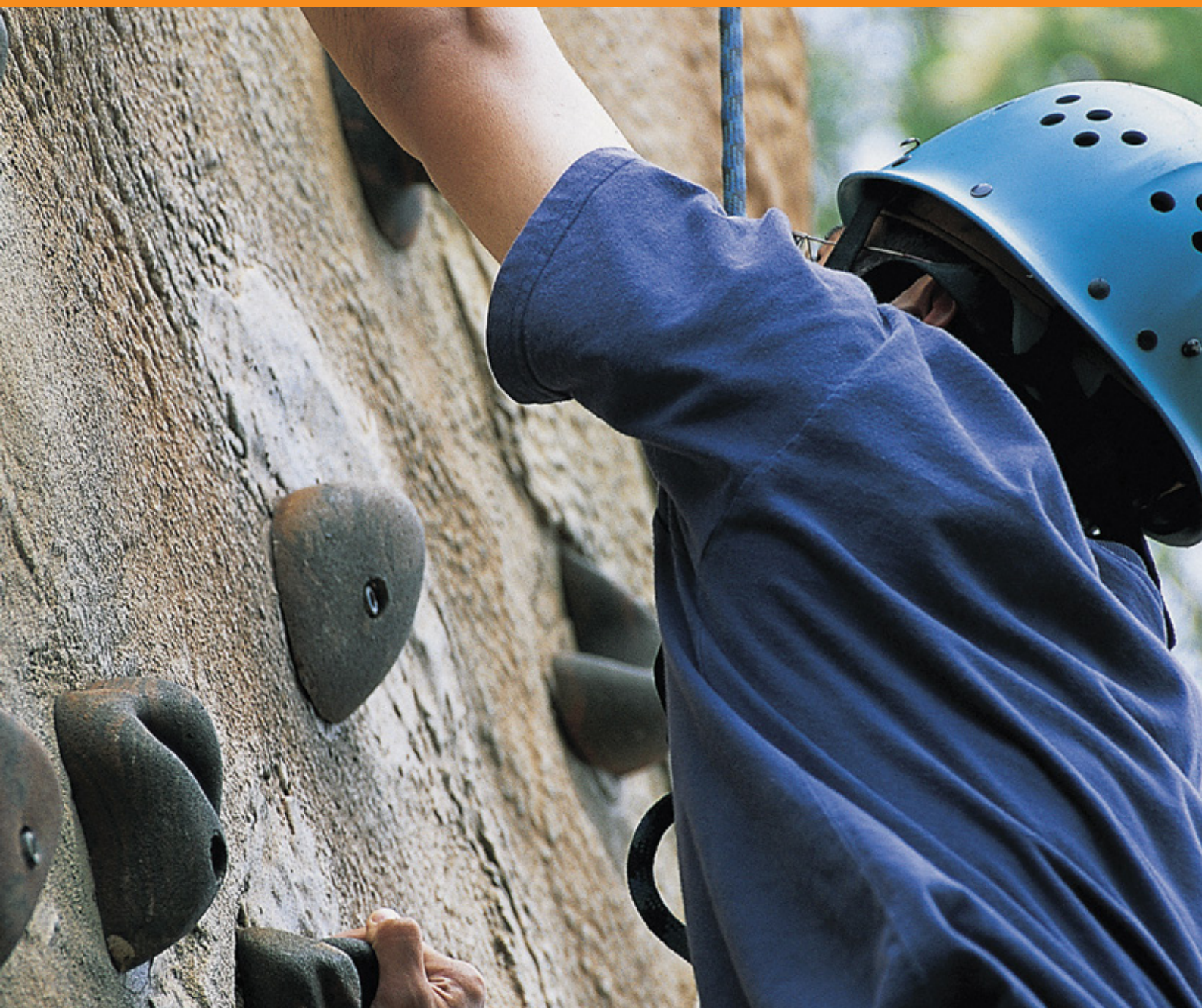


Queensland Adventure Activity Standards

Artificial Climbing



Great state. Great opportunity.

QORF

Prepared by: Sport and Recreation, Department of National Parks, Recreation, Sport and Racing

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Foreword

This document contains general information about why the Queensland Adventure Activity Standards (AAS) were developed. It also provides specific information to assist organisations and individual leaders plan and run adventure activities for various groups. Although it may seem lengthy, the document provides an overview of the minimum preparation required to conduct adventure activities. As such, users of the document are encouraged to read the whole document rather than selected parts.

All information contained in this document, including legal requirements, website and contact information and pathways for demonstrating competency was current on the publication date.

Please note this document's version date to ensure that current information is accessed.

1. Activity description: artificial climbing

Artificial climbing refers to the process of ascending, descending or traversing on artificial surfaces. This activity occurs in environments that allow leaders to control aspects of the activity environment in which dependent participants climb.

The AAS for Artificial Climbing refer to the use of any fixed or movable artificial climbing structure for the purpose of: bouldering, sport climbing (on lead) and wall climbing (where top rope belayed), whether they are indoor or outdoor.

The AAS for Artificial Climbing differ from the rock climbing and abseiling AAS because the controlled environment (e.g. constant conditions, emergency access, and lack of remoteness) significantly alters the inherent level of risk.

Bouldering: refers to rock climbing on artificial surfaces where the lowest part of the body should be no more than 1.2m above the impact zone and where adequate safety can be provided by 'spotting' rather than with the aid of additional systems involving harnesses, belay mechanisms and ropes. (Refer to Section 7 for definitions of 'spotting' and belay mechanisms).

Note: These standards are not designed to apply to the construction and maintenance of the physical structures required for artificial climbing structures, as the relevant standards for these are covered by Standards Australia, AS 2316.1-2009.

2. Introduction

The AAS are designed to help organisations and leaders plan and safely conduct outdoor adventure activities with groups of dependent participants. More specifically, the AAS are primarily designed to help those who lead groups of participants in situations where a duty may exist to take reasonable precautions to protect participants from harm. However, other adventure activity providers might find that the standards are relevant to their activities. Although they are called "Adventure Activity Standards", the AAS should be considered as guidelines that demonstrate non-specific principles and provide direction or suggest actions.

The AAS give leaders and organisations a valuable resource for understanding the processes they should follow to conduct safe and fun activities. They can help leaders and organisations develop operating procedures and plan activities. Each provider will apply the AAS differently, depending on each group's collective skills and experience, and their degree of dependence upon the leader. Also, groups participate in outdoor activities at a range of sites with varying conditions (including weather) and there will be varying outcomes (e.g. educational, personal development, therapeutic, recreational).

To allow for these differences, the AAS can be adapted to suit the organisation, the leader, the group and the situation. The leader remains responsible for making professional judgements and decisions about each activity to ensure the group's safety. The AAS have been designed to assist such judgements and decision-making.

The AAS also help promote knowledge and awareness about the impacts of adventure activities on the natural environment. As the demand for access to areas increases, sustainable environmental practices have become more important. Therefore, these practices are embedded in the document to help providers protect biodiversity values and preserve cultural sites.

A wide cross-section of Queensland's outdoor industry helped prepare the AAS using interstate AAS models as a basis. The result is a set of minimum, voluntary guidelines that reflect industry practices for planning and delivering adventure activities that are safe, thorough and informed. The AAS are NOT statutory standards imposed by law; however, some references throughout the AAS make some actions mandatory. These references reflect legislated considerations that providers must comply with and are highlighted as **MUST**.

Note: If dependent participants come from an Education Queensland school, providers should read this document in conjunction with the relevant Curriculum Activity Risk Management Module found at <http://ppr.det.qld.gov.au/education/management/Pages/Managing-Risks-in-School-Curriculum-Activities.aspx>

2.1 Disclaimer

The information in this AAS has been compiled following a consultative process conducted across the outdoor recreation industry. This AAS has been prepared for general information purposes only and does not take into account your individual situation, needs or objectives. The relevance and appropriateness of the information and recommendations in this AAS may change over time and will depend on the individual circumstances.

This AAS does not constitute advice of any kind and is not binding on any person. This AAS does not cover every circumstance of the relevant adventure activity, and cannot be relied upon to reduce or eliminate the risk of loss or injury. You must make your own inquiries and are encouraged to seek independent advice, as necessary, prior to using or relying on this AAS.

In addition, the information contained in this AAS is not or is not intended to be medical advice and persons should seek their own professional medical advice before participating in these activities.

Reasonable efforts were made to ensure that details of organisational websites and contact information were current as at the time of publication, however such information may have changed and not been updated in this AAS.

The State of Queensland and all other contributors and authors of this AAS, to the extent permitted by law make no representations or warranties in relation to this AAS, its accuracy, reliability, completeness or currency, that reasonable care has been taken in its preparation, or that third party rights have not been infringed, and expressly disclaim all liability (including but not limited to liability for negligence) for any loss whatsoever, injury or death, arising from or in connection with the use of or reliance on any part of this AAS.

2.2 Acknowledgement

In developing the AAS, the Department of National Parks, Recreation, Sport and Racing, and the Queensland Outdoor Recreation Federation recognise the contribution of those who attended consultation workshops and technical working groups.

They also acknowledge the following owners and developers of interstate Adventure Activity Standards for generously providing access to their documents, expertise and ideas:

- Outdoor Recreation Centre of Victoria
- Sport and Recreation Tasmania
- Recreation SA
- Outdoors WA.

2.3 Partnership arrangements

Developing the Queensland Adventure Activity Standards (AAS) has been an initiative funded, managed and owned by the Department of National Parks, Recreation, Sport and Racing and developed by the Queensland Outdoor Recreation Federation.

2.3.1 AAS Inter-departmental committee

An interdepartmental committee comprising representatives from a range of Queensland Government departments and agencies oversaw the document's development, including:

- Department of Communities
- Department of Community Safety
- Department of Education and Training
- Department of Employment, Economic Development and Innovation
- Department of Environment and Resource Management
- Department of Justice and Attorney-General
- Queensland Police Service
- Department of the Premier and Cabinet
- Department of Transport and Main Roads
- Queensland Treasury
- Forestry Plantations Queensland
- Queensland Government Insurance Fund
- Tourism Queensland.

The above list reflects the names of these organisations, as they were at the time of the committee being formed.

2.4 Technical working group representatives

Activity-specific technical working groups used their skills and knowledge to develop specific operational details. Representatives consulted in this process included:

- The Scout Association of Australia, Queensland Branch Inc.



- Girl Guides Queensland



- Outdoor Educators Association of Queensland



- The Outlook



- Kindilan Outdoor Education and Conference Centre



3. Safety and the law

3.1 Risk management overview

Risk management and safety awareness are essential to providing effective and professional adventures. Not only does risk management minimise accidents and incidents during activities, it is also a vital component of any business model. Risk management assists with strategic and operational management, program planning and delivery, and people and resource management. It also helps to develop awareness in communities where adventure activities take place.

Risk management for outdoor activities has implications for all outdoor activity providers who are responsible for complying with any legal requirements. Section 3.3 of this document refers to a range of Acts that legislate the actions of adventure activity providers, while Section 3.4 explains providers' workplace health and safety obligations under the *Work Health and Safety Act 2011*. Providers **MUST** also comply with other legislative and civil laws to meet their legal responsibilities. Some of these laws are built into statutes and local authority bylaws, and others have been developed through judges' decisions (common law).

