Fitzgerald River National Park
Coastal Walk Trail

Department of Environment and Conservation
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1.0 Executive Summary

The development of a coastal walk trail is part of the Fitzgerald River National Park (FRNP) Improvement Project, jointly funded by the State and Federal Governments. It has been divided into two stages; Stage One is between Point Ann and Hamersley Inlet; and Stage Two between Bremer Bay and Point Ann, and from Hamersley Inlet to Hopetoun.

There is currently an informal, undefined walk trail from Point Ann to Hamersley Inlet, which offers the most remote coastal walking experience in the Park. However due to its remote nature and the possible spread of dieback it presents the greatest risk to both trail users and the environment.

The development of the walk trail concept plan included:

- socio-cultural and biophysical site assessments, resulting in the identification of seven Landscape Character Types through which the trail passes
- a market analysis including visitor profiling, product development, assessment of other trails and a business model
- definition of a trail interpretation concept, ‘The Linear Landscape: Inspire the Walker to Read the Landscape, to give meaning to the walking experience
- preparation of a trail alignment concept including trail options and trail loops of various classes. A seven day main trail is recommended with overnight stops at Gordon Inlet, St Mary Inlet, Twin Bays, Quoin Head and Hamersley Inlet. The trail loops are also recommended to enable visitors to experience a wider range of character types and provide a range of options for visitors.
- identification of trail construction methods and management including trail classification, construction techniques, design principles, opportunities and constraints and environmental risks. Broad trail construction costs including accommodation and trail heads, are calculated at approximately $4.5 million for Stage One, and $2 million for Stage Two.
- assessment of visitor risks which revealed the various risks that trail users are likely to experience including accident, injury, illness and lack of water. Mitigation measures include developing a water supply plan, visitor registration, making risks known to visitors, recommending appropriate safety and medical equipment and the development of an evacuation / recovery plan.
- preparation of a community consultation plan which includes distribution of trail information, local and regional community displays and information days, and ongoing web based information.

The marketing analysis revealed that a highly cooperative approach between the DEC, the Shires of Jerramungup and Ravensthorpe, and local industry and community groups is a critical ingredient for sustainable, long term success of the project. Marketing and promotion on a broader destination basis is required for the Fitzgerald region. Suggested marketing initiatives include:

- investigating the creation of a jointly funded tourism coordinator position, possibly shared equally between the two Shires
- preparing a dedicated marketing plan for the walk trail where roles and responsibilities of key stakeholders are clearly detailed
- working closely with the respective Regional Tourism Organisations (RTOs) when undertaking external promotion
- targeting specialised long distance walking groups and specialised tour operators
- creating a user friendly and informative website

Product development initiatives include:

- developing a series of interesting “resting huts” along the walk trail
- developing accommodation precincts at each end of the walk trail
- consideration of a commercial eco style accommodation facility in the Park within the Management Plan.
2.0 Introduction

The Fitzgerald River National Park (FRNP) is located on the south coast of Western Australia between Albany and Esperance and is recognised as one of the most botanically diverse regions in the world. It is one of only two UNESCO Biosphere Reserves in WA. The landscape is dominated by coastal hills, collectively known as Barrens, as well as spectacular spongolite cliffs. The park offers diverse recreational experiences including bush walking, nature appreciation, camping, canoeing, fishing and whale watching. The FRNP is blessed with magnificent coastal scenery, which many people see as some of the best in the country.

The development of a coastal walk trail is part of the FRNP Improvement Project, jointly funded by the State and Federal Governments. The aim of this $40 million project is to improve tourist access and facilities in the Park and assist economic and social development in surrounding communities of Bremer Bay, Hopetoun, Ravensthorpe and Jerramungup.

The walk trail portion of the FRNP Improvement Project has been divided into two stages. Stage 1 is for a link between Point Ann and Hamersley Inlet. Stage 2 is for the links west and east of this, from Bremer Bay to Point Ann and from Hamersley Inlet to Hopetoun. Currently only Stage 1 of the walk trail is funded.

Western Australia is renowned for its spectacular and remarkable landscapes that offer exceptional biodiversity and landscape values. These values and landscapes are currently experienced by two iconic walking trails; the Bibbulmun and Cape to Cape Walk Tracks. The spectacular and rugged landscapes of the FRNP create the opportunity for another iconic coastal trail which would provide a totally different experience in an environment that has unique biodiversity, landscapes and cultural histories.

The FRNP walk trail can provide varied experiences and levels of difficulty ranging from class 3 sections close to Bremer Bay and Hopetoun to a class 5 trail located within the centre of the Park. The concept also suggests shorter loop walk opportunities close to the towns of Bremer Bay and Hopetoun. The trail is also unique in that it is one of a number of trails which traverse the core of a Biosphere Reserve.

2.1 Key Issues

The following section outlines some of the key issues involved with the planning and construction of a walk trail in the FRNP.

TRAIL ALIGNMENT

A trail located in a remote natural area needs to be exceptional in its alignment, design and construction so that it does not impact the visual or environmental values of the landscape. The natural environment and its remote and rugged quality needs to dominate the experience of the trail.

The objectives for the design of the trail were to:

- provide a range of experiences for trail users
- create a link between Bremer Bay and Hopetoun
- create different classes along the trail with low risk, easier classes in the Stage 2 sections and a more challenging, higher risk trail in the centre, between Point Ann and Hamersley Inlet
- create loop trails of various lengths, in the less challenging sections closer to Bremer Bay and Hopetoun
- connect places of cultural and natural interest
- connect to existing walk trails and recreation sites
- use existing overnight campsites and facilities where possible, and upgrade facilities where required
- suggest additional overnight campsites and facilities through the challenging middle section
- use existing trails where possible to minimise vegetation clearing and lower construction costs, however these trails need to be assessed for sustainability and the experience they offer
- stay within 2km of the coast in the coastal catchments to minimise the potential for dieback spread
• consider development of loops or spurs and class level variation to respond to landscape features.

SITE APPRECIATION

In order to develop a trail concept, the current biophysical, social, economic and cultural context of the site needs to be understood. This helps minimise potential impacts of trail construction on the environmental and cultural values of an area and helps identify interpretive features and narratives.

The successful integration, design and management of trail networks is dependent on the assessment of the following:

• landform and stability
• ecological values
• recreation and public access
• landscape and visual amenity
• indigenous heritage
• other cultural heritage
• hazards
• land capability.

TRAIL CLASSIFICATION

The trail needs to be classified according to the following Australian Standards:

• AS 2156.1-2001 Walking Tracks – Infrastructure Design
• AS 2156.2-2001 Walking Tracks – Classification and Signage.

The FRNP coastal trail concept incorporates various classifications between class 3 and class 4, each of which have different requirements for:

• track conditions
• gradient
• signage
• infrastructure
• terrain
• weather
• management regimes.

CONSTRUCTION METHODS AND MAINTENANCE

Construction methods and maintenance vary depending on the trail location as a result of factors such as access, terrain, soil and vegetation. Trail design considers material selection, grading, infrastructure requirement and management and maintenance regimes.

DIEBACK MANAGEMENT

The FRNP is largely free of dieback disease due to limited access to the site and management strategies that have been in place since 1986 and the size of the National Park. The construction of a major trail
increases the risk of dieback introduction and spread through both construction and visitor use. There is a risk that vehicular and foot traffic may assist the spread of the disease unless appropriate hygiene practices are introduced as part of the walk trail experience. It is unlikely that any introductions would be deliberate, therefore, awareness and hygiene practices will be essential for visitors unfamiliar with the potential impacts of the disease. A high number of rare plants susceptible to dieback are located at the top of peaks. To prevent the spread of dieback to these high points, the FRNP Management Plan 1991-2001 restricts access to the peaks of Mid Mt Barren, Woolbernum Hill and Thumb Peak to approved permit holders for research and critical management.

The Australian Government (Department of the Environment, Water, Heritage and the Arts), has approved a road upgrade and this walk trail development, with a decision made under Sections 75 and 77A of the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act). Approval was given provided measures are taken to avoid significant impacts on listed threatened species and communities and listed migratory species. Limiting the risk of dieback spread is one of the requirements.

**RISK MANAGEMENT**

Managing risk is an essential component of trail planning. Consideration has been given to:

- visitor risks
- environmental risks
- construction and operational risks.

A basic risk assessment process has been undertaken in accordance with AS/NZS ISO 31000:2009 Risk management - principle and guidelines.

**WATER AVAILABILITY**

Water supply along the trail will need to be addressed. Currently the only fresh water supply along the proposed trail is from a rainwater tank at Twin Bays. It is usually recommended that walkers carry at least three to four litres of water per person per day. It is not possible for a walker to carry enough water for the whole seven day walk. A number of options could be considered for addressing water supply including:

- rain water tanks attached to new camp shelters, sized to suite local rainfall conditions with water levels monitored by staff and volunteers
- setting up of caches at publicly accessible locations for walkers to drop supplies off prior to walking.

**MARKET ANALYSIS**

The proposed trail was assessed in terms of the potential market. Consideration was given to the location of the site; current visitation rates; linkage to nearby experiences; and analysis of other similar trails in the state, interstate and internationally.

This analysis assisted in providing a range of options for trail experience and visitor servicing.
The market analysis included assessment of the target market of the proposed trail.

Opportunities for existing and proposed recreation visitation; and similar landscape locations were explored to indicate appropriate traffic numbers, service facilities and usage monitoring or fee system for a remote trail.

Issues associated with developing a market profile for the trail include:

- the geographical remoteness from Perth and normal visitor traveller patterns means there will be some challenges in developing a market profile for the walk. Developing a marketing profile can take time
- capitalise on tourism potential of the trail, encourage trail users to stay in Bremer Bay and Hopetoun before, after, and/or during their walk.
- develop selection criteria for tour developers including visual and environmental impact assessment
- the tourism industry want more products and a walk will be a major attraction
- medium to long term benefits
- need a number of parallel processes
- partnerships with tourist providers
- need something for potential operators to bite on
- important to give stakeholders realistic expectations
- staged process with market triggers.

**VISUAL IMPACTS**

The visual resources of remote natural areas are an important part of the experience. Therefore, assessing the potential visual impacts of proposed track routes and associated infrastructure is an important component of developing a trail concept in a remote natural area. Some guidelines have been identified to minimise the impact of the final trail alignment. Visual resource planning considered sight lines, topography, track width, visual absorbance capacity, colour and texture.

**INTERPRETATION**

Trails should provide creative and engaging interpretive elements to allow users to gain a broad understanding of the cultural and natural dynamics of an area. Effective interpretation provides visitors with a greater understanding of the environment and its biophysical and socio-cultural context and can enhance a visitor’s trail experience. This helps the visitor develop a sense of connection and stewardship with the landscape. Interpretation also requires an excellent understanding of the regional and local sense of place. The FRNP offers many opportunities for interpretation because of the distinctive geological and biophysical processes as well as the unique mix of indigenous and non-indigenous histories.

**MANAGEMENT ZONES**

The Management Zones for the FRNP as defined in the Management Plan were reviewed and mapped as part of this report. The management zone in the centre of the Park is defined as being a ‘wilderness’ zone. This area does not meet the criteria for a wilderness area according to the Wilderness Policy. In the case of FRNP this zone:

- is strictly for conservation
- has access limited to non-motorised forms except for essential management and emergency needs
- has minimal primitive facilities.

A large portion of the Stage 1 trail passes through this wilderness zone presenting a number of issues with regard to managing visitor safety and providing infrastructure to trail users. (Refer to Map 1 in Appendix One. All Maps referenced are in Appendix One)
3.0 Site Appreciation

3.1 Socio-cultural Analysis

The following socio-cultural characteristics were mapped (Refer to Maps 2, 3, 4 and 5):

- existing features
- land use
- aboriginal sites
- significant views
- existing tracks and roads
- existing accommodation
- intercolonial Telegraph Line
- rabbit-proof fence.

European exploration of the park began in 1791 when the Doubtful Islands were spotted by the European explorer, George Vancouver. Flinders confirmed these as islands in 1802 when he sailed eastwards along the coast, noting the ranges as ‘barren hills’. In 1841, E.J. Eyre and his Aboriginal friend Wylie camped at the base of East Mt Barren during a journey from Adelaide to Albany. Both James Drummond and J.S. Roe travelled through the area in 1848, and the following year, in 1849 the Gregory Brothers (A.C., F.T. and H.C.) explored the area.

Whaling and sealing were practiced during the 1800’s off the Park’s coast, and there are still remnants of a commercial salmon fishing lease north of Pt Ann.

Quaalup Homestead, built in 1858, has been restored as a major tourist site within the Park.

The park is of cultural significance to Noongar people and there are numerous indigenous sites of significance within the Park, mainly at estuaries which were a food for food and water as well as social and ceremonial sites.

There are a number of existing campsites within the Park, with varying facilities from backpacker camping spots to primary camp sites with facilities such as toilets, tables and benches and barbeques. 4WD camping areas are in the more remote locations and used primarily by fisher people.

Existing designated walk trails are few; occurring at West Mt Barren, Point Ann and East Mt Barren. There is a walk trail at Twertup, however it is closed due to the area being affected by fire in recent years. The Park has many tracks, mainly at the western end. Hood Point has numerous tracks used by quad bikes and 4WD vehicles; there are a few closed tracks around Quaalup, but very few through the middle section of the park. The old telegraph track is used as a management access track, with many of the tracks branching off of this to the coast having been made by fishermen in the 1960’s and 1970’s. These tracks are mostly along ridge lines, as this was the easiest route for the vehicles, but the worst in terms of dieback management. Two main tracks allow emergency and management access from the telegraph track to Twin Bays and Marshes Beach.
3.2 Biophysical Analysis

The biophysical features of geology, soil type, landform and vegetation structure within the Fitzgerald River National Park have a strong relationship. Each characteristic is described below in more detail.

**GEOLOGY**

The bedrock of the southern part of the park is part of the Albany-Fraser Province (1100-1800 million years old). The bedrock of the northern part of the Park is considerably older (2500-2900 million years old) and is formed by a stable crustal segment referred to as the Yilgarn Craton. The southern end of the Park is comprised predominantly of the folded and faulted metasediments of the Barren Ranges. There are also small sections of slightly older granitic gneiss along the coast from Bremer Bay to Point Charles. The trail passes predominantly through the Jonacoonack, Hammersley and Whoogerup geological systems, and to lesser degrees through the Meerup, Mount Manypeaks, Toorgellup and Gore systems.

The following describes the geology of the Park in more detail and in relation to the trail concept (Refer to Map 6).

**Hammersley System**

This system consists of level to gently undulating sandplain with swampy coastal depressions, with grey sandy, pale deep sand and alkaline grey shallow sandy duplex. The Quaalup Loop option passes through this system, which is found from Bremer Bay to Point Charles. The trail passes predominantly through the Jonacoonack, Hammersley and Whoogerup geological systems, and to lesser degrees through the Meerup, Mount Manypeaks, Toorgellup and Gore systems.

**Meerup System**

The coastal dune fields of this system are found on the south coast from Albany to Bremer Bay. Two trail options pass through this system east of Bremer Bay across Hood Point. It is characterised by coastal dunes made of calcareous, mostly alkaline sand, sandy gravel and shallow sand. Associated vegetation is Yate woodland, mallee scrub and heath.

**Mount Manypeaks System**

The granitic hills and headlands of this system are found along the south coast from Albany to Bremer Bay. The shallow sandy gravel, bare rock and shallow sands of this system are found at Hood Point. One trail option passes through this geological type which is found nowhere else along the trail. The associated vegetation is low woodland and scrub heath with mosses and lichens on exposed rocks.

**Jonacoonack System**

The deeply incised valleys with breakaways, cliffs and wide valley floors of this system are found within the park between Bremer Bay and Hopetoun. They are characterised by bare rock, stony soil, pale shallow sand and pale deep sand and mallee heath vegetation. The trail passes through this system at Bremer Bay, Quaalup, along Trigelow Beach, from St Mary Inlet to Dempster Inlet and around Hamersley Inlet.
Whoogarup System

The mountains and hills of this system are characterised by mountains and moderately inclined to steep hills on Proterozoic quartzite and metasediments in the Barren Ranges, and a wave cut platform on East Mt Barren. The soils consist of bare rock, stony soil, grey deep sandy duplex and shallow sand. Associated vegetation is thick scrub heath and mallee including *Eucalyptus preissiana* and *Dryandra quercifolia*. The trail passes through this system at Point Ann, between Dempster Inlet and Whalebone Beach and at East Mt Barren.
Tooregullup System

This system of Holocene coastal sand dunes with some remnants of Pleistocene formations, calcareous deep and shallow sands and mixed coastal scrub vegetation is found from Bremer Bay to Cape Arid. The trail passes through this from Culham Inlet to Hopetoun.

Suzetta System

The valleys and breakaways of this system are found in the Park between Bremer Bay and Ravensthorpe and consists of plateau edge and scarp slope, with grey shallow soils, grey non-cracking clay and pale shallow sand. Associated vegetation is mallee-heath. The trail does not pass through this system as it is located in the northern region of the park.

Jerramungup System

The gently undulating plateau with rock outcrops of the Jerramungup system are found between Jerramungup and Ravensthorpe. It has grey sands, shallow and deep; alkaline, grey, shallow, loamy and saline, wet soil and associated mallee scrub. The trail does not pass through this system as it is located in the northern region of the park.

Lower Fitzgerald System

The deeply incised valleys with rock outcrops and breakaways of the Lower Fitzgerald system are located between Jerramungup and Ravensthorpe. It has alkaline, grey, shallow, loamy and sandy soils. The associated vegetation consists of woodland, mallee scrub and heath. The trail does not pass through this system as it is located in the northern region of the Park.

Ravensthorpe System

This system is characterised by undulating low hills on Archaean greenstone of metasediments and ultramafics, with alkaline red shallow loamy soil, shallow gravel and self mulching cracking clay, non-cracking clay and stony soil. Salmon and York Gum vegetation associations occur within this system. The trail does not pass through this system as it is located in the northern region of the Park.
VEGETATION AND FLORA

The vegetation of the FRNP consists predominantly of open to very open mallee, shrubland and heath with woodlands only occurring along rivers and in swamps. The Park is the only remaining uncleared remnant of the Eyre Botanical District of the South-West Botanical Province.

To date 1,748 plant species have been identified within the Park of which 75 are found nowhere else. This amounts to 20% of Western Australia’s known plant species.

The following vegetation systems are subdivisions of the larger Eyre Botanical District (Refer to Map 7).

126: Freshwater lakes
Freshwater lakes are dotted through the Plains in the western half of the park.

129: Drift sand
These areas are characterised by unvegetated areas of drift sand between Fitzgerald and Dempster Inlets.

42: Mallee and acacia on south coastal dunes
The following community is found around Quaalup Homestead, along option D of the trail. It is comprised of Agonis open forest and Acacia mixed scrubland including: Agonis flexuosa, Eucalyptus decipiens, Acacia cochlearis, Acacia sp, Hakea corymbosa, Jacksonia spinosa, Melaleuca.

