

This Visitor Safety Strategy was prepared by TRC Tourism for the Ginninderry Conservation Trust.

#### **DISCLAIMER**

Any representation, statement, opinion or advice expressed or implied in this document is made in good faith but on the basis that TRC Tourism Pty. Ltd., directors, employees and associated entities are not liable for any damage or loss whatsoever which has occurred or may occur in relation to taking or not taking action in respect of any representation, statement or advice referred to in this document.

#### **ACKNOWLEDGEMENT**

We acknowledge the Indigenous peoples of the lands, waters and communities we work together with. We pay our respects to their cultures; and to their Elders – past, present and emerging.

©Copyright TRC Tourism Pty Ltd



www.trctourism.com

Image credit: Ginninderry Conservation Trust Facebook

Report Name	Version	Date submitted
Draft Safety Strategy - Ginninderry Conservation Trust	1	07/12/ 2021
Draft Safety Strategy - Ginninderry Conservation Trust	2	11/01/2022
Final Visitor Safety Strategy - Ginninderry Conservation Trust	3 (Final)	19/01/2022



# Contents

The Ginninderry Conservation Corridor	1
Legislative and Policy Considerations	1
The Ginninderry Conservation Trust	1
Managing Visitor Safety	3
Risk Management Framework	3
Roles and Responsibilities	3
Review Procedures	4
Definitions	4
Managing Visitor Safety in the Conservation Corridor	5
Objectives	5
Scope	5
Visitor Access and Activities	5
Identifying Risks	6
Recording Risks	6
Determining Risk Ratings and Tolerability Levels	6
Risk Management Responses	7
Risk Treatment Plans	8
Inspections and Asset Maintenance	8
Hazard and Risk Identification	11
Appendices	12
Appendix A – PRELIMINARY RISK ASSESSMENT	13
Appendix B – RISK ASSESSMENT MATRIX	16





# The Ginninderry Conservation Corridor

The Ginninderry Conservation Corridor (the Conservation Corridor) is a conservation area recently established across the border of the ACT and NSW and planned as an integral part of the new sustainable Ginninderry urban community.

To the west the Conservation Corridor is bounded by the Murrumbidgee River and to the north by Ginninderra Creek in NSW. In the east, the Conservation Corridor abuts the new cross-border Ginninderry urban development and extends south to Woodstock Nature Reserve in the ACT.

When fully developed, the Conservation Corridor will comprise a total area of 580 hectares - 360 hectares in the ACT and 220 hectares in NSW. The land within the Conservation Corridor boundaries will be acquired for conservation in stages. The first portion of the Conservation Corridor was established in 2019 in the southern ACT portion adjacent to the first stage of the Ginninderry urban development. The Visitor Safety Strategy applies to this first stage of establishment and management of the Conservation Corridor.

#### Legislative and Policy Considerations

The ACT portion of the Ginninderry Conservation Corridor is held under a Section 303 license over public land under the *Planning and Development Act* 2007. The licence specifies the use of the land for conservation and recreation purposes.

#### The Ginninderry Conservation Trust

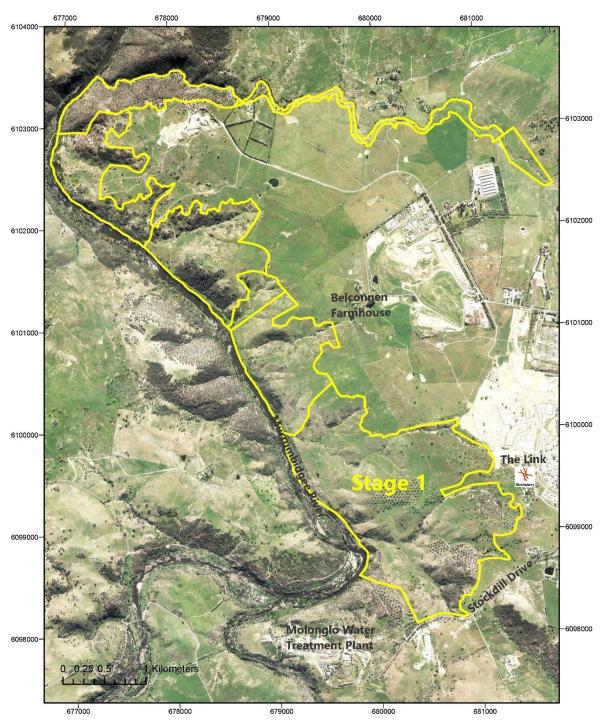
The Ginninderry Conservation Trust (GCT) is responsible for the management of the Conservation Corridor and for protecting the cultural, environmental and social values. The Trust legal entity has been established with a guiding constitution under the Australian Corporations Act (2001).