The risk management and legal information in this document is a guide to the processes and procedures, as well as requirements and methods, for reducing, eliminating, transferring or accepting risks. Several sections in this document refer to actions or incentives that will reduce the likelihood of injuries or incidents and enhance the enjoyment of all involved. When risk management is fully incorporated into all stages of an activity, safer activities result.

This document is not sufficiently comprehensive to provide every piece of information about risk management for outdoor activities. Therefore, leaders and organisations are encouraged to seek further guidance, develop their own risk assessment and management systems, and review and update their systems regularly.

3.2 Summary overview of legal framework

The following general information on legal liability in contract and negligence does not provide a complete and accurate description of the law on these topics, or necessarily relate to every provider's circumstances. While this general information may be helpful, it is offered on the basis that providers will not rely on it solely, but will obtain their own independent legal advice.

3.3 Liability

The law of contract and the tort of negligence govern legal liability for personal injury or property. However, legislation such as the *Personal Injuries Proceedings Act 2002*, the *Civil Liability Act 2003*, the *Competition and Consumer Act 2010* (Commonwealth) and the *Fair Trading Act 1989* (Queensland) may also apply.

3.3.1 Contract

A claim in contract requires that a contract exists between the person who has suffered the loss or injury and the provider. If injury or damage occurred because the provider did not exercise reasonable care in providing the service, a court may find that they breached the contract, which entitles the party to claim compensation for the loss or injury suffered.

3.3.2 Negligence

A successful claim in negligence against a provider may result in a court awarding damages against the provider to compensate the injured party for the loss or injury.

The essential elements of a claim in negligence are that:

- the provider owes a duty of care and, therefore, **MUST** take reasonable measures to ensure the safety of their clients and participants
- a breach of this duty of care occurred
- the breach caused the harm suffered by the client or participant.

Duty of care is a legal requirement—imposed by the courts—requiring providers to take reasonable care to protect clients or participants from reasonably foreseeable harm or loss. Although the law does not automatically impose a duty of care, a duty may be imposed when one party (the provider) assumes responsibility for another in providing adventure activities. Generally, anyone conducting an outdoor adventure activity for a group of dependent participants will owe a duty of care to those participants for the safe conduct of the activity.

If a party makes a claim against a provider and a court finds that the provider owes a duty of care, the court must then determine the appropriate level or standard of that care to determine whether the provider acted reasonably or has breached the duty of care. In determining the standard of care, a court will consider the experience of the providers and participants, and the conditions at the time of the incident, and may seek guidance from experts in the field.

An obvious defence in a claim in negligence is that the provider acted with all reasonable care in the circumstances and is, therefore, not negligent. To limit the potential for legal liability and minimise the risk of injury, each provider or organisation should implement risk and safety management processes. To develop these processes, the provider should identify foreseeable risks and implement measures to protect participants from known potential hazards and risks (that are reasonably foreseeable), against which they can take preventative measures.

For more detailed legal information, please refer to Appendix 1.

3.4 The Work Health and Safety Act 2011 (WHS Act 2011)

The WHS Act 2011 outlines the laws relating to the health and safety duties that affect most workplaces in Queensland. Section 19 outlines the primary duty of the person conducting a business or undertaking to ensure as far as is reasonably practicable, that the health and safety of workers and other persons is not put at risk from work carried out as part of the business or undertaking. This duty requires the person to eliminate or minimise those risks so far as is reasonably practicable.

Workers, that is, trip leaders and guides also have a duty to take reasonable care of their own health and safety and that they do not adversely affect the health and safety of other persons. Workers **MUST** comply with any reasonable instruction and cooperate with any reasonable policy or procedure relating to health and safety at the workplace.

If the WHS Regulation 2011 describes how to prevent or minimise risks in an organisation's particular workplace; the organisation **MUST** comply with this regulation. Additionally, if a code of practice describes how to prevent or minimise risks in an organisation's workplace, the code of practice should be followed and is admissible as evidence of what is reasonably practicable in court proceedings under the WHS Act 2011 or WHS Regulation 2011.

The following codes of practice may be relevant for organisations providing adventure activities:

- How to Manage Work Health and Safety Risks Code of Practice 2011.
- Workplace Health and Safety Consultation Co-operation and Co-ordination Code of Practice 2011.
- First Aid Code of Practice.
- Hazardous Manual Tasks Code of Practice 2011.

The codes of practice can be found at www.deir.qld.gov.au/workplace/law/codes/riskman/

4. Planning

4.1 Activity plan

Purpose

An activity plan helps a leader define and achieve objectives, and minimise the inherent risks to participants. A leader can plan an activity in various ways, and each leader or organisation will have their own approach to planning. This section is a reference for leaders or organisations planning activities. It will help maximise an activity's success and minimise risks to participants.

Practice

It is recommended that leaders or organisations prepare an activity plan for all activities. Each organisation can determine how much of the plan they need to document. However, they should consider the following list during the planning stage.

Participant

- Activity objectives (desired outcomes) and participant expectations
- Size of the group
- Age, experience and skills of participants
- Socio-cultural demographics of the group or individual participants and implications (e.g. religious or cultural dress code)
- Fitness, disposition and known medical conditions of participants
- Standard of care required (e.g. child participants, paying customers)
- Duration of activity.

Area

- Availability and condition of artificial climbing structure including pre-activity inspection of:
 - › surrounding ground (e.g. fallen branches/debris, flooring absorbency, people)
 - › access to and condition of rescue gear
 - › condition of physical structures (e.g. climbing surface)
 - › site and environmental considerations, including site specific operating procedures, review of maintenance schedule, potential hazards and designated 'safe' areas*
- Land manager requirements (access restrictions, group sizes, permit requirements, booking requirements)

- Layout of specific site access (such as ladders, rescue equipment).
- A visual pre-activity inspections should be conducted at each use. However, the leader should also have confidence in the integrity of the artificial climbing structure, the critical fittings, such as belay lines and the surrounding area and grounds based on awareness of the organisation's maintenance plan and site specific inspections.

Equipment

- Support and evacuation capabilities (e.g. access to vehicle) and availability of emergency medical assistance
- Communication plan, including suitable communication equipment (e.g. satellite phone, emergency position indicating radio beacons or EPIRBs, personal locator beacons, flares, mobile phones, two-way radio) and its level of coverage
- Access to water, toilet and shade requirements
- Condition and suitability of all equipment (e.g. ropes, harnesses, helmets, hardware)
- First aid requirements.

Leader

- Leader to participant ratio
- Leaders' skills and competence to conduct the activity, effectively manage incidents and achieve the planned objectives
- Leaders' familiarity with elements of the climbing structure
- Working With Children Check for individual leaders, where applicable (Section 4.11).

Additional considerations, where appropriate (e.g. outdoor artificial climbing structures):

- Site's ability to withstand visitation with minimal impact
- Seasonal factors (rain, fire, availability of drinking water, track conditions, other users)
- Expected weather conditions and implications (hypothermia, hyperthermia)
- Equipment, food and clothing requirements
- Cancellation, modification or postponement procedure (e.g. if forecasted or current adverse weather conditions, insufficient equipment, restrictions dictated by the land manager or environmental factors such as flood, drought, lightning or fire affect the location).
- It is recommended that personal equipment and site logs be kept and signed by the supervisor after each session.

4.2 Risk management

For adventure activities, risk can be defined as ‘the potential to lose or gain something of value’ (Haddock 2004, p.7). In contrast, the *How to manage work health and safety risks Code of Practice 2011*, defines risk as ‘the possibility that harm (death, injury or illness) might occur when exposed to a hazard’. In practice, risk tends to be measured in terms of consequence and likelihood (Standards Australia, AS/NZS ISO 31000:2009 Risk management - Principles and guidelines).

Given the nature of adventure activities, risk is inherent. Losses may be physical (e.g. bone fractures), mental (e.g. fear), social (e.g. embarrassment) or financial (lost gear) (Miles and Priest 1999). However, it can also be argued that exposure to risk can provide substantial reward, including good health, fun, challenge and enhanced personal confidence or self-esteem (Haddock 2004).

Finding the balance—minimising loss and reaping the benefits of adventure activities—is important. Leaders and organisations **MUST** implement processes to manage risk appropriately for the context and situation. The AAS can guide this practice.

HB 246–2010 *Guidelines for managing risk in sport and recreation organisations*, published by Standards Australia, defines risk management as ‘the systematic application of management policies, procedures and practices to the task of identifying, analysing, evaluating, treating and monitoring risk’ (p.4). While various models may achieve this goal, a risk management plan generally incorporates the following five steps:

1. Identify all hazards.

- What could potentially cause harm or loss?

2. Assess and prioritise the risks that these hazards create and address the highest priority risk first.

- What could happen and what might be the consequences?

3. Choose measures to control the risks.

- Can you eliminate the risk? Use another venue? Use personal protective equipment? Bring in an expert? Substitute with an activity with less risk? Substitute real risk for perceived risk?

4. Implement appropriate control measures.

- Act to control or eliminate the risk.

5. Monitor the control measures and review the process.

- Are the measures working? Does the process meet industry standards? What needs amending? Are the activity goals or outcomes still being achieved?

HB 246–2010 *Guidelines for managing risk in sport and recreation organisations* can be purchased through the Standards Australia website: <http://infostore.saiglobal.com/store/details.aspx?ProductID=1421050>

Section 8.2 of this document and the Queensland Government’s *How to manage work health and safety risks Code of Practice 2011* provide more information on managing exposure to risk.

A general web search can also provide more information on risk management processes and recognised training providers that offer courses in risk management. Speaking with experienced colleagues and seeking advice from activity-specific organisations may also be helpful.

4.2.1 Risk assessment measures

Risks for adventure activities are generally classified under the three categories of people, equipment and environment.

People risks may include participants who are physically or psychologically unprepared for an activity, or have known behavioural issues that affect the safety of the activity. People risks may also include leader fatigue, poor planning, lack of knowledge or skill, or complacency (Priest and Gass 2005).

Equipment risks may include insufficient gear for the group or an inferior standard of equipment.

Environment risks may include adverse or unseasonal weather, sudden changes in river levels, high winds or danger from local wildlife. They do not include factors inherent in the adventure activity, such as getting wet while canoeing.

Providers should consider each of these risk categories (and others as identified) in relation to the specific activity and the group involved. For example, as part of risk management planning, selected leaders should have the authority, skills and experience to:

- conduct the activity in the selected environments
- achieve the planned objectives
- effectively manage incidents
- supervise the group at all times
- preserve the environmental integrity of the route and campsites.

Providers should note foreseeable risks and develop strategies to manage, avoid or minimise them. Importantly, the group leader should understand these risks and strategies. They should be included in specific activity plans (Section 4.1), and considered in an emergency strategy (Section 4.4) and/or organisational risk management guidelines, which should be current and specific to the activity and location.

For help with risk assessment and planning, see Appendix 2 for sample risk management templates. While the templates are not prescriptive, they offer models to identify and manage risk.