The option B inland route which runs parallel to Trigelow Beach passes through the following vegetation:

Mallee and Acacia mixed scrubland on south coastal dunes, Banksia mixed heath: Acacia cyclops, Hakea oleifolia, Banksia media, Melaleuca pentagona, Calothamnus pinifolius, and Pimelea ferruginea.

47: Tallerack mallee-heath
The Tallerack mallee-heath vegetation occurs along option D of the trail heading between Bremer Bay and Quaalup, and from Quaalup along the Rabbit Proof Fence to Point Ann. It also occurs east of Hamersley Inlet. It is comprised of Eucalyptus Open mallee scrubland, Adenanthos mixed shrubland and Banksia mixed heath including: Nuytsia floribunda, Eucalyptus tetragona, Eucalyptus decipiens, Adenanthos cuneatus, Agonis obtusifolia, Calothamnus pinifolius, Xanthorrhoea, Banksia repens, Banksia media, Anigozanthos humilis, Exocarpos sparteus, Eucalyptus decurva, Eucalyptus falcata, Hakea crassifolia, and Allocasuarina.
50: Dwarf scrub on granite (south coast)

This association occurs along option C at the Hood Point. It is comprised of an intricate mosaic of plant communities upon the granite summit including: *Pimelia ferruginea*, *Isopogon formosus*, *Hibbertia cuneiformis*, *Acacia cyclops*, *Hakea prostrata*, *Hakea oleifolia*, *Leucopogon revolutus*, * Comesperma confertum*, and *Bossiaea rufa*.

516: Mallee scrub, Black Marlock

The trail does not pass through this vegetation community, located at the north end of the park. It is comprised of Eucalyptus open mallee shrubland including: *Eucalyptus redunca*, *Eucalyptus sp.*, *Banksia sp.*, *Melaleuca spathulata*, *Grevillea sp.*

691: Dryandra quercifolia and Eucalyptus spp. Thicket

The trail passes through this vegetation association from Dempster Inlet to Hamersley Inlet, with small sections at West Mt Barren and East Mt Barren. It is comprised of Eucalyptus mixed closed mallee shrubland including: *Eucalyptus preissiana*, *Dryandra quercifolia*, *Banksia lehmanniana*, * Calothamnus pinifolius*, and *Allocasuarina humilis*
The trail does not pass through this vegetation community, located in small areas in the western edge of the Park. This association is comprised of Eucalyptus woodland and Anthocercis mixed sparse heath including: *Eucalyptus occidentalis*, *Eucalyptus decipiens*, *Anthocercis genistoides*, *Astroloma compactum*, and *Brachysema lanceolatum*.

938: Medium woodland: York gum and Yate

The trail does not pass through this vegetation community, located in a small area in the northeastern edge of the Park. It is comprised of Eucalyptus open woodland characterised by *Eucalyptus occidentalis*, and *Eucalyptus loxophleba*. 
Mallee scrub, black marlock; tallerack mallee heath

The trail does not pass through this vegetation community, located across the very northern reaches of the Park. It is comprised of Eucalyptus open mallee shrubland, Adenanthos mixed open shrubland and Banksia mixed heath including: *Eucalyptus redunca*, *Adenanthos cuneatus*, *Agonis obtusifolia*, *Calothamnus pinifolius*, *Nuytsia floribunda*, *Eucalyptus tetragona*, *Eucalyptus decipiens*, *Banksia repens*, *Banksia media*, and *Anigozanthos humilis*.

**HYDROLOGY**

The Park has four main rivers whose catchments are partly in cleared agricultural land; the Gairdner, Fitzgerald, Hamersley and Phillips. The shorter St Mary and Dempster Rivers have all of their catchments within the Park. All the rivers are intermittent and flow mainly in the winter and spring. The rivers generally run from northwest to southeast through the Park, and all the major rivers terminate in inlets whose mouths are blocked by sand bars. The rivers only break through the sand bars on rare occasions after heavy rainfall in the catchments (Refer to Map 8).

The walk trail crosses all the major rivers within the Park. In general crossing occurs at the sand bars that block the inlets. On the rare occasions that the sand bars break open, walkers may struggle to cross the inlets, which may in some instances be impassable and present significant visitor risk.

Many woodland and shrubland covered swamps occur within the plains; during winter and spring, the water in them is a few centimetres deep. Trail Option D from Quaalup to Pt Ann passes through some of these areas.

**COASTAL MORPHOLOGY**

The Park’s coastline consists of broad sandy bays separated by rocky headlands and steep cliffs sections interspersed with small sandy coves. The sandy bays occur in the western section of the Park between Bremer Bay and Dempster Inlet, and the steep cliffs in the eastern end from Dempster to Culham Inlet. The walker experiences much of this varied coastal morphology as they move along the coast (Refer to Map 9).
3.3 Landscape Character Types

The landscape character types of the study area are described to ensure that the broadest experience possible is offered to the walker through the conceptual design of the trail. Detailed planning and design will ensure that most of the distinct features in a landscape character type are experienced on site by the walker, the only exception being the Uplands character type in the northern part of the Park.

The Park has seven distinct types of landscapes that each have a unique landform, climate, vegetation, water form, cultural and land use patterns. They are:

- uplands
- plains
- ranges
- valleys
- sandy coast
- rocky coast
- coastal towns.

The Park is the largest area of uncleared land in the Esperance Plains and is an expansive example of the natural landscape that would have existed before the surrounding plains were cleared for agriculture. The distinct landscape character types (LCT) are described below (Refer to Map 10).

**UPLANDS**

The uplands are gently undulating plains made of granites and gneisses with shallow loamy and soils and ragged, upright granite outcrops. The uplands occur on the northern edge of the Park, away from the coast. The uplands are covered with very open mallees of *Eucalyptus reducna* (Black Marlock) and *E. tetragona* (Tallerrack) and also scrub and heath of Allocasuarina, Grevillea and Acacia associated with the granite outcrops. Steep-sided, v-shaped valleys incise the undulating plain with a single channel that flows in winter and spring.

**PLAINS**

This horizontal landscape is composed of plains that are generally flat and made of sedimentary spongolite and siltstone with shallow sandy loam, colluvial sands and cracking clay. The plains are covered with widespread, very open mallees of *E. decipiens* and open to very open shrub mallee. This type is poorly drained and has large areas with no run-off, with sumps and small ephemeral lakes appearing in winter and spring. The lakes are of great ecological significance as a water source for plant and animal life. Long, uninterrupted views across the plains focus on the rugged ranges.
VALLEYS

Valleys are cut through the flat plains and have steep sided breakaways and broad flat bottoms. The geology is similar to that of the plains with spongolite and siltstone rocks and sandy loam soils that are shallow on the valley slopes and deeper on the valley floor. The valleys have streams with small flows in winter and spring, and small linear pools. The valley floors and drainage lines support open shrub mallee of _E. conglobata_ (Port Lincoln Mallee) and _E. incrassata_ (Lerp Mallee), with low woodland on slopes and rims and open mallee on the mesas. The experience of the valleys in the plains is one of enclosure, with dense vegetation obscuring any long views up or down the valley. All the major rivers extend to the coast and form inlets incised in quartzite, spongolite or limestone depending on the surrounding geology. The mouth of the inlets is blocked by sand bars that open occasionally after heavy rain. Water occupies a small portion of the expansive flat floor, the soils next to the inlet being saline. Samphire heath grows on these flats, with Melaleuca woodland or shrubland on the edges.

RANGES

The ranges are rugged, steep hills made of quartzite phyllite, dolomite and conglomerates with quartzite sands or phyllitic loamy sand and schist duplex soils. The quartzite soils support Banksia scrub and _Adenanthos_ open low scrub; and the phyllitic schist soils support very open shrub mallee of _E. incrassata_ (Lerp Mallee), and Banksia and Allocasuarina low scrub. Isolated peaks and ranges with vertically protruding rock and frequent rock outcrops of orange, white, grey and pink express the geology of the coast. From the hills the expansive plains present a linear pattern of taller mallee growing above the scrub, the curvilinear coastline, abrupt low range, and deep linear valleys.

SANDY COAST

The sandy coast is characterised by long, low curving white beaches backed by windswept solidified limestone dunes covered in a dense green coastal heath. These beaches and sweeping bays are protected by rounded rocky headlands of granite that protrude into the turquoise waters of the Southern Ocean. The loose calcareous or siliceous sands occur over spongolite
or quartzite. The coastal heath is a diverse mix of *Acacia* species, *Leptospermum spinescens*, *Melaleuca uncinata* (Broom Bush), and *Banksia* species. In more protected areas further from the coast, woodlands occur of low dense *Agonis flexuosa* (Peppermint), and taller *E. decipiens*, *E. transcontinentalis* (Redwood) and *E. occidentalis* (Flat-topped Yate). The loose soils are extremely susceptible to wind and sometimes wave erosion creating blowouts that appear as long finger-like swathes of stark white against the grey green heath in the direction of the prevailing winds.

**ROCKY COAST**

The ranges abut the Southern Ocean creating steep, rocky cliffs over rocky shorelines. Minor coves of fine to rocky sand occur in some locations but these are difficult to access because of the steep topography. The proximity of the high ranges to the coast allows for expansive and dramatic views up and down the rugged coastline and across the rolling hills to the steep peaks of the ranges. Studded outcrops of caramel, grey and white rock contrast the grey green heath clinging to the steep slopes. Intermittent streams flow toward the Ocean in V shaped valley of rock. The turquoise of the Ocean is broken by the sparkling white foam as the sea crashes into the rocky shore parallel to the coastline.

**COASTAL TOWNS**

The coastal towns of Bremer Bay and Hopetoun form the two end points of the Park. They are small quiet and geographically remote communities with a close relationship to the coastal environment. The towns are different in character; with Bremer Bay having a large visiting population in summer, while Hopetoun is currently expanding as a result of nearby mining operations. The towns provide the ‘civilization’ that contrasts the remote and wild nature of the Park and provide important services and supplies to visitors to the Park.
The trail passes through all the Landscape Character Types except for the Uplands LCT. This results in users experiencing a diverse range of unique site features.

For further details on which sections of the trail pass through the various landscapes see Section 6.0.

Refer to Map 15 for an overview of the trail and its relationship to Landscape Character Types.
4.0 Market Analysis

4.1 Introduction

The Fitzgerald River National Park is a major visitor attraction for those travelling to and through the broader southern coastal region of Western Australia. Located approximately 180 km north-east of Albany and about 230 km west from Esperance, the Park crosses into both the Shires of Ravensthorpe and Jerramungup. From a tourism marketing perspective the Park also crosses into the two Tourism WA recognised tourism regions being Australia’s South West and the Australia’s Golden Outback. The main road access route for visitors to the Park is Highway Number 1 which runs along its northern boundary and from there south to the coastline.

In terms of visitor access from Perth, the National Park lies some 6 hours direct driving south-east from the capital city of Western Australia, or visitors can take daily flights to Albany (1 hour 15 minutes) or Esperance (1 hour 40 minutes) and then drive approximately 2 hours 30 minutes from either Albany or Esperance town centres.

Both Bremer Bay and Hopetoun are small, quiet and geographically remote towns boasting white sandy beaches and a relaxed coastal lifestyle. The permanent population for Bremer Bay is currently estimated at around 300 and according to Australian Bureau of Statistics (ABS) historical data has remained around this level for the past 15 years (in year 1996 221 residents, and year 2001 some 241 residents). Unlike Bremer Bay, Hopetoun has experienced strong expansion and growth over recent years linked directly to the BHP Ravensthorpe Nickel Operations (RNO) project. Hopetoun is some fifty kilometres from Ravensthorpe and along the major road access route linking the Southern coastline. The ABS estimated that Hopetoun had a pre-mine population in 2001 of 357 people (ABS 2001), however in May 2008, the Shire estimated this had grown to above the 1,000 mark. This rate of increase is considered very rapid and further evidenced by a LandCorp estimation that within the space of one year the Hopetoun population rose from 586 (in 2006) to 1,100 people (in September 2007) (source: LandCorp). Since the decline of RNO Hopetoun / Ravensthorpe is one of the most rapidly declining regional populations (source: West Australian Press). As new mines open and RNO recommences with new ownership, population numbers will increase.

Historically, agriculture has been the focus of economic activity within the Shires of Ravensthorpe and Jerramungup with broad acre cropping and wool production the key industries. The RNO mining operation provided a major stimulus to local economic activity within the Ravensthorpe Shire, however, a new approach is now being implemented and tourism has been identified as having the potential to diversify the local economic and employment base.

Evolving tourist trends have, over the last decade, led to a shift from standardised mass tourism to more individualistic patterns, in which greater flexibility and a more meaningful experience have gained prominence. Throughout the world, developing destinations, with a rich resource base of pristine natural treasures, hold significant comparative advantage in their potential to attract tourists in search of authentic new experiences.

For the local economy of a destination tourism presents one opportunity to grow employment through the generation of jobs and the creation of entrepreneurial opportunities. For tourism to be successful, effort must be focused on maximising individual spend, and providing products and experiences that act as an incentive to tourists to stay longer and return on repeat visits.

Over the last two decades tourism has emerged as one of Australia’s most significant growth industries. Being highly labour intensive, and an industry where the employee cannot be easily replaced by a machine or a computer, the development of tourism within a community has many advantages. Local business operators are obvious direct beneficiaries from the creation of a successful tourism industry within a destination, however the dollars spent by visitors also filter through to the community at large creating additional spending and employment opportunities. The main beneficiary of well-managed tourism development is ultimately the local communities of that visitor destination.
The proposed FRNP Coastal Walk Trail project certainly offers this potential and when implemented correctly can stimulate local entrepreneurial opportunity, kick start the development of ancillary services such as new accommodation and hospitality services, and provide a diverse range of optional activities. However, caution also needs to be added, the geographical remoteness of the destination and time lag nature of the tourism industry will mean economic benefits may not be instantaneous. The establishment of the FRNP trail will provide a substantial boost and act as a catalyst for long term growth to the local visitor based economy but local stakeholders should remain realistic on the scale of benefits to be achieved over the immediate to short term. Aspiring tourism areas typically take many years to develop into successful and sustainable visitor destinations and the Fitzgerald River region will be faced with similar challenges.

4.2 Visitor Profiling

CURRENT VISITATION

The Fitzgerald River National Park and surrounding coastal towns of Bremer Bay and Hopetoun boast some significant nature-based visitor attractions including spectacular coastline, unique flora and fauna, and impressive clean white sandy beaches, however in a broader destination context, the Fitzgerald Biosphere region does not rate as high when compared to more popular and well promoted neighbouring destinations such as Esperance and Albany which boast more “iconic” scale of attractions. To date Hopetoun and Bremer Bay have not been considered as a major visitor destination by State and RTO promotion bodies and therefore, available tourism research for the destination remains limited in its scope. What is available is detailed below:

- The Department of Environment and Conservation (DEC) reports that in a typical year an estimated 40,000 visitors enter the Fitzgerald National Park. This figure is calculated by using traffic counters on major entry roads into the Park and by applying estimates of numbers of people per vehicle. If this estimate is correct, 40,000 visitors into the National Park would indicate a substantial existing visitation market that the proposed walk trail project could leverage upon. These numbers are considered significant in particular when considering the small resident populations in the adjacent towns of Bremer Bay (300) and Hopetoun (1,000).

- Tourism WA (TWA) prepared the Hopetoun Ravensthorpe Tourism Asset Assessment Report in February 2009. In this report, TWA states that the Ravensthorpe Hopetoun Visitor Centre received some 6,550 visitors through its doors in year 2008, a decrease of 730 visitors from the previous year. The Visitor Centre is located on the main road of the town of Ravensthorpe and these visitor numbers appear minor. The TWA report also stated “all visitation to the region is highly seasonal”.

- The Tourism WA Tourism Development Priorities 2010-2015 (March 2010) report estimated annual visitation levels to the Shire of Ravensthorpe over
the 2001-2008 period to be around 17,500. The large majority (92%) are domestic travellers and the remaining 8% from overseas.

- Using similar data sources, the Shire of Ravensthorpe Draft Tourism Strategy report (April 2010) compared visitation levels to the Shire of Ravensthorpe as being around 1/5th of the total visitors to Esperance and around 1/10th of the visitors to Albany. Primary research carried for the tourism strategy related to market perceptions and positive findings of the report were that survey respondents perceived the area as “relaxed, small-country-town feel, non-commercial, quiet, untouched, unknown and an escape from the crowds”. The report highlights that the region’s comparative advantages lies in “untouched serenity, rawness and peaceful nature – protected island status”. Specifically the report highlights the natural features of the FRNP as the strengths and opportunities on which to base the region’s potential market differentiation.

- A review of the Australia’s Golden Outback (AGO) annual holiday planner reflects a good presence for the Hopetoun and Fitzgerald National Park destination (considering its relatively limited tourism ready product) with a full page dedicated to local attractions and advertising from local businesses. The town is described as “surrounded by unspoilt wilderness, abundant pristine white beaches and is the perfect setting for a relaxed all year round holiday. Great for boating, windsurfing, swimming, snorkelling, fishing, whale watching, bush walking, wildflowers…”

- Discussion with AGO senior management reveals the AGO remains keen to promote the Fitzgerald River National Park to external markets and recently applied for external funding for a marketing campaign with the themes “4 seasons in the Fitzgerald; Summer – swimming and boating; Autumn – coastal fishing; Winter – walks along wind swept beaches; Spring – wildflowers.” This approach, along with whale watching themes, appears well considered. The AGO is considered a professional, effective, and highly appropriate regional tourism organisation that should be resourced to assist in the promotional role for the new walk trail.

- Existing accommodation within Hopetoun and Bremer Bay is limited in capacity and largely services the budget and caravan market with an identified gap in supply for travellers wanting mid-to upmarket standards of accommodation. Bremer Bay does offer some more unique accommodation options including Quaalup Homestead and the Wellstead Museum cottages as well as marketing a range of private holiday home for short term rent which remain popular during summer school holiday periods. This general lack of upper end-accommodation facilities is also reinforced in the recent Tourism WA report, which stated “although Hopetoun and Ravensthorpe are situated between three popular locations, Albany, Hyden and Esperance there is much visitor potential which cannot be fully captured with the current range of accommodation being of a basic standard, which does not appeal to a large growing sector of discerning travellers. While the low price end of the accommodation market is currently catered for, there are gaps in the mid and high price ranges.”

Reflecting these observations we can develop a profile of current visitation to the Fitzgerald River National Park and surrounding towns comprising:

- Local residents
  - enjoying the region’s coastal assets via recreational pursuits of swimming, surfing, fishing, diving and boating.

