

A young child with brown hair, wearing a blue hoodie and white pants with colorful fish patterns, is looking down at a small red flower held in the hand of an adult. The adult is wearing a blue long-sleeved shirt. They are in a natural setting with dry leaves, twigs, and green plants. The background is slightly blurred, showing more of the natural environment.

# Woowookarung Regional Park

## Strategic Directions Plan September 2018

Authorised and published by Parks Victoria  
Level 10, 535 Bourke Street, Melbourne VIC 3000  
Copyright © Parks Victoria 2018

This Strategic Directions Plan is approved for implementation. Its purpose is to direct all aspects of management of Woowookarung Regional Park until the plan is reviewed.

A draft strategic directions plan was published in May 2018. All submissions were carefully considered in preparing this approved Strategic Directions Plan.

## **National Library of Australia Cataloguing-in-Publication entry**

Parks Victoria.  
Woowookarung Regional Park Strategic Directions Plan September 2018 / Parks Victoria.

ISBN: 978-0-7311-8398-2 (paperback)



A catalogue record for this  
book is available from the  
National Library of Australia

This document may be cited as:

Parks Victoria 2018. Woowookarung Regional Park Strategic Directions Plan.  
Parks Victoria, Melbourne.

## **Copies**

This plan may be downloaded from: <http://parkweb.vic.gov.au/explore/parks/woowookarung-regional-park/plans-and-projects/canadian-regional-park-planning>

Copies of the plan are available from:

Parks Victoria Information Centre  
Level 10, 535 Bourke Street  
Melbourne VIC 3000  
Phone: 13 1963



# **Woowookarung Regional Park**

## **Strategic Directions Plan September 2018**

Aboriginal and Torres Strait Islander people are advised that this document may contain images, names, quotes and other references to deceased people.

## Acknowledgement of Country

The authors respectfully acknowledge the traditional custodians of the land in which Woowookarung Regional Park sits - the Wadawurrung people of the Kulin Nation, their spirits, ancestors, Elders and community members past and present. Parks Victoria, on behalf of the Victorian Government, acknowledges the significance of the study area, the Wadawurrung people and seeks to reflect the views, interests and aspirations of the Traditional Owners in managing the park.

## Acknowledgements

The final plan was prepared and released under direction of the Parks Victoria Board and the Minister for Energy, Environment and Climate Change. The Parks Victoria Board acknowledges and thanks the Project Steering Committee, comprising the Friends of Canadian Corridor, Wadawurrung Traditional Owners, the City of Ballarat, the Department of Health and Human Services and the Parks Victoria Team, for leading the plan's development. The Project Steering Committee thanks the community for their support for the creation of Woowookarung Regional Park.

Parks Victoria would like to acknowledge the input and assistance of the many other people and stakeholders who have generously given their time and energy in participating in the preparation of the plan including -

- Friends of Canadian Corridor
- Field Naturalist Club of Ballarat
- Ballarat Bushwalking and Outdoor Club
- Goldfields Track Inc.
- Mt Clear College
- Federation University
- Ballarat Sebastopol Cycling Club (BSCC)
- Pax Hill Activity Centre (Scout Camp)
- Department of Environment, Land, Water and Planning (DELWP) staff
- Ballarat Community

Site Office Landscape Architecture was commissioned to prepare the draft plan.

## Disclaimer

This plan is prepared without prejudice to any negotiated or litigated outcome of any native title determination applications covering land or waters within the plan's area. It is acknowledged that any future outcomes of native title determination applications may necessitate amendment of this plan; and the implementation of this plan may require further notifications under the procedures in Division 3 of Part 2 of the Native Title Act 1993 (Commonwealth).

The plan is also prepared without prejudice to any future negotiated outcomes between the State or Federal Governments and Victorian Aboriginal communities.

It is acknowledged that such negotiated outcomes may necessitate amendment of this plan. Every effort has been made to ensure that the information in this plan is accurate. Parks Victoria does not guarantee that the publication is without flaw of any kind and therefore disclaims all liability for any error, loss or other consequence that may arise from you relying on any information in the publication.

## Front Cover

Image: A. Schipperen - Family in Woowookarung Regional Park.

## Back Cover

Image: A. Shannon - Creamy Candles.

For further information on this plan, please phone the Parks Victoria Information Centre on 13 1963.

## Photo Credits

Photos © Parks Victoria except as noted in photo credits where copyright belongs to the credited photographer or organisation.

Image: Peter Kervarac











Image: Peter Kervarac

# Executive Summary

Woowookarung Regional Park is an important expression of community participation, organisation and strength, and the creation of the park is the result of grass roots community activism over many years. It is a new park by the people, for the people. Parks Victoria has worked in close collaboration with a broad range of interest groups and partners to develop this plan which establishes a vision for the park and directions to realise its rich potential.

Woowookarung Regional Park is a new 641 hectare park which sits within the traditional lands of the Wadawurrung people. Woowookarung is a Wadawurrung word and means 'place of plenty'. The naming of the park is a reminder of the importance of this landscape to the Traditional Owners and their ongoing connection to Country. The name reflects the traditional use and connection that Wadawurrung people have with the area.

The vision for Woowookarung Regional Park is to provide an innovative, collaboratively managed and inspirational park that conserves its special and unique values, and supports a happy, active and healthy community. This vision is founded on guiding principles relating to conservation, accessibility and governance.

To give effect to the vision, eight Strategic Directions, each with goals and strategies, are proposed. These encompass culture, ecology, regeneration of the native forest, connecting people to the park, recreational opportunity, access and tracks, connecting the park to Ballarat, and collaborative management with neighbours.

The Strategic Directions in this plan align with Parks Victoria's vision, Shaping Our Future.

## Shaping Our Future

Shaping Our Future outlines Parks Victoria's vision, purpose and strategic directions for the next decade. This plan identifies a vision for Parks Victoria to be a world class park service ensuring healthy parks for healthy people. In delivering on this vision Parks Victoria aims to inspire the community to conserve and enjoy Victoria's unique natural and cultural heritage. Together Caring for Country and promoting the the value of our parks and waterways benefits all Victorians and their visitors.

The four pillars below explain the vision and purpose and how it will be achieved.

**Connecting people and parks** aims to improve the health and wellbeing of Victorians through the management of a parks estate that is valued by the community.

**Conserving our special places** aims to increase the resilience of natural and cultural assets in parks and maintain ecosystem services in the face of climate change and other stressors.

**Providing benefits beyond boundaries** recognises the organisation's role in contributing to the safety, living standards and well-being of Victorians.

**Enhancing organisational excellence** is focused on improving the organisation's and capabilities and recognises the important role of our partners in achieving the desired outcomes.

Shaping Our Future is underpinned by the Healthy Parks Healthy People approach which this plan further explores and activates. See Healthy Parks Healthy People Framework (HPHP Framework), Appendix B, page 93.

The key pillar each Strategic Direction responds to is highlighted below.





## Experiencing the park

Woowookarung Regional Park is a place with many and varied stories to tell, creating a rich tapestry of ideas, events and memories that have shaped the landscape we can experience today. Telling these cultural, environmental and social stories will play an important role in how people understand and experience the park.

### The park - twenty years from now

In twenty years time Woowookarung Regional Park will have:

- Increased public awareness and appreciation of the park, leading to greater stewardship of the park.
- Increased community knowledge, understanding and appreciation of Traditional Owner cultural heritage.
- Regular programmed nature based activities to encourage healthy lifestyles, and to improve environmental resilience.
- High quality, environmentally responsive visitor facilities to support activities within the park.
- Increased protection and management of the park's cultural, environmental and social values.
- Increased biodiversity, including corridors to and within the park, and representation of Ecological Vegetation Classes (EVCs).
- Provision of and increased participation in diverse passive and active recreational activities.
- Diverse research and educational projects in cultural heritage, environmental resilience and management, and social activation.
- Improved connections and navigation to and within the park.
- Improved road and land management across boundaries.
- Programmed events and celebration of the park with the community.
- Supporting high quality nature based tourism opportunities highlighting the park's values and active appreciation of the park.

*Image: Peter Kervarac*



# Contents

A new park for Ballarat	10	Goal 4C – Support programs, activities and events in the park	53
Vision	12	<b>Strategic Direction 05 – Create experiences</b>	<b>54</b>
Enjoying the park	14	Goal 5A – Provide rich and varied experiences	54
Woowookarung Regional Park overview	16	Goal 5B – Name important sites	56
A visible park	18	Goal 5C – Create visitor sites	58
Telling the park stories	20	Goal 5D – Attractions	62
<b>Strategic Directions</b>	<b>23</b>	Goal 5E – Create neighbourhood trailheads	64
<b>Strategic Direction 01 – Celebrate culture</b>	<b>24</b>	<b>Strategic Direction 06 – Create trail networks</b>	<b>66</b>
Goal 1A – Celebrate connection to Country	26	Goal 6A – Create primary trail network	68
Goal 1B – Celebrate contemporary connections	27	Goal 6B – Create trail connections	70
<b>Strategic Direction 02 – Nurture the ecology</b>	<b>28</b>	Goal 6C – Create specialty circuits	74
Goal 2A – Enhance areas of ecological importance	32	<b>Strategic Direction 07 – Connect the park to the city</b>	<b>78</b>
Goal 2B – Restore the waterways	32	Goal 7A – Provide local and regional trail connections	78
Goal 2C – Activity based on ecological sensitivity	38	Goal 7B – Orientate people to the park	79
Goal 2D – Establish ecological corridors	40	Goal 7C – Promote the park	79
<b>Strategic Direction 03 – Regenerate the forest</b>	<b>46</b>	<b>Strategic Direction 08 – Integrated land management</b>	<b>80</b>
Goal 3A – Create ecological corridors	50	Goal 8A – Manage the park interface	82
Goal 3B – Manage the weeds	51	Goal 8B – Working with neighbours	85
Goal 3C – Fuel management	52	Goal 8C – Managing the roads	86
<b>Strategic Direction 04 – Connect people, health and the park</b>	<b>52</b>	Goal 8D – Management of infrastructure	87
Goal 4A – Activate Healthy Parks Healthy People	53	<b>Appendices – Appendix A. Indigenous species list</b>	<b>90</b>
Goal 4B – Foster community participation	53	– <b>Appendix B. HPHP Framework</b>	<b>93</b>
		<b>Bibliography</b>	<b>94</b>

Common Bird Orchid. Image: Peter Kervarac



# A new park for Ballarat

Woowookarung Regional Park is a new 641 hectare park for Ballarat and the western region of Victoria. Located less than four kilometres from Ballarat's city centre, the park will offer an exciting range of activities and experiences for people in nature.

Woowookarung Regional Park (the park) is an important expression of community participation, organisation and strength. Its creation is the result of grass roots community activism led by the Friends of Canadian Corridor (FoCC). Upon hearing of the impending return of the plantation lands to the State Government in 2012, the FoCC lobbied for the creation of 'Canadian Park', requesting all candidates in the 2014 State election "commit in writing that your leader and party will provide funding for the establishment of a Canadian Multi Use Forest Park".

In 2015, legislation to create the Canadian Regional Park was introduced into the Victorian Parliament and in 2016 the park was formally created as a new park to benefit people now and for future generations.

## Regional Park

The park is reserved as a Regional Park under the *Crown Land (Reserves) Act 1978*. A Regional Park is an area of reserved Crown Land which is readily accessible from urban centres or a major tourist route, set aside primarily to provide recreation for large numbers of people in natural or semi-natural surroundings. Regional parks also have significant value for nature conservation as habitat and their cultural heritage features.<sup>01</sup>

## Naming of the park

In 2017 the park was renamed from Canadian Regional Park to Woowookarung Regional Park. The park sits within the traditional lands of the Wadawurrung people. Woowookarung is a Wadawurrung name and means 'place of plenty'. The naming of the park is a reminder of the importance of this landscape to the Traditional Owners and their ongoing connection to Country.

The name reflects the traditional use and connection that Wadawurrung people have with the area.

## Strategic Directions Plan

When the park was reserved in 2016, Parks Victoria became the responsible authority assigned to develop a plan to guide its future direction and ongoing management.

The development of the Strategic Directions Plan (the plan) has been informed by extensive engagement with Traditional Owners, local community, stakeholders and strategic partners, and the FoCC.

The engagement has guided decisions for the planning and management of the park based on its natural and cultural values, and to realise the many aspirations for the park as an important community, environmental and recreational asset.

This plan represents the community's desire to create a park legacy where park health improves alongside the community's expressed need for connections, learning and simply being in nature.

There will be ongoing opportunities for the community to collaborate with Parks Victoria to implement the plan.

## Vision and guiding principles

A Vision and guiding principles have been developed with the local community. They have been used to further develop eight Strategic Directions, and together form the foundation for the park's conservation, nurturing community connections and development for the next 15 to 20 years.

## Future implementation

Many of the strategies within this plan will be delivered through the annual works programming for park management.

Larger projects will be dependent on securing funding, including successful grant applications and partnerships over the life of the plan.

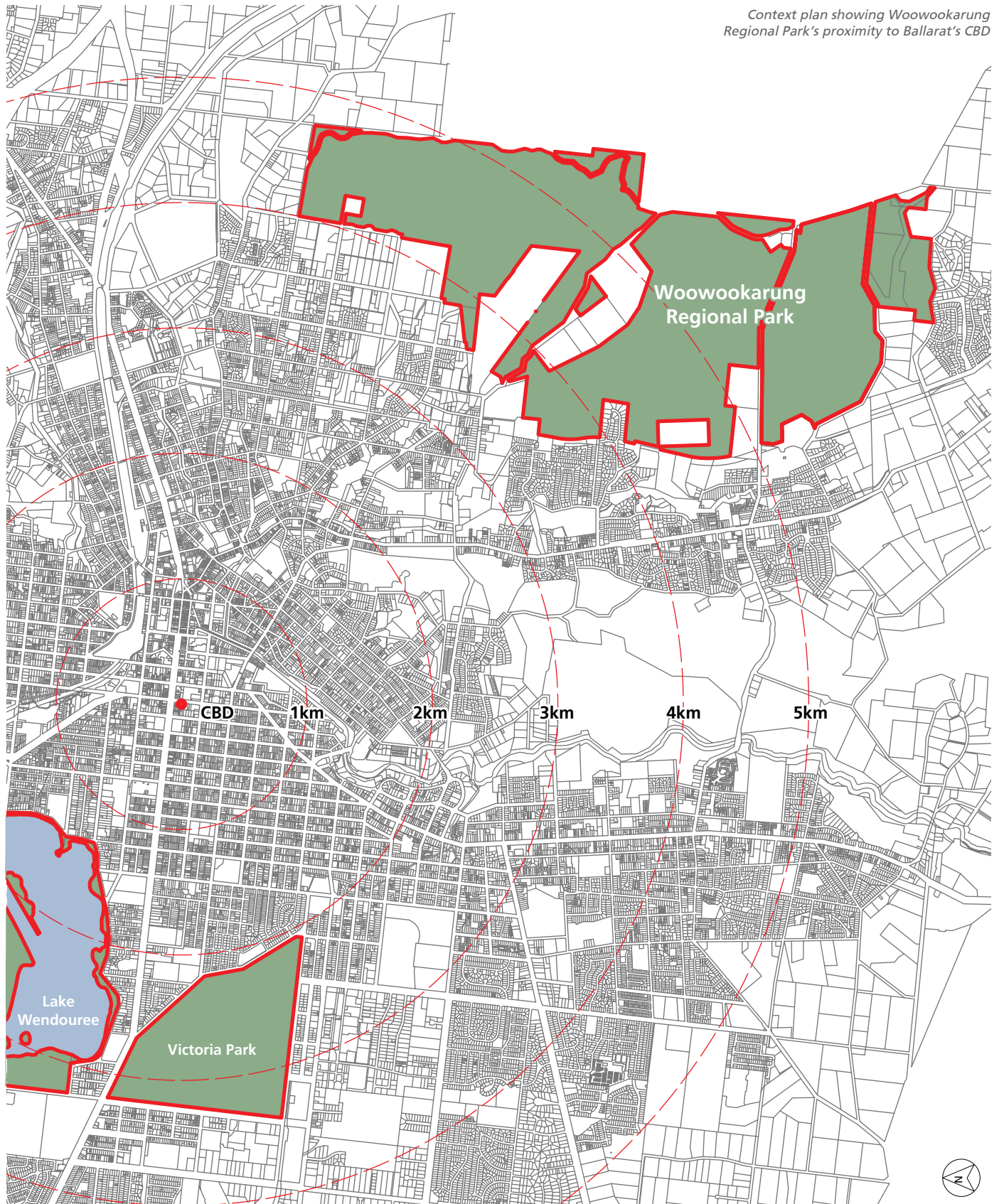
An Implementation Framework is currently being developed to guide and prioritise projects. It will be subject to cost planning, design and development planning, including trail, cultural heritage and biodiversity assessments, and further community and stakeholder consultation.

Measures to recognise the success of the implementation of this plan will be developed as part of the Implementation Framework.

01 VEAC - Regional parks, nature conservation reserves, and historic and cultural features reserves, <http://www.veac.vic.gov.au>



Context plan showing Woowookarung Regional Park's proximity to Ballarat's CBD



# Vision

To provide an innovative, collaboratively managed and inspirational park that conserves the special and unique values of Woowookarung Regional Park, and supports a happy, active and healthy community.

## Guiding principles

### Conservation

- Respect and enhance the ecological and cultural values of the park.
- Improve stream and waterway health within the park.

### Accessibility

- Make the park accessible to a wide range of visitors of all ages and people of all abilities.
- Provide a wide range of activities and experiences within the park that attracts a broad cross section of the Ballarat community to foster a strong connection and appreciation for the park.
- Manage impacts on the environment and ensure activities do not compromise the conservation principles.
- Improve connections between the park and the local community to support a happy, active and healthy community within a rapidly growing city.
- Provide ongoing opportunities for learning in nature, highlighting the values of the park, particularly focused on children and youth.

### Governance and sustainability

- Work in partnership on Country and celebrate the Wadawurrung people and cultural heritage of the park.
- Provide exemplary park management that supports the social, cultural and environmental values of the park.
- Facilitate ongoing dialogue, collaboration and coordination with local government agencies, land managers, community stakeholders, clubs and organisations.

*Scarlet Robin. Image: Peter Kervarac*









# Enjoying the park

A regional park provides a unique opportunity to provide and accommodate a wide range of recreational activities in a semi-natural environment, while also ensuring its important environmental assets and biodiversity values are protected.

The new park is ideal for both passive and active recreational pursuits including bushwalking, jogging, mountain bike riding, horse riding, fossicking and metal detecting, educational activities, nature appreciation and stargazing. A table of permitted and non-permitted activities is provided below.

## Summary of activity

Nature observation, birdwatching	Yes
Picnicking	Yes
Barbeques in designated areas	Yes
Fires – camp fires and solid fuel barbeques	No
Camping	No*
Bushwalking or short walks	Yes
Dogs on lead or under immediate control	Yes
Dogs off lead	No
Car touring, four-wheel driving	Yes
Registered trail biking on roads and vehicular tracks	Yes
Off road four-wheel driving, registered trail biking	No
Cycling and mountain bike riding on roads, management tracks, shared trails and MTB circuits	Yes
Geo-caching – no digging or interference in ecological or culturally sensitive areas	Yes
Visiting historic features	Yes
Orienteering and rogaining	Yes
Guided activities	Yes
Organised or competitive activities	Yes – subject to permit
Horse riding on shared trails, management tracks, roads and trail riding circuits	Yes
Education activities	Yes
Environmental education	Yes

## Summary of activity

Approved research	Yes
Apiculture (Bee keeping)	Yes – subject to permit
Car rallies	No
Hunting	No
Metal detecting	Yes
Gold panning	Yes
Gemstone fossicking	Yes
Mineral exploration	Yes – 1, 2
Mining	Yes – 1
Stone searching and extraction	Yes – 1
Firewood and other minor forest produce	No
Sawlog and post production	No
Water production/distribution	Yes – subject to licence agreement
Grazing	No

Note: Some uses may depend on whether the legislation provides for the use in a particular Park (such as camping) the use of powers to set aside land where the use is permitted or excluded, or the issuing of a permit to allow the use.

1 Subject to consent of the Crown Land Minister.

2 Two exploration licences exist over the proposed park area.

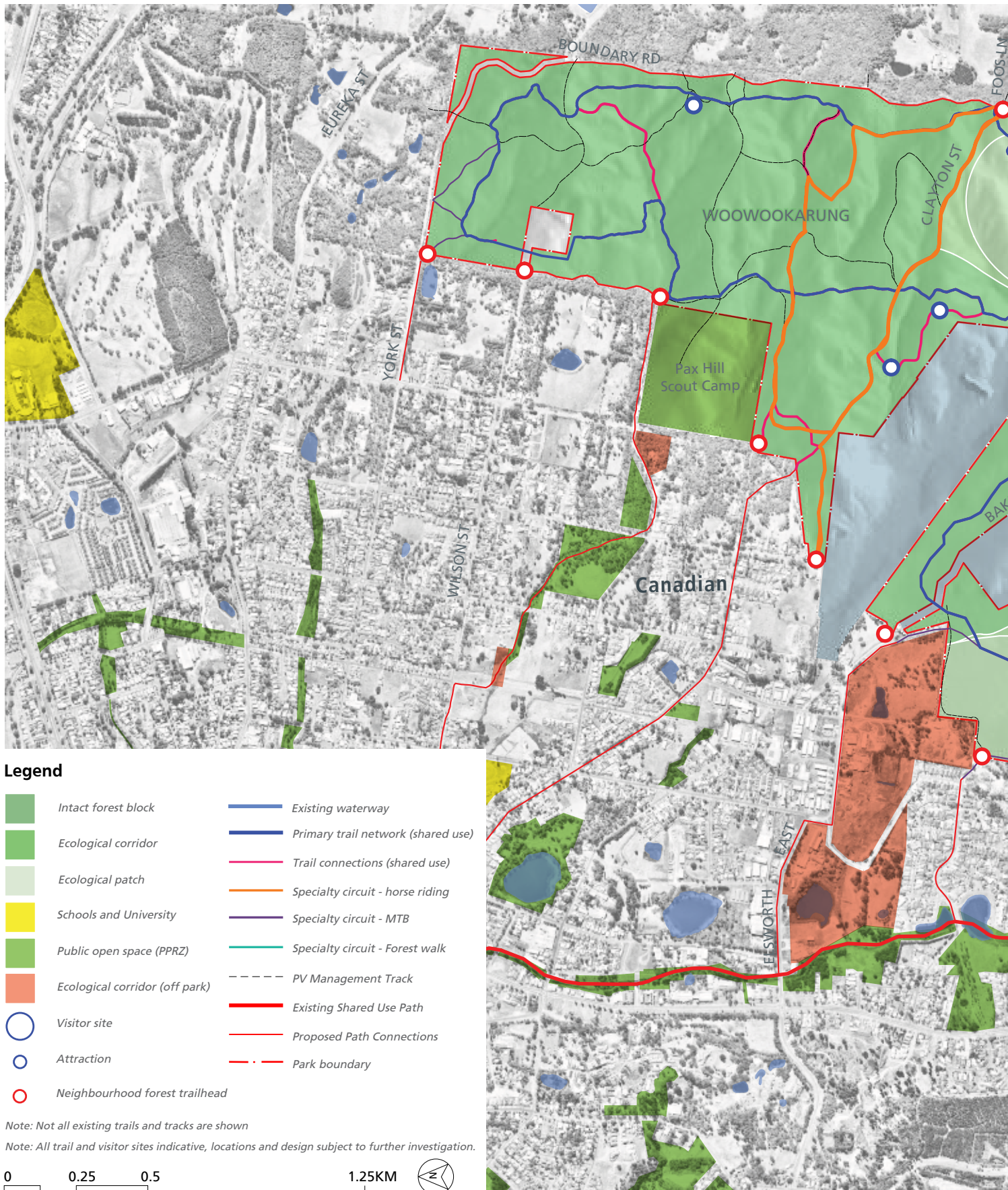
\* Camping may be allowed as part of a program permit.