4.3 Pre-activity documentation

Many sound reasons exist for documenting aspects of the activity plan, such as ensuring that information about the activities and group is available if a group member is injured or incapacitated. Activity plan documentation enables search and rescue teams to better conduct an efficient search if necessary. Documentation will also assist with legal defence following an incident.

The suggested minimum amount of documentation required for an activity includes:

- an emergency strategy (Section 4.4), including contingency plans
- documentation of designated start and finish times
- names, addresses, medical information and emergency contact details for all participants, leaders and assistant leaders. Medical conditions and management strategies for relevant participants should be documented, including details of any conditions (e.g. asthma), and any medication or actions to be taken (e.g. self-administered inhaler). Medical conditions can include but are not limited to:
 - › diabetes
 - › epilepsy
 - › fainting and dizziness
 - › specific allergic reactions
 - › blood conditions that may affect bleeding or clotting
 - › impaired sight
 - › impaired hearing
 - › conditions that affect balance
 - › recent or longstanding injuries
 - › disability
 - › illness or other medical conditions relevant to a participant's ability to participate (e.g. heart conditions, migraines or pregnancy)
- information for all participants, leaders and assistant leaders on food allergies, including the magnitude of reaction and management strategies, as well as medications and who can administer them
- any access permits, licences or approvals required by land managers such as Queensland Parks and Wildlife Service (QPWS), local councils or private landholders
- relevant public vehicle driving licence if transporting participants, vehicle and trailer registrations. More information is available on the Department of Transport and Main Roads website: www.tmr.qld.gov.au
- a signed consent form from each participant that acknowledges the inherent risks of the activity after they have been fully briefed on those risks

- participants' agreement that they receive medical assistance if required, as well as any other documentation required by an insurer or legal advisor
- signed consent by a parent or legal guardian for participants under 18 years.

The leader and an external, non-participating contact person (necessary in an incident or emergency) should have access to all documentation.

4.4 Emergency strategy

Even with appropriate policies and procedures, such as an activity plan (Section 4.1) and risk management plan (Section 4.2), accidents and emergencies can still occur. These are often sudden and unexpected, can significantly affect groups and individuals, and require an immediate and planned response to contain the situation.

The emergency strategy complements the risk assessment and provides a framework for action in an emergency. Activity leaders and a suitable external, non-participating contact should fully understand the emergency strategy and be able to immediately access this document. A summary of emergency procedures should be one component of the preliminary group briefing (Section 5.1.1).

An emergency strategy for an activity will vary according to the situation, but should include:

- emergency response actions, allocated roles and responsibilities
- emergency access and escape routes (where possible)
- assembly points where appropriate
- details of key organisations (e.g. land manager and police) and how to best contact them in an emergency (e.g. mobile phone, satellite phone, radio)
- planned activity start and finish times
- the emergency trigger time for the non-participating contact to inform emergency services (if the group fails to return or check in)
- contingency plans for foreseeable emergencies (e.g. falls, fire, flood)
- communication equipment that the group will carry
- relevant aspects of the land/site manager's emergency strategy
- strategies relevant to the features of the areas being visited (e.g. access/egress difficulties due to location of climbing structure)
- a strategy for maintaining supervision ratios if the planned activity changes (e.g. due to adverse conditions, an injured leader or participants withdrawing from the activity).

The WHS Act 2011 requires certain incidents to be notified to Workplace Health and Safety Queensland, in the Department of Justice and Attorney-General by the fastest means possible. This may initially be by telephone, but must be followed up within 48 hours, by notification using the approved form available at: www.deir.qld.gov.au/workplace/resources/pdfs/incidents_form.pdf

Notifiable incidents are:

- The death of a person
- Serious injury or illness
- Dangerous incidents.

Serious injuries and illness include:

- Immediate treatment as an inpatient in a hospital
- Immediate treatment for:
 - › Amputations
 - › Serious head, eye or spinal injuries
 - › Serious burns
 - › Separation of skin from underlying tissue (scalping or de-gloving)
 - › Loss of a bodily function
 - › Serious lacerations.

Dangerous incidents include situations where there is a serious risk to a person's health and safety emanating from an immediate or imminent exposure to, for example:

- Uncontrolled escape, spillage or leakage of a substance
- Uncontrolled implosion, explosion or fire
- Uncontrolled escape of gas or steam
- Uncontrolled escape of a pressurised substance
- Electric shock
- Fall or release from height of any thing
- The collapse or partial collapse of a structure.

Note: If an incident involves search and rescue, death or an injury likely to result in death (whether or not death occurs), police are responsible and will take control of the incident. All other parties, including the contact person, will be under the police's direction. Police will advise a deceased person's nearest family member after a fatal incident.

Refer to Appendix 3 for a sample emergency response template.

4.5 Restricting participation

There may be times when a leader needs to exclude or remove a participant from an activity, or modify an activity for the safety of the group or an individual. The leader will use their discretion and judgement to do this either before departing or during an activity.

A leader may need to exclude participants for several reasons, including (but not limited to) being under the influence of alcohol or drugs (including prescription drugs that may affect performance), being unable or unwilling to follow instructions, lacking suitable equipment, or having an inadequate level of fitness, physical ability or experience for the activity.

The leader should also consider operational restrictions that affect participation, including issues relating to weather, equipment, route difficulty, restrictions dictated by the land manager and environmental factors, such as trail conditions, flood, drought, lightning and fire.

A sound risk management plan will help the leader determine how and when these restrictions or modifications might apply.

4.6 Ratios

When planning any outdoor activity, the ratio of qualified, experienced leaders to dependent participants needs to be considered. Some activity peak bodies provide maximum leader-to-participant ratios. In certain situations, judgement may dictate smaller or larger numbers of participants per leader.

Several variables can affect this decision, including but not limited to:

- the nature of the artificial climbing structure (e.g. indoor climbing gym, indoor climbing wall, outdoor climbing wall)
- line of sight for supervision (e.g. inward facing walls, outward facing walls, distance between active ropes)
- the leaders' experience
- participants' expected capabilities (i.e. experience, competence, fitness)
- conditions (e.g. use of friction pulleys, type and extent of any absorbent flooring, environment, weather)
- planned duration of the activity
- number of participants and optimum group size (see Section 4.7)
- remoteness (where relevant) of the activity
- suitability and availability of equipment
- aim/objective of the program (e.g. recreational, educational, therapeutic)
- expected/required level of duty of care (e.g. schools, community groups, commercial operations).

When deciding on ratios and supervision, sufficient leaders should be available to ensure continuous line of sight of all participants.

Spectators or non-active participants should be located in an area that is deemed safe, where they do not interfere with the activity. They should be supervised independently.

Ratios should be set by a qualified person with knowledge of the activity, location, equipment and group.

Artificial climbing structure managers or other relevant authorities may suggest ratios and where these exist the more stringent ratio should be regarded as a minimum requirement. For example, if the proposed ratio was 1:6, but the artificial climbing structure manager's ratio was 1:4, the artificial climbing structure manager's ratio would be the minimum standard.

Note: There is a range of artificial climbing structure environments including commercial climbing gyms through to outdoor climbing walls or towers. Managers and operators will need to establish their own ratios after conducting thorough risk assessment and management processes. Those seeking guidance for setting ratios for outdoor artificial climbing structures may find value in referring to the natural rock climbing and/or abseiling AAS.

4.7 Group size

The group's size is important when considering group management and ways to protect the environment. Leaders should carefully determine maximum and minimum group sizes, and the ratio of leader to participant.

Group sizes may be decided based upon:

- the group's and individuals' safety
- the activity's objectives
- specific restrictions imposed by the land manager (e.g. QPWS, climbing gym guidelines, Department of Education, Training and Employment supervision ratios)
- the activity's expected environmental impact
- the leaders' and participants' experience
- the potential impact on other users
- conditions (environment, remoteness, weather)
- available equipment.

Where a large group is split into a number of smaller groups, each smaller group should have its own leader and assistant leaders who independently adhere to the AAS.

4.8 First aid

A person whose business or undertaking involves conducting outdoor activities for dependent participants in any situation (paid or volunteer) **MUST** comply with relevant legislation.

Under the WHS Regulation 2011, a person conducting a business or undertaking **MUST** ensure that first aid equipment is:

- accessible to each of their workers
- appropriate and adequate for workers and the work they do.

They **MUST** also ensure that an adequate number of workers are trained to administer first aid taking into consideration the nature of the hazards in the workplace and its size and location.

The First Aid Code of Practice gives advice on workplace first aid, including the contents of first aid kits for remote locations. The code also states that workers in remote locations should have access to appropriate communication systems. (Refer to: www.deir.qld.gov.au/workplace/law/codes/index.htm).

The unit of competency, HLTF301C Apply First Aid (or equivalency) is a minimum standard for first-aid trained personnel. However, the level of first aid competency required will depend on the risk management assessment. Activities for participants with disabilities may require more specialised first aid knowledge.

For activities and programs that are expedition based or in remote areas where access to professional medical care is greater than one hour away, a higher level of first aid competency, such as SISOOPS305A Provide First Aid in a Remote Location should be held by at least one leader.

4.9 Weather

Effective planning for outdoor climbing requires accessing up-to-date weather and fire information. The most up-to-date information is available on the website of the Bureau of Meteorology at www.bom.gov.au/weather/qld. This website provides information on weather, seas and hydrology, and some historical data.

4.10 Sun safety in Queensland

Sunburn is a risk for anyone who participates in outdoor activities, particularly in Queensland. Leaders should take reasonable steps to prevent or minimise the likelihood of staff and participants suffering excessive sun exposure.

Measures can include:

- encouraging everyone to wear activity- and weather-appropriate clothing
- encouraging everyone to wear hats and sunglasses
- conducting physically demanding activities in the cooler part of the day where possible
- encouraging everyone to drink water
- encouraging everyone to use sunscreen (minimum SPF 30+ recommended)
- taking breaks in shaded areas.

For more information on sun safety, refer to:

- Sun Safety: www.sunsafety.qld.gov.au
- Cancer Council Australia: www.cancer.org.au/cancersmartlifestyle/SunSmart/Preventingskincancer.htm

4.11 Child protection

Some organisations and leaders will need to consider Queensland's safety requirements for working with children.

A person seeking to operate a business **MUST** possess a blue card or an exemption card if the usual activities of the business include, or are likely to include providing sport and active recreation activities directed mainly towards children, or mainly involving children. Persons who operate a business have an obligation to ensure that any individuals who work, volunteer or undertake a practical placement in a regulated child-related environment meet their specific blue card requirements.

Paid employees **MUST** possess a blue card or an exemption card, unless an exemption applies, if their work in sport and active recreation includes, or is likely to include, providing services that are directed mainly towards children, or conducting activities that mainly involve children, for at least:

- eight consecutive days, or
- once a week, each week, over four weeks, or
- once a fortnight, each fortnight, over eight weeks, or
- once a month, each month, over six months

Volunteers and trainee students **MUST** possess a blue card, unless an exemption applies, if their work or practical placement in sport and active recreation includes, or is likely to include, providing services that are directed mainly towards children, or conducting activities that mainly involve children. This is regardless of how often they will come into contact with children and young people.