- School holiday families
  - (Summer and Easter) arriving from inland WA population centres such as Kalgoorlie Boulder and the major centre of Perth, typically utilising holiday home accommodation (either rented or owned) or caravan and camping parks.
• Self Drive Holiday makers
  o predominantly travelling through the region arriving either from Esperance or Albany as part of a longer trip. Based on the current range of accommodation on offer within the Park and in and around Bremer Bay and Hopetoun, these would be budget to mid range style of travellers with sightseeing a primary activity. Source of origin would be diverse including international, interstate and intrastate travellers, and would also include day-trippers emanating from Albany and Esperance.

• Dedicated nature enthusiasts
  o attracted to the Fitzgerald River National Park to experience the range of nature based opportunities and activities such as bushwalking/hiking and experiencing unique flora and fauna. Specific recreational activities would include hiking, whale watching, wildflower viewing, bird watching, and photography. Experiencing the natural wonders of the Fitzgerald is their primary purpose for visiting.

TRENDS AND REVIEW OF PARTICIPATION RATES IN BUSHWALKING/HIKING TRAILS

The potential market for bushwalking and hiking trails is difficult to define accurately. Recreational trails include the more commonly acknowledged bushwalking and mountain bike tracks but can also include bridle trails, canoeing, heritage and culturally based trails products. A review of available recreationally based statistics and trends is provided below.

National participation rates

Australia wide an estimated 13.1m persons aged 15 years and over participated in at least one physical activity for exercise, recreation and sport in 2004 or a participation rate of around 82.8% (source: Participation in Exercise, Recreation and Sport Survey – ERASS 2004 Annual Report). Bushwalking was ranked as the 8th most popular activity with some 818,000 participants in 2004. Bushwalking participation increased over the 2001 to 2004 periods with a 2.9% increase.

Western Australia participation rates

The ERASS 2004 Survey also estimated participation rates in selected activities for the State of Western Australia. Bushwalking attracted some 58,100 persons which represented a participation rate of around 3.7%. There are some 600 trails listed on the Western Australian Department of Sport and Recreation’s Trails West trails database totalling some 3,000 kilometres of trails throughout the State. There are some 7 major bushwalking clubs operating within Western Australia. Perth Bushwalkers Club is the largest with over 370 members. Most are non-commercial, volunteer run and undertake trips locally, nationally and overseas. A total membership base of around 2,000 to 3,000 is estimated from these groups.

A review of retailer directories reveals some 272 sporting and leisure goods retailers within the state and 71 outdoor adventure activity retailers. More specifically, there are some 120 camping equipment retailers.

From the national and state wide statistics reviewed above it can be seen that both participation levels
and consumer expenditure in physical recreation activities and products has increased over the past 5 years. Bushwalking and hiking activities are therefore considered growth industry sectors with direct and positive implications for walk trail development projects such as the FRNP.

The Department of Conservation and Land Management estimated that there were some 9.65m visits to national parks, state forests and other reserves in the year 2004/5. The “South Coast” region which includes the FRNP estimated some 870,562 visitors (or around 9% of the state’s total).

The Bibbulmun Track User Research Report (December 2003). Independent research was carried out in 2003 to measure usage levels and patterns across the entire Bibbulmun Track. A summary of the report results included the following:

- It is estimated that the track is used by around 21,000 individual users each year, mostly for short day walks.
- These users generate some 137,250 visits and with an average 2.04 days for each walk, there are some 280,000 user days in a year.
- In terms of expenditure the survey estimated that nearly $21m are spent each year as a result of walkers on the Bibbulmun Track. This is based on an average day walker spend of $72, walkers on 2 to 3 days walk averaging around $200, and those on 4 day or longer walks averaging nearly $750.
- 41% of walkers interviewed during the survey were doing day walks less than 4 hours duration, 30% doing day walks greater than 4 hours, 19% were walking for 2 to 3 days and 10% were walking for more than 4 days (including 5% who were walking end to end which equates to 1,050 walkers of the 21,000 using the track).
- Nearly 90% of walkers accessed the track by private vehicle.
- Commercially organized group visits comprised just 1% of all groups.
- The most common group size was 2 people with an average group size of 3.1 people.
- A large 89% of walkers interviewed were from WA, 7% from interstate and 4% from overseas. That is 11% were from outside of WA and when applying this survey figure against the estimate of 21,000 total users per year then approximately 2,310 users originated from outside of the state. The survey also found that around a third of these out of state users had decided to walk the track before arriving suggesting that this may have been a major motivating factor to visit the state by some 760 users.

If the survey results are correct then this indicates that users of the Bibbulmun Track have a significant impact in terms of direct expenditure into local communities along the trail and spread across a broad range of industry sectors (food supplies, equipment, accommodation, and petrol). Without doubt the large majority of users appear to be sourced from intrastate however the finding that some 760 users arrived to WA with the intention of undertaking the trail indicates that there is underlying levels of untapped interest for high quality trail products from interstate and overseas. These are considered important findings for the potential marketability of the FRNP Coastal Walk Trail project and similar market data could be applied to estimate future usage of the proposed walk trail.
SEASONAL CONSIDERATIONS

The seasonal impacts on general visitation ("mass tourism") to Bremer Bay/Hopetoun and other southern WA coastal destination areas are considered significant. General observations combined with consultations with local operators suggest that school holiday periods and the spring “wildflower” months of September through to October are the most popular periods to visit. Winter months and periods generally outside of school holidays would be considered low “mass tourism” visitation periods. Lower volume special interest and niche based tourism opportunities such as nature enthusiasts (dedicated hikers, whale watchers, bird watchers and wildflower enthusiasts) would be attracted according to when nature based events occur, such as whale migration patterns, July through to October each year.

DEC South Coast Region provided a range of vehicle flow data most for specific Easter and Christmas periods. The most revealing chart supplied is highlighted below for the Pabelup Drive South and covers a near 12 month period March 2008 through to January 2009. As can be seen the peaks in vehicle numbers occurred during Easter and Christmas/Summer school holiday periods and the spring months of August to October.

A review of the neighbouring coastal visitor destination of Esperance also provides some useful and applicable indicators for estimating mass tourism visitor patterns to the Fitzgerald region.

Source: DEC South Coast Region
For the 2006 year, the Esperance commercial accommodation providers with 15 or more rooms and from those providing results to the ABS survey, averaged an annual occupancy rate of 60% and an average room rate of $91.04. There were some 61,101 room nights spent at these type of commercial accommodation providers in Esperance in 2006 (source ABS Survey of Tourist Accommodation Shire of Esperance 2006). The monthly average occupancy levels provides a good indication of monthly visitor seasonality impacts for a southern coastal destination. The average room rate also reflects the seasonality impacts and the average $91.04 reflects a mix of accommodation standards. A review of the above graphs show that the months of December, January, and April received above average room rates indicating that this is considered the peak visitor periods most likely servicing the family holiday maker market corresponding to school holiday periods. Occupancy levels were recorded lowest in months June to August reflecting the colder winter months.

Again, using the Shire of Esperance as an example of a similar and neighbouring coastal tourist destination along the WA southern coastline, in the year 2006 an estimated 50,200 visitors (45,500 domestic and 4,700 international) stayed in “hotel/resort/motel” style accommodation (source IVS and NVS data annual average 2005 & 2006).

FRNP COASTAL WALK TRAIL POTENTIAL USERS

Based on these observations it is assumed that visitation to the Fitzgerald region can be broadly divided into two groupings; mass tourism and special interest visitors. It has been assumed that “mass tourism” visitors would generally undertake only the Stage 2 range of walk trails in and around the Bremer Bay and Hopetoun town sites. Special interest visitors are assumed to undertake the Stage 1 end to end walk trail experience.

Mass tourism would include visitors where the primary purpose is to holiday and undertake recreational activities such as swimming, surfing, fishing and boating. Peak visitation would occur during the Summer and Easter school holiday periods and it is during this time that the destination would experience greatest volume of visitor numbers. Visitors would utilize holiday home and commercial accommodation in and around the towns of Bremer Bay and Hopetoun, or camping grounds in and at the boundaries of the National Park. During summer usage of walk trails would be largely limited to day trips or at the most 2 day/1 night bushwalks due to the seasonal heat and be focused on the Stage 2 network of walk trails. Weather patterns around the Easter holidays in April are less predictable however visitors should experience milder temperatures and this may encourage greater length of walks and overnight stays within the Park and potential use of the Stage 1 end to end walk trail.

Special interest visitors include nature based enthusiasts such as dedicated bushwalkers/hikers, flora and fauna admirers and their visitation patterns will correspond to when the nature based event of interest occurs. It is assumed that these visitor types will utilize both Stages 1 and 2 network of walk trails.

The following table summarises potential walk trail user group types, potential visitation levels of each in a typical year, the months of visit divided into peak, high and low periods, and a description of recreational activities.
### Summary of potential users per annum

<table>
<thead>
<tr>
<th>SEASONALITY</th>
<th>MONTHS</th>
<th>ESTIMATED WALK TRAIL USAGE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak</td>
<td>December, January, April (92 days)</td>
<td>Walk trail network (predominantly Stage 2 trails); usage levels during 92 day period estimated at between 9,000 to 15,000 visitors or around 97 to 163 visitors per day on the walk trail network.</td>
<td>Summer and Easter school holiday periods, mass tourism to coastal towns, attractions and beaches, recreation activities including beach-going, fishing, boating and swimming. Day walks and short overnight walks would be most popular during these periods from visitors based in the towns of Hopetoun and Bremer Bay. Full trail multiple overnight stay walks would be limited due to heat and summer conditions.</td>
</tr>
<tr>
<td>High</td>
<td>July, August, September, October (123 days)</td>
<td>Walk trail network; estimated at 50 to 65 visitors per day or between 6,150 to 8,000 visitors. End to end; usage levels of the walk trail during these 4 months could range between 800 and 1,200 dedicated hikers and nature enthusiasts or 6 to 10 hikers entering the trail each day. Includes commercial walking tour operator numbers.</td>
<td>Whale watching and wildflower seasons, more special interest and niche based visitation expected. Walk trail should attract the dedicated hiker and nature enthusiast visitor types. Ideal time to undertake entire walk trail and should attract greatest hiker market numbers.</td>
</tr>
<tr>
<td>Low</td>
<td>February, March, May, June, November (150 days)</td>
<td>Walk trail network; reflecting predominantly local usage at 5 persons per day or 750 for the 4 month period.</td>
<td>Considered the times where least usage of the walk trail will occur. These are considered the less appealing times to visit the adjacent coastal towns and least appealing to undertake the end to end walk trail due to either extreme weather - summer or winter. Assumes greatest user group is local residents.</td>
</tr>
</tbody>
</table>

Based upon the assumptions detailed above, in a typical year it is estimated that between 17,000 to 25,000 individual users will undertake a walk trail experience within the FRNP. This visitation level includes an estimated 1,100 to 1,400 end to end trail users in a typical year.
SUMMARY OF FACTORS THAT WILL IMPACT FUTURE TOURISM TO THE REGION

Tourism destinations operate in a highly competitive industry and visitation levels can be affected by a range of factors both within and outside the sphere of control of local tourism stakeholders.

Factors within control

- Levels of cooperation amongst tourism stakeholders; local government, industry operators, regional tourism organisations, visitor information centres, government agencies such as DEC and TWA. In particular, local councils must understand the value of tourism and provide a platform for the private sector to deliver, and in order for tourism to sustain itself in a local community, the residents must be willing partners.
- Investment in local infrastructure.
- Investment in destination promotion.
- Adoption of regional themes and branding.
- Encouraging high levels of service standards and customer care.
- Delivering value for money and memorable visitor experiences.
- Networking with the right industry tour operators will be essential for the success of the walk trail.
- Establishing an effective online website presence for both promotion and trail management operations, such as bookings and payments.

Factors outside control

- Australian dollar
  - the currency fluctuations of the Australian dollar have direct impacts on tourism visitation within Australia. In short a strong Australian dollar has negative impacts on regional tourism destinations in Australia by encouraging Australians to travel overseas (thereby reducing domestic tourism) while also making Australia a less attractive destination for international holiday makers. These fluctuations can be significant and move quickly, for example the $AUD fell sharply from its ‘resources boom’ peak in mid 2008 of nearly US$0.98 to US$0.62 by late October 2008 before recovering to US$0.92 in early 2010.
  - Price of oil
    - the price of oil impacts both the cost of airfares and internal travel (especially drive tourism) within Australia for visitors and again fluctuations in this cost directly impacts the perception of “value for money” for regional destinations in Australia.
  - General economic growth
    - the Australian economy is forecast to outperform nearly all developed economies in 2009/10. Strong growth and low unemployment typically leads to a domestic population with strong spending potential which can be beneficial to regional tourism destinations.

While regional tourism destinations are unable to directly influence the above factors those destination managers need to be aware of these impacts and be prepared to implement programs to either counter or leverage based on these factors.
4.3 Visitor Product Development

The principal reason for visiting the FRNP is to enjoy and experience the natural wonders of the region. To this end, it is essential that any built infrastructure in and adjacent to the Park must complement the surrounding natural environment, enhance the nature based visitor experience, and enable the most effective management of the valuable natural assets. Striking the right balance is therefore considered critical.

Travellers to a region can be simply grouped as either day-trippers or overnight visitors. It is these overnight visitors that offer a particular destination the greatest potential to maximise expenditure opportunities spending approximately three times the level of day-tripper expenditure and roughly ten times those that simply make a “pit stop”.

Successful tourism should always translate into additional cash into a community and overnight visitors by definition will spend more dollars on local accommodation, meals, shopping, petrol and visiting local attractions. In terms of visitor expenditure, overnight visitors are what highly successful tourism destinations must ultimately target and strive for.

Communities with successful tourism programs will see that the local industry actually subsidises the community, whereas communities where tourism programs are not effective or do not exist are in fact subsidising visitors – providing services that visitors use but don’t leave money behind that cover the cost of having them available. Ultimately, successful tourism should be primarily measured by how much additional visitor dollars are spent in a community.

AUSTRALIA’S GOLDEN OUTBACK DESTINATION DEVELOPMENT STRATEGY - DEVELOPMENT MATRIX

The AGO Destination Development Strategy [DDS] 2007-2017 makes the general observation that “Towns beyond the regional centres (within the AGO) require better accommodation and service facilities to encourage visitors to stay longer.” The Destination Development Strategy also focuses on the important Fitzgerald River National Park citing “the National Park is one of the most diverse botanical regions in the world and rates as a World Biosphere by UNESCO. More than 1,800 beautiful and bizarre species of flowering plants, as well as a myriad of lichens, mosses and fungi, have been recorded in the National Park.”

The DDS recommends the establishment of a range of lodge and camping accommodation facilities be established to service the needs of users of the National Park.

As can be seen from the AGO Destination Development matrix on the following page the Fitzgerald River National Park rates slightly above the mid range for “iconic significance” but only poor in terms of “market readiness”. Investment within the Park as proposed within this report will fast track the Park’s “market readiness” which will have flow on benefits to the local communities in question.

In terms of a traditional product life cycle, the Fitzgerald Biosphere region can be described as still growing in its early development phases, principally servicing the day visitor markets from Albany and Esperance, “passing-through” self drive travellers, or those overnighting in
local budget style caravan and camping establishments. Without an active, tourism-focused commercial accommodation sector the Fitzgerald area will continue to only satisfy these current “low yield” market types. The lack of a solid commercial accommodation base can also work to inhibit the financial viability of local Visitor Information Centres (VICs). A common denominator of all the successful VICs operating within Western Australia is the presence of a solid local accommodation base that they take bookings for and gain commissions from.

Establishing additional accommodation capacity within a developing tourism destination poses a number of important viability issues and ultimately should only result when sufficient market demand for such facilities has been clearly identified. There is no doubt that lack of accommodation capacity can severely restrict tourism growth for a particular destination however these operations must also be financially sustainable ventures. A long term approach to accommodation development must therefore be implemented and typically stems only once a vibrant local visitor industry is first established that is based on profitable day trippers and niche based overnight visitor markets.

The establishment of accommodation precincts at the end of the proposed Fitzgerald Walk Trail is considered very important for the long term success of the walk trail as well as the broader tourism region. Targeting nature focused overnight travellers these precincts should develop and offer accommodation options that satisfy current visitor needs yet be able to expand the scale and scope of operations and facilities if and when the required demand eventuates. Long term master planning of these sites should therefore enable the expansion of new facilities if and when market demand triggers are achieved.
Successful tourism destination development can take many years. A good example within Western Australia is the Wave Rock Experience, where over a period of 30 years, a group of local businessmen have grown a simple visitor attraction into an important and successful regional visitor destination offering an extensive range of accommodation options each developed as the market demand dictated. For the Fitzgerald Coastal Walk Trail this growth phase can be fast tracked with well resourced and highly focused promotion however project stakeholders should remain realistic about the scale of benefits the walk trail can deliver to the local communities over the short to medium term. Successful tourism destination development does require time and the investment of appropriate resources.

As a summary of product development initiatives for the Fitzgerald Coastal Walk Trail:

- Develop a series of interesting “resting huts” along the walk trail to satisfy overnighting needs, in particular at or nearby impressive coastal locations.

- Develop accommodation precincts at each end of the walk trail. Investigate development of private accommodation facilities on two sites adjacent to the National Park; on Department of Planning and Infrastructure land (between Bremer Bay and Gordon Inlet), and Shire of Ravensthorpe land at Hamersley Inlet. Master planning of these sites should enable approvals for long term growth and development options to facilities as demand triggers dictate. Include visitor information servicing facilities for the walk trail at each of these accommodation node locations.

- Include within National Park Management Plan consideration of commercial eco-style accommodation facility within the Park at a future date, however viability considerations would only make this probable over the long term.
## 4.4 Other Trail Assessments

<table>
<thead>
<tr>
<th>WHALE TRAIL, SOUTH AFRICA</th>
<th>CRADLE MOUNTAIN OVERLAND TRACK, TASMANIA</th>
<th>GREAT OCEAN WALK, VICTORIA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>The Overland Track from Cradle Mountain to Lake St Clair is a true wilderness walk which travels through spectacular dolerite mountains, near beautiful waterfalls, through a variety of fascinating ecosystems and close to Tasmania’s highest mountain, before finishing at Australia’s deepest lake, Lake St Clair.</td>
<td>The Great Ocean Walk, on Victoria’s spectacular west coast, stretches 104 kms from the idyllic resort town of Apollo Bay, to within sight of the magnificent 12 Apostles. Weave through beautiful National Parks, walk deserted beaches and gaze over pristine marine sanctuaries.</td>
</tr>
<tr>
<td><strong>Length</strong></td>
<td>A six day 5 night walk, travelling 65 kilometres through the heart of the Tasmanian Wilderness World Heritage Area.</td>
<td>A range of short walks, day walks, overnight walks. Choose from a number of suggested Great Ocean Walk itineraries and spend up to 8 days on track.</td>
</tr>
<tr>
<td><strong>Fee paying/bookings</strong></td>
<td>Fee paying and bookings for accommodation required. A conservation fee of R30 per adult (AUD$4) and R15 per child is charged for entry into the Reserve. Whale Trail costs are base don group bookings in either 6pax or max 12pax at R1050 (AUD$150) plus accommodation costs which can range from simple campsites to luxury cottages. The website includes detailed booking conditions including extensive cancellation policies and disclaimers. Children below the age of 8 are not allowed on the trail.</td>
<td>The Overland Track Fee only applies during the peak walking season (1 November - 30 April). The fee must be paid at the time of booking. The fee is $160 AUD per adult, including GST. The fee for children (aged 17 and under), seniors and pension concessionaires is $128. Children under 5 may walk free of charge although young children not encouraged. Group sites Great Ocean Walk campsites at Elliot Ridge, Blanket Bay and Cape Otway, also have group campsites attached to them. These larger, more open sites can hold a maximum of 15 people (approximately 8 x 2 person tents), and are bookable by a group for $160 per night (plus $10 administration fee per application).</td>
</tr>
</tbody>
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## WHALE TRAIL, SOUTH AFRICA

**Services offered**

Vehicles are left at Potberg and a shuttle service is provided to take the hikers from the end of the trail back to their cars at Potberg. Every day the transport contractor is on standby to transport the luggage that you do not want to carry yourself to the next cottage, allowing you the luxury of carrying only a daypack, camera and field guides while walking. 60 litre standard containers are provided. This container is called a unit and the transport cost of the unit is R300.00 (approx $AUD43) for the duration of your hike.

