

# Lake Boort Scarred Trees

MASTERPLAN

APRIL 2022



ASPECT Studios

The report authors respectfully acknowledge the Dja Dja Wurrung people as the Traditional Custodians on whose Country Lake Boort is located. We recognise their continuing connection to land, waters and community and we pay our respect to their Elders past and present.





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

**Acknowledgments**

The project team wishes to acknowledge the input and assistance of the following:

- Dja Dja Wurrung Clans Aboriginal Corporation
- Yung Balug Clan
- Victorian State Government
- Regional Development Victoria
- Loddon Shire Council
- Parks Victoria
- North Central Catchment Management Authority
- Boort Community Members

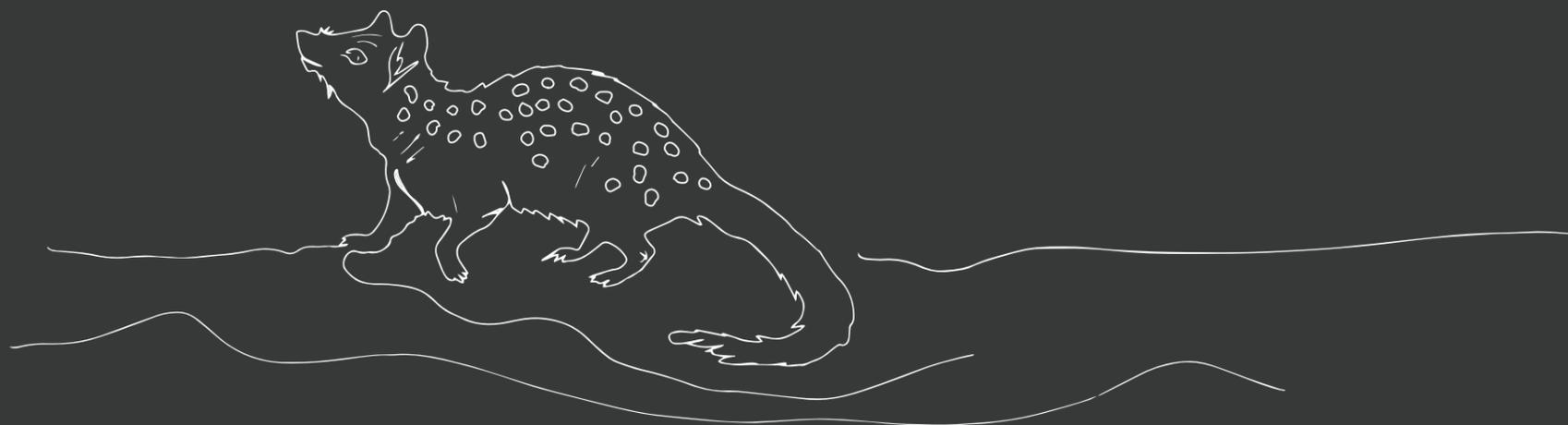
**This Masterplan has been generously funded by the following bodies:**

- Loddon Shire Council, Victoria State Government and Dja Dja Wurrung Clans Aboriginal Corporation

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## Foreword

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Loddon Shire Council is delighted to bring the Lake Boort Scarred Trees Masterplan to the community. The Masterplan creates a platform for sharing, protecting and appreciating Lake Boort's significant and precious cultural and natural values. The Masterplan considers the steps needed to realise Lake Boort's potential as a visitor destination, offering a concept design which proposes to reveal the site's significant values and engage potential visitors.

Importantly the Masterplan represents a further articulation of what the Dja Dja Wurrung peoples and local Boort community have long known, that the story of Lake Boort is of deep importance and is one that should be shared. The Masterplan outlines how, with considered investment, engagement, infrastructure and promotion, Lake Boort can be realised as a site of national and even international importance.

The Loddon Shire Council warmly thanks the Victorian State Government and Dja Dja Wurrung Clans Aboriginal Corporation for supporting the development of this plan.

## Executive Summary

The Masterplan aims to build awareness and appreciation of Lake Boort as an unparalleled landscape destination, identifying how considered visitor access can create unique and immersive landscape experiences, whilst also providing greater protection of the site's significant cultural heritage values.

The Lake Boort Scarred Trees Masterplan aims to position the Lake Boort site as one of the first cultural landscapes in Victoria with a distinct Indigenous visitor offer. The 'Victorian Visitor Economy Strategy,' 2016 has identified an opportunity for growth and development in cultural tourism in Victoria. The Masterplan seeks to respond to this opportunity, offering an accessible and rich cultural experience for local, interstate, and international visitors.

Lake Boort is rich with Aboriginal cultural heritage representing a continuing connection to Country for Dja Dja Wurrung peoples. Located in the rolling wheat fields of northern Victoria, Lake Boort opens a vista of opportunity to elevate the appreciation of Indigenous cultural heritage, and to support and engage with community in the region, through achieving the objectives of this Masterplan.

The Lake Boort Scarred Trees Masterplan showcases an aspirational vision and framework to present Lake Boort to the world as a unique visitor destination that offers immersive, educational experiences of Dja Dja Wurrung Country. Visit Victoria has identified Indigenous tourism and nature-based tourism as two key strategic growth areas for Victoria. This Masterplan seeks to capitalise on these growth areas, offering accessible and immersive nature based and cultural tourism experiences from the regional to the international visitor. The Masterplan framework paves the way for investment, and increased visitation at Lake Boort. With this comes the opportunity for capacity development within the Indigenous community.

The potential of Lake Boort as a tourist destination is stepped through in the concept design. The vision is to enhance visitor experience by creating a platform to share and appreciate this highly significant cultural landscape and its distinctive natural values.

The Lake Boort Scarred Trees Masterplan evolved following a number of online meetings with the local Dja Dja Wurrung community, the broader Boort community, stakeholders and the project steering committee. A guided site visit provided additional valuable understanding of the importance and connection of Dja Dja Wurrung peoples to this Country. This understanding has formed the foundation for the development of the Masterplan and has guided the development of the proposed visitor experiences in this unique and culturally important landscape.

The long-term vision and design principles that informed the Masterplan were developed early following community meetings. These, together with a broader understanding of the Lake Boort ecological and environmental systems were used to guide the Masterplan concept.

Feedback from engaging with the local Dja Dja Wurrung community, the broader Boort community and stakeholders were summarised into five key feedback themes:

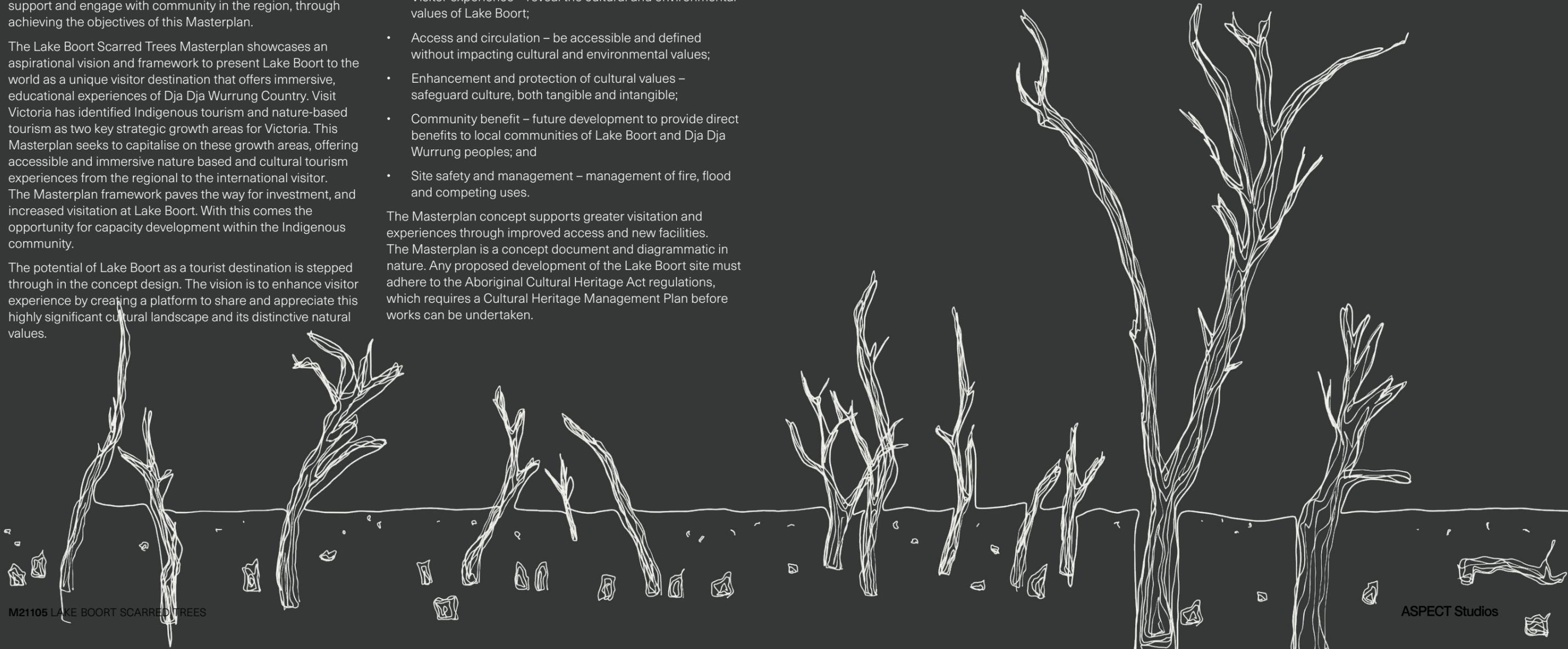
- Visitor experience – reveal the cultural and environmental values of Lake Boort;
- Access and circulation – be accessible and defined without impacting cultural and environmental values;
- Enhancement and protection of cultural values – safeguard culture, both tangible and intangible;
- Community benefit – future development to provide direct benefits to local communities of Lake Boort and Dja Dja Wurrung peoples; and
- Site safety and management – management of fire, flood and competing uses.

The Masterplan concept supports greater visitation and experiences through improved access and new facilities. The Masterplan is a concept document and diagrammatic in nature. Any proposed development of the Lake Boort site must adhere to the Aboriginal Cultural Heritage Act regulations, which requires a Cultural Heritage Management Plan before works can be undertaken.

A tourism assessment has positioned the Masterplan within the Victorian tourism market context. Identifying visitors who would likely seek out the cultural tourism and nature-based experiences proposed at Lake Boort. The detailed cost benefit analysis suggests that the Masterplan will stimulate the local economy and generate employment opportunities.

The implementation strategy identifies a logical staging of works. Each of the stages identified in the implementation strategy lists a number of smaller projects within the stage, giving a greater level of fidelity to the proposed implementation. The Implementation strategy serves as a useful tool to guide future investment and development.

A cost planning exercise has been undertaken in parallel to the development of the Masterplan. In addition, substantial social, cultural and environmental benefits will accrue for the region and visitors through raising awareness, protection and the sharing of this internationally significant landscape.



## Masterplan Planning and Context

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The development of a Masterplan for Lake Boort is an important first step in realising the aspirations of Dja Dja Wurrung community for this incredible landscape. The Masterplan seeks to outline a vision for Lake Boort which balances visitor access with protection of cultural and environmental values. The engagement process informing the Masterplan was undertaken over seven months and included extensive involvement with Dja Dja Wurrung community.

Lake Boort currently has no designated visitor access or amenity which means visitors are free to access all areas of the site without understanding the site's cultural and environmental values and their need of protection. The Masterplan looks to inform visitors of the significant cultural and environmental values whilst providing a greater control of managing impact on the area.

The Masterplan concept represents the initial stage in the design and planning process of Lake Boort. The following document captures the community's aspirations for the site and a vision for its future use.

The whole of Lake Boort sits in an area of Aboriginal cultural heritage sensitivity. It is important to note prior to any ideas presented in the Masterplan being formally developed, compliance with the Aboriginal Heritage Act 2006 is required. This will require a Cultural Heritage Management Plan (CHMP) to be prepared to the approval of Dja Dja Wurrung Clans Aboriginal Corporation as the Registered Aboriginal Party and approving authority for this process.

Further investigations will also need to be undertaken to address the conditions identified in the CHMP assessment and other requirements as they arise through subsequent design phases.

Through realising this vision for Lake Boort we can ensure those experiencing this landscape develop a meaningful appreciation and understanding of its significance and respond in a respectful and caring approach.





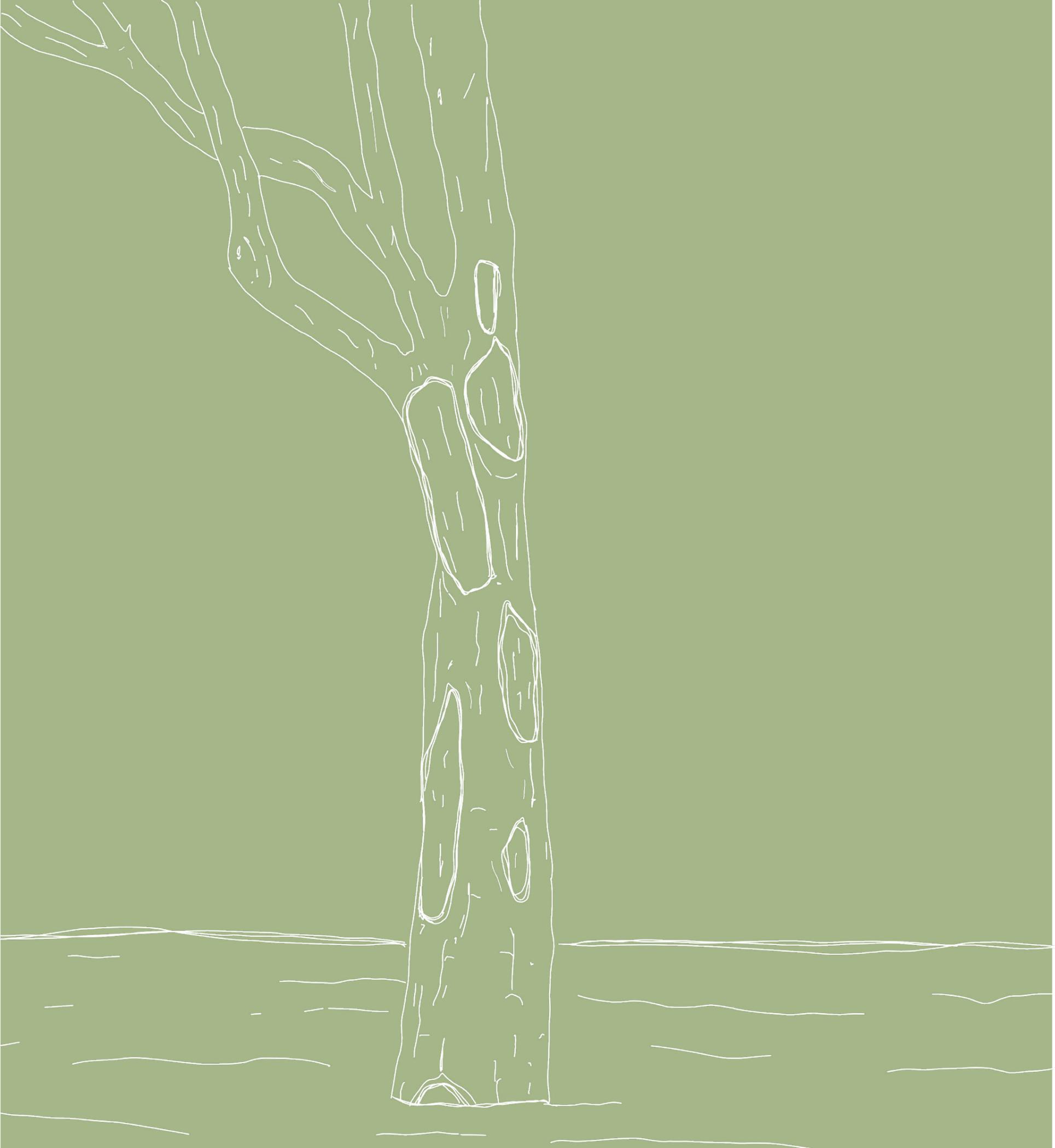
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Section 1

# Introduction and Acknowledgments

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## 1.1 Introduction

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The Lake Boort Scarred Trees Masterplan has been developed to provide a vision of a sustainable future for community, culture and tourism.

The Lake Boort region is regarded as one of the most significant Aboriginal cultural sites not only in Victoria, but Australia. Today, there are estimated to be over 400 scarred trees in the vicinity of the lake. The uniqueness of the site is attributed to its scale – the quantity, density and varied uses of the trees – which are rarely seen together.

These trees have been dated at over 300 years old and retain the scars from the cutting of bark to make canoes, shields and containers. It is one of the few remaining sites where one can see trees with cultural uses such as toe-hold scars, ownership markers, possum extraction holes and with bark removed for drying possum skins, shelters, grinding flour and burials.

The site is not only known for its trees, but for the many mounds, cooking ovens, artefact's and ceremonial sites known around the lake. The rarity of this site also comes from the ability for visitors to access the site easily and to see and understand how the local Indigenous community lived by the lake for tens of thousands of years.



Scarred Tree in an inundated Lake Boort. (Haw, 2016)

## 1.2 Project Purpose

### The Need for a Masterplan

Lake Boort offers authentic experiences of the living Dja Dja Wurrung culture, history and environment. The Masterplan is an important step in recognising and protecting the broader significance of this destination.

The Lake Boort Scarred Trees project will be one of the first tourism initiatives in Victoria to develop a distinctly Indigenous experience by creating a platform to share, appreciate and protect this highly significant landscape. As a key opportunity for growth and development (as defined in the 2016 Victorian Visitor Economy Strategy), this project will offer an accessible and rich experience for all.

The Masterplan is designed to raise recognition, appreciation, engagement and investment in Indigenous cultural heritage throughout the south east of Australia. An implementation strategy has been incorporated to facilitate engagement and investment in this significant destination for government, Dja Dja Wurrung, Boort and tourism communities.

### Project Purpose

The aim of the Masterplan is to create a compelling and engaging visitor experience that reflects the significance of the site. This will raise awareness more generally to the substantial Aboriginal cultural heritage in South Eastern Australia.

Rodney Carter, CEO of Dja Dja Wurrung Clans Aboriginal Corporation, frames their purpose and work as 'rebuilding their home on Country'. For the first time since dispossession, Dja Dja Wurrung peoples will be able to welcome visitors in ways that have not recently been undertaken on Country.

The Masterplan considers an integrated and multi-layered experience that complements and celebrates the landscape through:

- protection of Aboriginal cultural heritage;
- celebration of the high ecological values of the site
- nature-based tourism opportunities; and
- visitor access which will include guided tours and experiences.

To realise the full potential of Lake Boort, a Masterplan has been completed to provide:

- concept designs and quantity surveying for visitor access, guided tours and experiences;
- reports and assessments including a cost benefit analysis of the social and economic contribution of this project and environmental considerations; and
- key promotional considerations and linkages to activate the site.

### Project Objectives

The Masterplan identifies key Dja Dja Wurrung cultural heritage values and knowledge. It has been advised by the community that sharing this knowledge in order to educate the broader community is beneficial and appropriate.

Understanding the importance of protecting the Aboriginal cultural heritage values at Lake Boort, whilst providing adequate access for visitors to view these, underpins the Masterplan in identifying:

- Potential tourism product opportunities that leverage the heritage and significance of Lake Boort, including:
  - an understanding of the appetite for regional Victorian Aboriginal cultural tourism experiences and elements required to sustain it;
  - an understanding of current visitor numbers to Lake Boort and the current value of tourism to the Boort economy;
  - an assessment of the projected growth in visitation to Loddon Shire and region;
  - an assessment of the associated economic benefits and return on investment; and
  - opportunities to link to other cultural heritage sites and tourism assets/activities to attract visitors to Boort, Loddon Shire and the region.
- The infrastructure and associated delivery, pricing and management arrangements required to activate this key Indigenous cultural visitation experience including:
  - maximising the opportunities created by the Masterplan's concept designs for increased access and engaging experiences; and
  - a concept design for small scale infrastructure including boardwalks, signage and digital elements.

The Masterplan also assess potential economic, social and environmental benefits of the proposed design. The plan will outline the logical stages for future works, including roles and responsibilities of stakeholders.

## 1.3 Project Vision & Design Principle

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This vision statement and four corresponding design principles were developed through engagement with Traditional Owners and consultation with stakeholders, including the community of Boort. The Vision Statement and Design Principles are intended to guide the formation of the Masterplan and the future development of visitor infrastructure at the Lake Boort Reserve site.

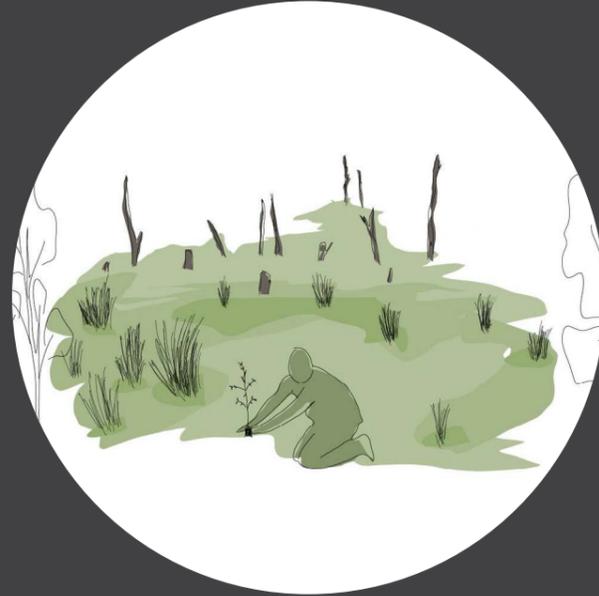
### Vision Statement

Reveal Lake Boort as a destination of international significance, embracing the rich and living Dja Dja Wurrung culture, unique cultural history and distinctive site ecology.



### Celebrating Community and Country

Reveal Lake Boort's rich and living Dja Dja Wurrung history and culture. Foster contemporary interpretation of Traditional Owner stories, ongoing cultural practice and community knowledge sharing.



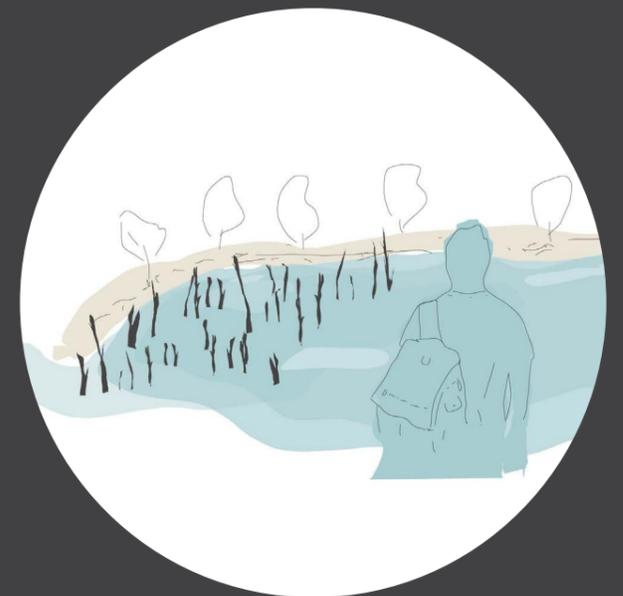
### An Enduring Landscape

Enhance and protect cultural and environmental site values, facilitating Dja Dja Wurrung land management and increased visitor appreciation and respect for the significance of the Lake Boort landscape.



### Authentic and Immersive

Create authentic and immersive visitor experiences, which celebrate the unique cultural, historical and environmental values of Lake Boort.



### Harness Tourism Potential

Embrace a regional cultural tourism strategy which celebrates and promotes Lake Boort as a connected cultural landscape destination, realising the social and economic benefits for the broader Boort community.

Section 2

# Existing Conditions and Site Context



## 2.1 State Context and Project Area

### Regional Context

The Lake Boort Reserve is located in North West Victoria on the outskirts of the Boort township. Boort is part of the Loddon Shire Council area – it is 87 kilometres North West of Bendigo and 254 kilometres, from Melbourne.

Lake Boort is classified as a shallow freshwater marsh and is part of an 80 kilometre network of temporary and permanent freshwater lakes, swamps and marshes, known as the Boort Wetlands. These water bodies include Lake Boort, Lake Leaghur, Lake Lyndger, Lake Yando, Little Lake Meran, Little Lake Boort and Lake Meran. The primary land use surrounding Lake Boort is farmland, namely cropping (irrigated and dryland) and grazing.

### Aboriginal Language Context

Lake Boort sits at the Northern extent of Dja Dja Wurrung Country and sits within the area of the Yung Balug clan, one of sixteen clans that comprise the Dja Dja Wurrung Clans Aboriginal Corporation.



Lake Boort Project Context

## 2.2 Cultural Context

### Location on Country

Lake Boort is located at the Northern extent of the Dja Dja Wurrung Clans Aboriginal Corporation appointed RAP (Registered Aboriginal Party) Area. The Yung Balug clan are the Dja Dja Wurrung language group of the Lake Boort area; however, the lake also sits near the boundary of the Wergaia and the Barapa Barapa language groups. Prior to settlement Lake Boort is known to have had high importance as an inter-tribal meeting place.

### Aboriginal Cultural Landscape

Lake Boort has an extremely high density of Aboriginal scarred trees that have been uniquely preserved in the landscape, many of which feature multiple scars. It is estimated that there are well over 400 scarred trees within the Lake Reserve area. The scarred trees bear the markings of canoes, shelters, carrying vessels, and other cultural modifications such as drying possum skins, toe holds for hunting and bark cuttings for burials. In addition to the scarred trees at Lake Boort, the site also contains remarkable archaeological features, which illustrate the daily life of Dja Dja Wurrung people pre-settlement. These features include over 40 cooking mounds, stone tool artefact's and ceremonial sites. The scale, density and archaeological significance of the cultural artefact's at Lake Boort establish it as a site of international and national significance.

### Current Context

The Dja Dja Wurrung people have an enduring connection to Lake Boort, lasting thousands of years. This connection has withstood colonisation and post settlement land use modification, which significantly altered the natural cycles of Lake Boort. The Dja Dja Wurrung people have a connection to both the tangible and intangible cultural values of Lake Boort and are working in partnership with other management authorities to ensure the preservation of Lake Boort's environmental and cultural values. There are aspirations of the Yung Balug Clan to locate a Cultural Tourism and Education centre at Lake Boort site, which would house a number of cultural items currently kept at the 'Yung Balug Temporary Keeping Place'.

### Implications on Master Plan

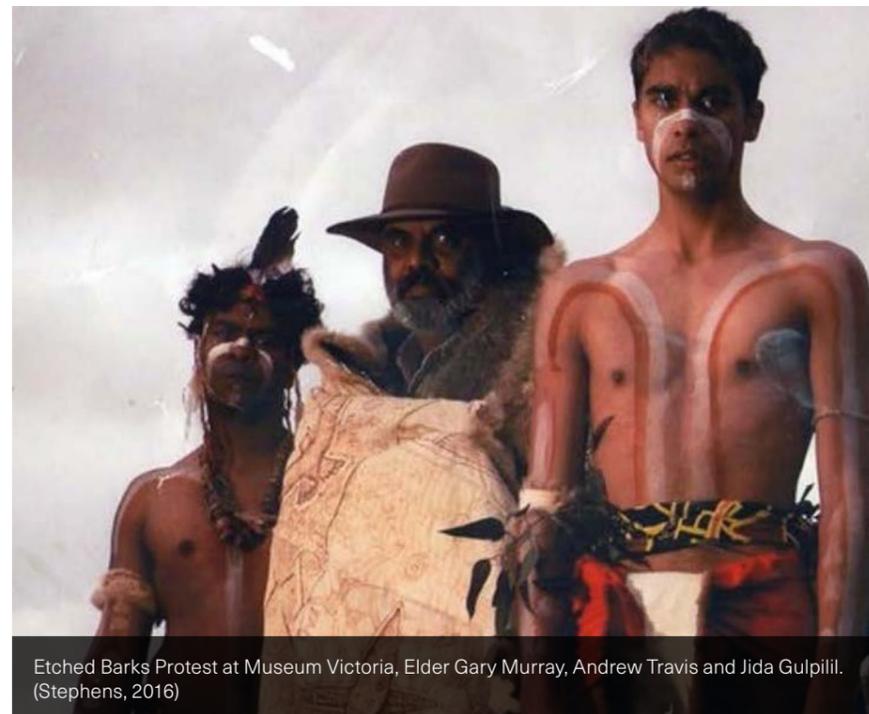
- Any subsequent development of this Masterplan should include comprehensive engagement with the Dja Dja Wurrung Clans Aboriginal Corporation and the Yung Balug Clan;
- Opportunities for Aboriginal co-design and employment should be actively explored with Dja Dja Wurrung/the Yung Balug Clan for any subsequent development of this Masterplan;
- As noted in the planning section of this document, a Cultural Heritage Management Plan (CHMP) is required, prior to any construction works being undertaken at the Lake Boort site; and
- The protection and preservation of the Aboriginal cultural landscape, and intangible cultural values is of critical importance to any further development of the Lake Boort Scarred Trees Masterplan.



Dja Dja Wurrung Peoples in front of a Bark Hut. (photographer unknown (courtesy of Paul Haw))



The Yung Balug Totem, the Spotted Quoll. (Wallpaper Cave, n.d.)



Etched Barks Protest at Museum Victoria, Elder Gary Murray, Andrew Travis and Jida Gulpilil. (Stephens, 2016)



Spotted Quoll dance markings. c.1880's Yung Balug Wlapanumin John Logan c.1830's-1911 (far left) at Coranderrk, Healesville. Walpanumin is the grandfather of the Elite Sportsman and Religious Leader Pastor Sir Douglas Nicholls JP;MBE;KCVO; Bapa Mamus and former Governor of South Australia. (Photo Courtesy of State Library of Victoria.)

## 2.3 Landscape Character

### Surrounding Context

The landscape surrounding Lake Boort has been significantly modified post-settlement. This is evident in the open vistas of farmland, which surround the township of Boort. Generally, any areas of more naturalistic or vegetated landscape are isolated to the perimeters of the three major water bodies of the Boort area; Lake Lyndger, Little Lake Boort and Lake Boort. The dominant geographic features of the Boort Landscape are the lunettes, which define the Eastern margins of the former swamps in the region. The lunettes are easily identifiable as they are the only points of raised elevation in an otherwise flat landscape. These sandy deposits have cultural significance to the local Dja Dja Wurrung peoples as their raised elevation meant they were historically used by the local aboriginal people for smoke signalling. One such lunette flanks Lake Boort.

### Surrounding Lakes

Little Lake Boort, which lies to the West of Lake Boort, is popular for recreational use. The lake is a permanently filled water body and is surrounded by copses of trees, well maintained open lawns and a loop walking trail.

Lake Lyndger to the North is separated from Lake Boort by Boort Pyramid Road. It is similar in size and character to Lake Boort. Lake Lyndger is linked to Lake Boort by a channel below the Boort–Pyramid Road.

### Lake Boort

As a result of Lake Boort being flooded in the 19th century, the previously existing Red Gum Forest which existed on the lake bed was drowned. Many of the dead Red Gum trees in the Northern portion of the lake were later felled in the late 20th century to facilitate water skiing and boating. The remaining dead trees located in the Southern half of the lake are now the most identifiable feature of the Lake Boort landscape. The dark silhouettes of the dead Red Gum trees reach up from the relatively flat lake bed, leaving a striking impression that can be enjoyed from a distance or close up.

The Western margin of Lake Boort tells the story of the modification of the Loddon Catchment. The irrigation infrastructure of channel No. 3 separates most of the reserve from the more activated edge of Little Lake Boort. The channel is bridged by a single road which is the site's only formal access point.

The edge of the Lake Boort shoreline is marked by a berm-like formation. This formation is populated by a dense woodland overstorey of the Red Gums and Black Box trees, making it clearly identifiable from the surrounding landscape.

When Lake Boort is in a drying cycle (refer top left image), the cracked yellow and red clays of the lake bed can be seen between the native grasses, which take hold when seasonal water dissipates. The exposed landscape of the lake bed, reads as an open vista. The area above eyeline is occupied only by the horizon line, the numerous large trunks of dead red gum trees and the green of a few immature redgums beginning to emerge.

Located in the South East pocket of the Lake Boort landscape, lies Kinypanial Creek, an ephemeral creek system which connects to the Loddon River and feeds Lake Boort. The creek is characterized by its steep banks, sandy berms and mature eucalypt trees which flank its bank. The creek bed is one of the deepest points within the Lake Boort Reserve and holds water long after seasonal inundation events (refer bottom left image).



Lake Boort in a drying cycle. (Haw, 2016)

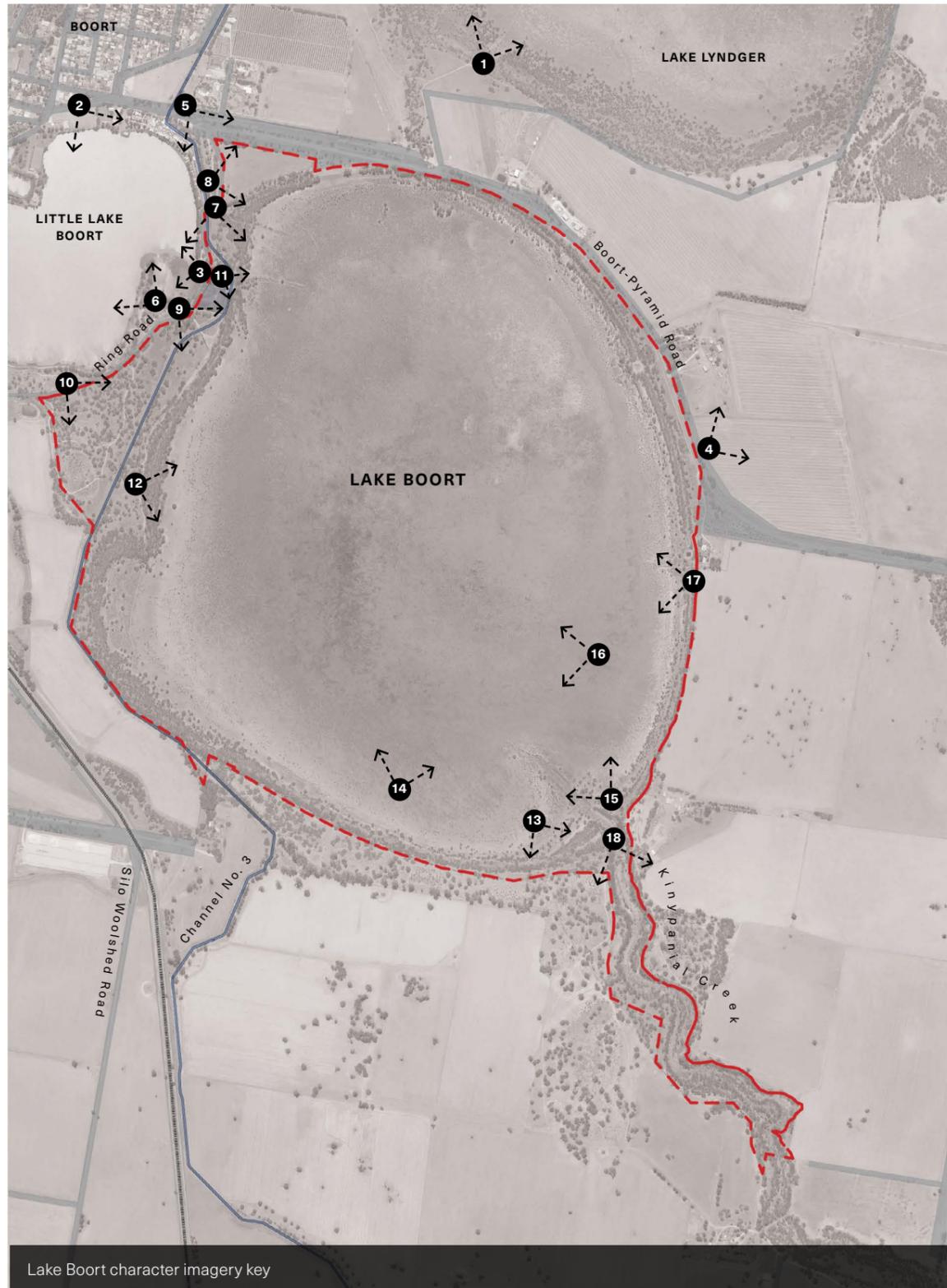


Lake Boort as a grassland. (ASPECT Studios, 2021)



Lake Boort during a seasonal inundation event. (Sharon Wells, n.d.)

