



Western Australian Adventure Activity Standard

Rock Climbing

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Adventure Activity Standards benchmark the minimum industry requirements and responsibilities for organisations and leaders conducting outdoor adventure activities for commercial and non – commercial groups.

The Adventure Activity Standards are designed to be applied when the participants are, for the purposes of participating in the activity, either

- in a pre-existing group
 - where either the group members (and or its representative third party) have made a collective purchase of / collective decision to participate in the activity (ie a school, corporate or community group); or are
- formed into a new group
 - where the participants have purchased / made the decision to participate in the activity as individuals or smaller groups, but having done so become a part of a new group (ie citizens or tourists who, having purchased an activity from an organisation or leader individually, are formed into a group for the purposes of participating in the activity provided).

In all cases the relationship between the group of participants and the activity provider is one based upon dependence by way of contract and or duty of care.

The existence of other types of groups where the group is less defined and NOT dependent as a group upon an activity provider for the conduct of the activity is acknowledged. (ie independent club members participating in an activity). It is intended that such less defined groups of independent participants are not “captured” by the AAS.

The Western Australian Adventure Activity Standards were developed by an industry wide consultative process coordinated by Outdoors WA following the recommendations of the 2006 State Government Adventure Tourism Visitor Safety Task Force Report. The Project received grant funding via the Department of Sport and Recreation.

The development and implementation of the AAS allows the outdoor adventure industry to demonstrate its collective integrity and agreed standards. This, in turn will provide a measure of quality for the purposes of assisting

1. Consumers of services to make informed choices about the services they select
2. Training organisations to produce graduates that are aware of and meet industry standards
3. Media, insurance and legal scrutineers of the industry and its members, to understand what is acceptable practice and what is not
4. The development of sustainable use practices that consider the specific natural and cultural heritage values of an area

The AAS are a critical component of the *industry quality framework comprising* four aligned and inter-connected components

1. **Accreditation** - the required business operating standards for businesses and organisations
2. **Adventure Activity Standards** - the minimum standards to which an activity must be conducted by a provider to dependent groups of participants
3. **Leader Registration Scheme** - the responsibilities and competencies required of the leaders conducting the outdoor activities
4. **Codes of Conduct** – the behavioural expectations of persons operating as outdoor leaders

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INTRODUCTION

The Western Australian Adventure Activity Standards (AAS) have been developed to assist organisations and leaders to plan and conduct outdoor adventure activities with commercial and non-commercial groups of dependent participants (where there is a duty of care based in contract and or in authority).

The purpose of the AAS is to maintain the perception of adventure whilst simultaneously reducing / managing real risk for participants. Increased outdoor physical activity with reduced incident and accident rates will be the ultimate performance indicators of the value of the AAS.

The AAS provide a valuable resource for the development of operating procedures, and or for the purposes of comparing existing operating procedures to industry agreed benchmarks. All groups differ in their collective skills and experience, in their degree of dependence upon the leader, and participate in activities at a range of sites with varying conditions (including weather). It **remains the responsibility of the leader to make the professional judgements and decisions concerning the conduct of the activity to ensure the safety of the group**. The AAS are designed to assist such judgements and decision making.

The AAS are designed to promote knowledge and awareness of the broad and activity specific impacts increasing recreation and travel opportunities place upon the natural environment. The AAS are designed to assist the protection of biodiversity values and the preservation of cultural sites balanced with the increased access demands. The 7 Principles of Leave No Trace are imbedded within the AAS.

Whilst not statutory standards, the AAS are likely to provide the basis for policy formation and decision making by jurisdictions external to the outdoor adventure activity industry including, but not restricted to licensing, insurance and legal jurisdictions.

ACTIVITY DESCRIPTION

The Rock Climbing Adventure Activity Standard is designed for application to organisations and individuals providing or conducting the activity where the relationship between the activity provider and the participants, be it commercial or non-commercial, is one of dependence (where there is a duty of care based in contract or authority).

The activity of rock climbing is described as the process of ascending natural surfaces.

Associated activities include bouldering, single and multi pitch lead climbing, and single pitch top rope climbing.

The activity of bouldering is described as rock climbing where no part of the body is higher than 2.4m off the ground and where adequate safety can be provided by 'spotting' and the landing surface rather than with the aid of additional systems involving a harness, belay mechanism and ropes.