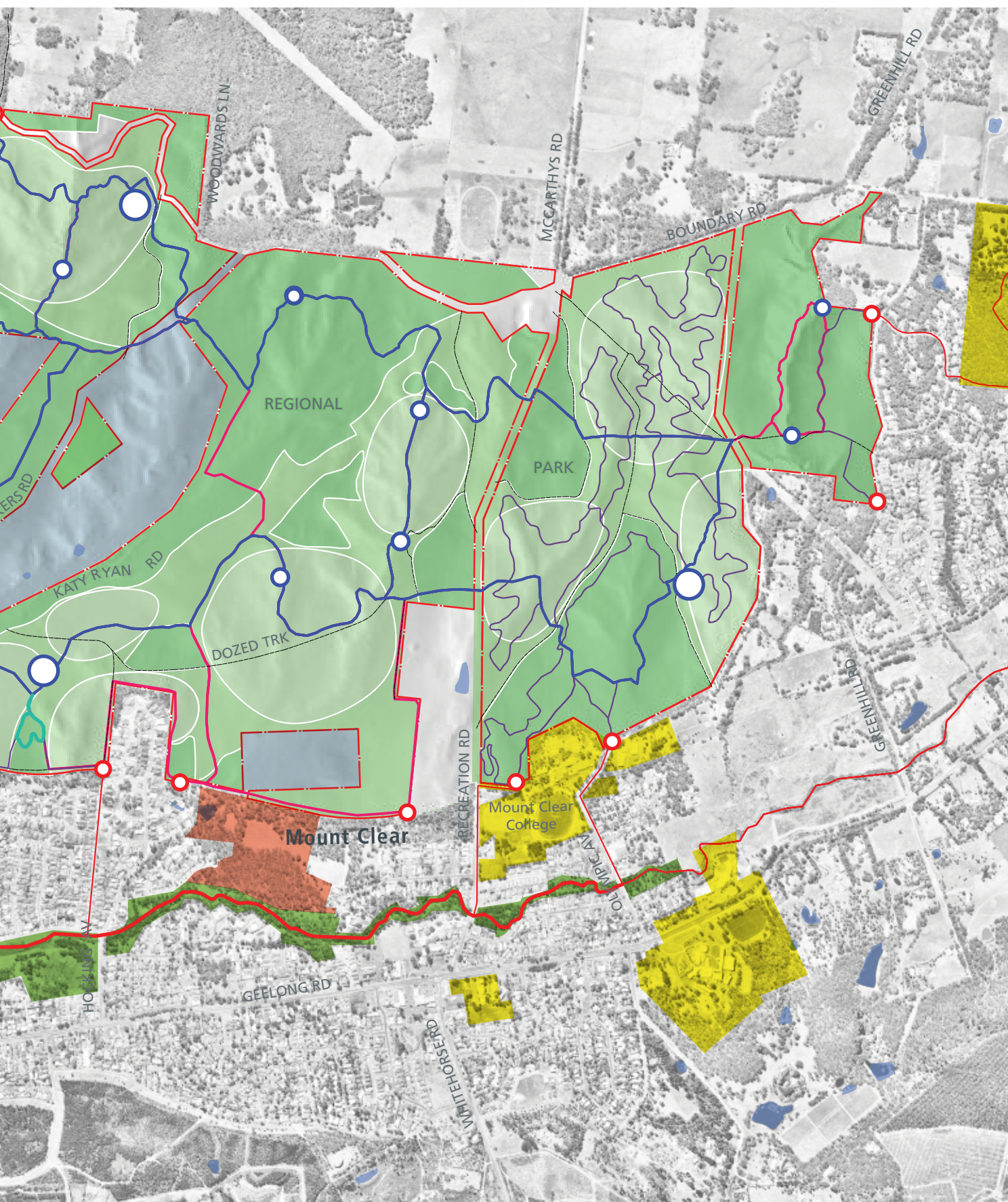




# Woowookarung Regional Park – unique, inspirational and collaboratively managed









# A visible park

Despite the proximity of Woowookarung Regional Park to the centre of Ballarat, the land it occupies has always been in the background and largely unnoticed.

## The Forest

Prior to the creation of the park in 2016, it was known as Canadian Forest. Over the last 180 years, the forest has existed as the backdrop to Ballarat, seen in countless photographs and paintings as a dark line of vegetation sitting on the skyline, punctuated by the distinctive volcanic cone that is Mount Warrenheip.

The park plan brings the park to prominence within the community's consciousness, connecting them to the park and making it an active and visible part of their life.

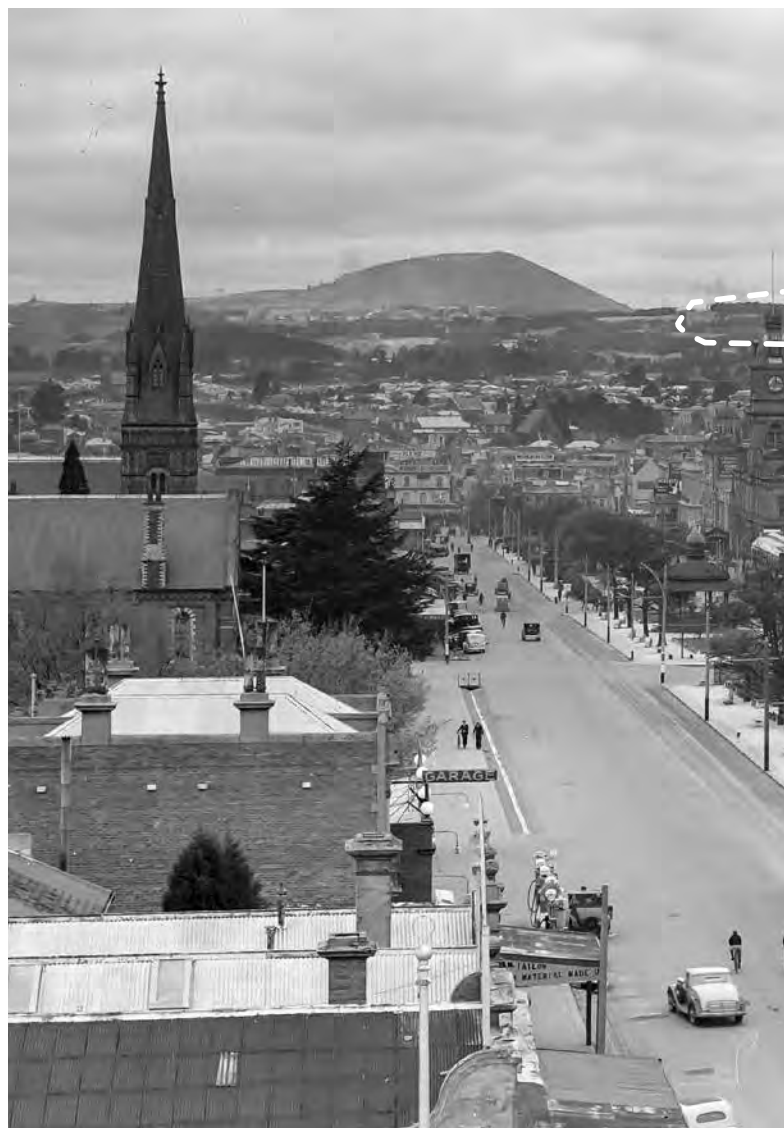


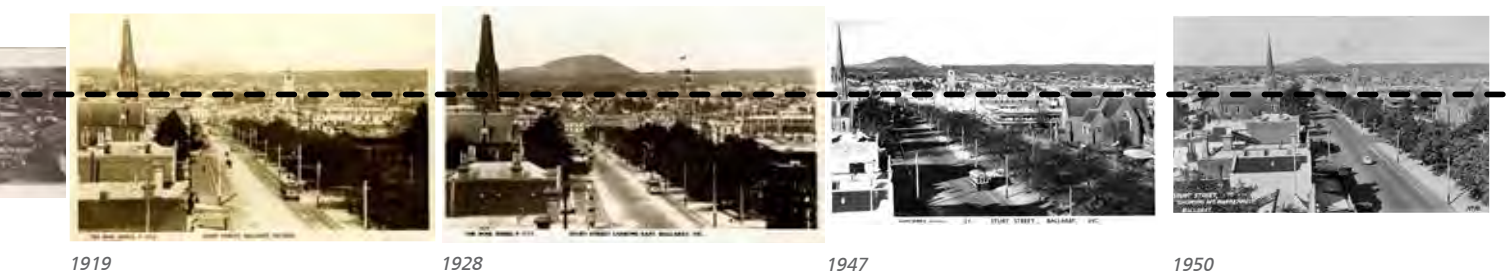
Old Ballarat as it was in the summer of 1853 - 54,  
Eugene Von Guerard 1854



1906

Canadian Forest as the backdrop to the city and historic photos,  
Images: State Library of Victoria







# Telling the park stories

Woowookarung Regional Park is a place with many stories to tell, creating a rich tapestry of ideas, events and memories that have shaped the landscape we experience today.

Just as Canadian Forest existed silently in the background of Ballarat, many of its stories are unknown. The creation of Woowookarung Regional Park is an opportunity to share these stories, as they play an integral role in how people will understand and experience the park and landscape.

## Physical stories

These are the stories of the physical environment, such as the topography, geology, hydrology and ecology of the park. These elements greatly influence the way visitors experience the park.

- *Views - with the removal of the plantations, there are some excellent views overlooking Ballarat from the park.*
- *Topography - offers subtle but constantly undulating topography with steep embankments.*
- *Shallow Soils - the shallow soils make the ground susceptible to erosion if damaged or disturbed.*
- *The Forest - the presence of a large forest of trees close to the city.*
- *Size - the size of the park is big enough to get lost, yet small enough to walk around.*

Image: Peter Kervarac



## Indigenous stories

The Wadawurrung have continuously occupied this land over 30,000 years and many generations. The landscape is imbued with their stories.

- *Creation Stories - the park landscape is part of the creation stories of the Traditional Owners.*
- *The Six Seasons - the annual seasonal cycle better describes the changing climate throughout the year, referencing environmental events such as plant flowering, fruiting and animal behavioural patterns.*
- *Caring for Country - the Traditional Owners have an ongoing connection to place and desire to foster caring practises for its ongoing health.*
- *Fire Stick Farming - managing the landscape using traditional fire stick farming techniques may help manage the park today.*
- *Cultural Heritage - there are significant cultural places and likely artefacts within the park which are to be protected.*
- *Indigenous Resource - the Wadawurrung have long used the park as a source of many useful materials and foods.*

Image: Peter Kervarac



## Environmental stories

These stories outline the important environmental qualities of the park. Some are obvious (such as the Grass-trees) while other environmental stories are emerging (such as the effects of climate change).

- *Rare and threatened plants - the park has over 180 indigenous plants including two state level significant plants (Penny leaf flat pea, Yarra gum).*
- *The park sits within the Victorian Central Uplands bioregion - 2 per cent of the park is listed as Valley Grassy Forest, a vulnerable EVC within the region.*
- *Animals - the park is home to many animals, including the Eastern Grey Kangaroo, Black Wallaby, Short-beaked Echidna, Koala, Agile Antechinus and Brushtail Possum.*
- *Climate change - will affect how the ecology of the park operates.*
- *Carbon sequestration - the park plays an important role in sequestering (extracting and storing) carbon from the atmosphere helping to offset carbon dioxide emissions.*
- *Grass-trees (Xanthorrhoea australis) - one of the icons of the park, are under threat from possible infection from Phytophthora (Phytophthora cinnamomi).*

Image: C. Hall



## Immigration stories

These stories relate to the many ways the park has been used and modified since the arrival of non-indigenous Australians.

- *Gold Mining - the ongoing search for gold within the park has left visible traces on the landscape.*
- *Rifle Ranges - the park has been the location for two rifle ranges, which have left their mark on the landscape.*
- *Development of the City - the population of Ballarat is expected to grow by over 40,000 people by 2036 (a growth of 30 per cent).*
- *Demographics - 35 per cent of Ballarat's current population of just over 100,000 people is less than 25 years of age.*
- *Citizen Advocacy - the creation of the park is the direct result of citizen advocacy and without the FoCC there would be no park today.*
- *Forestry - the park has been used for commercial forestry since the 1960's when the first plantations were established.*
- *Railway - a railway line through the park was used for early trade and commerce.*

Image: M. Rootes



## Personal stories

These are many individual and personal memories and experiences of the park. When considered collectively, they provide considerable meaning and importance to the park and inform how people use and engage with it.

- *Childhood Stories - many people have memories of the park as children.*
- *Family Connections - the park is a place for families to come together.*
- *Neighbours - many people live adjacent to the park, forming strong connections with the landscape.*
- *Diverse Activities - people continue to use the park in diverse ways.*

Image: P. Wallace







*Image: Peter Kervarac*

# Strategic Directions

The Strategic Directions were developed with the community to put into effect the vision and guiding principles for the park. They set the goals and objectives to be achieved through the plan.

## 01 Strategic Direction Celebrate culture

The park has a rich history of stories which are embedded in places of interest throughout the park. Telling the stories is a vital aspect to help gain an understanding of its past and to connect the park with future generations.

## 05 Strategic Direction Create experiences

The park supports visitors who enjoy the park for its quiet contemplation, nature appreciation, and active recreation such as walking, trail running, horse riding and mountain biking.

## 02 Strategic Direction Nurture the ecology

The park has been a forest for decades, and although highly disturbed by different activities over time, there remain important ecosystems that will be protected and nurtured to flourish.

## 06 Strategic Direction Create trail networks

An important way to experience the park is to use one of its many trails. The creation of a network of trails throughout the park will cater for different interests, ages, fitness levels and modes of travel.

## 03 Strategic Direction Regenerate the forest

The forest has always been part of the recognisable landscape of Ballarat, forming the horizon line to the city well before it was recognised as Woowookarung Regional Park. Its fragmentation over time from different uses has resulted in significant environmental change. Reuniting the forest fragments and regenerating the former plantation land is key to improving the health of the park.

## 07 Strategic Direction Connect the park to the city

Although the forest has always been present in the background of Ballarat and has played an important role in the history of the city, it has remained largely unnoticed by many people. Linking the park to the city and more broadly to the region is crucial to developing strong connections to the park.

## 04 Strategic Direction Connect people, health and the park

A key component of the plan is bringing the park to the foreground of the community's consciousness, ensuring the park is valued and relevant. Strong and enduring connections between people and the park will encourage a strong sense of ownership and pride in the park.

## 08 Strategic Direction Integrated land management

An important long term strategy for the park is to build resilience by working with other land managers, service providers and private landholders to achieve shared outcomes and complementary land management activities.



# Strategic Direction 01 – Celebrate culture

The park has a rich history of stories which are embedded in places of interest throughout the park. Telling the stories is a vital aspect to help gain an understanding of its past and to connect the park with future generations.

## Celebrating culture in the park

The park is a place with many stories to tell, created by a rich tapestry of ideas, events and memories that have shaped the park and the landscape we experience today. Just as the Canadian Forest existed in the background of Ballarat, many of these stories are also hidden from view.

Crucial to the park is the protection of cultural heritage and celebration of culture. The creation of the park is an opportunity to share and tell these stories and protect significant places, all of which contribute to the understanding of the park, and play an integral role in how people experience and connect to the park.

Celebrating culture extends across time, representing traces from the past, such as cultural heritage, as well as current social values which shape how we view the park today.



*"Woowookarung embodies the spirit and the history of this place, which provided food, medicine, water, shelter and raw materials for Aboriginal people. In Wadawurrung language Woowookarung means 'place of plenty'".*

Uncle Bryon Powell, Elder and Chair of the Wadawurrung

### What is cultural heritage?

As defined by the International Council on Monuments and Sites (ICOMOS), cultural heritage is “an expression of the ways of living developed by a community and passed on from generation to generation, including customs, practices, places, objects, artistic expressions and values. Cultural heritage is often expressed as either intangible or tangible cultural heritage.”<sup>01</sup> As part of human activity, cultural heritage produces tangible representations of the value systems, beliefs, traditions and lifestyles. As an essential part of culture as a whole, cultural heritage contains these visible and tangible traces from antiquity to the recent past.”<sup>02</sup>

For the purposes of this plan, we have assumed cultural heritage to include evidence of more than 30,000 years of occupation of Victoria by Aboriginal people, and of the more recent period of settlement and immigration by non-Aboriginal people. All heritage material can provide us with important information about past lifestyles and cultural change, and cultural heritage places provide reference points around which the wider heritage landscape can be understood. Preserving, enhancing and where possible interpreting these important and non-renewable resources is encouraged.

### What are social values?

Whereas cultural heritage is an expression of the ways of living developed by a community in the past, social values are an expression of the current customs, practices, places, objects, artistic expression and values of a community today. Social values are an expression of what people think and feel about something and are a quantification of the importance people place on different aspects of their lives. Social values exist as both personal expressions, as well as cultural values that reflect a shared set of common values, social expectations and collective understandings.

In regard to the creation of the park, social values identify how people relate to and feel in this place. This includes how and why they use the park, and how much they value it. The park becomes an expression of both cultural heritage and social values through the telling of its stories.

01 [www.icomos-uk.org/uploads/sidebar/PDF/A%20Cultural%20Heritage%20Manifesto.pdf](http://www.icomos-uk.org/uploads/sidebar/PDF/A%20Cultural%20Heritage%20Manifesto.pdf)

02 [www.cultureindevelopment.nl/cultural\\_heritage/what\\_is\\_cultural\\_heritage](http://www.cultureindevelopment.nl/cultural_heritage/what_is_cultural_heritage)

*Welcome to Country - Image: M. Rootes 2014*





## Goal 1A – Celebrate connection to Country

The Wadawurrung people are the Traditional Owners of the land on which the park has been created. The park forms an important part of the traditional landscape that they have cared for over many thousands of years. While some places are physical, others have no physical form but are still significant to the living culture through their link to ancestors, traditions, language, stories and ceremonies. This landscape allows the Wadawurrung people to continue to undertake their traditional practices and maintain a strong spiritual connection with the land. Respecting their culture and connection to Country is vital to the success of the park.

### Strategies

1. *Support ongoing connections to Country through landscape restoration and the continuation of ceremony.*
2. *In partnership with the Traditional Owners, define how cultural traditions and practices relevant to the cultural heritage of the park can inform development and ongoing management of the park.*
3. *Recognise the potential for cultural heritage places and culturally significant sites to exist in the park.*
4. *Build capacity for conservation of Aboriginal cultural heritage, site protection and restoration.*
5. *Present and support opportunities for the Wadawurrung to share their stories including the role the landscape has played as a 'place of plenty'.*
6. *Provide programs and opportunities for indigenous and non-indigenous groups to collaborate and interact.*
7. *Consider developing a park-wide Aboriginal Cultural Heritage Land Management Agreement (ACHLMA) in partnership with the Registered Aboriginal Party (RAP).*
8. *Explore opportunities to express art and culture reflecting the Wadawurrung stories and identity of the park, seeking their guidance and approval.*
9. *Recognise the six seasons of the park to understand the natural rhythms of the park and how to best interact with them for their protection, enjoyment and learning.*

Image: Peter Kervarac



## Goal 1B – Celebrate contemporary connections

Viewing Ballarat from the highpoints of the park you can see the evolution of a place. From its geological past, people shaping the landscape and settlement, through to present day and possibilities for the future. The park reflects these changes and helps us understand the landscape we experience today and our social connections to it.

To the local community the park is a safe haven, a place to unwind and to connect with people and nature.

These social connections, the heart and soul of the park, foster stewardship and are an important aspect in its future success.

The Wadawurrung continue their cultural heritage and connection to the place.

## Strategies

1. *Tell the story of landscape change and cultural connections within the area encompassed by the park since the arrival of non-indigenous Australians, including gold mining, forestry and other activities, and how it has been an integral part of the region's history.*
2. *Recognise the role the park has played for neighbourhood use and, at times, misuse, to develop a process to re-engage and reconnect the community in appropriate use and appreciation of the park.*
3. *Celebrate the recent story of the creation of the park and its role as an important community and environmental asset.*
4. *Tell the stories of Ballarat through people's connections to the park and celebrate how it has been, and will continue to be vital in shaping a healthy and vibrant future for Ballarat.*
5. *Provide opportunities for new stories to be shared through art, play, events and engaging with the environment.*

*Refer to page 20 for stories.*

Image: Peter Kervarac





## Strategic Direction 02 – Nurture the ecology

The park has been a forest for decades, and although highly disturbed by different activities over time, there remain important ecosystems that will be protected and nurtured to flourish.

### Why is the environment important?

Underpinning the park's creation is a strong environmental vision presented by the community that recognises the value of existing natural systems within the park and identifies the need to both protect and enhance them.<sup>01</sup> These values significantly contribute to the biodiversity of Ballarat and provide opportunities for people to engage more directly with nature.

<sup>01</sup> *A social, civic, environmental and economic vision for establishing a multi-use Regional Reserve in The Canadian Corridor, Friends of Canadian Corridor 2014-2015*

Canadian Cup Moth larvae. Image: C. Hall



## Vegetation within the park

There are two Ecological Vegetation Classes (EVCs) within the park. EVCs are groupings of vegetation communities based on floristic, structural, and ecological features. A significant portion of the park (370 ha or 57 per cent) is mapped as Heathy Dry Forest. About 11 ha (or 2 per cent of the park) is mapped as Valley Grassy Forest, which is vulnerable (threatened) in the bioregion. The remaining 41 per cent of the park is the regenerating former plantation blocks that are currently mapped as a pre-European EVC. As the park continues to flourish, there is opportunity to tactically increase these EVCs, thus improving the ecosystem robustness and health of the park.

## Plants and animals

The park is home to a wide variety of plants and animals. A vascular flora list provided by the Field Naturalists Club of Ballarat (FNCB 2016) includes 182 indigenous species and 70 introduced species found within the park including two plant species of conservation significance (the Penny-leaf Flat-pea (*Platylobium rotundum*) and the Yarra gum (*Eucalyptus yarraensis*). In addition, a natural values assessment also identified five lichen and mosses, 107 native bird species and five native mammal species (see Appendix A, page 90).<sup>02</sup>

In 2015, the Department of Environment, Land, Water and Planning (DELWP) noted that “there are locally significant populations of Austral Grass-tree (*Xanthorrhoea australis*), particularly in the north. These are a very attractive visual component of the understorey and contribute to the habitat value of the area for native fauna. Stands of Brown Stringybark (*Eucalyptus baxteri*) are considered locally significant as this species is uncommon around Ballarat. There are also locally significant records of Rough Tree-ferns (*Cyathea australis*) in several creek-lines in the proposed park.”<sup>03</sup>

## Koala management

Ballarat’s koala population lives in and around Nerrina, Invermay and the Canadian Valley and has declined in these areas over the years due to human activity including plantation clear felling and housing development. To ensure their long term survival in accordance with the City of Ballarat’s Comprehensive Koala Plan of Management (2006), there is an opportunity to link the park to create a continuous corridor, or biolink, which will reduce the fragmentation of the koala’s natural habitat.

## Connectivity

An important prerequisite for ecological resilience and health is connectivity. The park’s resilience and health is enhanced the more connected it is, both within the park (local connectivity), and with habitats beyond the park (regional connectivity). Regional connectivity plays an important ecological role linking ecosystems at a landscape scale. Local reserves are Mount Warrenheip Flora Reserve and Union Jack Education Area. The broader region includes Enfield State Park (south), and Nerrina Heritage Area and Creswick Regional Park (north). Forest connections exist throughout the Federation University Mount Helen Campus.

## Environmental threats

### Pest weeds and animals

Post settlement brought disruption to the forest functioning, such as tree removal, while also introducing non native plants and animals. These introductions have often out competed with local plant and animal populations, unbalancing food opportunities and creating new predation threats for animals, such as foxes which impact heavily on local possum and bird populations. Such impacts see a reduction in native habitat, and reduced diversity of animals, disrupting the ecosystems and causing animals to move away and some to disappear.

### *Phytophthora cinnamomi*

Phytophthora is a natural soil borne plant root disease that infects vegetation, eventually killing them. Phytophthora requires moist conditions to spread. It is easily carried on footwear, bicycle and vehicle tyres. The spread of Phytophthora begins at a highpoint, ie. on a hill or start of a water shed, eventually travelling downhill, and in time kills susceptible plants en route. The Austral Grass-tree (*Xanthorrhoea australis*) is highly susceptible and swathes of this vegetation appear to have been affected by the pathogen.