## 2.4 Landscape Character Images



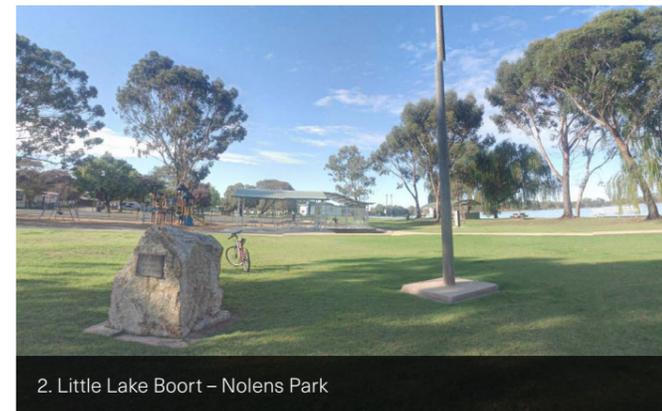
Lake Boort character imagery key



1. Lake Lyndger Lakebed



4. Farmland Adjacent Lake Boort



2. Little Lake Boort - Nolens Park



5. Entry to Ring Road from Boort Pyramid Road



3. Little Lake Boort - Boardwalk



6. Little Lake Boort - Myrong Beach

## 2.4 Landscape Character Images



7. Channel No. 3



10. Reserve West of Channel No.3



13. Emerging Red Gum Plantings on Lake Shore Line



16. Views of Lake Boort Lakebed (when inundated)



8. Lake Boort - Chinese Garden



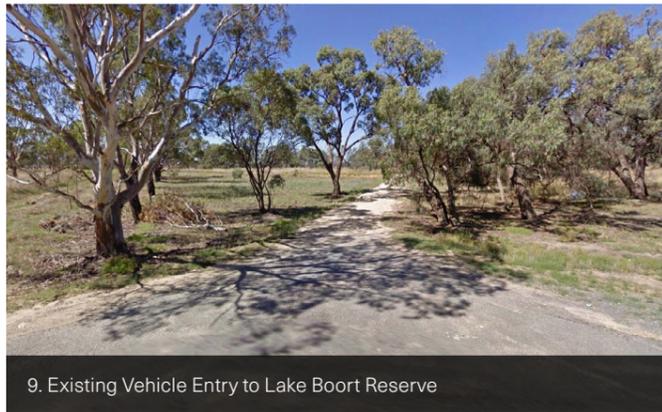
11. Channel No. 3 Water Management Infrastructure



14. Dead Red Gums Visible from Lake Perimeter



17. Views of Lake Boort from Lunette



9. Existing Vehicle Entry to Lake Boort Reserve



12. Lake Shoreline



15. Views out to Lake Bed from Kinypanial Creek



18. Views of Kinypanial Creek (when inundated)

## 2.5 Management Context

### Lake Boort Reserve Management

Lake Boort has been designated for public use since 1881. It is currently reserved under the Crown Land (Reserves) Act 1978 and managed by Parks Victoria. The site sits under 'Conservation and Recreation Zone' jurisdiction, and as such, has a management emphasis on:

- the protection of environmental and cultural values;
- the encouragement of dispersed recreation and nature-based tourism activities; and
- the provision of small-scale activities and recreation facilities which allow for activities to occur without significant impact on natural processes, which are integral also to the cultural landscape values of Lake Boort.

Lake Boort is a State Game Reserve and is thus managed in accordance with the Crown Land (Reserves) Act and Wildlife (State Game Reserve) Regulations 2014.

Parks Victoria's Lake Boort Reserve Management Plan (2018) notes that the Management of Lake Boort will include active partnerships with Dja Dja Wurrung, Victorian State Government agencies, Loddon Shire Council and the Boort community.

### Surrounding Management Context

#### Lake Lyndger Wildlife Reserve

Lake Lyndger Wildlife Reserve is an area of public land also managed by Parks Victoria.

#### Little Lake Boort Management

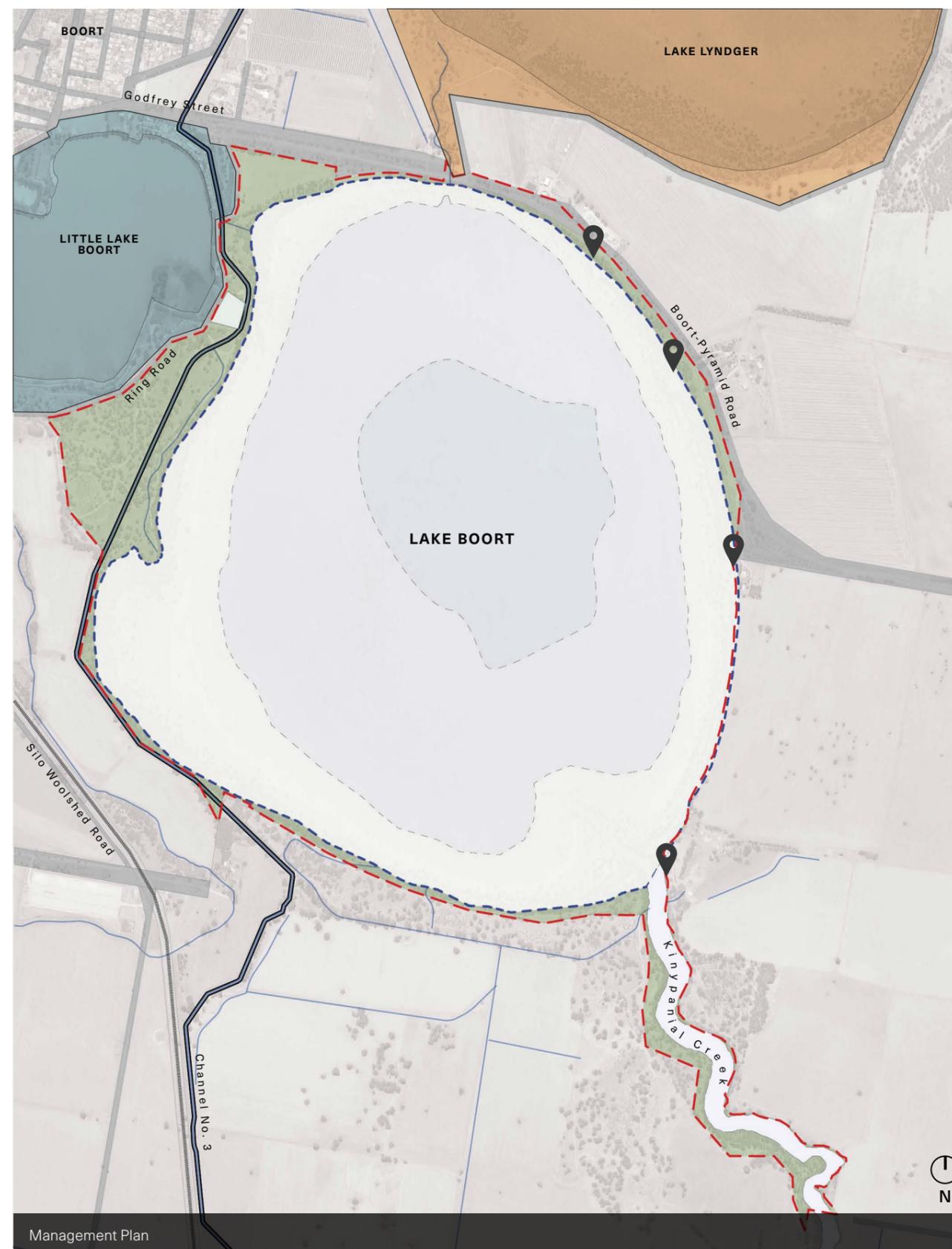
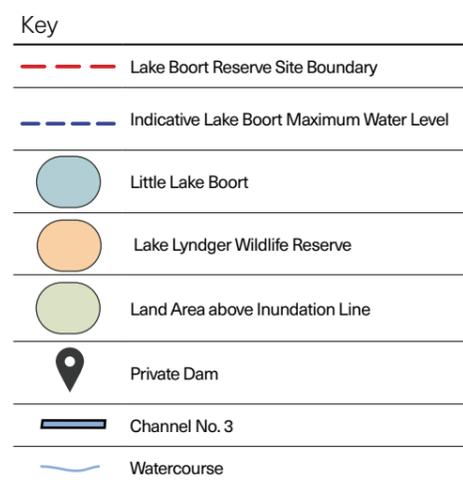
Loddon Shire Council is responsible for overall planning and management of Little Lake Boort under Section 65 of the Victorian Local Government Act. Day-to-day management of the lake and associated foreshore parklands is delegated to the Little Lake Boort Committee of Management.

### Implications on this Masterplan

This Masterplan was developed under the assumption that the existing management context of Lake Boort and the surrounding reserves will remain in operation.

Implementation of any infrastructure or works from this Masterplan will require approval and/or consent from the relevant management authority.

*For further detail on the management of Lake Boort, refer to the The Lake Boort Reserve Management Plan – March 2018 (Parks Victoria)*



## 2.6 Existing Site Infrastructure

### Existing Infrastructure

The Lake Boort site is easily accessed by car, via the Ring Road which connects to Boort-Pyramid Road. Existing public site infrastructure is limited to a short vehicle access track from the Ring Road, a walking track located to the West of Channel No.3, and a boat ramp located on the North site edge adjacent the Chinese Gardens site.

In contrast, Little Lake Boort to the West hosts extensive user amenity. The many site facilities include parking, shelters, toilets, picnic/barbeque areas and play equipment. Little Lake Boort also features a popular loop walking/cycling trail which connects to the existing Lake Boort walking track.

Parks Victoria has recently received a grant from the Victorian Government as part of the 'Victorian Great Outdoors Program' to develop a small camp ground near the existing Lake Boort public Vehicle Entry.

### Temporary Keeping Place

Local Boort resident Paul Haw currently runs the 'Yung Balug Temporary Keeping Place' on his property, which is situated on the lunette hill on the East side of Lake Boort. The Temporary Keeping Place displays a large collection of Yung Balug Clan artefacts, making it a popular tourist destination for people visiting the Boort area.

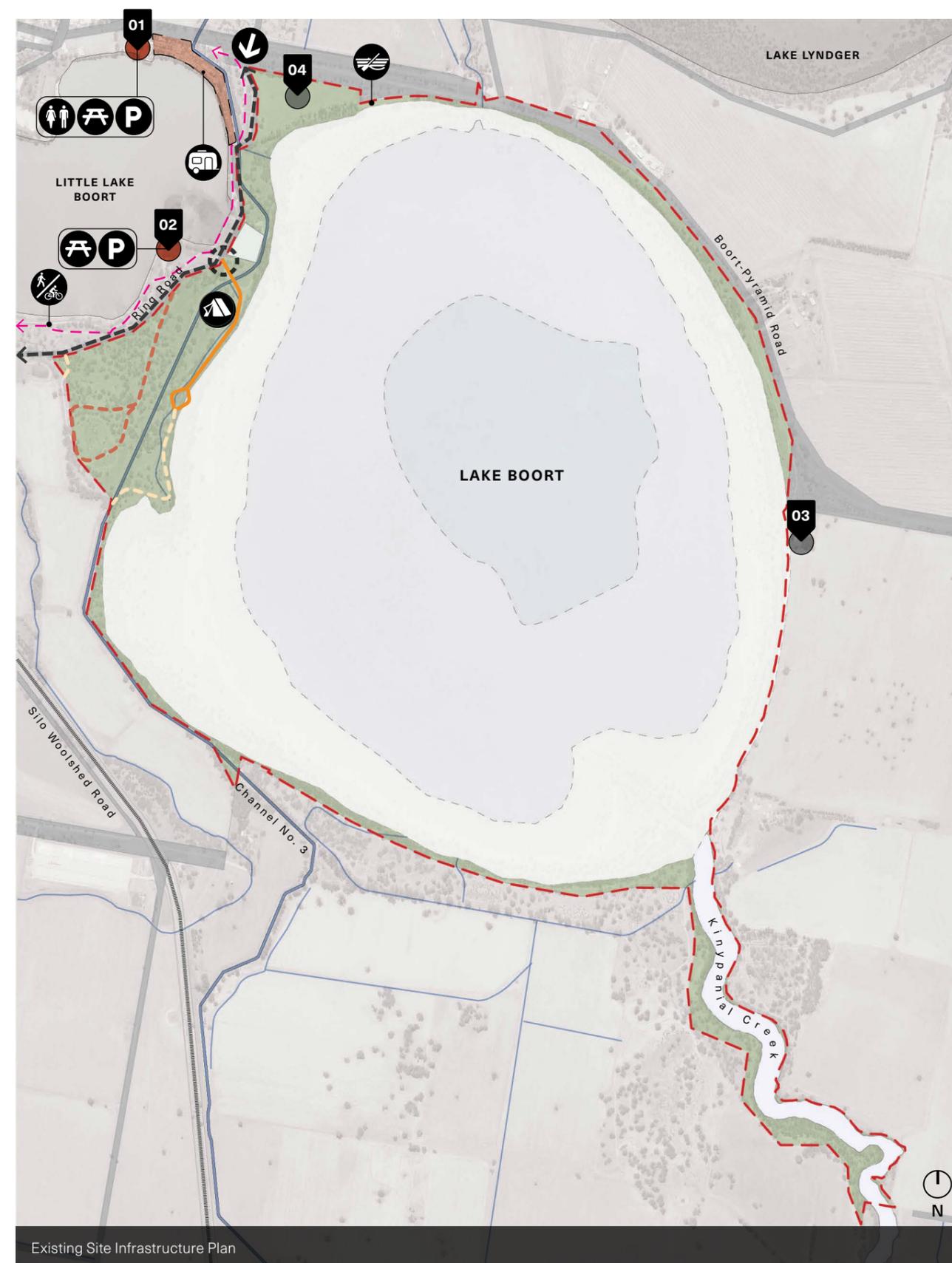
### Implications on Masterplan

- Future infrastructure proposed as part of this Masterplan should align with the proposed future development of the Lake Boort Camp Site, so as to minimise the impacts on cultural and environmental site values; and
- There is an opportunity to connect any proposed Lake Boort trail networks with the existing Little Lake Boort facilities and infrastructure, thus strengthening amenity of both.

### Flood Mitigation

Loddon Shire Council is currently exploring flood mitigation options for the town of Boort. One mitigation option is the installation of a levee, located along the Eastern perimeter of the Boort township, part of this proposed levee would be located within the Lake Boort Reserve.

Key	
	Site Boundary
	Lake Boort Walking Track
	Public Vehicle Access
	Little Lake Boort Trail
	Lake Boort Vehicle Entry
	Ring Road
	Lake Boort Boat Ramp
	Future Camp Site Location
	Entry From Boort-Pyramid Road
	Nolens Park (Little Lake Boort)
	Myrong Beach (Little Lake Boort)
	Yung Balug Temporary Keeping Place
	Chinese Garden



## 2.7 Planning, Overlays and Heritage

There are multiple planning considerations within the Lake Boort Reserve. Below is a summary of planning legislation that applies to the site. Lake Boort is within the Loddon Planning Scheme

### Planning Zones

One key Planning Zone applies to the Lake Boort Reserve site, The Public Conservation and Resource Zone (PCRZ).

### Planning Overlays

#### Environmental and Landscape Overlays

These overlays seek to protect vegetation or landscape features of the area:

- Environmental Significance Overlay – Schedule 1 (ESO1); and
- Vegetation Protection Overlay – Schedule 1 (VPO1).

#### Land Management Overlays

These overlays are used to signify land with potential issues that may require advice or approval from a statutory authority:

- Land Subject to Inundation Overlay Schedule (LSIO); and
- Floodway Overlay Schedule (FO).

#### Other Overlays

- Specific Controls Overlay – Schedule 2 (SCO2). (Note an SCO which allows specific controls to be applied to particular land and permits the exclusion of other planning scheme requirements.)

### Heritage Controls

#### Areas of Aboriginal Cultural Heritage Sensitivity

The entire site is considered to be an area of Aboriginal Cultural Heritage Sensitivity. These areas sit within the Aboriginal Heritage Regulations 2018. A Cultural Heritage Management plan (CHMP) is required for areas where new works or infrastructure are proposed at the Lake Boort site.

#### Heritage Inventory:

Two sites within the Lake Boort Reserve are registered on the Victorian Heritage Inventory:

- The Lake Boort Dam site, located near the mouth of Kinypanial Creek; and
- The Chinese Gardens site located at the North West extent of the site. These sites are protected under the Victorian Heritage Act 1995.

#### Bushfire Prone Areas

The site is within a designated Bushfire Prone Area (BPA). As such, any new buildings or building alterations/additions must meet the bushfire prone area requirements of the National Construction Code.

#### Implications on Masterplan

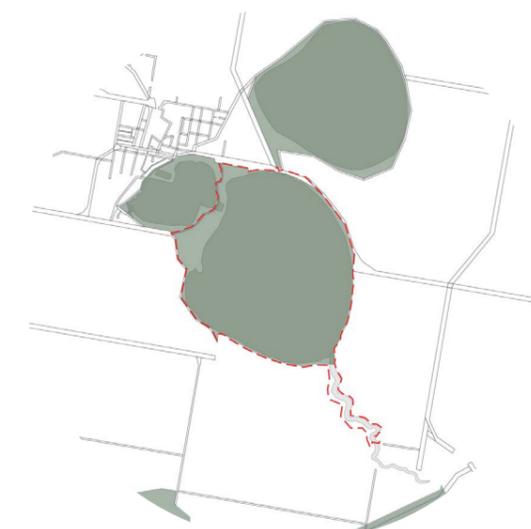
All proposed works will be subject to the relevant planning controls and heritage requirements prior to implementation.



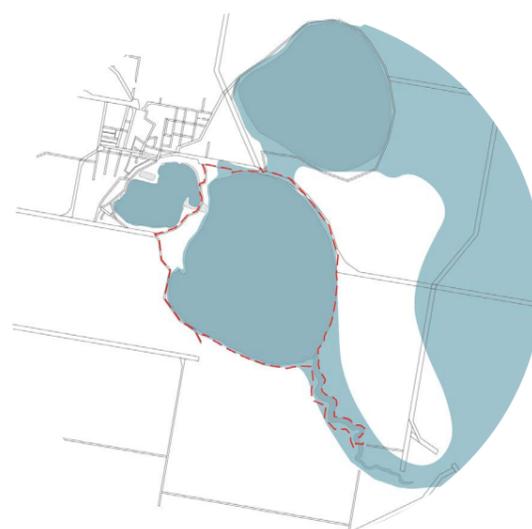
Public Conservation and Resource Zone (PCRZ)



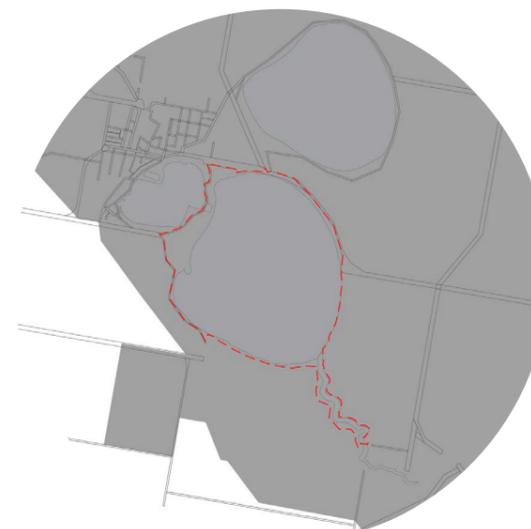
Environmental Significance Overlay



Vegetation Protection Overlay



Floodway Overlay



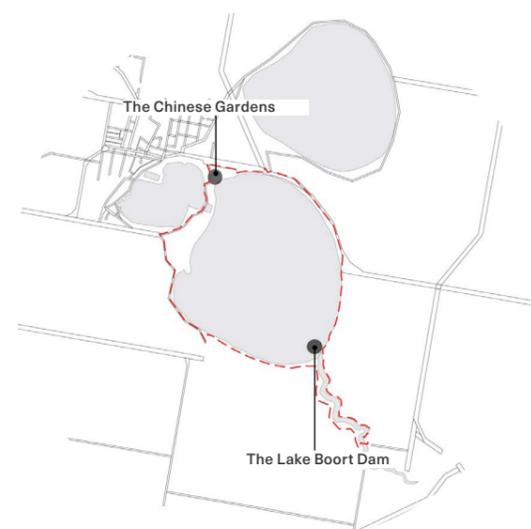
Specific Controls Overlay



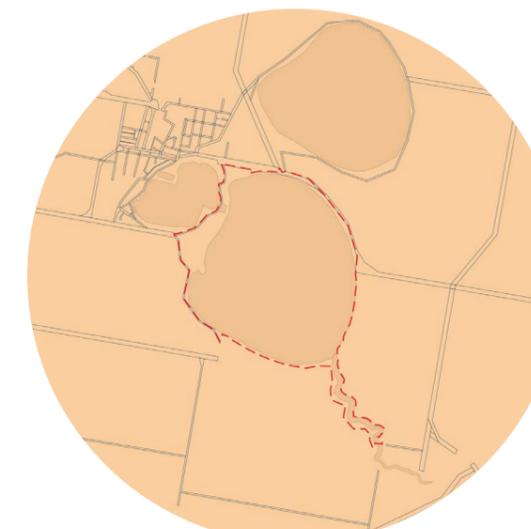
Land Subject to Inundation Overlay



Areas of Aboriginal Cultural Heritage Sensitivity



Heritage Inventory Locations



Bushfire Prone Areas

## 2.8 Ecological Context

### Vegetation

Lake Boort is situated within the Victorian Riverina Bioregion. The site is predominantly made up of three main vegetation classes:

- The Red Gum Swamp Ecological Vegetation Class (EVC), which is the dominant vegetation class and is located within the lake bed;
- Wetlands Formation – The Plains Woodland EVC, which encircles the lake and is clearly identifiable from the canopy of the black box trees that have taken hold on the lake's shore formation; and
- The Lignum Swamp EVC, which has established in the deeper sections of the Kinyipanal creek system.

All three Ecological Vegetation Classes within the Lake Boort area are considered endangered or vulnerable within the Victoria Riverina Bioregion.

### Fauna

Lake Boort is considered a site of bioregional importance due to its high habitat value and diversity. Lake Boort is home to several threatened and vulnerable species, including the Freckled Duck, the Hardhead, Royal Spoonbill, Little Egret, Eastern Great Egret, White-bellied Sea Eagle, Glossy Ibis, Brolga, Whiskered Tern, Grey-crowned Babbler and the Brown Treecreeper (NCCMA 2017).

Many species which occupy Lake Boort are considered water-dependent and require the presence of water in the Lake for food, habitat, breeding and nesting. The Wetland is highly productive when water is present, thus the provision of an appropriate watering regime is critical to fostering a healthy ecological condition at the Lake Boort.

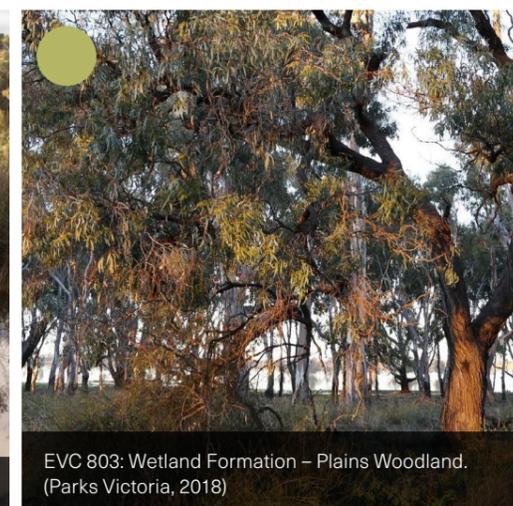
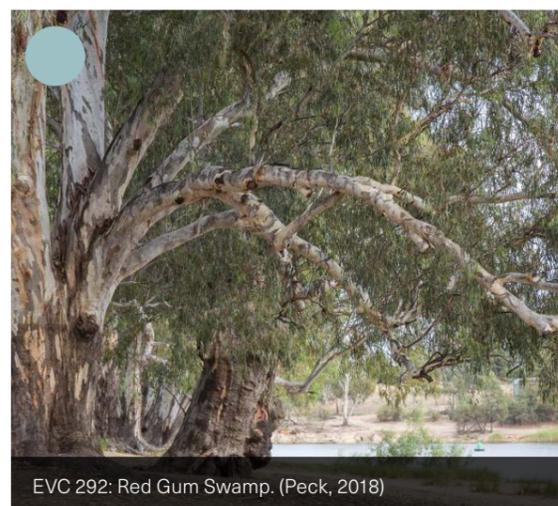
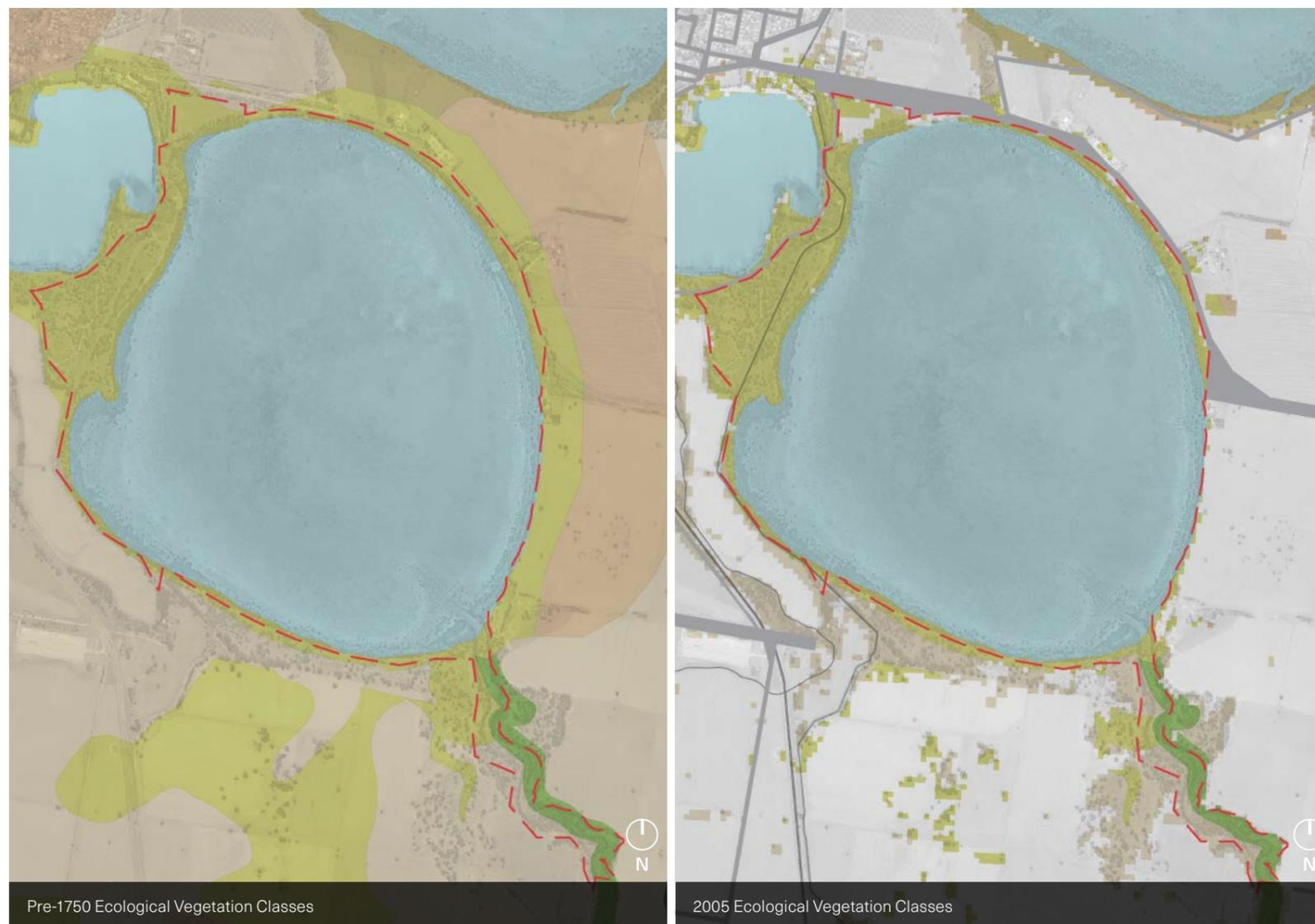
### Site Geology

Many former swamps in this landscape, including Lake Boort, are bordered by a crescent shaped dune known as a lunette, which formed from wind-blown sand during the Late Quaternary period. These lunettes are a dominant landscape feature, occurring on the Eastern edges of the swamps. The township of Boort is located on the highest ridge of the local dune complex. The lunettes across the Boort Wetland region are all identified to be of Aboriginal Cultural sensitivity.

### Implications on Masterplan

The health and management of the Lake Boort ecology and biodiversity has been noted as being of high importance throughout the Lake Boort Masterplan engagement.

The future design and planning of any proposed site infrastructure will need to consider appropriate installation and construction techniques, which are considerate of the site's ecological importance. The ongoing management of human impact on Lake Boort's ecology should also be a primary consideration of any future planning and design work.



Key	
	EVC 803: Wetlands Formation - Plains Woodland
	EVC 104: Lignum Swamp
	EVC 66: Low Rises Woodland
	EVC 292: Red Gum Swamp
	EVC 803: Plains Woodland

## 2.9 Hydrological Context

### Wetland Context

Lake Boort forms part of a series of wetlands that stretch across the Northern plains from Boort to Kerang. It is classified as a temporary floodplain lake, which is one of the most depleted wetland types in Victoria (Parks Victoria 2018). The wetland portion of the Lake Boort reserve makes up over 400ha of the 502ha site.

### History

The catchment surrounding Lake Boort is a highly regulated system and has been the subject of numerous landscape modifications since European settlement. Lake Boort was originally an intermittent wetland that was naturally inundated by Kinypanial Creek floodwaters (NCCMA 2012), however the introduction of an artificial water regime between 1850 and 1997 resulted in Lake Boort being permanently filled with water. In the late twentieth century, new infrastructure was constructed at Lake Boort, which returned the lake to a more natural wetting and drying cycle.

### Current Regime

Currently Lake Boort receives significant flows from the Loddon River (to the East) via distributary flows during flood events; and from overland flows from the Borung Plains to the West. Large natural flood events such as those which occurred in 2011 and 2016 still inundate the lake.

The restoration of Lake Boort as a temporary floodplain lake and the preservation of the site's fragile cultural values are currently guiding the further development of the Lake Boort Environmental Water Management Plan.

The dynamic hydrological context of Lake Boort creates a unique and ephemeral landscape experience. Depending on which point in the seasonal cycle the lake is observed, it can appear as a full water body, a dry and cracked lake bed, or an abundant grassland.

### Implications on Masterplan

The management of water flow into Lake Boort was found to be of key importance to stakeholders during the engagement process. The need for increased water flow was noted to be important to the success of the Lake Boort Masterplan for the following reasons:

- Maintaining and enhancing cultural site values;
- Maintaining and enhancing environmental values;
- Management of environmental weeds; and
- Controlling fire risk.

Any future planning and development of the Lake Boort site will need to carefully consider the hydrological context of the lake in relation to the alignment of paths, proposed heights of boardwalks and the location of site facilities (e.g. shelters, toilets and parking).



Looking West over Lake Boort during the 2011 flood event. (Sue Forster, 2018)



Lake Boort when inundated with seasonal water. (James Hackel, 2018)



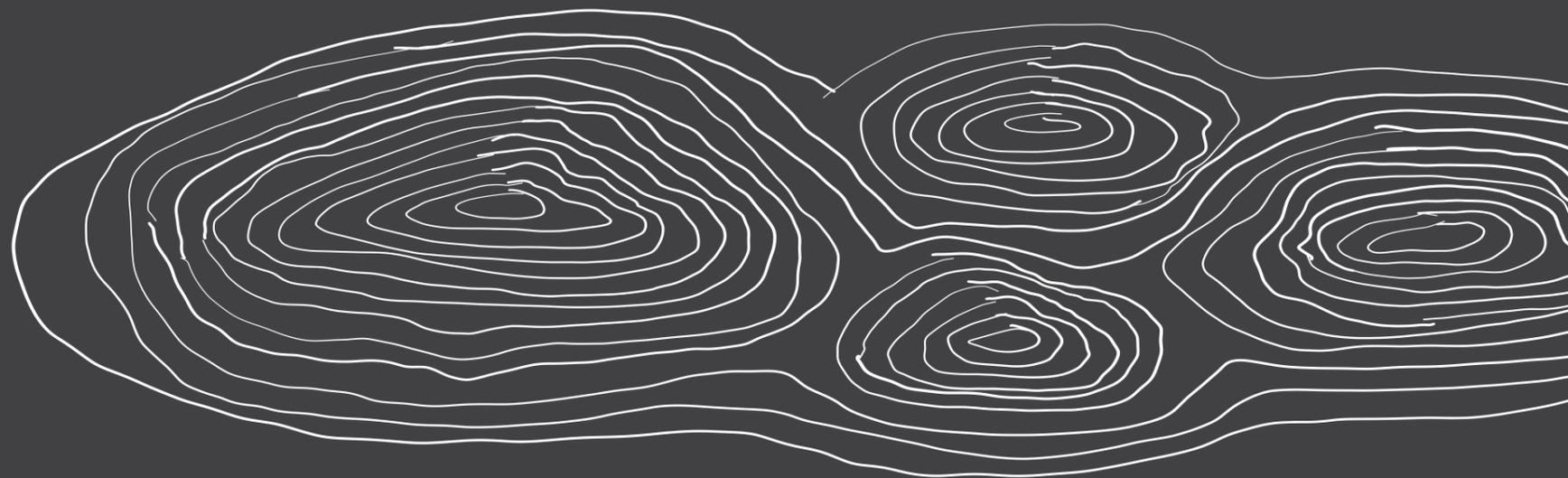
A scarred tree on the dry lake bed of Lake Boort. (Haw, 2016)



Kinypanial Creek weir constructed in the early 20th century. (unknown, n.d.)

Section 3

# Engagement Summary



### 3.1 Project Engagement and Concept Development Process

#### Overview

The development of the Lake Boort Scarred Trees Masterplan project was comprised of a four stage process. Each stage involved a number of engagement workshops, tasks and outputs. The stages were as follows:

- Stage 1 – Understanding Place and Country;
- Stage 2 – Concept Option Engagement;
- Stage 3 – Final Concept Engagement; and
- Stage 4 – Finalising the Concept and Masterplan.

#### Stage 1 – Understanding Place and Country

At the commencement of the project the project team undertook a desktop study of relevant background documents and information, closely followed by a site visit to Lake Boort and several stakeholder workshops. The focus for Stage 1 was to understand and establish the project ambitions, vision and aspirations.

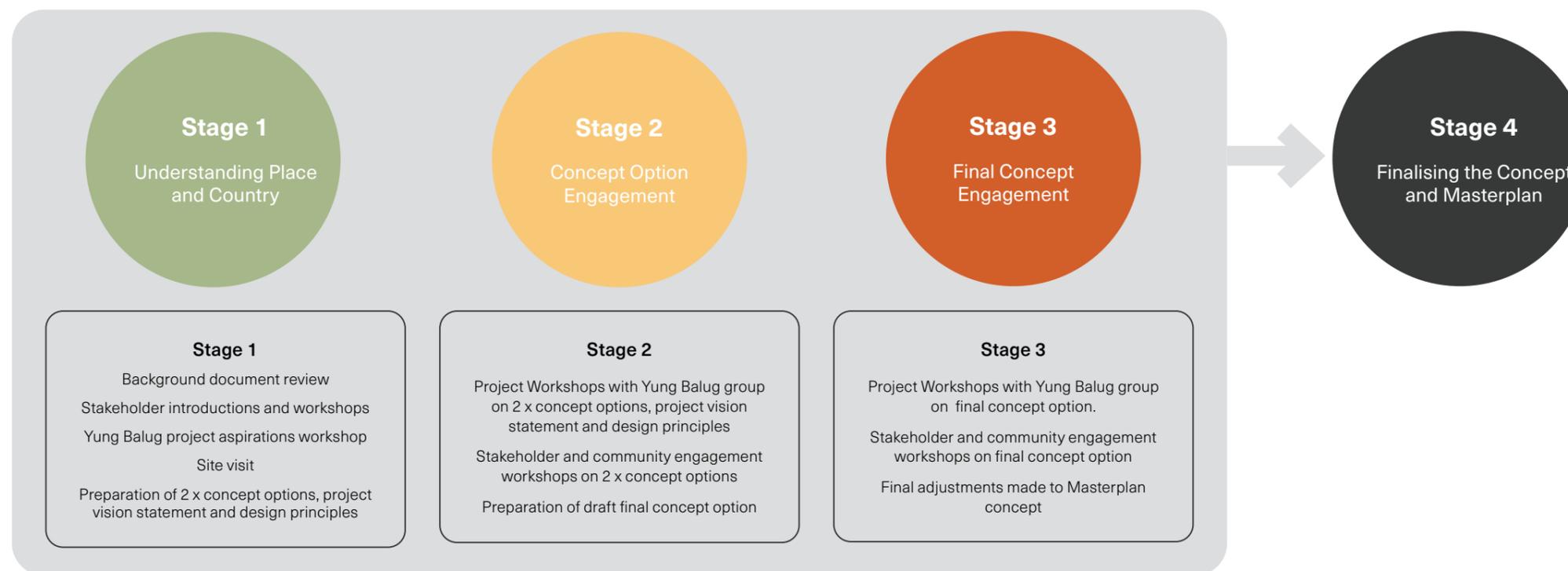
The desktop study of relevant background documents included the below core background documents, as well as supplementary documents and material that were provided to the project team.