This AAS ought to be read in conjunction with the specific standards for caving, abseiling, artificial surfaces climbing and canyoning where (rock) climbing is to be engaged as a component of participating in these associated activities.

Further details of rock climbing operating procedures can be found in the Western Australian Roping Code of Practice located at www.outdoorswa.org

PLANNING and PREPARATION

The AAS provides a planning and preparation framework considered critical in maximising participant safety and enjoyment. All planning must be finalised and the relevant components written before the activity is undertaken. A suggested framework for the activity plan includes

- Preliminary Information
- Site Plan
- Risk Management Plan
- Emergency Response Plan
- Minimal Environmental Impact Plan

Samples and suggested templates are available at www.outdoorswa.org

Preliminary Information

The following are the minimum information requirements for conducting a rock climbing session

- Objectives / desired outcomes of the session (recommended only)
- Planned start and finish times
- Leader to participant ratio and group size (refer Leader : Participant Ratios and Group Size)
- Land/site manager requirements including
 - access restrictions
 - group sizes
 - booking and permit requirements
 - current environmental management policies and biodiversity issues affecting the region (refer to www.dec.wa.gov.au)
 - regulations in regard to fire restrictions and bans
- Equipment requirements (refer Equipment)
- Participants' names and emergency contact details
- Medical information advised by participants which may be relevant to the activity
 - Conditions - asthma, diabetes, epilepsy, fainting, allergic reactions, blood conditions which may effect bleeding/ blood clotting, recent or long-standing injuries, (eg back, knee, ankle), disability, pregnancy, repetitive strain injury
 - Medications - what is it / why is it required / how is it administered?
- Group members are advised in writing of
 - Potential risks associated with the activity
 - Zero tolerance requirements re alcohol and drugs other than prescription drugs NOT effecting the participant's ability to participate
 - The requirement to conform to responsible and attentive behaviour
- Signature(s) of informed consent including the provision of emergency medical treatment by participant / parent / guardian as relevant to the specific participants; participants under the age of 18 must have the signature of a parent / guardian
- Participant signed legal liability disclaimer / waiver to sue (retain for a minimum of four years); participants under the age of 18 must have the signature of a parent / guardian if required by the organisation that has legal responsibility for them
- An understanding of the history of the site

Site Plan

The purpose of the site plan is to assess issues re access, environmental impact, risk and emergency communications relative to a particular site. The site plan ought to provide details of

- access to the site
 - assessment of the suitability of the site for the size of the group
 - access to and within the site
 - by vehicle (2WD / 4WD) including emergency services vehicles
 - on foot including to and from the nearest car park and to and from the top of the pitch including the best routes to take to minimise environmental impact
- how to make an emergency call (by mobile or satellite phone, by radio or by a runner party to a land line) and where is the best place to make these calls
- surface type & suitability (artificial / natural - granite, sandstone etc.)
- site characteristics (difficulty, height, pitch, overhangs)
- specific route characteristics to ensure abseils can be rigged without using vegetation as anchors and with minimal environmental impact
- opportunities for rest breaks and availability of impacted shaded waiting areas
- merits of taking alternative removable shelter to prevent the destruction of vegetation by groups looking for shade
- toileting facilities and appropriate waste disposal options
- location of any water sources
- location of any culturally significant areas, structures, artefacts or rock art that need to be avoided
- location of any rare or endangered plants or animals
- ability of site to withstand visitation with minimal impact including leaving vegetation undisturbed

Samples and suggested templates are available at www.outdoorswa.org

Risk Management Plan

The purpose of the Risk Management Plan is to identify the human, site specific, equipment and environmental risks for the safe conduct of the activity. By identifying, analysing and evaluating these risks, appropriate strategies to reduce / manage the risk can be developed and implemented.

The activity provider must assess the chosen site(s) for any hazards and adapt the planning of the activity as required. Information of any new hazard ought to be made available within the group / organisation and to the relevant land manager.