02 Canadian Park (Woowookarung) Natural Values & Habitat Values Assessment, Physsi, June 2017

03 Values, Uses and Community Views - A final report on stakeholder and community consultation for the creation of a new park in Ballarat, Department of Environment, Land, Water and Planning, State Government of Victoria, October 2015



Moss. Image: Peter Kervarac









## Goal 2A – Enhance areas of ecological importance

The existing EVCs in the park are important environmental values to protect and enhance. This includes undertaking more thorough EVC mapping to better understand how the EVCs within the park operate and where sensitive areas of importance exist. It will also be important to understand what EVCs may appear within the re-emerging forest.

At the time of preparing the plan, limited EVCs mapping has been undertaken and further investigation and mapping is required. This will pick up the emerging EVCs within the re-emerging forest.

### Strategies

1. Undertake a more detailed and thorough investigation and mapping of existing and emerging EVCs within the park to inform the park design process.
2. Develop a mini Conservation Action Plan for the park.
3. Implement design measures to conserve and protect areas of sensitive or high environmental value within the park.
4. Design the park by locating park assets to protect and enhance areas of environmental sensitivity.
5. Facilitate tactical active rehabilitation of areas identified as significant or prioritised as areas for improvement.
6. Develop and implement a weed and pest plant management strategy.
7. Develop and implement a pest animal management strategy.

## Goal 2B – Restore the waterways

Waterways are crucial to ecosystem support, providing water for animals and an expanded diversity of flora within the park. The park sits at the very top (headwaters) of the Barwon River catchment. Many of the permanent and ephemeral creeks, waterways and drainage lines within the park have been severely disturbed.

There is an opportunity to map and assess the feasibility of restoring the waterways to enhance the health of the park.

### Strategies

1. Map and assess the condition of waterways and creeks and implement appropriate restoration work.
2. Protect riparian zones from activities that pose a threat to the ongoing health and viability of these zones.
3. Develop trails and visitor facilities that allow, where feasible, people to experience and be educated about rehabilitated water courses in the park, such as elevated board walks and bridges.
4. Review water health and develop programs to assist in the protection of water courses throughout the park.
5. Work with other agencies to support integrated water catchment management.

Weed slashing demonstration. Image: C. Johnston





### Existing stream

The image below shows an existing water course on the former plantation block just below the proposed Amphitheatre site. The land, including the former stream, was significantly disturbed when the blue gum plantation was removed in 2012. Ruts and furrows from earth moving equipment are still obvious, creating deep pools of water.

*Image: M. Rootes*





## Goal 2C – Activity based on ecological sensitivity

Given the park is a Regional Park, encouraging use and locating activities based on an understanding of the ecological and cultural sensitivity of the landscape is important.

Sensitivity will be based on areas of known importance, such as:

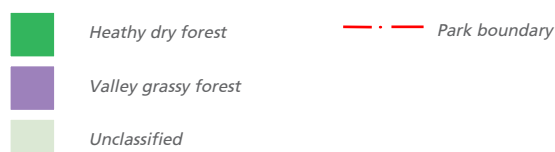
- high quality and diverse vegetation, for example healthy Grass-tree populations;
- areas where the risk of Phytophthora spreading is high;
- intact areas of forest;
- areas susceptible to erosion;
- existing waterways, creeks, damp areas; and
- the location of historic relics, artefacts, and other culturally significant areas.

It is proposed that a Conservation Action Plan (CAP) and a Bioscan (a survey of flora and fauna species over various seasons) will be undertaken to provide a more in depth understanding of the environmental values of the park. This will assist in identifying the best opportunities to protect and rehabilitate habitat to increase the park's ecological robustness. It will also inform the assessment of the existing trail network and future location of trails, activities and assets.

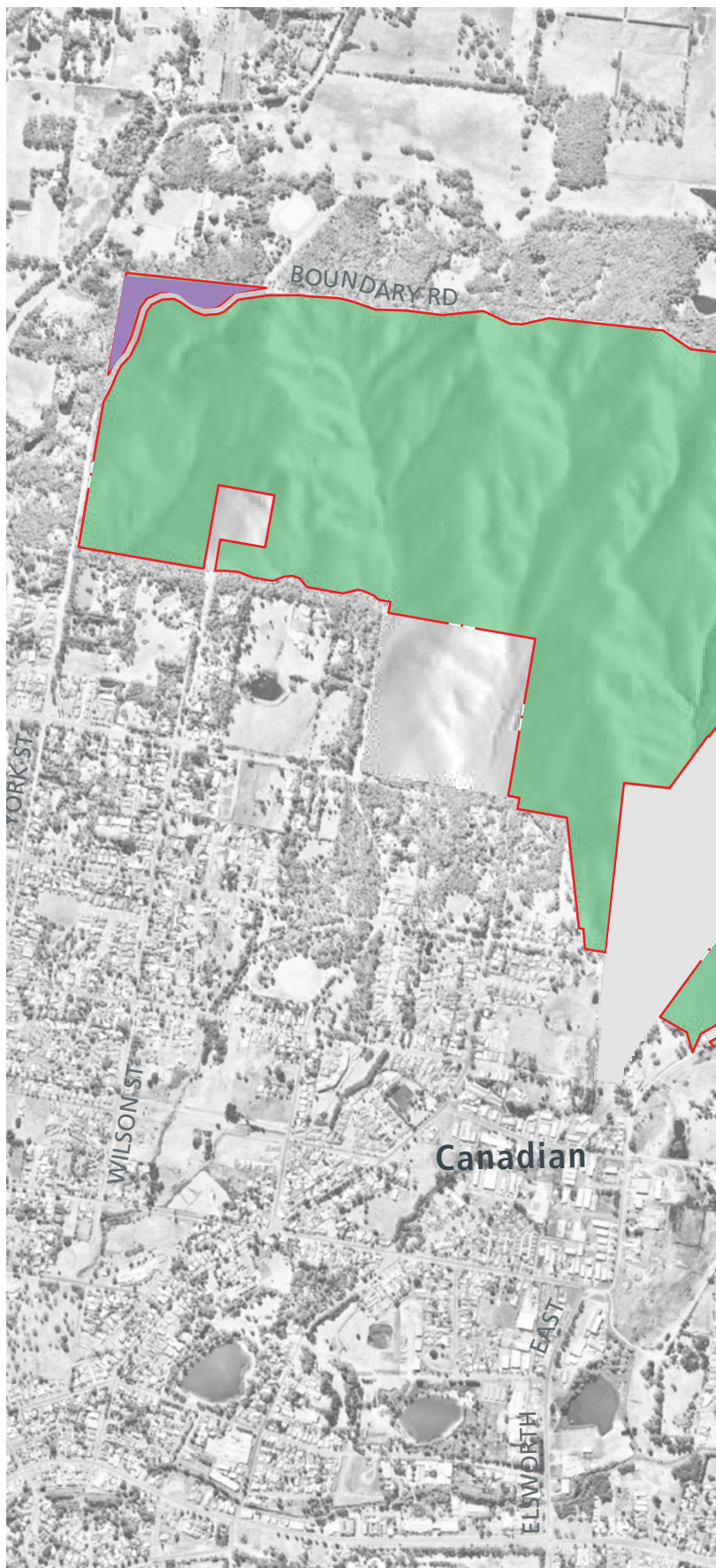
### Strategies

1. *Develop a mini CAP to provide a greater understanding of the environmental values of the park and guide decisions on the location of park facilities, trails and activities.*
2. *Undertake a Bioscan of the park in partnership with local universities, educational institutions and the community.*
3. *Use Phytophthora mapping to feed into the mini CAP and to develop biosecurity approaches, programs and appropriate management techniques to minimise the spread and impacts of Phytophthora.*
4. *Establish and enforce regulations to protect the park's environmental values.*

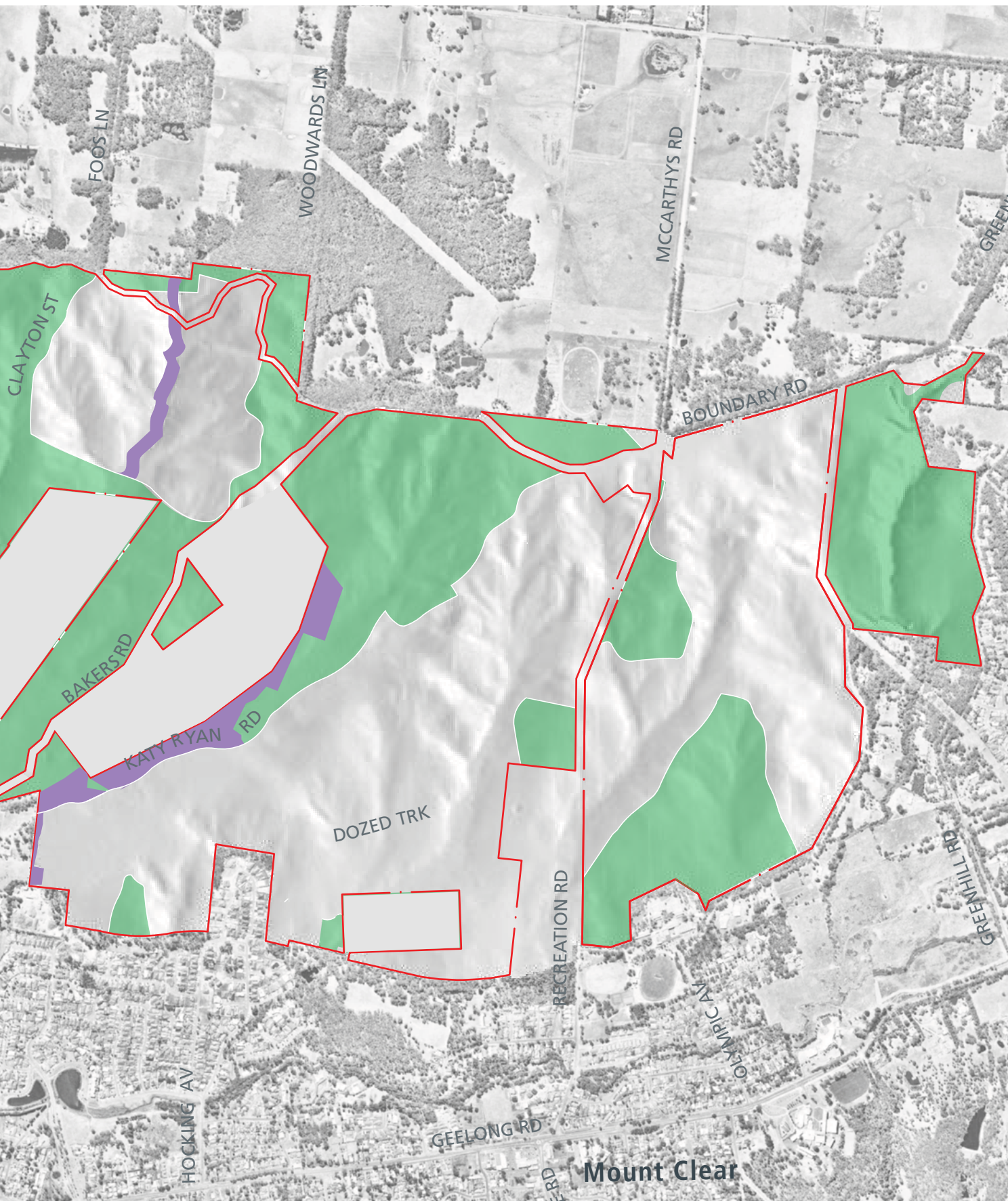
### Legend - Current EVCs



0 0.25 0.5 1.25KM











*For illustrative purposes only*







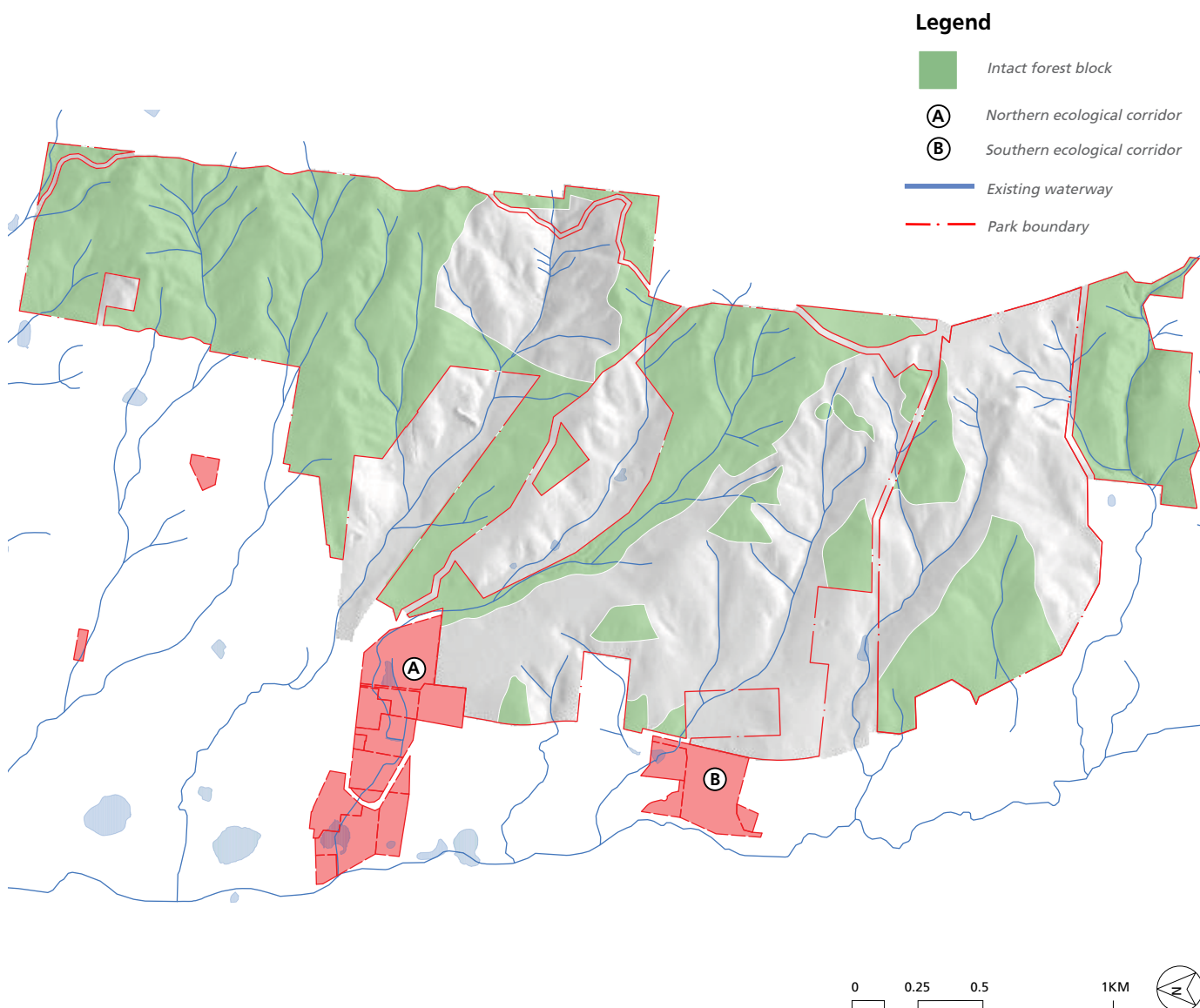
## Goal 2D – Establish ecological corridors

Ecological corridors along waterways and through the park play a vital role in supporting biodiversity. They support the operation of natural systems, the dispersal of plants and movement of animals within the park and the region, particularly as riparian zones are considered 'hotspots' for biodiversity. It is important to support and encourage maximum corridor robustness and expansion where possible.

Creek corridors offer the best opportunities for wildlife corridors as they provide critical resources for native animals in a dry country. Native animals resident in riparian corridors, and many other species from elsewhere within the landscape use waterways for occasional use and in droughts as a refuge. An important method to improve the ecological connectivity between the park and adjacent habitats is to improve linkages between the park and the Canadian Creek corridor.

The park is currently not well connected to the Canadian Creek corridor. A corridor retaining and enhancing the ecological connectivity between the park and Canadian Creek would increase the resilience of animals moving through this more developed landscape.

There is also the opportunity to strengthen the habitat connection across the re-emerging forest within the plantation area. Rehabilitation and regeneration will improve the habitat connections through the park linking to the existing forest.



### Northern ecological corridor

The northern park creek connection corridor falls largely within land currently zoned industrial within the Municipal Planning Scheme. This block is characterised by large areas of undeveloped land. An important waterway and series of ponds extends through this land before joining Canadian Creek, providing an important corridor for biodiversity. As the city of Ballarat continues to grow, there will be increasing pressure to re zone and redevelop this land for housing. Consideration should be given to protecting and enhancing the ecological corridor that physically connects the park with the creek.

### Southern ecological corridor

The southern park creek connection provides a largely forested and undeveloped connection between the park and the creek, which provides an important corridor for the movement of wildlife. This corridor provides the closest connection between park and creek with only 400m separation. Consequently, this provides one of the best opportunities to physically connect the creek and the park.

There is also an opportunity to strengthen habitat corridors across the re-emerging forest. Rehabilitation and regeneration will improve habitat connections through the park.

### Strategies

1. *Partner with the City of Ballarat to explore opportunities that allow improved environmental connections between the park, Canadian Creek and Canadian Creek Trail.*
2. *Work with the City of Ballarat and Moorabool Shire Council to ensure the Municipal Planning Scheme supports the long term creation of connections between the park and surrounding suburbs.*
3. *Develop 'tenure blind' land management strategies that align the management techniques of different land managers and owners and help create improved connections between the park and the creek.*
4. *Work with other conservation agencies and groups to develop a corridor plan from Enfield to Hepburn building on the City of Ballarat's Comprehensive Koala Plan of Management.*
5. *Continue to seek external funding arrangements/ partnerships to co-invest in landscape health initiatives.*





## Strategic Direction 03 – Regenerate the forest

The forest has always been part of the recognisable landscape of Ballarat, forming the horizon line to the city well before it was recognised as Woowookarung Regional Park. Its fragmentation over time from different uses has resulted in significant environmental change. Reuniting the forest fragments and regenerating the former plantation land is key to improving the health of the park.

### The fragmented forest

While the forest persists, it is fragmented, particularly from its recent history as a plantation and as a result of former fire regimes, which have burned too hot and created a simplistic forest structure. In 2002, plantations were replanted with 300,000 blue gums. In 2012, the leased areas were handed back to the Victorian Government. The plantations were felled and the land was cleared in accordance with the requirements of the hand back, resulting in extensive modification to the landscape and a highly fragmented park.

Currently, the remnant sections of intact forest form a fragmented mosaic across the park. This pattern is spatial, creating significant differences between cleared and uncleared land, a very distinctive condition of the park today.

### The re-emerging forest

The former plantation sites are regenerating. As the new forest regrows, the park is becoming less fragmented and more cohesive, as the trees and understorey continue to grow. In time, the forest will become less open.

There are significant differences in age and vegetation class between the existing intact and regenerating forest blocks. This creates an exciting dynamic across the park for people to explore, understand and nurture.

Image: Peter Kervarac



Image: FoCC









## The intact and the regenerating forest

Nature is ever changing, dynamic and evolving. These changes are often difficult to discern or observe over shorter time frames.

The diagrams opposite show a portion of the area over an 83 year period between 1934 and 2017. The block shown is a privately owned inlier on the south western edge of the park. In 1934, the block is largely cleared and surrounded by intact forest. By 1970, the plantations have been established on the state owned land adjacent to the block. In 2017, much of the tree structure has regrown on the private land, while the forest and plantations have been removed, effectively an inversion of the 1934 condition. These changes have occurred in an unstructured and uncoordinated way; yet biodiversity has increased and added to the health of the forest.

Within the former plantation sites there is an indigenous seedbank (native seeds stored in the soil) and the seeds are responding to positive conditions. EVCs will continue to emerge and create further corridors of robust forest. It will be important to monitor the vegetation and to see what species emerge and understand how it can be managed to generate a viable, healthy forest.

### Assessing the regenerating forest since 2012

The regenerating forest on the former plantation blocks is changing quickly. Analysis of different patches within the park clearly show significant changes in the forest structure in the five years since 2012.

The quality of the forest regrowth is variable across the park, with some areas showing excellent regeneration while other areas have struggled, becoming highly weed infested with limited species diversity. Species that have not been seen within the park in recent history are returning. It will be important to monitor how the re-emerging forest changes over time.

*Austral Grass-tree. Image: Peter Kervarac*



## Strategies for forest regeneration

The existing forest canopy and overall habitat in the park has been disturbed over time through use and has been subjected to severe disturbance, fragmenting the forest and dramatically altering the soil profile, hydrology and ecosystem. An important objective of the plan is to encourage regeneration of the forest and reunite the forest canopy using strategies that are achievable and practical to implement.

There is an opportunity to re-establish the former plantations with EVCs based on the historical and pre-plantation state. The existing seedbank, surrounding seed sources from existing vegetation and the local soil and climate conditions make this the most viable area to restore. These revegetation areas will be managed within the context of changing climate conditions.

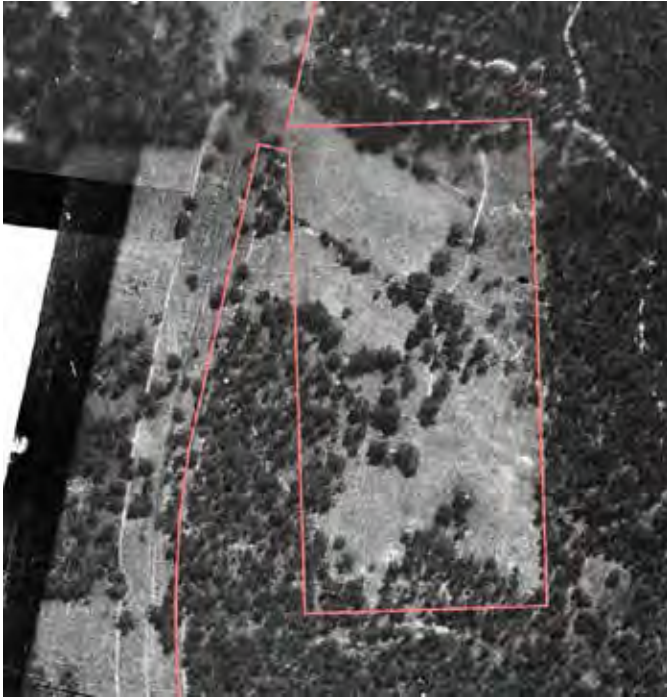
Regarding the 'natural' state of the forest the existing Heathy Dry Forest ecology is reinstating itself. While the Heathy Dry Forest EVC has good representation in the bioregion, there will be management strategies required to elevate its health and resilience.

Valley Grassy Forest (EVC 47) is present within the park and is considered vulnerable in the bioregion. It typically occurs on undulating lower slopes and valley floors, and therefore has been subject to high disturbance, particularly along water courses. This EVC is an EVC that will benefit from active management.



## Understanding change over time...

1934



1970



1990



2017





The Regenerating Forest - Former plantation looking towards Lal Lal Drain, 2012



The Regenerating Forest - The former plantation looking towards Lal Lal Drain, 2017





Image: FoCC



Image: FoCC





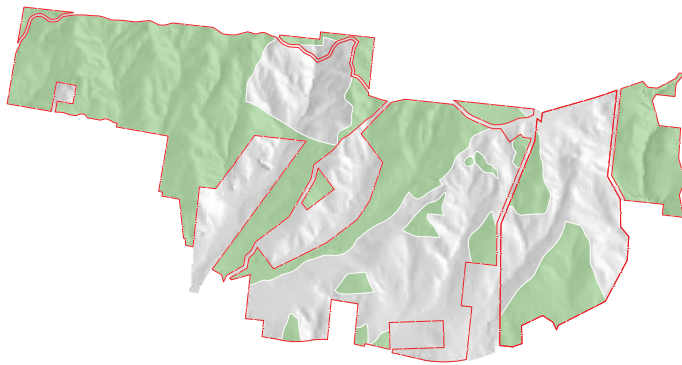
### Goal 3A – Create ecological corridors

There is an opportunity to focus on the creation of ecological corridors that link between existing blocks of intact forest within the park to connect fragmented habitats.