The blue card is regulated by the *Commission for Children and Young People and Child Guardian Act 2000*. Refer to the commission's website for further information: <http://www.ccypcg.qld.gov.au/bluecard/index.html>

In Queensland, the *Commission for Children and Young People and Child Guardian Act 2000* requires all people who work with children under the age of 18 years to implement procedures for managing risks to children, this includes having a documented child and youth risk management strategy.

For further information on managing the risks to children see: <http://www.ccypcg.qld.gov.au/bluecard/risk-management.html>

4.12 Minimal impact—the seven principles of Leave No Trace

Indoor

The following minimum impact principles are designed for outdoor artificial climbing structure. This does not preclude indoor climbing wall and gym owners/leaders from implementing positive environmental procedures into their site, including, but not limited to: energy efficient lighting and power, minimising waste and practising efficient water management.

Outdoor

Everyone involved in adventure activities is responsible for protecting Queensland's natural and cultural heritage, including leaders, organisations and participants. The following principles draw on minimal impact ethics and raise awareness about respect for environments and communities where adventure activities occur.

Where artificial climbing structures are located in an outdoor or natural environment, consideration should be given to the following.

1. Plan ahead and prepare

(Refer to Sections 4.1, 4.2, 4.6 for more details.)

- Understand the regulations and special concerns of the areas you access.
- Research your destination before you leave home.
- Seek permits if necessary.
- Prepare for isolation, weather hazards and emergencies.
- Carry and know how to use a map, a compass and/or GPS.
- Bring plenty of food and drinking water.
- Repackage food to minimise waste and bring rubbish bags. Avoid cans, bottles and aluminium foil.
- Carry extra warm and wet weather clothing.

2. Travel and camp on durable surfaces

Durable surfaces are established tracks, gravel and dry grass.

Climb/Abseil

- Always utilise recognised tracks to approach and move around the artificial climbing structure.
- Choose safe areas for the waiting group that have a firm base and can tolerate groups without causing vegetation damage and erosion.
- Do not disturb vegetation.
- Actively manage the group to minimise trampling. Stay on track.
- Avoid using trees or other vegetation for anchors or belay points.

Camping

- Plan your route carefully so you arrive at a pre-arranged site rather than creating a new campsite.
- Keep campsites small. Focus activity where there is no vegetation.
- Use a freestanding tent that requires few pegs if staying overnight.
- Bring your own poles; do not cut them from the bush.
- Never camp on frontal sand dunes.
- Protect water sources by camping at least 100 metres from rivers and billabongs.
- Never dig trenches around your tent.
- Leave the campsite in better condition than you found it.

3. Dispose of waste properly

Rubbish

- Remove all rubbish. Even biodegradable food scraps can upset the balance and cause weeds. Do not burn rubbish. Never bury rubbish as animals may dig it up.

Human waste

- Use toilets where provided.
- Carry a small trowel for emergency toileting.
- Bury any human waste 15 centimetres under the topsoil, where organisms in the soil will break it down fastest, and at least 100 metres away from tracks, campsites, watercourses, lakes or drainage channels. Where possible, avoid using man-made toilet paper. Where necessary, use sparingly and bury it deeply or carry it out.

Hygiene

- Wash yourself and any equipment at least 100 metres away from streams or lakes. Avoid using soaps or detergents. Scatter drained dishwasher.
- Do not use soap, toothpaste, shampoo or sunscreen in lakes or streams.

4. Leave what you find

- Help prevent the spread of weeds and pests by checking your vehicle, camping equipment and clothing to ensure they are clean before visiting parks, waterways and forests.
- Respect Indigenous art and other sites of cultural significance. Seek appropriate permission.
- Do not touch rock art, which can be damaged by the natural oils from human skin.
- Preserve the past: observe but do not touch cultural or historic structures and Preserve the past by observing but not touching cultural or historic structures and artefacts.
- Leave rocks, plants and other natural objects as you find them.

- Avoid introducing or transporting non-native species. Do not transport firewood.
- Learn to recognise non-native species and report sightings to appropriate sources.
- Do not travel through quarantine areas.
- Avoid transporting mud and dieback fungal spores.
- Check clothing and all gear, and burn or dispose of all hitchhiker-type seeds, before and after travelling into different areas.

5. Minimise the impact of fire

Stoves

- Use a fuel or gas stove when cooking. Reduce the risk of bushfires and burn injuries. Open fires destroy vegetation and leaf litter, and can devastate the bush if they escape.

Fire bans

- Light fires in parks only where permitted. Many parks do not permit open fires.
- Check with the land managers for current restrictions on lighting fires
- Carry any cigarette butts out with you.
- Fire ban information is available on the Queensland Rural Fire Service website: www.ruralfire.qld.gov.au

Camp fires

- Where open fires are permitted, use the fireplaces and fire rings provided.
- Light fires in cleared areas away from vegetation and tents.
- Keep the fire small.
- Use an existing or pre-used fireplace where possible.
- Do not place rocks around the fire as they conduct heat and damage the surrounding vegetation. They may also explode.
- Collect timber only where permitted. Use only dead, fallen timber. Do not break branches from trees as leaf litter and dead timber provide homes and food for animals.
- Always put the fire out by dousing it with water rather than earth. Embers can smoulder for days.
- Never light fires during high bushfire periods or in places where the fire might spread.

6. Respect wildlife

- Observe wildlife from a distance. Do not follow or approach them.
- Become educated about the role each species plays in their environment to understand the importance of its position within an ecosystem.
- Avoid wildlife during sensitive times, such as mating, nesting, and raising young. Touching nests or young animals may cause their parents to abandon them.

- Never feed wild animals or birds. Feeding wildlife damages their health, alters natural behaviours, and exposes them to predators and other dangers. Store food and rubbish securely.
- Control pets at all times or, better yet, leave them at home. All national parks restrict pets so check regulations before bringing them.
- Report injured animals to the local land managers. Do not attempt to handle an injured animal.
- Take care in adventure activities to minimise the risk from interactions between wildlife and participants. Queensland has unique fauna often not found in other parts of Australia and interactions may damage it. Contact relevant land or conservation authorities for site-specific details.
- Beware of some specific creatures that are prevalent in certain locations around Queensland, including:
 - › crocodiles
 - › snakes
 - › dingoes
 - › cassowaries
 - › pigs, cattle, horses and buffaloes.

These wild animals can be dangerous, and those animals that are native are protected. Nesting shore birds may also need consideration. More information on Queensland wildlife and how to best share nature with them is available on the Department of Environment and Heritage Protection website: www.ehp.qld.gov.au

7. Be considerate of your hosts and other visitors

- Learn about the cultural history of the land. Recognise, acknowledge and respect local knowledge.
- Respect the wishes and regulations of all hosts, including Indigenous, pastoral, land managers and locals.
- Never visit places without appropriate permission. Seek permission and/or a permit.
- Familiarise yourself and have respect for peoples' customs, culture, values, religion, dignity and feelings.

Further information is available at Leave No Trace Australia www.lnt.org.au

4.13 Activity planning checklist:

- Sought approval for activity from relevant land manager
- Clearly stated objectives and learning outcomes
- Completed area assessment (e.g. route, area significance, maps, terrain)
- Checked weather and made necessary alterations (e.g. gear, route)
- Maintained equipment logs
- Identified participants' social and cultural needs
- Assessed competence of leaders and assistant leaders (including the Working with Children check)
- Determined the leader to participant ratio
- Briefed all staff on activities, objectives, responsibilities, communications and emergency procedures
- Briefed all participants on activities, expectations, communications and emergency procedures
- Collected the names, addresses, and medical and emergency contact details for all participants
- Sought parental consent where appropriate
- Established cancellation, modification or postponement procedures
- Completed and shared the communication plan
- Packed appropriate first aid kits
- Checked all water, food, equipment and transport arrangements
- Identified support and evacuation abilities
- Completed and shared the contingency plan
- Identified emergency procedures
- Determined review procedures for activities

5. Leader

This AAS refers to leaders and assistant leaders. The performance of the leader is a critical factor in the safe conduct of an outdoor activity. The leader is required to accept responsibility for the planning, preparation and conduct of the activity by:

- maintaining current skills, qualifications and experience as required
- implementing and/or supervising activities that are suited to the individual/group/environment
- taking responsibility for the environmental preservation of the sites and surrounding areas.

An assistant leader is an individual whose role is to act as an additional support to the activity leader, and/or who has responsibility for a group of participants on an adventure activity.

The leader's overall responsibility does not negate the duty of dependent participants, who are responsible for their own actions and have agreed to participate knowing the inherent risks and circumstances involved.

5.1 The leader's responsibilities

The leader takes overall responsibility and coordinates the entire group. They supervise and aim to achieve the objectives of the group or individual participants' session. The leader may delegate individual tasks but they maintain ultimate responsibility.

Recommended leader responsibilities include:

- working within the policies, procedures and activity standard operating procedures (SOPs) of the organisational stakeholders and land managers (where applicable)
- confirming the activity plan (Section 4)
- researching and planning for likely hazards, incidents and emergencies
- confirming that an emergency strategy has been lodged with an appointed external contact
- checking the first aid kit and communication equipment before the activity
- checking all group equipment before departing and after returning
- carrying out a full briefing session and ensuring that all participants and staff understand it (Section 5.1.1)
- assessing that each participant's level of knowledge, ability and skill is appropriate for the difficulty and complexity of the activity, and that the equipment is adequate
- obtaining each participant's acknowledgement that the leader has the role of leading the group

- ensuring that participants and staff have completed all documentation, and that it has been collated
- ensuring that the message of minimal impact to the environment is conveyed and adhered to
- managing and minimising the activity's effect on the environment (Sections 4.1.1 and 4.12)
- ensuring that the group knows where to access safe drinking water
- conducting a practice session of required skills and ongoing coaching of technical skills
- managing last-minute checks, including weather and equipment checks
- taking a head count before, during (regularly) and immediately after the activity
- maintaining a constant awareness of the group's physical and psychological condition
- managing the group to avoid or minimise the effects of hazards
- complying with any land manager's requirements, including permits and approvals (Sections 4.1 and 4.3)
- controlling the pace of the group and resting the group if necessary
- maintaining observation of participants
- maintaining communication between the participants
- facilitating the achievement of objectives (e.g. through a post-activity debrief)
- monitoring participant experience and following up with the group
- delegating responsibility to any support personnel and ensuring that any vehicle used is suitable
- ensuring appropriate rescue procedures are followed in the event of an emergency
- notifying external contacts when the group has completed the activity and returned safely
- ensuring any incidents are managed, documented and reported
- ensuring equipment is logged and packed away.
- the climbing area to be used (and any areas not to be used)
- climbing routes and areas (e.g. route identification, bouldering area, novice – expert climbs)
- the land managers' requirements (e.g. specific conditions that apply to the site)
- how the session will be managed (timings, procedures)
- the agreed methods of communication within the group (signals and calls), which they will devise before commencing the activity
- essential equipment and clothing
- correct use and fit of equipment (including harness), with helmets fastened and worn at all times
- the type of food, the amount of food and water they will need and water availability
- where relevant, conservation strategies, including protecting flora and fauna, removing rubbish and being aware of sanitation
- emergency procedures so participants behave appropriately in an incident or emergency, including emergency communication methods
- expectations of participants and the participant's responsibility to act as requested (conduct, safety zones, need to follow requirements re safety e.g. behaviour, equipment use etc.)
- the leader's expectations of participants, and their responsibility to behave as requested (e.g. conduct, safety zones, equipment)
- any restrictions to participation.