Samples and suggested templates are available at www.outdoorswa.org

The Risk Management Plan ought to consider

- Leader(s) have the required authorisation, skills, qualifications and experience to
 - conduct the rock climb in the selected environment
 - satisfy the planned objectives

- effectively manage incidents (refer Requirements of Leaders)
- preserve the environmental integrity of the activity site and surrounding area
- Leader : Participant ratio (refer Participant Ratios and Group Size)
- Group profile
 - Skill / experience levels
 - Needs / requirements
 - Knowledge of environmental minimum impact strategies
- Methods for managing group at all times
 - Rock climbers
 - Others waiting to climb
 - Others who have completed an climb

Emergency Response Plan

The purpose of the Emergency Response Plan is to provide a set of steps for leaders to follow in the event of an incident or emergency which may include or lead to injury or death. The plan must detail how to minimise the escalation of the situation, the injuries incurred and how to reduce the likelihood of further incidents occurring. The Emergency Response Plan must be site specific and maintain current details including

- Access and egress options
- Contingency plans for effective rescue with minimum environmental impact to the site
- Group assembly points
- Emergency contact details including
 - Police
 - Department of Environment and Conservation
 - Medical stations (hospital, doctor)
- Specific communication requirements / available networks

ALL leaders must carry a copy and be fully aware of the emergency response plan. A copy of the emergency response plan must also be kept (with other documentation) with a non-participating contact and be readily accessible by the leader via an available telecommunication method in the event of an incident / emergency.

The leader is to communicate with the relevant external contact at a designated time(s). Upon failure to do so the external contact must action the emergency response plan which may include contacting the police. In situations where there is only one leader, the emergency response plan ought to have been introduced to, and be available to members of the group so that it may be actioned in the event that the leader becomes unfit to do so.

Samples and suggested templates are available at www.outdoorswa.org

Leader: Participant Ratios and Group Size

Whilst it is acknowledged that the characteristics profile of the group, the purposes of the rock climb, the characteristics of the site and the experience of the leader will influence the ratios of leaders to participants, the minimum ratios considered acceptable are

Top rope single pitch bottom belay

- The recommended ratio is 1:8
 - With an experienced leader and appropriate consideration of the above variables, a ratio of 1:12 using 4 ropes may be manageable
 - Assumes one climber, one belayer and one backup belayer per rope
 - Assumes competent belayers are available
 - Assumes all ropes are in close proximity

Top rope single pitch top belay

- The recommended ratio is 1:6
 - Assumes 2 leaders – one at top belay position, one at take off point
 - Assumes one climber, one belayer and one backup belayer per rope
 - Assumes competent belayers are available
 - Assumes all ropes are in close proximity

Multi pitch climbing (experienced participants only – assumes participants can belay effectively)

- The recommended ratio is 1:3

Lead climbing (experienced participants only – assumes participants can belay effectively)

- The recommended ratio is 2:4

These ratios are the minimum ratios. It is understood that different jurisdictions may impose ratios tighter than those above for reasons based within their own jurisdictions.

Group size will be determined by both site characteristics and the application of the above ratios. Consideration must be given to the adequate supervision of non-participants

Minimal Environmental Impact Plan

1. Plan Ahead and Prepare*

- Choose shaded waiting areas, not only for the comfort of participants, but also to reduce the tendency for waiting participants to push back into surrounding vegetation to find shade

2. Travel and Camp on Durable Surfaces*

- Use boulders before trees as anchor points
- If there is no alternative to using trees or other vegetation for belay points, protect them from rope damage by using rope padding or a minimum of 50 cm thick webbing
- Protect all plants, animals, historical and archaeological sites and geographic features
- Utilise recognised tracks to approach and move between descents
- Avoid steep access and ascent tracks which will be more prone to erosion
- Manage groups to minimise disturbance to vegetation and erosion
- Select sites that have a rocky top and base capable of tolerating group traffic to minimise vegetation damage and erosion
- Do not brush moss or lichen from the cliff unless absolutely necessary for safety reasons
- Do not fix materials including canvas and carpet to tree roots

3. Dispose of Wastes Properly*

- Bury faecal matter at least 100 metres from any waterway; carry out from any water supply catchment area
- Carry out all rubbish, including foodstuffs as they may harm native wildlife
- Use biodegradable soaps and detergents
- Dispose of washing water at least 100 metres from any waterway
- Avoid leaving food scraps that encourage the habituation of native animals

4. Leave What You Find*

- Wash all soil from camping and personal equipment and vehicles before moving between locations to avoid transporting seeds or soil-borne pathogens such as *Phytophthora*
- Avoid altering vegetation to better suit abseiling routes and access