The Trust's on-ground operations are guided by the Ginninderry Conservation Corridor Management Plan (2018-2023).

The GCT has a duty of care to visitors to the Ginninderry Conservation Corridor. The Visitor Safety Strategy establishes the types of activities that are permitted within the Conservation Corridor. This Strategy responds to the requirement of the Management Plan and sets out the GCT's approach to managing risks to visitor safety in the Ginninderry Conservation Corridor.







# **Ginninderry Conservation Corridor**

Map prepared by Ginninderry Conservation Trust 18 January 2022 Data provided by Knight Frank and ACTMapi



## **Managing Visitor Safety**

The GCT aims to provide a safe and enjoyable experience for visitors to the Conservation Corridor. The Conservation Corridor is generally a safe place to visit. However, the natural environment will always present risks to visitors—these risks can be managed, but never eliminated.

Risk of serious harm can be avoided if visitors take reasonable care and if the GCT has adequately evaluated and mitigated serious hazards.

The duty of the GCT is to identify foreseeable risks and to take reasonable steps to avoid or reduce them, particularly for people who may not have the skills, knowledge or experience to recognise the risk or its magnitude. Actions may include signs, closure of particular areas, maintenance or reconstruction work, and visitor education.

Above all, the GCT must demonstrate that it has applied a systematic approach to visitor safety.

# Risk Management Framework

The management of visitor safety in the Conservation Corridor sits within the GCT's Risk Management Framework that aims to identify, measure, or mitigate risks to staff, contractors and visitors and the entity itself. The framework addresses the Trust's legislative obligations and is an integral part of the GCT's management system and core operations.

The risk management process for visitor safety involves the identification of potential risks and hazards and an assessment of the likelihood that harm will occur if care or action is not taken, considering the levels of the number of people exposed to the hazard. It also considers the likely seriousness of the harm, or its consequence.

# Roles and Responsibilities

The GCT Board is responsible for the oversight of the Risk Management Framework as part of the Director's duties and responsibilities. This includes visitor safety risks and treatments.

The GCT's Work Health and Safety Committee is responsible for the implementation for the Framework and reporting to the Board on a quarterly basis. Visitor safety is a key component of their role.

The CEO is responsible for all statutory reporting obligations.

The Program Director is responsible for ensuring that risk assessments and management decisions are documented, approving and reviewing risk treatment plans and certifying their implementation through the Annual Work Plan for the Conservation Corridor.

All GCT staff are responsible for applying and complying with standards, procedures and documents relating to Visitor Safety and identifying and reporting to the Program Director on visitor safety matters as they arise.

Emergency response is provided by ACT Emergency Services and the Australian Federal Police. GCT staff are responsible for supporting emergency response operations and providing information about the Conservation Corridor and ways to minimise environmental impact during operations



#### **Definitions**

**Hazard** means a potential or existing condition that may causeharm to people or damage to property or the environment

**Risk** means a measure of the probability and severity of an adverse effect to health, property or the environment. Risk is often expressed as a combination of the likelihood of an event's occurrence and its consequences (AS/NZS ISO 31000:2009 – Risk Management).

**Risk assessment** is the process of identifying, analysing and evaluating risks.

**Risk treatment plan** means documented agreed action(s) or measures (additional to existing controls) to avoid, reduce, remove, modify or share a risk.