Leaders should ask participants to acknowledge that they understand the content of the briefing, and ask them to voice any concerns and ask questions about the activity. Leaders should consider an alternative briefing method for participants from non-English speaking backgrounds.

Learner Check: After the brief and before individuals climb or belay, leaders should confirm participant competency for the artificial climbing structure re skill, knowledge and attitude, to ensure they are competent climbers and belayers, before they are exposed to height and risk.

For participants' information, indoor climbing facilities should display relevant extracts of policies and procedures relating to the facility's operations and use. As a minimum, these should include the belaying procedures and the policy relating to the use of customer-supplied equipment. Consideration should be given to the capacity of non-English speakers to understand briefings and/or whether written briefing sheets in other languages are required.

5.1.1 Pre-activity briefing

The leader should clearly communicate all information about an activity to potential participants, leaving sufficient time for them to make an informed decision about their participation.

Each leader and organisation may have a preferred way to deliver a pre-activity briefing. The method may depend on an activity's length and complexity. The briefing should make participants aware of:

- the identity and role of activity leaders
- activity objectives
- the activity's nature and inherent risks

5.2 Responsibilities of assistant leader

Like the leader, the assistant leader offers the experience of the activity and achieves the activity's objectives. An assistant leader will support and assist the leader as instructed. Therefore, the assistant leader might need to understand the detail of the activity plan, risk management plan and emergency strategy.

To be included in a leader-to-participant ratio, the assistant leader should:

- possess relevant documented or demonstrated skills to safely conduct the activity
- be able to undertake activity-specific tasks as delegated by the leader
- be able to manage the group's safety, including in an emergency if the leader becomes incapacitated.

An accompanying adult without these skills and capacities may be responsible for the welfare and supervision of participants, but they would not be an assistant leader. As such, it is not recommended that leaders include these people in the leader-to-participant ratio.

5.3 Competencies

A leader requires competencies, experience and sound judgement at a level appropriate for the activity. To understand and reach this level, a leader should have acquired skills at least equivalent to the appropriate units of competency identified in the SIS10, Sport, Fitness Recreation Training Package.

Several organisations conduct training courses, which vary from full qualifications to statements of attainment for units of competency and skills sets. The units of competency for activity-specific, outdoor recreation leader training are available at www.nprsr.qld.gov.au/recreation/activity-standards.html

While neither a full qualification nor a statement of attainment of units of competency is compulsory to lead an artificial climbing structure activity, the units provide a benchmark for preferred leader skills and experience. Individual organisations will need to decide which leader competencies and equivalencies they expect informed by adherence to effective risk management practices and legal requirements.

Leaders should maintain a log or diary of activities to encourage currency and demonstrate experience. The log should include the artificial climbing wall activities that the leader has participated in or taken responsibility for, and details of the conditions, activity durations and roles that the leader has taken.

Note: The AAS are primarily designed for those who lead groups of participants where a duty may exist to take reasonable precautions to protect participants from harm. Each group will apply the AAS differently because they will possess distinct collective skills and experience, and depend on their leaders to varying degrees. However, the leader remains responsible for making professional judgements and decisions about the activity to ensure the group's safety.

5.3.1 Example pathways to demonstrate competency

Climbing Leader on Artificial Surfaces

A climbing leader on artificial surfaces may demonstrate their competence through any one of the following:

- graduating with a Certificate III or IV in Sport and Recreation or Outdoor Recreation or a Diploma of Outdoor Recreation, with specialisations in relevant indoor rock climbing units
- receiving a statement of attainment from a registered training organisation that specifies the appropriate units of competency
- becoming a registered leader under the National Outdoor Leader Registration Scheme (NOLRS), www.outdoorcouncil.asn.au, at one of the following registration levels appropriate to the activity context:
 - › Top Rope (Restricted) Climbing Guide (Artificial Surfaces)
 - › Single Pitch Climbing Guide (Artificial Surfaces)
 - › Single Pitch Climbing Instructor (Artificial Surfaces)
 - › Multi Pitch Climbing Instructor (Artificial Surfaces)
- demonstrating to the organisation's satisfaction, skills and currency that meet the leadership, group management, technical capacities and safety requirements of the specific circumstances being addressed.

Note: If a provider's dependent clients come from an Education Queensland school, this AAS should be read in conjunction with the relevant Curriculum Activity Risk Management Module, which is available at: <http://ppr.det.qld.gov.au/education/management/Pages/Managing-Risks-in-School-Curriculum-Activities.aspx>

6. Equipment

Equipment requirements will vary according to the planned activity (including location and objectives), the environmental conditions and the nature and size of the group. The leader and group should have easy access to emergency and contingency equipment.

An Australian Standard (AS 2316.1-2009) covers the construction of artificial climbing structures and challenge ropes courses.

6.1 Leader's equipment

Leaders will require similar equipment to their clients and need to demonstrate with the same equipment as participants. Leaders may be required to carry additional equipment or equipment that has different capabilities to participants. It is recommended that the leader has a harness containing a loop of tapes, sling, karabiner and ascender.

6.2 Safety equipment

Equipment requirements vary with the objectives of the session, the nature of the artificial climbing structure and the environmental conditions likely to be encountered. Where helmets are used (as decided by a risk assessment), it is recommended these conform with International Mountaineering and Climbing Federation (UIAA), European Committee for Standardisation (CE) or equivalent standards and are worn by the leader, climbers and belayers. Further information on International Mountaineering and Climbing Federation standards is available at www.theuiaa.org or for European Committee for Standardisation standards, access www.cen.eu.

6.3 Climber attachment method

There are several recognised options available for climber attachment on an artificial climbing structure. The nature of the activity allows for individual preference. The method of attachment should at least comply with harness manufacturers' instructions. Care should also be taken to instruct and assess participants in the method of attachment.

There are multiple methods for climber attachment including single point or dual karabiner. In making a choice, it is important for leaders to consider where the point of failure may lie (e.g. the rope, potential to release under load) and to minimise the risk. To guide a leader's choice, the following should be considered:

- The connection of the climber's harness to the belay rope should not rely on a single screw gate karabiner. Rather, using a recognised climbing attachment is recommended, supported by a back up connection (e.g. clip in with two screwgate karabiners or a self locking karabiner).

This does not preclude the leader from including the use of a single knotted connection, as used in outdoor or lead climbing, so long as the participants are also assessed for competency in tying and checking the knots and are adequately supervised.

Regardless of the method used for connection, the leader will need to monitor procedures for connection and belaying and be competent in supervising the methods used.

6.3.1 Belay systems and connections

Belay systems and connections are essential to the safe use of an artificial climbing structure. For example for indoor climbing centres it is important the components of these systems and connections are clearly visible from the ground and these should be numbered, colour-coded or have each component tagged for identification important to maintenance, fault reporting and general condition checks.

Where ground anchors are used, they need to be tested to satisfy the current version of European Committee for Standardisation standard, *Artificial climbing structures – protection points, stability requirements and test methods*.

Participants acting as non-anchored belayers need to undertake additional assessment and consideration should be given to relative weights (belayer, climber and equipment).

All equipment and components used in a belay system should be specifically designed for use in a belay system, should complement the procedures and systems being used and should be consistent throughout the artificial climbing structure.

6.4 Equipment used for an artificial climbing structure

6.4.1 Belay ropes

All climbing ropes used in top rope systems should be certified by the manufacturer as suitable for single rope belay purposes. Appropriate standards include current versions of the European Committee for Standardisation standard, *Dynamic mountaineering ropes and personal protective equipment for prevention of falls from a height – low stretch kernmantle ropes*.

All climbing ropes in lead climbing systems should be certified by the manufacturer as suitable for this purpose. Single, twin or half ropes may be used depending on the individual climbing facility's policy and procedures.

6.4.2 Karabiner

- Personal protection system: If used to connect the climber and belayer to the belay station, karabiners should have a dual opening action (manual locking or automatic locking gate) and be certified for such use by the manufacturer.
- Lead climbing protection points: karabiners for use at lead climbing protection points (on the lower ends of quickdraws) may have a single opening action (spring-gate).
- Equipment to artificial climbing structure interface: Any karabiner used to connect equipment to the artificial climbing structure should be a dual action karabiner, a semi permanent connection such as a rapid link (e.g. maillon rapide) or locked shackle and should be certified by the manufacturer as suitable for that purpose.

6.4.3 Harnesses

Only climbing harnesses which comply with the current version of the European Committee for Standardisation standard, *Mountaineering equipment - Harnesses - Safety requirements and test methods*, UIAA standards, or equivalent, should be used.

Harnesses need to be used, maintained and repaired according to manufacturers' recommendations.

It is recommended that harnesses be retired according to manufacturers' requirements.

6.5 Equipment belonging to participants

Organisation or site managers and leaders should be aware that participant-supplied equipment may be stored and maintained differently from that of issued equipment. Consideration of this issue is essential.

Managers and leaders may choose to:

- visually inspect all customer/participant supplied equipment to ensure it is appropriate
- require a customer/participant signature stating that the equipment is appropriate
- allow no use of customer/participant supplied equipment.

All supervisors and leaders should be fully aware of any policy relating to participant supplied equipment and should act appropriately.

6.6 Maintenance and storage

6.6.1 Equipment inspections

The frequency of inspection, maintenance and repair should be determined by manufacturers' recommendations and the leader's own risk assessment. These checks are likely to include daily, weekly, monthly or even more infrequent checks (every year or two, for the structure itself).

To track equipment with more ease, equipment should be easily identifiable (numbered) or isolated (permanently allocated to within one belay system).

Only a competent person can suitably inspect equipment and judgment should err on the side of safety. If in doubt, remove the item from service until further advice is obtained.

6.6.2 Equipment standards and re-certification

The climbing structure and anchors need to be assessed. It is commonly accepted that these assessments will be conducted by an independent assessor. The time lapse for re-assessment will vary based on the characteristics of the artificial climbing structure, manufacturers' recommendations and equipment. Deciding on a reassessment strategy should be derived from risk assessment and should consider:

- frequency of use
- prevailing conditions
- deterioration or wear and tear
- type of use
- years in service.

7. Definition of terms

Spotting

Is a support process provided by a person, or persons, who offer physical protection of the head and upper body of the climber should a fall occur during bouldering.

Belay Mechanism

The safety mechanism that limits the climber's uncontrolled change of position when there is a loss of the primary means of support. The belay mechanism also facilitates the climber leaving the wall in a controlled manner.

Standard Operating Procedure

A set of written instructions that document procedures to help outdoor leaders and managers implement best practice systems to safely deliver activities.