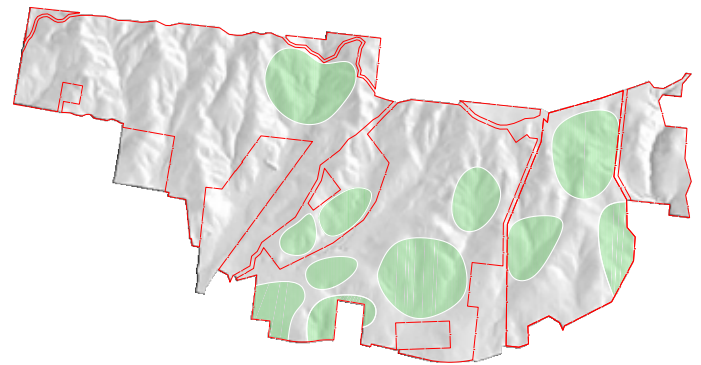
Areas immediately adjacent to intact forest blocks generally support much better regeneration of the forest due to seed dispersal. These areas are currently the focus of regeneration efforts within the park. These corridors reflect the core areas of investment and the remaining areas of regenerating forest on the former plantation blocks (outside of the ecological corridors) will become ecological patches that are managed. These patches support the overall intactness and resilience of the broader corridor effect.

#### Strategies

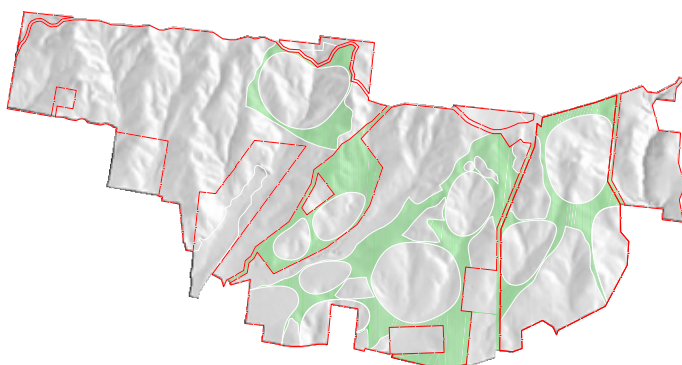
1. Undertake further investigation into the current and former distribution of EVCs within the park to better inform the regeneration strategy.
2. Regenerate the forest on the former plantation blocks by creating ecological corridors that link intact portions of forest to improve the ecological function of the park.
3. Fuel management will need to consider how best to support forest health and regeneration.
4. Provide weed eradication and management within the ecological corridors to promote forest regeneration.
5. Explore opportunities to work with FoCC, other partners and agencies to achieve improved natural system landscape health outcomes in these corridors.



A. Existing disconnected forest blocks



C. Proposed ecological patches



B. Ecological corridors





## Visualising the regenerated forest

Understanding how the park could evolve over time.



View 01 - Existing fragmented forest (2017) - 0 years



View 02 - Proposed corridors growing (2027) - 10 Years



View 03 - Proposed regenerated forest with corridors (2037) - 20 Years



View 04 - Proposed regenerated forest with corridors and patches (2057) - 40 Years



Goal 3B – Manage the weeds

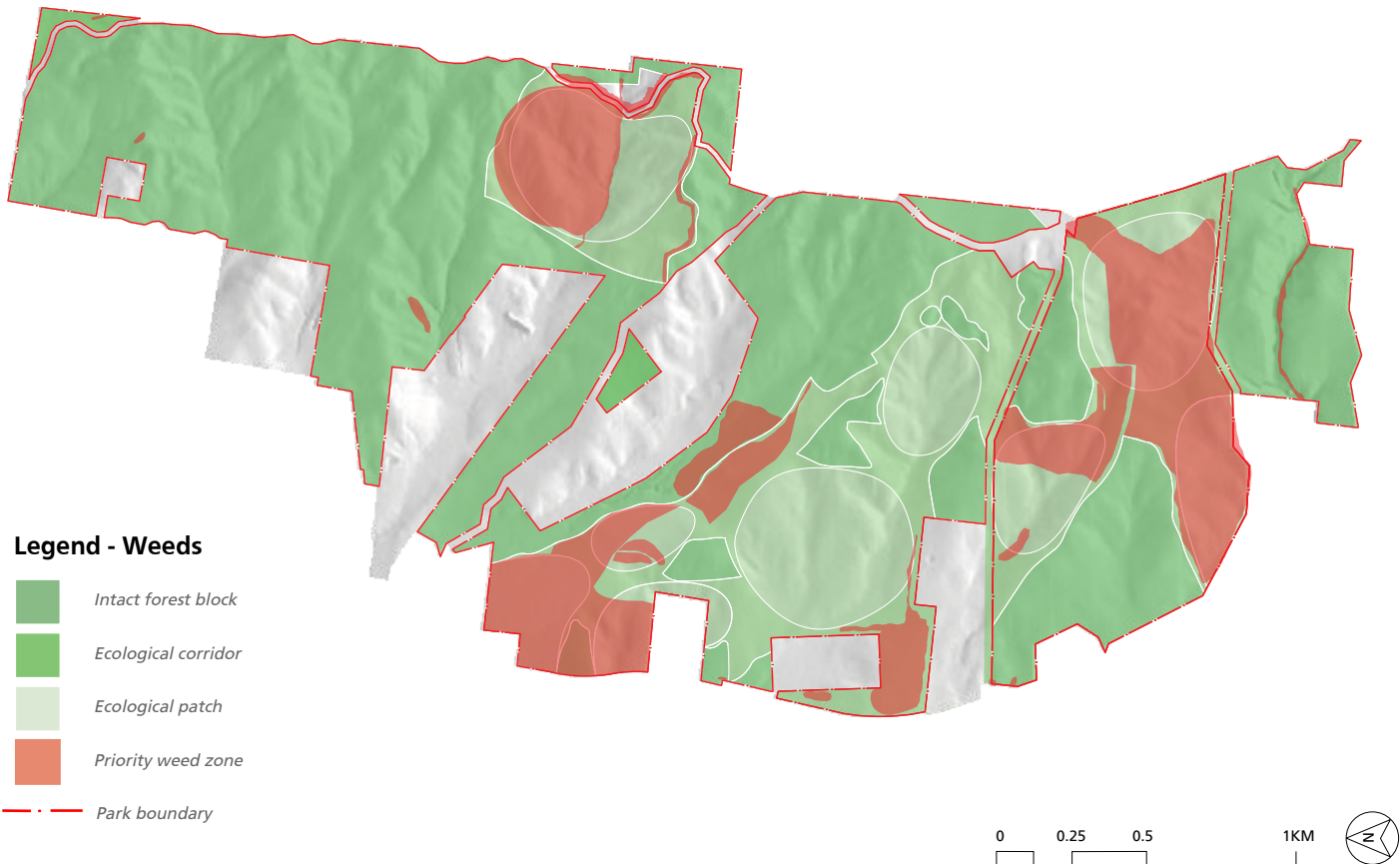
Weed infestation has been identified as a significant ongoing issue affecting the ecological health of the park. Weeds infest areas of existing vegetation then consolidate and spread. In areas of regenerating forest weeds suppress and smother emerging indigenous vegetation, which hinders the regeneration process.

The success of regenerating the forest relies on strategic weed management.

Strategies

- 1. Undertake a thorough site audit of weed infestation across the park and develop appropriate management strategies.
- 2. Prioritise weed eradication on species with small populations in the park.
- 3. Develop and enforce regulations to minimise illegal dumping of garden waste.

Existing gorse infestation (off Katy Ryan Road)



### Goal 3C – Fuel management

Management of fire fuel loads in the landscape is a complex task and can have multiple objectives. The plan supports a 'tenure blind' (cross tenure) Risk Landscape Management approach that will allow a park wide fuel management strategy, called a Strategic Bushfire Management Plan (SBMP), to be developed. The Department of Environment, Land, Water and Planning (DELWP) is the responsible government authority for the management of fire risk on public land. A SBMP is done in collaboration with inlier and adjacent private property owners and Forest Fire Management Victoria (FFMVic), of which Parks Victoria and DELWP are members. The SBMP identifies different management zones including Asset Protection Zones (APZ), Bushfire Management Zones (BMZ), and Landscape Management Zones (LMZ). These latter zones will be the focus for incorporating greater ecological outcomes supported by cultural burning practices.

The SBMP guides the development of Fire Operations Plans (FOP). The FOP is a list of burns and other fuel management works to be carried out over three years identified by DELWP, the Country Fire Authority (CFA) and Parks Victoria.

Fire is an important tool in land management. A key consideration for the park is how fire in the landscape is managed to contribute to community safety and at the same time support the protection and enhancement of the park's natural and cultural values. This will require careful planning, monitoring and significant collaboration between FFMVic, Traditional Owners, the CFA, City of Ballarat, Moorabool Shire Council and the broader community to develop an effective long term approach to fire risk management in the park.

### Strategies

1. *Develop an appropriate Strategic Bushfire Management Plan that draws on knowledge of Traditional Owner burning practices, as well as modern day fire modelling techniques to better manage the health of the park, and the fire risk to adjacent communities.*
2. *Explore opportunities with the Traditional Owners to research and trial ecological burn regimes that support cultural practices as well as ecosystem health.*
3. *As part of FFMVic, continually update bush fire modelling for the park to take account of the regenerating forest.*
4. *Continue to monitor fire management techniques to understand the impacts on the ecology of the park.*
5. *Undertake fuel reduction treatments in conjunction with DELWP and CFA.*
6. *Develop a Risk Landscape Planning approach to manage fire across the whole park including inlier properties.*

*Fuel reduction burning*





## Strategic Direction 04 – Connect people, health and the park

A key component of the plan is bringing the park to the foreground of the community's consciousness, ensuring the park is valued and relevant. Strong and enduring connections between people and the park will encourage a strong sense of ownership and pride in the park.

Awareness of the park's values will grow through education, information and community involvement, increasing the community's connection with the park and building a deeper respect for its assets. Opportunities for people to be active and recreate in the park will encourage visitors of all ages and abilities.

Growing scientific evidence and generations of traditional knowledge show that spending time in nature is good for our mind, body and soul. It has positive effects on our ability to concentrate, learn, solve problems and be creative. Parks Victoria's Healthy Parks Healthy People approach is built on this evidence and is the foundation of how the park will be managed as a park.

The State Government's Public Health and Wellbeing Plan and the City of Ballarat's Health and Wellbeing Plan both identify active living (physical activity) and mental health as the main strategic priorities requiring attention in the coming years. The park has an important role in improving the health of the Ballarat community. A strong focus on health will allow for specific partnerships, programs, activities and events to be investigated and where appropriate, implemented.

A separate plan will be developed, in alignment to the Strategic Directions Plan, to explore how the park can support community health activation.

### Goal 4A – Activate Healthy Parks Healthy People

Healthy Parks Healthy People (HPPH) is the foundation of Parks Victoria's approach to park management and recognises the fundamental connections between human health and environmental health. It gives us the opportunity to improve the health of our parks and our communities now and into the future.

See Appendix B, page 93 for HPPH Framework.

#### Strategies

1. *Develop an Activation Plan, in alignment with the Strategic Directions Plan, to translate Parks Victoria's HPPH approach into action through partnerships, programs, activities and events.*
2. *Continue to develop and strengthen partnerships with conservation, health, community, aged care, education and tourism sectors to help deliver on the HPPH approach and other health and wellbeing objectives.*
3. *Design and maintain park infrastructure to support diverse and inclusive opportunities for people to improve their health and wellbeing in nature.*
4. *Partner with the education sector and Traditional Owners to further strengthen the knowledge and evidence for health benefits of parks and nature.*
5. *Grow awareness of the benefits of health parks for people's wellbeing and promote the benefits of time in nature for all.*
6. *Advocate for improved public transport and active transport connections to the park to encourage equitable access.*
7. *Provide suitable access and a safe environment to encourage people to be active and healthy in the park.*

Image: Peter Kervarac



## Goal 4B – Foster community participation

The park was created through strong community advocacy. It is important to maintain this passion and involve a variety of community organisations, schools, groups and individuals in the planning and development of the park.

### Strategies

1. *Continue to work closely with FoCC, schools, universities and other community groups and individuals to develop and facilitate research and education programs, foster stewardship of the park and share their experiences and knowledge of the park with the broader community.*
2. *Work closely with the Wadawurrung people to share cultural connections, heritage and understanding with the wider community.*
3. *Support the development of a range of outreach programs that actively encourage participation in managing and caring for the park.*
4. *Undertake archaeological research and partner with the Traditional Owners and research institutions to conduct future research in the cultural value of the park and the Traditional Owner's capacity to shape its management.*

## Goal 4C – Support programs, activities and events

Partnerships will be integral to the successful development of organised programs, activities and events in the park. These opportunities help establish ongoing connections between people and place and generate ongoing interest in the health of the park and the health of people. Programs, activities and events may include active and passive recreation and will be inclusive of visitor needs in their offering.

Licensed tour operators and other service providers will continue to be supported to expand and diversify visitor experiences and services.

### Strategies

1. *Implement a program of regular events and activities for the community, with a focus on health of the park and community.*
2. *Allocate sufficient resources to undertake the development and management of diverse partnerships and management.*
3. *Support and encourage licensed tour operators, not-for-profit organisations, FoCC and other community groups to provide additional guided activities.*
4. *Investigate opportunities and interest from the business sector in providing complementary visitor services in or adjacent to the park to support community programs and activities and to broaden tourism offerings for the region.*
5. *Support the promotion and marketing of events and activities occurring within the park.*
6. *Advertise the park more widely to encourage day trips from the broader region.*

Image: FoCC





# Strategic Direction 05 – Create experiences

The park supports visitors who enjoy its quiet contemplation, nature appreciation, and active recreation experiences such as walking, trail running, horse riding and mountain biking.

The park offers a range of destinations and locations that will require the provision of certain facilities to support park user activities and experiences. These visitor sites will be connected by a trail network and will form an integral part of how people experience and navigate their way through the park.

## Goal 5A – Provide rich and varied experiences

It is important to provide settings which can support a diversity of activities and experiences and encourage people of all ages to regularly come to the park. Activities may include walking, trail running, bicycle riding, family gatherings and barbecues; while experiences may include star gazing, wildflower walks, bird watching and other nature based activities.

### Strategies

1. *Provide settings for a diverse range of activities and experiences within the park that cater for all ages, interests and abilities.*
2. *Manage the relationship between the different activities within the park to ensure safe and appropriate access for park users.*
3. *Develop the park to highlight and capitalise on the many unique and interesting experiences the park has to offer, including scenic views, topography and wildlife.*
4. *Design the park's facilities to support experiences and highlight the setting and stories of the park through signage, park information and interpretation.*
5. *Design the park's facilities to support sustainable experiences and to minimise impacts on the environment.*
6. *Explore opportunities for Licensed Tour Operators, and other tourism activation that value add to the nature experience of the park, and support the local economy.*
7. *Explore partnership opportunities with volunteers and not-for-profit organisations for events and programs in the park.*

0 0.25 0.5 1.25KM







Picnics and barbecues  
Family gatherings  
Parties and social events  
Community meeting place  
Engagement with community



Jogging  
Geocaching  
Trail running  
Orienteering  
Rogaining



Mountain biking  
Recreational riding  
Learning to ride  
Family rides  
Cyclo-cross



Wadawurrung history  
Cultural ceremonies  
Welcome to Country  
Cultural material collection  
Cultural education activities



Management activities  
Weed control  
Removal of rubbish  
Planned burns  
Revegetation & planting  
Erosion control  
Maintenance  
Clean Up Australia Day



Bush walking  
Walking clubs  
Organised walks  
Wildflower walks  
Ranger guided walks  
Education walks



## Goal 5B – Name important sites

The recent renaming of the park from Canadian Regional Park to Woowookarung Regional Park has been extremely important in providing a new identity for the park. The name means 'place of plenty' and reflects many aspects of the park's evolution. There is an opportunity to name or rename features within the park to give identity and meaning to places or features in the park. This will assist in navigation and way finding.

Parks Victoria is the authority responsible for investigating and determining place names on the land it manages, and has in place appropriate naming procedures and conventions to facilitate the naming of important features and sites within the park. Community consultation would be undertaken, including consideration of aboriginal names in consultation with Traditional Owners.

### Strategies

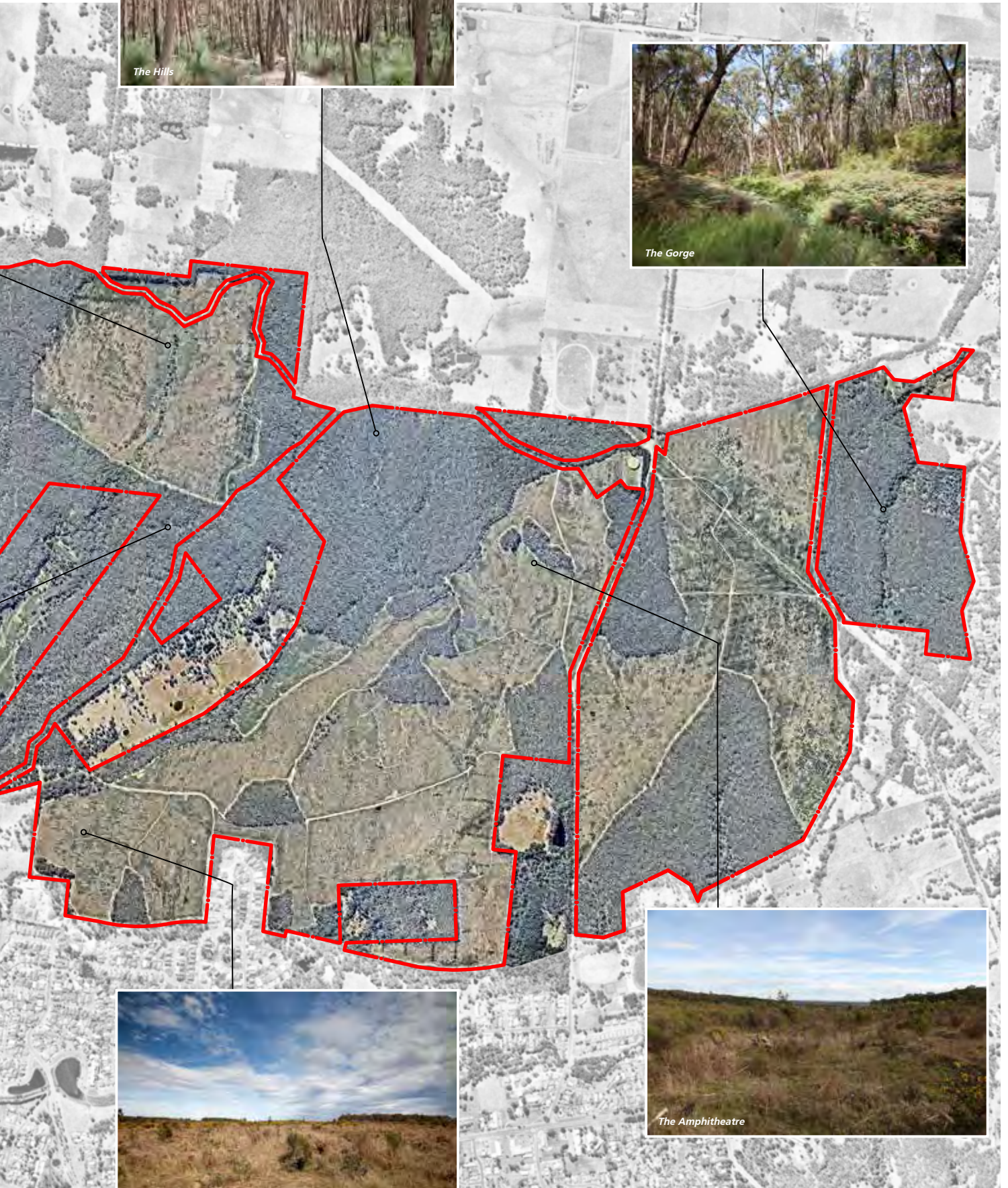
1. Undertake to name and/or rename key park features and sites that reflect the important stories of the landscape and park and consider aboriginal names for these features.
2. Ensure newly named locations are spatially mapped and registered with the appropriate emergency services.



0 0.25 0.5 1.25KM









## Goal 5C – Create visitor sites

### What is a visitor site?

A successful park requires facilities that support a diverse range of activities and experiences. A visitor site is a designated specific area where there is an invitation to stop and undertake some form of activity. The extent of a visitor site is the cleared or actively managed area that may contain visitor facilities and/or the delivery of visitor services that contribute to the visitor experience.

In the park, there are a number of proposed visitor sites that will support a wide range of activities and experiences, as well as provide important facilities for visitors.

### Visitor sites

Visitor sites will become important locations where people can access the park. They may include picnic facilities, information hubs, car parking, toilets and shelters. These sites will typically be day visitor areas for people arriving by car from further afield or for visitors wishing to stay longer in one place. These will generally support higher levels of visitation and will be constructed to ensure longevity and be sympathetic to the surrounding environs.

### Trailheads

These are smaller visitor sites located on the edge of the park adjacent to residential areas and will provide connections and access to the park trail networks. These will offer a lower level of facilities and information focused on supporting more local trail use.

### Attractions

Attractions will be important features throughout the park and will provide opportunities for visitors to experience the park. These include its plants and animals, the geology and heritage of the park's natural scenery and settings. The location of visitor sites and trails will showcase these attractions while ensuring their protection. Visitor safety issues will be addressed to provide high quality and sustainable experiences.

*Image: Peter Kervarac*



## Designing the visitor sites

As visitor sites welcome people into the park, it is very important that the design of the facilities and infrastructure reflect the ideas, experiences and stories that contribute to the character of the park, such as its cultural and environmental heritage. They will also support a range of health outcomes. The park has its own unique character independent of what can be experienced elsewhere in Ballarat. This uniqueness is an important part of 're-imagining' the park and can help build longer term connections between people and the park.

The location of visitor sites will be based on the setting and experience being supported and will be designed to minimise environmental and cultural heritage impacts. Sites will also be located in areas which allow a defensible space around the facilities to protect park assets during bush fires. This may include features such as larger mown areas of grass for recreation or viewing areas, as well as clearings to support fire management strategies.

### Proposed visitor site A (Western) - Health, community and all-abilities

This is the main visitor site proposed for the park where people travelling by car can access the park. Vehicle access will be available from Main Road, via Elsworth Street and Katy Ryan Road. The site is centrally located within the park, and will provide excellent access to the proposed trail network.

It will also provide an important introduction to the park and for many people it will become the main entry point into the park.