#### Core Background Documents

- The Lake Boort Reserve Management Plan – March 2018 developed by Parks Victoria;
- Healthy Country Plan – Dja Dja Wurrung; and
- Lake Boort Environmental Water Management Plan – February 2012 – Developed by North Central CMA.

#### Core Meetings

- Site visit: the project team were able to experience and learn about Lake Boort, its environment and its cultural significance in greater detail under the guidance of Yung Balug man and Parks Victoria member Andrew Travis;
- The project team held a number of workshops and follow up meetings with Yung Balug clan members to provide the greatest possible opportunity to allow for direct engagement with members at that time;
- Project team presented a project update to Loddon Shire Councillors;
- A number of separate stakeholder project ambition workshops were held to discuss project drivers, aspirations and priorities. Workshops included representatives from Loddon Shire Council, Dja Dja Wurrung, Parks Victoria, North Central CMA, First Peoples State Relations and the local community; and
- In support of stakeholder workshops, several one-on-one meetings were held with a diverse range of stakeholders who have extensive knowledge of the Lake Boort site. In these meetings, participants outlined their aspirations for the Lake Boort Scarred Trees Masterplan and helped to identify key opportunities and challenges.



Project Engagement Diagram

#### Stage 2 – Concept Option Engagement

Following Stage 1, a Vision Statement, Design Principles and two Concept Plans were developed for further engagement. This subsequent engagement was separated into two phases.

##### Phase 1

Project design principles and Masterplan concept options were presented to Yung Balug and the core stakeholder group over a number of workshops. These workshops provided opportunities to further explore project aspirations, built form and project opportunities/constraints, prior to engaging the wider stakeholder group and the public on the Masterplan concept options. Additionally, a project update was presented to Loddon Shire Councillors.

##### Phase 2

Following phase 1, the two concept plans were updated to incorporate stakeholder feedback. The two concepts were then presented at two subsequent engagement workshops:

- Workshop 1 – Broader Stakeholder Group Engagement Workshop; and
- Workshop 2 – Public Engagement Workshop.

In these sessions, participants had an opportunity to identify the opportunities and constraints of each concept. Feedback was specifically sought in regard to the different experiences that could be had at Lake Boort, the access and circulation of the lake and how the Western bank of the lake could be developed in order to facilitate increased cultural and environmental tourism.

Stage 2 allowed stakeholders to further develop a shared understanding and of the project vision before the development of a final concept option.

#### Stage 3

Following Stage 2, a single Masterplan concept draft was developed. The draft was developed in response to feedback on the two concepts provided in the previous stage. The final draft incorporated elements of both the previous two concepts. Prior to the final concept being take to the broader stakeholder group and community, the concept was presented to both Dja Dja Wurrung and Yung Balug. The final concept draft was then presented at two presentation workshops:

- Workshop 1 – Broader Stakeholder Group Presentation Workshop; and
- Workshop 2 – Public Presentation Workshop.

In these sessions, participants had an opportunity to provide final feedback before Masterplan concept was finalised. Feedback was specifically sought in regard to the development of mapped site experiences and the proposed site facilities and infrastructure.

Stage 3 allowed stakeholders to identify if any previous feedback had not been incorporated in the development of the final concept and for the project team to further clarify the Masterplan intent with the broader stakeholder group and local community.

#### Engagement Sessions Summary

Date	Engagement Involvement
Sept 2021	Commencement.
11 Oct 2021	Initial start up online meeting with Project Steering Group
27 Oct 2021	Site Visit with Andrew Travis, Parks Victoria. Online meeting with key stakeholders. Meeting with neighbouring local land owner.
1 Nov 2021	Online meeting with Dja Dja Wurrung.
1 & 10 Nov 2021	Online meeting with stakeholders including Parks Vic.
9 Nov	Meeting with Djaara members.
18 Nov	Meeting with Yung Balug Clan members (previous post phonement).
22 Nov	Meeting with Yung Balug Clan members.
30 Nov	Online Public Meeting
Nov 2021 to April 2022	Numerous communications (email, phone calls) with Yung Balug Clan members . Various communications (email, phone calls) with Djandak organisation. A number of online meetings with core stakeholder group. Two online meetings with Project Steering Group.
9 Feb 2022	Online meeting with key stakeholders associated with Lake Boort.
February to April 2022	Various discussions with landowners surrounding Lake Boort.
11 Feb 2022	Online public meeting.



## 3.2 Engagement Key Themes

Feedback and insights received throughout the engagement and concept development phases have been grouped into the following five Key Themes:

1. Visitor Experience;
2. Access and Circulation;
3. The Enhancement and Protection of Site Values;
4. Community Benefit; and
5. Site Safety and Management.

### Visitor Experience

Participants in the engagement process expressed a strong sentiment that the visitor experience at Lake Boort should focus on revealing the cultural and environmental site values. Much of the feedback related to revealing the site values with interpretive signage and digital tourism.

Identified visitor experience opportunities:

- Traditional Owner interpretation and storytelling through digital tools (augmented reality and phone applications);
- The use of entrance markers and art structures;
- Telling the story of the tree scarification process and the etching of barks;
- Telling dreaming stories of the Dja Dja Wurrung people;
- Interpretative signage and digital storytelling incorporating the Yung Balug totem of the Spotted Quoll;
- Emphasising sunset and sunrise experiences and experiences in the design of paths and boardwalks;
- Providing interactive play and education opportunities;
- Consideration of the unique seasonal characteristics of the Lake Boort landscape in the design of boardwalks and trails; and
- Provision of facilities for cultural education and demonstrations.

### Access and Circulation

The challenges of providing greater access and circulation to the Lake Boort reserve made it a contentious topic throughout the engagement process. Feedback predominantly related to the need for defined visitor access that was sensitive and did not significantly impact cultural and environmental site values.

Identified access and circulation opportunities:

- A sensitively designed loop track should be introduced around Lake Boort;
- Cycling access into the Lake Boort reserve should be explored, due to the scale of the lake and the proximity to the Little Lake Boort cycling trail;
- Designs should identify links to the Boort township, Boort Hill, Little Lake Boort and Lake Lyndger;
- The design of paths and boardwalks should incorporate equal access path;
- There is an opportunity for sensitively designed boardwalks to provide access to Kinypanial Creek;
- Designs should consider additional formal access points for non-motorized boats onto the lake;
- The introduction of a bridge over Kinypanial Creek is important for safe crossing when the lake is inundated; and
- The design of boardwalks should allow for users to step down onto the lake bed at key points.

**Enhancement and Protection of Site Values**

Community feedback around enhancement and protection of site values illustrated a strong interest in safeguarding the culture and environment around Lake Boort. The community acknowledged the complex site ecology and that it requires informed land management, which should be led by Dja Dja Wurrung. Additionally, the engagement revealed that the community wishes to prioritise preservation of Lake Boort’s cultural values, both tangible and intangible.

Identified opportunities for enhancement and protection of site values:

- More robust infrastructure is required to restrict motor vehicle access in the reserve;
- Further consideration of the location of boardwalks and paths is required, once a CHMP is completed;
- Circulation design should acknowledge which areas should only be accessed with a guide;
- A boardwalk should be located over the existing weir (Lake Boort dam) to ensure suitable protection;
- Future paths should be designed with consideration to protecting site artefact’s;
- Providing digital, informational and interpretive signage which highlights significance of Lake Boort;
- Acknowledging that intangible cultural values at Lake Boort are just as important as those that are tangible;
- Identifying key land management and rehabilitation areas, which should be revegetated with endemic species;
- Increased environmental watering to the site, thus aligning Lake Boort more closely to its historic wetting and drying cycles;
- Facilitating and supporting cultural burn practices, as led by Dja Dja Wurrung; and
- Firewood cannot be collected from reserve – it can be brought in but should influence the design of experiences.

**Community Benefit**

Throughout the engagement process, participants emphasised the importance of future development of Lake Boort providing direct benefits to the Local Boort community and to the Dja Dja Wurrung peoples.

Identified potential community benefits included:

- Strengthening the local economy by way of increased tourism;
- Provision of site facilities which support community events;
- Provision of site facilities which support Dja Dja Wurrung gathering on country, undertaking cultural land management and hosting ceremonies;
- Provision of site facilities which support Dja Dja Wurrung leading cultural tourism at Lake Boort; and
- The development of a Cultural and Education Centre at Lake Boort for the local Yung Balug group to keep site artefact’s.

**Site Safety and Management**

Several recurring safety and management issues were identified during the engagement process. These concerns principally related to the following three items:

1. Fire: The risk of fire to cultural values/artefact’s, environmental values, site users and proposed infrastructure;
2. Flooding: The risk that flooding may pose to proposed site infrastructure and how it may limit safe access around the lake; and
3. Competing Uses: The risk that incompatible site functions pose to visitors, such as tour groups at Lake Boort during duck hunting season.

Throughout the engagement process, opportunities were identified for mitigating these risks, which included:

Fire Risk Mitigation measures:

- Dja Dja Wurrung undertaking cultural burning; and
- Increasing environmental water flows to Lake Boort to kill off invasive plant species across the lake bed.

Flood Risk Mitigation:

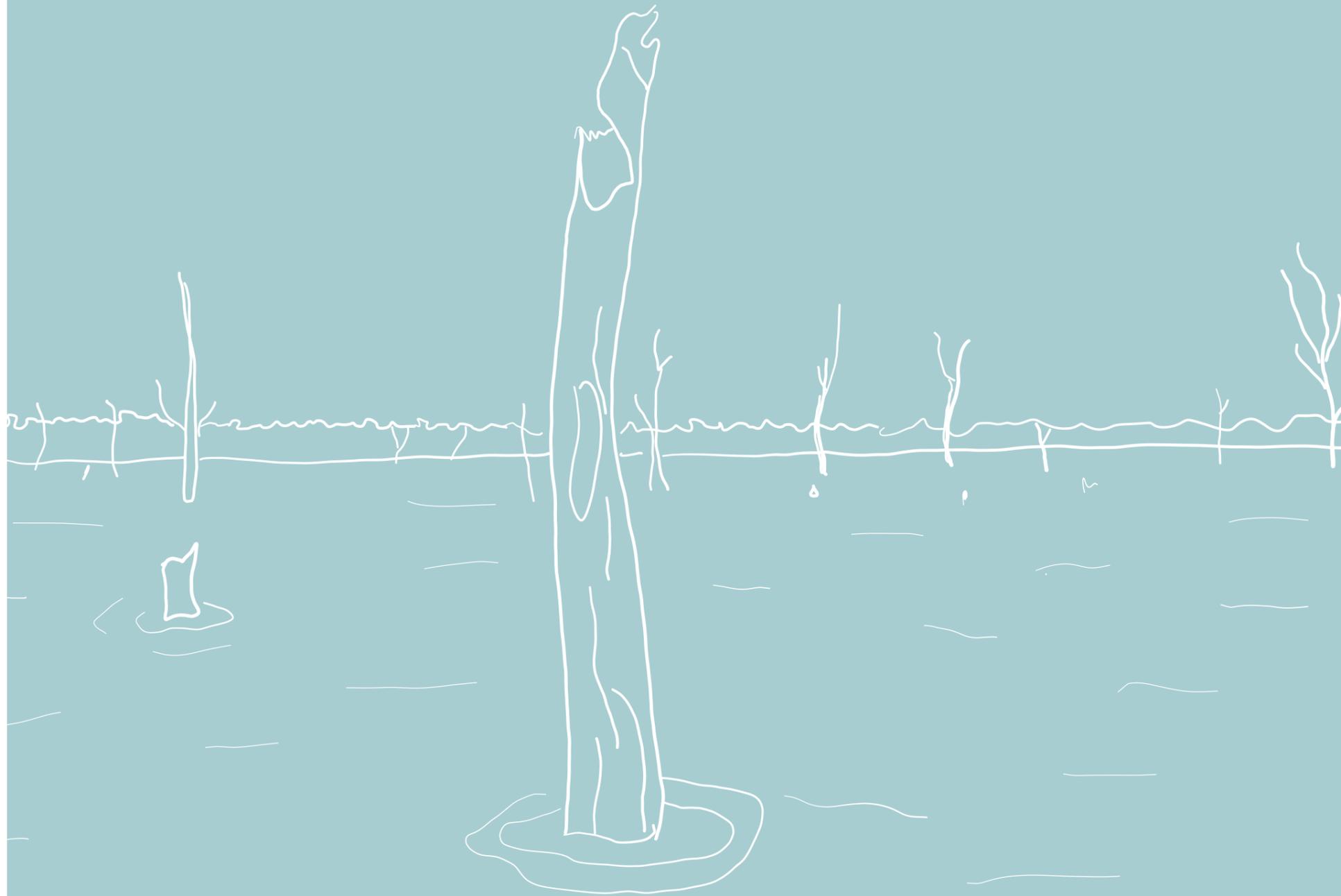
- Careful considerations of flood levels and water flows around key infrastructure (i.e. boardwalks); and
- Regulatory signage to inform users of the wetland characteristics of Lake Boort and the implications of fluctuating water levels on access and circulation.

User Group Conflict Mitigation:

- Restricting site access to tourists/day visitors during duck hunting season;
- Introducing regulatory signage to inform users of the seasonal duck hunting activity; and
- Management bodies such as Parks Victoria and Dja Dja Wurrung providing information on their websites to inform users of the seasonal duck hunting activity.

# Concept Design and Visitor Experience

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## 4.1 Masterplan Concept

### Concept Development

The Lake Boort Scarred Trees Masterplan concept has been developed to celebrate, share and protect the cultural values of the landscape. Lake Boort is a deeply significant location, both culturally and ecologically – a message that is crucial to imprint on visitors.

The Masterplan identifies mostly small-scale infrastructure which will enable visitors to access and enjoy the cultural and seasonal aspects of Lake Boort while safeguarding its cultural values. Carparking offers ease of access to Lake Boort, while a network of trails and boardwalks carry visitors through the landscape. The community and activity area is rich with amenity for all user types, including shelters, a playspace, viewing platforms, toilets and carparking. Interpretive and wayfinding signage/elements have also been incorporated to support and guide visitor journeys.

These experiences are inspired by the deep connection to Country that the Dja Dja Wurrung community holds to Lake Boort.

The concepts consider that paths and boardwalks within the lake reserve should:

- be sensitively designed to consider tangible and intangible cultural site values;
- protect important and fragile cultural sites within the reserve; and
- be designed in collaboration with Dja Dja Wurrung.

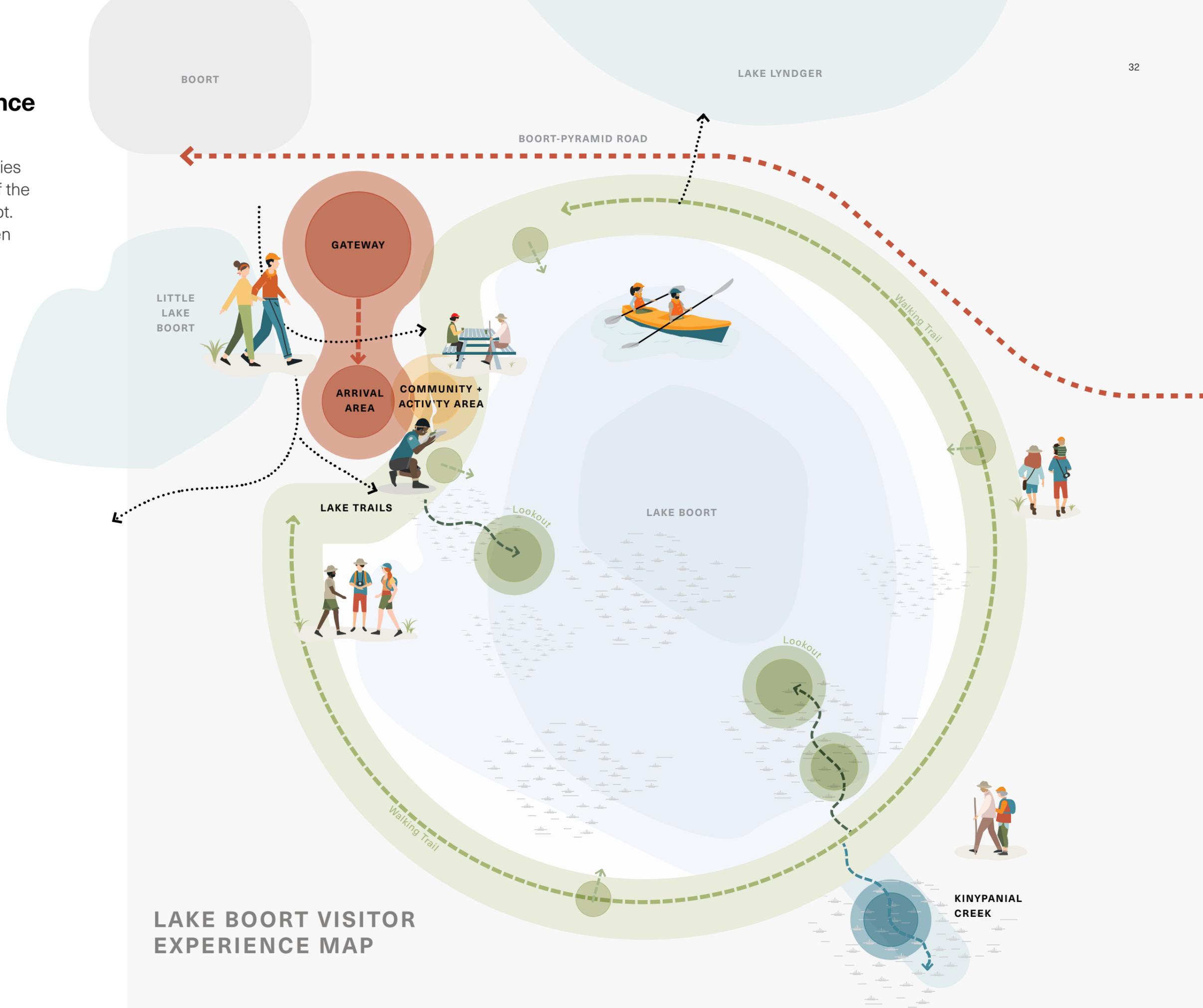


Artists impression of boardwalk experience at Lake Boort

## 4.2 Visitor Experience

The adjacent diagram identifies the key visitor experiences of the proposed Lake Boort concept. These experiences have been broken out into the following logical project stages:

- Arrival and Community Area;
- Southern Lake Trails;
- Northern Lake Trails; and
- Kinypanial Creek.



**LAKE BOORT VISITOR EXPERIENCE MAP**

### 4.3 Masterplan Concept – Overall Plan



Key

- 1** **Lake Boort - Existing**  
Lake Boort inundation area

---

- 2** **Little Lake Boort - Existing**  
Permanently inundated Little Lake Boort

---

- 3** **Scarred Trees - Existing**  
Lake Boort scarred tree. Trees to be visually accessible, but protected from visitors

---

- 4** **Channel no.3 - Existing**  
Seasonal river

---

- 5** **Lake Boort Trail - Proposed**  
Gravel track around perimeter of Lake Boort. Pathway to be shared between pedestrian and cyclists.

---

- 6** **Little Lake Boort Trail - Existing**  
Existing trail around perimeter of Little Lake Boort

---

- 7** **Trail Connection - Proposed**  
Pathway link between Lake Boort trails and Little Lake Boort trail

---

- 8** **Kinypanial Creek - Existing**  
Ephemeral creek flowing into Lake Boort

---

- 9** **Boardwalk - Proposed**  
Elevated boardwalk structure across lake bed

---

- 10** **Activity Area - Proposed**  
Activated and amenity filled community space

---

- 11** **Campground (by others) - Proposed**  
Small camping area to be designed by others

---

- 12** **Nature Play Area - Proposed**  
Interpretive nature play area for all ages and abilities

---

- 13** **Cultural Induction Point - Proposed**  
Dja Dja Wurrung and Yung Balug designed. Central hub of community area

---

- 14** **Rest Point - Proposed**  
Small graveled stopping point off Lake Boort trail. To include seating and signage

---

- 15** **Carpark - Proposed**  
Formalised carpark to accommodate independent day visitors and larger groups

---

- 16** **Gateway - Proposed**  
Gateway and arrival area with signage and artwork

---

- 17** **Chinese Garden - Existing**  
Existing historical garden

Masterplan Concept – Overall Plan



Artists impression of seasonal experience at Lake Boort

## 4.4 Masterplan Concept – Detail Areas



Key

- 1** **Lake Boort - Existing**  
Lake Boort inundation area

---

- 2** **Little Lake Boort - Existing**  
Permanently inundated Little Lake Boort

---

- 3** **Scarred Trees - Existing**  
Lake Boort scarred tree. Trees to be visually accessible, but protected from visitors

---

- 4** **Channel no.3 - Existing**  
Seasonal river

---

- 5** **Lake Boort Trail - Proposed**  
Gravel track around perimeter of Lake Boort. Pathway to be shared between pedestrian and cyclists.

---

- 6** **Little Lake Boort Trail - Existing**  
Existing trail around perimeter of Little Lake Boort

---

- 7** **Trail Connection - Proposed**  
Pathway link between Lake Boort trails and Little Lake Boort trail

---

- 8** **Kinypanial Creek - Existing**  
Ephemeral creek flowing into Lake Boort

---

- 9** **Boardwalk - Proposed**  
Elevated boardwalk structure across lake bed

---

- 10** **Activity Area - Proposed**  
Activated and amenity filled community space

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- 11** **Campground (by others) - Proposed**  
Small camping area to be designed by others

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- 12** **Nature Play Area - Proposed**  
Interpretive nature play area for all ages and abilities

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- 13** **Cultural Induction Point - Proposed**  
Dja Dja Wurrung and Yung Balug designed. Central hub of community area

---

- 14** **Rest Point - Proposed**  
Small graveled stopping point off Lake Boort trail. To include seating and signage

---

- 15** **Carpark - Proposed**  
Formalised carpark to accommodate independent day visitors and larger groups

---

- 16** **Gateway - Proposed**  
Gateway and arrival area with signage and artwork

---

- 17** **Chinese Garden - Existing**  
Existing historical garden



Artists impression of canoeing experience at Lake Boort

## 4.5 Visitor Infrastructure and Site Experience Glossary

### Proposed Items

	Parking	Formalised carpark to accommodate independent day visitors and larger groups. Surface finish likely to be gravel. Note additional parking provision is accessible at nearby Little Lake Boort.
	Tour Bus Arrival	2 x large parking bays for drop off and pick up of tour groups. Clear and accessible paths will connect bus arrival area to community area.
	Existing Holiday Park	Boort Lakes Holiday Park to support short and long stays.
	Information Signage	Practical signage with wayfinding, safety and site information.
	Digital Experience	Site specific app with local history, storytelling, wayfinding and educational components.
	Enhanced Landscape	Rehabilitated vegetation to promote ecological resilience, delineate corridors, and enhance landscape experience.
	Gathering on Country	Dedicated facilities for Dja Dja Wurrung and Yung Balug community members to meet and gather on site.
	Cultural Tours	Guided tours of key cultural spaces or artefact's to be undertaken by Dja Dja Wurrung people.

### Proposed Items

	Star Gazing	Secluded vantage point for star gazing.
	Seasonal Experience	Key location to observe the seasonal changes of Lake Boort.
	Seating	All abilities picnic table and bench seats.
	Walking Trail	Gravel track around perimeter of Lake Boort. Pathway to be shared between pedestrian and potentially cyclists. Surface finish likely to be gravel.
	Crossing Point/ Pathway	Pathway link between Lake Boort trails and other trail networks.
	Lookout	Lookout point along boardwalks of varying sizes. Larger lookouts will be able to host small to medium sized events.
	Interpretive Signage	Interpretive signage and art features at strategic locations throughout site. Design to draw on Lake Boort's culture and history. To be co-designed with Dja Dja Wurrung and Yung Balug.
	Shelter	Dja Dja Wurrung and propriety shelter to central hub of community area.

### Proposed Items

	Sunrise/ sunset Experience	Key location to observe the sunset or sunrise at Lake Boort.
	Bathrooms	All gender and all abilities bathroom facilities.
	Play Area	Interpretive nature play area for all ages and abilities. Design to draw on Lake Boort's cultural and environmental values.
	Accessible Space	Area designed to promote ease of access for people of all ability levels.
	Canoe Launch	Launch point potentially with assisted entry for canoing/kayaking on Lake Boort. Will include information and risk signage.
	Scarred Tree	Potential Scarred Trees viewing experience.
	Event Space	Area with capacity to host small to medium sized community events.

## 4.6 Arrival and Community Area - Mapped Experience

### Experience

Boort-Pyramid Road filters in guests from across the state as they are drawn into the new Lake Boort. Ushered in through the formal gateway, visitors will be enclosed by a newly designed landscape, built for ecological resilience and cultural celebration. Interpretive artworks at the gateway further set the scene that the visitor is entering a cultural nucleus. This distinct and considered arrival experience is a key tool in setting the scene of Lake Boort. Though this area of the landscape is experienced briefly, it provides visitors with crucial cues to the kind of space they will be stepping into, and the reverence they should hold.

The existing Ring Road carries the visitor through the middle of two riparian landscapes – Lake Boort and Little Lake Boort – which emphasise the landscape as temporal, dynamic and alive. The journey along the road offers short glimpses of both lakes, as the excitement to step out into the landscape builds. After travelling between the two lakes, visitors cross Channel No. 3 and arrive at the landing area.

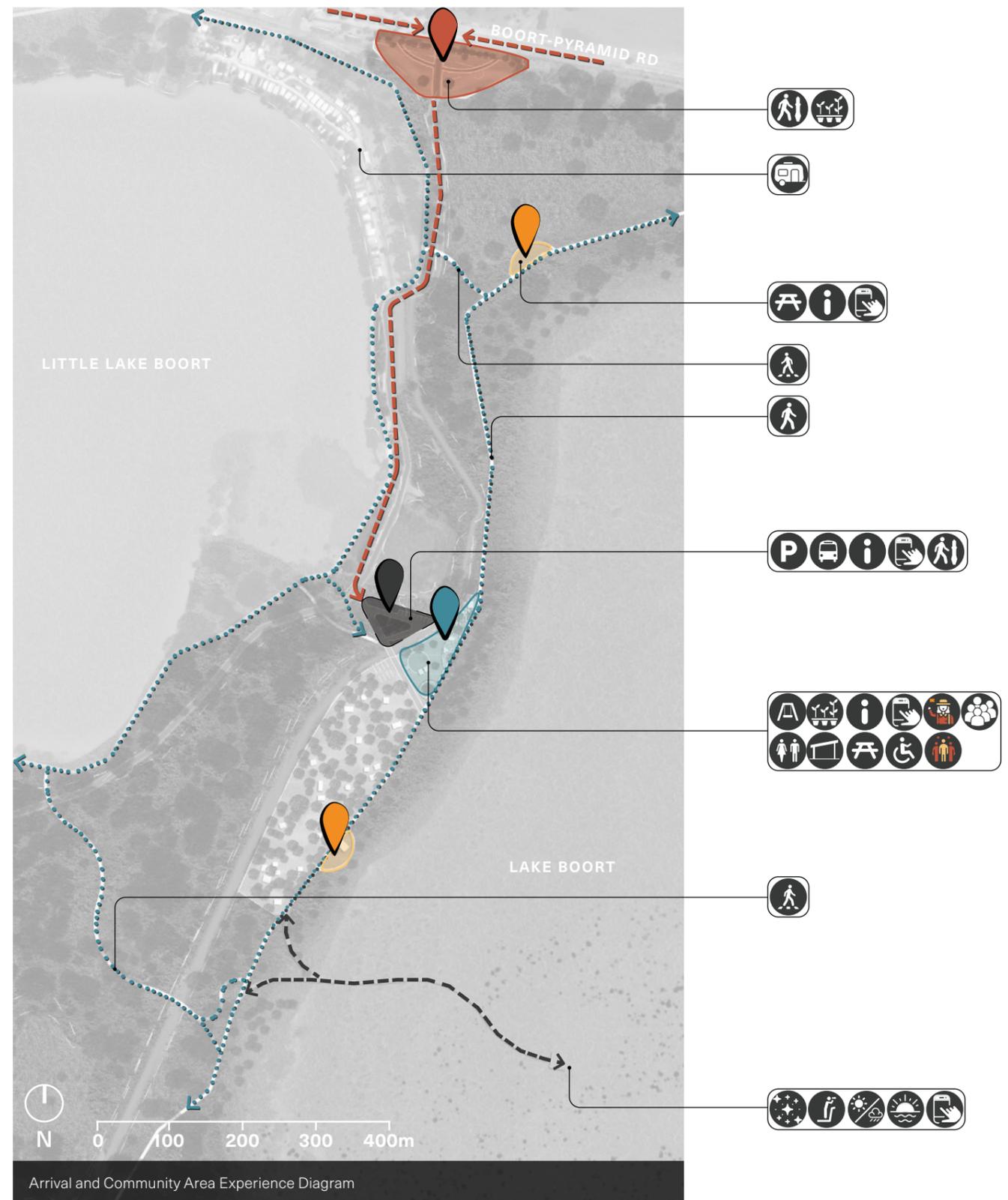
Guests will find all needed amenities carefully considered, from functional spaces such as carparks and bus drop off areas, to softer touches of interpretive signage and cultural induction areas. These softer areas welcome users into the space with intention, awareness, respect and excitement. Once out of the car, visitors are welcome to navigate their way to the activity space via wayfinding signage, and begin experiencing the richness of Lake Boort.

Following the gateway and arrival experience, visitors are guided into the Community and Activity Area. This part of the landscape is the most activated and programmed space around Lake Boort. Focusing on sensitive and inclusive amenities, this area plays host to interpretive nature play, picnic areas, signage and wayfinding and rest points, each woven with different digital integrations. Situated between the two lakes, this area is also a key tool for connectivity between Lake Boort and Little Lake Boort.

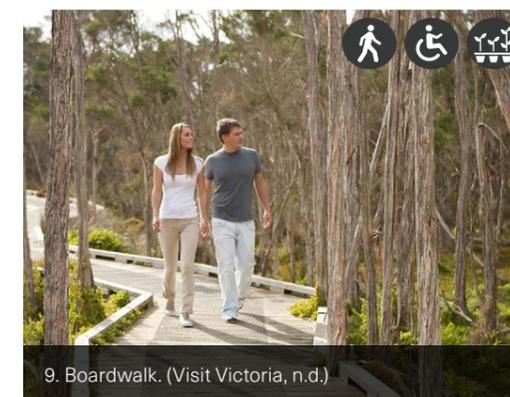
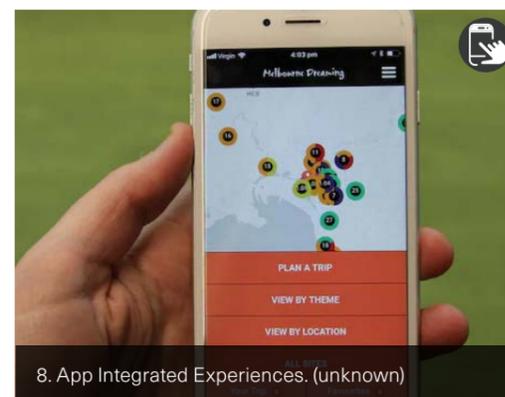
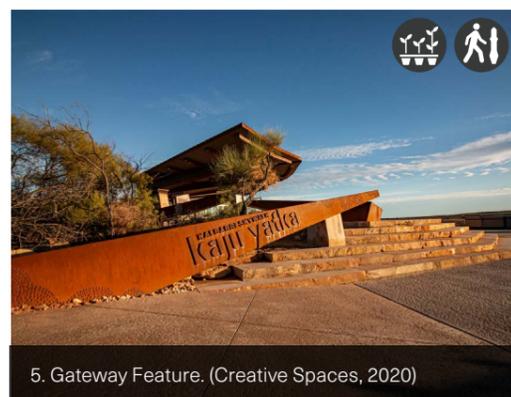
The Community and Activity Area proudly homes facilities for the Dja Dja Wurrung community. Dedicated spaces for gathering on Country, ceremony and yarning are dotted throughout – culminating in Dja Dja Wurrung designed shelter. Through centering First Nation's experiences and stories in the landscape, another strong message is sent to all visitors that this is a deeply significant place.

As well as being an amenity rich space, this community and activity area is the starting point for guided tours, walking trails and digitally integrated experiences. The shelter acts as a cultural induction point and sets a visitor up for an informed journey. Interpretive signage and wayfinding elements, both physical and digital, convey the rich cultural and natural history of Lake Boort. All of the trails in this area are designed for inclusive access, and can be enjoyed by people of all abilities.

Proposed Items	
	Community and Activity Area
	Rest Area & Lookout
	Arrival Area
	Gateway Area
	Pedestrian Access
	Boardwalk
	Vehicle Access
	Parking
	Tour Bus Arrival
	Existing Holiday Park
	Information Signage
	Digital Experience
	Enhanced Landscape
	Interpretive Signage
	Gathering on Country
	Cultural Tours
	Star Gazing
	Seasonal Experience
	Seating
	Walking Trail
	Crossing Point/ Pathway
	Lookout
	Sunrise/ sunset Experience
	Shelter
	Bathrooms
	Play Area
	Accessible Space



## 4.7 Arrival and Community Area - Indicative Experience



Signage and infrastructure images are concept only. Built outcomes must align with land manager requirements.

## 4.8 Southern Lake Trails - Mapped Experience

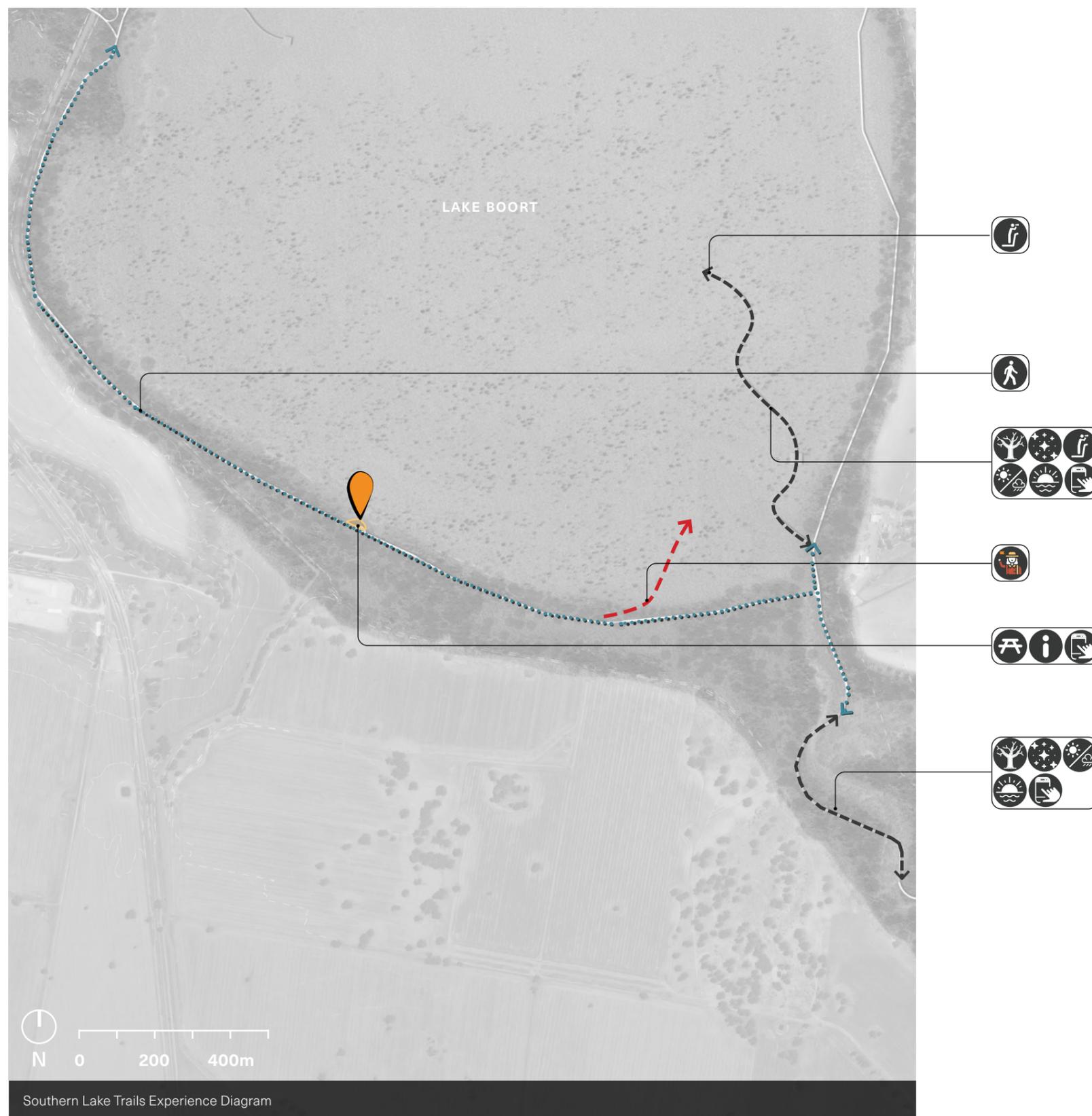
### Experience

The walking trail encircling Lake Boort offers perhaps the richest opportunity to reflect, connect with place, and observe the living Dja Dja Wurrung culture. The trail between the Community and Activity Area and Kinypanial Creek offers a diversity of experiences, but none more powerful than the Scarred Trees vistas. The striking trees punctuate the lake in an impressive display of culture and life. These monolithic structures form a museum of the practices, traditions and lifestyle of the local First Nations community. This powerful display can be observed as a solitary experience, accompanied by a digital guide, or as part of a tour group.