Organisation

A person or group of persons organised for a particular purpose that provides an artificial climbing experience for either commercial (for profit) or non-commercial (not-for-profit or community group) purposes.

Dependent Group

A group of people who rely upon a leader or organisation where a duty may exist to take reasonable precautions to protect participants from harm.

Participant

A person whose welfare is the responsibility of a leader or assistant leader.

Note: The National Outdoor Leader Registration Scheme refers to a participant as a client. A participant may also be known as a dependant.

Leader

An experienced person who is responsible for and coordinates the entire group, including supervision, to achieve the objectives of the group's or individual participants' session. A leader's responsibilities remain the same whether or not the session is for commercial purposes.

Assistant Leader

A person who gives the leader additional support and/or is responsible for achieving the objectives of a group's adventure activity. The assistant leader's responsibilities remain the same whether or not the session is for commercial purposes.

Must—In this document, must indicates that a section or statement is mandatory by law.

Should—In this document, should indicates a recommendation.

7.1 Summary of abbreviations

AAS	Adventure Activity Standards
ACS	Artificial Climbing Structure
EPIRB	Emergency Position-Indicating Radio Beacon
TGA	training.gov.au
NOLRS	National Outdoor Leader Registration Scheme
SIS10	Sport, Fitness Recreation Training Package
OCA	Outdoor Council of Australia
PAP	Partnered Assessment Provider
PLB	Personal Locator Beacon
QPWS	Queensland Parks and Wildlife Service
RTO	Registered Training Organisation

8. Further information

8.1 Organisations

Department of National Parks, Recreation,
Sport and Racing
PO Box 15187, City East Qld 4002
Phone: 1300 656 191 (Sport and Recreation Services)
Phone: 13 74 68 (National Parks, Marine Parks and
Forests)
www.nprsr.qld.gov.au

Queensland Outdoor Recreation Federation
150 Caxton Street, Milton Qld 4064
Phone: (07) 3369 9455
www.qorf.org.au

Outdoor Council of Australia
150 Caxton Street, Milton Qld 4064
Phone: (07) 3369 9455
www.outdoorcouncil.asn.au

Workplace Health and Safety Queensland,
Department of Justice and Attorney-General
PO Box 69, Brisbane Qld 4001
Phone: 1300 369 915
www.deir.qld.gov.au/workplace/index.htm

Leave No Trace
PO Box 71, Cottesloe WA 6911
Phone: 1300 884 086
www.lnt.org.au

Queensland Fitness, Sport, Recreation Skills Alliance
Sports House, Suite 1.08, 150 Caxton Street,
Milton Qld 4064
Phone: (07) 3367 0833
www.skillsalliance.com.au

Service Skills Australia
GPO Box 4194, Sydney NSW 2001
Phone: (02) 8243 1200
www.servicesskills.com.au

8.2 Resources

General websites

Blue cards

www.bluecard.qld.gov.au/bluecard/index.html

Bureau of Meteorology

www.bom.gov.au/weather/qld

Cancer Council Australia

[www.cancer.org.au/cancersmartlifestyle/SunSmart/
Preventingskincancer.htm](http://www.cancer.org.au/cancersmartlifestyle/SunSmart/Preventingskincancer.htm)

Legislation

- *Civil Liability Act 2003*
- *Child Protection Act 1999*
- *Work Health and Safety Regulation 2011*

<https://www.legislation.qld.gov.au/OQPChome.htm>

Department of National Parks, Recreation, Sport and Racing

Operational policy: Group activity permits
[www.nprsr.qld.gov.au/licences-permits/recreation/
group-activity-notification.php](http://www.nprsr.qld.gov.au/licences-permits/recreation/group-activity-notification.php)

*Operational policy: Commercial activity—
general requirements*
[www.nprsr.qld.gov.au/licences-permits/commercial/
index.html](http://www.nprsr.qld.gov.au/licences-permits/commercial/index.html)

*Operational policy: Permits or written approval for
special activities*
[www.nprsr.qld.gov.au/licences-permits/recreation/
special_activities.html](http://www.nprsr.qld.gov.au/licences-permits/recreation/special_activities.html)

First aid

[www.deir.qld.gov.au/workplace/subjects/firstaid/
index.htm](http://www.deir.qld.gov.au/workplace/subjects/firstaid/index.htm)

HQPlantations (forests management)

www.fpq.net.au

TGA (training.gov.au)

www.training.gov.au

Queensland Fitness, Sport and Recreation Skills Alliance

www.skillsalliance.com.au

Queensland Health

www.health.qld.gov.au

Department of Agriculture, Fisheries and Forestry

www.daff.qld.gov.au

Queensland Rural Fire Service

www.ruralfire.qld.gov.au

Standards Australia

www.standards.org.au

Workplace Health and Safety

Queensland—Incident forms

[www.deir.qld.gov.au/workplace/incidents/
incidents/notify/index.htm](http://www.deir.qld.gov.au/workplace/incidents/incidents/notify/index.htm)

Work Health and Safety Regulation 2011
<https://www.legislation.qld.gov.au/OQPChome.htm>

Cultural heritage

Department of Aboriginal and Torres Strait Islander
and Multicultural Affairs www.datsima.qld.gov.au

Note: The *Aboriginal Cultural Heritage Act 2003*
(*Queensland*) details guidelines for duty of care in
recognising, protecting and conserving Aboriginal
cultural heritage.

Multicultural Affairs Queensland
www.datsima.qld.gov.au

Risk management websites

Australian Standard AS/NZS ISO 31000:2009 Risk management—Principles and guidelines
www.riskmanagement.com.au
(including HB 246–2010 Guidelines for managing risk in sport and recreation organisations)

Commission for Children—
Risk management requirements
www.ccypcg.qld.gov.au/bluecard/risk-management.html

How to Manage Work Health and Safety Risks
Code of Practice 2011
www.deir.qld.gov.au/workplace/law/codes/index.html#h

Safety guidelines for children and young people in sport and recreation
<http://sma.org.au/resources-advice/policies-guidelines/active-children>

Books

Dickson, T.J., and Tugwell, M. (2000). *The risk management document: Strategies for risk management in outdoor and experiential learning*. North Sydney: Outdoor Recreation Industry Council.

Haddock, C. (2004). *Outdoor safety: Risk management for outdoor leaders*. Wellington: New Zealand Mountain Safety Council.

Miles, J., and Priest, S. (1999). *Adventure programming*. State College, Pennsylvania: Venture Publishing.

Priest, S., and Gass, M. A. (1997). *Effective leadership in adventure programming*. Champaign, Illinois: Human Kinetics.

The Scout Association of Australia. (2008). *Fieldbook for Australian Scouting (2008 Year of the Scout edition)*. North Ryde, NSW: McGraw-Hill Australia.

References to interstate AAS

Victorian AAS

www.outdoorsvic.org.au/activity_standards_review.php

Tasmanian AAS:

www.sportandrecreation.tas.gov.au/sportrectas/publications/adventure_activity_standards

South Australian AAS

www.getoutandstayout.org/sa-adventure--activity-standards.html

Western Australian AAS

www.outdoorswa.org/page.php?id=7

Activity Specific Resources

Outdoor Educators Association of Queensland

www.oeaq.org.au

Australian Climbing Instructors Association

PO Box 103
Natimuk VIC 3409
www.acia.com.au

Outdoors WA, WA Roping Activities Code of Practice

www.outdoorswa.org/files/Roping%20Activities%20Codes%20of%20Practice%20Version%201.0%20March%202008.pdf

Professional Association of Climbing Instructors (PACI)

PO Box 362, Hyde Park, Townsville QLD 4812
www.paci.com.au

Sport Climbing Australia

<http://www.sportclimbingaustralia.org.au>

Australian Standard®

Artificial climbing structures and challenge courses
AS 2316.1—2009
<http://infostore.saiglobal.com/store/Details.spx?ProductID=1378746>

9. Appendices

Appendix 1: Legal framework detail

Why have the Adventure Activity Standards?

The Adventure Activity Standards (AAS) are voluntary guidelines for undertaking potentially risky activities in a manner that promotes:

- safety for participants and organisations
- mitigation for organisations against the risk of civil legal claims and criminal penalties
- assistance in obtaining insurance cover.

The AAS are not imposed by law.

Not Legal Advice

The content of this Appendix is intended to provide a summary and general overview only in relation to the law and the matters of interest. It is not intended to be comprehensive, nor does it constitute legal advice.

There is no guarantee as to the accuracy or currency of the information and you should seek your own independent legal or other professional advice before acting on, or relying on, any of this information.

Applying the AAS

Implementing suitable risk management programs and strategies, and meeting the AAS, may help minimise the risk of injury or loss. Having evidence of compliance with these programs and strategies, and the AAS, could help organisations in the legal defence of claims, in proving for example that an organisation and its leaders acted with reasonable care under the circumstances to avoid foreseeable risks of injury.

Basis of legal liability

The common law of contract and of negligence together with legislation such as the *Personal Injuries Proceedings Act 2002 (Qld)*, the *Civil Liability Act 2003 (Qld)*, the *Limitations of Actions Act 1974 (Qld)*, the *Corporations Act 2001 (Cth)*, the *Competition and Consumer Act 2010 (Cth)* and the *Fair Trading Act 1989 (Qld)* (amongst other Acts) governs the legal liability for personal injuries or property damage of participants in adventure activities.

Claims in contract

A claim in contract may require a court to consider (amongst other things) whether:

1. a contract exists between the parties;
2. a breach of an express or implied term of the contract has occurred; and/or
3. damages should be paid, for a breach of contract for example.

1. Contract

A contract is a legally enforceable agreement made between two or more parties. A contract can be written or verbal (or a combination of these), and can be entered into in different ways. For example, you can enter a contract by:

- signing a document; or
- taking action on the basis of terms communicated to you by another party, therefore demonstrating your acceptance of those terms.

When considering a claim in contract in relation to personal injury, a contract must exist between the person who suffered the injury or loss and the organisation against whom the injured party is making the claim. For example, a contract would exist between an organisation and a party if the organisation has agreed to provide services for a payment.

A claim in contract can only be made by one party to the contract against the other party to the contract.

2. Breach of a term

Generally speaking, a claim in contract, will arise where there has been a breach of an express or implied term of the contract. An express term is a term that the parties have written or said. It is described in the contract itself. An implied term is in addition to the express terms of a contract. It is a term that the parties have not set out, but which is regarded as having been impliedly agreed to. A court may imply a term into a contract for business efficacy, to make the contract workable. A term may also be implied from the nature of the contract itself, or by reason of customer common usage, or on proper construction of the contract. A number of terms are also implied by legislation. A court might also read other terms into a contract as if they were written into the contract. These terms may give service providers other obligations when providing that service.

The *Competition and Consumer Act 2010 (Cth)*, *Fair Trading Act 1989 (Qld)* and the *Civil Liability Act 2003 (Qld)* (amongst other Acts) may also apply to conduct under the contract.

3. Compensation / Damages

If a court finds that a breach of either an express or implied term of the contract has occurred, then a party may be able to claim damages as compensation for the damage suffered as a result of that breach. Damages are a court ordered sum of money which places the plaintiff in the position he or she would have been in, had the legal wrong not occurred.