### Proposed visitor site B (Southern) - Biking

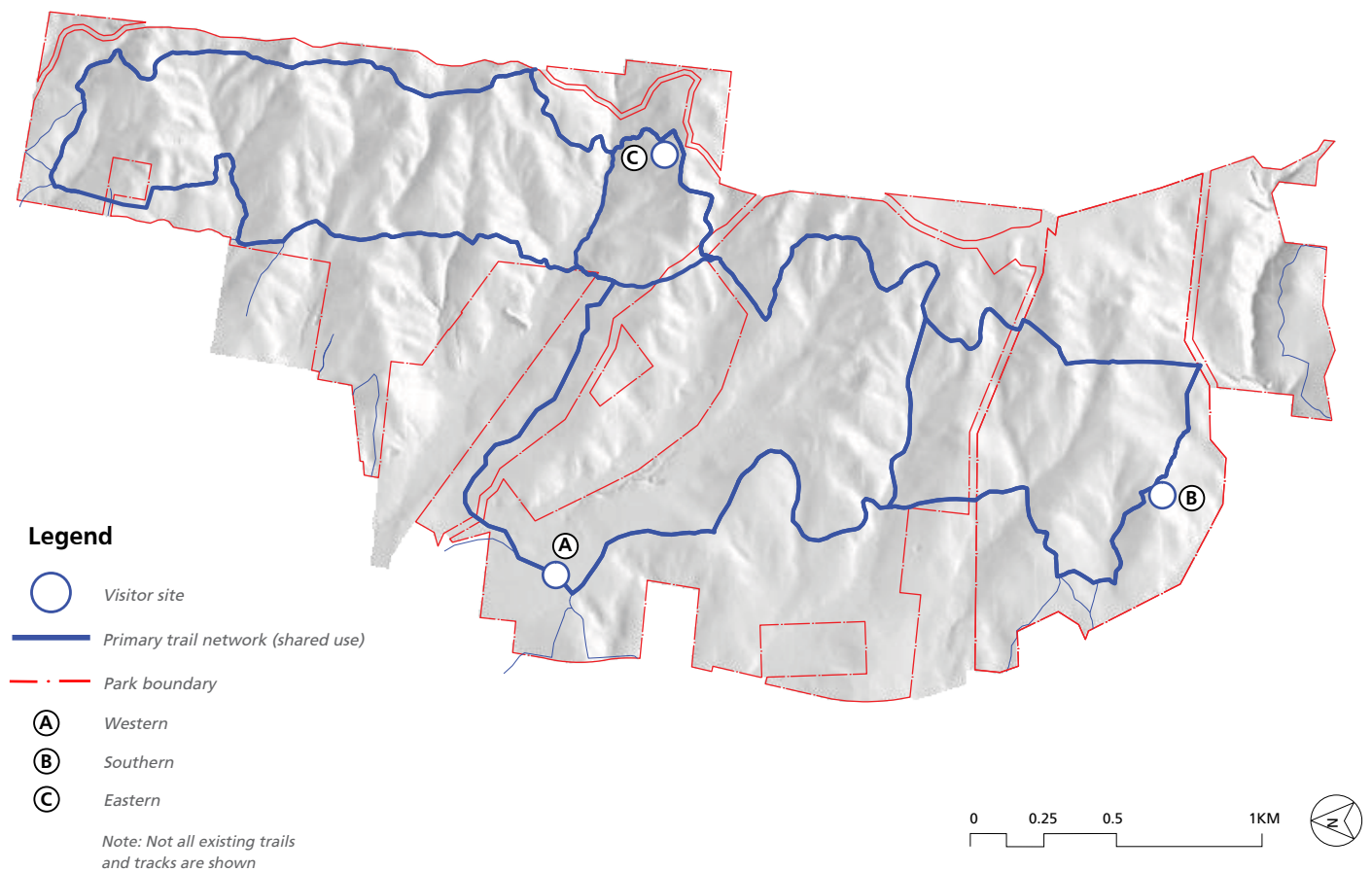
This site will support visitors undertaking mountain biking within the park and provides direct access to a range of dedicated mountain bike trails. It will contain a range of facilities that support this activity, including visitor information, bike wash down facilities and car parking.

### Proposed visitor site C (Eastern) - Lookout

This site will provide an important destination for visitors to experience impressive views across Ballarat and the surrounding landscape, and has the potential to become a significant local and regional destination. The site will be accessible by car (via Boundary Road), allowing visitors easy access to enjoy the views. It will be connected to the trail network and form part of the 10,000 Steps trail within the park. The Lookout will also connect to shorter nature walks through the regenerating forest.

### Strategies

1. Undertake capacity and site assessment to guide the provision of a variety of visitor experiences with associated visitor facilities in proposed locations.
2. Construct park facilities within the park using 'Universal Design Principles' and to the highest environmental sustainability standards, including exploring bio flushing toilets, materials with low embodied energy and recycled materials.





Artist impression: Visitor site - The Lookout







*For illustrative purposes only*



## Goal 5D – Highlight attractions

Attractions are typically located along the trail network and are experienced as part of the journey when travelling through the park either on foot or by active transport such as bicycles. These attractions and experiences tend to be destinations or points in that journey, rather than entry points into the park.

### Proposed sites

#### Saw Pit Gully and dam

This site is rich with traces of gold mining activity due to its location at the confluence of creeks and waterways and offers enormous potential for the restoration and rehabilitation of these waterways.

#### The Amphitheatre

Located on the 10,000 Steps circuit, the Amphitheatre (named by the Friends of the Canadian Corridor) sits within the topography of the park overlooking Ballarat. There is an opportunity to provide lookout platforms, picnic tables and seating that offer views across the regenerating former plantation blocks towards Ballarat. This location may provide an opportunity to tell the important story of the forest's regeneration and the strategies to reunite the forest fragments such as the ecological corridors. Other stories include the water races on the nearby hillside.

#### The Gorge and Cascades

The Gorge is one of the park's most dramatic features and includes the Cascades, which in winter time is the closest waterfall to Ballarat. This area of the park has some of the steepest topography and will require bridges and boardwalks to cross the sensitive waterway to deliver a range of exciting visitor moments.

#### The Hills / Grass-tree Gully

Within the park there are a number of outstanding clusters of Grass-trees that are one of the most iconic features of the park. These areas are particularly sensitive to the threat posed by Phytophthora. Consequently, there is opportunity to create a raised boardwalk through this landscape that offers a unique experience of the Grass-trees.

#### Watercourse and wetland

There are several locations where the watershed is high within the park. Some of these areas offer an opportunity to create low lying water features that can be interpreted and designed for quiet amenity, education and learning experiences. These locations can be designed to support current biodiversity and create a point of ecological difference in the forest.

### Experiences

#### Night sky clearing

Dark night skies are an important natural, cultural and scientific resource. Night sky clearing is an area not polluted by light and allows for public enjoyment of the night sky through interpretation, education, and professional and amateur astronomy.

The large area of the park contributes to the level of darkness of Ballarat's eastern sky and provides a valuable opportunity to promote the protection of dark night skies and nocturnal habitats.

These clearings are best located within the former plantation blocks where revegetation could be managed by allowing for the maintenance of a clearing within the surrounding regenerating forest.

#### Forest bathing

In recent years there has been growing interest in forest bathing, which combines a range of predefined, guided exercises and tasks in an outdoor environment, typically a forested area.

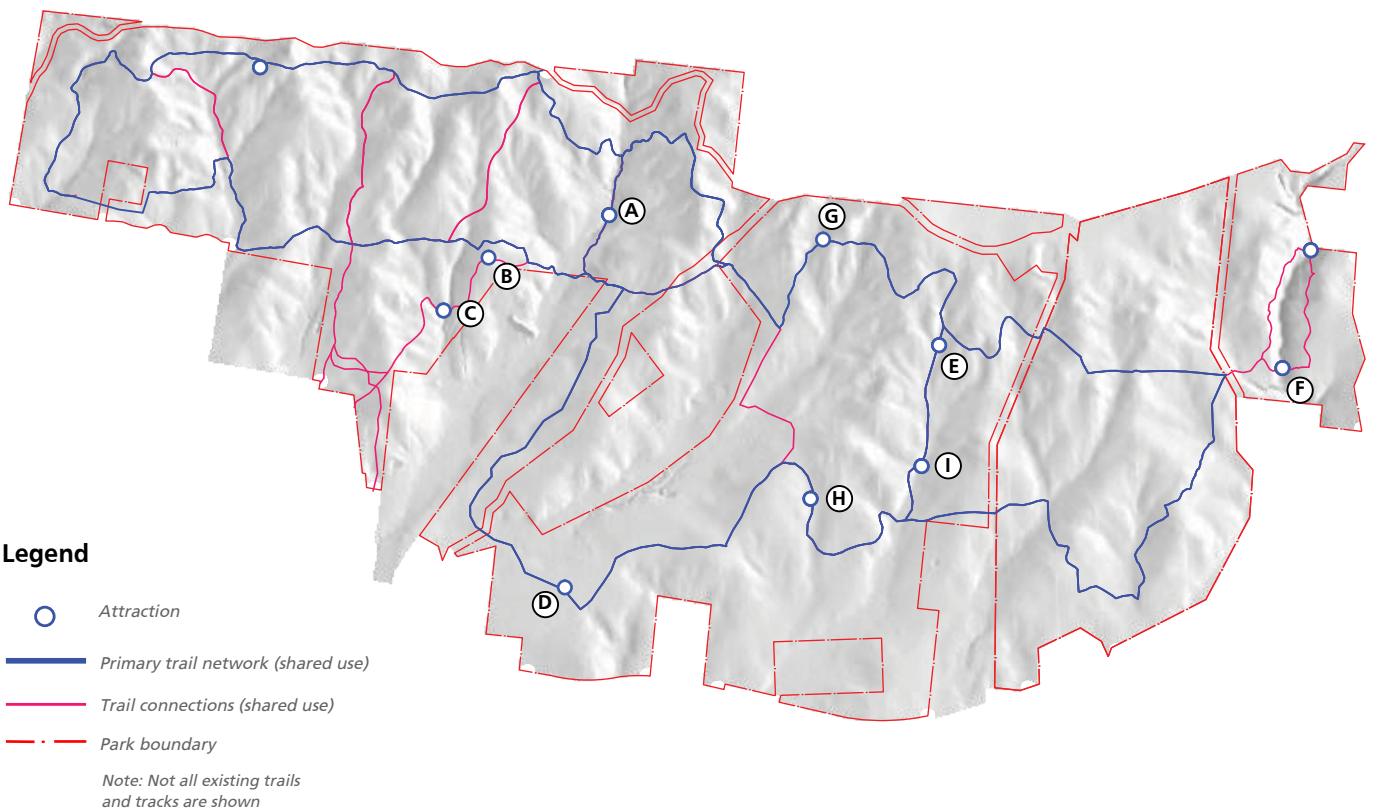


Strategies

- 1. Provide a range of activities and experiences throughout the park.
- 2. Manage important viewsheds and Night Sky Clearing areas through dynamic management of vegetation to protect these areas and support the experience and activities they offer.
- 3. Create water features in areas that support the environment and experiences within the park.

Attractions and experiences

A	Lal Lal 'Drain' Waterway
B	The Dam
C	Saw Pit Gully
E	The Amphitheatre
F	The Gorge & Cascades
G	The Hills / Grass-tree Gully
H	Night Sky Clearing
I	Forest Bathing





## Goal 5E – Create neighbourhood trailheads

It is proposed these smaller neighbourhood park entry points be located on the edge of the park adjacent to residential areas. They will provide convenient access to the trail network and the park for people walking or cycling from nearby residential areas.

This will cater for people taking a daily stroll, walking the dog, riding a bike or going for a jog after work and encourage more regular use of the park throughout the week and the year.

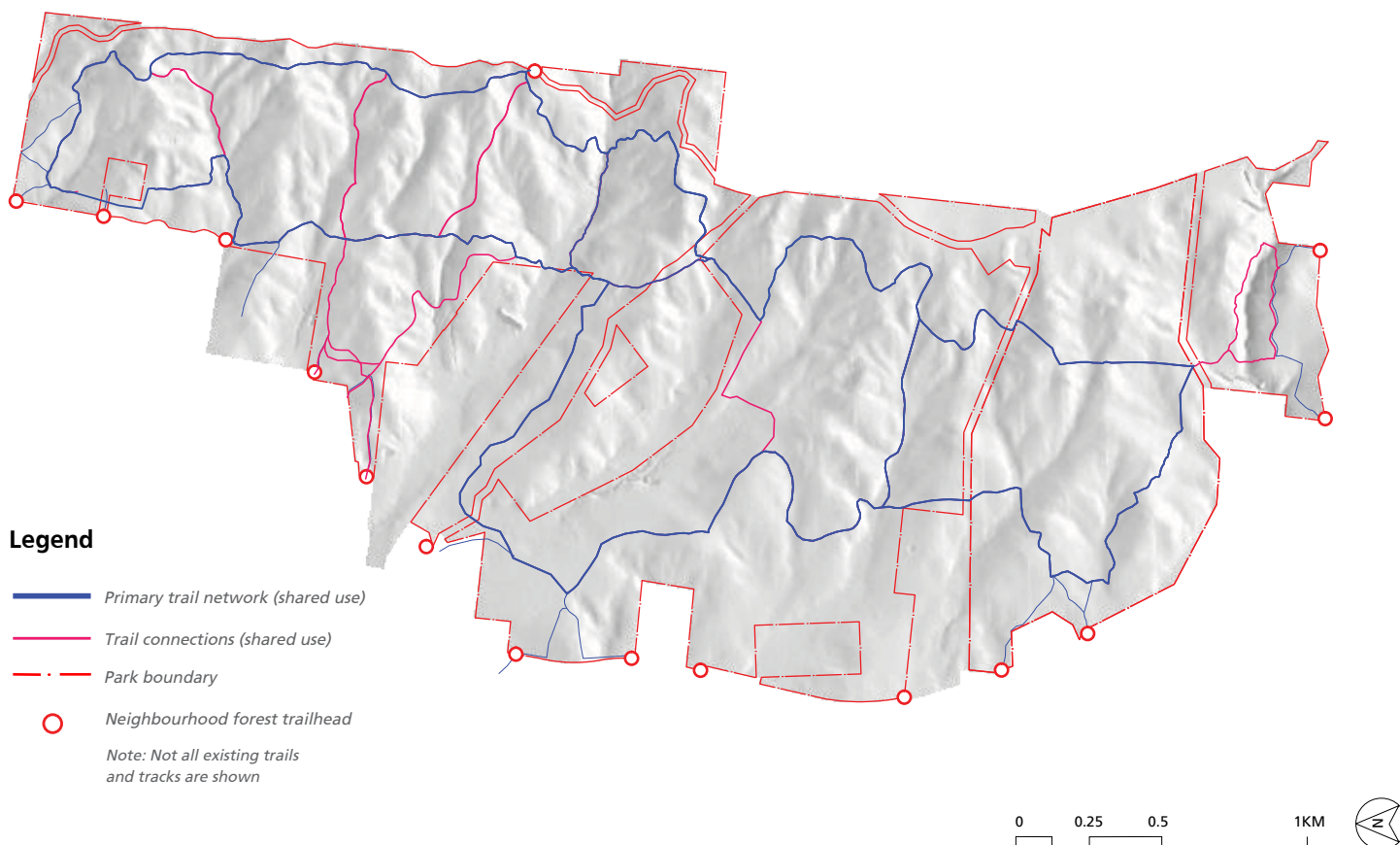
Since new park signage was installed Parks Victoria has noticed an increase in neighbourhood usage of the park, particularly by people who walk their dogs. This confirms the important role visible park signage and entry points can play in directly influencing positive behaviours.

Neighbourhood trailheads should be located to provide the most convenient access for the broadest number of people and, ideally, these should be spaced approximately every 400m from each other. Most are proposed to be located along the western edge of the park adjacent to the expanding suburbs of Canadian and Mount Clear.

Neighbourhood trailheads will typically include limited facilities such as park signage and information. In some locations limited car parking may be provided.

## Strategies

1. *Provide neighbourhood trailheads at key park entry locations.*
2. *Provide direct linkages to trail networks.*
3. *Provide clear park and trail signage, including maps, that highlight the different path circuits and places to explore in the park.*
4. *Provide neighbourhood park entrances along the western interface between the park and adjacent suburbs. These local park entries should be located on average a maximum of 400m from each other, allowing convenient access into the park.*









## Strategic Direction 06 – Create trail networks

An important way to experience the park is to use one of its many trails. The creation of a network of trails throughout the park will cater for different interests, ages, fitness levels and modes of travel.

The popularity of the park and its past uses has led to the establishment of multiple access points and tracks, which are currently the primary way of experiencing the park. Some roads and tracks are maintained for public and management access, including: emergency access to incidents such as vehicle accidents; council roads for access between neighbourhoods; and to navigate the park. The existing trail network also supports walking and recreational pursuits, such as riding, in the park.

To support ongoing passive and active enjoyment of the park a number of options for the existing and future trail network are proposed. Where possible, trails will be designed to support activities for all abilities, including Sherpa supported 'Trail Riders' to enable people with disabilities to actively enjoy the park environment.

### The trail network

The design of the trail network through the park is proposed to include a series of trails and circuits, which will allow people to start in one location and return to the same point without having to 'back track' (return via the same path). This provides a more interesting and diverse experience and is a well-established principle of trail design, which includes safety considerations.

Trails and circuits will be developed to support different recreational experiences and will factor in design elements such as distance, grade, width, natural features, supporting infrastructure and emergency considerations.

The location of the trail network will be designed to both protect the park's environmental and cultural heritage values and best support the visitor experience.

Further assessment of the existing trail network and its capacity to support different activities will guide the location and extent of the trail network.

The shared trail network will continue to be assessed and modified over time in response to environmental, cultural, recreational demand and future trail capacity assessments. Any changes will be undertaken in full consultation with the community and stakeholders.

### Regional mountain bike context

Dedicated mountain bike facilities providing single use mountain bike experiences are currently provided for elsewhere within the region, including neighbouring Creswick. The park will support beginner to intermediate mountain bike riders who will have access to all shared paths and dedicated mountain trail bike circuits.

### Accessibility and universal access

Where possible, trails will be designed to support active participation by people with a disability using adaptive bikes and also support Sherpa guided 'Trail Riders'. Speciality all abilities access circuits will be provided from key visitor sites designed to meet universal access guidelines. This will allow people with mobility impairments to access the trail with consideration of gradients and appropriate surfacing.

*Sherpa supported Trail Rider experience*





Trails for walking

Image: M. Prokudina



Trails for riding



Trails for running





## Goal 6A – Create primary trail network

There are four proposed primary circuits within the park; the northern, central and southern circuits and the full circuit. The primary circuits will provide an important navigation structure (or 'backbone') to the park, allowing access to existing and proposed park facilities, places of interest and experiences. Each circuit can be accessed from different park entrances, as well as from each other, allowing many opportunities to enter and move through the park.

Importantly, the proposed primary trail network will be for shared use and will cater for a variety of modes of travel, including walking, running, horse riding, rogaining and bicycle riding. These paths will be designed to accommodate users safely.

A trail use and capability assessment will guide the development of the trail network in conjunction with cultural heritage and environmental assessments to determine the best location.

### Full circuit – focus on the experience

This circuit is proposed to circumnavigate the entire park and intersect the three major visitor sites (the main park visitor site, the southern biking visitor site and the Lookout visitor site). The full circuit will provide a longer three to four hour walk or a one hour ride for those looking for something more challenging.

### Northern circuit

This circuit is proposed to sit within the northern section of the park, traversing through areas of largely intact forest and alongside numerous waterways, gullies and ridges. It will be accessed from the Lookout visitor site, as well as other park access points.

### Central circuit (The 10,000 Steps)

This circuit also forms the 10,000 Steps circuit, which is proposed to connect many of the exciting and unique features of the park. It will traverse a wide range of topography, commencing at the park's main visitor site (where there will be a range of facilities including car parking and toilets), travelling uphill through areas of regenerating forest and intact forest blocks before reaching the Lookout. The path will then return downhill, alongside the Rifle Range and back to the proposed main visitor site.

### Southern circuit

This circuit is proposed to traverse next to or through large areas of regenerating forest (former plantation blocks), as well as isolated fragments of intact forest. It will be accessed from the southern visitor sites, as well as numerous neighbourhood park trailheads.

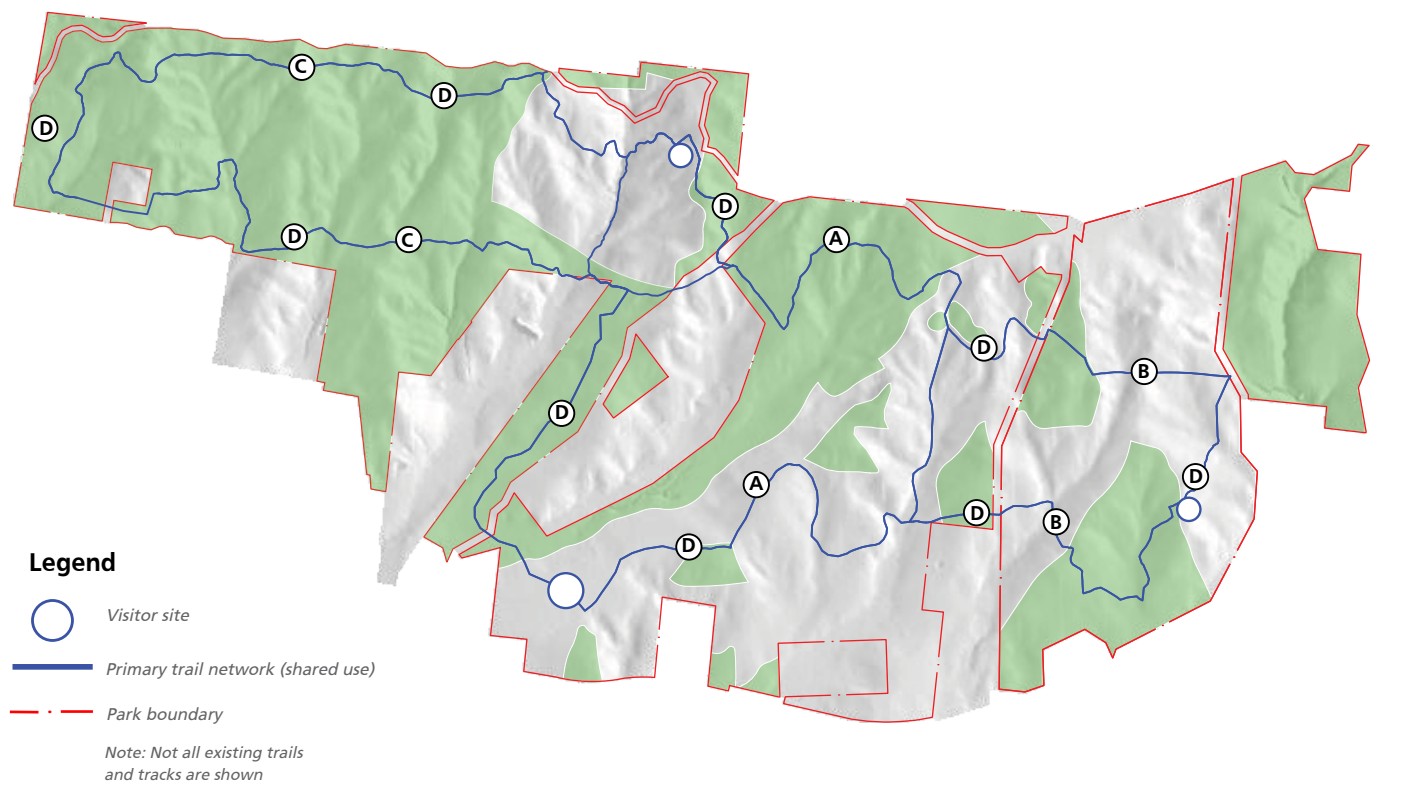
### Strategies

1. *Undertake capacity and suitability mapping for all existing and proposed trails, including management roads.*
2. *Refine the trail network in collaboration with user groups, Traditional Owners and FoCC to determine trail closure and forest regeneration after trail closure.*
3. *Following the assessment of trail capabilities and guided by cultural heritage and environmental assessments provide a network (backbone) of four primary circuits to structure access and movement through the park.*
4. *Ensure trail circuits are accessible from key park entry points and adjacent suburbs.*
5. *Consider the proposed alignment of the Goldfields (Wallaby) Track and incorporate the track into the trail design of the park.*
6. *Where possible, locate trails on existing trail alignments (which can be upgraded if required) and avoid unnecessary construction of new trails.*
7. *Where circuits traverse areas of ecological sensitivity (including waterways and steeper slopes), consider the use of raised bridges and boardwalks to elevate the trail above the ground.*
8. *Design the trail network to encourage all ability users where possible.*

Image: A. Schipperen



Primary trail network		Walk	Ride
A	Central circuit	1.5-2 hrs	30 mins
B	Southern circuit	1 hr	20 mins
C	Northern circuit	1.5-2 hrs	30 mins
D	Full circuit	3-4 hrs	1 hr
*Average walking speed 4kph, average riding speed 15kph			





## Goal 6B – Create trail connections

Unlike the primary trail network, which provides an overall structure to the park, the trail connections are shorter and allow access to a range of park features and experiences.

Typically, the trail connections are 'stacked' off the primary trail network, allowing diversity of trail distances and configurations. Many of the trail connections are directly connected to park entry points.

The trail connections will be based on a trail use and capability assessment to be undertaken in conjunction with cultural heritage and environmental assessments.

Proposed locations include:

### Lal Lal Drain Waterway circuit

This circuit will provide a fascinating short walk from the Lookout Visitor Site alongside the Lal Lal Drain waterway.

### Saw Pit Gully Chain of Ponds circuit

This circuit is proposed to provide access to some of the most interesting gold mining relics within the park, including dams and diggings.

### The Cascades Gorge circuit

This circuit is proposed to provide access to one of the park's most dramatic features known locally as the Gorge and the Cascades which in winter is the closest waterfall to Ballarat.