**Accommodation**

On the nature trail twelve self-catering cottages are available, ranging from basic cottages, some of which are equipped with bedding, to more luxurious options. Accommodation at Lekkerwater comprises a gracious home situated in an isolated part of the reserve on the shores of the Marine Protected Area. The house sleeps ten adults and offers complete seclusion, comfortable facilities and spectacular whale watching opportunities. There are also ten campsites at De Hoop, each site accommodating a maximum of six people in tents or caravans. Picnic sites are situated throughout the reserve. The hiker’s huts are designed to accommodate 12 people. All the huts except Noetsie have a built-in braai suitable for all the huts except Noetsie have to accommodate 12 people. All the huts except Noetsie have a built-in braai suitable for all the huts except Noetsie have to accommodate 12 people. All the huts except Noetsie have a built-in braai suitable for all the huts except Noetsie have to accommodate 12 people. All the huts except Noetsie have a built-in braai suitable for all the huts except Noetsie have to accommodate 12 people. All the huts except Noetsie have a built-in braai suitable for all the huts except Noetsie have to accommodate 12 people. All the huts except Noetsie have a built-in braai suitable for all the huts except Noetsie have to accommodate 12 people.

## CRADLE MOUNTAIN OVERLAND TRACK, TASMANIA

**Public buses will drop you off at the Cradle Mountain Visitor Centre, or at the accommodation nearby if you request. You must check in at the Visitor Centre to collect your Overland Track Pass and your Parks Pass. A frequent shuttle bus service goes from the Information Centre and the Visitor Centre 7 days a week, to the start of the walking track at Ronny Creek, 5kms into the Park. The side tracks add diversity to the Overland Track, with waterfalls, lakes and peaks. These side tracks are all clearly signposted, but the tracks are generally narrower and less obvious than the main track.**

**Accommodation**

There are bushwalker’s huts located at each of the five overnight stops on the Overland Track. Also at each overnight stop is a rainwater tank, camping platforms, other campsites and a fly-out bushwalker’s toilet.

The booking system manages departures and relieves the pressure at the overnight stops along the track and the amount and frequency of overcrowding at huts and along the track. Each hut has long sleeping platforms and communal cooking and eating areas with benches and tables. There is no food, cooking utensils, cooking stoves, mattresses or bedding available at the huts. It is essential that you carry a tent and fuel stove. There are three additional bushwalkers’ huts, mostly off the main track, at Lake Rodway (the Scott-Kilvert hut), at Pine Valley and at Echo Point. (Each of these has a bushwalker’s toilet.)

## GREAT OCEAN WALK, VICTORIA

**Obtain a permit at least 2 weeks before your hike start-date. All overnight hikes must move in an east to west direction. A limit of one night at each hike-in campsite unless otherwise approved by Parks Victoria. Each individual tent site allows maximum tent floor dimension of approximately 3m x 3.5m and holds a 2–3 person tent.**

**Accommodation**

Step on and off the trail with convenience; enjoy comfortable accommodation and excellent local meals or pitch your tent at wildly picturesque spots along the way. Pitch your tent at one of the walkers’ camp sites on route and wake up in a spectacular natural setting.

Each site has tent pads, toilets, shelters, rainwater tanks (untreated) and camp tables. Hike-in campsites are fuel stove only. There are 8 tent pads catering for 2-3 person tents at each site. Elliot Ridge, Blanket Bay and Cape Otway hike-in campsites also have dedicated group areas catering for a further 7 tents. There is no car access to hike in campsites.

*Table continues on the following page*
<table>
<thead>
<tr>
<th>WHALE TRAIL, SOUTH AFRICA</th>
<th>CRADLE MOUNTAIN OVERLAND TRACK, TASMANIA</th>
<th>GREAT OCEAN WALK, VICTORIA</th>
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<td>Key words – Overland Track</td>
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<td><a href="http://www.capenature.co.za">www.capenature.co.za</a></td>
<td><a href="http://www.parks.tas.gov.au">www.parks.tas.gov.au</a></td>
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<td></td>
<td></td>
<td><a href="http://www.greatoceanwalk.com.au">www.greatoceanwalk.com.au</a></td>
</tr>
</tbody>
</table>

Managing entity:
- CapeNature - a public institution with the statutory responsibility for biodiversity conservation in the Western Cape. CapeNature is driven by the vision to establish a successful ‘Conservation Economy’
- Parks and Wildlife Service Tasmania
- Parks Victoria

Identified Key Success Factors

- Visually spectacular natural scenery
- The “add on” or side walks are what raises a walk above the average.
- Offer a range of accommodation style and standards. Converted farmhouses offer upmarket high yield facilities however even in remote locations such as the Overland Track in addition to the basic huts, toilets and tent platforms at most campsites, there is the option of becoming a ‘soapie’ by doing a guided trip, complete with showers, meals and wine. It is these upscale facilities that offer the greatest potential for injecting economic benefit to the local region.
- Management of trail by requiring prior bookings and limiting numbers of walkers on trail at any one time.
- Pricing was around $150 per adult for 5 night track, payable only during major visitor season.
- Interactive website with abundant information and offering booking and payments services.
4.5 The Fitzgerald Walk Trail Business Model

The Fitzgerald Walk Trail will offer a range of unique and highly rewarding day and extended overnight walk trails to varying degrees of difficulty along the spectacular FRNP coastline. Visitors will inject expenditure into the region via entry and participation fees, accommodation and dollars spent within each of the surrounding towns.

The socio-economic goal of the project will be to generate significant visitor expenditure locally via:

- National Park general entry fees (charged and collected all year round)
- “End to End” walk trail fees (charged during peak periods only and in the range of $150 per person for a 4 to 5 night experience)
- Accommodation
  - DEC walker overnight huts and general campsites within the Park
  - Shire managed accommodation precincts at each end of the proposed walk trail.
  - Private operator accommodation adjacent to stage 2 walk trails and within the nearby townsites.
  - Flow on visitor expenditure into local businesses; supermarkets, petrol, attractions admission fees, tour operators, walking guides, restaurants and cafes etc.

The perceived success of the proposed walk trail should not be measured simply by how many walkers will undertake the trail each year but rather by what is the collective economic impact these visitor will inject into the local communities. The Fitzgerald Walk Trail as outlined within this report has strong potential to deliver significant benefits to the local communities surrounding the Fitzgerald National Park. In addition to the current visitation levels and expenditure generated the proposed Walk Trail should generate substantial “iconic” significance amongst dedicated nature enthusiasts. The proposed visitor infrastructure will significantly enhance the potential visitor experience to the region and will work to attract a new and additional market type. However, the challenge also lies with local industry to act on entrepreneurial opportunities and to supply products and services that meet identified market needs.

FITZGERALD WALK TRAIL MANAGEMENT

A highly cooperative approach between the DEC, the Shires of Jerramungup and Ravensthorpe, and local industry/community groups is considered a critical ingredient for sustainable long term success of the project.

- As the walk trail will lie within National Park boundaries the ultimate responsibility for its management will rest with the DEC, however there are good examples of where local “Friends” and similar interested community groups can also be effective contributors to the overall management role. A centralised and well resourced bookings facility will be required for the “end to end” walk trail product. This should be delivered online with live booking sheet functionality and payment ability. Managed by the DEC the website should provide an essential information source for potential users as well as an effective promotional tool for the walk. Local visitor centres (and perhaps even some selected local accommodation providers) should have the ability to access the website and make bookings on behalf of their clients on a commission fee basis.

- Accommodation options within the Park are currently managed by DEC and this should continue until/ if visitor demand grows to the point where a suitable location within the Park could be developed by a third party professional commercial operator on a lease basis to the DEC. However, at this stage sufficient market demand does not exist currently and into the foreseeable future to warrant feasible investment of this nature.

- Accommodation precincts at the ends of the Walk Trail offer greatest commercial opportunity. These facilities would lie outside of the Park boundaries.
and ideally be managed/leased to private operators by the respective Shires. Lease income from these precincts could be used by the Shires towards funding a permanent tourism officer role and/or regional promotions to external markets.

- Private investment in local accommodation. Ultimately, this type of investment relies on entrepreneurial thinking and action by local business people or from external operators attracted by the perceived market based opportunities generated by the Walk Trail.

FITZGERALD WALK TRAIL MARKETING

Marketing and promotion on a broader destination basis is required for the Fitzgerald region. “The Fitzgerald Coastline” is a current promotional branding being used and the naming and associated branding of the Walk Trail should strongly influence and work in closely with the broader destination initiatives. Some of the suggested marketing initiatives include:

- Investigate the creation of a jointly funded tourism coordinator position (perhaps shared equally between the two Shires). The role would be responsible for the coordination of tourism issues and specifically focusing upon the marketing of the “iconic” Fitzgerald Walk Trail product across DEC, Shire and private industry. The role would coordinate the production of a unified brand, its application across all marketing literature and the production of required promotional collateral.

- The Walk Trail itself will require the preparation of a dedicated marketing plan where roles and responsibilities of key stakeholders are clearly detailed.

- Without pre-empting the work of the Marketing Plan the majority of external promotion should be undertaken by working closely with the respective Regional Tourism Organisations (RTOs) namely the Australia’s Golden Outback and (working in with Esperance as the major eastern visitor access/entry point) and with Australia’s South West (working with Albany as the major western visitor access/entry point).

- Targeting specialised long distance walking groups and specialised tour operators will be an important aspect of any marketing focus for the Walk Trail. These walker types typically respond well to editorial coverage in their respective magazines, websites and social networking forums. Working closely with well established WA groups such as the Bibbulmun Track and Cape to Cape Walk Trail groups will be critical for generating awareness and interest during the initial track operational periods.

- The creation of a user friendly and informative website with high degree of functionality (online booking, payment facility, membership database and local industry management) is considered critical to effective marketing and management of the proposed trail.
5.0 Interpretation Concept

Based on the biophysical, socio-cultural and market analysis, a draft interpretation concept was developed to inform the location of the trail and trail facilities. Relating the trail to an interpretation narrative, allows the trail location to give meaning to the experience.

5.1 The Linear Landscape

Inspire the Walker to Read the Landscape

The proposed theme for the trail is ‘The Linear Landscape’. This is derived primarily from on site appreciation of the natural processes that have shaped the landscape to form recognisable patterns in the landform, geology, vegetation and fauna. These patterns are predominantly linear. Cultural lines that humans have inscribed upon the landscape are also apparent. Some of these are inscribed in thought through stories and historic journeys while others are physically inscribed in the landscape in the form of fences, tracks and telegraph lines. The proposed trail will add another line to the landscape which through its design and interpretation of the linear landscape will hopefully ‘inspire the walker to read the landscape’ and learn about its many cultural and physical forces that have shaped it.

The natural lines in the landscape include the following:

- lines of marine migration along the coastline including whales
- the line of the Rabbit Proof fence
- the coastline whose edge the trail follows providing a strong contrast to the turquoise ocean and dramatic landforms
- the silhouetted line of the ranges in the distance
- the line created by the Intercolonial Telegraph line

The interpretation opportunities along the alignment are noted in the following Section 6.0 The Trail Concept and Maps 16, 17, 18, 19, 20 and 21.

Photo 39. Point Ann linear rock formations
Photo 40. Lines of vegetation between Mt Bland and West Mt Barren

Photo 41. Lines of vegetation Little Boondadup

Photo 42. Lines of vegetation Little Boondadup
Photo 43. Linear rock formations at beach near Quoin Head

Photo 44. Linear rock formations west of Quoin Head
Fitzgerald River National Park Coastal Walk Trail

Photo 45. Quoin Head linear rock formations

Photo 46. Ridge lines

Photo 47. Trail line

Photo 48. Coast line
The trail traverses the spectacular coastal landscape of the Fitzgerald River National Park. The trail begins in the small, coastal town of Bremer Bay, wanders along pristine, white sandy beaches, passes over dunes through thick coastal vegetation, traverses gently undulating plains, negotiates rugged quartzite ranges and steep hills and hugs the dramatic rocky coastline with expansive views across the Southern Ocean and into the park. The trail ends in the coastal town of Hopetoun at the eastern end of the park.

**COASTAL TRAIL**

Three classes of difficulty could be experienced if the trail is walked from end to end (Refer to Map 12). The easiest trail sections will be closest to the two towns, Bremer Bay and Hopetoun. These would be Class 3 trails which require no bushwalking experience and a moderate fitness level. East of Point Ann and west of Hamersley Inlet, the level of difficulty increases to Class 4, where walkers can encounter a higher level of natural hazards and need a moderate level of bushwalking experience. The rugged terrain between Dempster Inlet and Quoin Head presents a more challenging landscape in which to locate a trail. The rugged and remote character of this section lends itself to a Class 5 trail which would require less modification and signage. However, with careful trail alignment, appropriate signage and a suitable level of management a Class 4 trail could be constructed through this area allowing a greater number of people to experience the natural beauty of this area.

The Main Coastal Trail (noted as Option A in the Trail Concept Description and on Maps 13, 14 and 15) is approximately 110 km in length for combined stages 1 and 2. Walking from Bremer Bay to Hopetoun the trail can be completed in seven days with overnight stops at Gordon Inlet, St Mary Inlet, Fitzgerald Inlet, Twin Bays, Quoin Head and Hamersley Inlet before reaching Hopetoun. An optional overnight stop is possible at Four Mile Beach.

**LOOP TRAILS**

Optional loop trails are also suggested to enable visitors to experience a wider range of character types and provide a diversity of trail options. The loop options are all Class 3, ensuring relatively easy half day to day walks for visitors.

- The **Quaalup Loop** leads from Bremer Bay to Quaalup Homestead then to Point Ann and Gordon Inlet before returning to Bremer Bay. This loop would take four days and includes sections of the main alignment.
- The **Hamersley Loop** is about 16km long and offers a nice day option. It travels along the shoreline of Hamersley Inlet, towards West Beach and Edwards Point before returning to the Inlet.
- The 12km **East Mt Barren Loop** is also a potential half day walk. This walk would take in the foothills of East Mt Barren, the western shore of Culham Inlet and the rocky shoreline below East Mt Barren.
- Two small loops, one from West Beach to East Mylies Beach (**West Beach Loop**) and the other between Four Mile and East Mylies Beach (**Barren Loop**) are also provided.

**WALKING DIRECTION**

It is recommended that trail users walk the trail from west to east, from Bremer Bay to Hopetoun. This will enable the spectacular views of the Barren Ranges to act as an anchor drawing walkers towards the centre of the Park, see Photo 49. Anchors are features in the landscape, with the greatest contrast, to which our eyes are drawn.

Wind data for Albany airport suggests morning wind direction is predominantly northwest and afternoon winds west/southwest. Data for Esperance notes morning winds are west/northwesterly and afternoon
Winds south/southeasterly. In general, winds are northwesterly in the morning and southwesterly in the afternoon. A west to east walking direction will allow winds to assist trail users rather than hamper them as the wind will be at their back. This will be experienced especially along the beach sections of the trail.

The trail alignment has been plotted to determine what distances are involved and how many days the trail may take to complete. The alignment also captures significant landscape and cultural features. All route locations are indicative only and will need further on site investigation to determine their suitability and to refine the visitor experience.

**OVERNIGHT FACILITIES**

It is recommended all the overnight stays include toilets, tent sites, sleeping shelters, and rain water tanks to collect run-off from roofs. The form, colour, material and texture of the built form should borrow from the surrounding landscape so the built form blends into the landscape and minimises negative visual impact. At remote locations, such as Twin Bays, facilities should be kept to a minimum and be carefully sited to ensure the remote natural values of the area are not compromised. Walker facilities should be located at a fair distance from vehicle campers to enable a sense of seclusion for walkers if they desire and particularly if generators are permitted in the campsite. All campsites require further on site investigation for location and style.

**TRAIL NAME**

It is recommended that a name be chosen for the trail. This is important for tourism opportunities and marketing purposes. It is preferable the name is chosen following consultation with community members, especially the indigenous community.
TRAIL CONCEPT DESCRIPTION

Sections 6.1 to 6.3 (pages 45-65) describe the Trail Concept. The descriptions are grouped into Western, Central and Eastern Sections, which reflect proposed construction staging. Each Section describes the main trail, option A, alternative alignment options and suggested loop walks. An overview of each section is provided below. Descriptions of the different trail classifications according to AS 2156 are provided in Section 7.1.

Section 6.1 Western Section (Stage 2)

Main Trail: Days 1-2 (Class 3)
- Day One (Bremer Bay to Gordon Inlet, options A, B & C)
- Day Two (Gordon Inlet to Point Ann, options A & B)

Quaalup Loop: 4 days (Class 3)
- Day One (Bremer Bay to Quaalup, option D)
- Day Two (Quaalup to Point Ann)
- Day Three (Point Ann to Gordon Inlet)
- Day Four (Gordon Inlet to Bremer Bay)

Section 6.2 Central Section (Stage 1)

Main Trail: Days 3-6 (Class 4)
- Day Three (Point Ann to Fitzgerald Inlet, options A & B)
- Day Four (Fitzgerald Inlet to Dempster Inlet, then Dempster Inlet to Twin Bays, option A)
- Day Five (Twin Bays to Quoin Head, options A & B)
- Day Six (Quoin Head to Hamersley Inlet, option A)

Section 6.3 Eastern Section (Stage 2)

Main Coastal Trail: Day 7 (Class 3)
- Day Seven (Hamersley Inlet to Hopetoun, option A)

Trail Loops: Day Walks (Class 3)
- West Beach Loop and Barren Loop, Day Seven (option B); East Mt Barren Loop, Day Seven (option C); Hamersley Loop, Day Seven (option D)
TRAIL MAPS (MAPS 12-21)

All the Maps are in Appendix One.