**Risk mitigation** means actions to reduce exposure to potential risks.





# Managing Visitor Safety in the Conservation Corridor

# Objectives

This Visitor Safety Strategy sets out the Ginninderry Conservations Trust's approach to managing risks to visitor safety in the Ginninderry Conservation Corridor. The objectives of the Visitor Safety Strategy are to:

- Identify visitor safety risks associated with the visitor use of the Ginninderry Conservation Corridor
- Minimise the potential for incidence of injury to visitors
- Encourage appropriate behaviour by visitors
- Analyse safety risks to determine the level of risk, consequence and likelihood
- Align with industry standards and best practice principles
- Enable GCT staff to effectively manage visitor risk and ensure documented accountabilities and responsibilities are in place

#### Scope

This Visitor Safety Strategy applies to all visitors to the Conservation Corridor. It does not apply to contractors, commercial operations, volunteers, researchers, or staff operations within the corridor.

#### Visitor Access and Activities

Visitor access into the Conservation Corridor is provided by vehicle roads to the visitor nodes and trailheads from the Ginninderry suburbs. The main visitor precinct will be Riverside Park (yet to be formally established). The Riverside Park will most likely be open between sunrise and sunset. The remaining areas of the Conservation Corridor will generally remain open.

Ginninderry Conservation Corridor Management Plan (2018-2023) identifies the following activities as permissible within the Conservation Corridor:

- Quiet observation and nature appreciation (such as bird watching, wildlife watching, visiting scenic and natural sites, photography, painting)
- Walking and bushwalking
- Cycling (road)
- Picnicking
- Water-based activities (kayaking and swimming etc)
- Fishing
- Camping will be considered
- Events, and large group activities
- Non-commercial small group activities
- Commercial tours, products and services



- Public rock climbing may be prohibited until the Ginninderra Falls area is open to the public and visitor infrastructure is in place. The potential for safe and environmentally sustainable rock climbing run by licensed operators will then be investigated
- Horse riding will be catered for on the Bicentennial National Trail which follows the Conservation Corridor's edge within the urban area for part of its route
- Mountain biking on shared paths only and is not permitted on the walking trails.

Visitor infrastructure includes walking trails, lookouts, management trails, signage, seating, picnic facilities, and public amenities, most of which will be constructed in or adjacent to Riverside Park.

#### **Identifying Risks**

Managing visitor safety involves the identification of potential hazards including:

- A natural feature, such as a cliff, water hole or tree
- A natural event, such as a storm or fire
- A native or introduced animal, such as a bird displaying aggressive behaviour
- A built structure, such as a viewing platform or walking track
- A visitor activity or behaviour
- Or a hazard of some other kind eg. public health risks associated with water quality.

# **Recording Risks**

The GCT will maintain a visitor safety risk register to record all identified visitor safety risks and their assessed risk rating. Some risks – for instance, risks with very severe potential impacts – may remain on the register for continued monitoring, even if they are currently being managed.

Under the GCT's risk management system, visitor safety hazards require documented management responses and/or risk treatment plans.

The Program Director - Conservation Corridor is responsible for preparing and implementing the visitor safety risk register.

#### **Determining Risk Ratings and Tolerability Levels**

GCT's risk management system sets general risk rating and tolerability levels. The Risk Matrix establishes the levels of risk. The risks levels are Low, Medium, High, and Very High.

In accordance with the GCT's risk management system, risk ratings establish priority and accountability for a management response. However, they do not determine what that response should be.



#### Risk Management Responses

After a risk to visitor safety has been assessed and its risk rating determined, the GCT must decide on the most appropriate management responses. Options range from eliminating the risk, mitigating the risk through a range of administrative or engineering controls, or accepting the risk.

A management response may involve:

- Removal of the activity/hazard
- Managing the hazard
- Managing the exposure of visitors to the hazard
- Managing both the hazard and the exposure of visitors to it
- Doing nothing and choosing to tolerate the risk.