### Wildflower circuit

This circuit is proposed to provide access to sites within the park with excellent displays of wildflowers. Other nature trails may be developed in other locations within the park to highlight the park's natural beauty.

### Cultural Heritage Discovery circuit

An important component of Celebrating Culture (Strategic Direction 01) is telling the many different stories of the park. There is an exciting opportunity to create a range of circuits which explore the important cultural heritage aspects of the park, including both indigenous and immigration stories.

### Strategies

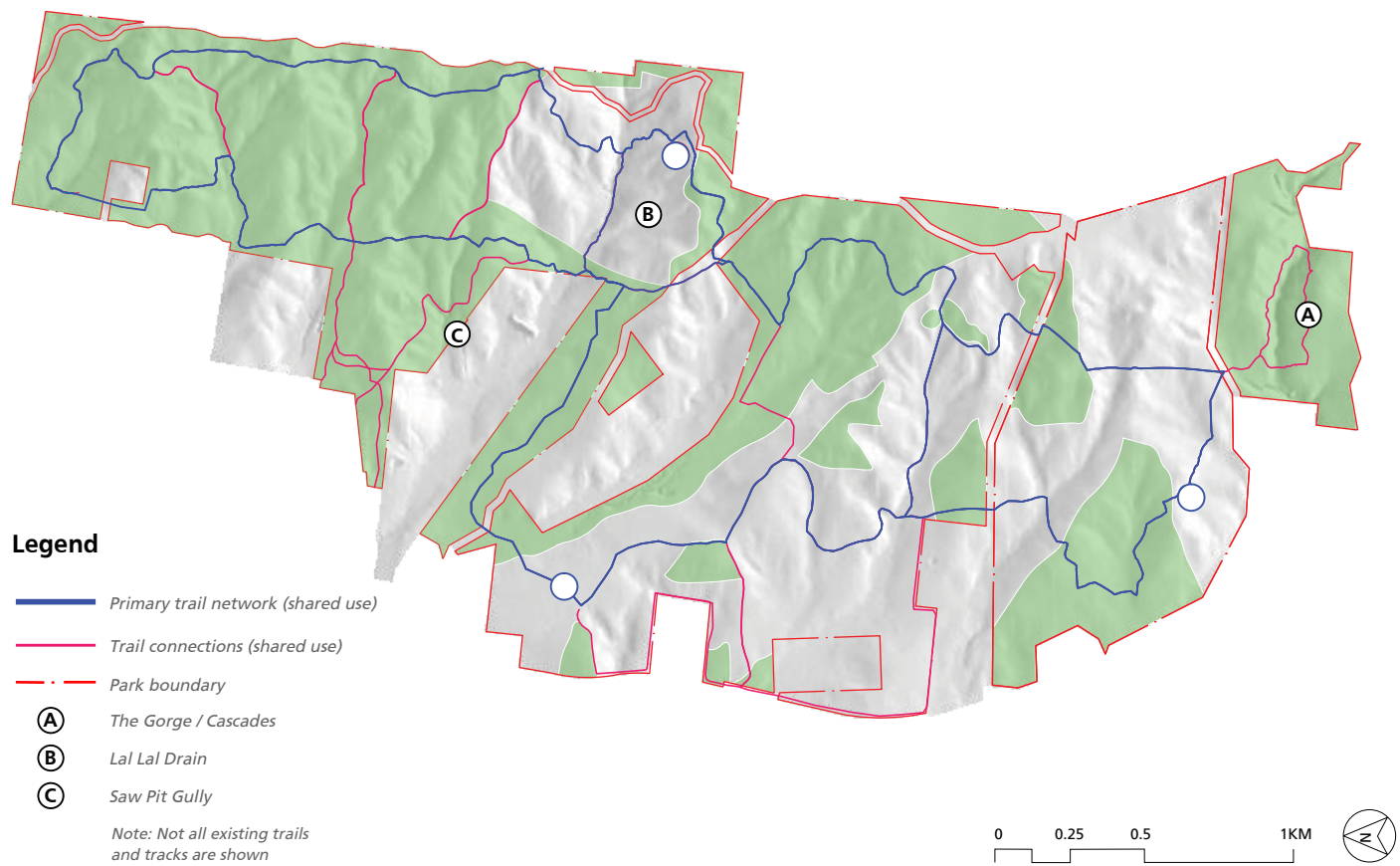
1. *Following the assessment of trail capabilities and guided by cultural heritage and environmental assessments, provide a network of shorter circuits which provide access to key park features, destinations and experiences.*
2. *Ensure circuits are accessed either from the main trail network, or from neighbourhood trailheads.*
3. *Develop a range of circuits which explore important aspects of the park's cultural and environmental heritage, history and stories.*

*Black-anther Flax-lily. Image: Peter Kervarac*



Secondary Connections		Walk	Ride
A	The Gorge / Cascades	1.5-2 hrs	30 mins
B	Lal Lal Drain Connections	1 hr	20 mins
C	Saw Pit Gully	1.5-2 hrs	30 mins

*\*Average walking speed 4kph, average riding speed 15kph*





Attraction: The Gorge / Cascades Circuit (Goldfields Track)



*For illustrative purposes only*







## Goal 6C – Create specialty circuits

There are a range of uses which require speciality circuits that typically cater for activities which may be incompatible or problematic with other uses. Therefore, these will require physical separation (such as higher speed technical mountain biking), or specific management due to the nature of their impact (such as horse trail riding). There are several types of speciality circuits proposed that require further detailed assessment.

### Specialty circuit concepts

#### Mountain biking circuits

In recent years, there has been a significant increase in the popularity of mountain biking. While most trails within the park are shared use, there are two single use mountain bike trails located in the south of the park. These trails will be monitored and may be modified in the future. However, it is intended these be retained in this location in the medium to long term. Other biking circuit trails are proposed for areas of the park where there is greater disturbance and where the impacts of the construction of best practice mountain bike trails can be carefully managed. These trails are also located to minimise the intersection with other shared use circuits and connections, thereby avoiding potential user conflicts.

#### Horse riding circuits

Horse riding has historically occurred in the park, in part due to the proximity to equestrian facilities located on the eastern side of the park. The park regulations support the inclusion of this activity and set asides need to be developed to include horse riding trails. The proposed horse riding circuit excludes incompatible uses such as mountain biking and bicycle riding. All horse riding trails are located on existing trail or management roads. The provision of adequate and safe parking of horse floats and vehicles will be provided on Clayton Street (near Foos Lane) on the eastern side of the park.

#### Introduction to the Forest Walk (all abilities access)

This is proposed as a single use specialty circuit providing a short all abilities walking trail into the forest. It is accessed from the main park visitor site where it is proposed that a range of facilities will be located, including car parking and toilets. The purpose of this trail is to introduce people to the forest experience. It will be constructed to meet universal access guidelines, allowing people with mobility impairments to access the trail.

## Other circuit concepts

### The 10,000 Steps (Central Circuit)

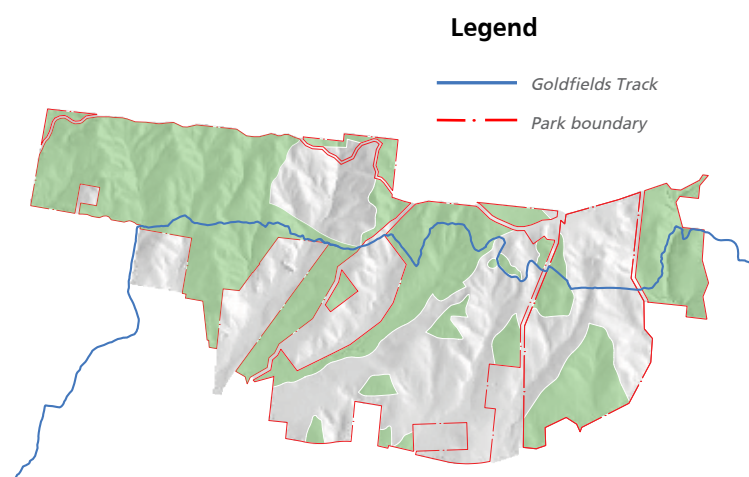
The Central Circuit is proposed to form part of the 10,000 Steps circuit, which connects many of the unique features of the park. It traverses a wide range of topography, commencing at the main visitor site, travelling uphill through areas of re-emerging forest and intact forest blocks before reaching the proposed Lookout. The path then returns downhill, alongside the Rifle Range and back to the main visitor site.

### Walking the Goldfields Track

The Goldfields Track is a 210km shared use trail that stretches from Mount Buninyong (just south of Ballarat) to Bendigo in the north. The Goldfields Track traverses through the park, utilising a portion of the full circuit.

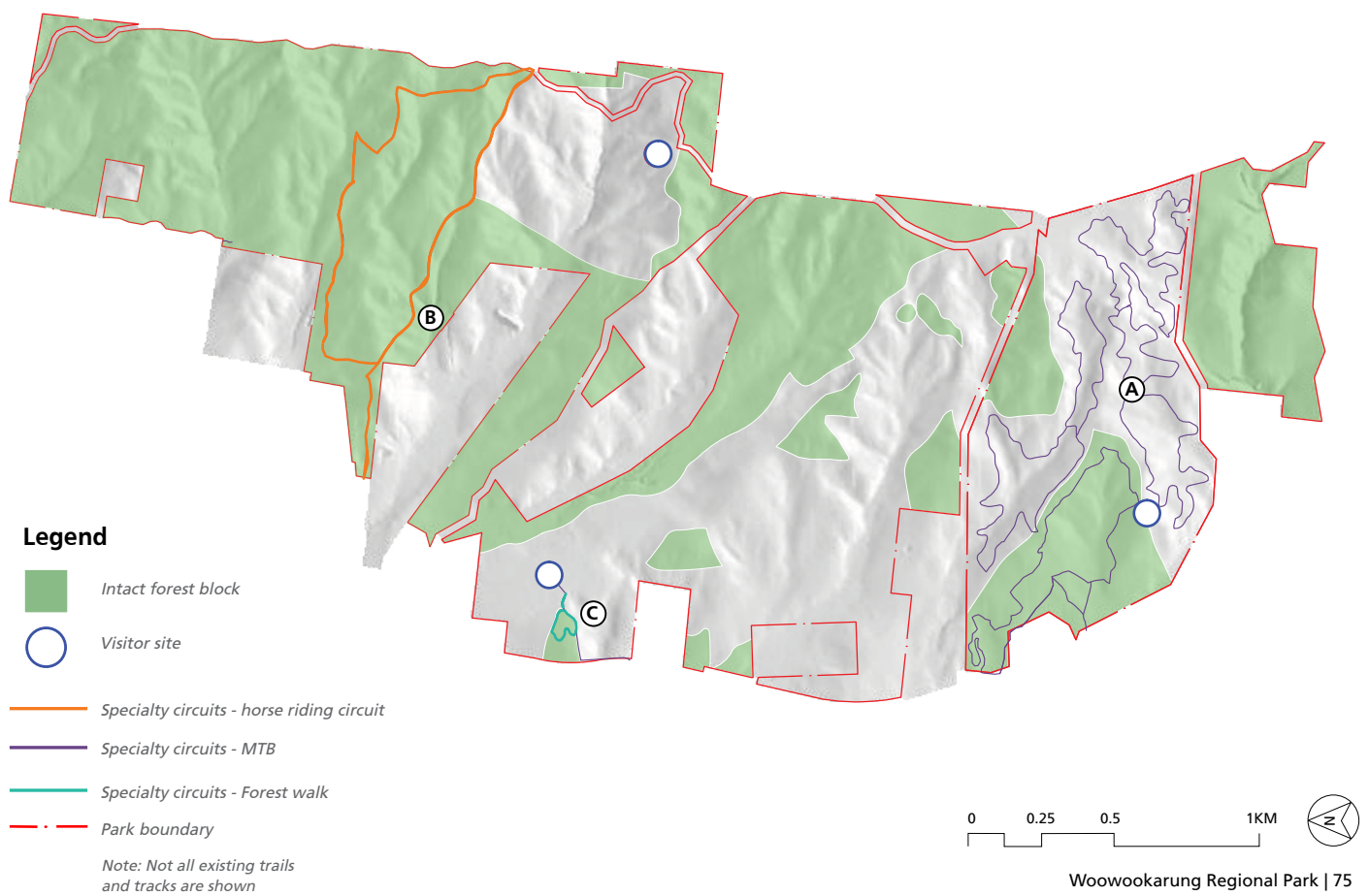
### Strategies

1. *Following a trail capability assessment and site investigation, provide a range of speciality circuits that cater for activities which may be incompatible with shared use paths, such as technical high speed mountain biking, horse trail riding and all abilities access.*
2. *Provide adequate horse vehicle parking from Foos Lane to access the park.*
3. *Provide a range of faster single use mountain biking circuits appropriately located within the park.*
4. *Monitor high intensity activities to understand their impacts and review the location or redesign of trails.*
5. *Investigate other opportunities for secondary circuits which can add to the visitor experience.*
6. *Develop set asides for specific activities to occur within the park where appropriate.*



### Conceptual speciality circuits








- |   |                                    |
|---|------------------------------------|
| A | Mountain biking circuit            |
| B | Horse riding circuit               |
| C | Forest walk - all abilities access |



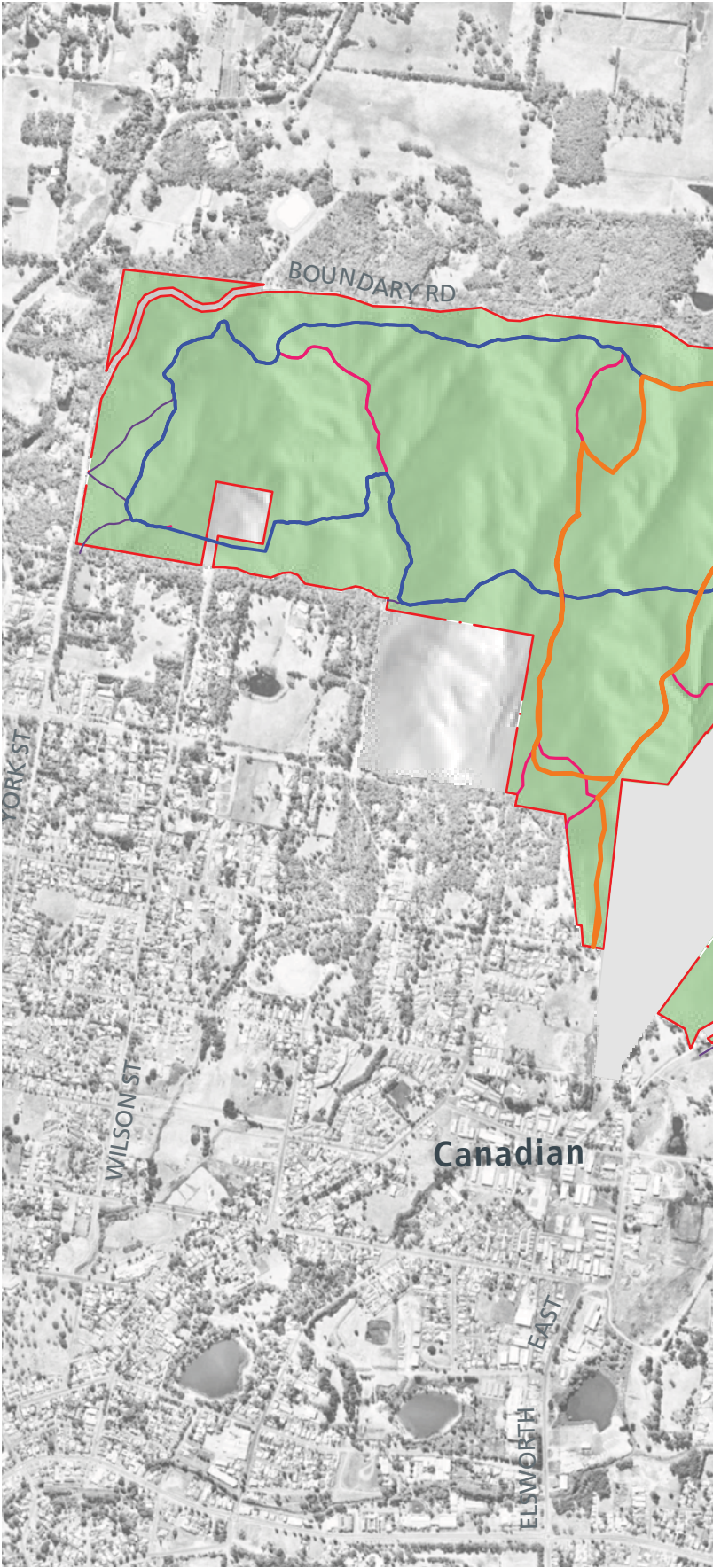


# Proposed trail networks

Legend

-  Visitor site
-  Primary trail network (shared use)
-  Trail connections (shared use)
-  Specialty circuits - horse riding
-  Specialty circuits - mountain biking, MTB
-  Specialty circuits - Forest walk
-  Park boundary

Note: Not all existing trails and tracks are shown









# Strategic Direction 07 – Connect the park to the city

Although the forest has always been present in the background of Ballarat and has played an important role in the history of the city, it has remained largely unnoticed by many people. Linking the park to the city and more broadly to the region is crucial to developing strong connections to the park.

## Goal 7A – Provide local and regional trail connections

Future population growth along with the increasing interest in longer recreational journeys both within Ballarat and throughout the region, means that the park is well placed to support this type of activity. Located alongside the Goldfields Track and near a number of local trails, there is ample opportunity for the park to improve and capitalise on these opportunities.

The success of the park will rest with the ability to create excellent physical connections with the surrounding suburbs. These connections will encourage walking and cycling to the park and link up to other regional trails, such as the Goldfields Track. Because most of these opportunities lie outside the park, it will be important to work closely with the City of Ballarat to improve these connections.

### Canadian Creek shared pathway

The most important opportunity to connect the park with the creek is via the Canadian Creek and the future extension of the shared user path network from the creek into the park. The Canadian Creek corridor forms an important linear park connecting the suburbs with the city. The path network currently terminates at Olympic Avenue.

### Olympic Avenue

This forms one of the most direct connections from the creek to the park, as well as linking Damascus College, Mount Clear College and the Earth Education Centre. There is an opportunity for the City of Ballarat to explore ways to improve pedestrian and on road bicycle connectivity. Consideration should also be given to dedicated off road bicycle paths or segregated cycle tracks.






### Goldfields Track alignment

The Goldfields Track is a 210km shared use trail that stretches from Mount Buninyong (just south of Ballarat) to Bendigo in the north. The current alignment of the Goldfields Track traverses through the streets of Canadian before entering the park along the north western edge at Spencer Street.

### Strategies

1. *Advocate to the City of Ballarat to upgrade, where possible, the shared user path and linkages along Canadian Creek to provide improved access to the park.*
2. *Work with the City of Ballarat to explore creating linkages between Lake Wendouree, Victoria Park and Woowookarung Regional Park.*
3. *Work to integrate the Goldfields Track into the design of the park to allow connections to the broader landscape and to support visitation and tourism.*

### Legend

-  Public open space (PPRZ)
-  Canadian Creek shared user path (existing)
-  Canadian Creek shared user path (proposed)
-  Upgraded pedestrian and bicycle linkages to park
-  Neighbourhood forest trailhead

## Goal 7B – Orientate people to the park

Due to the high number of paths and roads within the park and its many entrances, it will be important to provide clear, well positioned signage to assist users to find and move around the park.

### Strategies

1. *Work with the City of Ballarat and Moorabool Shire Council to develop a way finding strategy to provide directional signage and distance markers to highlight the proximity and ease of access to the park.*
2. *Provide high quality, clear and well positioned park entry signage to make the park more visible to the community.*

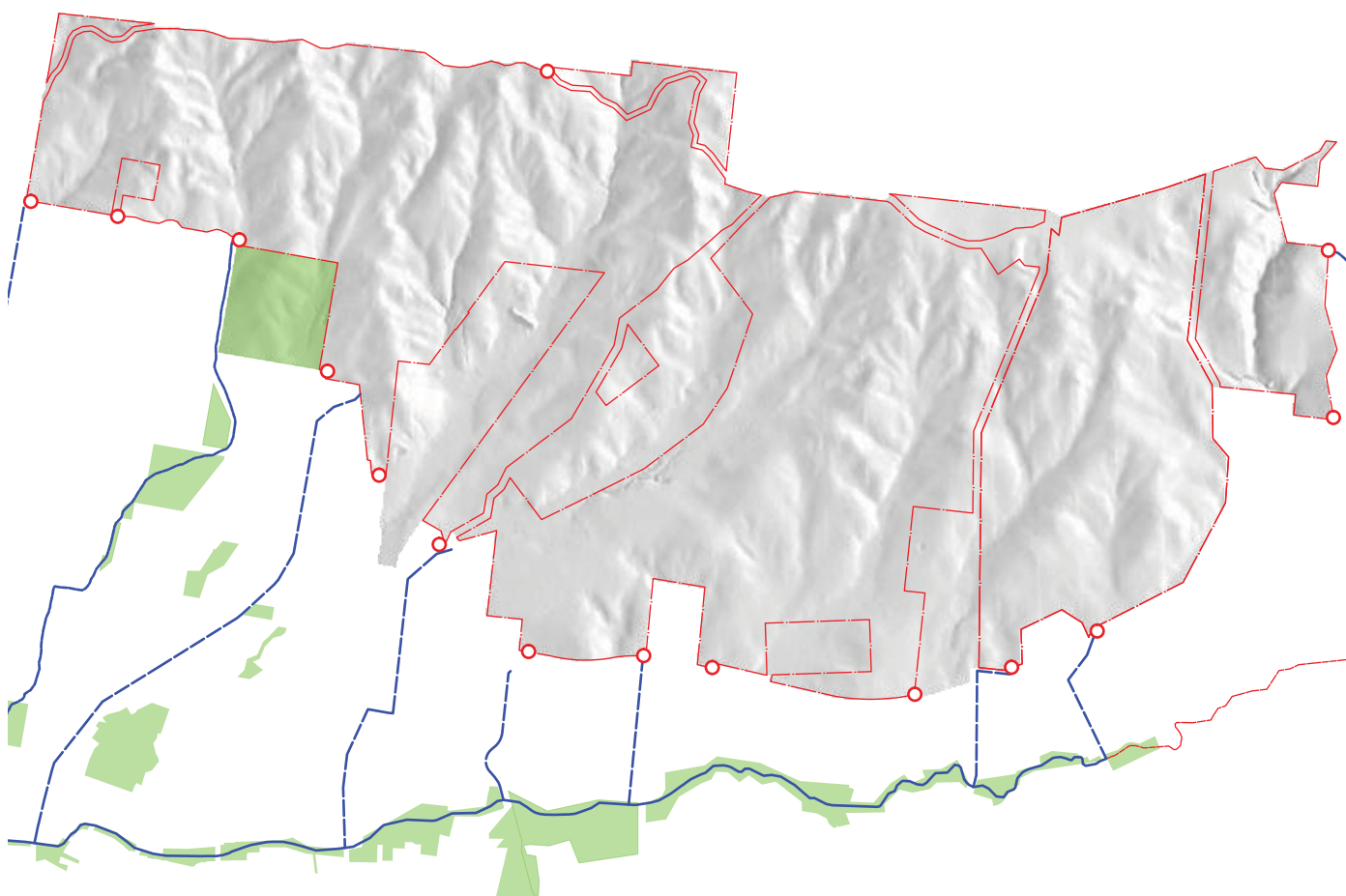
## Goal 7C – Promote the park

Interpretation of the park's cultural, environmental and sites of significance will encourage and help people to explore and learn about the park.

As a regional park, opportunities to let the broader community know and understand the value of the park should be explored. This will encourage people to visit from the region and support greater stewardship of the park.

### Strategies

1. *Develop an interpretation strategy for the park.*
2. *Provide regular marketing to raise awareness of events, programs and activities occurring within the park.*
3. *Advertise the park more broadly to encourage day trips from other locations outside Ballarat.*





## Strategic Direction 08 – Integrated land management

An important long term strategy for the park is to build resilience by working with other land managers, service providers and private landholders to achieve shared outcomes and complementary land management activities.