Walking trails around the lake are accessible year round, and have been designed to promote legibility, education, and cultural protection. Diversity of experience has also been prioritised with varied vantage points from which to appreciate the trees. The trails, boardwalks and rest points each offer different views, scales and journeys. The paths incorporate interpretive and directional signage in both physical and digital form. The digital elements provide visitors with personal stories from Yung Balug people around their connection to place, and the importance it holds.

The dynamic seasonality of Lake Boort is best observed from the walking trails. As an ephemeral water body, Lake Boort transforms from a dry grassy field to an inundated wetland, and with it comes a massive fluctuation in its uses, ecology and accessibility.

Proposed Items	
	Rest Area & Lookout
	Pedestrian Access
	Boardwalk
	Vehicle Access
	Information Signage
	Digital Experience
	Interpretive Signage
	Cultural Tours
	Star Gazing
	Seasonal Experience
	Seating
	Walking Trail
	Lookout
	Sunrise/ sunset Experience
	Scarred Trees

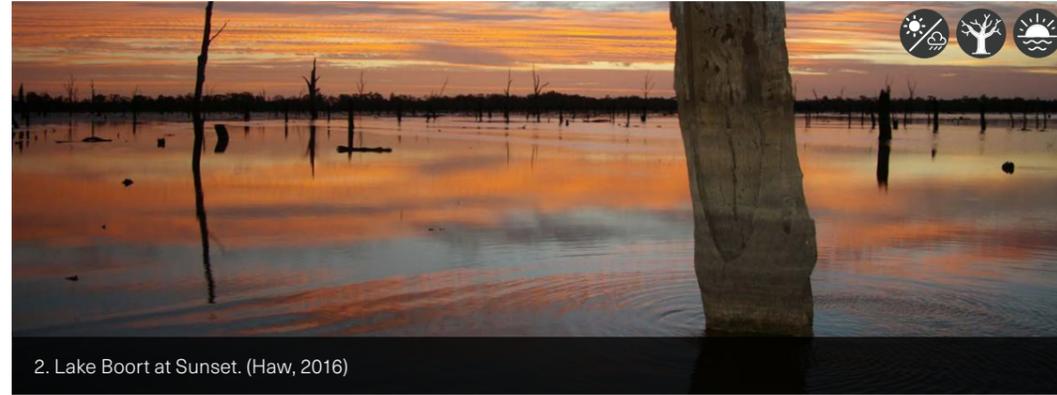


Southern Lake Trails Experience Diagram

## 4.9 Southern Lake Trails - Indicative Experience



1. Walking Trail. (Cubbin, n.d.)



2. Lake Boort at Sunset. (Haw, 2016)



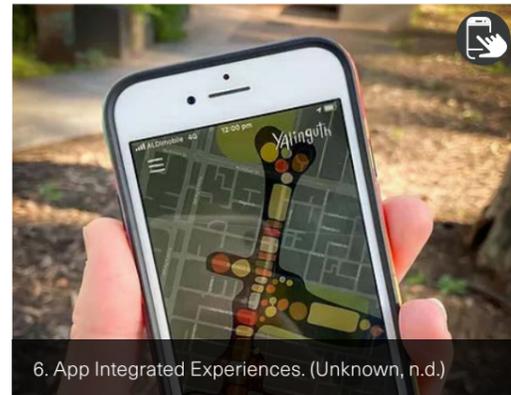
3. Boardwalk. (Grosmann, 2014)



4. Scarred Tree. (Haw, 2016)



5. Interpretive Signage Feature. (ASPECT Studios, 2019)



6. App Integrated Experiences. (Unknown, n.d.)



7. Site Artefact's. (Stephens, 2016)



8. Canoeing on Lake Boort. (Stephens, 2016)

Signage and infrastructure images are concept only. Built outcomes must align with land manager requirements.

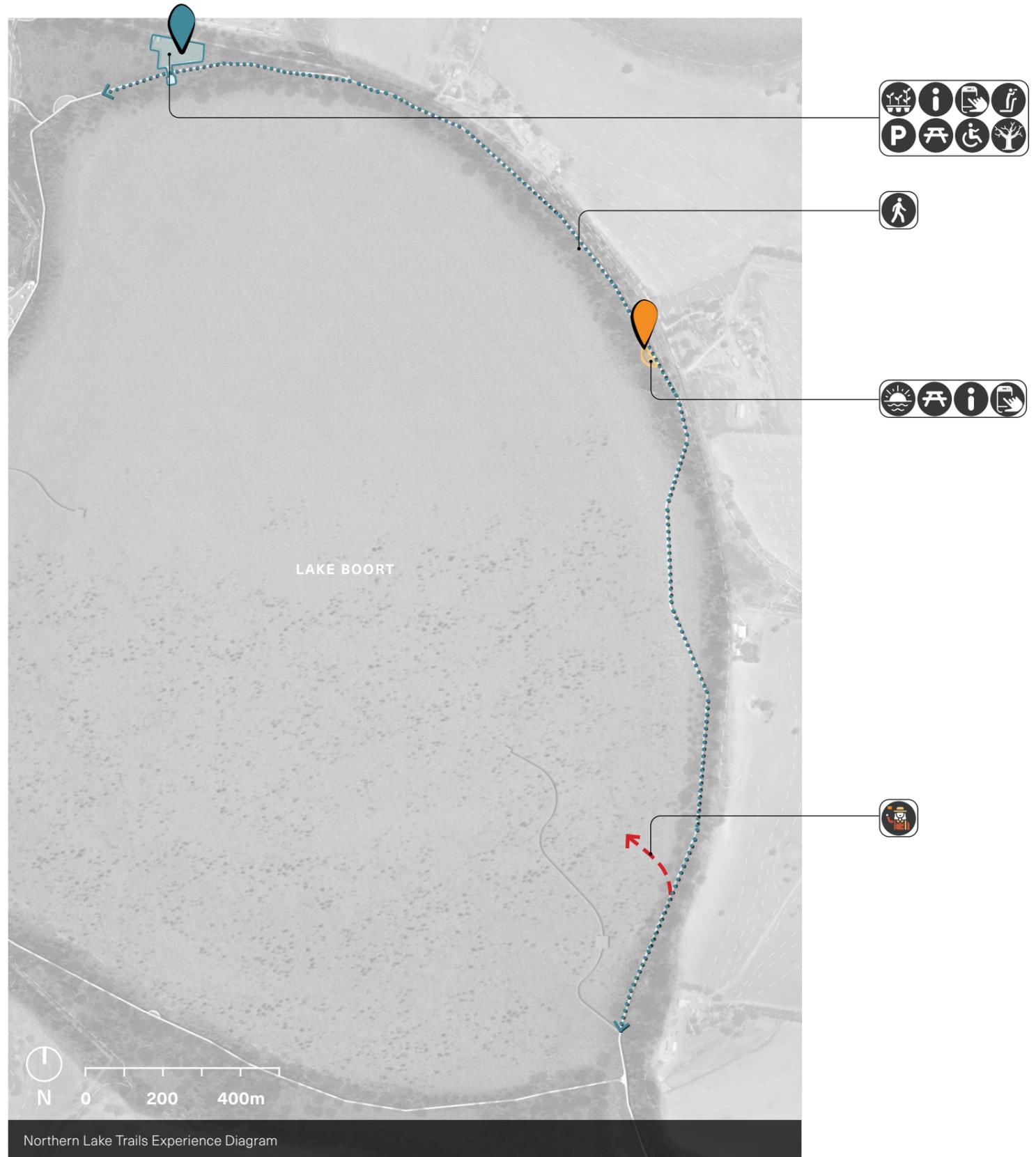
# 4.10 Northern Lake Trails - Mapped Experience

## Experience

The Northern Lake Trails provide an experience that allow visitors to be on Country and connect with place. Much like the Southern Lake Trails, these paths offer striking vistas and a leisurely walking experience. Visitors are kept at a distance from sensitive cultural areas by way of balustrading and elevated walkway at points.

This trail can be experienced alone or with a group, with a physical guide or as a digitally enriched experience. This trail is a key connecting corridor, completing the perimeter path and offering longer walks or rides for those looking to explore further. Similar to the Southern Trails, the changing seasons of Lake Boort are best observed from the trails and northern lookout area.

- Proposed Items
-  Activity Area
  -  Rest Area & Lookout
  -  Pedestrian Access
  -  Guided Walk
  -  Parking
  -  Information Signage
  -  Digital Experience
  -  Enhanced Landscape
  -  Interpretive Signage
  -  Walking
  -  Seating
  -  Cultural Tours
  -  Lookout
  -  Scarred Tree
  -  Sunrise/ sunset Experience



Northern Lake Trails Experience Diagram

## 4.11 Northern Lake Trails - Indicative Experience



Signage and infrastructure images are concept only. Built outcomes must align with land manager requirements.

## 4.12 Kinypanial Creek - Mapped Experience

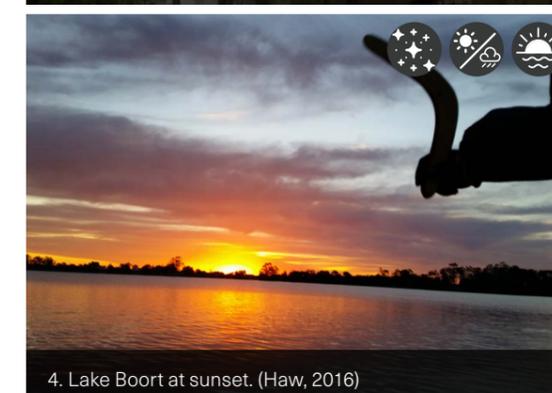
### Experience

To the South of Lake Boort, Kinypanial Creek presents opportunities for canoe launching, unique arrival, bird watching and hiking – all nestled amongst the rich riparian landscape. The approach to this area, and journey through it, is one of surprises. The visitor travels through rolling agricultural lands; yet arrives into a thriving ephemeral creek. Visitors make their way from the small carpark to the river bank edge, where they are drawn into an ancient landscape of scarred trees. Here visitors can either launch a canoe to experience floating around the base of the scarred trees, or walk along the trail and boardwalk amongst a small forest of the culturally significant landscape.

Just before the mouth of Kinypanial Creek, an elevated viewing platform allows visitors to take in a breathtaking view of the expansive mass of scarred trees. Walking access over the mouth of the creek provides an even closer view of the trees whilst also having an ideal vantage point for watching canoeists float down the creek below them.

#### Proposed Items

-  Rest Area & Lookout
-  Pedestrian Access
-  Parking
-  Information Signage
-  Digital Experience
-  Interpretive Signage
-  Scarred Trees
-  Seasonal Experience
-  Canoe Launch
-  Walking
-  Star Gazing
-  Seating
-  Sunrise/ sunset Experience



Signage and infrastructure images are concept only. Built outcomes must align with land manager requirements.

Section 5

# Signage and Wayfinding



## 5.1 Signage and Wayfinding Opportunity

Lake Boort is an enduring landscape, which provides considerable opportunity to celebrate the Dja Dja Wurrung history and culture through interpretive signage and wayfinding elements.

Of principal importance in the development of any signage strategy is that:

- Tangible and intangible cultural site values are identified; and
- Environment site values are identified.

### Opportunities/themes of interpretation could include:

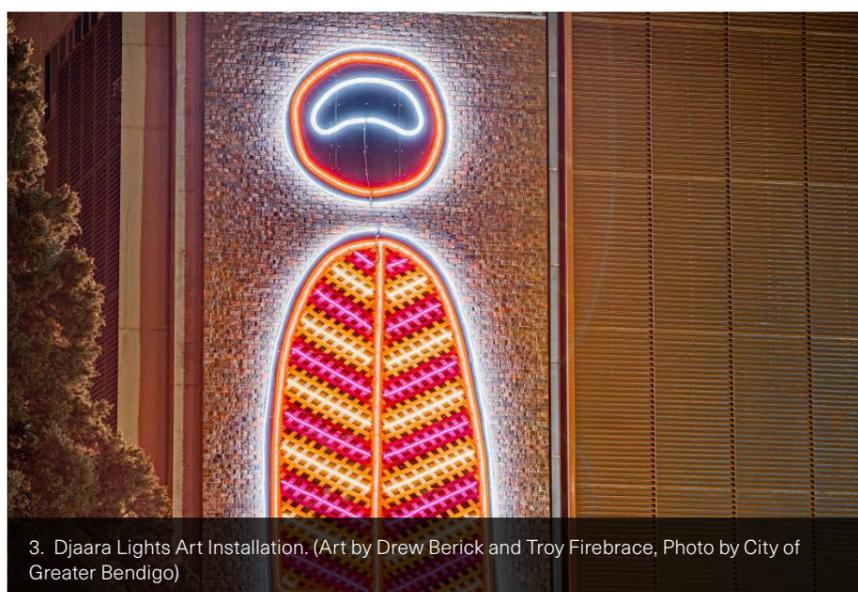
- The Yung Balug totem, the spotted Quoll;
- Mindi the rainbow serpent;
- The traditional etched barks of Dja Dja Wurrung;
- The unique scars of the trees of Lake Boort; and
- The site's natural values.



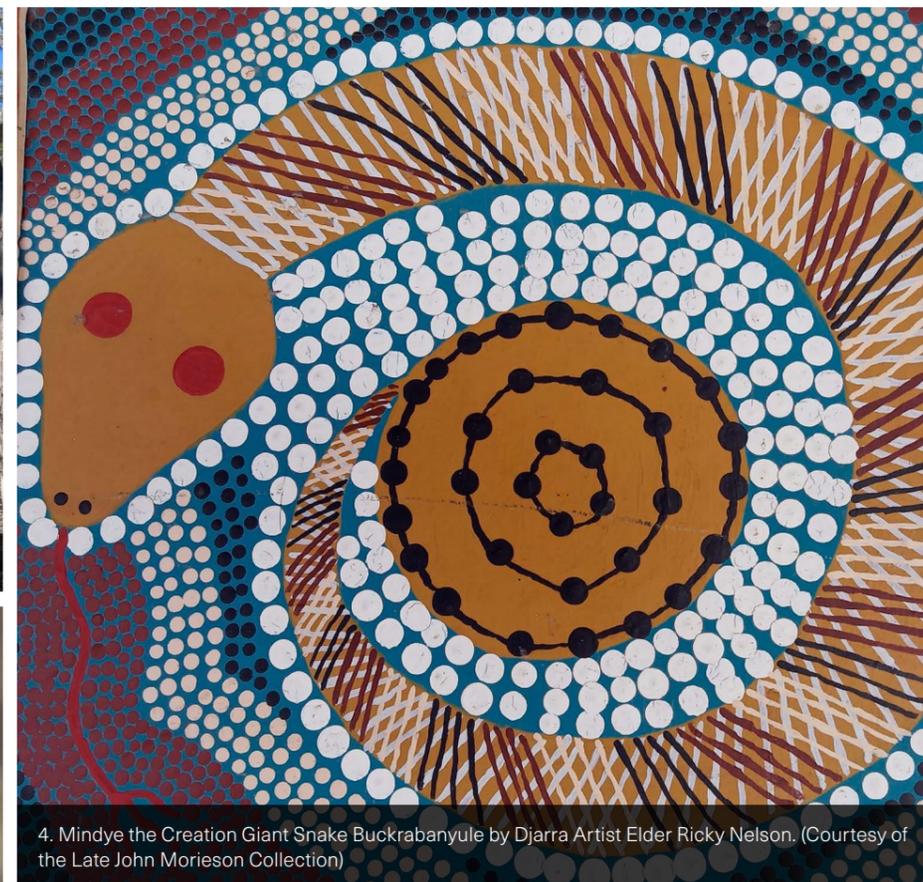
1. Trees along the Lake Shoreline. (ASPECT Studios)



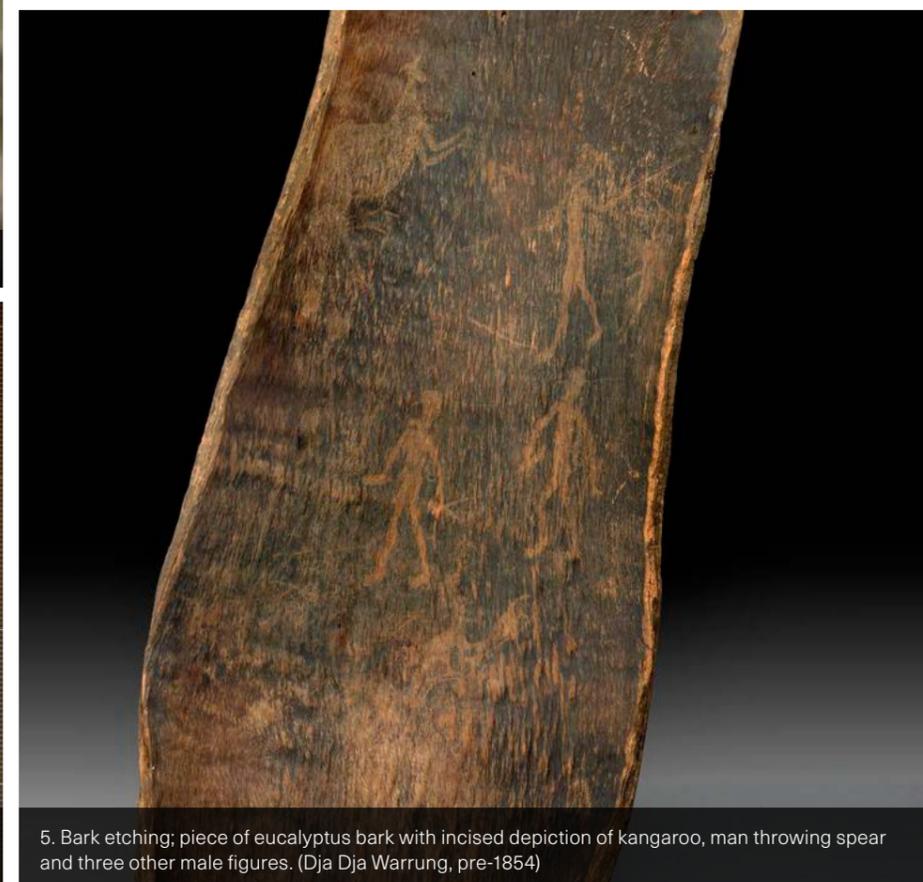
2. Spotted Easter Quoll. (Provided by the Walpanumin Institute)



3. Djaara Lights Art Installation. (Art by Drew Berick and Troy Firebrace, Photo by City of Greater Bendigo)



4. Mindye the Creation Giant Snake Buckrabanyule by Djarra Artist Elder Ricky Nelson. (Courtesy of the Late John Morieson Collection)



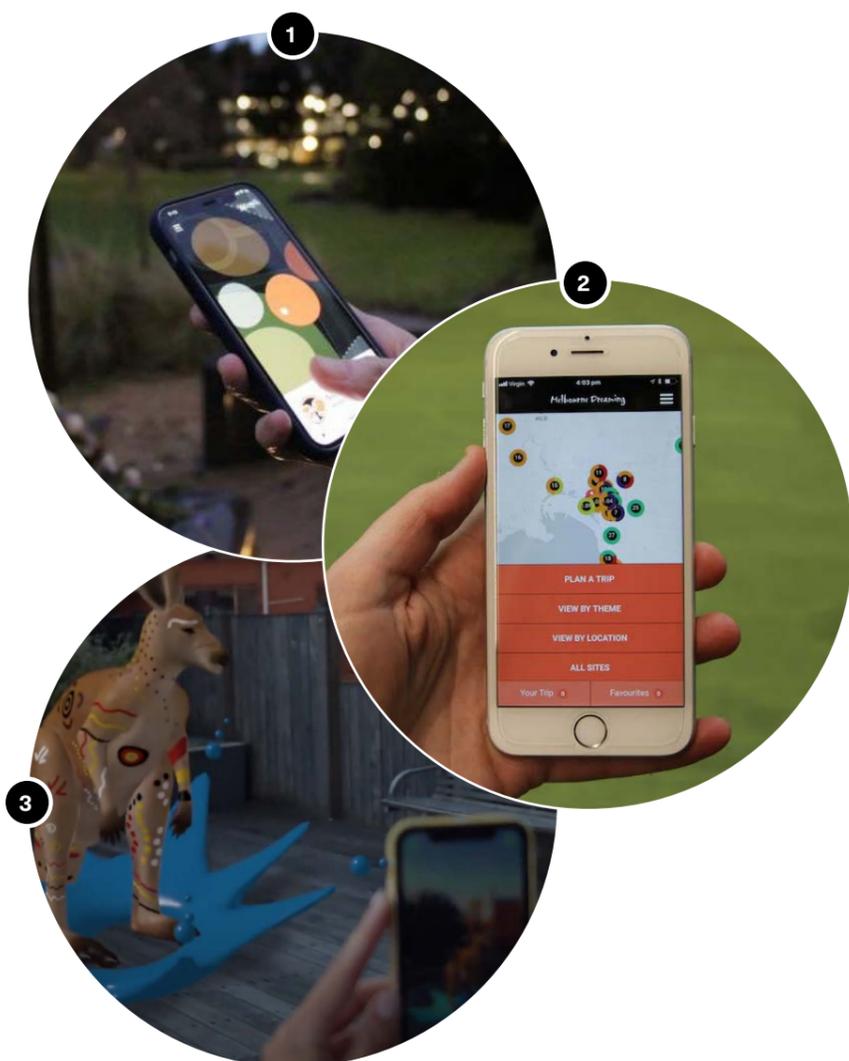
5. Bark etching; piece of eucalyptus bark with incised depiction of kangaroo, man throwing spear and three other male figures. (Dja Dja Wurrung, pre-1854)

Signage and infrastructure images are concept only. Built outcomes must align with land manager requirements.

## 5.2 Placemaking Opportunities

### Augmented Reality

Digital historic and interpretive story telling has developed quickly over the last few years, bringing opportunities to integrate virtual experiences and enhance the visitor experience.



#### Relevant Examples

- 1 Yalinguth – Augmented reality audio experience app. The app reveals a map of one's location that points to areas to access stories, historical events and songs.
- 2 Melbourne Dreaming – Locations of significance, discover Aboriginal Melbourne's rich cultural heritage from the past and present.
- 3 Djaara Lights – Combining the display of Djaara artwork and augmented reality experiences. A sequence of activations tells stories of the Dja Dja Wurrung six seasons on Djandak (Country) from Dja Dja Wurrung People, the Traditional Owners of Bendigo.

### Lighting and Illumination

Lighting and illumination can provide a way of night time activation for the site. Artwork can be projected or integrated into elements within landscape.



#### Relevant Examples

- 1 Parrtjima – Aboriginal light festival in Alice Springs Desert Park. Showcasing continuous culture on earth through technology.
- 2 Field of Light Uluru – Field of Light illuminates. As far as the eye can see gentle rhythms of colour light up the desert.
- 3 Boorna Waanginy: The Trees Speak. The visually mesmerising event explored the inter-connectedness of all life, and highlighted the beauty and fragility of WA's South-West.

### Sculptures and Artwork

Opportunity for key sculpture pieces to be a centrepiece of the site. These artworks can be incorporated into patterns and smaller details throughout the site.



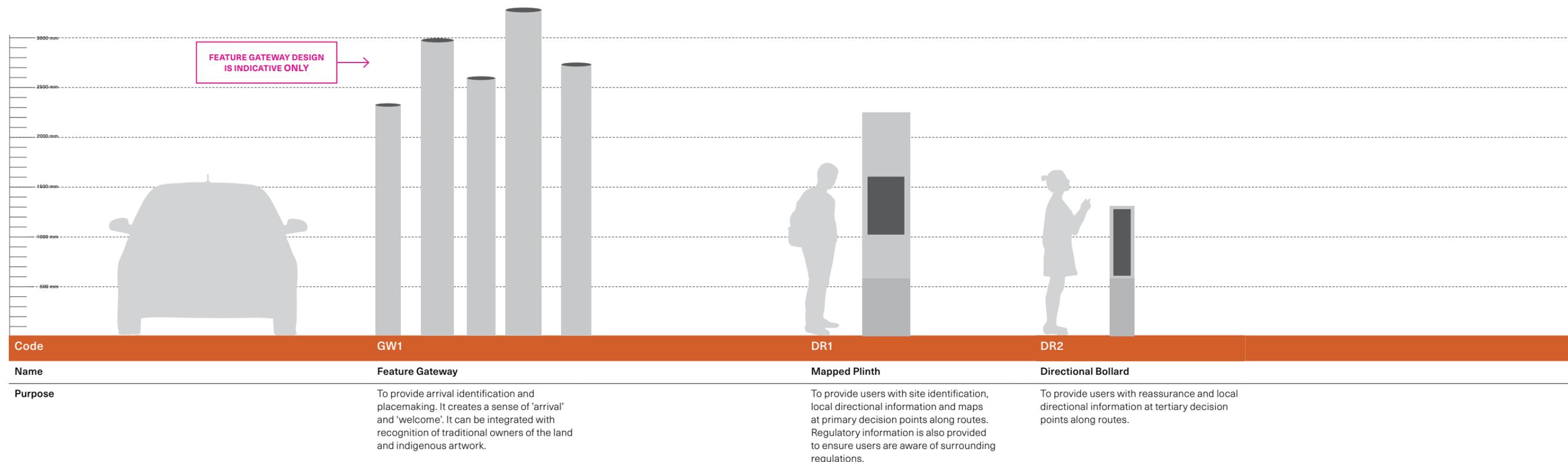
#### Relevant Examples

- 1 Lake Mungo National Park – Rock sculpture that tells an ancient story that describes the way in which the Willandra Lakes system was formed.
- 2 Kalbarri Skywalk Kajuru Yatka – Interpretation that took inspiration from the iconic Murchison River and incorporates artwork and illustrations from selected Nanda artists. Artwork elements are etched into gateway structures and paving details.

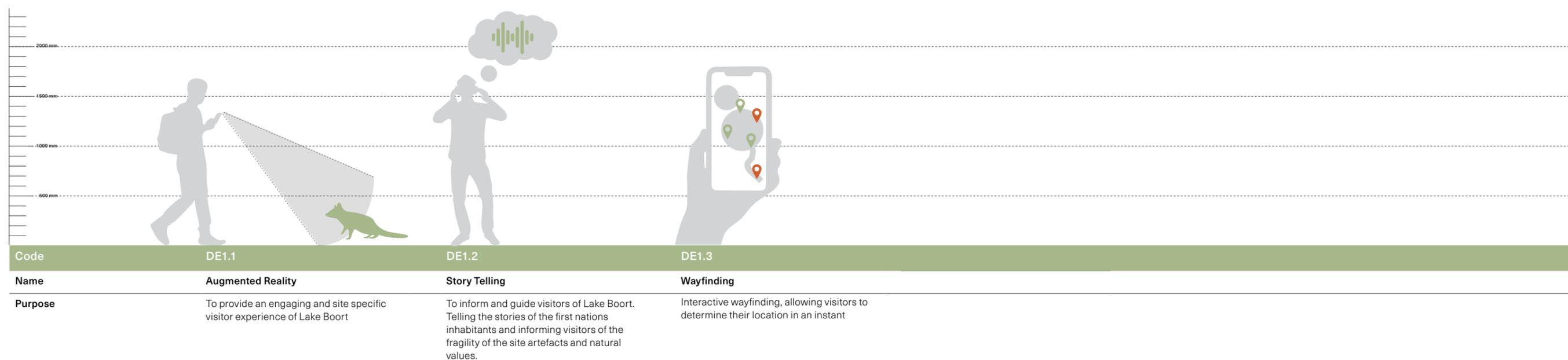
Signage and infrastructure images are concept only. Built outcomes must align with land manager requirements.

## 5.3 Recommended Signage and Wayfinding Typologies

### Proposed Wayfinding Typologies



### Proposed Digital Typologies



### Proposed Interpretive Typologies

Code	INT1	INT2	INT3
<b>Name</b>	<b>Interpretive Sign</b>	<b>Sculptural Interpretive</b>	<b>Interpretive Inlay</b>
<b>Purpose</b>	To provide users with site specific interpretive information to enhance knowledge, awareness and communicate culture/nature stories about the site and its history.	To provide users with site specific interpretive information to enhance knowledge, awareness and communicate culture/nature stories about the site and its history. Can include sculpture cut outs of animals as well as interpretive information.	To provide users with site specific interpretive information to enhance knowledge, awareness and communicate culture/nature stories about the site and its history.

### Proposed Regulatory Typologies

Code	RG1	RG2
<b>Name</b>	<b>Large Regulatory Panel</b>	<b>Regulatory Bollard</b>
<b>Purpose</b>	Communication of site specific regulatory information that apply in a specific area. i.e. Site Sensitive Area, Please Be Quiet etc.	Communication of public regulatory laws that apply in a specific area. i.e. No Skating, No Cycling, No Smoking, etc.

# 5.4 Preliminary Signage Locations



VICTORIA

## Lake Bort

### NOTES

*PRELIMINARY LOCATIONS ONLY*  
 All signage locations are approximate and should be used as a guide only.  
 All dimensions and existing conditions shall be checked and verified by signage contractor before proceeding with the work.

**BOARDWALKS AND GUIDED EXPERIENCE LOCATIONS SHOULD BE USED AS A GUIDE ONLY. LOCATIONS ARE APPROXIMATE**

### SIGN TYPES

- GW1** Feature Gateway
- DR1** Mapped Plinth
- DR2** Directional Bollard
- DE1** Digital Experience
- RG1** Large Regulatory Panel
- RG2** Regulatory Bollard
- INT** Interpretive Sign/Element

Section 6

# Project Implementation and Staging

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## 6.1 Implementation and Staging

The aim of the project is to create a compelling and engaging experience that reflects the national and international significance of the site, raising awareness more generally to the substantial Aboriginal cultural heritage in the south east of Australia.

The design of the experience will embed an integrated and multilayered experience incorporating:

- Aboriginal cultural heritage;
- The high ecological values of the site, and
- Nature-based opportunities.

The design is intended to sit seamlessly into the landscape and will likely include infrastructure such as boardwalks, signage and digital elements that maximise engagement with the Aboriginal Cultural heritage and natural landscape while preserving the site's heritage. Visitor access will include a framework for self-guided and as well as guided tours and experiences.

The project has been Masterplanned to be developed the following four stages:

- Stage 1: Development of a gateway and arrival (including a feature entryway and landscape), an integrated digital tourism experience, community and activity area (including a nature based playspace, shelter, toilet block and interpretative and directional signage), and boardwalks and tracks associated to the activity area (including a short walking trail loop track boardwalk, viewing platform and interpretive signage);
- Stage 2: Development of a walking track and boardwalk with interpretive signage onto Lake Boort and the development of a walking track, board walk, viewing platforms, kayak launching point and interpretive signage at Kinypanial Creek;
- Stage 3: Lake Boort Trail (completion of a perimeter walking trail loop around Lake Boort with viewing platforms, and interpretive signage), and Boort Pyramid Road Picnic Area (with shelter, interpretive signage and carpark); and
- Stage 4: Kinypanial Creek Access Road (including a new road, carpark and interpretive and directional signage).

These stages have been developed through identifying the following priorities:

- Priority 1 – areas where all visitors would access / primary areas for short term visitor opportunities;
- Priority 2 – priority areas that provide greater in depth visitor experience of Lake Boort;
- Priority 3 – remainder of areas that provide greater in depth experience; and
- Priority 4 – potential secondary access.

Although a number of different smaller projects have been identified within each of the stages, the timeframe for delivery of these items is largely dependent on funding opportunities.

The next steps in the delivery of the project must include:

- An Indigenous Cultural and Intellectual Property (ICIP) agreement to ensure protection of rights for all who have contributed to the development of this Masterplan;
- Further collaboration with Dja Dja Wurrung and Yung Balug Clan on the development of the Masterplan concept;
- A Cultural Heritage Management Plan (CHMP) to manage and protect the culturally significant site, and meet the requirements of the Aboriginal Heritage Act. The Cultural Heritage Management Plan needs to obtain approval from Dja Dja Wurrung Clans Aboriginal Corporation as the Registered Aboriginal Party for the Lake Boort area, prior to undertaking any construction works; and
- Further planning and design investigations including with interested parties and land owners associated with Lake Boort.

## 6.2 Implementation and Staging Matrix

Stage	Projects within Stage	Project Complexity Matrix					Overall Project Complexity Rating
		Traffic Engineering Required	Structural Engineering and Geo-Technical Report Required	Likely Ecological and Vegetation Protection Complexity (Low, Medium, High)	Hydrological Engineering Required	Landscape Design Complexity (Low, Medium, High)	
Stage 1 Arrival and Community Area	<b>Gateway and Arrival</b> <ul style="list-style-type: none"> <li>Feature entryway and landscape</li> <li>Interpretive gateway signage</li> <li>Intersection upgrade</li> <li>Day visitor car park</li> </ul>	X	X	Low		Medium	Medium
	<b>Digital Interpretation</b> <ul style="list-style-type: none"> <li>Integrated digital tourism experience (phone application)</li> </ul>			N/A	N/A	NA	Low
	<b>Community and Activity Area 1</b> (Adjacent campground) <ul style="list-style-type: none"> <li>Shelter</li> <li>Nature based playspace</li> <li>Toilet block</li> <li>Interpretive and directional signage</li> </ul>		X	Medium		High	Medium
	<b>Boardwalks and tracks Associated to Activity Area</b> <ul style="list-style-type: none"> <li>Short walking trail loop track</li> <li>Boardwalk</li> <li>Viewing platform</li> <li>Interpretive signage</li> </ul>		X	Medium	X	Medium	Medium
Stage 2 Southern Lake Trails	<b>Boardwalk onto lake</b> <ul style="list-style-type: none"> <li>Walking track to boardwalk</li> <li>Boardwalk</li> <li>Interpretive signage</li> </ul>		X	Medium	X	Medium	Medium
	<b>Kinypanial Creek</b> Along Kinypanial Creek: <ul style="list-style-type: none"> <li>Walking track</li> <li>Boardwalk</li> <li>Viewing platform</li> <li>Canoe launch</li> <li>Interpretive signage</li> </ul>		X	High	X	Medium	High
	<b>Lake Boort Trail</b> <ul style="list-style-type: none"> <li>Walking access over Kinypanial Creek</li> <li>Viewing platforms</li> <li>Interpretive and directional signage</li> </ul>		X	Medium	X	Medium	Medium
Stage 3 Northern Lake Trails	<b>Lake Boort Trail</b> <ul style="list-style-type: none"> <li>Completion of a perimeter walking trail loop around Lake Boort with viewing platforms</li> <li>Interpretive signage</li> </ul>			Medium		Low	Low
	<b>Boort Pyramid Road Picnic Area</b> <ul style="list-style-type: none"> <li>Picnic area and carpark (adjacent Boort-Pyramid Rd)</li> <li>Interpretive signage</li> </ul>	X		Low		Low	Low
Stage 4 Kinypanial Creek	<b>Kinypanial Creek Access Road</b> <ul style="list-style-type: none"> <li>New road</li> <li>Carpark</li> <li>Interpretive and directional signage</li> </ul>	X		X	Low		Low

## 6.3 Next Steps

### Community and Country Benefits

Throughout the Masterplanning process, consideration has been given to how this project can return benefits to the Boort community and Dja Dja Wurrung.

The following ongoing planning, design and built outcomes have been identified as potential benefits for both:

- Supporting and strengthening the Boort community through increased visitation and greater job creation;
- Region – enhance private investment and creation of more regional jobs;
- Purpose built infrastructure to allow for greater gathering on Country;
- Leadership with paid co-design in the future design development of the Lake Boort Scarred Trees Masterplan;
- Interpretive design – paid position for the development of culturally appropriate Dja Dja Wurrung narrative;
- Identified Dja Dja Wurrung place for ceremony; and
- Cultural land management opportunities.

### Indigenous Tourism

Tourism Australia (2009) nominated Indigenous tourism as one of the seven key leading activities in Australia's tourism market. At this time Indigenous tourism represented 12% of total visitor spend. In the year 2012, 69,800 international visitors participated in Aboriginal experiences across Australia. An estimated 9.3% of these visitors undertook their Aboriginal experience in Victoria.

The 2009 Jackson Report that informed the National Long Term Tourism Strategy also identified Indigenous cultures as providing Australia with a competitive advantage. Victoria Aboriginal Tourism Development Plan (2013) identifies gaps in Indigenous tourism, particularly in meeting domestic Victorian demand of experience within their own state. Lake Boort provides a key opportunity to fill this gap.