A management response to reduce exposure to hazard may include:

- Providing a specific risk message and other general warnings and safety messages through signs, printed material, the website or social media
- Provision of infrastructure
- Modifying visitor use at the hazard location (for example, rerouting a walking track)
- Redesigning or relocating a visitor area
- Closing a visitor area partly or wholly, temporarily or permanently.

In some circumstances, such as for risks rated as very high, it will be appropriate to take immediate action to reduce the risk. Risk warnings, signage and temporary barriers should be considered to reduce visitor exposure to hazards until long-term risk responses are implemented.

Factors to consider when determining a management response:

- Available resources, such as funding, trained staff and management capacity
- Potential impact of the management response, considering the relevant management objectives for the corridor as per the Ginninderra Conservation Corridor Management Plan
- The nature of the site, and how developed the site is for the same level of risk, more developed sites and settings may require a higher level of management intervention than less-developed sites
- Time required to implement the management response, the acceptability of leaving the risk untreated for that period, and the potential for interim or staged responses
- How much the proposed management response is likely to reduce the risk
- Sustainability or permanence of the management response and whether its effectiveness will diminish over time and/or require significant ongoing maintenance
- The management response's impact on other management objectives or services
- The social utility or value of a risky activity (for example, driving a car is statistically a risky activity, but people accept the risk because of driving's social utility)
- The views and expectations of the community
- Other statutory requirements.

A preliminary risk assessment is included in Appendix A. This addresses operational risks in relation to the management and presentation of the corridor for visitor use. Decisions and actions to mitigate or eliminate a risk are to be documented in a risk treatment plan.



#### Risk Treatment Plans

The risk assessment and management decision must be documented. For risks rated as medium or low, an entry in the visitor safety risk register will be sufficient. Documentation assists future management and may be used in court action, if an event occurs.

In accordance with the GCTs risk management system, for any risk rated high or above, the management response will be documented and authorised in a risk treatment plan. Documentation will include certification that the response has been implemented.

Where resources permit, a risk treatment plan may also be required for risks rated as medium, if these risks are not well controlled and require ongoing monitoring.

A risk treatment plan must include:

- a description of the risk
- details of the assessment of the hazard and exposure of visitors to the hazard, and any relevant
- information that explains how the risk was determined
- measures currently in place to manage the risk (for example, policies and procedures)
- details of the alternative management responses that have been considered and the likely consequences and effectiveness of these alternatives
- details of the costs and other resources that would be involved in undertaking the alternative management responses

- an environmental assessment of the proposed management response
- an evaluation of the risk that will remain after the risk treatment plan has been carried out.

The risk treatment plans should be reviewed every six months, subject to the level of residual risk.

#### Inspections and Asset Maintenance

Inspection and maintenance requirements for built assets (including walking tracks) will be specified and scheduled in the GCT's Risk

Treatment Plans for high or moderate risks (walking track infrastructure, access roads, Riverside Park precinct, Murrumbidgee River aquatic activities). The maintenance requirements will be documented in the Annual Work Plan for the Conservation Corridor. For asset-based risks, the risk treatment plan should be based on the adopted cyclic maintenance plan and inspection regime.

#### **Developing New Visitor Areas or Facilities**

The GCT should not develop, promote or open new visitor areas until:

- risks to visitor safety have been assessed and included in the relevant visitor safety risk register
- an appropriate management response has been determined and, where relevant, implemented.



#### **Review Procedures**

Processes to monitor and review risks to visitor safety will be incorporated into all aspects of the GCT's risk management framework and will consider:

- Effectiveness of controls
- Implementation and effectiveness of treatments in managing risks
- Lessons learned from events (near misses), changes, trends, successes and failures
- Detection of changes in the external and internal environment
- Identification of emerging risks.

The Program Director is required to review activities and risks to ensure the effectiveness of existing controls and to identify new hazards on a quarterly basis. The Risk Treatment Plans should also be reviewed at the same time, where the residual risk of the activity is high.