The overall Trail Concept (Map 12) shows the Main Trail divided into Stages, Trail Classifications and days.

The Trail Alignment Maps (Maps 13, 14 and 15) show all trail options, loops, trail distances, trail conditions, landscape features, infrastructure, roads and tracks. Option A on the maps is the Main Trail. The trail sections shown on each map are described below:

- **Map 13 Trail Alignment**: Bremer Bay to Point Ann.
- **Map 14 Trail Alignment**: Point Ann to Quoin Head.
- **Map 15 Trail Alignment**: Quoin Head to Hopetoun.

The Main Trail Experience Maps (Maps 16, 17, 18, 19, 20 and 21) show the main trail divided into days. The maps graphically describe what the trail user will experience along the trail. They also show the trail classes, interpretive opportunities, anchors, landscape features, where the trail experience changes between landscape types, views and estuaries. The trail sections shown on each map are described below:

- **Map 16 Main Trail Experience**: Day One Bremer Bay to Gordon Inlet (Class 3).
- **Map 17 Main Trail Experience**: Day Two Gordon Inlet to Point Ann (Class 3).
- **Map 18 Main Trail Experience**: Day Three and Four
  - Point Ann to Fitzgerald Inlet (Class 4)
  - Fitzgerald Inlet to Twin Bays (Class 4).
- **Map 19 Main Trail Experience**: Day Five Twin Bays to Quoin Head (Class 4).
- **Map 20 Main Trail Experience**: Day Six Quoin Head to Hamersley Inlet (Class 4).
- **Map 21 Main Trail Experience**: Day Seven Hamersley Inlet to Hopetoun (Class 3).
6.1 WESTERN SECTION (Stage 2)

Main Trail: Days 1 - 2 (Class 3)

DAY ONE: BREMER BAY TO GORDON INLET

There are three options for the trail user between Bremer Bay and Gordon Inlet (Refer to Map 13 Trail Alignment - Bremer Bay to Point Ann, and Map 16 Main Trail Experience - Day One Bremer Bay to Gordon Inlet).

Option A - Main trail

- Length: 21km
- LCT: Coastal Town; Valley; Sandy Coastal
- Visitor Risks: minimal

The trail begins in Bremer Bay townsite leading to Wellstead Estuary where the view opens up toward the river valley and the ocean. The trail follows the broad white sands of Bremer Beach with wide views to the horizon and Point Hood. The anchor for this section is the promontory at the end of Bremer Beach, at James Cove. At the end of the bay the trail user moves away from the coast into the enclosed, higher, thick coastal vegetation with limited views. There are possible views to West Mt Barren, Mt Bland and the ocean if the trail passes over higher topography. The trail experience opens up as the alignment descends onto Tooregullup Beach with wide views of the ocean, Point Hood, Doubtful Islands and Point Ann in the far distance. The trail leads north along the beach with Point Ann to the north as an anchor, then toward Gordon Inlet, where views open up west into the river valley and inlet.

Interpretation opportunities include Bremer Bay and Wellstead Estuary (geological form, vegetation form, Aboriginal, water form); James Cove (geological form, vegetation form, land explorers, maritime explorers, Aboriginal); West Mt Barren & Mt Bland (land explorers, maritime explorers); Gordon Inlet (water form, Aboriginal, marine migration).

Overnight facilities

A campsite could be established on the east side of Gordon Inlet within FRNP. A corrugated iron shack is located on private land at the Inlet which is currently used by walkers, but it is unsuitable because it is not located on DEC land.

The style of the built form of the new campsite could borrow elements from the fishing shacks common on the South Coast.
Option B - Hood Point private land

- Length: 11km
- LCT: Sandy Coastal
- Visitor Risks: conflict with vehicles

This option provides an alternative alignment across Point Hood. Instead of creating a new track through the Department of Planning (DoP) managed reserve it utilises an existing track through private land. If use of this track was allowed there may be conflicts between walkers and off road vehicles which would compromise the trail experience. This option is slightly longer than option A and results in a longer walk along Tooregullup Beach.

Option C - Hood Point promontory

- Length 22km
- LCT: Rocky Coastal; Sandy Coastal
- Visitor Risks: cliff risks, conflict with vehicles

This option involves a loop through Point Hood Promontory. It takes the walker through higher, granitic areas on the southern headland and descends from the ridges of dwarf coastal scrub into a couple of small bays with white sandy beaches. It is the only section of the trail which experiences the ‘dwarf scrub on granite’ vegetation community, found predominantly on southern coast headlands west of the Park.

In places the track uses some existing vehicle tracks, which need to be assessed for level of use and suitability for walking. The opportunity exists to rationalise the numerous tracks within this DoP managed reserve. This would enable some to be turned into walk trails and reduce the potential for user conflict.

Option C is much longer than options A and B and may necessitate an additional overnight stop. Another possibility would be to develop it as a separate day loop walk from Bremer Bay.

DAY TWO: GORDON INLET TO POINT ANN

There are two options for the trail user between Gordon Inlet and Point Ann (Refer to Map 13 Trail Alignment - Bremer Bay to Point Ann, and Map 17 Main Trail Experience - Day Two Gordon Inlet to Point Ann).

Option A - Main trail

- Length: 16km
- LCT: Sandy Coastal; Rocky Coastal
- Visitor risks: cliff risks, wave risks

From Gordon Inlet the trail moves north along broad, white, sandy Trigelow Beach with Point Ann as a strong anchor drawing the walker north. The beach is exposed to the southeast but is framed by thick coastal vegetation to the west. At the end of Trigelow Beach the track continues along a rocky shelf which hugs the high vegetated dune on its left with the turquoise ocean breaking upon rocks to the right. Little Boondadup Beach has interesting, layered, linear rock formations which protrude from the white sandy beach.
Three options require investigation for moving from the beach to the ridge top at Point Ann.

- One option is to define a new trail as close to Point Ann as possible.
- A second option is to use the existing walk trail from Little Boondadup to the existing vehicle track.
- A third option is to use the existing vehicle access at the end of Trigelow Beach. This final option is the least preferable as the access is very steep and the conveyer belt rubber used to stabilise the track significantly detracts from the visual experience.

From above Little Boondadup Beach the trail follows Trigelow East Track to Point Ann. From Trigelow Beach to Point Ann the landscape is characterised by steep, rocky, shaly gneiss cliffs with spectacular views from the
lookouts at Point Ann which provide excellent whale watching opportunities from July to October.

A trail should be developed between the lookouts and the campsite at St Mary Inlet so that walkers and other visitors move between the two areas without having to walk along the road.

Interpretation opportunities include West Mt Barren and Mt Bland (land explorers, maritime explorers); Doubtful Islands (land explorers, maritime explorers); Gordon Inlet (water form, Aboriginal, marine migration); Little Boondadup (geological form, vegetation form); Point Ann (geological form, Aboriginal, marine migration, historic fence line).
Overnight facilities

Plans are underway to upgrade the existing campsite at St Mary Inlet. In addition a backpack campsite is located within the foredunes at Little Boondadup. This site is very small and has no potential for expansion. A campsite for walkers using the trail would be better located closer to the other facilities at St Mary Inlet.

Extra walks

There are numerous small trails at Point Ann from the lookouts and along the ridge and alignment of the Rabbit Proof fence.

Option B - Behind Trigelow Beach

- Length: 16kms
- Class: 3
- LCT: Sandy Coastal; Rocky Coastal

From Gordon Inlet, a more protected, alternate route to walking along the exposed beach is to walk behind the foredune in the enclosed, dense, green, coastal heath along a closed track parallel to the beach. This option may offer views to West Mt Barren and Mt Bland at the higher points in the landscape. This option is slightly longer and may not offer the same spectacular views along the coastline to Point Ann as option A does.
Quaalup Loop: 4 days (Class 3)

This is a four day trail loop which begins in Bremer Bay and includes Quaalup, Point Ann, Gordon Inlet, then heads back to Bremer Bay.

**DAY ONE: BREMER BAY TO QUAALUP**

(Refer to Map 13 Trail Alignment - Bremer Bay to Point Ann).

**Option D**

- Length: 17kms
- LCT: Coastal Town, Plains, Valleys
- Visitor risks: minimal, conflict with vehicles

This trail loop begins in Bremer Bay but follows the eastern edge of Wellstead Estuary to the north, veering inland through an area of open, Eucalypt mallee trees and mallee shrubs. It follows a closed vehicle track which runs roughly parallel to the Gairdner Road. Careful planning will be required to minimise potential conflict between vehicles and walkers.

The trail continues, heading north towards Quaalup Homestead utilising the main vehicle track. A bridge may need to be constructed over the Gairdner River depending on the amount of traffic which currently uses the bridge. The days walk ends at the heritage listed Quaalup Homestead, built in 1858.

**Overnight facilities**

Quaalup Homestead offers a range of accommodation including chalets, cabins, on-site caravans and a campground.

**Extra walks**

There are some short wildflower walks available.
DAY TWO: QUAALUP TO POINT ANN

(Refer to Map 13 Trail Alignment - Bremer Bay to Point Ann).

Option D

• Length: 24kms
• LCT: Valleys, Plains, Ranges, Rocky Coastal
• Visitor Risks: minimal

The trail leaves Quaalup and heads north along the now closed Quaalup North Road. The trail leaves this track to skirt along the north of West Mt Barren until it meets the Rabbit Proof fence which it follows between West Mt Barren and Mt Bland until it reaches Point Ann. The plains landscape is dominated by an area of open shrub mallee with vertically protruding orange, white and grey rocks. The vegetation is linear in pattern and the landscape affords long uninterrupted views.

Extra walks

The West Mt Barren walk trail offers an opportunity to walk to the summit of West Mt Barren.
DAY THREE: POINT ANN TO GORDON INLET

(Refer to Map 13 Trail Alignment - Bremer Bay to Point Ann and Map 17 Trail Experience - Gordon Inlet to Point Ann).

The trail user can follow either Option A or B as noted in the previous ‘Main Trail’ section but head south instead of north to complete the trail loop. Option A trail along Trigelow Beach would allow walkers to view Point Hood and Doubtful Islands in the distance, which are strong anchors for walkers as they head toward Gordon Inlet.

DAY FOUR: GORDON INLET TO BREMER BAY

(Refer to Map 13 Trail Alignment - Bremer Bay to Point Ann and Map 16 Trail Experience - Bremer Bay to Gordon Inlet).

Trail users can follow either options A, B and C as noted in the previous ‘Main Coastal Trail’ section. Bremer Bay and Wellstead Estuary will be the anchors for walkers travelling from Point Hood to Bremer Bay.

6.2 CENTRAL SECTION (Stage 1)

Main Trail: Days 3 - 6 (Class 4)

Trail users have the option to walk from Point Ann to Twin Bays in one or two days along a Class 4 trail; or if they do not care to traverse the whole section, can end their walk at Point Charles/Fitzgerald Inlet.

DAY THREE: POINT ANN TO FITZGERALD INLET

There are two options for walkers between Point Ann and Fitzgerald Inlet (Refer to Map 14 Trail Alignment - Point Ann to Quoin Head and Map 18 Trail Experience - Point Ann to Fitzgerald Inlet).
Option A - Main trail

- Length: 12kms
- LCT: Rocky Coastal, Valley, Sandy Coastal
- Visitor Risks: Inlet crossing, cliff risk, fire risk

The trail crosses St Mary Inlet and takes an inland route through enclosed, thick dune vegetation toward the anchor point of Lake Nameless. The trail passes the southern end of the lake with long views across the lake, and then traverses through enclosed dune vegetation with possible views to the ocean at high points. Point Charles is an anchor drawing the walker back to the coast. This option increases the diversity of experiences offered along the trail and avoids potential conflict between walkers and vehicles on the beach.

Interpretation opportunities include Point Ann (geological form, Aboriginal, marine migration, historic fence line) Lake Nameless (water form); Fitzgerald Inlet (water form).

Overnight facilities

Day use and vehicle based camping facilities exist at Fitzgerald Inlet which can be accessed by 4WD. The Management Plan 1991-2001, also proposes a backpacker campsite at the east end of Fitzgerald Beach. Separate facilities for walkers should be provided. Some walking guides refer to the presence of a freshwater spring at Fitzgerald Inlet, which if found could also provide water.

Option B - Beach

- Length: 8kms
- LCT: Rocky Coastal, Valley, Sandy Coastal
- Visitor Risks: Inlet crossing, cliff risk, fire risk

The trail crosses St Mary Inlet and follows the beach north to Fitzgerald Inlet with Point Charles as an anchor. The walker will experience spectacular views of the ranges. As the trail crosses Fitzgerald Inlet, views open up west into the river valley. Care will need to be taken determining the best alignment off the beach on either side of Point Charles due to the loose unvegetated dunes either side of the ridge.
DAY FOUR: FITZGERALD INLET TO TWIN BAYS

(Refer to Map 14 Trail Alignment - Point Ann to Quoin Head and Map 18 Trail Experience - Fitzgerald Inlet to Twin Bays).

- Length: 16kms
- LCT: Rocky Coastal, Valley, Sandy Coastal
- Visitor Risks: Inlet crossing, cliff risk, fire risk

From Fitzgerald Inlet the track follows the beach past large sandy dunal areas with views to the ocean. At Dempster Inlet the view opens to the west up the inlet valley. The headland north of the inlet acts as an anchor for the walker along this section.

The trail will need to negotiate the steep slopes at the end of Fitzgerald Beach to the foothills of Mid Mt Barren, which is a dominant anchor. This is the start of the rugged, challenging central section of the trail. The alignment through this section will need to be carefully considered to minimise the potential for erosion. There are great views from the rocky headland to the ocean as well as inland to the ranges. The trail passes through low vegetation between Mid Mt Barren on the left and parallels the rocky coastline on the right. Thumb Peak becomes a dominant anchor with the quartzite hill BBY17 acting as a secondary anchor point. The trail also traverses a section of rocky coastline before reaching the sheltered western beach of Twin Bays. Some sections of existing and closed track may be suitable to use along this section. The Twin Bays are divided by a small rocky headland with the eastern bay being rockier and smaller than the western one.

Interpretation opportunities include Dempster Inlet (geological form, water form, Aboriginal); Mid Mt Barren (geological form, land explorers, maritime explorers); Twin Bays (geological form, vegetation form, land explorers, maritime explorers).

Overnight facilities

The old hut at Twin Bays was linked to salmon fishing when fished by McGlinn and maintained by a former Park Ranger, Lindsay Brown. It has a small rainwater tank and walkers log book which are used by people who walk through Twin Bays. Additional camping facilities will be required. Along with tent sites, a toilet should be provided with strong consideration given to increasing the current water supply. At this location facilities should be kept to a minimum and be carefully sited to ensure the remote natural values of the area are not compromised.
DAY FIVE: TWIN BAYS TO QUOIN HEAD

The Twin Bays to Quoin Head section of the trail is the most difficult, remote, and spectacular with views of the ranges descending into the ocean. There are two options between Twin Bays and Quoin Head (Refer to Map 14 Trail Alignment - Point Ann to Quoin Head and Map 19 Trail Experience - Twin Bays to Quoin Head).

Option A - Main trail

- Length: 18kms
- LCT: Rocky Coastal
- Visitor Risks: High - fire, injury, cliff risk, dehydration

The trail continues from the rocky eastern beach of Twin Bays up onto an existing track on the coastal platform between Thumb Peak and the steep coastal cliffs with Thumb Peak as an anchor. The southern end of Two Bump Hill is an anchor as the trail approaches the hill. This section offers great views of the eastern escarpment of Thumb Peak and the ocean. The vegetation becomes more dense and enclosed as the trail moves inland to avoid steep gullies. There are possible views to the north between Thumb Peak and Two Bump Hill. The trail leaves the existing ridge line track of Two Bump Hill to avoid walking above the 150m contour and the ridge line of Two Bump Hill, which forms the boundary between two micro catchments. Using this track would increase the likelihood of dieback spread across two catchments. The trail then turns towards the coast with views to Red Islet and winds its way along the ridges between Thumb Peak and the coast where the vegetation is more open and avoiding, where possible, the deeply incised valleys below Thumb Peak. The trail turns away from the coast for a section, heads back inland, before meeting the coastline again with views to the Whoogarup Range. The ocean, Red Islet, and the ranges alternately acts as anchors depending on the direction the trail takes- either inland or heading to the coast.

Past Two Bump Hill the trail follows the rugged exposed coastline, following broad ridges as much as possible and crossing valleys on more gentle slopes. It also travels past Marshes Beach which gives walkers an opportunity to visit one of the isolated coves which characterise this section of coastline. The trail passes through various vegetation types, higher mallee shrubs inland and low coastal vegetation. The headlands are dotted with protruding, linear rock formations which act as small anchors in this landscape.

The trail descends off the ridge onto the white sandy beach east of Quoin Head. The beaches along this rocky coastline are characterised by clean white sand and impressive linear rock formations. The trail crosses a sandy saddle to reach the pristine beach at Quoin Head. An existing set of stairs leads from the beach to the Quoin Head camping and day use area.
Interpretation opportunities include Twin Bays (geological form, vegetation form, land explorers, maritime explorers); Thumb Peak (geological form, vegetation form, land explorers, maritime explorers); Marches Beach (geological form, water form); Quoin Head (geological form, vegetation form, land explorers, maritime explorers).
Fitzgerald River National Park Coastal Walk Trail

Photo 81. Descent into a valley

Photo 82. Valley

Photo 83. Thicker higher vegetation on the inland route
Photo 84. Low coastal vegetation west of Quoin Head

Photo 85. Beach at Quoin Head

Photo 86. Rock formations at beach east of Quoin Head

Photo 87. Rock formations at beach east of Quoin Head
Photo 88. Beach west of Quoin Head

Photo 89. Quoin Head Beach

Photo 90. Quoin Head Beach
Overnight facilities

Currently there is a barbeque and car park at Quoin Head which can be accessed by 4WD. Visitor information indicates that toilets and camping are available, however these appear to have been destroyed by a recent fire and will need to be reinstalled. Consideration should be given to developing a separate campsite for walkers though a brief site inspection did not reveal any suitable locations.

Option B - Coastal route

- Length: 9 kms
- LCT: Rocky Coastal
- Visitor risks: High - fire, injury, cliff risk, dehydration

Option B suggests an alignment which stays much closer to the coastline. This alignment will need to traverse numerous valleys which may increase the risk of erosion. Traversing the valleys can be difficult as the vegetation in the base is thick and the slopes are very steep. In contrast the vegetation at the head of the valleys is often head height and quite dense. Both scenarios offer challenges to trail construction however the primary aims of the alignment should to minimise the potential for erosion and need for maintenance and to maximise the variety of environments the trail passes through. The ocean and Red Islet are anchors with the ranges as points of interest for walkers.