The scope, scale and feasibility of the vision of this Masterplan for Lake Boort is a long-term aspiration. Any associated access and facilities at Lake Boort to support cultural tourism experiences must be carefully planned to protect and avoid impacts to cultural heritage and environmental values. A Cultural Heritage Management Plan (CHMP) must be undertaken prior to further design development.

Without external tourism investment to support the establishment of such facilities, Lake Boort Reserve would remain a basic visitor site with limited facilities and access.

### Governance and Partnerships

The further development of the Lake Boort Scarred Trees Masterplan will require active partnerships with Dja Dja Wurrung Clans Aboriginal Corporation, key state government agencies, Loddon Shire and the greater Boort community.

Cultural tourism opportunities must be based on equitable partnerships with Traditional Owners who must be beneficiaries of commercial opportunities based upon their cultural heritage.

### Governance Structure

The key organisations with responsibilities towards Lake Boort include:

- Dja Dja Wurrung Clans Aboriginal Corporation as the Registered Aboriginal Party and party to the Dja Dja Wurrung Recognition and Settlement Agreement (2013);
- Parks Victoria – Land manager, Lake Boort;
- Department of the Environment, Land Water and Planning – Provider of policy advice and strategic direction; and
- North Central Catchment Management Authority – Manager of the Lake Boort Water Catchment.

### Indigenous Cultural and Intellectual Property

Indigenous Cultural Intellectual Property (ICIP) has been identified during this project through collaboration with individuals and the Yung Balug Clan group. This project does not intend to impinge on those rights as they exist.

The next step in the delivery of the Masterplan is to develop an ICIP agreement to ensure protection of rights for all who have contributed to the development of the Masterplan.

The Lake Boort Aboriginal Cultural Landscape Conservation Management Plan prepared for First Peoples – State Relations, DPC by Eco Logical Australia, 2021 is the primary reference document for protecting and managing Aboriginal cultural heritage at Lake Boort. Any decisions relating to the management and use of Lake Boort should consider this and other core background documents.

### References and Relevant Documents

#### The Masterplan was informed by:

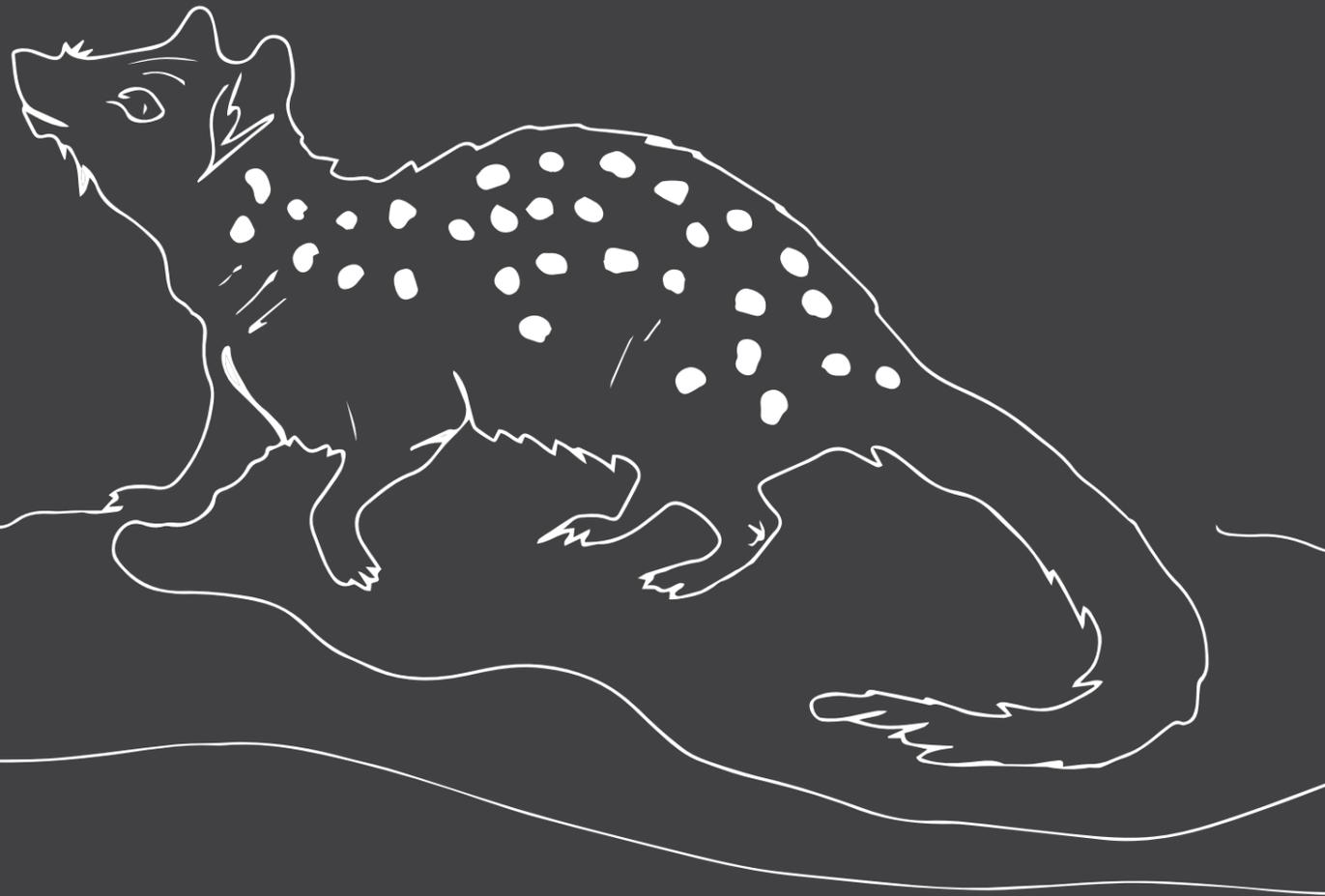
- The views and express wishes of the Dja Dja Wurrung people on how their Aboriginal cultural heritage can be used and shared; and
- The Lake Boort Reserve Management Plan March 2018, developed by Parks Victoria.

#### Core Background Documents

- Dhelkunya Dja – Dja Dja Wurrung Country Plan 2014-2034, Dja Dja Wurrung Clans Aboriginal Corporation; and
- Lake Boort Environmental Water Management Plan Final Draft – February 2012 – Developed by North Central Catchment Management Authority.

# Tourism Assessment, Marketing & Planning

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## 7.1 Summary

Lake Boort offers two key offerings to visitors: engagement with Indigenous cultural heritage as well as nature-based activities. These two elements identified as key growth drivers within the tourism sector (Tourism Australia (2020); Visit Victoria (2020)). Given limited Indigenous cultural tourism offerings in Victoria, Lake Boort represents an opportunity to engage this currently unrealised market within the South East of Australia.

A detailed tourism analysis, undertaken for the Masterplan, suggests visitors are likely to be independent travellers, from Melbourne, as well as key regional and interstate cities. Based on Indigenous cultural heritage tourism assessment by SGS (excluding nature-based tourism), visitation is estimated to be 35,000 people annually.

### Tourism Management Context

Boort sits within Loddon Shire, which is a participating member of the Bendigo Regional Tourism Group (including City of Greater Bendigo, Mt Alexander Shire, Central Goldfields Shire); and wider Goldfields category of Visit Victoria. (Note: Visit Victoria are currently considering regional boundaries and amalgamations). Currently, Bendigo and Ballarat are within the Goldfields tourism region, however separated as precincts.

The Masterplan aligns with the Bendigo Region Destination Management Plan 2015, and as well as the strategic goals of the Loddon Shire Economic Development and Tourism Strategy 2019.

The Masterplan responds particularly to the six overarching Strategic Development Objectives of the Bendigo Region Destination Management Plan:

- Primary Destination - Develop to support a diverse visitor economy and projected visitor growth, with nature-based and Indigenous heritage interpretation, particularly at Lake Boort, identified as key opportunities within the Loddon Shire and wider region;
- Building the Hinterland Experience – Build the tourism product to develop a compelling regional experience and encourage visitor dispersal;
- Heritage Rejuvenation and Positioning – Facilitate reinvestment in heritage attracts to improve interpretation and appeal to new markets;
- Unlocking Natural Assets – Utilise the region's natural assets to develop nature-based and recreational tourism experiences;
- Leveraging Arts and Cultural Growth – Leverage the region's arts and cultural brand to develop new experiences which appeal to new markets; and
- Visibility – Improve the services and experiences at every point of the visitor journey.

Within the Loddon Shire Economic Development and Tourism Strategy, the Masterplan aligns strongly to increasing the volume and value of tourist visitation, particularly through realising the international point of difference of Lake Boort. As noted in the Strategy, the Masterplan will help to “position Loddon towns to maximise the economic impact from visitors to the Shire, while also meeting the needs of residents.” page 5.

### Summary of Tourism Drivers

Key tourism markets, drivers and experiences are summarised below:

- Product – Nature-based tourism attracts 12% of all domestic visitors; and Cultural Tourism 6% with Aboriginal product a portion of this section. (Tourism Research Australia, TRA, Jan 2020). Note: historic data does not reflect predicted growth in these two drivers;
- Target Market Location – Victoria's tourism industry is driven by domestic tourism. In 2012, 63% of overnight visitors in the state were from Melbourne, 28% intrastate, and 9% international. The largest tourism segment seeking nature-based experiences, and offerings of 'authentic' Aboriginal experiences are independent intrastate visitors (TRA Jan 2020);
- Age – Tourists aged 24 – 44 years (38%) and 45 – 64 years (37%) have the highest interest in nature-based and Aboriginal experiences. Of these 67% are self-drive, and travel independently (rather than in the Visiting Friends and Relatives (VFR) category); and
- Duration of stay – Given the regional location of the site, overnight visitors are a key market. Once again intrastate visitors are a key market for domestic overnight Aboriginal tourism in Australia, accounting for 83% of the market, with 58% from Melbourne (Tourism Victoria 2013). Nature-based camp sites (Dja Dja Wurrung managed) will appeal to this group, alongside luxury offerings in Boort and Bendigo. Currently 28% of visitors Bendigo stay overnight. As this segment are attracted to multi-day experiences the future expansion of this site via Lake Lyndger and Lake Yando, as well as other regionally adjacent sites, will maximise the market and opportunity.

### Summary of Visitor Demographics Psychographics

Socially Aware – This psychographic segment identified by Roy Morgan Research constitutes a proportion of the population which are higher yield visitors, who seek cultural, nature based, educational and heritage experiences. This key demographic market for the project can be summarised as:

- Educated, professional, progressive, living in inner urban Melbourne;
- Interest in new, authentic, and varied activities, embrace outdoors including hiking, cycling, as well as shopping and dining;
- Interest in sustainability, community, social issues; and
- Savvy technology users.

## 7.2 Market Detail

Local, national, and international tourism data and trends are outlined below. The fastest growing sector within tourism is cultural tourism (including nature and Aboriginal cultural products) (Australian Cultural Tourism 2019). Note, as Aboriginal cultural tourism, and nature-based visitation are emerging markets, current data does not reflect these growing trends and subsequent opportunities.

Additionally, tourism and travel has been impacted significantly by COVID-19, with medium and longer-term impacts yet to understood. With pre-COVID-19 data identifying intrastate visitors as the key tourist market, COVID-19 is therefore more likely to increase intrastate visitation, given limited international travel opportunities for Australians. The shift to domestic tourism in the short to medium term is anticipated to further support the development of this site.

### Geographic Location of Visitor Markets

#### Domestic

Based on current data, visitors are likely to be drawn from domestic markets, principally Melbourne, with secondary flow from other intrastate, and interstate locations.

#### International

Pre-COVID-19 research data suggested international tourism to Victorian regional areas was limited. Marketing to international tourists therefore represents a high investment, low return strategy. Future international visitor opportunities do exist with collaboration and linkages possible with other Aboriginal and nature-based tourism product being developed across Victoria, with reliance on promotion by Commonwealth, State and regional tourism bodies. Until February 2020, the UK and NZ represented key visiting markets. With product development, an opportunity exists to attract Chinese and Northern European markets with a significant interest in Aboriginal and nature-based activities.

#### Post COVID-19

In the short term, the tourism sector has changed significantly in the wake of COVID-19, with unknown medium- and longer-term impacts. At the time of this report, international travel was limited and recommencing, with domestic tourism expanding.

## 7.3 Product

### Aboriginal Cultural Tourism

Nature-based tourism attracts 12% of all domestic visitors; with cultural tourism (with Aboriginal product a portion of this) attracting 6% of all tourists. (Visit Victoria 2020).

Current data indicates Aboriginal tourism product is of most interest to Victorian holiday makers aged 24 – 44 years (38%) and 45 – 64 years (37%) (Visit Victoria 2020).

Domestic tourists who are seeking relaxing holidays are most willing to choose Indigenous experiences that are safe, accessible, and engaging. There is a preference for hands on experiences that are interactive and personal and offer a variety of learning opportunities. Research by Visit Victoria (2020) indicates domestic tourists with an interest in Aboriginal product are seeking authentic experiences (e.g. not boomerang throwing) and were more likely to visit an Aboriginal site or community (27%) with 64% interested in learning an experience of art/craft; 39% interested in hunting and gathering; 37% rock art /carvings; 34% bush tucker; 34% music; 31% weapons. Indigenous experiences that incorporate natural elements such as water, earth and fire hold broad appeal. Note, given the current lack of Aboriginal cultural activities in Victoria, it is difficult to make conclusions from this data.

Tourism Research Australia (2009) identified almost 2.5 times as many domestic overnight Indigenous tourism nights spent in a caravan or camping group (29% compared to 12% in formal accommodation). Note: possible indication of type and location of current tourism Indigenous product (i.e. NT and Qld). Indigenous tourism visitors stayed longer and spent more (again potential reflection of current product). TRA (2009) also found 71% of all Indigenous tourism were domestic.

A lack of awareness and understanding of 'Aboriginal cultural experiences' have been identified as key barriers in domestic visitor market, with previous marketing focused on international market, rather than domestic (noting too, limited Aboriginal product currently on offer). Studies have also found the majority of Australians have preference to experience Indigenous product in their own state.

Note: The Bendigo region was recently awarded the UNESCO City and Region of Gastronomy with Aboriginal culture a key platform. The growing awareness and interest in Aboriginal culture and heritage is reflected in changing behaviours and cultural trends, including the now widespread use of Acknowledgment of Country in urban gatherings. It is anticipated that this cultural shift is leading to an increased interest to engage authentically with Aboriginal culture and Peoples.

## 7.4 Demographic, Psychographic and Value Segments

Roy Morgan (2021) offers key market segmentation and insights into domestic visitor behaviour relevant to this project. Relevant Roy Morgan market value segments include:

### Socially Aware

Socially Aware are well-educated, of a higher socio-economic status, predominantly 28 – 40 years, socially active, and community minded. They are astute, technologically up to date, trend setters, and keen communicators.

The Socially Aware are regular holiday makers, with 81.3% taking some kind of annual trip, the highest percentage of any of other psychographic segments. Not only are they regular travellers, they present a high yield, with an average spend per person of \$2,191 per trip. The top 4 most frequent holiday activities undertaken by the Socially Aware are food and wine experiences, National Parks, swimming and surfing, and countryside and wildlife.

Surveys and previous research show the Socially Aware indicated a preference for eco-tourism, for opportunities to experience local cultures, and for weekend trips away. This substantiates the view that Budj Bim will appeal to this market segment. They expressed a dislike for doing as little as possible on holiday, and for bright lights and big cities when they travel.

By way of comparison, the Socially Aware represents 24% of domestic visitors to the Great Ocean Road region, an estimated 1,629,360 visitors in 2010. The Great Ocean Road Destination Management Plan (2012) projected the market to grow to 2,034,000 domestic visitors by 2030.

### Lifestyle Leaders

Lifestyle Leaders are found in all regions, ages and lifecycle groups and represent approximately a quarter (23%) of

the Australian population aged 18+. Lifestyle Leaders are educated, professional and progressive individuals who enjoy seeking out new information and being the first to try new products. They have a higher level of discretionary expenditure than the general population so they can afford to indulge more often in travel, with a particular desire to escape city life and embrace nature/outdoors and new discoveries. Strong concerns about personal, community and planetary health and sustainability issues which shape their values, worldviews and decision making. Highly committed, knowledgeable.

### Hearth and Home and inspired by Nature

Represents approximately 14% of the total population. Generally, aged 50+ they regularly get away for weekends and want a choice of activities that allow them to get active, from hiking and cycling to shopping and dining. Their genuine environmental concerns lead them towards preferring an eco-tourism experience where respect for natural surrounds is paramount.

### MetroTech's (Libertarians)

Socially aware, cultured, connected, with action-packed social schedules and a desire to enjoy the freedom their upward mobility brings. This community has a conscience and is genuinely concerned about global and environmental issues, and they take good care of their health by exercising regularly and eating well. And they indulge in activities such as travel, fine dining, and wine. They make up 13% of population, are young, single, well-educated, inner-city professionals. From a geographic perspective, they predominantly reside in the CBD and inner suburbs of Melbourne, clustered around North Melbourne, Carlton, Richmond, and Albert Park.

### Creative Opinion Leaders

Represent approximately 6% of the total population 18+. They are creative both in terms of their involvement in cultural and creative pursuits and their openness to risks, new experiences, and innovative ideas. Although a small percentage of the population, this segment are influential early adopters, and key to early marketing strategies.

### Additional market consideration

#### New Melburnians

These new residents have limited knowledge of Victoria beyond Melbourne, which presents an opportunity where first generation immigrants to Victoria are seeking uniquely 'Australian' experiences to share with their family and friends. This target market seeks outdoor experiences not afforded in their country of origin. This market responds to different seasonality in their travel habits (e.g. spring and flower blossom season), which are associated with cultural holidays. Links to Bendigo will assist realisation of opportunities.

### Preferences for different age groups

- Young adults respond best to opportunities for group interaction and involvement, satisfying these segments needs for fun and bonding;
- Adults without kids favour experiences that are more intimate and allow direct engagement in a dynamic setting – preferences include smaller groups, timeout for couples, and spirit of adventure;

- Families with younger children seek outdoor, interactive experiences with a variety of activities, whilst those with older children prefer an additional learning element – preferences include a safe environment for fun and learning;
- Older working adults with no kids at home are motivated by opportunities to connect with Indigenous people in a natural environment – preferences include active participation in activities, where they can feel they are still young enough to be hands on; and
- Retirees require a safe and comfortable environment, as well as opportunities for meeting other travelers – preferences include social interaction in a comfortable and learning environment.

### Preferences for international visitors

- Experience seekers are the key market segment. Food and wine experience is overwhelmingly the number one preference for experience seekers and is identified as a preferred activity by all key origin markets;
- Nature based experience. This is the second most common preference for experience seekers from all origin markets and is a key preference for all markets identified except Japan; and
- Shopping experience. All key experience seeker markets except the United States and New Zealand expressed a preference for a shopping related experience during their visit.



## 7.5 Visitation Estimates

The below is based on a tourism analysis, SGS Economics and Planning provided visitation estimates, and cost benefit analysis.

### Introduction

At present, community awareness of the significance of the Lake Boort is close to nil. This lack of awareness does not facilitate nor attract visitation. Investment into infrastructure and promotion of the site will generate additional visitation to Lake Boort. This chapter seeks to estimate the levels of visitation Lake Boort will attract at full development.

Lake Boort is located approximately 1 hour's drive North West of Bendigo, in Loddon Shire.

Based on a tourism brief and analysis, SGS assumed due to the geographical location of Lake Boort, the primary segment of visitors that the Lake Boort Region is initially likely to be:

- Overnight visitors (both domestic and international) travelling in their own vehicles, visiting Lake Boort before reaching their final destination; and
- Day trip visitors from Central Victoria travelling in their own vehicles to visit Lake Boort.

Note: These assumptions have been used to determine the scale of visitation to the Lake Boort Scarred Trees upon initial development. It does not suggest that the Lake Boort Scarred Trees should only be marketed to day trippers from Central Victoria only, or overnight visitors travelling further afield than Lake Boort. The planned camp site at Lake Boort will add capacity for dedicated overnight stays in the area.

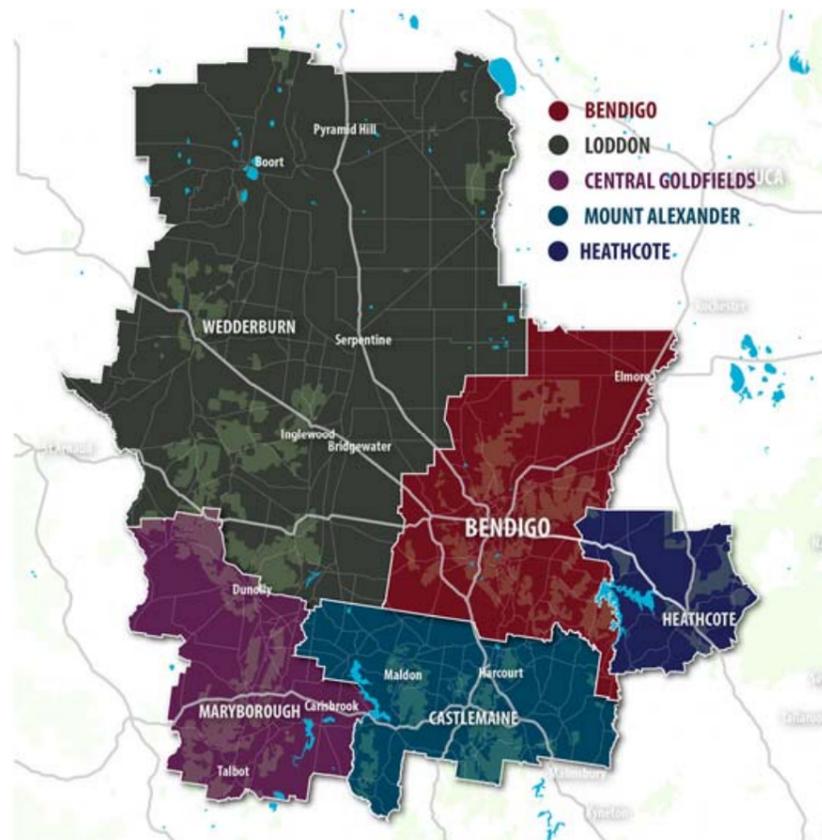
### Visitor estimates

To develop the base visitation estimates for overnight visitors, SGS estimated the number of people who might visit Lake Boort, based on:

- The location of their end destination and length of stay;
- Their mode of transport; and
- Willingness to experience Aboriginal cultural experiences.

Due to Lake Boort's location in Victoria, SGS poses that the probable end destinations for people likely to visit the Lake Boort site are Mildura and Echuca coming from the South (e.g. Bendigo or Melbourne), and Bendigo coming from the North/West (Mildura/the Riverine). (SGS were advised Bendigo was the most likely end destination with side excursion to Boort). SGS utilised the National Visitor Survey collected by Tourism Research Australia's on Victoria's 'tourism campaign regions' (see figure to the right).

Note: Although Lake Boort has potential as an attractive nature-based tourist destination, SGS has not used visitor propensity to visit nature-based tourism in our visitor estimations. As nature-based tourism represents 69% of the



Location of Lake Boort in Relation to Surrounding Towns and LGAs (Urban Enterprise, 2015)



Victoria's Tourism Campaign Regions (Visit Victoria, 2021)

international overnight visitor market, and 28% of the domestic overnight market, utilising this propensity would result in visitation estimates being implausibly high. Nonetheless, promoting the nature-based values of Lake Boort will assist positioning to a wider market, and will allow the experience to be packaged with additional activities in Central Victoria.

### Day Trip visitors from Surrounding Area Estimates

To estimate day trip visitors from Central Victoria to Lake Boort, SGS used real visitation data from the Loddon Visitor Information centre in Loddon as a proxy for annual visitation. We assumed that the same amount of people who stop at the Loddon Visitor Information Centre are likely to be interested in exploring local attractions such as the Lake Boort Scarred Trees. This is likely to be an underestimate of visitors given the international significance of the site, and likelihood visitors from further afield will be interested.

### Scenario Development

As tourism visitation has been so heavily affected by the ongoing COVID-19 pandemic, SGS developed two visitation scenarios to be considered:

#### Scenario 1

Assumes that interstate and international travel has resumed across Australia and its regions. Thus, the level of domestic and international visitation to the Bendigo/ Loddon, Mallee and Central Murray Regions is the same that was achieved in the year ending March 2020, i.e., to pre-COVID-19 conditions.

#### Scenario 2

Assumes that international travel is still not possible due to the continuing COVID-19 health crisis, and interstate (domestic) travel is still constrained. The level of international travel to the Bendigo/ Loddon, Mallee and Central Murray Regions is therefore zero, and the level of domestic travel is the same that was achieved in the year ending March 2021.

At present, the Lake Boort region is only accessible by private vehicle. Thus, the next step in the analysis was to exclude visitors from both scenarios who travelled via means other than private vehicles. To do this, SGS utilised data again from the National Visitor Survey compiled by Tourism Research Australia to understand the mode of transport used by overnight visitors.

### Overnight Visitors by Number Of Overnight Stops on Trip by Transport Used by Main Reason For Trip

	Holiday	Visiting Friends and Relatives	Business	Other Reason
<b>1 Night Overnight Stop</b>				
Air transport	14%	16%	48%	15%
Self-drive vehicle	81%	77%	48%	76%
Other transport	4%	7%	4%	10%
<b>2 Night Overnight Stop</b>				
Air transport	30%	30%	56%	20%
Self-drive vehicle	80%	80%	60%	78%
Other transport	10%	11%	n/a	12%
<b>3 Night Overnight Stop</b>				
Air transport	36%	33%	16%	16%
Self-drive vehicle	81%	85%	86%	86%
Other transport	17%	13%	n/a	n/a
<b>3 Night Overnight Stop</b>				
Air transport	16%	17%	48%	15%
Self-drive vehicle	81%	77%	49%	78%
Other transport	5%	8%	4%	10%

(Tourism Research Australia: National Visitor Survey, 2019)

SGS drew data from Tourism Research Australia noting that Indigenous cultural practices and sites are a major drawcard for international travellers. In 2019, 11% of international overnight visitors took part in Indigenous activities, compared to just 1% of domestic overnight visitors (Tourism Research Australia, March 2020). It is believed this reflects limited Indigenous product in the South East, particularly given the high interest noted in domestic tourism surveys, and demographic assessments. In 2009, spending by Indigenous tourism related visitors was valued at \$7.2 billion, representing 12% of total visitor expenditure in Australia.

Tourism Australia has identified Indigenous tourism as one of the seven key experiences which underpin Australia's global marketing activities. In the year ending 2019, 447,300 international and domestic visitors participated in an Aboriginal activity in Victoria, spending more than \$1.2 billion and 9.9 million nights (Victorian Department of Jobs, Precincts and Regions, 2019). Victoria's market share of international Aboriginal tourism visitors is estimated to be 6.8% of all visitors to the state (ibid).

The relatively low base of engagement in Aboriginal cultural tourism in Victoria provides a significant opportunity for this industry increase its economic contribution to the state and to provide unique, authentic and place specific visitor experiences in an increasingly crowded tourism market. Many developments are being actively pursued, most notably the Budj Bim Cultural Landscape Project, set to be opened in June 2022. The Victorian Government has invested more than \$12 million into the project which includes the national park, the Tyrendarra township, Kurtonitj, Lake Condah, and Tyrendarra Indigenous Protected Area. More information on the Budj Bim National Park can be found in Appendix 1.

The cumulative effect of a number of Aboriginal cultural experiences being available across Victoria will very likely increase the interest in the Lake Boort Scarred Trees, and the market share of Aboriginal Culture tourism sector as a whole.

The following tables summarise the base visitation estimates for both scenarios.

### Base Visitation Estimates For Scenario 1: Pre COVID-19 Tourism Conditions

	Year Ending March 2020			
	Overnight international	Overnight domestic	Day trips	Totals
Bendigo/ Loddon*	25,000	1,272,000	3,370,000	
Mallee**	23,900	847,000		
Central Murray***	9,000	939,000		
Total overnight visitor pool	<b>57,900</b>	<b>3,058,000</b>	<b>3,370,000</b>	<b>6,485,900</b>
Reduction to account for rate of visitation to Aboriginal cultural heritage sites (11% international, 1% domestic)	6,369	30,580	33,370	70,649
Reduction to account for 81% rate of self-driving	5,159	24,770	27,297	57,226
			<b>Total</b>	<b>57,000</b>
			<b>Avg. Daily</b>	<b>156</b>

(SGS Economics and Planning using Visit Victoria, 2020, Tourism Research Australia: National Visitor Survey, 2019)

### Base Visitation Estimates For Scenario 2: No International Travel

	Year Ending March 2021			
	Overnight International	Overnight domestic	Day trips	Totals
Bendigo/ Loddon*	0	664,000	1,685,000	
Mallee**	0	420,000		
Central Murray***	0	470,000		
Total overnight visitor pool	<b>0</b>	<b>1,554,000</b>	<b>1,685,000</b>	<b>3,239,00</b>
Reduction to account for rate of visitation to Aboriginal cultural heritage sites (11% international, 1% domestic)	0	15,540	16,850	
Reduction to account for 81% rate of self driving	0	12,587	13,649	26,236
			<b>Rounded Total</b>	<b>26,000</b>
			<b>Avg. Daily</b>	<b>71</b>

(Source: SGS Economics and Planning using Visit Victoria, 2021, Tourism Research Australia: National Visitor Survey, 2019)

In addition to the base visitation estimates, there are some factors that may increase daily visitation to the Lake Boort region, namely the extent to which Lake Boort is included in day tour schedules and educational field trips. Tourism stakeholders consulted with suggest that Lake Boort and the Scarred Trees will appeal to Aboriginal heritage and/or photography day trips, likely departing and arriving in Melbourne.

The maximum capacity of day trip buses are generally 12 people. Tourism stakeholders suggested that a once a week frequency of a day trip bus would be a low estimate for this destination, with daily trips being a high estimate. If educational trips by primary or secondary schools were to occur with a weekly frequency (and a max capacity of 60 per bus), this would provide an additional cohort of visitors. This is presented in the tables below for both Scenario 1 and 2.

*It is important to note that the data does not exist to predict the peak and off-peak visitation levels. For outdoor nature-based activities, weekend/school holiday peaks have the potential to create overcrowding. This will lead to negative visitor experiences if domestic demand increases, and the dispersal of visitors is not effectively managed. Lake Boort is also a popular duck shooting destination during the short designated season – (and only when there is water in Lake Boort). Visitation to Lake Boort will likely be highly discouraged during this time.*

*The visitation ranges provided should therefore be further interrogated by practicing tourist operators regarding peak and off-peak seasons.*

#### Additional Visitation Sources For Scenario 1: Pre COVID-19 Tourism Conditions

		Annual visitation: day tours	Annual visitation: Education visits	Total
Low Estimate	Inclusion of site on day tour schedules, once a week frequency	+624	+0	+624
Medium Estimate	Inclusion of site on day tour schedules, daily frequency	+4,380	+0	+4,380
High Estimate	Inclusion of site on day tour schedules, daily frequency, plus weekly educational school visits	+4380	+3120	+7500

(SGS Economics and Planning using Visit Victoria, 2020, Tourism Research Australia: National Visitor Survey, 2019)

As day tour schedules are generally targeted towards international visitors, the number of additional visitors by this source has been scaled back in scenario 2 as shown below.

#### Additional Visitation Sources For Scenario 2: No International Travel

		Annual Visitation: Day Tours	Annual Visitation: Education Visits	Totals
Low Estimate	No additional visitation	+0	+0	+0
Medium Estimate	Inclusion on day tour schedules, weekly frequency	+624	+0	+624
High Estimate	Inclusion on day tour schedules, weekly frequency + weekly educational school visits	+624	+3,120	+3,744

(SGS Economics and Planning using Visit Victoria, 2020, Tourism Research Australia: National Visitor Survey, 2019)

#### Total Visitation Estimates For Scenario 1: Pre COVID-19 Levels Of Activity

		Annual	Daily Average
Low Range	Base visitation estimates + Inclusion on day tour schedules, weekly frequency	57,000	156
Medium Range	Base visitation estimates + Inclusion on day tour schedules, daily frequency	62,000	169
High Range	Base visitation estimates + Inclusion on day tour schedules, daily frequency, + weekly educational school visits	65,000	178

(SGS Economics and Planning using Visit Victoria, 2020, Tourism Research Australia: National Visitor Survey, 2019)

#### Total Visitation Estimates For Scenario 2: No International Travel

		Annual	Daily Average
Low Range	Base visitation estimates	26,000	71
Medium Range	Base visitation estimates + Inclusion on day tour schedules, weekly frequency	27,000	73
High Range	Base visitation estimates + Inclusion on day tour schedules, weekly frequency + weekly educational school visits	30,000	82

(SGS Economics and Planning using Visit Victoria, 2020, Tourism Research Australia: National Visitor Survey, 2019)

## 7.6 Cultural Heritage Tourism Comparison

### Sense checking the visitation estimates

To ensure the visitation estimates developed for the Lake Boort Scarred Trees Masterplan stand up to scrutiny, SGS researched several experiences that could be compared to the Lake Boort Scarred Trees tourism offer. Although it was possible to find comparable Indigenous tourism experiences to use as case studies (see Appendix 1), few case studies had visitation data recorded by their management organisations (Budj Bim whilst comparable is yet to commence operations). SGS was able to obtain visitation estimates for Mungo National Park, a highly comparable offer to the Lake Boort Scarred Trees.

### Mungo National Park

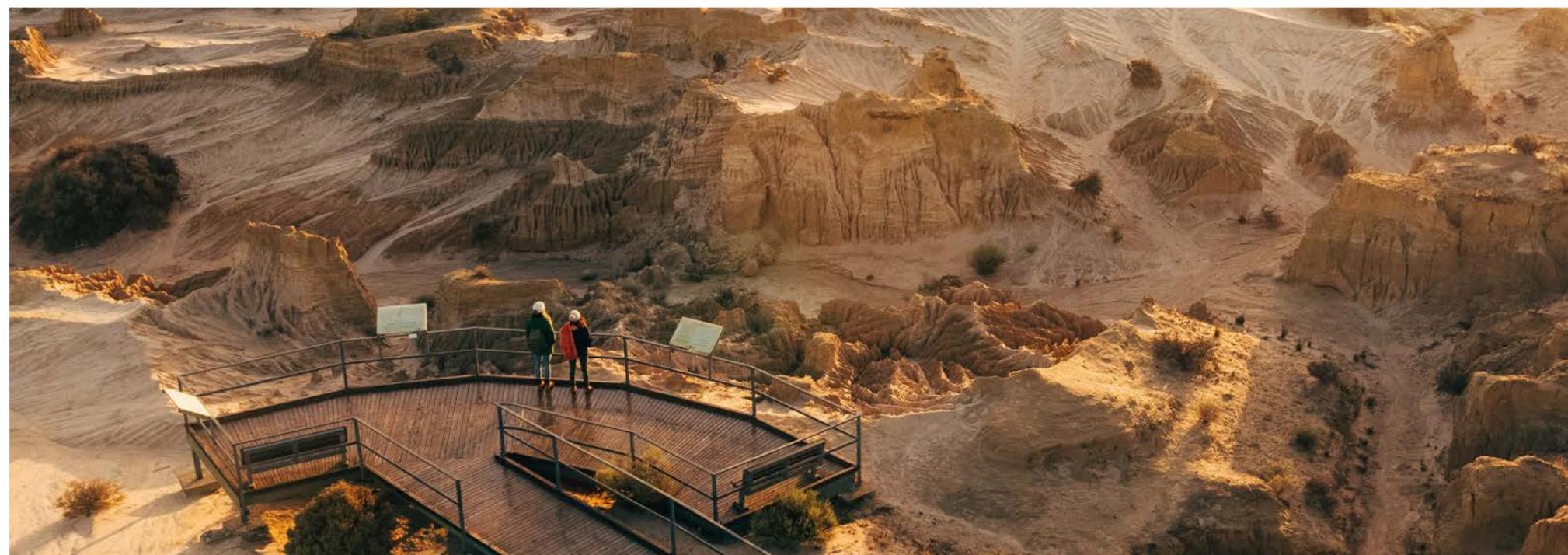
The Lake Mungo region is a profoundly key place for the three traditional owners: the Barkandji/Paakantyi, Mutthi Mutthi and Ngiyampaa people. Across the landscape are remnants of fireplaces, middens and tools. Many significant archaeological remains have been recovered due to Mungo's favourable conditions for the preservation of the archaeological record (including the remains of Mungo Lady and Mungo Man). These records have enabled scientists to date Aboriginal occupation in the region back to over 42,000 years ago (Macquarie University, 2021).

In 2010, 2013 and 2018, Mungo National Park attracted approximately 25,000 visitors per annum (NSW State Parks internal reporting). This data was collected using traffic counters, guided tours, day use fees and camp fee envelopes.

In response to COVID-19, the NSW National Parks and Wildlife Service expanded the online booking system, meaning that all camping and accommodation must be booked via the online system. During the 2020-2021 Financial Year, 2020/2021, combined booking for Mungo National Park totalled 10,023. Although the total does not include day visitors or private tour companies that also would be visiting the park throughout the reporting period, it represents significantly lower visitation results than 2010, 2013 and 2018, with the main contributor being COVID-19 and the resulting restrictions. It should also be noted that the 2020/2021 financial year also experienced weather events that closed the park for all visitors for extended periods of time.