An annual risk assessment workshop will be undertaken to assess existing risks identified in the risk register and to identify emerging risks with staff. Any increases in the risk rating are highlighted and/or ineffectiveness of controls noted and prioritised and all risk treatment plans updated as required.





#### Communicating Safety and Risk Messages

Communication is an important tool for managing visitor safety. GCT will include safety messages online, in publications and other promotional media. These safety messages should identify a range of general risks that may be encountered in the corridor. They are intended to help visitors understand their personal responsibility and guide them on staying safe in the corridor.

GCT will provide warnings and information on general risks on signage and other communication used by visitors while in the Conservation Corridor. These warnings are to be specific to the corridor and its conditions, including the scale, location and consequences of the risks (where this is not obvious). The safety information for common risks will include:

- the nature of the risk
- the consequence of the risk (if it is not obvious)
- what a visitor should do to avoid the risk.

GCT may also issue specific risk messages, such as a sign warning of a potentially life-threatening risk, at or near the site of the risk. Such messages must clearly provide information on the nature of the risk and the consequences of the risk (where it may not be obvious). Universal danger and hazard pictograms should be used wherever available to provide supplementary messaging. This is particularly important for residents and visitors from non-English speaking backgrounds.

The best practice for hazard signs:

- use a danger sign to warn of a particular hazard or hazardous condition that is likely to be life threatening
- locate danger signs as close as possible to affected areas
- always use text on danger signs and symbols to assist with communication
- where possible place danger messages on stand-alone signs, rather than on an integrated sign such as a directional sign.

GCT cannot rely on a warning or risk message as protection from liability for negligence where:

- A warning or message has been contradicted. GCT staff should avoid issuing directions to visitors that are inconsistent with notices on signs or in printed material (unless there is a 'live' risk such as a bushfire, in which case staff can supply an instant risk message)
- The person who suffers harm is an 'incapable person' such as a child not under the control of, or accompanied by, a capable adult. In highly visited areas, where children are likely to be present, signs and warnings may not be enough to manage safety risks: additional measures may be needed.



#### Hazard and Risk Identification

Site and visitor behaviour hazards and risks (listed below) have been identified through the Management Plan, a site visit on 30 November 2021 and consultation with GCT staff.

Visitor safety concerns that may be encountered in the Corridor include:

- 1. Slips, trips or falls due to rough surfaces, exposed roots, creek crossings, wet ground, wombat holes etc. that could cause serious injury or fatality to visitors.
- 2. Hazardous trees or branches falling on visitor(s), particularly those using the walking tracks, that could cause serious injury or fatality.
- 3. Rock fall, landslide or slope instability along the walking tracks or in other areas if the Corridor causing serious injury or fatality to walker(s).
- 4. Visitor(s) leaving the tracks and trails and becoming lost leading to serious injury.
- Unexpected encounters with native and introduced animals eg Kangaroos, deer, pigs, cows, swooping magpies, horses (on Bicentennial National Trail) etc.
- 6. Unexpected encounter of Mountain Bike(s) by walker(s) on walking tracks causing injury or fatality.
- 7. Lack of walker/cyclist skill, experience or health condition leading to serious injury, illness or fatality on tracks and trails.
- 8. Visitors(s) exposed to extreme weather (heat, cold, heavy rainfall and thunderstorms) conditions resulting in serious illness (ie heat stroke/exhaustion, dehydration or hypothermia) or serious injury (lightning strike).

- 9. Visitors(s) bitten or stung by snakes, spiders, ticks or insects resulting in illness or fatality.
- 10. Flooding in the Murrumbidgee River, and Ginninderra Creek causing drowning or injury due to water-based activities.
- 11. Swimming in the dam(s), creeks, waterways causing drowning or injury.
- 12. Delays in emergency response to lost or injured visitors endangering patient survival.
- 13. Built asset (elevated platforms, utility infrastructures such as water/sewage/electricity, handrails, constructed pathway) failure causing serious injury or fatality to visitor(s).
- 14. Bushfires and hazard reduction burns causing smoke inhalation, injury or fatality.
- 15. Collection of mushrooms or other bush tucker causing illness due to incorrect identification.
- 16. Ingestion of weeds (eg blackberry) following spraying causing serious illness.
- 17. Health issues associated with contact with water from the Murrumbidgee River and creeks causing serious illness.
- 18. Accidents involving vehicles, pedestrians and cyclists using the road to Riverside Park causing serious injury or fatality to visitor(s).
- 19. Aggressive or anti-social behaviour by a person(s) causing serious injury or fatality to visitor(s).
- 20. Inappropriate disposal of sharps (needles, syringes), scalpels, razors and other blades and injecting equipment causing serious injury or fatality to visitor(s).