Claims in negligence

To make a successful claim in negligence, a party (the claimant) must prove on the balance of probabilities (i.e. more probable than not) that:

1. the service provider owed a duty of care to take reasonable measures to avoid causing harm to their clients or participants, where the risk of harm is foreseeable if due care is not taken; and
2. a breach of this duty of care occurred;
3. the breach of the duty of care caused the injury or loss suffered.

The service provider would be in breach of his or her duty of care where the service provider fails to avoid a foreseeable risk where a reasonable person would have done so.

As the result of a successful claim in negligence, the court may award damages against the service provider to compensate for the loss or injury that the claimant suffered.

1. Establishing a duty of care

A duty of care is the obligation owed to anyone to whom it is reasonably foreseeable would be injured by a lack of care being taken. In the case of adventure activities, the court may impose a duty of care on a service provider, which legally requires them to take reasonable care to protect a client or participant from foreseeable harm or loss.

2. Determining a breach in a duty of care

Standard of care

To decide whether a breach of a duty of care has occurred, the court must first determine the appropriate level or standard of that duty of care.

The court determines the standard of care as a question of law by taking into account all the relevant circumstances and the specific facts of each case. To determine the appropriate level or standard, a court considers the organisation's and clients' experience and the conditions at the time, and possibly asks experts in the field for advice. Generally a court will hold that a specialist organisation (such as a service provider that provides adventure activities) will owe a higher duty of care than the standard of care owed by ordinary members of the community. The organisation's duty of care is higher than that of an ordinary citizen because it has agreed to provide services for a reward or is responsible for the care of others.

A court will find that the organisation has not met the standard of care (i.e. a breach of the duty of care has occurred) if the evidence, on the balance of probabilities, establishes that the organisation has not acted reasonably in the circumstances. That is to say, due to the negligent or careless conduct, or a failure to act by the service provider who owed a duty of care to the adventure activity participants, the standard of care necessary to fulfil the duty of care was not maintained.

The law requires the organisation to protect participants from reasonably foreseeable hazards associated with the activity, and from those risks that could arise (i.e. risks that the organisation, instructor, teacher, or staff member or guide can reasonably foresee), against which they could take reasonable preventative measures.

Defence—no breach of duty

The *Civil Liability Act 2003* (Qld) states that a person does not breach a duty to take precautions against a risk of harm unless:

- a risk is foreseeable (that is, it is a risk of which the person knew or ought reasonably to have known); and
- a risk is 'not insignificant'; and
- in the circumstances, a reasonable person in the position of the person (e.g. the service provider) would take appropriate precautions.

In determining whether a reasonable operator took appropriate precautions, a court will consider (amongst other relevant issues):

- the probability that harm would occur if they did not take care;
- the likely seriousness of the harm;
- the burden of taking precautions to prevent the risk of harm; and
- the social utility of the activity that creates the risk of harm.

In these circumstances, it is recommended that in order to minimise the potential for legal liability and to minimise the risk of injury, each service providing organisation implement risk and safety management processes that identify foreseeable risks and implement measures to control them. For the same reasons, all organisations should ensure that leaders, managers or guides should, as a minimum have appropriate first aid and activity-specific training.

This is particularly important when the activity is a specialised one. In these circumstances, as a participant will rely on the expertise of the organisation, leader or guide, a higher duty of care will be imposed because the organisation, leader or guide will be considered to be responsible for controlling, guiding and protecting the participant. Additionally, the probability that harm will occur if care is not taken and the likely seriousness of the harm, is higher for adventure activities than for other types of activities.

3. Establishing that the breach caused the harm

To hold someone liable for paying damages in negligence, the court must establish that the breach of duty caused the harm suffered. In establishing that a breach of duty caused the particular harm, the following elements must be established (in accordance with the *Civil Liability Act 2003* (Qld)):

- a. That the breach of duty was a necessary condition of the occurrence of the harm; and
- b. It is appropriate for the scope of liability of the person in breach to extend to the harm so caused.

Defences

Voluntary assumption of risk and obvious risks

The *Civil Liability Act 2003* (Qld) states that if a defence of voluntary assumption of risk is raised by the defendant and the risk is an obvious risk, the plaintiff is taken to have been aware of the risk unless the plaintiff proves, on the balance of probabilities, that he or she was not aware of the risk. For example, if the risk of harm was obvious, then a rebuttable presumption exists (i.e. a presumption that can be proved to the contrary with evidence) that the person who suffered the harm was aware of the risk. A person does not owe a duty of care to another person to warn of an obvious risk.

Similarly a person is not liable in negligence for harm suffered by another person as a result of the materialisation of an inherent risk.

An obvious risk is a risk that, in the circumstances, would have been obvious to a reasonable person in the position of the person suffering harm, including risks that are a matter of common knowledge. An inherent risk is the risk of something occurring that cannot be avoided by the exercise of reasonable care and skill.

However, it would be unlikely to be an obvious risk if an injury was caused by the service providing organisation's inexperience or incompetence, defective equipment, or inadequate supervision or instruction.

Dangerous recreation activities

The *Civil Liability Act 2003* (Qld) also provides that a person is not liable for negligence for harm suffered by another person as a result of the materialisation of an obvious risk where a participant engaged in a dangerous recreational activity. This may apply whether or not the participant suffering the harm was aware of that risk. A dangerous recreational activity is an activity engaged in for enjoyment, relaxation or leisure that involves a significant degree of risk of physical harm to a person.

Contributory negligence

If a participant's failure to take precautions against the risk of harm caused or contributed to the accident causing personal injury, then this would be a partial defence to a claim in negligence to the extent that the court apportions responsibility between the organisation and the injured participant. When considering by how much to reduce the damages due to contributory negligence, a court may decide to reduce the damages by anywhere between 1 percent and 100 percent. An apportionment of 100 percent would defeat the claim entirely.

Exclusion of liability agreements

In some instances, the court may uphold documents that exclude liability, sometimes referred to as a 'waiver to sue' or 'release'. Exclusion of liability agreements are usually a written statement that a supplier of recreational services cannot be sued if a participant is injured or killed using the service. Each participant signs the agreement before the supplier supplies the services. These agreements must be carefully drafted and comply with any applicable legislation. The use of these agreements may enable suppliers of recreational services to exclude or otherwise limit their liability for negligence that caused or contributed to a participant's injury or death.

Volunteers

Under the *Civil Liability Act 2003* (Qld), volunteers are protected from personal civil liability in relation to any act they undertake in good faith when providing community work organised by a community organisation.

A volunteer is a person who does community work on a voluntary basis. This includes work for which a person receives reimbursement of reasonable expenses but does not include court-ordered community work.

Community work is not for private financial gain and is performed for charitable, sporting, educational and other purposes.

Expressions of regret

The *Civil Liability Act 2003* (Qld) also states that when a person apologises (verbally or in writing) for causing death, personal injury or harm, this apology does not constitute an admission of fault or negligence liability provided the apology does not include a clear acknowledgement of liability.

Additional considerations

Organisations providing adventure activities should also consider the following obligations:

Work Health and Safety Act 2011 (Qld).

This Act's main objective is to provide for a nationally consistent framework to secure the health and safety of workers and workplaces by protecting workers and other persons against harm to their health, safety and welfare through the elimination or minimisation of risks arising from work or from particular types of substances or plant so far as is reasonably practicable.

Commission for Children and Young People and Child Guardian Act 2000 (Qld).

This Act regulates the requirement for people to obtain a blue card if they intend to work or carry on a business in a child-related area, either in a paid or voluntary capacity. Both paid employees and volunteers may need a blue card if they intend to work in facilities or situations that fall under any of the following categories:

- residential facilities
- school boarding houses
- schools—employees other than teachers and parents
- child care
- churches, clubs and associations involving children
- health, counselling and support services
- private teaching, coaching or tutoring
- education programs conducted outside of schools
- child accommodation services, including homestays
- religious representatives
- sport and active recreation

- emergency services cadet programs
- school crossing supervisors
- care of children under the *Child Protection Act 1999*; and
- any other category prescribed by a regulation.

A service or activity that a person provides may be considered a business irrespective of whether or not the service or activity is performed for profit. However, the service or activity must fall within one of the business categories regulated by the *Commission for Children and Young People and Child Guardian Act 2000* (Qld), such as private teaching, coaching and tutoring, or providing sport and active recreation activities.

Standards

The following is a guide (not a complete list) to the standards that an organisation providing adventure activity experiences, guides, instructors, teachers or staff members, should meet:

- Ensure that the activity is appropriate for the skills and experience of intended participants.
- Ensure that the intended activity is appropriate for the known, expected and forecasted conditions.
- Provide adequate staff and leader supervision.
- Provide competent and appropriately trained staff and leaders.
- Provide safe and properly functioning and adjusted equipment.
- Provide reasonable food and safe shelter if relevant.
- Give participants reasonable guidance, instruction and direction.
- Depending on the activity, have adequate knowledge of the area where the activity will occur, and be able to provide reasonable first aid, emergency backup and rescue.
- Ensure that appropriate approvals and authorisations/licensing requirements (if any) have been obtained.

Appendix 2 Exemplar risk management templates

Note: The following templates have been included as examples for guidance purposes and are incomplete. If these templates are used, information specific to the activity, location, participants, etc. will need to be sourced and incorporated.

Activity: 3 hr artificial climbing wall session

Location: Abseil/Climb Tower (Outdoor)

DATE:

ANALYSIS	DESCRIPTION	
Risks Accident, injury, other forms of loss	1. Injury related to falling (i.e. impact) 2. Injury related to slipping (i.e. graze) 3. Muscle strain 4. Splinters, Small Cuts 5. Rope Burn	6. Spider/Insect bites/stings 7. Sunburn 8. ... 9. Heat exhaustion 10. Asthma

	PEOPLE	EQUIPMENT	ENVIRONMENT
Causal Factors Hazards, perils, dangers	<ul style="list-style-type: none"> Poor belaying technique, lack of supervision, no safety check Poor belaying technique, lack of supervision, no safety check Lack of adequate warm up activity before climbing Failure to use climbing holds, use of tower structure Poor belaying technique, lack of supervision Lack of awareness Not wearing hat/sunsmart clothing, or using sunscreen Lack of knowledge, failure to follow instructions Lack of knowledge, failure to follow instructions Lack of prior knowledge, lack of management plan, exercise (in some cases) ... 	<ul style="list-style-type: none"> Failure of Equipment (rope, tape, karabiner) Connection to ropes incorrect, shoes with no friction Failure of equipment (helmet, harness) Shape of holds Rough surface on climbing wall Moving rope contact with skin No insect repellent, lack of footwear Lack of sunsmart clothing, sunscreen Missing or not functional preventer/reliever ... 	<ul style="list-style-type: none"> Height related activity Weathering of climbing wall surface Artificial environment where spiders/insects nest Lack of shade Continually looking up into the sun whilst Belaying Lack of shade, hot weather Environmental triggers (pollens, dust) ... Uneven ground surface around ACS