Other key information on Mungo National Park can be found in the table to the right.

<sup>3</sup> SGS acknowledges that while Budj Bim National Park may be the most comparable site and experience to the Boort Scarred Tree region, as it is not yet opened to the public, Mungo National Park was chosen so as to utilise actual visitation data. Once visitation commences at Budj Bim National Park in June 2022, real visitation data could be utilised in relation to this project.



Mungo National Park (National Parks NSW)

Managing Organisation	The Paakantji and Ngiyampaa people co-manage Mungo National Park with the New South Wales National Parks and Wildlife Service.
Aboriginal Cultural Significance	The Lake Mungo region is a profoundly important place for the three Traditional Owner groups: the Barkandji/Paakantyi, the Mutthi Mutthi and the Ngiyampaa peoples. The lakeshore lunettes contain the burial sites of many Aboriginal ancestors. Across the landscape are remnants of fireplaces, middens, and tools. Many significant archaeological remains have been recovered due to Mungo's favourable conditions for the preservation of the archaeological record (including the remains of Mungo Lady and Mungo Man). These records have enabled scientists to date Aboriginal occupation in the region back to over 42,000 years about (Macquarie University, 2021)
Facilities and Services	<ul style="list-style-type: none"> <li>• 2 x campgrounds (one campground with 30 sites, and one campground with 12 sites, both with a max capacity of 6 people at each site)</li> <li>• 1 x budget accommodation (Mungo Shearers Quarters – 5 bedrooms, sleeps 27)</li> <li>• 1 x visitor centre</li> <li>• Picnic areas with toilets and shelters</li> <li>• Self-guided driving tours</li> <li>• Self-guided walks</li> <li>• Cycling trails</li> <li>• Guided day and multi day experiences</li> </ul>

Key Facts: Mungo National Park

Mungo National Park is an established tourism product (which should technically make it more appealing than Lake Boort at least initially), Lake Boort is considerably more accessible than Mungo National Park. Due to its arid environment, the Mungo National Park is highly vulnerable to extreme weather events, resulting in the Park being closed to the public for extended periods. Thus, it is reasonable to assume that Lake Boort would achieve higher visitation than Lake Mungo National Park.

The estimated visitation is even more plausible when considering the visitation that nearby Lake Tyrell is currently achieving, and projected to achieve in coming years. Lake Tyrell is located 190kms (or two and a half hours drive) Northwest of Lake Boort. Lake Tyrell is considered "one of Victoria's most remarkable natural attractions" due to its unique salt lake environment (Victorian Premier's Office, 2017).



Lake Tyrrell (Joel Bramley, 2021)

In 2017, the State Government announced that Lake Tyrrell would receive \$2.3 million to fund new visitor information and tourism infrastructure including a boardwalk, interpretive signage, walking tracks, a viewing area, accessible toilets, waste management infrastructure, and parking with turnaround space for buses. The project is expected to boost the Lake's current visitation numbers from 42,000 per annum in 2017 to more than 192,000 by 2025 (Victorian Premier's Office, 2017). Given that Lake Boort could be included in an itinerary to Lake Tyrrell by only adding an additional 10 minutes of driving time, it is highly likely that Lake Boort will benefit from the proximity to Lake Tyrrell. This, in addition to the evidence of Lake Mungo National Park, renders the 57,000 to 65,000 tourism estimates quite plausible.

### Potential Triggers

Over and above the fluctuation of visitation during peak and off peak periods, the following factors may influence the level of visitation seen at the lake Boort site:

- Further development of the Lake Boort area will very likely increase visitation. Importantly, the Dja Wurrung Clans Aboriginal Corporation have received \$500,000 funding from Parks Victoria to develop a campsite, which is likely to be fully constructed within the next 18 months;
- As mentioned above, the cumulative effect of a number of additional Aboriginal cultural experiences being available across Victoria (including those within the Budj Bim National Park) will very likely increase the interest in the Lake Boort Scarred Trees;
- Elevating Lake Boort's profile through the Bendigo Regional Tourism network will likely increase visitation to the site. Lake Boort sits within Loddon Shire Council, which is part of the Bendigo Regional Tourism network. This network is a strong marketing group who invest considerable time and money into promoting their regions (consisting of the Bendigo, Loddon Valley, Maryborough and Castlemaine regions). Bendigo in particular has a wealth of accommodation options that would complement Lake Boort's offer. By elevating Lake Boort's profile with the Bendigo Regional Tourism network, it is very likely that visitation will increase at Lake Boort;
- Linking the Lake Boort tourism experience with Lake Tyrrell will likely increase visitation. Given that Lake Boort could be included in an itinerary to Lake Tyrrell by only adding an additional 10 minutes of driving time, it is highly likely that Lake Boort will benefit from the proximity to Lake Tyrrell. Actively engaging with tourism operators who take visitors to Lake Tyrrell would be paramount to achieving this;
- Development of additional trail/ walk infrastructure in Boort region with Aboriginal Cultural heritage may increase visitation, particularly if physically connected to Lake Boort. Given the current drivers to visitation, including the preference for nature based experiences and the interest in multi day activities, the development of additional trail or walk infrastructure is likely to increase visitation substantially. The wider region includes rich Aboriginal cultural heritage, including within the neighbouring Lake Lyndger, and further north Lake Yando. Durham Ox, located 10 kilometres from Lake Boort, has an existing river system with significant Aboriginal Cultural heritage. Gunbower and the area around Echuca also has extraordinary cultural heritage, with possible linkages;
- Seasonal changes (including unseasonably hot and/ or cold conditions) may reduce visitation; and
- Drought and flooding conditions affecting the appeal of the landscape may reduce visitation.

It is difficult to estimate how the parameters above may impact visitation (at all, at what scale, and the interactions between them). Thus as part of the cost benefit analysis, SGS has undertaken further sensitivity testing that will determine whether significantly increasing or decreasing levels of visitation will impact the Benefit Cost Ratio (BCR) of the project. This sensitivity testing can be found in section 3.5 of the report.

### Elements for Success

Due to the relatively remote location of the Lake Boort, there is a need for quality facilities located on site, including bathroom facilities, shelters, adequate car parking, and potentially refreshments available (particularly during peak times).

In addition, past engagement regional tourism stakeholders and a review of best practice literature and case studies has provided SGS with an understanding of the elements required for a successful tourism track or trail nature based experience. These success factors are:

- World class design and infrastructure to access key cultural heritage;
- Quality facilities located on site, including bathroom facilities, shelters, adequate car parking, and potentially refreshments available (particularly during peak times);
- High quality contemporary concept and landscape design;
- Integration of Aboriginal cultural heritage and ecological/nature-based experiences where possible;
- Contemporary and engaging way finding signage and digital innovations such as augmented reality experiences/ self-guided tours);
- The development of authentic Aboriginal Cultural experiences linked to the unique offering of the site. As noted earlier, research by Visit Victoria (2020) indicates domestic tourists with an interest in Aboriginal product are seeking authentic experiences (i.e. not boomerang throwing) and were more likely to visit an Aboriginal site or community (27%) with 64% interested in learning an experience of art/craft; 39% interested in hunting and gathering; 37% rock art /carvings; 34% bush tucker; 34% music; 31% weapons. Victoria as a whole is well placed to benefit from this trend, as the state has an extremely rich and varied Aboriginal Cultural Heritage. As explained in above, the Victorian Government is investing heavily to protect and build awareness of many Victorian Aboriginal Cultural Heritage places across the state. Thus the level of interest will undoubtedly increase over time; and
- Linkages to other sites, and experiences including photography experiences at nearby Lake Tyrrell, other Aboriginal Cultural sites such as Budj Bim National Park, Lake Mungo National Park, Gunbower, nature-based activities across the region (Murray River Adventure Trail), and other cultural offerings in the region such as food and wine destinations.

Marketing and awareness campaigns tailored to target markets and aligned with the private sector's product offer will be essential to the site's success, as will continuous improvement through monitoring and evaluation of the visitor experience.

## 7.7 Variable Impacting Visitation

### Increasing visitation

Over and above the fluctuation of visitation during peak and off-peak periods, the following factors may influence the level of visitation seen at the Lake Boort site;

Further development of the Lake Boort area will increase visitation. Importantly, the Dja Wurrung Clans Aboriginal Corporation have received \$700,000 funding from Parks Victoria to develop a campsite, which is likely to be fully constructed within the next 18 months.

The cumulative effect of several additional Aboriginal cultural experiences being available across Victoria (including those within the Budj Bim National Park) will very likely increase the interest in the Lake Boort Scarred Trees.

Lake Boort sits within Loddon Shire, which is part of the Bendigo Regional Tourism network. This network is a strong marketing group who invest considerable time and money into promoting their regions (consisting of the Bendigo, Loddon Valley, Maryborough and Castlemaine regions). Bendigo has a wealth of accommodation options that would complement Boort's offer. By elevating Lake Boort's profile with the Bendigo Regional Tourism network, it is likely that visitation will increase at Lake Boort.

Development of additional trail/ walk infrastructure in Boort region (i.e. Lake Lyndger) with Aboriginal Cultural heritage may increase visitation, particularly if physically connected to Lake Boort. Given the current drivers to visitation, including the preference for nature-based experiences and the interest in multi day activities, the development of additional trail or walk infrastructure is likely to increase visitation substantially. The wider region includes rich Aboriginal cultural heritage, including Lake Yando, Kooyoora State Park, and the neighbouring Lake Lyndger. Durham Ox, located 10 kilometres from Lake Boort, has an existing river system with significant Aboriginal Cultural heritage. Gunbower and the area around Echuca also has extraordinary cultural heritage, with possible linkages.

### Decreasing visitation

Seasonal changes (including unseasonably hot and/ or cold conditions) may reduce visitation. Additional impacts on visitation include:

- Drought and flooding conditions affecting the appeal of the landscape; and
- Duck hunting during wet seasons.

It is difficult to estimate how the parameters above may impact visitation (at all, at what scale, and the interactions between them). Thus as part of the cost benefit analysis, SGS will undertake further sensitivity testing that will determine whether significantly increasing or decreasing levels of visitation will impact the benefit cost ratio (BCR) of the project.

### Critical Success Factors

To realise the potential of the site, a number of success factors have been identified.

- World class design and infrastructure to access key cultural heritage;
- Quality facilities located on site, including bathroom facilities, shelters, adequate car parking, and potentially refreshments available (particularly during peak times);
- High quality contemporary concept and landscape design;
- Integration of Aboriginal cultural heritage and ecological/nature-based experiences where possible;
- Contemporary and engaging way finding signage and digital innovations such as augmented reality experiences/ self-guided tours);
- The development of authentic Aboriginal Cultural experiences linked to the unique offering of the site. As noted earlier, research by Visit Victoria (2020) indicates domestic tourists with an interest in Aboriginal product are seeking authentic experiences (e.g. not boomerang throwing) and were more likely to visit an Aboriginal site or community (27%) with 64% interested in learning an experience of art/craft; 39% interested in hunting and gathering; 37% rock art / carvings; 34% bush tucker; 34% music; 31% weapons. Victoria as a whole is well placed to benefit from this trend, as the state has an extremely rich and varied Aboriginal Cultural Heritage. The Victorian Government is investing heavily to protect and build awareness of many Victorian Aboriginal Cultural Heritage places across the state. Thus the level of interest will undoubtedly increase over time; and
- Linkages to other sites, and experiences including photography experiences at nearby Lake Tyrell, other Aboriginal Cultural sites such as Budj Bim National Park, Lake Mungo National Park, Gunbower, nature-based activities across the region (Murray River Adventure Trail), and other cultural offerings in the region such as food and wine destinations.

Marketing and awareness campaigns tailored to target markets and aligned with the private sector's product offer will be essential to the site's success, as will continuous improvement through monitoring and evaluation of the visitor experience.

# Promotion Plan



## 8.1 Promotion Plan

### Product

- Aboriginal cultural heritage; and
- To a lesser extent, nature-based experiences (limited when Lake Boort is dry, with richer experience and opportunities when in flood).

### Aboriginal Cultural Heritage Product

- The material Aboriginal cultural heritage (principally Aboriginal scarred trees) will be viewed via boardwalks and paths situated in the South East section in the centre of Lake Boort, as well as Kinypanial Creek;
- Digital interpretation of the material and non-material cultural heritage, and to a lesser extent ecological values, is the principal platform for Yung Balug to provide interpretation for visitors of Lake Boort's seen and unseen cultural heritage. Via audio, video, music and art, Yung Balug will have the capacity to share their unique relationship to Country, providing a visceral experience for participants. Digital interpretation allows for greater accessibility of Yung Balug's stories, both in Boort and outside the region;
- On site signage/interpretation (potential for art, sculptural trail). Consider trail with artist scarring of trees – <https://nga.gov.au/stories-ideas/madhan-warrugarra-wirimbirra-gulbalanh/>;
- Guided tours;
- Yung Balug Workshops – e.g. cultural education – re-scarring, weaving; and
- Yung Balug Keeping Place is located on private property outside the Lake Boort site, and is complementary to product. A dedicated Cultural Centre may become the Keeping Place in future (although outside the remit of this Masterplan).

### Nature-based

- Bike riding, walking (linking to Little Lake Boort);
- Astronomy;
- Photography; and
- When in flood – Canoeing, bird watching, wildlife tours.

### Product Linkages

Packaging like or complementary product will assist in attracting visitors, and encouraging extended stays in the region.

### Local product links

Promotional linkages to complementary sites including:

- Little Lake Boort – where numerous scarred trees exist;
- Durham Ox – 10km from Boort, with rich ecological and

Aboriginal cultural heritage along the river via canoe;

- Lake Tyrell – 126km from Boort, and key destination for Asian tourists from Melbourne, interested in photography; and
- Food offerings – Simply Tomatoes and Salute Oliva.

### Regional product links

Opportunity exists to form collaborative promotional linkages with sites including:

- Budj Bim;
- Hanging Rock (Aboriginal Product being developed); and
- Lake Mungo.

### Special Events

Federal and State funding bodies actively support Aboriginal cultural events. With a strong appetite for this style of event in our key target market, several events are suggested, many with the potential to be promoted through established organisations.

- Seasonal events relating to Aboriginal culture seasons;
- Aboriginal contemporary music festival (location to be considered);
- Aboriginal Outdoor Film Festival event;
- Aboriginal Writers event (potentially linked to Bendigo Writers Festival and Wheeler Centre);
- Bendigo Art Gallery Aboriginal art exhibition, with linkages to Boort product; and
- Astronomy event linked to Dark Sky place.

### Promotion

Given existing tourism networks, and costs of promotion, it is suggested strong relationships are established and leveraged through existing networks, and promotional avenues. Special events may be promoted separately, but again through these networks. Funding may also be sought for dedicated cross-promotional funding with complementary Aboriginal Cultural Heritage sites (e.g. Budj Bim). Special events are to occur following launch. The networks include:

- Loddon Shire Tourism;
- Bendigo Regional Tourism;
- Visit Victoria;
- Tourism Australia (including Discover Aboriginal Experiences collective);
- Parks Victoria communications; and
- Bendigo Art Gallery – indigenous /nature themed exhibitions.

### Plan

#### Pre-Launch

- Development of key communication messages;
- Development of dedicated website;
- Liaison and briefing of:
  - > Key tourism bodies (listed above). Seek funding for media familiarisations and one key special event to consolidate and reinforce media attention to opening. Develop packages with Bendigo Tourism, and other key organisations and sites;
  - > Tour operators (including those travelling to Sea Lake). Discuss inclusion in tours; and
  - > Tourist focused businesses in region (Simply Tomatoes and Salute Oliva).
- Launch of campground;
- Identify media and high-profile ambassadors (Uncle Jack Charles, Indigenous footballers, other media personalities); and
- Coordinate launch event, with development of invitation list (including media), and consider news announcement relating to the site (e.g. rescarring or repatriation of heritage).

#### Publicity campaign

- Writing and distribution of media release. Secure long lead time media (e.g. Good Weekend Magazine); and
- Consider staggered news and announcements regarding Lake Boort Scarred Trees.

#### Launch

- Formal government launch event;
- Informal, community, and media event – attendance by high profile Ambassadors – e.g. Uncle Jack Charles, Indigenous footballers. To be connected to Dja Dja Wurrung community; and
- Additional announcement associated with opening of site, to attract daily news attention.

#### Post launch

- Arrange familiarisation tour with key tourism and social media;
- Attendance at Australian Tourism Exchange
- Coordinate special events to garner ongoing attention in media;
- Drip feed media with news and announcements
  - > Scarring of trees – teaching a new generation (likely to achieve national media attention)
  - > Events
  - > Repatriation and burials
- Consider campaign across various Dja Dja Wurrung sites (Hanging Rock, etc) to excite interest in overnight visitation to various sites;
- Target key markets (through leveraging tourism bodies)–

initially Melbourne, then Bendigo/Ballarat, and Sydney; and

- Development of food, wine and cultural heritage product with tourism partners and networks.

### Special interest groups

Targeting special interest groups will support engagement, including:

- Educational – secondary and tertiary;
- Assistance reaching groups may be provided through tourist organisations, organisations who may provide support (Bendigo Art Gallery), and those aligned with Aboriginal culture (e.g. Koorie Heritage Trust), as well as through cross collaboration with other Indigenous sites (including Lake Mungo);
- Bird watching;
- Photographic;
- Astronomy; and
- History groups.

### Additional promotional considerations

#### Food and beverage

- Portable food vendors may be invited during key times and events;
- Bush food offerings, in local retail; and
- Linkages to specialist food and wine producers (regional farm trail) e.g. Salute Oliva and Simply Tomatoes.

#### Accommodation

- Lake Boort campsite due for completion June 2023;
- Boort Lakes Holiday Park;
- Private accommodation operators; and
- Bendigo promoted as accommodation base for those seeking luxury experience.

# Cost Benefit Analysis (SGSE)



## 9.1 Cost Benefit Framework and Valuation Techniques

### Cost Benefit Framework

Cost benefit analysis (CBA) assesses the economic, social and environmental benefits of a project with its costs, to determine if the project generates a net welfare gain for the community.

When conducting a CBA, the project's outcomes are benchmarked against those of a 'base case' scenario. The base case assumes that The Boort Scarred Tree Project (or the Project) is not pursued, yet the Boort Scarred Trees will be enjoyed by a small number of visitors.

As previously outlined, the project has been Masterplanned to be developed the following stages:

- Stage 1: Development of a gateway and arrival (including a feature entryway and landscape), an integrated digital tourism experience, community and activity area (including a nature based playspace, shelter, toilet block and interpretative and directional signage), and boardwalks and tracks associated to the activity area (including a short walking trail loop track boardwalk, viewing platform and interpretive signage)
- Stage 2: Development of a walking track and boardwalk with interpretive signage onto Lake Boort and the development of a walking track, board walk, viewing platforms, kayak launching point and interpretive signage at Kinypanial Creek.
- Stage 3: Lake Boort Trail (completion of a perimeter walking trail loop around Lake Boort with viewing platforms, and interpretive signage), and Boort Pyramid Road Picnic Area (with shelter, interpretive signage and carpark), and
- Stage 4: Kinypanial Creek Access Road (including a new road, carpark and interpretive and directional signage).

The CBA isolates the incremental costs and benefits generated in moving from the base case to the Project Case, which we have defined as stages one and two of the Masterplan only (i.e excluding stage 3 and 4). This is based on the assumption that once stages 1 and 2 of the project are completed, optimum visitation would be achieved. The costs and benefits arising from moving to the base case to the delivery of the Project Case plus stage 3 and 4 is explored in section 3.5.

The table below identifies the key incremental costs and benefits which arise of the life of Project.

### Incremental Costs and Benefits

Costs	Benefits
Capital costs The upfront costs of the project's development and construction.	Construction – producer surplus The profits generated by the Victorian contractor appointed to construct the project.
Capital maintenance and activation costs The costs of maintaining and activating the project's assets over time.	Construction – labour surplus The incomes earned by labour force members who are employed for the project's construction.
Construction employees' opportunity costs The opportunity costs of labour force members who are employed for the project's construction.	Visitor benefits The direct experience benefits and indirect educational and cultural appreciation benefits gained by visitors.
	Tourism benefits The profits earned by Victorian businesses who benefit from additional tourism expenditures.
	Existence and legacy benefits The benefits to Victorian non-visitors who value the improved cultural preservation and interpretation of the Boort Scarred Trees for current and future generations.

Source: SGS Economics and Planning

### Valuation Techniques

CBA uses market and non-market valuation techniques to monetise incremental costs and benefits wherever possible, i.e. so they can be presented in present day dollar values enabling direct comparison.

The table below summarises the valuation techniques used to monetise each of the items tabulated above.

### Valuation Techniques Used

Costs	Valuation Technique
Capital costs	Market prices as estimated by Quantity Surveyors.
Capital maintenance and activation costs	Market prices using an annual allowance (% of capital costs).
Construction employees' opportunity costs	SGS labour force modelling estimating the current after tax incomes and leisure times enjoyed by the region's construction workers.
Benefits	Valuation technique
Construction contractor – producer surplus	Construction industry profitability rates as measured by ABS Australian Industry.
Construction employees – labour incomes	SGS labour force modelling estimating the future after tax incomes and leisure times enjoyed by the project's construction workers.
Visitor benefits	Visitor willingness to pay as measured using revealed preferences (travel costs) for Victorian resident and education group visitors.
Tourism benefits	Tourism industry profitability rates, as measured by ABS Australian Industry, given domestic and international daily spending rates.
Existence & legacy benefits	Benefit transfer method based on published literature relating to improved Aboriginal Cultural opportunities.

Source: SGS Economics and Planning

## 9.2 Monetised Costs

### Capital Costs

Capital costs have been advised by Quantity Surveyors/ Cost Estimators and are spread over two years (2023-2024). Stage one, occurs in year 2023, and has a cost of \$5.7 million. Stage two, occurs in year 2024, and has an additional cost of \$5.1 million. The impact of the additional investment costs in stages three and four of the project, \$2.6 million in total, are tested in the sensitivity analysis.

### Capital maintenance and activation costs

Cost estimates for maintenance and activation of the assets created by the capital works have not been provided by Quantity Surveyors/ Cost Estimators. Consequently, we have made an annual allowance for these ongoing costs as follows:

- Years 2 to 6 - 0.5% p.a. of capital costs.
- Years 7 to 20 - 1.5% p.a. of capital costs.

### Construction employees' opportunity costs

Previous work by SGS has estimated that 2.4 FTE jobs are directly created by each \$1 million of spending in the construction industry in regional Victoria. This means that during stages one and two, 26 full time jobs are created by the construction process (i.e. \$10.8 million multiplied by 2.4 jobs per million).

The creation of these jobs is only considered a benefit if the workers are more productively employed than what they otherwise would be under the base case. This would entail either:

- Getting paid more than what they would otherwise be paid;
- Moving from a position of under employment to full time employment; and/ or
- Moving from a position of unemployment to under or full time employment.

SGS has developed a model which compares how much income and leisure time the workers employed during construction would have to forego to take up full time construction positions, i.e. it calculates their 'opportunity costs'.

Opportunity costs vary by labour force origin:

- Fully employed workers – opportunity costs include their current after tax incomes;
- Partly employed workers – opportunity costs include their current after tax incomes and leisure times; and
- Unemployed workers – opportunity costs include their current unemployment benefit payments from the Commonwealth and leisure times.

To estimate the opportunity costs experienced by Victorian workers, SGS has adopted the following assumptions regarding their labour force origins.

### FTE Numbers and Their Labour Force Origins

Project Occupation	FTEs	Labour Force Origin		
		Unemployment	Underemployment	Full Employment
Construction Workers	26	3%	7%	90%

Source: SGS Economics and Planning, 2022

### FTE Numbers and Their Labour Force Origins

Project occupation	ANZSCO occupation	Project average salary*	Employee decile**
Construction workers	Labourers	\$97,443	50%

\*All salaries presented as pre-tax values

\*\* employee skill (and salary) level relative to occupation distribution across regional Victoria.

Source: SGS Economics and Planning, 2022; ABS Employee Earnings and Hours, 2019.

## 9.3 Monetised Benefits

### Construction – Producer Surplus

The analysis assumes that Victorian suppliers are appointed to deliver the construction contract/s.

These Victorian suppliers are assumed to make industry standard margins on these contracts. As shown below, Construction industry margins have averaged 11% over the past 5 years. This profitability rate have been applied to the capital costs profiled above.

### Industry Profitability Rates

	Construction		
	EBITDA^ (\$m)	Sales (\$m)	Profitability*
2015-16	61,576	42,136	11.3%
2016-17	61,106	42,571	11.2%
2017-18	65,034	45,835	10.8%
2018-19	66,346	49,085	11.3%
2019-20	67,396	52,050	12.3%

Source: ABS, Australian Industry 2019-20

Notes: ^ Earnings before Interest, Tax, Depreciation and Amortisation

\* EBITA divided by Sales.

### Construction – Labour Incomes

As detailed earlier, the project will employ a substantial number of Victorian workers during construction. These workers will enjoy after tax incomes, which more than offset their opportunity costs estimated in the earlier section. The table below details the benefit experienced by workers (by occupation) after removing income tax payments.

### Incomes Earned By Victorian Workers by Occupation

Role	Project average salaries	Project after-tax incomes
Construction workers	\$97,443	\$75,308
2019-20	67,396	52,050

Source: SGS Economics and Planning, 2022.

A key portion of the project's implementation will involve surveys, engagement and conservation heritage management plans, which will be undertaken by local professionals, including those from Dja Dja Wurrung and Yung Balug clans. It is therefore certain that Aboriginal peoples from the Lake Boort region will directly benefit from the construction of the project.

### Visitor Benefits

Visitors to the project will enjoy direct recreation/ leisure benefits. The number of visitors that are expected to visit the site, because of the project, has been estimated in Section 2 of this report. We have used the following low and high scenarios for forecast visitation, both assuming that travel patterns fall in line with pre-COVID-19 levels by 2024:

- Low scenario – annual visitation of 57,000 p.a. commencing in Year 2 and growing at 5% p.a. thereafter
- High scenario – annual visitation of 65,000 p.a. commencing in Year 2 and growing at 5% p.a. thereafter.

In the absence of any direct benefit valuations that we might apply to the project, we have reverted to estimating visitor value using their opportunity costs. That is, what time costs must visitors expend to visit the site given their base case travel patterns. These costs have been developed for both Victorian public visitors (73% of total visitors) and Victorian school visitors (5% of domestic visitors), as detailed overleaf. It is assumed that school visitations will only occur for the high visitation scenario.

### Opportunity Cost Assumptions – Victorian Visitors

Opportunity cost assumption	Victorian public visitors	Victorian school visitors
Time to/ from site	60 mins	60 mins
Time at site	Excluded	2 hours
Opportunity cost of time	\$18.40 per hour per person	\$15 per hour per student

Source: SGS Economics and Planning, 2022.

Note: 1)An assumption re the time costs visitors must expend to visit the site given their base case travel patterns (in this case, the additional time spent travelling to Lake Boort upon deviating off the main highway). [2]<https://www.atap.gov.au/parameter-values/road-transport/index> [3]<https://www.pc.gov.au/research/ongoing/report-on-government-services/2022/child-care-education-and-training/school-education>

### Tourism benefits

Given that a tourist visit to the Boort Scarred Trees Project will consume time, say 2 hours, it is likely that this will directly translate into tourism visitor spending in and around the site that would otherwise not occur in Victoria. The profits made by Victorian business on these incremental expenditures are benefits to Victoria.

Regional tourism visitation and spending rates are estimated by Tourism Research Australia, drawing from the Domestic Visitors Survey. This enables an estimation of how much is spent per 'day trip' by domestic visitors. The table below summarises data from 2019 and 2021, recognising that 2021 was highly affected by COVID-19. The data reveals that between \$93 and \$98 per day is spent by domestic visitors during day trips in regional Victoria.

### Domestic Visitation and Expenditures – Regional Victorian Day Trips

	Visitors ('000)		Regional Expenditure (\$M)	
	Year Ending September 2019	Year Ending September 2021	Year Ending September 2019	Year Ending September 2021
Regional VIC	41,068	25,447	3,820	2,510

Source: Tourism Research Australia, 2022

Based on this we have assumed that each trip to the project site by an interstate or international visitors converts to \$25 in tourism expenditure being made in Victoria that otherwise would not occur. These tourism expenditures are most likely to be experienced in the accommodation and food services and retail industries. Respectively these industries have enjoyed a 10% and 6% profitability rate on average over the past 5 years, as per the below ABS Australian Industry Statistics.

### Industry Profitability Rates

	Accommodation + food services	Retail trade
2015-16	11.0%	5.5%
2016-17	9.8%	5.5%
2017-18	9.1%	5.4%
2018-19	9.0%	5.1%
2019-20	9.2%	6.2%

Source: ABS, Australian Industry 2019-20

Notes: \* EBITA divided by Sales.

### Existence and Legacy Benefits

Even though some Victorians will not visit the project site, they are still likely to place some value on the improvements the project brings regarding Aboriginal heritage and environmental protection.

Indigenous relationship to country is a multidimensional connection that is not represented through the Eurocentric view of land. This does make it complicated to try and derive a monetary representation of heritage and culture that is translatable between both Western and indigenous ideologies.

To demonstrate recognition of a wider willingness to pay (WTP) for improved preservation and interpretation of Aboriginal heritage, a study published Zander, Garnett and Straton has been utilised.[32]

This study used choice experiments to assess urban Australian's willingness to pay (WTP) for four non-market eco-system services provided by Australian natural lakes/ rivers. The services included: (1) good environmental condition, (2) quality for recreational use, (3) condition of land being important to Aboriginal people, and (4) income derived from the land. The survey was conducted across three case study regions including Northern Territory, Western Australia and Queensland, and respondents were classed as three hypothetical strategy groups. The strategy groups were based off all of the services but for focus of project application the condition of land for Aboriginal people was considered a determining factor. The strategy groups were:

1. Strong conservation which placed high importance on condition of land for Indigenous people
2. Constrained development by conservation which placed some level of importance on the condition of land for Indigenous people.
3. Development first which placed poor to no level of importance on the condition of land for Indigenous people

The questionnaire was mailed to households which included domestic residents and interstate residents, a compensating surplus was then calculated taking into consideration other factors (income, environmentalists etc.). The results are shown in table below.

### Compensating Surplus Of Management Scenarios For Different Users (AUS\$)

Strategy group	All respondents	Developers	Environmentalists	Neutral people	Darwin based people	People who have visited	People who have not visited
Development first	66	25	59	66	98	87	43
Constrained development	462	172	403	449	667	593	297
Conservation first	374	132	310	346	514	457	229

Source: Zander, Garnett and Straton, 2010

The suggestions of this case study indicated strong public support from cities where the bulk of Australia's population lives now favours development that is strongly constrained by concerns for Aboriginal culture and, to a lesser extent, by environmental values. Incorporating respondents who lived away from the study area / have never visited indicated that these people will pay substantial amounts to maintain cultural and environmental values.

In this report, a one off WTP value was obtained by averaging the strategy groups of constrained development and conservation first, focusing only on those who have not visited the site. This was chosen as these strategy groups demonstrated consideration for Aboriginal culture and despite visiting the site would still choose to contribute. Further assumptions are detailed in Table 18.

### Willingness To Pay For Preservation Of Cultural Heritage

Parameter	Value
WTP non-use value	\$263
Percentage of value concentrated on cultural preservation	25%
Incremental increase due to project	20%

Source: SGS Economics and Planning using Zander, Garnett and Straton, 2010

Only 25 percent of the WTP value was used as the whole value represents all four services being implemented, while preservation of culture only constitutes one fourth of these services. The additional 20 percent was to represent the incremental change that the project will attribute. The final WTP value was applied to the population of those who inhabit Dja Dja Wurrung country (115,000), as it is likely these people will have a better understanding of the Boort Scarred Trees' cultural significance.

It is important to note that estimates used above are conservative, and provide only a small indication of the value of preserving and maintaining cultural heritage. It is acknowledged that the value of preserving and maintaining cultural heritage is intrinsically invaluable to Aboriginal and Torres Strait Islander communities.

## 9.4 Results

### Overarching assumptions

Overarching assumptions for the discounted cashflow analysis are as follows:  
Values = 2022, real (i.e. no escalation)

Timeframe = 20 years (2023 to 2042)

Discount rate [1] = 4% real.

Performance results

### Cost Benefit Analysis Results

	Low visitation scenario	High visitation scenario
	Present value dollars	
Capital costs	\$10,189,000	\$10,189,000
Asset maintenance & activation costs	\$1,546,000	\$1,546,000
Opportunity costs of project employees	\$904,000	\$904,000
<b>Total incremental costs</b>	<b>\$12,639,000</b>	<b>\$12,639,000</b>
Construction contractor – producer surplus	\$1,078,000	\$1,078,000
Construction employees – labour incomes	\$1,771,000	\$1,771,000
Visitor benefits	\$13,542,000	\$16,302,000
Tourism benefits	\$795,000	\$909,000
Existence & legacy benefits.	\$1,409,000	\$1,409,000
<b>Total incremental benefits</b>	<b>\$18,595,000</b>	<b>\$21,469,000</b>
<b>Performance Measures</b>		
Net Present Value (NPV) (\$m)	\$5,956,000	\$8,830,000
Benefit Cost Ratio (BCR)	1.5	1.7

Source: SGS Economics and Planning

Notes: Discount rate of 4% per annum used.

[1]The discount rate is used to convert future streams of costs and revenues to present day values. The discount rate recognises the opportunity costs of capital, as well as social preferences for consumption opportunities now rather than later.

### Cost Benefit Analysis Results

Performance measure	Estimation method	Decision rule
Net Present Value (NPV)	A number generated by deducting the present value of the stream of costs from the present value of the stream of benefits, (with the present value of costs and benefits determined by using an appropriate discount rate).	Accept options with a positive NPV Reject options with a negative NPV The greater the NPV the better.
Benefit Cost Ratio (BCR)	Ratio of discounted present day benefits over discounted present day costs.	Accept options with a BCR > 1 Reject options with a BCR < 1 The greater the BCR the better.

Source: SGS Economics and Planning

### Sensitivity Testing

Sensitivity testing assesses how the project performs under differing assumptions. The following six sensitivity tests have been conducted upon the project case using a range of pessimistic and optimistic assumptions when compared to the base case assumptions, i.e. the assumptions detailed in the sections above.

### Sensitivity Tests

Variable	Base assumption	Pessimistic assumption	Optimistic assumption
T1 - Discount rate	4% real	7% real	1% real
T2 – Capital costs	100%	125%	75%
T3 – Asset maintenance costs	100%	125%	75%
T4 – Visitor numbers	100%	75%	125%
T5 – Non-visitor benefits	Included	Excluded	Excluded
T6 – No international visitors	100%	0%	0%

Source: SGS Economics and Planning

<sup>13</sup>The Project Case is defined as stages one and two of the Masterplan. <sup>14</sup>The Base Case assumes that The Boort Scarred Tree Project (or the Project) is not pursued, yet the Boort Scarred Trees will be enjoyed by a small number of visitors.

The impact of these changes on the project's BCR and NPV is summarised in the tables below.

### Sensitivity Testing Results – Project BCRs

Variable	Low visitation scenario		High visitation scenario	
	Pessimistic assumption	Optimistic assumption	Pessimistic assumption	Optimistic assumption
T1 - Discount rate	1.2	1.8	1.4	2.1
T2 – Capital costs	1.2	1.8	1.4	2.1
T3 – Asset maintenance costs	1.4	1.5	1.6	1.8
T4 – Visitor numbers	1.2	1.8	1.4	2.0
T5 – No international visitors	1.4	1.4	1.6	1.6

Source: SGS Economics and Planning

### Sensitivity Testing Results – Project NPV (\$M)

Variable	Low visitation scenario		High visitation scenario	
	Pessimistic assumption	Optimistic assumption	Pessimistic assumption	Optimistic assumption
T1 - Discount rate	\$2,668,000	\$11,139,000	\$4,755,000	\$15,227,000
T2 – Capital costs	\$3,409,000	\$8,504,000	\$6,283,000	\$11,378,000
T3 – Asset maintenance costs	\$5,569,000	\$6,342,000	\$8,443,000	\$9,216,000
T4 – Visitor numbers	\$2,371,000	\$9,540,000	\$4,527,000	\$13,133,000
T5 – No international visitors	\$5,161,000	\$5,161,000	\$7,921,000	\$7,921,000

Source: SGS Economics and Planning

### Additional Sensitivity Testing

SGS undertook one additional round of sensitivity testing to understand the performance of the Boort Scarred Tree Project being delivered as: sensitivity tests:

- T7 – Stage one only – This test interrogates the performance of the project case if stage one of the project was to be completed in isolation, assuming no additional costs or benefits from stage two onwards. We have assumed that stage one in isolation generates only 25% of the visitation generated by stages one and two combined.
- T8 – Stage one to four in combination - This test interrogates the performance of the project case if stage one to four was completed in combination. Stages three and four include additional costs of \$2.6 million which are assumed to occur in 2026. It should be noted that this additional expenditure in stage three and four may generate increased visitation, however this benefit has not be included in the sensitivity testing results.