The risk assessment for the corridor is presented in Appendix A. For any risk rated medium, high or above, the management response should be documented and authorised in a risk treatment plan.





# APPENDIX A - PRELIMINARY RISK ASSESSMENT

 Table 1.
 Visitor Safety Risk Assessment

Risk ID	Author	Date Identified	Risk Description	Likelihood Rating	Consequence Rating	Overall RiskRating	Risk Response Category	Risk Response/ MitigationActions	Residual Risk Rating
1		30-Nov-21	Slips, trips or falls due to rough surfaces, exposed roots, creek crossings, wet ground, wombat holes etc. that could cause serious injury or fatality to visitors.	Possible	Major	High	Reduce	General safety signage.Regular inspections by staff. Establish walking trail network, encourage visitors to stay on trails, use appropriate trail designs and infrastructure (e.g. stepping stones, steps, handrails).  Track closure during andafter heavy rainfall, high -winds or fire events.  Safety messages reinforced in audio App.	Moderate
2		30-Nov-21	Hazardous trees or branches falling on visitor(s), particularly those using the walking tracks, that could cause serious injury or fatality.	Possible	Major	High	Reduce	Hazardous tree inspectionsand removal of hazardous trees or limbs.  Regular track inspections and maintenance.  Specific safety messaging on website to avoid visiting in high winds. Corridor closure during extreme weather.  Safety messages reinforced in audio App. Staff respond to hazard reports from the public. Trail and picnic facility inspections by qualified arborist.	Moderate
3		30-Nov-21	Rock fall, landslide or slope in stability along the walking tracks or inother areas of the Corridor causing serious injury or fatality to walker(s).	Possible	Major	High	Reduce	Slope stability assessment. Specific rock fall safety signage. Regular track inspections by field officers. Corridor closure during heavyrainfall, high winds or fire events. Trail design to avoid high risk areas and use signage and hand-rails where appropriate.	Moderate
4		30-Nov-21	Visitor(s) leaving the tracks and trails and becoming lost leading to serious injury.	Possible	Major	High	Reduce	General, specific 'stay ontrack' safety signage.  Distance and location information.  Marked track. Safety messages reinforced in audio App.  Mobile phone coverage. Monitor mobile phone coverage in corridor.	Moderate
5		30-Nov-21	Unexpected encounters with native and introduced animals eg Kangaroos, deer, pigs, cows, swooping magpies, horses (on Bicentennial National Trail) etc.	Likely	Moderate	Moderate	Accept	Include information about inherent site risks in signage and other collateral developed for visitors to the site. Safety messages reinforced in audio App. Monitor fauna populations and respond if over-abundant.	Moderate
6		30-Nov-21	Unexpected encounter of Mountain Bike(s) by walker(s) on walking tracks causing injury or fatality.	Likely	Major	Extreme	Reduce	MTB generally prohibited from using the trails General safety signage. Specific messaging. Well-marked track. Safety messages reinforced in audio App. Trails designed to reduce desirability for bike riders (e.g. step-overs).	Moderate