### Land management challenges

There are a range of threats to the ecological health of the park including the lack of conservation reservation, internal fragmentation, edge effects, existing urban development impacts (built environment, changes in water flow/runoff), predation by dogs, cats and foxes, introduced plant species and future impacts from proposed roads and new residential developments.

### Conservation zoning

Under the State Planning Scheme, the current zoning of the majority of the park is Farm Management Zone (FMZ) and should be rezoned to the more appropriate zoning of Public Conservation and Resource Zone (PCRZ) in both the City of Ballarat and Moorabool Shire Council's Planning Schemes. This will aid in the protection of the park at the urban interface and allow more complementary development to occur adjacent to the park.

There is also an opportunity to advocate for an Environmental Significance Overlay to be put in place to provide a buffer between the park and urban development and to assist in the protection of biodiversity corridors, such as koala habitat, which provides important links to the park.

Image: FoCC



## Fragmentation

Within the park, habitat is fragmented by barriers such as roads, tracks, powerline easements, and fences, all of which reduce the ease by which animals can move through the landscape. It is important to reduce fragmentation to provide a more continuous park environment to aid the movement of animals and to help the overall environmental health of the park.

## Urbanisation

Due to its past use and the status of the land that makes up the park, there have been ongoing impacts on the landscape and the disturbance of animals. By becoming a regional park, the land status will help protect and modify these impacts over time.

With increasing urbanisation around the park there may be environmental impacts. Some activities impact directly on native animals, including hunting by domestic cats and disturbances by dogs and people. Other threats include damage to the vegetation and landscape from trail bikes and illegal vehicle use, rubbish dumping and nutrient-enriched storm water runoff.

Community education and stewardship of the park will be important in reducing these impacts.

## Edge effects

Edge effects are the physical and biological changes that occur towards the edge of fragmented habitats. Edge effects are about changes in the availability of sunlight, impacts of wind speed and species composition.

These impacts could be better managed through the development of appropriate planning controls, collaboration with key stakeholders and clear management outcomes for these areas.

*Urbanisation*



*Managing impacts of access and activities*

*Image: FoCC*



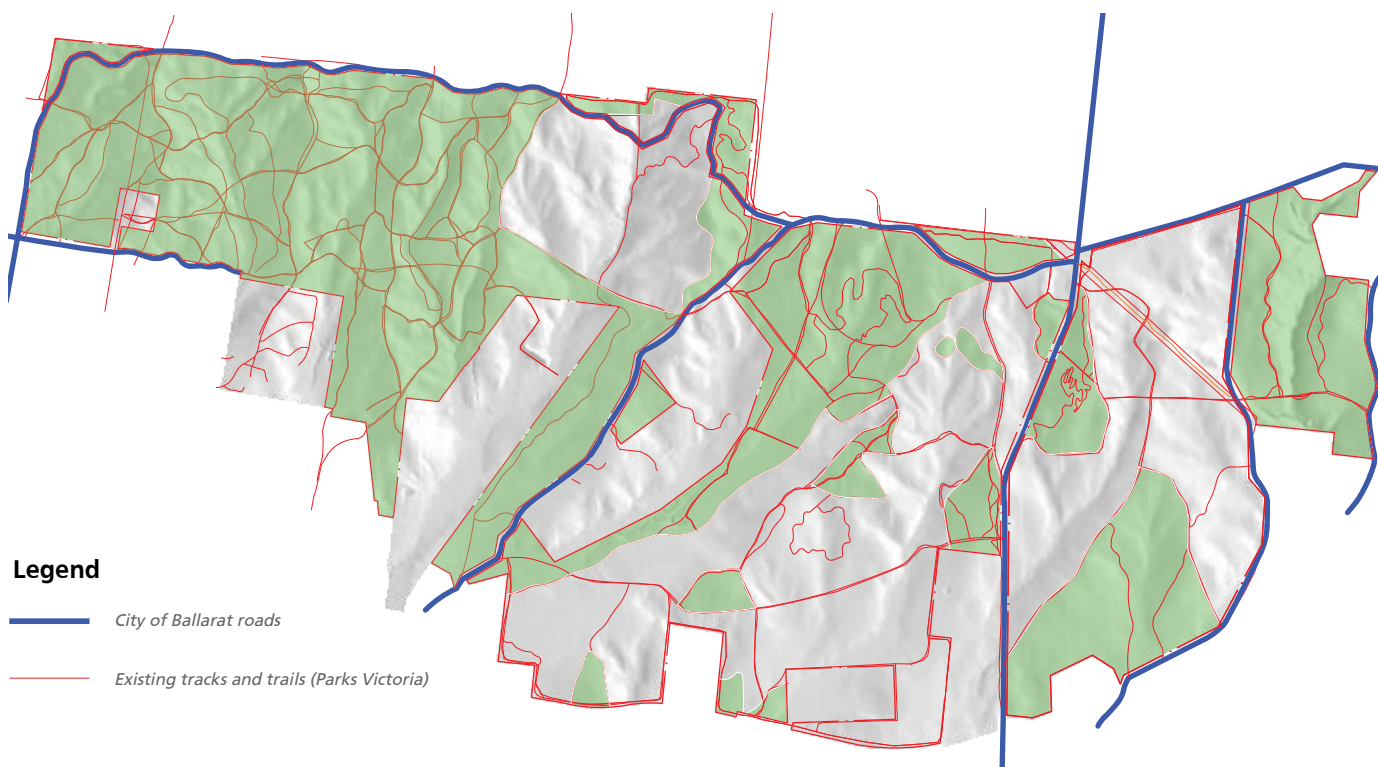


## Goal 8A – Manage the park interface

The interface between the adjoining suburbs and the park is important to manage. This interface has more in common with an urban park, where residential development immediately abutting the park may impact on park values. In many cases, new housing backs onto the park, leading to awkward interfaces. It will be important to work closely with both the City of Ballarat and Moorabool Shire Council to improve the park interface and protect the park's values.

## Strategies

1. *Work with the City of Ballarat and Moorabool Shire Council to ensure future development adjacent to the park has a more positive interface with the park.*
2. *Advocate to the City of Ballarat and Moorabool Shire Council to ensure that suitable planning scheme overlays, such as Environmental Sensitivity Overlay (ESO) and development guidelines, are developed and implemented to better protect the park from edge effects and to protect ecological corridors, including the Eastern Ballarat Precinct and the Buninyong/Mt Clear corridor.*
3. *Work with the City of Ballarat to review the Comprehensive Koala Plan of Management 2006 and draw reference to the corridor opportunities the park generates.*
4. *Work with the Corangamite Catchment Management Authority (CCMA) to ensure water management corridor is protected.*
5. *Work with the City of Ballarat Council and Moorabool Shire Council to consider changing the park zoning to an appropriate conservation zone in the future.*



0 0.25 0.5 1KM







*Navigating the park. Image: A. Schipperen*



## Goal 8B – Working with neighbours

The park currently has several inlier private properties of varying sizes that account for approximately 100ha in total or 13 per cent of the broader footprint of the park study area. Some of these properties are residential properties that are occupied and some are unoccupied. One of the challenges of managing parks with inlier properties is the ability to provide a consistent management approach across the park area.

All the inlier properties are currently covered by either Rural Conservation Zoning – schedule 1 or 3 or Rural Living Zone. There are also vegetation protection and bushfire management overlays across all properties as well as Environmental Significance overlays covering many areas. An additional environmental audit overlay exists for the former rifle range property. These State planning controls are established to assist in protecting the amenity, biodiversity and landscape and heritage values of areas under those zones, while allowing for residential and agricultural use in a rural environment.

From an environmental viewpoint, the goal is to manage habitat and weed management in a similar way to the rest of the park to avoid barriers to wildlife movement and the spread of weeds. Many of the inlier properties are well vegetated and provide both a valuable contribution and continuity to the forest cover through the park. It is recognised that many of the properties are being well managed with similar objectives in mind to the rest of the park.

Fire risk management is another challenge accounting for the need to protect life and property not only on adjoining land but also on these inlier areas. These properties create larger boundary ratios that increase the public, private interface and areas to be managed for fire risk.

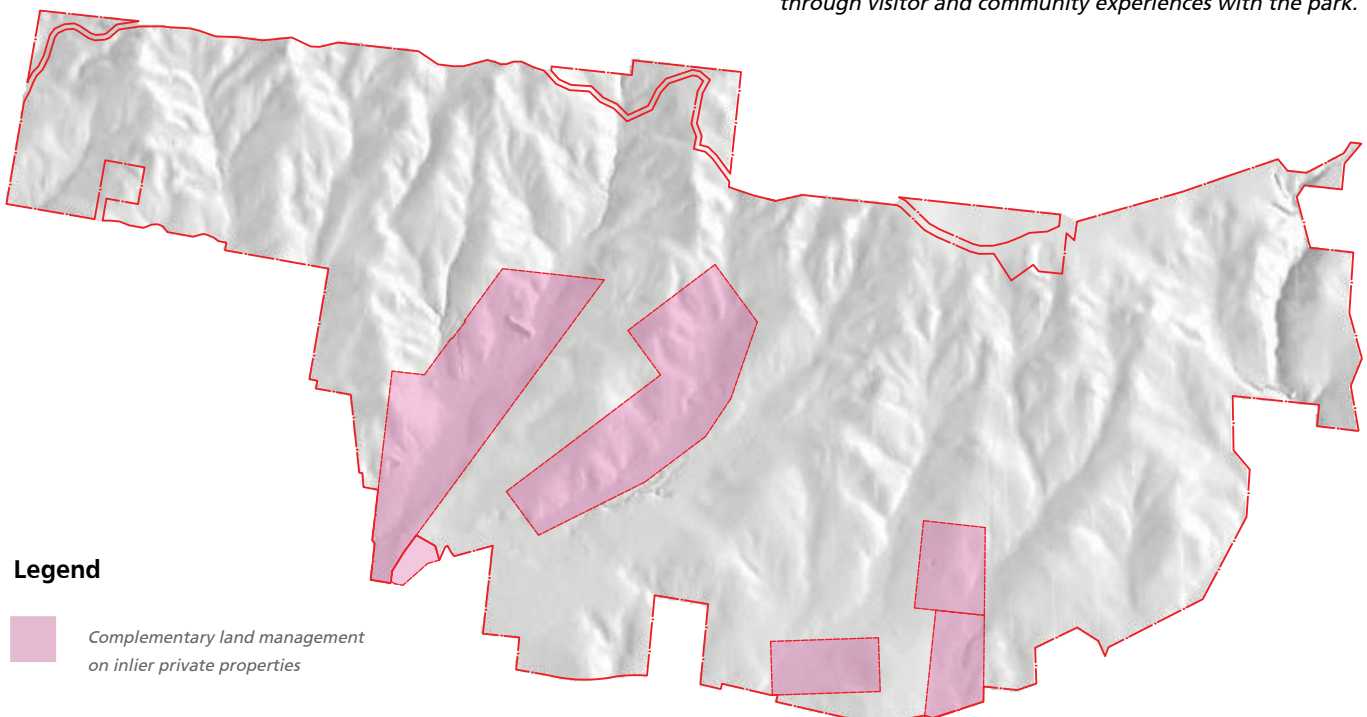
### Partnering neighbours

Other key partners in the management and support of sharing ecological management and educational outcomes for Woowookarung Regional Park are located adjacent to the park. Pax Hill Scout Camp and Mt Clear College, including the Earth Education Centre, are keen partners in further developing educational programs, piloting management techniques and engaging their students and visitors in stewardship activities within the park.


A key goal for the park is to achieve a consolidated and consistent management approach across all tenures to improve environmental outcomes, enhance visitor experiences and more effectively manage the park.

### Strategies

1. *Encourage private landholders on inlier properties to implement programs or additional controls that achieve environmental outcomes that can benefit the whole park.*
2. *Work in partnership with key neighbours such as Pax Hill Scout Camp, Mt Clear College and the Earth Education Centre to develop and foster mutual benefits provided through visitor and community experiences with the park.*



### Legend

 Complementary land management on inlier private properties



## Goal 8C – Managing the roads

The park currently has approximately 120km of roads and tracks managed by the City of Ballarat, the Moorabool Shire Council and Parks Victoria. The network has evolved over time in both a planned and ad-hoc manner reflecting the park's many prior uses. These roads currently carry traffic in, around and through the park and provide access for visitors to explore the park as well as serving local community access. These roads and tracks also serve many management functions such as accessing key infrastructure for fire management and maintenance purposes.

Investigations to date identify that these roads contribute to the highly fragmented nature of the park. Some pose a significant disturbance threat to the environmental functions of the park causing barriers for wildlife and landscape impacts such as erosion. Pathogens such as *Phytophthora* are water and soil born and have the potential to seriously affect Grass-tree populations and are spread more widely by vehicle traffic.

A significant issue for the park is the volume and excessive speed of traffic on Council owned through roads which are narrow and densely vegetated along the verges. This creates issues for visitor safety and the visitor experience due to increased noise, dust, and potential collisions. Liaison with the Moorabool Shire Council and the City of Ballarat on the management of these roads is required to work towards slowing traffic and ensuring a safe environment is encouraged in the park.

A review and rationalisation of the extensive network of roads and tracks is required to achieve a sustainable network that meets visitor, neighbour, community and other authorities and park management objectives. This review will occur in consultation with the City of Ballarat, the Department of Environment, Land, Water and Planning (DELWP), the Moorabool Shire Council, other authorities, user groups and the community. The closure of tracks and roads is a long term process and will follow an analysis and capacity assessment of all trails and roads to identify priorities.

Kangaroos. Image: Peter Kervarac



## Strategies

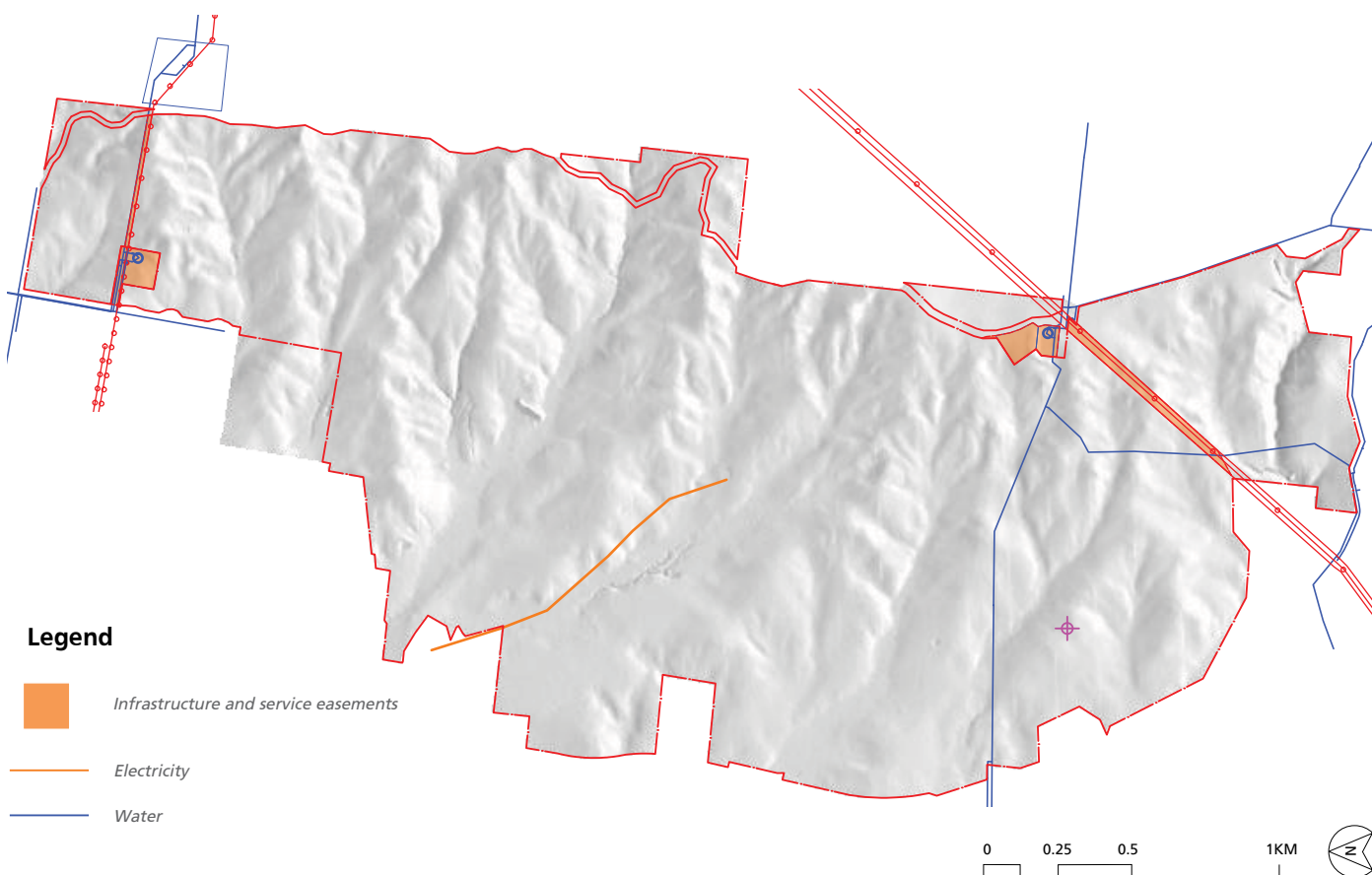
1. *Undertake a detailed audit and review of vehicle access and use in the park.*
2. *Undertake a detailed assessment and capacity review of the trails and road network to determine its capacity to support activities within the park and to manage road traffic.*
3. *Work with the City of Ballarat and Moorabool Shire Council to identify the proposed road and track network to be retained for vehicle use.*
4. *Advocate for the review of road management and identified safety issues to improve safety and visitor experience.*
5. *Advocate for a downgrading of the speed allowed through the park with Vic Roads and/or review the flow of traffic to improve the safety of the road network.*
6. *In consultation with stakeholders, close and rehabilitate tracks that are not required for any purpose to reduce fragmentation of the park.*
7. *Identify tracks to be Management Vehicle Access Only.*
8. *Identify tracks to be re-purposed for trail-based use.*
9. *Maintain remaining park roads in line with the Road Management Act 2004 to provide safe vehicle access to visitor sites and to undertake park management activities.*
10. *Work with the City of Ballarat and Moorabool Shire Council to investigate reducing speed limits and other speed limiting mechanisms throughout the park to improve visitor safety.*
11. *Provide the community with appropriate information and maps covering any updated road and track access through and around the park.*

## Goal 8D – Management of infrastructure

The park currently has a range of service infrastructure, including high voltage overhead power lines, water pipes and tanks and telecommunications towers. Each infrastructure type has associated levels of disturbance which can inhibit the operation of the park's ecosystems. Consideration should be given to strategies that optimise the management of these areas for the benefit of the park's plants, animals and visitors whilst acknowledging the important role they play in the broader community.

## Strategies

1. *Liaise with infrastructure and service providers to ensure that the management of infrastructure elements is consistent with the management of the park, including easements and necessary maintenance access requirements.*
2. *In conjunction with Central Highlands Water, undertake significant rehabilitation of the existing water easement (adjacent to Olympic Avenue) where there is extensive erosion and damage caused by illegal vehicle access, as well as weed infestations.*
3. *Work with infrastructure and service providers to improve the interface between fenced infrastructure and the park.*
4. *Develop appropriate licence agreements for service providers to ensure an agreed process is in place to sensitively manage infrastructure within the park and manage risk to the visitor.*





*Austral Grass-tree. Image: Peter Kervarac*









# Appendix A

## Plant list – indigenous species. Source: Field Naturalist Club of Ballarat 2018

Scientific Name	Common Name
<i>Acacia aculeatissima</i>	Snake Wattle
<i>Acacia dealbata</i>	Silver Wattle
<i>Acacia lanigera</i>	Woolly Wattle
<i>Acacia melanoxylon</i>	Blackwood
<i>Acacia mearnsii</i>	Late Black Wattle
<i>Acacia myrtifolia</i>	Myrtle Wattle
<i>Acacia paradoxa</i>	Hedge Wattle
<i>Acacia provincialis</i>	Wirilda
<i>Acacia pycnantha</i>	Golden Wattle
<i>Acacia stricta</i>	Hop Wattle
<i>Acacia verniciflua</i>	Varnish Wattle
<i>Acacia verticillata</i>	Prickly Moses
<i>Acaena echinata</i>	Sheep's Burr
<i>Acaena novae-zelandiae</i>	Bidgee widgee
<i>Acaena ovina</i>	Sheep's Burr
<i>Acetosella vulgaris</i>	Sheep Sorrel
<i>Acianthus exsertus</i>	Mosquito Orchid
<i>Acrotriche prostrata</i>	Trailing Ground-berry
<i>Acrotriche serrulata</i>	Honeypots
<i>Allocasuarina litoralis</i>	Black Sheoak
<i>Amyema pendula subsp. pendula</i>	Drooping Mistletoe
<i>Anthosachne scabra</i>	Common Wheat-grass
<i>Arthropodium milleflorum</i>	Pale Vanilla-lily
<i>Arthropodium strictum</i>	Chocolate Lily
<i>Asperula scoparia</i>	Prickly Woodruff
<i>Astroloma humifusum</i>	Cranberry Heath
<i>Austrostipa mollis</i>	Soft Spear-grass
<i>Austrostipa pubinodis</i>	Tall Spear-grass
<i>Austrostipa rudis</i>	Veined Spear-grass
<i>Billardiera scandens</i>	Common Apple-berry
<i>Blechnum minus</i>	Soft Water-fern
<i>Blechnum nudum</i>	Fishbone Water-fern
<i>Boronia nana hispida</i>	Dwarf Boronia
<i>Bossiaea prostrata</i>	Creeping Bossiaea
<i>Brachyscome graminea</i>	Grass Daisy
<i>Brunonia australis</i>	Blue Pincushion
<i>Bulbine bulbosa</i>	Bulbine Lily
<i>Burchardia umbellata</i>	Milkmaids
<i>Bursaria spinosa</i>	Sweet Bursaria
<i>Caladenia iridescens</i>	Bronze Caladenia
<i>Calochilus robertsonii</i>	Purplish Beard Orchid
<i>Carex appressa</i>	Tall Sedge
<i>Carpobrotus modestus</i>	Inland Pigface
<i>Cassinia aculeata</i>	Common Cassinia
<i>Cassinia arcuata</i>	Drooping Cassinia
<i>Cassinia longifolia</i>	Shiny Cassinia
<i>Cassinia companulata</i>	Smooth Cassinia
<i>Cassytha glabella</i>	Slender Dodder-laurel

Scientific Name	Common Name
<i>Cassytha melantha</i>	Coarse Dodder-laurel
<i>Cassytha pubescens</i>	Downy Dodder-laurel
<i>Centella cordifolia</i>	Swamp Pennywort
<i>Centipeda minima</i>	Spreading Sneezeweed
<i>Centrolepis strigosa</i>	Hairy Centrolepis
<i>Chamaescilla corymbosa</i> <i>var.corymbosa</i>	Blue Stars
<i>Chiloglottis valida</i>	Common Bird Orchid
<i>Chrysocephalum apiculatum</i>	Common Everlasting
<i>Chrysocephalum semipapposum</i>	Clustered Everlasting
<i>Comesperma ericinum</i>	Heath Milkwort
<i>Coprosma quadrifida</i>	Prickly Currant-bush
<i>Coronidium scorpioides</i>	Button Everlasting
<i>Correa reflexa</i>	Common Correa
<i>Corunastylis despectans</i>	Sharp Midge-orchid
<i>Crassula decumbens</i>	Spreading Crassula
<i>Crassula sieberana</i>	Sieber Crassula
<i>Cymbonotus preissianus</i>	Austral Bear's-ear
<i>Cyrtostylis reniformis</i>	Gnat Orchid
<i>Daucus glodchidiatus</i>	Australian Carrot
<i>Daviesia latifolia</i>	Hop Bitter-pea
<i>Daviesia leptophylla</i>	Narrow-leaf Bitter-pea
<i>Daviesia mimosoides</i>	Blunt-leaf Bitter-pea
<i>Deyeuxia quadriseta</i>	Reed Bent-grass
<i>Dianella revoluta</i>	Black-anther Flax-lily
<i>Dianella tasmanica</i>	Tasman Flax-lily
<i>Dichelachne rara</i>	Common Plume-grass
<i>Dicksonia antarctica</i>	Soft Tree-fern
<i>Dillwynia cinerascens</i>	Grey Parrot-pea
<i>Dillwynia glaberrima</i>	Smooth Parrot-pea
<i>Dillwynia sericea</i>	Showy Parrot-pea
<i>Dipodium pardalinum</i>	Spotted Hyacinth-orchid
<i>Dipodium roseum</i>	Rosey Hyacinth-orchid
<i>Diuris pardina</i>	Leopard Orchid
<i>Diuris sulphurea</i>	Tiger Orchid
<i>Drosera auriculata</i>	Tall Sundew
<i>Drosera aberrans</i>	Scented Sundew
<i>Drosera macrantha</i>	Climbing Sundew
<i>Drosera peltata</i>	Pale Sundew
<i>Epacris impressa</i>	Common Heath
<i>Epilobium hirtigerum</i>	Hairy Willow-herb
<i>Eriochilus cucullatus</i>	Parson's Bands
<i>Eryngium vesiculosum</i>	Prickfoot
<i>Eucalyptus aromaphloia</i> <i>subsp.aromaphloia</i>	Scentbark
<i>Eucalyptus baxteri</i>	Brown Stringybark
<i>Eucalyptus dives</i>	Broad-leaved Peppermint
<i>Eucalyptus macrorhyncha</i>	Red Stringybark