As shown in the table to the right, developing stage one in isolation does not result in a bcr above one (or a positive npv). Although the development

of stage one is a logical first step to activate the site and start building awareness of the project, the most economic benefits arise from the development of stage 1 and 2 combined. Developing stages 1 – 4 in combination also results in a positive bcr and npv despite the higher costs associated with them.

### Additional Sensitivity Testing Results – Project NPV (\$M)

Variable	Low visitation scenario		High visitation scenario	
	BCR	NPV	BCR	NPV
T7 – Stage one	0.8	-\$1,588,000	0.9	-\$842,000
T8 – Stage one to four in combination	1.2	\$3,702,000	1.4	\$6,576,000

Source: SGS Economics and Planning

# Funding of Actions



## 10.1 Funding Of Actions

Funding body	Grant and amounts	Due dates	Notes
Parks Victoria	Victorian Great Outdoors	Campground due for completion June 2023	\$700k allocated to Lake Boort campground can assist with first stage implementation
Regional Development Victoria	<p>Regional Infrastructure Fund (RIF)– Predominately for regional infrastructure projects conducted by Local Governments, not-for-profits and community groups that grow jobs, regional economies and strengthen regional communities.</p> <p>\$20k – 3m in funding.</p> <p><a href="https://www.rdv.vic.gov.au/grants-and-programs/regional-infrastructure-fund">https://www.rdv.vic.gov.au/grants-and-programs/regional-infrastructure-fund</a></p> <p>Investment Fast Track Fund (IFF) – which aims to assist Local Governments, Businesses, not-for-profits and community groups undertake planning and development work, to take projects from current development stage to shovel ready.</p> <p>4:1 investment</p> <p>Up to \$500k.</p> <p><a href="https://www.rdv.vic.gov.au/grants-and-programs/investment-fast-track-fund">https://www.rdv.vic.gov.au/grants-and-programs/investment-fast-track-fund</a></p> <p>Regional Tourism Investment Fund – For regional tourism infrastructure projects that will grow jobs, regional economies and visitation.</p> <p>Min \$150k to \$10m</p> <p><a href="https://www.rdv.vic.gov.au/grants-and-programs/regional-tourism-investment-fund">https://www.rdv.vic.gov.au/grants-and-programs/regional-tourism-investment-fund</a></p>	Funding has closed. Potential for future rounds.	Funding of digital interpretation through Aboriginal Unit. Consider seed funding for development of special events
Creative Victoria	<p>Various.</p> <p>Funding programs and dates to be announced</p>		
Visit Victoria	<p>Victoria's Aboriginal Tourism Development</p> <p><a href="https://www.ecotourism.org.au/assets/Resources-Hub-Indigenous-Tourism/VIC-Victoria-s-Aboriginal-Tourism-Development-Strategy-2013-2023.PDF">https://www.ecotourism.org.au/assets/Resources-Hub-Indigenous-Tourism/VIC-Victoria-s-Aboriginal-Tourism-Development-Strategy-2013-2023.PDF</a></p> <p>Regional Events Fund (up to \$500k). Various rounds of funding on offer</p>		Seek marketing funding
Victorian Aboriginal Economic Strategy 2013 – 2020	Potential to support economic, business and social development initiatives. Lake Boort is a good example of a landmark project.		May be auspiced through Dja Dja Wurrung
National Indigenous Australians Agency	<p>National Indigenous Tourism Product</p> <p>Up to \$100k.</p> <p><a href="https://www.niaa.gov.au/indigenous-affairs/economic-development/indigenous-tourism-fund">https://www.niaa.gov.au/indigenous-affairs/economic-development/indigenous-tourism-fund</a></p>		Investing in developing new products, equipment, business planning and marketing in the tourism sector
Regional Development Victoria – Business Victoria	<p>Enabling Tourism Fund.</p> <p>\$30k – \$500k per project</p> <p><a href="https://business.vic.gov.au/grants-and-programs/enabling-tourism-fund">https://business.vic.gov.au/grants-and-programs/enabling-tourism-fund</a></p>	Funding has closed for this year. It is likely a further round will be offered for 2023.	
Festival Australia	<p>Commonwealth funding for festival events</p> <p><a href="https://www.grants.gov.au/Go/Show?GoJuid=5d1eda50-8717-4f28-b25b-f2d46a7d0fa5">https://www.grants.gov.au/Go/Show?GoJuid=5d1eda50-8717-4f28-b25b-f2d46a7d0fa5</a></p>		
Indigenous Visual Arts	<p>Funding for creation of visual arts by Aboriginal Peoples.</p> <p><a href="https://www.grants.gov.au/Go/Show?GoJuid=0c65f878-73ab-4152-869b-00c67c0586b8">https://www.grants.gov.au/Go/Show?GoJuid=0c65f878-73ab-4152-869b-00c67c0586b8</a></p>		Consider funding for creation of Aboriginal art works along boardwalks
Grants Connect	Refer to site for variety of Commonwealth funding opportunities, and closing dates.		

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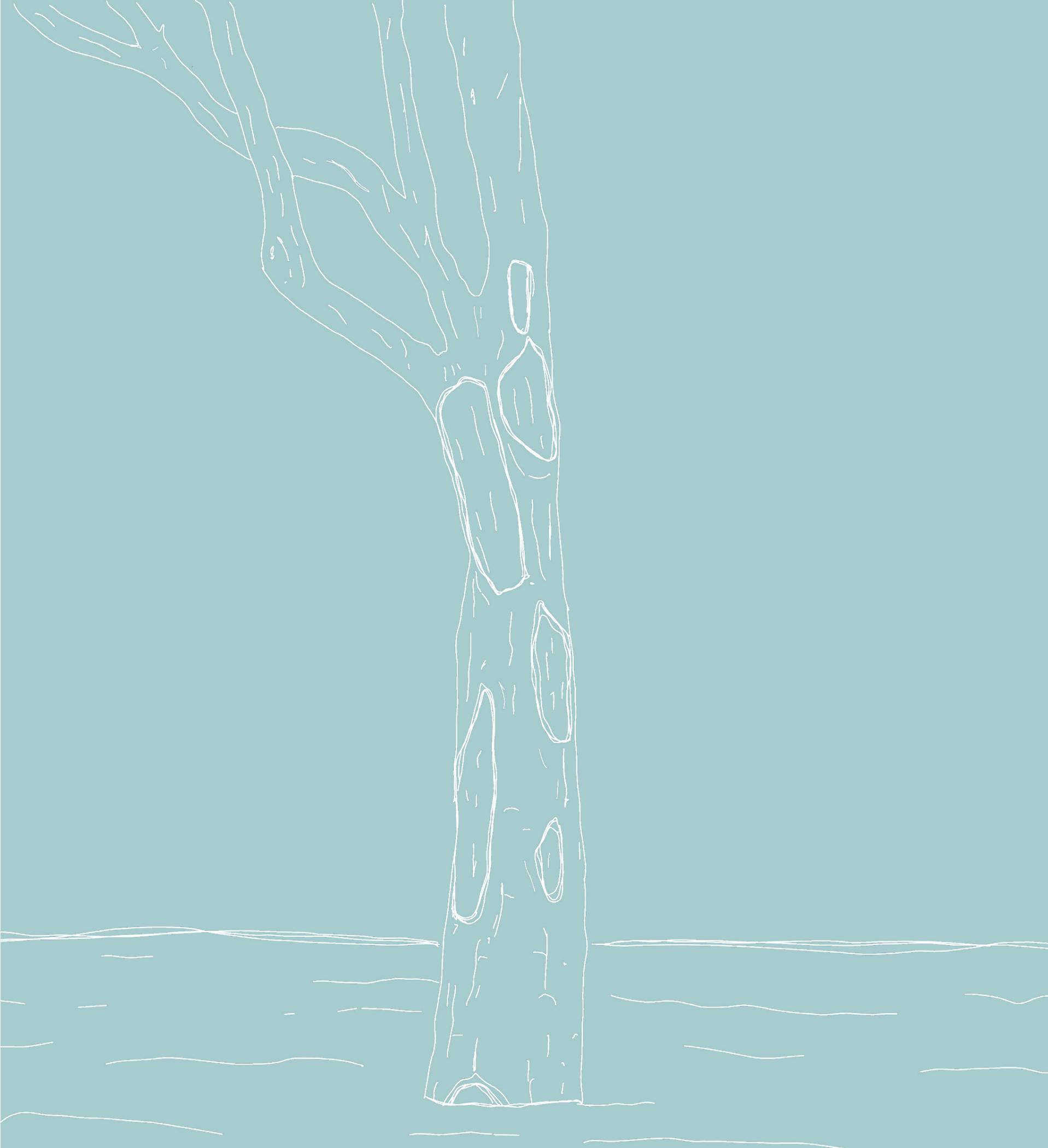
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Section 11

# Appendix 1

## Cost Plan



# 11.1 Project Cost Plan

**GEELONG**  
2 Hampton St,  
Newtown VIC 3220  
03 5222 2562  
ABN 31 600 499 965

**MELBOURNE**  
Suite 3/ Level 1, 420 Spencer St,  
West Melbourne VIC 3003  
03 9052 3212  
info@zinccm.com.au

**ZINC**  
COST MANAGEMENT

Ref 21295-cp1revA

8 April, 2022

Aspect Studios  
Level 4, 160 Queen Street  
MELBOURNE VIC 3000

Via email tom.roberts@aspect-studios.com

Attention Mr. Tom Roberts

Dear Tom,

**Lake Boort Scarred Trees Masterplan  
Cost Plan No. 1revA**

We have prepared Cost Plan No. 1revA for the above project based on the documentation provided and our discussions.

**Cost Summary**

The cost plan can be summarised as follows:

	Stage 1 (\$)	Stage 2(\$)	Stage 3 (\$)	Stage 4 (\$)	Total Cost (\$)
General External Works and Services	\$4,131,000	\$3,750,000	\$1,120,000	\$626,000	\$9,627,000
<b>Sub-Total (excl. GST):</b>	<b>\$4,131,000</b>	<b>\$3,750,000</b>	<b>\$1,120,000</b>	<b>\$626,000</b>	<b>\$9,627,000</b>
ESD Initiatives	\$103,000	\$94,000	\$28,000	\$16,000	\$241,000
Contingencies and Cost Escalation	\$1,292,000	\$1,173,000	\$351,000	\$196,000	\$3,012,000
Non-Construction Costs	\$150,000	\$100,000	\$250,000	\$50,000	\$550,000
<b>TOTAL END COST (excl. GST):</b>	<b>\$5,676,000</b>	<b>\$5,117,000</b>	<b>\$1,749,000</b>	<b>\$888,000</b>	<b>\$13,430,000</b>

Please refer to the attached cost plan for further information and scope of works included. All costs are reported exclusive of GST.

**ZINC**  
COST MANAGEMENT

**Documentation**

The cost plan is based on Masterplan documentation and has been prepared using the following:

- Landscape – drawings prepared by Aspect Studios received 18 February, 2022
- Correspondence with Aspect Studios up to 7 April, 2022

**Environmental Sustainable Design (ESD)**

The cost plan includes an allowance of 2.5% for ESD initiatives over and above BCA Section J requirements and assumes environmentally responsible products and materials, WSUD principles in the landscape design, etc.

**Non-Construction Costs**

The cost plan includes the following non-construction cost allowances:

- Cultural Heritage Management Plan - \$550,000
  - Stage 1: Arrival and Community Area - \$150,000
  - Stage 2: Southern Lake Trails - \$100,000
  - Stage 3: Northern Lake Trails - \$250,000
  - Stage 4: Kinypanial Creek Arrival Area - \$50,000

**Provisional Sum Allowances**

The cost plan includes the following Provisional Sum allowances:

- Interpretive Signage - \$250,000 (as advised by Aspect Studios)
  - Stage 1: Arrival and Community Area - \$100,000
  - Stage 2: Southern Lake Trails - \$50,000
  - Stage 3: Northern Lake Trails - \$75,000
  - Stage 4: Kinypanial Creek Arrival Area - \$25,000
- Playground Equipment - \$80,000 (as advised by Aspect Studios)
- 1 No. Large Shelter - \$100,000
- 4 No. Small Shelters - \$200,000
- Public Toilet - \$750,000
- Integrated digital experience phone application - \$45,000

**Contingency**

The cost plan includes allowances for design contingency (5%) and contract contingency (10%). The cost plan assumes the contingency will be required for design documentation related issues and not for changes in scope. Additionally, the cost plan includes allowances for locality contingency (5%) which assumes it will be required for travel, accommodation, material freight, etc.

**Cost Escalation**

The cost plan is based on costs current at February, 2022, and includes allowance for cost escalation to February, 2023. No allowance for cost escalation has been made beyond this date.

### Market Conditions

The entire construction industry is experiencing volatility with disruptions to supply chains and material shortages, resources and labour, etc. across the globe. This is placing significant increased pressure on construction costs within the Australian market with further trade price rises predicted during the construction phase of a project.

Zinc Cost Management continues to monitor construction costs and has included allowances for cost escalation where appropriate, however we reserve the right to adjust the cost plan should the project program be delayed and or market conditions change.

### Assumptions

The following assumptions have been made with regards to the cost plan:

- No allowance has been included for boundary fencing
- No allowance has been included for relocation of existing services infrastructure
- No allowances have been included for underground rainwater storage tanks
- No allowance has been included for a site substation
- We have assumed boardwalks to be 2.5m wide
- We have assumed the bridges to be 3m wide

The cost plan is indicative only of the possible order of cost. All components of the cost plan will require confirmation once the design has developed further.

The cost plan assumes specified cladding materials are compliant with applicable building standards in respect of fire resistance.

Costs are also based on the assumption that the project will be competitively tendered to a select list of appropriate and interested builders in the form of a fixed lump sum contract. The cost plan makes no allowance for cost plus, negotiated, staged or construction management forms of procurement.

### Main Risks

The main risks associated with cost are:

- Scope creep
- Cost implications due to delays regarding procurement of materials (i.e. timber supply shortage, etc.), labour scheduling, etc.
- Existing conditions, i.e. services infrastructure, etc.
- Abnormal ground conditions
- Asbestos / hazardous material removal
- Market conditions / cost escalation
- Resolution of non-construction costs (refer above)
- Assumptions (refer above)
- Exclusions (refer below)

### Exclusions

Please note that the cost plan specifically excludes any allowances for the following:

- |   |                                       |
|---|---------------------------------------|
| • Asbestos / hazardous material removal                               | • Native vegetation offset            |
| • Relocate or upgrade of existing services and infrastructure         | • Bushfire risk planning allowance    |
| • Works outside site boundary (i.e. Boort-Pyramid Road, etc.)         | • Surveys                             |
| • Abnormal ground conditions (i.e. rock, ground water, filling, etc.) | • Traditional owner engagement        |
| • Site decontamination and remediation                                | • Statutory planning, permits, etc.   |
| • Cost escalation beyond February, 2023                               | • Risk management plan                |
| • Decanting or relocation   | • Parks Victoria management fees      |
| • Temporary accommodation and services                                | • Business plan                       |
| • Audio visual / IT equipment and infrastructure                      | • Furniture, fittings and equipment   |
| • Media equipment   | • Planning permit                     |
| • Marketing & branding  | • Finance, legal, letting costs, etc. |
| • Client costs  | • Open space levy                     |
|   | • Goods and Services Tax              |
|   | • Open space levy                     |
|   | • Consultants Fees                    |

Where appropriate, allowances for the above items should be made in the overall feasibility study.

Do not hesitate to contact us to discuss any clarifications or if you require further information.

Yours faithfully,



**Justin Zumpe**  
 Managing Director



**James Gow**  
 Quantity Surveyor

**Encl. Appendix A - Cost Plan No. 1revA**

APPENDIX A



SUMMARY



Lake Boort Scarred Trees Masterplan  
Lake Boort, Boort 8 April, 2022

Cost Plan No. 1 based on Masterplan Documentation prepared by Aspect Studios received 18 February, 2022

Description of Works	Unit	Rate (\$/unit)	Stage 1 (\$)	Stage 2 (\$)	Stage 3 (\$)	Stage 4 (\$)	Total Cost (\$)
<b>Stage 1: Arrival and Community Area</b>							
Gateway and Arrival	Item		615,000	-	-	-	615,000
Digital Interpretation	Item		48,000	-	-	-	48,000
Community & Activity Area 1	Item		1,904,000	-	-	-	1,904,000
Boardwalks and tracks associated to activity area	Item		1,564,000	-	-	-	1,564,000
<b>Sub-Total</b>							<b>4,131,000</b>
<b>Stage 2: Southern Lake Trails</b>							
Boardwalk onto Lake	Item		-	2,229,000	-	-	2,229,000
Kinypanial Creek	Item		-	1,521,000	-	-	1,521,000
<b>Sub-Total</b>							<b>3,750,000</b>
<b>Stage 3: Northern Lake Trails</b>							
Lake Boort Trail	Item		-	-	886,000	-	886,000
Boort Pyramid Road Picnic Area	Item		-	-	234,000	-	234,000
<b>Sub-Total</b>							<b>1,120,000</b>
<b>Stage 4: Kinypanial Creek Arrival Area</b>							
Kinypanial Creek Access Road	Item		-	-	-	626,000	626,000
<b>Sub-Total</b>							<b>626,000</b>
<b>Exclusions</b>							
Asbestos / hazardous material removal	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Relocate or upgrade of existing services and infrastructure	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Works outside site boundary	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Works to camping area (western side of Lake Boort)	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Abnormal ground conditions / site decontamination / remediation	Note		Excluded	Excluded	Excluded	Excluded	Excluded
<b>Total External Works &amp; Services</b>			<b>4,131,000</b>	<b>3,750,000</b>	<b>1,120,000</b>	<b>626,000</b>	<b>9,627,000</b>
ESD Initiatives							
ESD initiatives (WSUD, swale drains etc.)	Item	2.5%	103,000	94,000	28,000	16,000	241,000
<b>Contingencies &amp; Escalation</b>							
Staging of the works (i.e. hoardings, temp. fencing and works, etc.)	Item	2.5%	106,000	96,000	29,000	16,000	247,000
Locality allowance (i.e. material freight, travel, accommodation, etc.)	Item	5.0%	217,000	197,000	59,000	33,000	506,000
Design contingency	Item	5.0%	228,000	207,000	62,000	35,000	532,000
Cost escalation (allow to February, 2023)	Item	5.0%	239,000	217,000	65,000	36,000	557,000
<b>Total Anticipated Construction Tender Sum</b>			<b>5,024,000</b>	<b>4,561,000</b>	<b>1,363,000</b>	<b>762,000</b>	<b>11,710,000</b>
Contract contingency	Item	10.0%	502,000	456,000	136,000	76,000	1,170,000
<b>Total Construction Cost (up to February, 2023)</b>			<b>5,526,000</b>	<b>5,017,000</b>	<b>1,499,000</b>	<b>838,000</b>	<b>12,880,000</b>
<b>Non-Construction Costs</b>							
Cultural Heritage Management Plan	Item		150,000	100,000	250,000	50,000	550,000
Consultants fees	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Authority / headwork's charges	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Client costs	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Native Vegetation Offset	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Business Plan	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Parks Victoria Management Fees	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Surveys (feature, level & title)	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Bushfire Risk Planning allowance	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Traditional Owner Engagement	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Marketing & Branding	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Statutory Planning, Permits etc.	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Risk Management Plan, Probity Plan	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Temporary accommodation/ Decanting	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Open Space Levy	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Goods & Services Tax	Note		Excluded	Excluded	Excluded	Excluded	Excluded
<b>Total End Cost (up to February, 2023)</b>			<b>5,676,000</b>	<b>5,117,000</b>	<b>1,749,000</b>	<b>888,000</b>	<b>13,430,000</b>

This cost plan is based on preliminary information and therefore is indicative only of the possible order of cost. All components of the cost plan will require confirmation once the design has developed further. Refer to the accompanying letter for details of basis of cost plan and exclusions from above costs.

Elemental Cost Plan					
					
<b>Project:</b> Lake Boort Scarred Trees Masterplan		<b>Details:</b> Cost Plan No. 1 revA			
<b>Building:</b> Lake Boort					
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 1 – Gateway and Arrival</b>					
<u>Preliminaries</u>					
1	Allowance for builder's preliminaries, overheads and margin	1	Item	30,000.00	30,000
2	Allowance for traffic management	1	Item	10,000.00	10,000
<u>Preliminaries</u>					<b>40,000</b>
<u>Demolition</u>					
3	Allowance to demolish and remove existing hard and soft landscaping (i.e. paving, trees, garden beds, etc.)	1	Item	2,500.00	2,500
4	Maintain and protect existing services, i.e. junction pits, communication lines, drainage pipes, etc.	1	Item	1,000.00	1,000
5	Allowance for removal of hazardous materials (i.e. asbestos, lead, etc.) - EXCLUDED	0	Note	0.00	0
<u>Demolition</u>					<b>3,500</b>
<u>Site Preparation</u>					
6	Allowance for site preparation / clearance	1	Item	2,500.00	2,500
7	Allowance for rock removal / excavation - EXCLUDED	0	Note	0.00	0
8	Allowance for removal of contaminated soil - EXCLUDED	0	Note	0.00	0
<u>Site Preparation</u>					<b>2,500</b>
<u>Roads, Footpaths &amp; Paved Areas</u>					
9	<u>Vehicular-grade paving</u>				
10	Asphalt carparking including linemarking, kerbs, channels, etc.	1,181	m2	100.00	118,100
11	<u>Paving</u>				
12	Gravel pathway (2.5m wide)	383	m2	40.00	15,320
13	<u>Sundry</u>				
14	Works to Campground - EXCLUDED (out of scope)	0	Note	0.00	0
<u>Roads, Footpaths &amp; Paved Areas</u>					<b>133,420</b>
<u>Boundary Walls, Fencing &amp; Gates</u>					
15	Allowance for site boundary fencing - EXCLUDED	0	Note	0.00	0
<u>Boundary Walls, Fencing &amp; Gates</u>					<b>0</b>
<u>Landscaping &amp; Improvements</u>					
16	<u>Soft Landscaping</u>				
17	Hydro-seeding	2,006	m2	10.00	20,060
18	Garden beds including indigenous biodiversity planting	701	m2	75.00	52,575
19	Allowance for edging to garden beds	1,116	m	30.00	33,480
20	Allowance for trees (No. to be defined)	1	Item	10,000.00	10,000
21	<u>Hard Landscaping</u>				
22	Rubbish/recycling bins (scope as per QS Drawing Notes)	1	No.	4,000.00	4,000
<b>To Collection</b>					<b>299,535</b>

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Elemental Cost Plan					
					
<b>Project:</b> Lake Boort Scarred Trees Masterplan		<b>Details:</b> Cost Plan No. 1 revA			
<b>Building:</b> Lake Boort					
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 1 – Gateway and Arrival</b> <span style="float: right;"><i>(Continued)</i></span>					
<u>Landscaping &amp; Improvements</u> <span style="float: right;"><i>(Continued)</i></span>					
23	Allowance for 10 No. seats (scope as per QS Drawing Notes)	2	No.	5,000.00	10,000
24	<u>Signage</u>				
25	Allowance for gateway experience (i.e. gateway sign, materials, etc.)	1	Item	250,000.00	250,000
26	Allowance for interpretative signage (i.e. wayfinding bollards, regulatory signage, entrance feature signage) - PROVISIONAL SUM (as advised by Aspect Studios)	1	Item	20,000.00	20,000
27	<u>Sundry</u>				
28	Allowance for sundry landscaping (i.e. seating, etc.)	1	Item	5,000.00	5,000
<u>Landscaping &amp; Improvements</u>					<b>405,115</b>
<u>External Stormwater Drainage</u>					
29	Allowance for drainage to asphalt carparking	1	Item	30,000.00	30,000
30	Stormwater treatment system - EXCLUDED	0	Note	0.00	0
<u>External Stormwater Drainage</u>					<b>30,000</b>
<u>External Water &amp; Sewer</u>					
31	Allowance for irrigation (planting, etc.) - EXCLUDED	0	Note	0.00	0
32	Allowance for underground tanks - EXCLUDED	0	Note	0.00	0
<u>External Water &amp; Sewer</u>					<b>0</b>
<u>External Electrical Services</u>					
33	Allowance for pathway lighting - EXCLUDED	0	Note	0.00	0
34	Allowance for upgrades to existing electrical services - EXCLUDED	0	Note	0.00	0
<u>External Electrical Services</u>					<b>0</b>
<b>Stage 1 – Gateway and Arrival</b>					<b>614,535</b>
<b>To Collection</b>					<b>315,000</b>

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Elemental Cost Plan					
<b>Project:</b> Lake Boort Scarred Trees Masterplan <b>Building:</b> Lake Boort		<b>Details:</b> Cost Plan No. 1 revA			
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 1 – Gateway and Arrival</b> <span style="float: right;"><i>(Continued)</i></span>					
<b>COLLECTION</b>					
	Page 1:				299,535
	Page 2:				315,000
	<b>Stage 1 – Gateway and Arrival Carried to Summary:</b>				<b>614,535</b>

Elemental Cost Plan					
<b>Project:</b> Lake Boort Scarred Trees Masterplan <b>Building:</b> Lake Boort		<b>Details:</b> Cost Plan No. 1 revA			
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 1 – Digital Interpretation</b>					
<u>Preliminaries</u>					
35	Allowance for builder's preliminaries, overheads and margin	1	Item	3,000.00	3,000
	<u>Preliminaries</u>				<u>3,000</u>
<u>Landscaping &amp; Improvements</u>					
36	<u>Signage</u>				
37	Allowance for intergated digital tourism experience phone application - PROVISIONAL SUM (as advised by Aspect Studios)	1	Item	45,000.00	45,000
	<u>Landscaping &amp; Improvements</u>				<u>45,000</u>
<b>Stage 1 – Digital Interpretation</b>					<b>48,000</b>
<b>To Collection</b>					<b>48,000</b>

Elemental Cost Plan					
Project: Lake Boort Scarred Trees Masterplan				Details: Cost Plan No. 1 revA	
Building: Lake Boort					
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 1 - Digital Interpretation</b> <span style="float: right;"><i>(Continued)</i></span>					
<b>COLLECTION</b>					
Page 4: <span style="float: right;">48,000</span>					
<b>Stage 1 - Digital Interpretation Carried to Summary:</b> <span style="float: right;"><b>48,000</b></span>					

Elemental Cost Plan					
Project: Lake Boort Scarred Trees Masterplan				Details: Cost Plan No. 1 revA	
Building: Lake Boort					
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 1 - Community &amp; Activity Area 1</b>					
<u>Preliminaries</u>					
38	Allowance for builder's preliminaries, overheads and margin	1	Item	90,000.00	90,000
					<u>Preliminaries</u> 90,000
<u>Demolition</u>					
39	Allowance to demolish and remove existing hard and soft landscaping (i.e. paving, trees, garden beds, etc.)	1	Item	2,500.00	2,500
40	Maintain and protect existing services, i.e. junction pits, communication lines, drainage pipes, etc.	1	Item	1,000.00	1,000
41	Allowance for removal of hazardous materials (i.e. asbestos, lead, etc.) - EXCLUDED	0	Note	0.00	0
					<u>Demolition</u> 3,500
<u>Site Preparation</u>					
42	Allowance for site preparation / clearance	1	Item	5,000.00	5,000
43	Allowance for fill to play mounds	1	Item	10,000.00	10,000
44	Allowance for rock removal / excavation - EXCLUDED	0	Note	0.00	0
45	Allowance for removal of contaminated soil - EXCLUDED	0	Note	0.00	0
					<u>Site Preparation</u> 15,000
<u>Roads, Footpaths &amp; Paved Areas</u>					
46	<u>Paving</u>				
47	Gravel paving to gathering space	439	m2	40.00	17,560
48	Exposed aggregate paving to gathering space	730	m2	150.00	109,500
49	<u>Play Area</u>				
50	Gravel paving to play area (allow 80%)	808	m2	60.00	48,480
51	Rubber softfall to play area (allow 20% as advised by Aspect Studios)	202	m2	375.00	75,750
52	<u>Sundry</u>				
53	Works to Campground - EXCLUDED (out of scope)	0	Note	0.00	0
					<u>Roads, Footpaths &amp; Paved Areas</u> 251,290
<u>Boundary Walls, Fencing &amp; Gates</u>					
54	Allowance for site boundary fencing - EXCLUDED	0	Note	0.00	0
					<u>Boundary Walls, Fencing &amp; Gates</u> 0
<u>Outbuildings &amp; Covered Ways</u>					
55	<u>Large Shelter</u>				
56	Allowance for 1 No. large shelter (70m2) including substructure, framing, roofing, fixings, finish, rainwater goods and drainage, etc. (as advised by Aspect Studios) - PROVISIONAL SUM	1	No.	100,000.00	100,000
57	<u>Small Shelters</u>				
					<b>To Collection</b> 459,790

Elemental Cost Plan						ZINC COST MANAGEMENT		
<b>Project:</b> Lake Boort Scarred Trees Masterplan		<b>Details:</b> Cost Plan No. 1 revA						
<b>Building:</b> Lake Boort								
Code	Description	Quantity	Unit	Rate	Total			
<b>Stage 1 - Community &amp; Activity Area 1</b>						<i>(Continued)</i>		
<u>Outbuildings &amp; Covered Ways</u>						<i>(Continued)</i>		
58	Allowance for 4 No. small shelters (25m2 each) including substructure, framing, roofing, fixings, finish, rainwater goods and drainage, etc. (as advised by Aspect Studios) - PROVISIONAL SUM	3	No.	50,000.00	150,000			
<u>Outbuildings &amp; Covered Ways</u>					<u>250,000</u>			
<u>Landscaping &amp; Improvements</u>								
<b>59</b>	<u>Soft Landscaping</u>							
60	Garden beds including indigenous biodiversity planting	1,819	m2	75.00	136,425			
61	Allowance for edging to garden beds	290	m	30.00	8,700			
62	Allowance for trees (No. to be defined)	1	Item	10,000.00	10,000			
<b>63</b>	<u>Hard Landscaping</u>							
64	Allowance for 20 No. large boulders (as advised by Aspect Studios)	20	No.	1,000.00	20,000			
65	Allowance for drinking fountains (2 No.)	2	No.	5,000.00	10,000			
66	Picnic table settings to play area shelters (1 No. per shelter)	4	No.	5,000.00	20,000			
67	Rubbish/recycling bins (scope as per QS Drawing Notes)	1	No.	4,000.00	4,000			
68	Allowance for 10 No. seats (scope as per QS Drawing Notes)	2	No.	5,000.00	10,000			
<b>69</b>	<u>Signage</u>							
70	Allowance for interpretative signage (i.e. wayfinding bollards, regulatory signage, entrance feature signage) - PROVISIONAL SUM (as advised by Aspect Studios)	1	Item	40,000.00	40,000			
<b>71</b>	<u>Play Equipment</u>							
72	Allowance for playground equipment- PROVISIONAL SUM (as advised by Aspect Studios)	1	Item	80,000.00	80,000			
<b>73</b>	<u>Sundry</u>							
74	Allowance for sundry landscaping (i.e. seating, etc.)	1	Item	5,000.00	5,000			
<u>Landscaping &amp; Improvements</u>					<u>344,125</u>			
<u>External Stormwater Drainage</u>								
75	Allowance for stormwater collection from shelters and storage including connection to existing service (assume Ring Rd)	1	Item	50,000.00	50,000			
76	Stormwater treatment system - EXCLUDED	0	Note	0.00	0			
<u>External Stormwater Drainage</u>					<u>50,000</u>			
<u>External Water &amp; Sewer</u>								
77	Allowance for water and sewer services infrastructure including connection to existing (assume Ring Rd)	1	Item	50,000.00	50,000			
78	Allowance for irrigation (planting, etc.) - EXCLUDED	0	Note	0.00	0			
79	Allowance for underground tanks - EXCLUDED	0	Note	0.00	0			
<u>External Water &amp; Sewer</u>					<u>50,000</u>			
<b>To Collection</b>					<b>594,125</b>			

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Elemental Cost Plan						ZINC COST MANAGEMENT	
<b>Project:</b> Lake Boort Scarred Trees Masterplan		<b>Details:</b> Cost Plan No. 1 revA					
<b>Building:</b> Lake Boort							
Code	Description	Quantity	Unit	Rate	Total		
<b>Stage 1 - Community &amp; Activity Area 1</b>						<i>(Continued)</i>	
<u>External Electrical Services</u>							
80	Allowance for electrical services to shelters (i.e. lighting, associated conduits, PV Cells, etc.)	1	Item	100,000.00	100,000		
81	Allowance for pathway lighting - EXCLUDED	0	Note	0.00	0		
82	Allowance for upgrades to existing electrical services - EXCLUDED	0	Note	0.00	0		
<u>External Electrical Services</u>					<u>100,000</u>		
<u>Special Provisions</u>							
83	Allowance for (134m2) public toilet including sewer treatment tank, solar panel, rainwater tank, etc.- PROVISIONAL SUM	1	Item	750,000.00	750,000		
<u>Special Provisions</u>					<u>750,000</u>		
<b>Stage 1 - Community &amp; Activity Area 1</b>					<b>1,903,915</b>		
<b>To Collection</b>					<b>850,000</b>		

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Elemental Cost Plan		<b>ZINC</b> COST MANAGEMENT			
<b>Project:</b> Lake Boort Scarred Trees Masterplan		<b>Details:</b> Cost Plan No. 1 revA			
<b>Building:</b> Lake Boort					
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 1 – Community &amp; Activity Area 1</b> <span style="float: right;"><i>(Continued)</i></span>					
<b>COLLECTION</b>					
	Page 6:				459,790
	Page 7:				594,125
	Page 8:				850,000
<b>Stage 1 – Community &amp; Activity Area 1 Carried to Summary:</b>					<b>1,903,915</b>

Elemental Cost Plan		<b>ZINC</b> COST MANAGEMENT			
<b>Project:</b> Lake Boort Scarred Trees Masterplan		<b>Details:</b> Cost Plan No. 1 revA			
<b>Building:</b> Lake Boort					
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 1 – Boardwalks and Tracks Associated to Activity Area</b>					
<u>Preliminaries</u>					
84	Allowance for builder's preliminaries, overheads and margin	1	Item	78,000.00	78,000
<u>Preliminaries</u>					<u>78,000</u>
<u>Demolition</u>					
85	Allowance to demolish and remove existing hard and soft landscaping (i.e. paving, trees, garden beds, etc.)	1	Item	5,000.00	5,000
86	Allowance for removal of hazardous materials (i.e. asbestos, lead, etc.) - EXCLUDED	0	Note	0.00	0
<u>Demolition</u>					<u>5,000</u>
<u>Site Preparation</u>					
87	Allowance for site preparation / clearance	1	Item	5,000.00	5,000
88	Allowance for rock removal / excavation - EXCLUDED	0	Note	0.00	0
89	Allowance for removal of contaminated soil - EXCLUDED	0	Note	0.00	0
<u>Site Preparation</u>					<u>5,000</u>
<u>Roads, Footpaths &amp; Paved Areas</u>					
90	<u>Paving</u>				
91	Gravel pathway (2.5m wide)	4,407	m2	40.00	176,280
92	<u>Bridges</u>				
93	Bridge boardwalk including framing, fixings, finish, etc. (assume 2.5m wide) constructed over channel	134	m2	1,000.00	134,000
94	<u>Boardwalk / Platform 1</u>				
95	0.2m - 2.1m high boardwalk including framing, fixings, finish, etc. (assume 2.5m wide) constructed on lake edge or within lake	1,355	m2	750.00	1,016,250
96	5m x 5m viewing platforms including framing, fixings, finish, etc. (scope as per QS Drawing Notes)	25	m2	1,500.00	37,500
97	<u>Sundry</u>				
98	Works to Campground - EXCLUDED (out of scope)	0	Note	0.00	0
<u>Roads, Footpaths &amp; Paved Areas</u>					<u>1,364,030</u>
<u>Boundary Walls, Fencing &amp; Gates</u>					
99	Allowance for site boundary fencing - EXCLUDED	0	Note	0.00	0
<u>Boundary Walls, Fencing &amp; Gates</u>					<u>0</u>
<u>Landscaping &amp; Improvements</u>					
100	<u>Soft Landscaping</u>				
101	Allowance for trees (No. to be defined)	1	Item	20,000.00	20,000
102	<u>Hard Landscaping</u>				
103	Rubbish/recycling bins (scope as per QS Drawing Notes)	3	No.	4,000.00	12,000
<b>To Collection</b>					<b>1,484,030</b>