Option A has a more diverse alignment, covering inland and coastal areas, where Option B stays close to the coast offering spectacular views of the coast. Option A, though longer, also provides the opportunity to climb higher into the ranges, up Thumb Peak foothill slopes for unique and spectacular views.
DAY SIX: QUOIN HEAD TO HAMERSLEY INLET

(Refer to Map 15 Trail Alignment - Quoin Head to Hopetoun and Map 20 Trail Experience - Quoin Head to Hamersley Inlet).

Option A - Main trail

- Length: 11kms
- LCT: Rocky Coastal, Sandy Coastal
- Visitor Risks: fire, cliff risk, injury

From Quoin Head the trail heads east towards Whalebone Beach generally following the existing 4WD Whalebone Track. The start of this track is highly eroded and should be avoided, while the use of other sections should be considered carefully, taking into account existing and future levels of vehicle use to minimise conflict between users. A headland east of Quoin Head acts as an anchor as walkers travel east. Other points of interest in this section include the Whoogarup Range to the left. The low to medium height vegetation partially encloses the trail user, then heads atop the steep sandy dunes behind Whalebone Beach with open ocean views, before dropping down to Hamersley Beach. A rocky shelf at the eastern end of Hamersley Beach may provide a suitable alternative to moving up off the beach again before walking up the shoreline of Hamersley Inlet to the campground. Views open up north into the inlet.

Interpretation opportunities include Quoin Head (geological form, vegetation form, land explorers, maritime explorers); Whalebone Beach (Aboriginal); Hamersley Inlet (land explorers, maritime explorers, water form, marine migration).
Overnight facilities

Plans are underway to upgrade and consolidate the existing DEC and Shire of Ravensthorpe Campgrounds. Planning for this area should provide specific camp sites for walk-in campers with some degree of separation from vehicle based campers. Consideration should also be given to providing water for walkers.
6.3 EASTERN SECTION (Stage 2)

Main Trail: Day 7 (Class 3)

DAY SEVEN: HAMERSLEY INLET TO HOPETOUN

There are four options between Hamersley Inlet and Hopetoun, with the options also forming additional loop trails from certain locations. (Refer to Map 15 Trail Alignment - Quoin Head to Hopetoun and Map 21 Trail Experience - Hamersley Inlet to Hopetoun).

Option A - Main trail

- Length: 25km
- LCT: Sandy Coastal, Rocky Coastal, Coastal Town
- Visitor Risks: Cliff Risk

The trail alignment from the Hamersley Inlet Campground will need to traverse two large areas of drift sand and dunes. The shifting nature of these areas makes trail definition difficult. Once over the dunes the trail follows a steep barren rocky headland with open vegetation and with Edwards Point an anchor. The trail skirts between a higher rocky point and the ocean which should offer spectacular views to Annie Peak to the north with a headland at West Beach acting as an anchor point. From here the trail heads past West Beach, a small white sandy bay, with beach access via an unsealed road.

The trail continues along the rocky coast before intercepting an existing track and descending onto Mylie’s Beach. The beach walk has views to the anchor point of East Mt Barren.

At the eastern end of the beach, the trail follows the rock shelf around to Barrens Beach, which will need investigation to determine its suitability. The trail then follows Four Mile Beach, passes Culham Inlet, a landscape point of interest where views open up into the inlet. A beach walk from the inlet to the anchor point of Hopetoun forms the final section of the trail.

Interpretation opportunities include Hamersley Inlet (land explorers, maritime explorers, water form, marine migration); Edwards Point (marine migration); West Beach (Aboriginal); East Mt Barren (geological form, vegetation form, land explorers, maritime explorers); Culham Inlet (land explorers, water form); Hopetoun (land explorers, maritime explorers, marine migration); Annie Peak (geological form, land explorers).
**Option B - Inland**

- Length: 10kms
- LCT: Sandy Coastal, Rocky Coastal, Coastal Town

The trail heads inland from West Beach along a closed track through open vegetation.

**Trail Loops: Day Walks (Class 3)**

**WEST BEACH LOOP**

Option B described above can also be used as a small trail loop from West Beach to Mylie’s Beach then back to West Beach.

**BARREN LOOP**

- Length: 7kms

This alternative, noted on Map 15 as Option B, has the trail leaving the beach at the eastern end of East Mylie’s Beach along a closed track, then it traverses through dune vegetation, running parallel to Hamersley Drive. The alignment is just south of East Mt Barren, and then it descends onto Four Mile Beach.

**Option C - Inland around East Mt Barren**

- Length: 12km
- LCT: Sandy Coastal, Ranges, Rocky Coastal, Coastal Town

The trail ascends from Mylie’s Beach along an existing track onto the top of the rocky exposed cliff then heads north across the saddle between East Mt Barren and the smaller peak to its north offering spectacular views to the Eyre Range, which acts as an anchor. It descends towards the broad, open water of Culham Inlet and follows the inlet edge south until meeting with the Option A route at Four Mile Beach.
EAST MT BARREN LOOP

Option C described above can be undertaken as a trail loop, which could also include the Barren Loop for a longer trail loop option.

TRAIL LOOP - HAMERSLEY LOOP

Option D - Hamersley Inlet

- Length: 9km
- LCT: Sandy Coastal, Valley, Ranges, Rocky Coastal, Coastal Town

From Hamersley Inlet campsite, the trail follows the inlet north to a stream from where it follows a valley to the east with possible views to Eyre Range and East Mt Barren as an anchor, before heading south to join the main alignment.

Overnight facilities

A current vehicle campsite at Four Mile Beach can be used to break up the seventh day. Additional facilities for walk-in campers are recommended.

Extra Walks

An existing walk trail provides an opportunity to walk to the summit of East Mt Barren.
7.0 Construction Methods and Management

7.1 Trail Classification

**CLASS 3 TRAILS**

The DEC, for the purposes of the planning of the coastal walk trail, requires consideration of the construction and on-going maintenance required for an AS 2156 - Class 3 Trail Classification. The intent of a Class 3 Trail is to provide the visitor with the opportunity to:

- walk in slightly modified natural environments requiring a moderate level of fitness, where the provision of interpretation and facilities is not common.
- observe and appreciate the natural environment with limited provision of interpretive signage.
- occasionally encounter other walkers.

Site reconnaissance revealed that because of the remote and dramatic nature of the landscape of the Fitzgerald River National Park, the ability to achieve an AS 2156 - Class 3 Trail Classification, exists only in the eastern and western ends of the coastal area between Hopetoun and Hamersley Inlet and between Bremer Bay and Point Ann.

These two areas fall within the Natural Environment Management Zone, identified in the Fitzgerald River National Park Management Plan 1991-2001. These areas are identified as having the ability to sustain, with minimum impairment, a selected range of low-density outdoor activities with a minimum of related facilities. The management requirement within this zone is to conserve the natural environment with a low to moderate level of management; and includes the opportunity for four-wheel drive tracks but with restricted motorised access, and semi-primitive camping facilities.

**CLASS 4 TRAILS**

The coastal landscapes between Point Anne and Quoin Head is remote and rugged range landscape and presents a high risk to users. This portion of the coast is suited to an AS 2156 - Class 5 trail, with the intent of a Class 5 Trail being to provide visitors with the opportunity to:

- find their own way along often indistinct tracks using their advance outdoor knowledge and skill.
- enjoy frequent opportunities for solitude with few encounters with other walkers.

This area falls within the Management Zone — Wilderness, identified in the Fitzgerald River National Park Management Plan 1991-2001. This zone is identified as having extensive areas maintained in a wilderness state. Management is focused on conservation of the natural resource and allows non-motorised access only except for emergency and essential management. Facilities if provided are to be primitive.

A Class 4 trail could be achieved in this area with adjustment to the management plan, sensitive and considered placement of the trail alignment and associated facilities and a suitable level of management. Remote areas would remain to provide off track walking opportunities for experienced bushwalkers. The WA federation of Bushwalkers is supportive of this approach.

**CLASS 5 TRAILS**

The coastal landscapes between Point Anne and Quoin Head are remote but accessible dunal landscapes that were determined through the site reconnaissance to have the ability to achieve an AS2126 – Class 4 Trail Classification. The intent of a Class 4 Trail is to provide the visitor with the opportunity to:

- explore and discover relatively undisturbed natural environments along defined and distinct tracks with minimal facilities, if any.
- observe and appreciate the natural environment without provision of interpretive signage.
- enjoy solitude with few encounters with other walkers.

These two areas also fall into the Management Zone — Natural Environment, identified in the Fitzgerald River National Park Management Plan 1991-2001.
7.2 Construction of New Trails

The best construction methods and management regimes needed to achieve these objectives are ultimately related to trail shaping techniques and the basic site-specific forces and relationships that occur at any given location. Creating sustainable walk trails relies on the use of what nature, the site, materials and management can offer. (Parker, 2004) Sustainable construction method and management relies on detailed site planning and design.

The following broad design principles should be considered during the selection of the final trail alignment and detailed design. They define and respond to the human and physical forces and relationships that underpin sustainable natural surface trails. (Parker, 2004).

NATURAL SHAPES

Natural shape describes the basic shape found in all things in nature, including trails, and how we respond to that shape.

Design Principle 1:

- Derive the trail alignment from shapes that occur in nature to connect the walker to the place.

ANCHORS

Anchors are features in the landscape with the greatest contrast to which our eyes are drawn, including edges and gates.

Design Principle 2:

- Align trails to allow the walker to be drawn to anchors in the landscape.

SAFETY

Safety refers to our perceived level of safety when on a trail.

Design Principle 3:

- Ensure a sufficient level of safety to the walker balanced with the psychological need for decision-making to manage risk.
EFFICIENCY

Efficiency refers to our desire that the trail be easier to use than to bypass, shortcut, or avoid.

Design Principle 4:
- Shape trails to provide the fastest and easiest path to the destination.

PLAYFULNESS

Playfulness is the idea that the patterned randomness of nature has a playful quality that we both need and desire.

Design Principle 5:
- Plan and design trails to include a high degree of interaction between the trail user and the site features.

HARMONY

Harmony is the confluence of natural shapes, anchors, safety, efficiency, playfulness and physical factors to sustainably support the desired trail experience.

Design Principle 6:
- Plan and design trails using the interaction of natural shapes, anchors, safety, efficiency, playfulness and physical factors to instil a sense of stewardship for the environment.

COMPACTION AND DISPLACEMENT

Compaction is the downward force of visitor’s weight, plus the weight of modalities on the tread surface of a trail; and displacement is the horizontal movement of the trail tread material due to human movement.

Design Principle 7:
- Plan and design trails with the understanding that compaction and displacement will occur.

EROSION

- Erosion is caused by water or wind that has enough force to transport tread particles.

Design Principle 8:
- Design the trail shape, the tread and the site context to help limit the erosion that will inevitably occur.

TREAD TEXTURE

Tread texture is the composition of the soil, rock and other site materials and how the composition causes the tread to behave under physical forces in wet and dry trail conditions.

Design Principle 9:
- Design the tread using a wide range of particles sizes; the smallest particles to bind, the larger particles to resist displacement and erosion while providing strength in wet conditions, and medium particles to stabilise.

TREAD WATERSHED

Tread watershed is the trail tread between a local high point and the next local low point, plus the land area that drains onto this tread segment.

Design Principle 9:
- Plan and design trails to have small tread watersheds.
7.3   Opportunities and Constraints

COASTAL ZONE

The sandy coastal zone is made up of a series of distinct environments (beach, foredunes, swales, secondary dunes, and tertiary dunes) broadly parallel to the shoreline. These distinct environments differ dramatically in their ability to tolerate use. The resilience of a foreshore environment to public use and building is dependent on its ability to recover ecologically from the use. The beach is the most resilient to intensive recreation and the least resilient to building. The only major threats to the beach are pollution and the interruption of the system that supplies its sand. The foredune is the least resilient to heavy use or even minor traffic. The swale behind the foredune is reasonably resilient but can be degraded easily. The windward side and crest of the secondary dune system is not resilient to use but the lee side is well stabilised and therefore the most resilient (Seddon, 2004). It is important for site planning within the foreshore to avoid the less resilient zones and provide recreational facilities only in the most resilient zones. It is also important not to breach the protective foredune and lee and crest of the secondary dune so that the stable zone remains stable. An understanding of the ability for the foreshore to withstand use informs the walk trail concept. The site planning principles in the coastal zone are to:

- direct walk trails to the resilient beach area
- locate built recreational facilities such as campsites on the lee side of the secondary dune system
- avoid building permanent structures such as staircases on the beach and foredune
- provide a limited number of well-defined beach access paths perpendicular to the prevailing winds
- protect recreation areas from coastal influences such as changing winds, wave, current, and tidal conditions
- protect or establish dune vegetation.

Photo 101. Beach trail near Quoin Head
USE OF EXISTING TRACKS

The use of existing tracks has appeal to land managers because bushland is preserved and the cost of construction is reduced. However, existing tracks need to be evaluated to determine if their future use for walking is appropriate. The factors that influence the successful use of existing tracks are:

- width
- current use
- alignment
- overall experience.

If the existing track was formally a vehicle track then the walking experience can be compromised because the track width is too wide for a human scale interaction with nature. If these tracks are to be used for walking the track width could be reduced through revegetation.

In some instances the existing vehicular track is well vegetated on the edges and down the middle. This provides the opportunity for walkers to walk side by side but still have an intimate relationship with the setting. Very narrow tracks allow for single file and solitary experience with nature.

If the existing track is used by vehicles, it is not recommended that pedestrians be introduced because it is not a safe or intimate natural experience.

Some of the existing vehicle tracks in the park follow ridgelines and have not taken the steep topography into account, crossing contours and resulting in highly eroded tracks. These tracks would not be suitable for use as part of the trail.

At the present time vehicular access is permitted to and on the beach within the Park. This should be minimised in the future.

Each track to be considered for reuse needs to be evaluated to determine if the design of the track is sustainable, based on the design principles presented above, and on the desire for the overall experience to promote stewardship of the environment.

TRACK WIDTH

For a Class 3 Trail the track must have a 1200mm maximum width and provide a gentle social experience. For Class 4 and 5 Trails in this environment, it is recommended that the maximum width be 700mm to ensure a solitary experience with nature.

If the terrain is suitable, a mechanical slasher can be used, but the slash width needs to be appropriate for the ideal track widths. The slasher is significantly faster than hand clearing. For example, a mechanical slasher can cut 4km/hr (DEC) in coastal heath. Hand slashing can cut 400m /day (DEC) and will be required where no vehicle access is possible.
**TOPOGRAPHY**

The dramatic topography changes and erodible soils along the coast will require careful alignment of the trail to minimise the need for infrastructure such as steps and water bars. It is preferable to use rolling grade reversals, rolling grade dips and kicks to water bars as these require less ongoing maintenance than water bars. Steps in the Park are inevitable in some locations, however, they should be minimised due to cost and maintenance. Steps in the fragile foredune, swale behind the foredune, windward side and crest of the secondary dune system areas should be elevated on posts rather than in built on the ground.

Careful design of the tread watershed to reduce the volume of flow at the pathway will minimize erosion.

In steep valleys, the concept plan locates the path following contours and gradually dropping down slopes whenever possible. This requires a longer journey for the walker but offers a more diverse experience of the landscape types. Following the contours minimises erosion and maintenance and the need for permanent structures.

Crossing through valleys and across streams will need to be assessed after rain as the creeks may be impassable, requiring a bridge or alternative route.

**TREAD MATERIALS**

The use of tread materials sourced within the Park will reflect the local landscape character, enhance the natural experience, and reduce the visual impact of the trail. With careful alignment, the importation of tread materials can be kept to a minimum and borrow pits located near the trail. Best practice would be to use durable natural tread materials to reduce importation of new materials.

The Fitzgerald River National Park Management Plan 1991-2001 recommends the extraction of site materials (i.e. gravel, sand, limestone and stone). Extraction is to occur with the objective of limiting extraction to areas where such activity have minimal impact on the spread of dieback, public use and the Park’s flora, fauna and landscape; and ensure that dieback does not spread by the movement of gravel, sand or stone.

Design the tread using a wide range of particles sizes; the smallest particles to bind, the larger particles to resist displacement and erosion while providing strength in wet conditions, and medium particles to stabilise.

**EROSION HAZARDS**

Each landscape character type has erosion hazards based on the unique geology, soil type, vegetation, topography and drainage pattern. The erosion hazards will influence trail alignment, tread material, infrastructure and costs.

The uplands are moderately susceptible to erosion due to the skeletal soils associated with the granite outcrops, the steep slopes of the valley walls and 1:5 year flooding.

The plains are highly susceptible to erosion if the waterlogged areas are disturbed leading to breakdown in the structure of the soil and prolonged ponding or increased run-off. The fine silty soils are susceptible to water and wind erosion, the latter in the coastal areas.
The valleys are highly susceptible to water erosion because of the steep valley sides and shallow soils. The flat valley floors are moderately susceptible to water erosion. Bench track construction techniques can descend valley side slopes with adequate water control to manage run off and erosion. These can be durable when constructed correctly.

The ranges and rocky coast are very highly susceptible to water erosion the numerous drainage lines have steep slopes and unconsolidated soils.

The sandy coast is extremely susceptible to wind and sometimes water erosion due to the loose soils.

**WIND**

The prevailing winds tend to be north-westerly in the morning, then south-easterly in afternoon in the Park. It is important to manage track erosion and blowouts on the dunes and beaches.

The wind can be very strong on the exposed beaches making walking difficult. Walking the trail in a west to east direction can reduce this impact.

**DIEBACK**

Knowledge of best practice construction methods to control the spread of dieback must be applied to the construction of the walk trail. Consideration of hygiene measures include:

- only working in dry conditions
- ensuring all machinery, vehicles, equipment and footwear entering disease free remnant vegetation is free of soil and mud by wash-down or brushing
- minimising movement of vehicles, machinery, equipment and footwear between disease free and disease infected sites
- not removing road making materials (eg. gravel) from infected sites
- working in mini-catchments and not moving material from one catchment to another
- sourcing materials used in revegetation from certified dieback free suppliers.

In the concept for the alignment of the walk trail, consideration has been given to the location of the trail in the areas identified as high to very high risk of impact of dieback on vegetation (Fitzgerald River National Park Management Plan 1991-2001). One vehicle for the transport of dieback is through water. In high risk areas the ridge line areas that separate catchments is to be avoided. The trail is not proposed in areas above the 150m contour surrounding catchment boundary ridge lines.

Visitor hygiene measures to control dieback include:

- use of spray bottles of methylated spirits for cleaning equipment and footwear
- brushing down equipment and footwear
- possible closure of trail during wet conditions.