Risk ID	Author	Date Identified	Risk Description	Likelihood Rating	Consequence Rating	Overall RiskRating	Risk Response Category	Risk Response/ MitigationActions	Residual Risk Rating
7		30-Nov-21	Lack of walker/cyclist skill, experience or health condition leading to serious injury, illness or fatality on tracks and trails.	Possible	Major	High	Reduce	General safety signage. Specific messaging regarding track grade, distance etc at trail headand website. Safety messages reinforced in audio App.	Moderate
8		30-Nov-21	Visitors(s) exposed to extreme weather (heat, cold, heavy rainfall and thunderstorms) conditions resulting in serious illness (ie heat stroke/exhaustion, dehydration or hypothermia) or serious injury (lightning strike).	Possible	Major	High	Reduce	General safety and warning signage. Specific messaging on website.  Conservation Corridor closure during high rainfall, high wind or total fire ban days.  Safety messages reinforced in audio App.	Moderate
9		30-Nov-21	Visitors(s) bitten or stung by snakes, spiders, ticks or insects resulting in illness or fatality.	Possible	Major	High	Accept	Include information about inherent site risks in signage and other collateral developed for visitors to the site. Snake-specific warning signs encouraging visitors to stay on-tracks deployed seasonally.	Moderate
10		30-Nov-21	Flooding in the Murrumbidgee River, and Ginninderra Creek causing drowning or injury due to water- based activities.	Possible	Major	High	Reduce	General safety and warning signage. Specific messaging on website. Riverside access point closure during flooding.	High
11		30-Nov-21	Swimming in the dam(s) causing drowning or injury.	Possible	Major	High	Reduce	General safety and warning signage. Specific messaging on attraction website.	Moderate
12		30-Nov-21	Delays in emergency response to lost or injured visitors endangering patient survival.	Unlikely	Moderate	High	Share	Monitor and seek improvement in mobile phone coverage to reduce blackspots.  Safety and locational signage.  Emergency vehicle accesspoints.  Relatively close proximity to emergency services and hospitals.	Moderate
13		30-Nov-21	Built asset (elevated platforms, handrails, constructed pathway) failure causing serious injury or fatality to visitor(s).	Unlikely	Major	High	Reduce	Design standards and maintenance plan in place. 5-yearly engineering inspections of elevated platforms. Regular 6-monthly inspection and maintenance by field staff. Staff respond to visitor reports of asset damage.	Moderate
14		30-Nov-21	Bushfires and hazard reduction burns causing smoke inhalation, injury or fatality.	Unlikely	Major	High	Reduce	General safety and warning signage. Specific messaging on website. Closure during extreme weather events including total fire ban days. Community-warnings directly and via media when hazard reduction burns planned.	Moderate
15		30-Nov-21	Collection of mushrooms or other bush tucker causing illness due to incorrect identification.	Rare	Major	Moderate	Reduce	General safety and warning signage on seasonal basis. Specific messaging on website.	



Risk ID	Author	Date Identified	Risk Description	Likelihood Rating	Consequence Rating	Overall RiskRating	Risk Response Category	Risk Response/ MitigationActions	Residual Risk Rating
16		30-Nov-21	Ingestion of weeds (e.g. blackberry) following spraying causing serious illness.	Rare	Major	Moderate	Reduce	General safety and warning signage on seasonal basis. Specific messaging on website.	Moderate
17		30-Nov-21	Health issues associated with contact with water from the Murrumbidgee River.	Rare	Major	Moderate	Share	Warnings and alerts from Icon Water in place. General safety and warning signage. Specific messaging onattraction website. Closure of river access. Safety messages reinforced in audio App.	Moderate
18		30-Nov-21	Accidents involving vehicles, pedestrians and cyclists using the road to Riverside Park causing serious injury or fatality to visitor(s).	Likely	Major	Extreme	Reduce	Design standards. General safety signageSpecific messaging. Well-marked road. Safety messages reinforced in audio App.	Moderate
19		30-Nov-21	Aggressive or anti- social behaviour by aperson(s) causing serious injury or fatality to visitor(s).	Unlikely	Major	High	Accept	Ensure emergency response plan in place.	Moderate
20		30-Nov-21	Inappropriate disposalof sharps (needles, syringes), scalpels, razors and other blades and injecting equipment causing serious injury or fatality to visitor(s).	Unlikely	Major	High	Reduce	Ensure availability of sharps disposal unitsaccessible and with instructions for use. Surveillance inspections of high-visited sites.	Moderate
21		30-Nov-21	Shooting (both approved culls and illegal hunters)	Unlikely	Major	High	Reduce	Scheduled timing of approved culls outside popular visitor use times. Communication on web site if necessary for approved culls and possible closure. Warning signage (prohibition on firearms).	Moderate
22		30-Nov-21	Unauthorised drone usage	Unlikely	Moderate	High	Reduce	General safety and warning signage. Specific messaging on website and app.	Moderate
23		30-Nov-21	New activities as they emerge	Unknown	Unknown	Unknown	Reduce	General safety and warning signage. Specific messaging on website and app.	Moderate