Elemental Cost Plan					
					
<b>Project:</b> Lake Boort Scarred Trees Masterplan		<b>Details:</b> Cost Plan No. 1 revA			
<b>Building:</b> Lake Boort					
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 1 – Boardwalks and Tracks Associated to Activity Area</b> <span style="float: right;"><i>(Continued)</i></span>					
<u>Landscaping &amp; Improvements</u> <span style="float: right;"><i>(Continued)</i></span>					
104	Allowance for 10 No. seats (scope as per QS Drawing Notes)	6	No.	5,000.00	30,000
105	<u>Signage</u>				
106	Allowance for interpretative signage (i.e. wayfinding bollards, regulatory signage, entrance feature signage) - PROVISIONAL SUM (as advised by Aspect Studios)	1	Item	40,000.00	40,000
107	<u>Sundry</u>				
108	Allowance for sundry landscaping (i.e. seating, etc.)	1	Item	10,000.00	10,000
<u>Landscaping &amp; Improvements</u>					<u>112,000</u>
<u>External Stormwater Drainage</u>					
109	Stormwater treatment system - EXCLUDED	0	Note	0.00	0
<u>External Stormwater Drainage</u>					<u>0</u>
<u>External Water &amp; Sewer</u>					
110	Allowance for irrigation (planting, etc.) - EXCLUDED	0	Note	0.00	0
111	Allowance for underground tanks - EXCLUDED	0	Note	0.00	0
<u>External Water &amp; Sewer</u>					<u>0</u>
<u>External Electrical Services</u>					
112	Allowance for pathway lighting - EXCLUDED	0	Note	0.00	0
113	Allowance for upgrades to existing electrical services - EXCLUDED	0	Note	0.00	0
<u>External Electrical Services</u>					<u>0</u>
<b>Stage 1 – Boardwalks and Tracks Associated to Activity Area</b>					<b>1,564,030</b>
<b>To Collection</b>					<b>80,000</b>

Elemental Cost Plan					
					
<b>Project:</b> Lake Boort Scarred Trees Masterplan		<b>Details:</b> Cost Plan No. 1 revA			
<b>Building:</b> Lake Boort					
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 1 – Boardwalks and Tracks Associated to Activity Area</b> <span style="float: right;"><i>(Continued)</i></span>					
<b>COLLECTION</b>					
Page 10:					1,484,030
Page 11:					80,000
<b>Stage 1 – Boardwalks and Tracks Associated to Activity Area Carried to Summary:</b>					<b>1,564,030</b>

Elemental Cost Plan					
					
<b>Project:</b> Lake Boort Scarred Trees Masterplan		<b>Details:</b> Cost Plan No. 1 revA			
<b>Building:</b> Lake Boort					
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 2 – Boardwalk Onto Lake</b>					
<u>Preliminaries</u>					
114	Allowance for builder's preliminaries, overheads and margin	1	Item	111,000.00	111,000
<u>Preliminaries</u>					<u>111,000</u>
<u>Demolition</u>					
115	Allowance to demolish and remove existing hard and soft landscaping (i.e. paving, trees, garden beds, etc.)	1	Item	5,000.00	5,000
116	Allowance for removal of hazardous materials (i.e. asbestos, lead, etc.) - EXCLUDED	0	Note	0.00	0
<u>Demolition</u>					<u>5,000</u>
<u>Site Preparation</u>					
117	Allowance for site preparation / clearance	1	Item	5,000.00	5,000
118	Allowance for rock removal / excavation - EXCLUDED	0	Note	0.00	0
119	Allowance for removal of contaminated soil - EXCLUDED	0	Note	0.00	0
<u>Site Preparation</u>					<u>5,000</u>
<u>Roads, Footpaths &amp; Paved Areas</u>					
120	Vehicular-grade paving				
121	Gravel carparking	351	m2	60.00	21,060
122	<u>Paving</u>				
123	Gravel pathway (2.5m wide)	7,485	m2	40.00	299,400
124	Gravel paving to interpretive nodes	643	m2	40.00	25,720
125	<u>Boardwalk / Platform 2</u>				
126	0.2m - 2.1m high boardwalk including framing, fixings, finish, etc. (assume 2.5m wide) constructed on lake edge or within lake	2,132	m2	750.00	1,599,000
127	5m x 5m viewing platforms including framing, fixings, finish, etc. (scope as per QS Drawing Notes)	50	m2	1,500.00	75,000
<u>Roads, Footpaths &amp; Paved Areas</u>					<u>2,020,180</u>
<u>Boundary Walls, Fencing &amp; Gates</u>					
128	Allowance for site boundary fencing - EXCLUDED	0	Note	0.00	0
<u>Boundary Walls, Fencing &amp; Gates</u>					<u>0</u>
<u>Landscaping &amp; Improvements</u>					
129	<u>Soft Landscaping</u>				
130	Garden beds including indigenous biodiversity planting	422	m2	75.00	31,650
131	Allowance for edging to garden beds	215	m	30.00	6,450
132	Allowance for trees (No. to be defined)	1	Item	10,000.00	10,000
133	<u>Hard Landscaping</u>				
134	Allowance for seating to interpretive nodes	1	Item	5,000.00	5,000
<b>To Collection</b>					<b>2,194,280</b>

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Elemental Cost Plan					
					
<b>Project:</b> Lake Boort Scarred Trees Masterplan		<b>Details:</b> Cost Plan No. 1 revA			
<b>Building:</b> Lake Boort					
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 2 – Boardwalk Onto Lake</b> <span style="float: right;">(Continued)</span>					
<u>Landscaping &amp; Improvements</u> <span style="float: right;">(Continued)</span>					
135	<u>Signage</u>				
136	Allowance for interpretive signage (i.e. wayfinding bollards, regulatory signage, entrance feature signage) - PROVISIONAL SUM (as advised by Aspect Studios)	1	Item	25,000.00	25,000
137	<u>Sundry</u>				
138	Allowance for sundry landscaping (i.e. seating, etc.)	1	Item	10,000.00	10,000
<u>Landscaping &amp; Improvements</u>					<u>88,100</u>
<u>External Water &amp; Sewer</u>					
139	Allowance for irrigation (planting, etc.) - EXCLUDED	0	Note	0.00	0
140	Allowance for underground tanks - EXCLUDED	0	Note	0.00	0
<u>External Water &amp; Sewer</u>					<u>0</u>
<u>External Electrical Services</u>					
141	Allowance for pathway lighting - EXCLUDED	0	Note	0.00	0
142	Allowance for upgrades to existing electrical services - EXCLUDED	0	Note	0.00	0
<u>External Electrical Services</u>					<u>0</u>
<b>Stage 2 – Boardwalk Onto Lake</b>					<b>2,229,280</b>
<b>To Collection</b>					<b>35,000</b>

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### Elemental Cost Plan



<b>Project:</b> Lake Boort Scarred Trees Masterplan	<b>Details:</b> Cost Plan No. 1 revA
<b>Building:</b> Lake Boort	

Code	Description	Quantity	Unit	Rate	Total
<b>Stage 2 – Boardwalk Onto Lake</b> <span style="float: right;"><i>(Continued)</i></span>					
<b>COLLECTION</b>					
	Page 13:				2,194,280
	Page 14:				35,000
	<b>Stage 2 – Boardwalk Onto Lake Carried to Summary:</b>				<b>2,229,280</b>

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### Elemental Cost Plan



<b>Project:</b> Lake Boort Scarred Trees Masterplan	<b>Details:</b> Cost Plan No. 1 revA
<b>Building:</b> Lake Boort	

Code	Description	Quantity	Unit	Rate	Total
<b>Stage 2 – Kinypanial Creek</b>					
<u>Preliminaries</u>					
143	Allowance for builder's preliminaries, overheads and margin	1	Item	73,000.00	73,000
	<u>Preliminaries</u>				<u>73,000</u>
<u>Demolition</u>					
144	Allowance to demolish and remove existing hard and soft landscaping (i.e. paving, trees, garden beds, etc.)	1	Item	2,500.00	2,500
145	Allowance for removal of hazardous materials (i.e. asbestos, lead, etc.) - EXCLUDED	0	Note	0.00	0
	<u>Demolition</u>				<u>2,500</u>
<u>Site Preparation</u>					
146	Allowance for site preparation / clearance	1	Item	5,000.00	5,000
147	Allowance for rock removal / excavation - EXCLUDED	0	Note	0.00	0
148	Allowance for removal of contaminated soil - EXCLUDED	0	Note	0.00	0
	<u>Site Preparation</u>				<u>5,000</u>
<u>Roads, Footpaths &amp; Paved Areas</u>					
149	<u>Paving</u>				
150	Gravel pathway (2.5m wide)	373	m2	40.00	14,920
151	<u>Boardwalks</u>				
152	0.2m - 2.1m high boardwalk including framing, fixings, finish, etc. (assume 2.5m wide) constructed on dry land	1,179	m2	450.00	530,550
153	0.2m - 2.1m high boardwalk including framing, fixings, finish, etc. (assume 2.5m wide) constructed on lake edge or within lake	650	m2	750.00	487,500
154	<u>Bridges</u>				
155	Bridge boardwalk including framing, fixings, finish, etc. (assume 2.5m wide) constructed over creek	306	m2	1,200.00	367,200
	<u>Roads, Footpaths &amp; Paved Areas</u>				<u>1,400,170</u>
<u>Boundary Walls, Fencing &amp; Gates</u>					
156	Allowance for site boundary fencing - EXCLUDED	0	Note	0.00	0
	<u>Boundary Walls, Fencing &amp; Gates</u>				<u>0</u>
<u>Landscaping &amp; Improvements</u>					
157	<u>Soft Landscaping</u>				
158	Allowance for trees (No. to be defined)	1	Item	10,000.00	10,000
159	<u>Signage</u>				
160	Allowance for interpretative signage (i.e. wayfinding bollards, regulatory signage, entrance feature signage) - PROVISIONAL SUM (as advised by Aspect Studios)	1	Item	25,000.00	25,000
161	<u>Sundry</u>				
<b>To Collection</b>					<b>1,515,670</b>

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Elemental Cost Plan					
					
<b>Project:</b> Lake Boort Scarred Trees Masterplan			<b>Details:</b> Cost Plan No. 1 revA		
<b>Building:</b> Lake Boort					
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 2 – Kinypanial Creek</b> <span style="float: right;"><i>(Continued)</i></span>					
<u>Landscaping &amp; Improvements</u> <span style="float: right;"><i>(Continued)</i></span>					
162	Allowance for sundry landscaping (i.e. seating, etc.)	1	Item	5,000.00	5,000
<u>Landscaping &amp; Improvements</u>					<u>40,000</u>
<u>External Water &amp; Sewer</u>					
163	Allowance for irrigation (planting, etc.) - EXCLUDED	0	Note	0.00	0
164	Allowance for underground tanks - EXCLUDED	0	Note	0.00	0
<u>External Water &amp; Sewer</u>					<u>0</u>
<u>External Electrical Services</u>					
165	Allowance for upgrades to existing electrical services - EXCLUDED	0	Note	0.00	0
<u>External Electrical Services</u>					<u>0</u>
<b>Stage 2 – Kinypanial Creek</b>					<b>1,520,670</b>
<b>To Collection</b>					5,000

Elemental Cost Plan					
					
<b>Project:</b> Lake Boort Scarred Trees Masterplan			<b>Details:</b> Cost Plan No. 1 revA		
<b>Building:</b> Lake Boort					
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 2 – Kinypanial Creek</b> <span style="float: right;"><i>(Continued)</i></span>					
<b>COLLECTION</b>					
Page 16:					1,515,670
Page 17:					5,000
<b>Stage 2 – Kinypanial Creek Carried to Summary:</b>					<b>1,520,670</b>

Elemental Cost Plan					
					
<b>Project:</b> Lake Boort Scarred Trees Masterplan		<b>Details:</b> Cost Plan No. 1 revA			
<b>Building:</b> Lake Boort					
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 3 – Lake Boort Trail</b>					
<u>Preliminaries</u>					
166	Allowance for builder's preliminaries, overheads and margin	1	Item	45,000.00	45,000
<u>Preliminaries</u>					<u>45,000</u>
<u>Demolition</u>					
167	Allowance to demolish and remove existing hard and soft landscaping (i.e. paving, trees, garden beds, etc.)	1	Item	5,000.00	5,000
168	Allowance for removal of hazardous materials (i.e. asbestos, lead, etc.) - EXCLUDED	0	Note	0.00	0
<u>Demolition</u>					<u>5,000</u>
<u>Site Preparation</u>					
169	Allowance for site preparation / clearance	1	Item	10,000.00	10,000
170	Allowance for rock removal / excavation - EXCLUDED	0	Note	0.00	0
171	Allowance for removal of contaminated soil - EXCLUDED	0	Note	0.00	0
<u>Site Preparation</u>					<u>10,000</u>
<u>Roads, Footpaths &amp; Paved Areas</u>					
172	Paving				
173	Gravel pathway (2.5m wide)	9,095	m2	40.00	363,800
174	Extra over to form sloped gravel pathway (2.5m wide)	4,362	m2	20.00	87,240
175	Gravel paving to interpretive nodes	1,927	m2	40.00	77,080
176	Boardwalk / Platform 3				
177	0.2m - 2.1m high boardwalk including framing, fixings, finish, etc. (assume 2.5m wide) constructed on lake edge or within lake	55	m2	750.00	41,250
178	5m x 5m viewing platforms including framing, fixings, finish, etc. (scope as per QS Drawing Notes)	25	m2	1,500.00	37,500
<u>Roads, Footpaths &amp; Paved Areas</u>					<u>606,870</u>
<u>Boundary Walls, Fencing &amp; Gates</u>					
179	Allowance for site boundary fencing - EXCLUDED	0	Note	0.00	0
<u>Boundary Walls, Fencing &amp; Gates</u>					<u>0</u>
<u>Landscaping &amp; Improvements</u>					
180	Soft Landscaping				
181	Garden beds including indigenous biodiversity planting	1,265	m2	75.00	94,875
182	Allowance for edging to garden beds	645	m	30.00	19,350
183	Allowance for trees (No. to be defined)	1	Item	30,000.00	30,000
184	Hard Landscaping				
185	Allowance for seating to interpretive nodes	1	Item	15,000.00	15,000
186	Signage				
<b>To Collection</b>					<b>826,095</b>

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Elemental Cost Plan					
					
<b>Project:</b> Lake Boort Scarred Trees Masterplan		<b>Details:</b> Cost Plan No. 1 revA			
<b>Building:</b> Lake Boort					
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 3 – Lake Boort Trail</b> <span style="float: right;"><i>(Continued)</i></span>					
<u>Landscaping &amp; Improvements</u> <span style="float: right;"><i>(Continued)</i></span>					
187	Allowance for interpretative signage (i.e. wayfinding bollards, regulatory signage, entrance feature signage) - PROVISIONAL SUM (as advised by Aspect Studios)	1	Item	50,000.00	50,000
188	Sundry				
189	Allowance for sundry landscaping (i.e. seating, etc.)	1	Item	10,000.00	10,000
<u>Landscaping &amp; Improvements</u>					<u>219,225</u>
<u>External Stormwater Drainage</u>					
190	Stormwater treatment system - EXCLUDED	0	Note	0.00	0
<u>External Stormwater Drainage</u>					<u>0</u>
<u>External Water &amp; Sewer</u>					
191	Allowance for irrigation (planting, etc.) - EXCLUDED	0	Note	0.00	0
192	Allowance for underground tanks - EXCLUDED	0	Note	0.00	0
<u>External Water &amp; Sewer</u>					<u>0</u>
<u>External Electrical Services</u>					
193	Allowance for pathway lighting - EXCLUDED	0	Note	0.00	0
194	Allowance for upgrades to existing electrical services - EXCLUDED	0	Note	0.00	0
<u>External Electrical Services</u>					<u>0</u>
<b>Stage 3 – Lake Boort Trail</b>					<b>886,095</b>
<b>To Collection</b>					<b>60,000</b>

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Elemental Cost Plan					
Project: Lake Boort Scarred Trees Masterplan				Details: Cost Plan No. 1 revA	
Building: Lake Boort					
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 3 - Lake Boort Trail</b> <span style="float: right;"><i>(Continued)</i></span>					
<b>COLLECTION</b>					
	Page 19:				826,095
	Page 20:				60,000
	<b>Stage 3 - Lake Boort Trail Carried to Summary:</b>				<b>886,095</b>

Elemental Cost Plan					
Project: Lake Boort Scarred Trees Masterplan				Details: Cost Plan No. 1 revA	
Building: Lake Boort					
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 3 -Boort Pyramid Road Picnic Area</b>					
<u>Preliminaries</u>					
195	Allowance for builder's preliminaries, overheads and margin	1	Item	12,000.00	12,000
196	Allowance for traffic management	1	Item	10,000.00	10,000
	<u>Preliminaries</u>				<u>22,000</u>
<u>Demolition</u>					
197	Allowance to demolish and remove existing hard and soft landscaping (i.e. paving, trees, garden beds, etc.)	1	Item	5,000.00	5,000
198	Maintain and protect existing services, i.e. junction pits, communication lines, drainage pipes, etc.	1	Item	2,000.00	2,000
199	Allowance for removal of hazardous materials (i.e. asbestos, lead, etc.) - EXCLUDED	0	Note	0.00	0
	<u>Demolition</u>				<u>7,000</u>
<u>Site Preparation</u>					
200	Allowance for site preparation / clearance	1	Item	10,000.00	10,000
201	Allowance for rock removal / excavation - EXCLUDED	0	Note	0.00	0
202	Allowance for removal of contaminated soil - EXCLUDED	0	Note	0.00	0
	<u>Site Preparation</u>				<u>10,000</u>
<u>Roads, Footpaths &amp; Paved Areas</u>					
203	<u>Vehicular-grade paving</u>				
204	Gravel carparking	351	m2	60.00	21,060
205	<u>Paving</u>				
206	Gravel pathway (2.5m wide)	300	m2	40.00	12,000
	<u>Roads, Footpaths &amp; Paved Areas</u>				<u>33,060</u>
<u>Boundary Walls, Fencing &amp; Gates</u>					
207	Allowance for site boundary fencing - EXCLUDED	0	Note	0.00	0
	<u>Boundary Walls, Fencing &amp; Gates</u>				<u>0</u>
<u>Outbuildings &amp; Covered Ways</u>					
208	<u>Small Shelters</u>				
209	Allowance for 4 No. small shelters (25m2 each) including substructure, framing, roofing, fixings, finish, rainwater goods and drainage, etc. (as advised by Aspect Studios) - PROVISIONAL SUM	1	No.	50,000.00	50,000
	<u>Outbuildings &amp; Covered Ways</u>				<u>50,000</u>
<u>Landscaping &amp; Improvements</u>					
210	<u>Soft Landscaping</u>				
211	Hydro-seeding	6,736	m2	10.00	67,360
212	Allowance for trees (No. to be defined)	1	Item	10,000.00	10,000
213	<u>Signage</u>				
<b>To Collection</b>					<b>199,420</b>

### Elemental Cost Plan



<b>Project:</b> Lake Boort Scarred Trees Masterplan	<b>Details:</b> Cost Plan No. 1 revA
<b>Building:</b> Lake Boort	

Code	Description	Quantity	Unit	Rate	Total
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**Stage 3 –Boort Pyramid Road Picnic Area** *(Continued)*

Landscaping & Improvements *(Continued)*

214	Allowance for interpretative signage (i.e. wayfinding bollards, regulatory signage, entrance feature signage) - PROVISIONAL SUM (as advised by Aspect Studios)	1	Item	25,000.00	25,000
215	Sundry				
216	Allowance for sundry landscaping (i.e. seating, etc.)	1	Item	10,000.00	10,000
<u>Landscaping &amp; Improvements</u>					<u>112,360</u>

External Stormwater Drainage

217	Allowance for drainage to gravel carparking - EXCLUDED	0	Note	0.00	0
218	Stormwater treatment system - EXCLUDED	0	Note	0.00	0
<u>External Stormwater Drainage</u>					<u>0</u>

External Water & Sewer

219	Allowance for irrigation (planting, etc.) - EXCLUDED	0	Note	0.00	0
220	Allowance for underground tanks - EXCLUDED	0	Note	0.00	0
<u>External Water &amp; Sewer</u>					<u>0</u>

External Electrical Services

221	Allowance for carpark lighting - EXCLUDED	0	Note	0.00	0
222	Allowance for upgrades to existing electrical services - EXCLUDED	0	Note	0.00	0
<u>External Electrical Services</u>					<u>0</u>

**Stage 3 –Boort Pyramid Road Picnic Area** **234,420**

**To Collection** 35,000

### Elemental Cost Plan



<b>Project:</b> Lake Boort Scarred Trees Masterplan	<b>Details:</b> Cost Plan No. 1 revA
<b>Building:</b> Lake Boort	

Code	Description	Quantity	Unit	Rate	Total
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**Stage 3 –Boort Pyramid Road Picnic Area** *(Continued)*

**COLLECTION**

Page 22:	199,420
Page 23:	35,000

**Stage 3 –Boort Pyramid Road Picnic Area Carried to Summary:** **234,420**

Elemental Cost Plan					
<b>Project:</b> Lake Boort Scarred Trees Masterplan		<b>Details:</b> Cost Plan No. 1 revA			
<b>Building:</b> Lake Boort					
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 4 – Kinypanial Creek Access Road</b>					
<u>Preliminaries</u>					
223	Allowance for builder's preliminaries, overheads and margin	1	Item	30,000.00	30,000
224	Allowance for traffic management	1	Item	10,000.00	10,000
<u>Preliminaries</u>					<u>40,000</u>
<u>Demolition</u>					
225	Allowance to demolish and remove existing hard and soft landscaping (i.e. paving, trees, garden beds, etc.)	1	Item	2,500.00	2,500
226	Maintain and protect existing services, i.e. junction pits, communication lines, drainage pipes, etc.	1	Item	1,000.00	1,000
227	Allowance for removal of hazardous materials (i.e. asbestos, lead, etc.) - EXCLUDED	0	Note	0.00	0
<u>Demolition</u>					<u>3,500</u>
<u>Site Preparation</u>					
228	Allowance for site preparation / clearance	1	Item	5,000.00	5,000
229	Allowance for rock removal / excavation - EXCLUDED	0	Note	0.00	0
230	Allowance for removal of contaminated soil - EXCLUDED	0	Note	0.00	0
<u>Site Preparation</u>					<u>5,000</u>
<u>Roads, Footpaths &amp; Paved Areas</u>					
231	Vehicular-grade paving				
232	Gravel carparking	837	m2	60.00	50,220
233	Allowance for 1km gravel access road (assume 6m wide) - PROVISIONAL SUM	1	Item	300,000.00	300,000
234	Paving				
235	Gravel pathway (2.5m wide)	1,919	m2	40.00	76,760
236	Extra over to form sloped gravel pathway (2.5m wide)	1,930	m2	20.00	38,600
237	Gravel paving to interpretive nodes	91	m2	40.00	3,640
<u>Roads, Footpaths &amp; Paved Areas</u>					<u>469,220</u>
<u>Boundary Walls, Fencing &amp; Gates</u>					
238	Allowance for site boundary fencing - EXCLUDED	0	Note	0.00	0
<u>Boundary Walls, Fencing &amp; Gates</u>					<u>0</u>
<u>Landscaping &amp; Improvements</u>					
239	<u>Soft Landscaping</u>				
240	Garden beds including indigenous biodiversity planting	689	m2	75.00	51,675
241	Allowance for edging to garden beds	215	m	30.00	6,450
242	Allowance for trees (No. to be defined)	1	Item	10,000.00	10,000
243	<u>Hard Landscaping</u>				
244	Allowance for seating to interpretive node	1	Item	10,000.00	10,000
<b>To Collection</b>					<b>595,845</b>

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Elemental Cost Plan					
<b>Project:</b> Lake Boort Scarred Trees Masterplan		<b>Details:</b> Cost Plan No. 1 revA			
<b>Building:</b> Lake Boort					
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 4 – Kinypanial Creek Access Road</b> <span style="float: right;"><i>(Continued)</i></span>					
<u>Landscaping &amp; Improvements</u> <span style="float: right;"><i>(Continued)</i></span>					
245	<u>Signage</u>				
246	Allowance for interpretative signage (i.e. wayfinding bollards, regulatory signage, entrance feature signage) - PROVISIONAL SUM (as advised by Aspect Studios)	1	Item	25,000.00	25,000
247	<u>Sundry</u>				
248	Allowance for sundry landscaping (i.e. seating, etc.)	1	Item	5,000.00	5,000
<u>Landscaping &amp; Improvements</u>					<u>108,125</u>
<u>External Stormwater Drainage</u>					
249	Allowance for drainage to gravel carparking - EXCLUDED	0	Note	0.00	0
250	Stormwater treatment system - EXCLUDED	0	Note	0.00	0
<u>External Stormwater Drainage</u>					<u>0</u>
<u>External Water &amp; Sewer</u>					
251	Allowance for water and sewer services infrastructure - EXCLUDED	0	Note	0.00	0
252	Allowance for irrigation (planting, etc.) - EXCLUDED	0	Note	0.00	0
253	Allowance for underground tanks - EXCLUDED	0	Note	0.00	0
<u>External Water &amp; Sewer</u>					<u>0</u>
<u>External Electrical Services</u>					
254	Allowance for carpark lighting - EXCLUDED	0	Note	0.00	0
255	Allowance for upgrades to existing electrical services - EXCLUDED	0	Note	0.00	0
<u>External Electrical Services</u>					<u>0</u>
<b>Stage 4 – Kinypanial Creek Access Road</b>					<b>625,845</b>
<b>To Collection</b>					<b>30,000</b>

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Elemental Cost Plan					
					
<b>Project:</b> Lake Boort Scarred Trees Masterplan		<b>Details:</b> Cost Plan No. 1 revA			
<b>Building:</b> Lake Boort					
Code	Description	Quantity	Unit	Rate	Total
<b>Stage 4 – Kinypanial Creek Access Road</b> <span style="float: right;"><i>(Continued)</i></span>					
<b>COLLECTION</b>					
	Page 25:				595,845
	Page 26:				30,000
	<b>Stage 4 – Kinypanial Creek Access Road Carried to Summary:</b>				<b>625,845</b>
<hr/>					
<b>Report Summary</b>					
GFA: 0.00 m2					<b>9,626,790</b>

Elemental Cost Plan					
					
<b>Project:</b> Lake Boort Scarred Trees Masterplan			<b>Details:</b> Cost Plan No. 1 revA		
<b>Building:</b> Lake Boort					
Code	Description	Quantity	Unit	Rate	Total
<b>COLLECTION SUMMARY</b>					
<b>PAGE NO</b>					
	Stage 1 – Gateway and Arrival	3			614,535
	Stage 1 – Digital Interpretation	5			48,000
	Stage 1 – Community & Activity Area 1	9			1,903,915
	Stage 1 – Boardwalks and Tracks Associated to Activity Area	12			1,564,030
	Stage 2 – Boardwalk Onto Lake	15			2,229,280
	Stage 2 – Kinypanial Creek	18			1,520,670
	Stage 3 – Lake Boort Trail	21			886,095
	Stage 3 – Boort Pyramid Road Picnic Area	24			234,420
	Stage 4 – Kinypanial Creek Access Road	27			625,845
	<b>Total Amount:</b>				<b>9,626,790</b>

# Appendix 2

## Cost Benefit



## 12.1 Cost Benefit Analysis References

1. Boort Business and Tourism Council and Boort Development Committee (2021) About the Boort Scarred Trees, available online < <http://boort.com.au/scar-trees/>>
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3. Gippsland and East Gippsland Aboriginal Co-operative (2021) Bataluk Cultural Trail, available online <<https://batalukculturaltrail.com.au/>>
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## Appendix 1: Comparable experiences

### Budj Bim Cultural Landscape Project

Budj Bim National Park is located in western Victoria, approximately 80kms northwest from Warrnambool. The 55 square kilometre national park is located in the Moyne Shire.



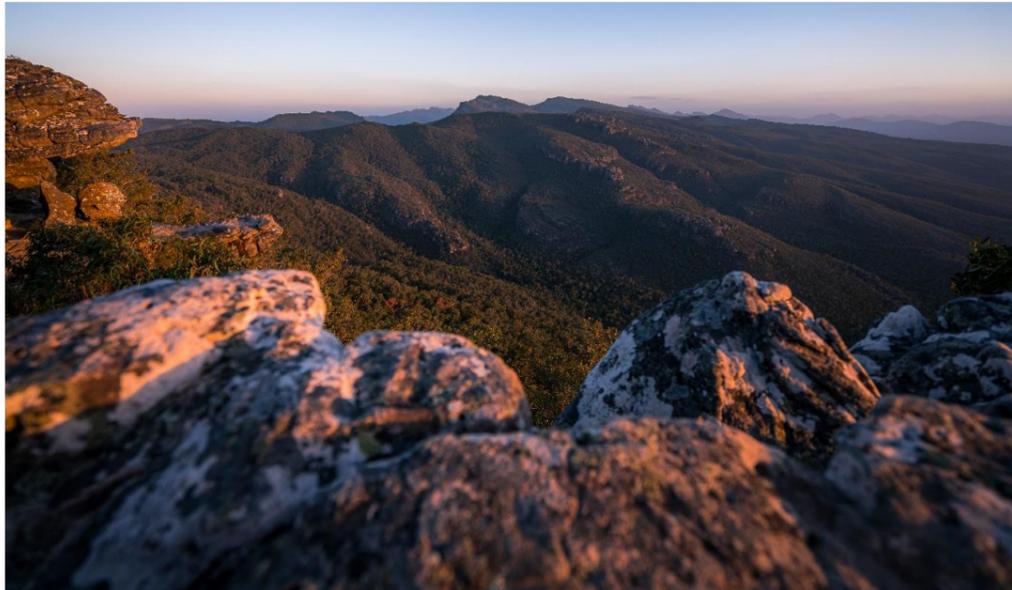
Source: Parks Victoria

<b>Managing organisation</b>	To be co-managed by Gunditj Mirring Traditional Owners Aboriginal Corporation and Parks Victoria (the first co management arrangement in Victoria)
<b>Aboriginal Cultural Significance</b>	<p>The Budj Bim Cultural Landscape is central to the history of the Gunditjmara people. The area has formally been recognised on the UNESCO World Heritage List and is the only Australian World Heritage property listed exclusively for its Aboriginal cultural values. The Budj Bim Cultural Landscape features the earliest living example of aquaculture in the world (Parks Victoria, 2021). The site features a complex system of channels and weirs used by the Gunditjmara people to trap eels and fish for more than 6,600 years. It's also home to the remains of more than 300 Aboriginal stone houses, evidence of the Gunditjmara people's permanent settlement in the area (NIT, 2022).</p> <p>The Victorian Government has invested more than \$12 million into the Project which includes the national park, the Tyrendarra township, Kurtonitj, Lake Condah, and Tyrendarra Indigenous Protected Area (NIT, 2022)</p>
<b>Facilities and services</b>	<p>At project finalisation, the Project's offer will include:</p> <ul style="list-style-type: none"> <li>- The Tae Rak Aquaculture Centre, which will give visitors the opportunity to learn about how the Gunditjmara people worked with the environment for more than 30,000 years</li> <li>- 1 x Café at lake Condah</li> <li>- 1 x Campground</li> </ul>

	<ul style="list-style-type: none"> <li>- Picnic Area with toilets, gas BBQs, shelters, and park information</li> <li>- Self-guided four wheel driving</li> <li>- Self-guided walks</li> <li>- Cycling trails</li> <li>- Caving</li> <li>- Guided bus tours, caving tours and bushwalks.</li> </ul> <p>The Tae Rak Aquaculture Centre and cafe at Lake Condah is scheduled to open to the public in June 2022. Guided cultural tours of the Budj Bim Cultural Landscape will also commence at this time (NIT, 2022)</p>
<b>Annual visitation</b>	TBA

**Gariwerd (Grampians National Park)**

The Grampians National Park (Gariwerd) is a Nature Reserve 140 kilometres northwest of Ballarat. Gariwerd is Heritage-listed for its Aboriginal heritage (including the most Aboriginal rock art paintings and shelters in one place in Victoria, its array of animal and plant life, and its environmental landscapes. The Grampians National Park is 1,672 square kilometres, and was placed on the National Heritage List in 2006.



Source: Shutterstock

<b>Managing organisation</b>	Parks Victoria
<b>Aboriginal Cultural Significance</b>	Gariwerd has been home to the Djab Wurrung and Jardwardjali people for 20,000 years and contains the densest concentration of rock art paintings and the largest assemblage of Aboriginal art motifs in Victoria. Motifs painted in numerous caves include depictions of humans, human hands, animal tracks and birds. To the Jardwardjali and Djab wurrung peoples, Gariwerd was central to the dreaming of the creator, Bunjil, and buledji Brambimbula, who were responsible for the creation and naming of many landscape features in western Victoria.

<b>Facilities and services</b>	<ul style="list-style-type: none"> <li>- Campgrounds</li> <li>- Picnic areas with toilets, gas BBQs, shelters, and park information</li> <li>- Accommodation ranging from budget to luxury</li> <li>- Brambuk National Park and Cultural Centre (owned and managed by Jardwardjali and Djab Wurrung people)</li> <li>- Self-guided walks</li> <li>- Self-drive tours</li> <li>- Cycling trails</li> <li>- Rock climbing</li> <li>- Guided day and multi day tours</li> </ul>
<b>Annual visitation</b>	The Brambuk Cultural Centre, located in Gariwerd, attracts 200,000 visitors per year.

**The Bataluk Cultural Trail**

The Bataluk Cultural Trail follows a number of culturally significant sites along the original network of Indigenous trading routes and trails (now the Princes and South Gippsland Highways), between Yarrem (Yarram, which is 67 kms southeast from Traralgon) and Kam (Cann River).



Source: Gippsland and East Gippsland Aboriginal Cooperative

<b>Managing organisation</b>	The Gunaikurnai Land and Waters Corporation (GLaWAC)
<b>Aboriginal Cultural Significance</b>	The trail itself follows significant traditional routes used by the Gunaikurnai for over 30,000 years. With the mountains a two or three day walk to the north and the lakes and ocean one or two days walk to the south, the path which is now the South Gippsland and Princes Highways formed the backbone of the network of trails and trading routes which spanned the region. Included in the 11 sites along the trail are scarred trees, information on weapons, relics and dreaming stories, and multiple sacred sites (Gunaikurnai Land and Waters Corporation, 2021).
<b>Facilities and services</b>	<ul style="list-style-type: none"> <li>- Self-guided walks</li> <li>- Cycling trails</li> </ul>
<b>Annual visitation</b>	TBA

## Appendix 2: Data

**TABLE 25: DOMESTIC OVERNIGHT VISITOR ESTIMATES FOR YEAR ENDING MARCH ('000)**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Bendigo/ Loddon*</b>	683	867	813	799	925	959	1,060	1,050	1,137	1,272	664
<b>Mallee**</b>	631	619	633	611	742	621	762	758	833	847	420****
<b>Central Murray***</b>	568	667	628	723	721	728	735	877	874	939	470

\* Includes Lake Boort region \*\* includes Mildura \*\*\* includes Echuca/ Moama \*\*\*\*data not available, so estimate is made based on Bendigo/ Loddon and Central Murray regions reduction in visitation

Source: Victorian Department of Jobs, Precincts and Regions, National Visitor Survey by Tourism Research Australia, March 2011- 2021

**TABLE 26: DOMESTIC DAYTRIP VISITOR ESTIMATES FOR YEAR ENDING MARCH ('000)**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Bendigo/ Loddon*</b>	2,150	2,374	2,578	2,120	2,018	2,353	2,456	2,770	3,103	3,370	1,685
<b>Mallee**</b>	606	510	662	479	626	441	587	442	592	710	355****
<b>Central Murray***</b>	722	833	948	824	676	884	775	1,094	1,066	1,072	604

\* Includes Lake Boort region \*\* includes Mildura \*\*\* includes Echuca/ Moama \*\*\*\*data not available, so estimate is made based on Bendigo/ Loddon and Central Murray regions reduction in visitation

Source: Victorian Department of Jobs, Precincts and Regions, National Visitor Survey by Tourism Research Australia, March 2020

**TABLE 27: INTERNATIONAL OVERNIGHT VISITOR ESTIMATES FOR YEAR ENDING MARCH 2020 ('000)**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Bendigo/ Loddon*</b>	18.7	16.5	19.8	15.8	21.4	19.5	17.6	21.4	27.3	25.0
<b>Mallee**</b>	16.1	20.3	20.2	19.5	20.6	25.1	24.4	23.9	23.1	23.9
<b>Central Murray***</b>	7.9	10.2	7.7	14.4	11.4	12.6	13.4	13.3	17.8	9.0

**TABLE 28: INTERNATIONAL DAYTRIP VISITOR ESTIMATES FOR YEAR ENDING MARCH 2020 ('000)**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Bendigo/ Loddon*</b>	50.1	47.7	57.0	49.0	47.3	53.1	62.7	57.1	57.6	46.5

\* Includes Lake Boort region

Source: Victorian Department of Jobs, Precincts and Regions, National Visitor Survey by Tourism Research Australia, March 2020

**TABLE 29: 2021 LODDON VISITOR INFORMATION CENTRE VISITOR DATA**

	Actuals								Estimates*			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
<b>Wimmera, Mallee, Bendigo and Northern Country (including Echuca)</b>	45	60	49	41	88	46	41	46	52	52	52	52

Estimates are the average of the first eight months of 2021.

Source: Loddon Shire Council

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