Scientific Name	Common Name
<i>Eucalyptus obliqua</i>	Messmate Stringybark
<i>Eucalyptus ovata</i> var <i>ovata</i>	Swamp Gum
<i>Eucalyptus radiata</i>	Narrow-leaved Peppermint
<i>Eucalyptus rubida</i>	Candlebark
<i>Eucalyptus viminalis</i>	Manna Gum
<i>Eucalyptus yarraensis</i>	Yarra Gum
<i>Euchiton japonicus</i>	Creeping Cudweed
<i>Euchiton sphaericus</i>	Star Cudweed
<i>Exocarpos cupressiformis</i>	Cherry Ballart
<i>Gahnia radula</i>	Thatch Saw-sedge
<i>Gahnia sieberiana</i>	Red-fruit Saw-sedge
<i>Geranium solanderi</i>	Austral Crane's-bill
<i>Gompholobium huegelii</i>	Common Wedge-pea
<i>Gonocarpus tetragynus</i>	Common Raspwort
<i>Goodenia lanata</i>	Trailing Goodenia
<i>Goodenia ovata</i>	Hop Goodenia
<i>Gratiola peruviana</i>	Austral Brooklime
<i>Gratiola</i> sp.	Brooklime
<i>Haloragis aspera</i>	Rough Raspwort
<i>Hardenbergia violacea</i>	Purple Coral-pea
<i>Helichrysum luteoalbum</i>	Jersey Cudweed
<i>Hemarthria uncinata</i>	Mat Grass
<i>Hibbertia riparia</i>	Upright Guinea-flower
<i>Histiopteris incisa</i>	Bat's-wing Fern
<i>Hovea heterophylla</i>	Common Hovea
<i>Hydrocotyle laxiflora</i>	Stinking Pennywort
<i>Hypericum gramineum</i>	Small St John's Wort
<i>Hypolepis rugulosa</i>	Ruddy Ground Fern
<i>Indigofera australis</i>	Austral Indigo
<i>Isotoma fluviatilis</i>	Swamp Isotome
<i>Juncus amabilis</i>	Hollow Rush
<i>Juncus australis</i>	Austral Rush
<i>Juncus holoschoenus</i>	Joint-leaf Rush
<i>Juncus pallidus</i>	Pale Rush
<i>Juncus planifolius</i>	Broad-leaf Rush
<i>Juncus sarophorus</i>	Broom Rush
<i>Juncus subsecundus</i>	Finger Rush
<i>Kennedia prostrata</i>	Running Postman
<i>Kunzea</i> sp. Upright form	Forest Burgan
<i>Lachnagrostis filiformis</i>	Common Blown-grass
<i>Lagenophora stipitata</i>	Blue-bottle Daisy
<i>Leptorhynchus squamatus</i>	Scaly Buttons
<i>Leptorhynchus tenuifolius</i>	Wiry Buttons
<i>Leptospermum continentale</i>	Prickly Tea-tree
<i>Leptospermum myrsinoides</i>	Silky Tea-tree
<i>Leucopogon virgatus</i>	Common Beard-heath
<i>Lobelia gibbosa</i>	Tall Lobelia
<i>Lomandra multiflora</i>	Many-flowered Mat-rush

Scientific Name	Common Name
<i>Lomandra filiformis</i> subsp. <i>filiformis</i>	Wattle Mat-rush
<i>Lomandra longifolia</i>	Spiny-headed Mat-rush
<i>Luzula meridionalis</i>	Field Woodrush
<i>Microlaena stipoides</i>	Weeping Grass
<i>Microseris walteri</i>	Yam Daisy, Murnong
<i>Microtis parviflora</i>	Slender Onion Orchid
<i>Monotoca scoparia</i>	Prickly Broom-heath
<i>Olearia erubescens</i>	Moth Daisy-bush
<i>Olearia myrsinoides</i>	Silky Daisy-bush
<i>Opercularia varia</i>	Variable Stinkweed
<i>Ozothamnus ferrugineus</i>	Tree Everlasting
<i>Ozothamnus obcordatus</i>	Grey Everlasting
<i>Pauridia vaginata</i>	Yellow Star
<i>Pelargonium rodneyanum</i>	Magenta Stork's-bill
<i>Persoonioa chamaepeuce</i>	Dwarf Geebung
<i>Pimelea humilis</i>	Common Rice-flower
<i>Pimelea linifolia</i>	Slender Rice-flower
<i>Plantago varia</i>	Variable Plantain
<i>Platylobium obtusangulum</i>	Common Flat-pea
<i>Platylobium rotundum</i>	Penny-leaf Flat-pea
<i>Poa sieberiana</i>	Fine-leaf Tussock Grass
<i>Podolepis jaceoides</i>	Showy Podolepis
<i>Podolobium procumbens</i>	Trailing Shaggy-pea
<i>Poranthera microphylla</i>	Small Poranthera
<i>Pteridium esculentum</i>	Austral Bracken
<i>Pterostylis melagramma</i>	Tall Greenhood
<i>Pterostylis nana</i>	Dwarf Greenhood
<i>Pterostylis nutans</i>	Nodding Greenhood
<i>Pterostylis parviflora</i>	Tiny Greenhood
<i>Pultenaea daphnoides</i>	Large-leaf Bush-pea
<i>Pultenaea gunnii</i> subsp. <i>gunnii</i>	Golden Bush-pea
<i>Pultenaea humilis</i>	Dwarf Bush-pea
<i>Rumex brownii</i>	Slender Dock
<i>Rytidosperma geniculatum</i>	Knead Wallaby-grass
<i>Rytidosperma fulvum</i>	Copper-awned Wallaby Grass
<i>Rytidosperma pallidum</i>	Silver-top (Red-anther) Wallaby Grass
<i>Rytidosperma penicillatum</i>	Slender Wallaby-grass
<i>Rytidosperma semiannulatae</i>	Wetland Wallaby-grass
<i>Rytidosperma setaceum</i>	Bristly Wallaby-grass
<i>Schoenus apogon</i>	Common Bog-sedge
<i>Senecio glomeratus</i>	Fireweed
<i>Senecio hispidulus</i>	Hill/Rough Fireweed
<i>Senecio minimus</i>	Shrubby Fireweed
<i>Senecio phelleus</i>	Rock Fireweed
<i>Senecio quadridentatus</i>	Cottony Fireweed
<i>Solanum laciniatum</i>	Kangaroo Apple



# Appendix A

## Plant list – indigenous species. Source: Field Naturalist Club of Ballarat 2018

Scientific Name	Common Name
<i>Stackhousia monogyna</i>	Creamy Candles
<i>Stylidium armeria</i>	Grass Triggerplant
<i>Tetrarhena distichophylla</i>	Hairy Rice-grass
<i>Tetradlea ciliata</i>	Pink-bells
<i>Thelymitra ixioides</i> var. <i>ixioides</i>	Spotted Sun Orchid
<i>Thelymitra carnea</i>	Pink Sun Orchid
<i>Themeda triandra</i>	Kangaroo Grass
<i>Thysanotus patersonii</i>	Twining Fringe Lily
<i>Veronica calycina</i>	Hairy Speedwell
<i>Veronica gracilis</i>	Slender Speedwell
<i>Veronica persica</i>	Creeping Speedwell
<i>Viola betonicifolia</i> subsp. <i>betonicifolia</i>	Showy Violet
<i>Viola hederacea</i>	Ivy-leaf Violet
<i>Wahlenbergia gracilis</i>	Sprawling Bluebell
<i>Wahlenbergia stricta</i>	Tall Bluebell
<i>Wolffia australiana</i>	Tiny Duckweed
<i>Wurmbea dioica</i>	Early Nancy
<i>Xanthorrhoea australis</i>	Austral Grass-tree
<i>Xanthorrhoea minor</i> subsp. <i>lutea</i>	Small Grass-tree

## Animals

Canadian Park (Woowookarung) Natural values and habitat values report, Physys 2017

## Birds

Scientific Name	Common Name
<i>Acanthiza chrysorrhoa</i>	Yellow-rumped Thornbill
<i>Acanthiza lineate</i>	Striated Thornbill
<i>Acanthiza pusilla</i>	Brown Thornbill
<i>Acanthiza reguloides</i>	Buff-rumped Thornbill
<i>Acanthorhynchus tenuirostris</i>	Eastern Spinebill
<i>Accipiter cirrhocephalus</i>	Collared Sparrowhawk
<i>Accipiter fasciatus</i>	Brown Goshawk
<i>Accipiter novaehollandiae</i> <i>novaehollandiae</i>	Grey Goshawk
<i>Anas superciliosa</i>	Pacific Black Duck
<i>Anthochaera carunculata</i>	Red Wattlebird
<i>Apus pacificus</i>	Fork-tailed Swift
<i>Aquila audax</i>	Wedge-tailed Eagle
<i>Ardea ibis</i>	Cattle Egret
<i>Ardea pacifica</i>	White-necked Heron
<i>Artamus cyanopterus</i>	Dusky Woodswallow
<i>Artamus personatus</i>	Masked Woodswallow
<i>Artamus superciliosus</i>	White-browed Woodswallow
<i>Cacatua galerita</i>	Sulphur-crested Cockatoo
<i>Cacatua tenuirostris</i>	Long-billed Corella
<i>Cacomantis flabelliformis</i>	Fan-tailed Cuckoo

Scientific Name	Common Name
<i>Cacomantis pallidus</i>	Pallid Cuckoo
<i>Cacomantis variolosus</i>	Brush Cuckoo
<i>Calyptorhynchus funereus</i>	Yellow-tailed Black-Cockatoo
<i>Chenonetta jubata</i>	Australian Wood Duck
<i>Chrysococcyx basalis</i>	Horsfield's Bronze-Cuckoo
<i>Chrysococcyx lucidus</i>	Shining Bronze-Cuckoo
<i>Circus approximans</i>	Swamp Harrier
<i>Colluricincla harmonica</i>	Grey Shrike-thrush
<i>Coracina novaehollandiae</i>	Black-faced Cuckoo-shrike
<i>Corcorax melanorhamphos</i>	White-winged Chough
<i>Cormobates leucophaeus</i>	White-throated Treecreeper
<i>Corvus mellori</i>	Little Raven
<i>Cracticus tibicen</i>	Australian Magpie
<i>Cracticus torquatus</i>	Grey Butcherbird
<i>Dacelo novaeguineae</i>	Laughing Kookaburra
<i>Daphoenositta chrysoptera</i>	Varied Sittella
<i>Dicaeum hirundinaceum</i>	Mistletoebird
<i>Egretta novaehollandiae</i>	White-faced Heron
<i>Elanus axillaris</i>	Black-shouldered Kite
<i>Eolophus roseicapillus</i>	Galah
<i>Eopsaltria australis</i>	Eastern Yellow Robin
<i>Falco berigora</i>	Brown Falcon
<i>Falco cenchroides</i>	Nankeen Kestrel
<i>Falco longipennis</i>	Australian Hobby
<i>Falco peregrines</i>	Peregrine Falcon
<i>Falcunculus frontatus</i>	Crested Shrike-tit
<i>Glossopsitta concinna</i>	Musk Lorikeet
<i>Glossopsitta porphyrocephala</i>	Purple-crowned Lorikeet
<i>Grallina cyanoleuca</i>	Magpie-lark
<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle
<i>Hieraaetus morphnoides</i>	Little Eagle
<i>Hirundapus caudacutus</i>	White-throated Needle-tail
<i>Hirundo neoxena</i>	Welcome Swallow
<i>Lalage sueurii</i>	White-winged Triller
<i>Lichenostomus chrysops</i>	Yellow-faced Honeyeater
<i>Lichenostomus leucotis</i>	White-eared Honeyeater
<i>Lophoictinia isura</i>	Square-tailed Kite
<i>Malurus cyaneus</i>	Superb Fairy-wren
<i>Melithreptus brevirostris</i>	Brown-headed Honeyeater
<i>Melithreptus lunatus</i>	White-naped Honeyeater
<i>Microcarbo melanoleucos</i>	Little Pied Cormorant
<i>Milvus migrans</i>	Black Kite
<i>Myiagra cyanoleuca</i>	Satin Flycatcher
<i>Neochmia temporalis</i>	Red-browed Finch
<i>Neophema chrysostoma</i>	Blue-winged Parrot
<i>Ninox novaeseelandiae</i>	Southern Boobook
<i>Oriolus sagittatus</i>	Olive-backed Oriole
<i>Pachycephala pectoralis</i>	Golden Whistler

Scientific Name	Common Name
<i>Pachycephala rufiventris</i>	Rufous Whistler
<i>Pardalotus punctatus punctatus</i>	Spotted Pardalote
<i>Pardalotus striatus</i>	Striated Pardalote
<i>Petrochelidon nigricans</i>	Tree Martin
<i>Petroica boodang</i>	Scarlet Robin
<i>Petroica phoenicea</i>	Flame Robin
<i>Phalacrocorax carbo</i>	Great Cormorant
<i>Phalacrocorax sulcirostris</i>	Little Black Cormorant
<i>Phaps chalcoptera</i>	Common Bronzewing
<i>Phaps elegans</i>	Brush Bronzewing
<i>Phylidonyris novaehollandiae</i>	New Holland Honeyeater
<i>Phylidonyris pyrrhoptera</i>	Crescent Honeyeater
<i>Platycercus elegans</i>	Crimson Rosella
<i>Platycercus eximius</i>	Eastern Rosella
<i>Podargus strigoides</i>	Tawny Frogmouth
<i>Rhipidura albiscapa</i>	Grey Fantail
<i>Rhipidura leucophrys</i>	Willie Wagtail
<i>Rhipidura rufifrons</i>	Rufous Fantail
<i>Sericornis frontalis</i>	White-browed Scrubwren
<i>Strepera graculina</i>	Pied Currawong
<i>Strepera versicolour</i>	Grey Currawong
<i>Threskiornis molucca</i>	Australian White Ibis
<i>Threskiornis spinicollis</i>	Straw-necked Ibis

Scientific Name	Common Name
<i>Todiramphus sanctus</i>	Sacred Kingfisher
<i>Trichoglossus haematodus</i>	Rainbow Lorikeet
<i>Turnix varia</i>	Painted Button-quail
<i>Vanellus miles</i>	Masked Lapwing
<i>Zosterops lateralis</i>	Silvereye

## Mammals

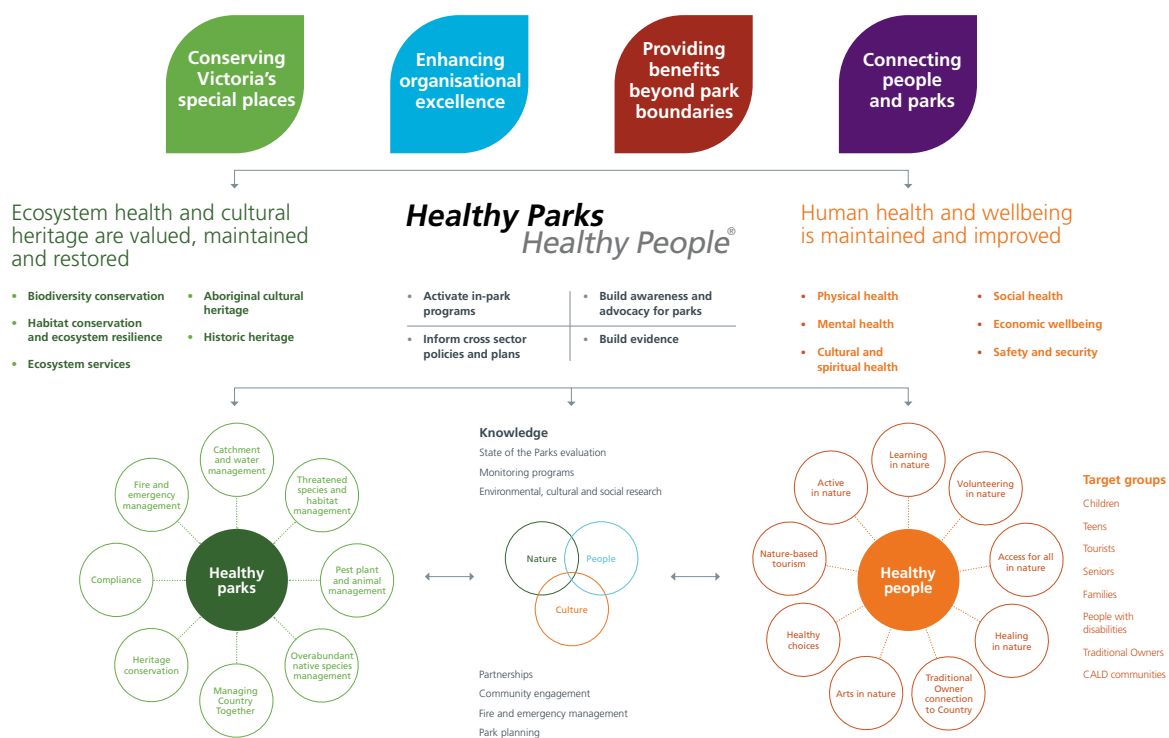
Scientific Name	Common Name
<i>Macropus giganteus</i>	Eastern Grey Kangaroo
<i>Phascolarctos cinereus</i>	Koala
<i>Tachyglossus aculeatus</i>	Short-beaked Echidna
<i>Trichosurus vulpecular</i>	Common Brushtail Possum
<i>Wallabia bicolor</i>	Black Wallaby

## Reptiles and amphibians

Scientific Name	Common Name
<i>Lampropholis guichenoti</i>	Garden Skink

# Appendix B

## Healthy Parks Healthy People® framework





# Bibliography

## Parks Victoria Documents:

- A Guide to Healthy Parks Healthy People, Parks Victoria, 2017
- Connectivity workshop summary for Consultants.docx, Parks Victoria, December 2016
- Healthy Parks Healthy People South Australia 2016-2021 - Making Contact With Nature, Second Nature, Government of South Australia, 2016
- Healthy Parks Healthy People: the State of the Evidence 2015, Prepared for Parks Victoria by Mardie Townsend, Claire Henderson-Wilson, Elyse Warner and Lauren Weiss, School of Health and Social Development, Deakin University
- Valuing Victoria's Parks - Accounting for ecosystems and valuing their benefits: report of first phase findings Parks Victoria.
- Crown Land (Reserves) Act 1978
- Parks Victoria Disability Action Plan 2017 - 2020

## Friends of Canadian Corridor Documents:

- Friends Of The Canadian Corridor: A Short Story Of The Canadian Corridor, Friends of the Canadian Corridor, 2016
- A Social/Civic, Environmental & Economic Vision For Establishing A Multi-Use Regional Reserve In The Canadian Corridor, Friends Of The Canadian Corridor, 2014-15
- Imagine a "Canadian Multi Use Forest Park"?, Friends of the Canadian Corridor, 2014

## City of Ballarat Documents:

- Today Tomorrow Together: The Ballarat Strategy 2015 (<http://www.ballarat.vic.gov.au/pbs/city-strategy/ballarat-strategy.aspx>)
- Local Area Plan for Ballarat East, 'Imagine Ballarat East' – Ballarat East Discussion Paper (<http://www.ballarat.vic.gov.au/pbs/city-strategy/strategic-projects-andframeworks/current/imagine-ballarat-east.aspx>)
- Urban Forest Strategy and Living Corridors (<http://www.ballarat.vic.gov.au/pbs/city-strategy/ballarat-strategy/urban-forest-strategy-and-living-corridors.aspx>)
- City of Ballarat Koala Overlay and Comprehensive Koala Plan of Management, City of Ballarat, August 2006
- Ballarat Open Space Strategy – Linkages and Opportunities for Future Linkages ([www.ballarat.vic.gov.au/media/200654/boss%20-%20volume%201.pdf](http://www.ballarat.vic.gov.au/media/200654/boss%20-%20volume%201.pdf))
- City of Ballarat Municipal Planning Scheme (<http://www.ballarat.vic.gov.au/pbs/statutory-planning/overlays/environmental-significance-overlay.aspx>)
- Mapping Ballarat's Historic Urban Landscape September 2013 ([www.ballarat.vic.gov.au/media/3026950/mapping\\_ballarat\\_s\\_historic\\_urban\\_landscape.pdf](http://www.ballarat.vic.gov.au/media/3026950/mapping_ballarat_s_historic_urban_landscape.pdf))

## Catchment Authority Documents:

- Corangamite Regional Catchment Strategy 2013 – 2019 (<http://www.ccma.vic.gov.au/admin/file/content2/c7/CCMA%20RCS%20FINAL%20JUNE%202013.pdf>)

## DELWP Documents:

- Values, Uses and Community Views - A final report on stakeholder and community consultation for the creation of a new park in Ballarat, Department of Environment, Land, Water and Planning, State Government of Victoria, October 2015 ([http://delwp.vic.gov.au/\\_\\_data/assets/pdf\\_file/0013/316201/Final-report-onstakeholder-and-community-consultation.pdf](http://delwp.vic.gov.au/__data/assets/pdf_file/0013/316201/Final-report-onstakeholder-and-community-consultation.pdf))
- Munganin – Gadhaba 'Achieve Together' DELWP Aboriginal Inclusion Plan 2016-2020, DELWP, p 15
- Strategic Bushfire Management Plan – West Central Bushfire Risk Landscape 2015, Overview also available, (<http://www.delwp.vic.gov.au/safer-together/landscapes/west-central>)
- Fire Operations Plan 2016 (<http://www.delwp.vic.gov.au/fire-and-emergencies/managing-bushfire-risk/fire-operations-planning/approved-fire-operations-plan>)
- Victorian Biodiversity Atlas (<http://www.delwp.vic.gov.au/environment-and-wildlife/biodiversity/victorianbiodiversity-atlas>)

## Other Documents:

- Connecting Global Priorities: Biodiversity and Human Health A State of Knowledge Review, World Health Organization and Secretariat of the Convention on Biological Diversity, 2015
- Trail Solutions: IMBA's Guide to Building Sweet Single Track, International Mountain Biking Association, 2004
- VEAC - Regional parks, nature conservation reserves, and historic and cultural features reserve, (<http://www.veac.vic.gov.au>)

## Data Sources

- <http://www.data.gov.au/dataset/ballarat-1m-contours#>

## Useful Websites

- [http://er-info.dpi.vic.gov.au/sd\\_weave/anonymous.html](http://er-info.dpi.vic.gov.au/sd_weave/anonymous.html)
- Historic Urban Landscape Ballarat ([www.hulballarat.org.au](http://www.hulballarat.org.au))
- Ballarat Historical Society Inc. ([www.ballarathistoricalsociety.com](http://www.ballarathistoricalsociety.com))
- Ballarat East Network ([www.ballarateast.net](http://www.ballarateast.net))
- Reveal Ballarat's Past (<http://ballaratrevealed.com/locations>)
- <http://spatial.federation.edu.au/eureka/eureka.php>
- <http://mapshare2.dse.vic.gov.au/MapShare2EXT/imf.jsp?site=bim>

## Media

- <http://www.thecourier.com.au/story/4578822/creswick-becomes-mountainbike-mecca/>