# **APPENDIX B – RISK ASSESSMENT MATRIX**

			Likelihood		
Consequence	A Rare	B Unlikely	C Possible	D Likely	E Almost Certain
1 Insignificant	L	L	1	M	М
2 Minor	L	L	M	Н	Н
3 Moderate	L	М	н	н	Н
4 Major	М	н	н	ŧ	ŧ
5 Catastrophic	н	Н	- 6		

Rank	Descriptor	People & Public	Environmental
1	Insignificant	Injuries or illness not requiring medical attention, or Minor first aid injury (FAC)	No lasting effect on the environment or social amenity, and/or Recovery – less than 1 week and/or Cosmetic remediation
2	Minor	Injury requiring medical treatment (MTI), or Localised illnesses requiring medical attention	Short term or low-level long-term impact on the environment or socia amenity, and/or Recovery – 1 week to several months, and/or Easy remediation
3	Moderate	Middle to long term injury (RDI or LTI), or Localised illnesses requiring hospitalisation	Long term impacton the environment or social amenity, and/or Recovery – several months to several years, and/or Challenging remediation
4	Major	Permanent disabling injuries, or Widespread illness requiring hospitalisation, or Single death	Extensive, long term impact on the environment or social amenity, and/or Recovery – several years to several decades, and/or Uncertain reversibility or remediation
5	Catastrophic	Multiple deaths	Impacts are irreversible and/or permanent

Rank	Descriptor	Frequency	Description
Α	Rare	Will occur once every 30 years	The event may occur in exceptional circumstances
		Once in 30 years or less frequent	Not likely to occur, but it's not impossible
В	Unlikely	Will occuronce in 10 years  Could occuronce in 10 years or multiple times over 20 years	The event could occur at some time, usually requires a combination of circumstances to occur
С	Possible	Will occuronce every 5 years	The event should occur at some time
		Once in 5 years or multiple times over 10 years	Is sporadic, but not uncommon
D	Likely	Once per year	Known to re-occurapproximately annually
		Once in a year or so	
Е	Almost Certain	Will occur more than once a year  Multiple times in a year	The event is expected or known to occur often

Rank	Acceptance evaluation This decision should be considerate of compliance requirements and As Low As Reasonably Practicable (ALARP)	Description
	Unacceptable STOP WORK	Work shall not proceed without further controls to reduce risk. Contact your Supervisor/ Business Unit Leader.
High	Undesirable ALARP	Work shall only proceed with Supervisor/Business Unit Leader approve and risk mitigation recorded (e.g. JSEA).
Moderate	Monitor ALARP	Work may proceed with ongoing monitoring of control measures.
Low	Acceptable Proceed	Work may proceed, working in accordance with planned controls.



# **Risk Response Categories**

How the project will treat the risk in terms of the project's chosen categories, for example:

- For threats:
  - avoid (eliminate the threat to protect from the impact of the risk)
  - reduce (act to reduce the probability of occurrence or the impact of the risk)
  - transfer (shifts the impact of the threat to as third party, together with ownership of the response)
  - accept (acknowledge the risk, but do not take any action unless the risk occurs)
  - share (distributing the risk across multiple partners, teams or projects)
- For opportunities: enhance, exploit, reject, share.

#### Risk Response

Actions to resolve or minimise the risk. More than one response may apply.