Photo 104. Gully with water west of Quoin Head. A winter waterfall location
7.4 Environmental Risks Summary

The following lists the main environmental risks associated with constructing trails in the park:

- wind and sometimes water erosion in the sandy coastal zone
- wind erosion of the fine silty soils in the plains zone
- water erosion of the steep valley sides and shallow soils in the valley zone
- water erosion of the steep sloped and unconsolidated soils of drainage lines in the ranges and rocky coast zones
- erosion of existing tracks due to poor alignment (crossing contours, following ridges)
- erosion of the trail due to high water flow (poor design of the tread watershed)
- erosion of steep topography (alignment not following contours)
- blowouts and track erosion on the dunes and beaches
- dieback spread due to the following:
  - during extraction of tread materials
  - working in wet conditions
  - machinery, vehicles and footwear not washed down adequately
  - increased movement between disease-free and infected areas
  - movement of materials between mini-catchments
  - revegetation materials not sourced from dieback free suppliers
  - poor trail alignment (aligning trail above the 150m contour in the central area, and along catchment boundaries)

7.5 Visual Impact

During detailed planning and design, the visual impact of the construction methods and materials needs to be evaluated based on a consideration of sightlines, topography, track width, visual absorbance capacity, colour, texture, and form.

Visual impact considerations include:

- alignment
- width
- siting of facilities
- materials of facilities
- colours of facilities
- textures of facilities.
The community and stakeholder consultation revealed that one of the most critical issues facing the management of infrastructure and visitors within the Park is the insufficient number of on-site rangers. The Park currently has two full-time rangers. For successful management and maintenance of the trail, a sufficient number of on-ground staff is required.

### 7.7 Maintenance and Monitoring

For sustainable maintenance and monitoring early intervention is required. This includes activities such as:

- vegetation pruning
- erosion control
- monitoring of path and facility conditions 6 monthly for all trails

The class of a trail determines the level of maintenance frequency of inspections.

### 7.8 Trail Construction Costs

Broad trail construction costs have been itemised into tables (Refer to Appendix Two). The trail costs have been split into Stage One and Stage Two with accommodation and trail head information included into the overall trail costs. The accommodation and trail head costs have been broken down and shown on separate pages to indicate how these figures were arrived at.
8.0 Risk Assessment

Trail planning and design needs to consider risks to the environment and users as part of the design, construction and management of a trail. The environment of the FRNP is both sensitive to disturbance and disease and remote. At certain times of the year potential risks to visitors such as wildfire could be very high, potentially resulting in management options such as the closure of some sections of the trail.

A basic risk assessment process has been undertaken in accordance with AS/NZS ISO 31000:2009 Risk management - principle and guidelines. Further risk assessment evaluations will need to be undertaken in terms of DEC’s management framework so that the identification, analysis, planning, monitoring and control of risk is fully embedded into trail operational processes. The following matrices identify the outcomes of the risk assessment process undertaken for FRNP trail.

Some visitor risks may be mitigated through the use of commercial operators, controlling group numbers, guiding walkers through the park, providing medical aid, organising food and water drops and organising overnight stays.

The risks listed below can be mitigated through the use of commercial operators:

- getting lost
- injuries
- dehydration
- exposure.

Risk assessment tables have been prepared for both environmental and visitor risk. These can be found on the following four pages.
### ENVIRONMENTAL RISK ASSESSMENT

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<td>Introduction of dieback to the trail, new infestations or spreading previous dieback with access or trail building activities.</td>
<td>Possible</td>
<td>Moving soil obtaining gravel from dieback infested pit, introduction from vehicles, dieback infected water used in operations</td>
<td>Vegetation death, loss of habitat, ecosystem modification. Political consequences under the EPBC Act</td>
<td>Major</td>
<td>FRNP Management Plan, example Hygiene Plans, Environmental Impact Assessment Checklist (process), Gravel Management guidelines, washdown (Jacup and Hopetoun Car Wash) and boot stations, cleaning agents such as phytoclean, Environmental Management Plans, Induction Training, On-site Environment Officer.</td>
</tr>
<tr>
<td>Introduction of dieback, new infestations, beyond the baseline assessment due to ongoing usage and management of road and track.</td>
<td>Possible</td>
<td>Inadequate management of subsequent visitation and recreational use</td>
<td>Vegetation death, loss of habitat, ecosystem modification. Political consequences under the EPBC Act</td>
<td>Major</td>
<td>FRNP Management Plan, boot stations, hygiene access protocol (road closures)</td>
</tr>
<tr>
<td>Introduction of weeds due to road and track building activities.</td>
<td>Possible</td>
<td>Transport of weeds into the park</td>
<td>Unwanted infestations of exotic plants and threat to native species</td>
<td>Major</td>
<td>nil</td>
</tr>
<tr>
<td>Increased erosion along trail alignment after construction.</td>
<td>Possible</td>
<td>Increased hard surfaces, concentration of flows (speed and volume)</td>
<td>Channeling water will result in soil movement</td>
<td>Moderate</td>
<td>Road Infrastructure (culverts, spoon drains)</td>
</tr>
<tr>
<td>Destruction of Declared Rare Flora</td>
<td>Possible</td>
<td>Direct disturbance of flora by trampling or vehicle, oil spill, inadequate water management, direct displacement of DRF</td>
<td>Without adequate surveys prior to construction plants won't be identified</td>
<td>Major</td>
<td>Permitting of activities that impact on threatened flora</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Medium</td>
<td>Environmental Management Plans &amp; Flora surveys prior to works.</td>
</tr>
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</table>
## ENVIRONMENTAL RISK

<table>
<thead>
<tr>
<th>RISK DESCRIPTION</th>
<th>LIKELIHOOD</th>
<th>RISKS</th>
<th>CONSEQUENCE</th>
<th>EXISTING CONTROLS</th>
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</thead>
<tbody>
<tr>
<td>Impact on Aboriginal Heritage sites</td>
<td>Rare</td>
<td>Major</td>
<td>High</td>
<td>Environmental Management Plans.</td>
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<tr>
<td>Road plant or vehicle enters aboriginal site or subsequent recreational use impacts on aboriginal sites</td>
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<td></td>
<td></td>
<td>Aboriginal heritage act and on site consultation / sign off by relevant Land and Sea Council</td>
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<tr>
<td>Weather conditions that lead to work stoppages</td>
<td>Likely</td>
<td>Moderate/ Rare</td>
<td>Rain events stop access and Fire Weather Warnings stop machine works.</td>
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<tr>
<td>Poor weather conditions eg. rain, high winds, hot days</td>
<td></td>
<td></td>
<td></td>
<td>Management</td>
</tr>
<tr>
<td>Wildfire in the area of works leading to work stoppages</td>
<td>Possible</td>
<td>Rare</td>
<td>nil</td>
<td>High</td>
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<tr>
<td>Increased equipment usage in park causing increased fire risks, or natural causes (eg. lightning strikes).</td>
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</tr>
<tr>
<td>Requirement to create gravel pit(s) inside FRNP</td>
<td></td>
<td></td>
<td>Visual impact to the FRNP</td>
<td>Medium Visual Impact Assessments</td>
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<tr>
<td>Gravel cannot be obtained outside the park, or insufficient gravel or suitable, or logistically impractical.</td>
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<td></td>
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<tr>
<td>The project will cause fauna populations to be disrupted, injured or killed.</td>
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<td></td>
<td>Fauna will be relocated, injured or killed.</td>
<td>High Environmental Management Plans</td>
</tr>
<tr>
<td>Fauna sites not marked, increased human usage within the park from pre-construction and construction of the road, recreation sites and walk trail.</td>
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</table>
## VISITOR RISK ASSESSMENT

<table>
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<tr>
<th>HAZARD</th>
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<td></td>
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<tr>
<td><strong>FIRE</strong></td>
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<tr>
<td>Spring</td>
<td>RARE</td>
<td>injuries / burns</td>
<td>Moderate</td>
<td>Moderate</td>
<td>develop a risk management plan which includes prediction of extreme weather patterns, walker registration, track closure during high risk periods, evacuation plan and medical treatment plan.</td>
</tr>
<tr>
<td>Summer</td>
<td>RARE</td>
<td>death/ severe burns/ other injuries / people trapped</td>
<td>Catastrophic</td>
<td>High</td>
<td>develop a risk management plan which includes prediction of extreme weather patterns, walker registration, track closure during high risk periods, evacuation plan and medical treatment plan.</td>
</tr>
<tr>
<td>Autumn</td>
<td>RARE</td>
<td>death/ severe burns/ other injuries / people trapped</td>
<td>Catastrophic</td>
<td>High</td>
<td>develop a risk management plan which includes prediction of extreme weather patterns, walker registration, track closure during high risk periods, evacuation plan and medical treatment plan.</td>
</tr>
<tr>
<td>Winter</td>
<td>RARE</td>
<td>minor injuries</td>
<td>Minor</td>
<td>High</td>
<td>develop a risk management plan which includes prediction of extreme weather patterns, walker registration, track closure during high risk periods, evacuation plan and medical treatment plan.</td>
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<tr>
<td><strong>SAFETY AND RECOVERY</strong></td>
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<tr>
<td>lack of water</td>
<td>Possible</td>
<td>dehydration / heat stroke / death</td>
<td>Major</td>
<td>High</td>
<td>develop a water supply plan which includes monitoring of water availability and water security, investigate water supply options including walker registration, drop points, water collection from infrastructure.</td>
</tr>
<tr>
<td>Getting lost</td>
<td>Unlikely</td>
<td>dehydration, panic, injury</td>
<td>Major</td>
<td>Moderate</td>
<td>good signage, good maintenance regime, visitor registration, high quality maps and guidebooks, gps alignment publicly available, visitors guided by commercial operators</td>
</tr>
</tbody>
</table>
### VISITOR RISK

<table>
<thead>
<tr>
<th>HAZARD</th>
<th>LIKELIHOOD</th>
<th>RISKS</th>
<th>CONSEQUENCE</th>
<th>RATING</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>injury / accident / illness</td>
<td>Possible</td>
<td>animal bites, allergies, diarrhoea, heart attack, panic attack, flu, broken limbs, severe sprains, burns, dehydration, cuts and abrasions, falls, asthma etc.</td>
<td>Major</td>
<td>High</td>
<td>visitor registration, make risks known to visitors, recommend appropriate safety and medical equipment, develop evacuation / recovery plan</td>
</tr>
<tr>
<td>equipment failure</td>
<td>Unlikely</td>
<td>exposure, injury, dehydration</td>
<td>Moderate</td>
<td>Moderate</td>
<td>visitor registration, make risks known to visitors, recommend appropriate safety and medical equipment, develop evacuation / recovery plan</td>
</tr>
<tr>
<td>extreme weather</td>
<td>rare</td>
<td>exposure, injury, dehydration</td>
<td>Major</td>
<td>Moderate</td>
<td>visitor registration provide weather information to visitors, make risks known to visitors, recommend appropriate safety and medical equipment, develop evacuation / recovery plan</td>
</tr>
<tr>
<td>washed out to sea (washed off rocks / washed out while trying to cross open inlet)</td>
<td>rare</td>
<td>drowning, death</td>
<td>Major</td>
<td>Moderate</td>
<td>visitor registration provide weather information to visitors, make risks known to visitors, recommend appropriate safety and medical equipment, develop evacuation / recovery plan</td>
</tr>
</tbody>
</table>
9.0 Community Consultation Plan

Public involvement in projects is important to achieve an outcome with short and long-term benefits. Effective consultation allows the community to engage in the decision-making process, taking into account local interests and concerns about what should take place.

The FRNP is an area of international conservation significance, which the state, through DEC, is charged with managing and protecting. Along with community involvement, a project of this nature, therefore needs experienced protected area managers, aided by experienced trail designers and users to ensure that decisions and actions are not detrimental to the environment.

Local community and stakeholder involvement can provide the land manager and designer with specific local knowledge and landscape values and this is essential to achieve an appropriate outcome. The long-term benefit of public involvement is a high level of acceptance, adoption and successful implementation of a project.

Cultural and heritage issues which should be addressed during consultation include the indigenous history of the park. The park is of cultural significance to Noongar people and there are numerous indigenous sites of significance within the park, mainly at estuaries which were a food and water source as well as social and ceremonial sites. Consultation and collaboration with the indigenous community is essential in providing interpretation which presents the rich cultural indigenous heritage. Non-indigenous historic activities include pastoralism, agriculture, whaling, sealing and mining. There are disused mines and homestead ruins, the rabbit proof fence and the old telegraph line remains. Consultation with the local community will assist in revealing more historical information relating to the park.

Community consultation about the proposed new trail will be important to gain broad acceptance of the proposal from the local and broader community. The fact that this is potentially an iconic trail in Western Australia a broader understanding of its values and operational requirements is a must. The consultation process can be considered in the more immediate local sense such as the town and communities surrounding the FRNP and more regional communities such as the south west, through to communities associated with trails such as trail groups, walker groups, tourists etc.

The community consultation process could include:

- Preparation of information for circulation and distribution highlighting the trail, features, construction and proposed opening dates (print material and web based information)
- Local community – displays and information days at regional centres inviting comment onto comment sheets
- Regional community - eg Albany, Esperance, Kalgoorlie, Perth displays and information day
- Targeted groups – eg trail users – invitation through Department of Sport and Recreation and
other organisations for trail users to come along to a one day display and presentation with feedback sessions.

- Ongoing information via web based media and social networking sites such as Twitter and Facebook to advise people of the trail and seek comment.

From a marketing perspective, the staging of community based workshops should be undertaken both during walk trail development and regularly once the product is fully established. Tourism WA stages such workshops and involving respective regional tourism organisations and the like will be important. Local operators should be provided with useful advice in trying to set up complementary visitor based products, scale and scope of facilities and services required, along with estimations of potential marketplace demographics.

Likewise, local councils must understand the value of tourism and provide a platform for the private sector to deliver. These workshops should be jointly coordinated and delivered by DEC and local government and be actively encouraging local industry and community participation.

In order for tourism to sustain itself in a local community, the residents must at least be willing partners, and ideally be actively engaged in the management and promotion of the key tourist attractions and draw cards. Tourism, via the proposed walk trail presents an excellent opportunity for Hopetoun and Bremer Bay to turn the tide of unemployment through the generation of jobs and the creation of entrepreneurial opportunities. However long term success requires building community capacity to deliver the required standards in employment services and to the ability to identify business and market place opportunities.
10.0 Conclusion

The Fitzgerald River National Park Coastal Walk Trail offers a unique opportunity to provide varied experiences and levels of difficulty, passing through the core of a Biosphere Reserve and some of the most spectacular and rugged landscape on the south coast.

A seven day main trail is recommended with overnight stops at Gordon Inlet, St Mary Inlet, Twin Bays, Quoin Head and Hamersley Inlet. Several optional loops are also recommended to enable visitors to experience a wider range of landscape character types and provide a range of route options or choices for visitors.

The trail is classified according to AS 2156-2001 and AS 2156.2-2001 and includes sections of Class 3 and 4. Class 4 travels between Point Ann and Hamersley Inlet, while Class 3 trails occur at the beginning and end near Bremer Bay and Hopetoun.

Market analysis revealed that the proposed FRNP Coastal Walk Trail project offers the potential to stimulate local entrepreneurial opportunity, kick start the development of ancillary services such as new accommodation and hospitality services, and provide a diverse range of optional activities. A key issue for the FRNP trail is the geographical remoteness of the destination and time lag nature of the tourism industry. This will mean economic benefits may not be instantaneous. Successful tourism destination development does require time and the investment of appropriate resources. A highly cooperative approach between the DEC, the Shires of Jerramungup and Ravensthorpe, and local industry and community groups is considered a critical ingredient for sustainable long term success of the project.

A long term approach to accommodation development should be implemented including the establishment of a range of lodge and camping accommodation facilities to service the needs of users of the National Park. The establishment of accommodation precincts at the end of the proposed Fitzgerald Walk Trail is considered very important for the long term success of the walk trail as well as the broader tourism region.

Marketing and promotion on a broader destination basis is also required for the Fitzgerald region. “The Fitzgerald Coastline” is a current promotional branding being used and the naming and associated branding of the Walk Trail should strongly influence and work in closely with the broader destination initiatives. Some of the suggested marketing initiatives include:

- investigate the creation of a jointly funded tourism coordinator position, possibly shared equally between the two Shires
- the Walk Trail itself will require the preparation of a dedicated marketing plan where roles and responsibilities of key stakeholders are clearly detailed
- the majority of external promotion should be undertaken by working closely with the respective Regional Tourism Organisations (RTOs)
- target specialised long distance walking groups and specialised tour operators
- create a user friendly and informative website.

Meaning is given to the trail experience by relating the trail to an interpretive narrative. A narrative should be developed around the concept of ‘The Linear Landscape: Inspire the Walker to Read the Landscape.’ It is hoped the trail alignment and interpretation of the linear landscape will ‘inspire the walker to read the landscape’ and learn about the diverse cultural and physical forces that have shaped the Park.

The long term environmental sustainability and ease of maintenance are important for the ongoing success of the trail. In order to achieve this careful consideration must be given to topography, tread materials, erosion hazards, prevailing winds and other environmental risks. The design principles which focus on the trail alignment and an understanding of the physical context of the trail need to be considered when determining the final alignment.

Broad trail construction costs have been calculated including accommodation and trail heads. These approximate costs are $4 million for Stage One, and $2 million for Stage Two. Completion of Stage Two is important to maximise benefits for the communities at either end of the trail.
A threat to the success of the trail is the high level of risks to walkers particularly in the remote central area of the Park. Various mitigation measures including development of a risk management plan have been suggested to minimise these risks.

Community consultation should be undertaken. This includes distribution of trail information, local and regional community displays and information days, presentation and feedback sessions with targeted trail user groups, and ongoing web based media information to advise people of the trail and seek comment.

Ultimately the success of the trail is dependant on the concept being supported by the local community. A community consultation process should be undertaken to help develop a sense of ownership of the trail by the community and help ensure that the Fitzgerald River National Park Walk Trail becomes Western Australia’s next iconic trail.
11.0 References


Bureau of Meteorology, *Wind Frequency Analysis Albany Airport*, 2004

Bureau of Meteorology, *Wind Frequency Analysis Esperance*, 2004


David McNamara, *A Report on the Investigations into the Possibility of an Alternative to the Two Bump Hill Section of the Coastal Wilderness Walk*, Jan 1999

Department of Environment and Conservation-Recreation & Landscape Unit for South Coast District *Fitzgerald River National Park: Recreation Masterplan Draft Ver 1*, Feb 2010

Department of Environment and Conservation-Interpretation Unit, *Fitzgerald River National Park improvement Project: Draft Interpretation Plan*, April 2010


Fitzgerald River National Park Association, compiled by Craig, G., *Queelup Walk*, *West Mount Barren Brochure*

Fitzgerald River National Park Association, compiled by Craig, G., *Horrie and Dorrie Walk Brochure*

Fitzgerald River National Park Association, compiled by Craig, G., *East Mount Barren Walk Brochure*

Geological Survey of Western Australia, *1:250,000 Bremer Bay, Western Australia, Sheet S1/50-12 International Index, First Edition*, Western Australia, 1984

Geological Survey of Western Australia, *1:250,000 Newdegate, Western Australia, Sheet S1 50/8 International Index, First Edition*, Western Australia, 1984

Geological Survey of Western Australia, compiled by Thom, R. & Chin, R.J. *1:250,000 Geological Series-Explanatory Notes: Bremer Bay, Western Australia, Sheet S1/50-12 International Index*, Perth, Western Australia, 1984

Ham, S.H., Department of Resource Recreation and Tourism College of Forestry, Wildlife and Range Sciences University of Idaho *Beware of Interpreters Packing Little Ideas and Big Budgets: Keynote Presentation to the Interpretation Australia National Conference, University of Queensland, Gatton College*, Sept, 1997

Hill, R. *Gateways to the Desert in Landscape Architecture*, March 2010


Perry, G. (Editor) Western Australian Herbarium, Department of Conservation and Land Management, *Kingia Volume 1 Number 2*, 1990


Rush, Chris, *Hike from ranger's residence at East Mt Barren to Hood Point and return*, 2009

Seddon, G., *A Sense of Place*, 2004


The Australian Government (Department of the Environment, Water, Heritage and the Arts), *Sections 75 and 77A of the Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act).