		PEOPLE	EQUIPMENT	ENVIRONMENT
Risk Management Strategies	Normal Operation	<ol style="list-style-type: none"> 1. Teach and check belaying techniques, close supervision of belayers and ensure ABCDE safety check is completed 2. Teach and check belaying techniques, close supervision of belayers and ensure ABCDE safety check is completed 3. Sequence activity to include adequate warm up before climbing 4. Clear instruction about what holds to use, avoid using tower structure to climb 5. Teach and check belaying techniques, close supervision of belayers 6. Remind participants about environmental hazards (Insects/spiders), check medical information re allergies 7. Explain and demonstrate sunsmart behaviour (hat, sunscreen, appropriate clothing) 8. ... 9. Rest breaks are taken, ensure water is consumed during activity 10. Check medical information, follow asthma management plan 	<ol style="list-style-type: none"> 1. Regular checks of equipment and tower structure, especially before use. Check connection to rope. Check footwear. 2. Regular checks of equipment and tower structure, especially before use. Check footwear. 3. Careful selection of holds and grading of climbs/routes 4. Regular maintenance to remove possible splinters, rough edges 5. Instruct participants to move rope out of the way when climbing, supervise belayers to ensure safe technique and rope runs freely 6. Remind participants about insect repellent, wear appropriate footwear 7. Have spare hats, sunscreen available for participants 8. ... 9. Provide water/access to water supply 10. Check with participants that they have medications required 	<ol style="list-style-type: none"> 1. Maintain safe environment: regular checks, safe ground area 2. Maintain safe environment: regular checks, safe ground area 3. N/A 4. Regular maintenance on climbing tower 5. N/A 6. Regular checks, removal of insect/spider nests from climbing tower 7. Have rest breaks, time activity to minimize sun exposure 8. ... 9. Have rest breaks, time activity to minimize sun exposure 10. Check medical information, be aware of possible triggers

		PEOPLE	EQUIPMENT	ENVIRONMENT
Risk Management Strategies	Emergency	<ol style="list-style-type: none"> 1. Injury related to fall: first aid (DRABC, treat injuries), medical assistance as necessary 2. Injury related to slip: first aid (clean and cover wound), medical assistance as necessary 3. Muscle strain: first aid (RICE), medical assistance as necessary 4. Splinters/small cuts: first aid (remove splinter, clean and cover), medical assistance as necessary 5. Rope burn: First aid (cool, cover), medical assistance as necessary 6. Bites/stings: first aid (DRABC, EpiPen® (if required), remove sting, cold water/compress), (medical assistance as necessary) 7. Sunburn: first aid (cool), medical assistance as necessary 8. Heat exhaustion: first aid (DRABC, cooling, rest, re-hydration), medical assistance as necessary 9. Asthma: first aid (DRABC), follow asthma management plan, medical assistance as necessary 		

Relevant Industry Standards Applicable	<ol style="list-style-type: none"> 1. Adventure Activity Standards, Qld (Artificial Climbing, Rock climbing) 2. Sport Climbing Australia www.sportclimbingaustralia.org.au/1.0/home/ 		
Policies And Guidelines Recommended	<ol style="list-style-type: none"> 1. Education Queensland Education Policy and Procedures Register, HLS-PR-012: Curriculum Activity Risk Management Module (Rock Climbing and Abseiling) education.qld.gov.au/strategic/eppr/health/hlspro12/index1.html 2. Etc 		
Skills Required By Staff	<ol style="list-style-type: none"> 1. Skills required in artificial climbing, group management, weather, logistics, first aid, and vertical rescue. This may be indicated by the following industry registrations and training: 2. National Outdoor Leader Registration Scheme (NOLRS) Restricted Climbing Guide (Artificial Surfaces) <ul style="list-style-type: none"> › First Aid › Vertical Rescue training › Working with Children Bluecard Holder 3. Etc 		
Final Decision on Implementing Activity	Choose One		
	Accept	Reject	
	Comments: A Climbing session on the Abseiling/Climbing Tower is an outdoor activity in a controlled environment. Whilst there is potential for serious misadventure, with appropriate training, safety briefing and leader qualifications, it is a relatively low risk activity.		

Completed by:

Signed:

Date:

Original RAMS template reproduced with permission of Grant Davidson.

Thanks to Phil Harrison for this sample risk assessment and management plan.

Risk management plan

Activity: abseil natural cliff

DANGER	RISK	RISK ASSESSMENT	MANAGEMENT STRATEGIES	EVALUATION/COMMENTS
Environment		Rate Probability & Magnitude as High, Medium or Low		
Sun/ Heat Exposure	Sunburn Dehydration Heat Exhaustion/ stroke	Prob M Mag M Prob M Mag M/H Prob M Mag M/H (Depending on UV rating)	Participants advised on appropriate sun smart clothing Ensure hats are worn by participants and leaders Allow rest periods for people to drink water & sit in shade Conduct activities in the shade if possible during heat of the day Make sunscreen available Encourage peer reminders and monitoring Monitor Weather	
Dead/ Loose tree branches				
Electrical Storm	Lightning strike Tree/ rock Fall	Prob L Mag H Prob L Mag H	In the event of storm, cease all activities immediately Remove all participants from exposed sites Seek cover from closest building if possible Avoid contact with metal objects, trees, fences and other isolated objects First aid kit with every leader Have access to emergency transport/ evacuation capacity	
Slippery surfaces of abseil site and access routes	Injury Fall	Prob L Mag M Prob L Mag M	Conduct visual checks for integrity of surfaces and access ...	
Cold Weather				

DANGER	RISK	RISK ASSESSMENT	MANAGEMENT STRATEGIES	EVALUATION/COMMENTS
Uneven ground surfaces				
Rubbish	Cut Feet Embedded Objects	Prob M Mag L Prob L Mag M	Participants to wear closed in shoes at all times First aid kit with every leader	
People		Rate Probability & Magnitude as High, Medium or Low		
Ill prepared clients – Psychologically (e.g. fear of heights)	Stress Trauma Reduced self concept Reduced involvement	Prob M Mag M Prob M Mag M Prob M Mag L/M Prob M Mag L/M	Participants well briefed on expectations and conditions for abseiling Challenge by choice theme adopted Leaders to program at clients level of skill and competence Thorough briefing of risks Identify people with fear of heights (e.g.) through discussion and/or medical form	
Ill prepared clients – Physically	Exhaustion Stress Trauma Reduced self concept Reduced involvement Enhancement of medical conditions		Detailed medical consent forms completed and signed Medical summary reviewed by leader/s – note taken of any impairment that might impact on engagement and activity safety Leaders to program at clients level of skill and competence Etc Etc Allow breaks for food and water	
Wandering Clients			Establish clear safety zones for all participants and observers Leaders to be aware of participant locations at all times Etc	

DANGER	RISK	RISK ASSESSMENT	MANAGEMENT STRATEGIES	EVALUATION/COMMENTS
Equipment		Rate Probability & Magnitude as High, Medium or Low		
Harness Failure	Death Unconsciousness Injury	Prob L Mag H		
Rope/ Tape Failure				
Helmet failure/ incorrectly worn	Head injury Unconsciousness Death		<p>Helmets UIAA standard or equivalent</p> <p>Leaders to ensure all participants are shown how to put on helmets correctly</p> <p>Helmets stored correctly & kept free of dirt and other harmful materials</p> <p>Leaders to check all helmets in good condition prior to the commencement of abseil session</p> <p>Leaders to check all participants helmets are worn correctly before they approach the abseil area</p> <p>Leaders and participants to wear and keep their helmets on in the abseil area</p> <p>Helmets must be discarded according to manufacturer guidelines</p>	
Hardware failure			UIAA approved (or equivalent) and in good condition	
Long hair/ Loose jewellery & other ornaments	Entanglement	Prob M Mag M	<p>Leader to ensure that any long hair and jewellery is secured (hair) or removed (jewellery) if necessary</p> <p>Any body piercing that may cause discomfort or be aggravated with harness or abseil system must be taped and secured</p>	

Thanks to Kindilan Outdoor Education and Conference Centre for this exemplar Risk Assessment and Management plan.

Appendix 3: Emergency strategy

Emergency response plan template

Introduction

The following template has been included as an example for guidance purposes and is incomplete. If this template is to be used, information specific to the activity, location, participants, etc. will need to be sourced and incorporated.

Emergency is defined in many jurisdictions as an event that requires a significant, coordinated response. The concepts of emergency and emergency management must be viewed in context, and emergency planning must account for the range of possible causes and responses. For example, natural emergencies are caused by storms, bushfires, floods, drought or weather extremes that may create an emergency. Similarly, outdoor leaders need also to prepare for emergencies caused by humans, such as accidents, lost or missing persons, or equipment failure; or social hazards, such as substance abuse and misuse, emotional trauma, or infectious diseases or food poisoning.

Plan overview

Verify	Confirm that there is an emergency situation.
Notify	Notify appropriate authorities and staff of emergency event.
Assess	Determine the extent and nature of the emergency.
Act	Respond to situation based on requirements, skills and responsibilities.

Emergency contacts (phone numbers)

Key organisations	Best contact methods (mobile or satellite phone, radio)
Police, ambulance, fire	000 triple zero (112 from mobile)
Land manager	Etc
Etc	Etc

Assembly locations

Identify and describe locations of established evacuation assembly points and ensure every person knows them.

Site plan

The map must include locations of:

- emergency assembly and evacuation areas
- water, gas and power isolation points
- fire fighting equipment
- first aid kits
- dangerous goods
- etc.

Roles and responsibilities

Outline the responsibilities of all key personnel involved in the activity and their contact details.

Key personnel	Responsibilities	Contact
e.g. Leader	Determine seriousness of incident, implement planned response, e.g. notify home organisation and external support, manage the group, administer appropriate first aid (as required)	
e.g. Assistant Leader	Etc	
Authorised media spokesperson	Etc	
Etc	Etc	

Media management

Outline procedures for when media makes contact with staff members; For example, outline the people who have clearance to speak to media, and who media should be directed to for information on the emergency and what information they can provide.

Foreseeable emergencies and response actions

Routine incidents

Incident type	Response actions
Electrical failure	
Ruptured water pipe	
Etc.	

Non-routine incidents

Incident type	Response actions
Bushfire	
Building fire	
Lost or missing person	
Injury/medical	
Storm/flood	
Snake bite	
Etc	

Specific communication equipment carried by group

List types and number of communication devices that group may have, such as:

- mobile phone
- UHF radio
- satellite phone
- etc.

Relevant aspects of land managers' emergency strategy

Identify and access any land management requirements for emergency strategy, including the following:

- Strategies relevant to the specific features of the areas being visited (e.g. river crossings)
- Detail any site specific features that may require particular attention during an emergency response situation.
- A strategy for maintaining supervision ratios if any changes to the planned activity occur
- Detail plans of how to maintain group supervision during the course of the emergency response.

Post-emergency debrief

Outline what discussions or debriefs will be required after the incident to refine response procedures. The severity of the incident will determine the level of debrief.

Post-incident reporting

Complete an incident/accident report form and file accordingly. The form should outline details of the incident, including the:

- date and time of the incident
- personnel involved
- type of incident
- first aid administered.