12.0 Appendix One - Maps
13.0 Appendix Two - Opinion of Probable Costs
<table>
<thead>
<tr>
<th>CLASS</th>
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<th>S</th>
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| STAGE 1 | | | | | | | | | | | | | | |
| Factors affecting costs | Broad OPC | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| average track width | Rehabilitation / required | Rate | Imported Material | Rate | Construction access for vehicles | factor | Clearing | Rate | Hygiene washdown | Rate | forming / grading / erosion control required | Rate | Construction technique | factor | Unit | Quantity | Estimated rate | Extension |
| Track |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| beach |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| closed track |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| estuary |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| existing road |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| existing vehicular track |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| existing walk track |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| new walk track |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| rocky shoreline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Infrastructure |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| limited to environmental and maintenance. Management intervention: low to moderate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| steps |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| bridges / boardwalks |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| accommodation * |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Signage |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| minimal for management and direction |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| trail markers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| signage: management |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| signage: interpretation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| trail heads * |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**NOTES**

1. Average Track Width: indicates ideal track width for this class of trail
2. Rehabilitation Required: Yes - indicates that some rehabilitation may be required along the alignment, Rehabilitation is costed at $5 / sqm
3. Imported Material: indicates whether imported material is required to surface the trail or whether the existing material is suitable
4. Construction Access for Vehicles: indicates whether it is possible for vehicles to access the alignment during construction, may be represented as a percentage
5. Clearing: indicates whether clearing is required: applied at a rate of $12 /sqm
6. Hygiene Washdown: Indicates whether plant & equipment needs to be washed down to minimise risk of dieback introduction and spread: applied at a rate of $2 /lm
7. Forming/grading / erosion control: indicates whether earthworks will be required to form or grade the track: applied at a rate of $10 / sqm
8. Construction Technique: indicates the most likely construction technique likely either hand or machine. If hand a factor of 7 is applied if by machine a factor of 1
9. Accommodation and Trail Heads cost breakdown is shown on the following 2 spreadsheets

---

**Stage 1 Total (excluding GST)**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>GST 10%</td>
<td>$4,544,482.34</td>
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<tr>
<td>Stage 1 Total (including GST)</td>
<td>$4,999,305.73</td>
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## ACCOMODATION

### Stage 1

<table>
<thead>
<tr>
<th>Campsites</th>
<th>Campsite Components</th>
<th>factors affecting cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Materials</td>
<td>Sleeping Shelter</td>
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<tr>
<td>Class 3 - visibly impacted sites for up to 12 tent sites in groups of 4</td>
<td>St Mary Inlet</td>
<td>steel/colorbond</td>
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<tr>
<td></td>
<td>Hammersley Inlet</td>
<td>steel/colorbond</td>
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<tr>
<td>Class 4 - visibly impacted sites for up to 8 tents in groups of 3</td>
<td>Fitzgerald Inlet</td>
<td>steel/colorbond</td>
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<tr>
<td></td>
<td>Quoin Head</td>
<td>steel/colorbond</td>
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<tr>
<td></td>
<td>Twin Bays</td>
<td>steel/colorbond</td>
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| Stage 1 Total (excluding GST) | $1,125,746 |
| GST                          | $112,575   |
| Stage 1 Total (including GST) | 1,238,321  |
## TRAIL HEADS

### Stage 1

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<tr>
<td></td>
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</tr>
<tr>
<td>Estimated rate</td>
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</tr>
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### Major

- **Point Anne / St Mary Inlet**
  - Primary orientation nodes for walktrail
  - Materials: steel, colorbond stonework, timber
  - Estimated rate: 30,000
  - Seating: 2
  - Signs: 0
  - Construction: 2WD
  - Yes
  - Hygiene washdown or brush: 1.01
  - Each: $32,320

- **Hammersley Inlet**
  - Materials: steel, colorbond stonework, timber
  - Estimated rate: 30,000
  - Seating: 2
  - Signs: 0
  - Construction: 2WD
  - Yes
  - Hygiene washdown or brush: 1.01
  - Each: $32,320

### Minor

- **Fitzgerald Inlet**
  - Secondary orientation nodes, for visitors walking smaller sections or loops
  - Materials: steel
  - Estimated rate: 2,000
  - 4WD: 1.2
  - Yes
  - Hygiene washdown or brush: 1.01
  - Each: $2,424

- **Quoin Head**
  - Materials: steel
  - Estimated rate: 2,000
  - 4WD: 1.2
  - Yes
  - Hygiene washdown or brush: 1.01
  - Each: $2,424

### Stage 1 Total (excluding GST) $69,488.00

### GST $6,948.80

### Stage 1 Total (including GST) $76,436.80
## TRAIL OPC
### TRACKS
#### STAGE 2

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<th>CLASS</th>
<th>average track width</th>
<th>Rehabilitation / required</th>
<th>Rate</th>
<th>Imported Material</th>
<th>Rate</th>
<th>Construction access for vehicles</th>
<th>factor</th>
<th>Clearing</th>
<th>Rate</th>
<th>Hygiene washdown</th>
<th>Rate</th>
<th>forming / grading / erosion control required</th>
<th>Rate</th>
<th>Construction technique</th>
<th>factor</th>
<th>Unit</th>
<th>Quantity</th>
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<th>Extension</th>
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<tr>
<td>3</td>
<td>1200mm</td>
<td></td>
<td>5</td>
<td>material / no</td>
<td>5</td>
<td>yes / no</td>
<td>5</td>
<td>yes / no</td>
<td>15</td>
<td>yes / no</td>
<td>2</td>
<td>yes / no</td>
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<td>1 or 7</td>
<td>lm</td>
<td>32077</td>
<td>1215</td>
<td>1</td>
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</table>

**Factors affecting costs**

- **Broad OPC**

**Track**
- Generally modified surface, sections may be hardened. Width: variable and generally less than 1200 mm. Kept mostly clear of intrusions and obstacles.

**Infrastructure**
- Steps may be common, track generally no steeper than 1:10. Facilities generally not provided except for specific safety and environmental considerations. Management Intervention: Moderate

**Gradient/steps**
- 5% of lm of new track
- Every 75 lm except on beach

**Bridges / boardwalk**
- FRP or steel grating
- 5% of lm of new track

**Accommodation**
- 2.00

**Interpretation & Signage**
- Signs and track markers used for direction, limited signage for management and interpretation

- Stainless steel
- Mostly no
- Yes
- Na
- Hand

**Stage 1 Total(excluding GST)**
- $2,186,432.75

**GST**
- 10%

**Stage 1 Total (including GST)**
- $2,405,076.03

**NOTES**

1. Average Track Width: indicates ideal track width for this class of trail
2. Rehabilitation Required: Indicates that some rehabilitation may be required along the alignment. Rehabilitation is costed at $5 / sqm
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7. Forming / grading / erosion control: indicates whether earthworks will be required to form or grade the track: applied at a rate of $10 / sqm
8. Construction Technique: Indicates the most likely construction technique likely either hand or machine. If hand a factor of 7 is applied if by machine a factor of 1
9. Accommodation and Trail Heads cost breakdown is shown on the following 2 spreadsheets
## ACCOMODATION

### Stage 2

<table>
<thead>
<tr>
<th>Campsites</th>
<th>Campsite Components</th>
<th>factors affecting cost</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Materials</td>
<td>Sleeping Shelter</td>
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<tr>
<td>Estimated Rate</td>
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<td>10000</td>
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#### Class 3

- Visibly impacted sites for up to 12 tent sites in groups of 4

<table>
<thead>
<tr>
<th>Campsites</th>
<th>Materials</th>
<th>Sleeping Shelter</th>
<th>Rainwater Tank</th>
<th>Toilet</th>
<th>Tent Sites</th>
<th>Picnic Tables</th>
<th>Construction access for vehicles</th>
<th>Hygiene washdown or brush</th>
<th>Rate</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four Mile steel/colorbond</td>
<td>1</td>
<td>110,000</td>
<td>1</td>
<td>10,000</td>
<td>1</td>
<td>50,000</td>
<td>6</td>
<td>6,000</td>
<td>3</td>
<td>1,500</td>
</tr>
<tr>
<td>Gordon Inlet steel/colorbond</td>
<td>1</td>
<td>110,000</td>
<td>1</td>
<td>10,000</td>
<td>1</td>
<td>50,000</td>
<td>6</td>
<td>6,000</td>
<td>3</td>
<td>1,500</td>
</tr>
</tbody>
</table>

**Stage 1 Total (excluding GST)**: $358,550

**GST**: $35,855

**Stage 1 Total (including GST)**: $394,405
### TRAIL HEADS

#### Stage 2

<table>
<thead>
<tr>
<th>Trail Heads</th>
<th>Campsite Components</th>
<th>factors affecting cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Estimated rate</td>
<td>30,000</td>
<td>1000</td>
</tr>
</tbody>
</table>

#### Major

<table>
<thead>
<tr>
<th>Trail Heads</th>
<th>Primary orientation nodes for walktrail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bremer Bay</td>
<td>steel, colorbond stonework, timber</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Hopetoun</td>
<td>steel, colorbond stonework, timber</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

#### Minor

<table>
<thead>
<tr>
<th>Trail Heads</th>
<th>Secondary orientation nodes, for visitors walking smaller sections or loops</th>
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</thead>
<tbody>
<tr>
<td>Four Mile</td>
<td>steel</td>
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<td></td>
<td>0</td>
</tr>
<tr>
<td>Cave Point</td>
<td>steel</td>
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<tr>
<td></td>
<td>0</td>
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<tr>
<td>West Beach</td>
<td>steel</td>
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<tr>
<td>Mylies</td>
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<td></td>
<td>0</td>
</tr>
<tr>
<td>East Mylies</td>
<td>steel</td>
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<td></td>
<td>0</td>
</tr>
<tr>
<td>Barrens Beach</td>
<td>steel</td>
</tr>
<tr>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

#### Stage 2 Total (excluding GST) $76,760.00

#### GST $7,676.00

#### Stage 2 Total (including GST) $84,436.00
Stakeholder Meetings

SHIRE OF JERRAMUNGUP

Bill Parker - CEO

Bruce Trevaskis- Shire President

- The Shire of Jerramungup is very keen to have the trail begin in the heart of Bremer Bay and integrate with their proposed town centre upgrade (plans can be viewed on their website).
- The trail has the potential to extend the tourist season through a greater portion of the year:
  - Bremer Bay’s main tourist season is December to February, and Easter (from 300 people to 6000-10,000 people)
  - The Parks main tourist season is July to November for whales and wildflowers
  - The trail would potentially attract more visitors during the cooler months.
  - This may provide more constant source of income for tourist businesses and encourage new businesses. The Shire’s identified a need to get tourists to contribute more in financial terms to the towns.
- There is interest in having trail users pay for trail use.
- Overnight trail users will take business away from Bremer Bay, so people need to be encouraged to use the easier end trails close to the towns.
- Hood Point, east of Bremer Bay is currently managed by DoP. They have little to no management presence on the ground and the area is currently used mostly by off road vehicles. As the area is predominantly uncleared there may be potential for it to be re-vested and set up as an eco-style resort.
- 1200 ratepayers currently in the shire.
- Overnighers on trail take business away from Bremer Bay where tourist numbers are needed.

SHIRE OF RAVENSTHORPE

The Shire of Ravensthorpe will have a full time Tourism Manager soon.
- There are concerns about damage to infrastructure from fire (boardwalks, bridges). Will lose tourists numbers before they are rebuilt.
- Facilities will be upgraded at the Shire of Ravensthorpe Reserve at Hamersley Inlet, plans include a high yield eco-village, nature park caravan area, camping and canoe hire.

BOTH SHIRES

- Capitalise on tourism potential of the trail, encourage trails users to stay in Bremer Bay and Hopetoun before, after, and/or during their walk.
- The tourism benefits to the Shires will be reduced if the trail does not extend between the two towns.
- There is potential to create other sources of employment.
- Both are concerned about extraction/rescue of injured walkers and have identified the need to upgrade the regions capacity to undertake emergency rescues (helicopters, volunteers, ambulance).

QUAALUP HOMESTEAD

The main tourist season is wildflower season between August and October, Xmas and July for whale-watching. Apparently visitors are asking for more walk trails.

The homestead would potentially be on one of the trail loops in the western end.

FESA /SES MEETING BREMER BAY

Gary Logan District Manager, SES

John Ifla

- Volunteers currently maintain track
- Bibbulmun Track has two rescues per year
Volunteers are needed to maintain track width

Police have a Search and Rescue role but won’t commit funds

Need quad bike access for rescues

No access to Twin Bays in winter

Visitor risk outweighs the dieback risk

Use old tracks where possible for access, prevent public use, keep keys with FESA and DEC

Safety points

Limit visitors to three groups

Close trail at height of fire season

Prepare pre-emptive plan

Need more ranger presence

Develop Fire Prescription for the park

Close park when a trough is moving from the west coast when there is a high chance of lightning strikes and fire

Pt Ann rock fishing: need buoys. Increased visitation after road is bituminised

Lack of equipment (helicopter, bike with stretcher)

Volunteers are older with limited abilities, no young population to draw upon in Bremer Bay

Off-road motorcycle incidents increased when Albany closed beaches as motorcyclists moved to Bremer Bay

DPI land at Hood Point has numerous tracks, but they are not managed. These need rationalisation and management

FRNP: July 2009 to June 2009 there were 4 incidents

FRNP: July 2009 to 2010 March there were 17 incidents

Trigelow Beach: off-road motorcyclists cutting up track

Motorcyclists in FRNP are being more careful, avoiding wet areas

No motorcycle access in FRNP, except emergency quad bike

Management presence needs to be strengthened to ensure safety of users

Walkers randomly walking down Fitzgerald River valley

Mine may increase ‘hoon’ factor which results in more trail bikes and 4WD’s

Waste management

PETER VAN SCHOUBROECK

DEC Ranger - Fitzgerald River National Park – Gairdner

Site plan Pt Ann

DEC STAFF

Lorna Charleton, Interpretation Officer

Tracy Churchhill, Recreation and Landscape Unit co-ordinator

Stuart Harrison, Recreation and Trails Unit co-ordinator

Rod Quartermaine, Tourism Development Officer
Stakeholder Workshop Hopetoun

Malcolm Grant, Publican Port Hotel Hopetoun and ex DEC employee and Operations Officer DEC Ravensthorpe

Rodger Walker, Community Landcare Officer, RAIN (Ravensthorpe Agricultural Initiative Network) who liaise with farmers regarding environmental issues in the areas

- member of the Ravensthorpe residence association
- walk trail will need to cater to different abilities
- Railway Heritage Trail for Ravensthorpe to Hopetoun, very scenic, passes through private property, needs overnight facilities
- good potential for trail development within 10km radius of Hopetoun

Andrew Chapman, Zoologist, good fauna knowledge of the park, Friends of The Park member, past president and has walked through the park many times, carried out a Fauna Survey of the FRNP.

Rodney Daw, CBFCO Shire of Ravensthorpe, constructed many 4WD tracks through the FRNP in the 1960’s and 1970’s, predominantly to fish for Blue Groper.

John Tucker, Friends of the Park committee member, conducted Bird surveys, has good knowledge of coastal areas of the park

- volunteers needed to maintain track width
- provide water at stations for walkers
- rescue vehicles can use existing tracks buy only 2-3 tracks vehicles can use
- important to share assets of the community to others
- more chance of controlling dieback by controlling access at both ends of the trail
- make the park more accessible to all ages
- keep the tracks a bushwalking experience, don’t upgrade to easy walking
- zone the trail- high risk: Fitzgerald river to Quoin Head, low risk: either end
- erosion potential increase after a fire through loss of vegetation
- don’t damage the environment when constructing, using trail

Other Consultation

WA FEDERATION OF BUSHWALKERS

DEC (Neil Worrell & Luke Coney) met with representatives of the WA Bushwalkers Association. WABA support a defined trail within the FRNP that affords

- more water availability,
- provision of overnight shelters
- access to otherwise difficult areas.

Other routes remain available for those who want to use them.
Vegetation
Pre-European (DAFWA, 2005)
Map 7
Hydrology & Topography

Map 8
Landscape Character Types

Map 10
Main Trail Experience
Day 1 Bremer Bay to Gordon Inlet - Class 3

Map 16

Legend:
- overnight stay
- trail alignment option A

Trail Experience:
- beach
- rocky shoreline
- open vegetation
- open with enclosed sections
- anchors
- landscape features
- change of experience
- views
- potential views
- estuaries
- towns

Interpretive opportunities:
1. Bremer Bay & Wollondilly Estuary
2. James Cove
3. West Mt Barren & Mt Bland
4. Doubtful Islands
5. Gordon Inlet

Themes:
- Site No.
- Aboriginal
- Cultural
- Geology
- Marine
- Native Vegetation
- Weather

Site No.
1
2
3
4
5

1:100,000 @ A3
Main Trail Experience
Day 3 Point Ann to Fitzgerald Inlet - Class 4
Day 4 Fitzgerald Inlet to Twin Bays - Class 4
Map 18
Main Trail Experience
Day 7 Hamersley Inlet to Hopetoun - Class 3
Map 21

LEGEND
- overnight stay
- trail alignment option A

Trail Experience
- beach
- rocky shoreline
- open vegetation
- open with enclosed sections
- anchors
- landscape features
- change of experience
- views
- potential views
- estuaries
- town

Interpretive Opportunities
17 Hamersley Inlet
18 Edwards Point
19 West Beach
20 East Mt Barren
21 Culham Inlet
22 Hopetoun
23 Annie Peak

Themes

<table>
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<tr>
<th>Site No.</th>
<th>geological form</th>
<th>vegetation form</th>
<th>landform</th>
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<th>aboriginal</th>
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<th>fence line</th>
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Scale: 1:100,000 @ A3