5. Minimise Campfire Impacts*

- Observe Total Fire Bans; liaise with local land management staff

6. Respect Wildlife*

- Try to minimise noise at the site
- Minimise interaction with wildlife
- Be aware of the nesting and behaviour patterns of wildlife found at the site

7. Consider Your Hosts and Other Visitors*

- Do not block footpaths with equipment or belayers
- Be aware of and diplomatic with other groups, individual climbers and other recreational users
- Respect the wishes and regulations of all hosts – indigenous, pastoral, land managers and locals

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

REQUIREMENTS OF LEADERS

The performance of the leader is a critical factor in the safe conduct of a rock climbing activity. The leader is required to

- accept responsibility for the planning, preparation and conduct of the climb
- maintain current qualifications and experience deemed to be critical determinants of the ability to meet these requirements
- accept responsibility for the environmental preservation of the site and surrounding area

This does not exclude the fact that participants are responsible for their own actions in relation to the potential risks that may be encountered by choosing to participate in a climbing activity.

Responsibilities of Leaders

Leaders are required to accept the following responsibilities

- to use professional judgement to make decisions that will ensure the safety of all group members and maintain the integrity of the environment including matters relevant to
 - people based risks*
 - collect all documentation / forms signed by all dependent participants / parents or guardians (or ensure data is collected by the third party responsible for the group)
 - communicate the risks relating to the activity to the group in a pre-activity briefing

- match the experience / capabilities of the group to the climbing activity
- ensure all incidents are documented and reported in writing to Outdoors WA in writing within seven (7) days
- close down the activity in circumstances where dependent participants fail or refuse to comply with requirements (EG behavioural, equipment use)
- site based risks*
 - appropriately manage hazards including rock fall
 - be aware of and comply with the land/site manager's guidelines including minimal impact
 - manage the whole group effectively; ensure that your group behaves with respect for other users
 - ensure that all waiting participants remain in a designated safe area and, if minors, are appropriately supervised by a responsible adult
 - appoint appropriate external contacts to notify police etc. if not contacted by designated time/s
 - notify appropriate external contacts of safe return / completion
- equipment based risks*
 - check suitability, condition and use of all equipment prior to, during and on return
 - ensure correct use of equipment by all participants
 - maintain and service all equipment in keeping with manufacturer's specifications
 - ensure that a First Aid Kit and communication equipment suitable for the location are in good order
- environmental based risks*
 - apply Leave No Trace Principles
 - comply with the land / site manager's guidelines including minimal impact principles relative to flora, fauna and rubbish removal
 - report all environmental damage to the Department of Environment and Conservation or other land manager
 - report any perceived breaches of the Rock Climbing AAS or the Roping Code of Practice to Outdoors WA

**** to be read and applied in conjunction with additional details in the Western Australian Roping Activities Code of Practice***

Competencies of Leaders

Leaders require a range of technical and group facilitation skills to effectively conduct group rock climbing activities. Leaders are deemed to be competent to lead rock climbing activities if

- they are currently registered in the National Outdoor Leader Registration Scheme (NOLRS)* as an rock climbing guide or instructor (NOLRS - administered by Outdoors WA on behalf of the Outdoor Council of Australia) which requires
 - a recognised qualification or skill set
 - sufficient current experience
 - appropriate first aid qualifications
 - within one hour from definitive medical care – Senior First Aid required
 - beyond one hour from definitive medical care – an advanced / wilderness / remote First Aid qualification is required

**** registration with NOLRS must be achieved by 31 January 2011***

**** further information about NOLRS including how to register is available at www.outdoorswa.org***

**** the registration achieved must align with the specific form of rock climbing to be undertaken ie. Single Pitch Climbing Guide Natural Surfaces***

EQUIPMENT

Equipment requirements vary with the objectives of the activity, the group characteristic profile and the environmental conditions likely to be endured. When planning equipment requirements for a session it is important to consider all possible eventualities and to select equipment that will minimise cultural and environmental impact of the activity (refer www.Int.org.au)

Participant's Equipment*

The following equipment requirements apply to all participants while they are undertaking the activity

- Helmet specifically designed for rock climbing / abseiling and which adheres to UIAA, CE, ANSI or equivalent must be worn whenever there is a risk of head injury
- Harness specifically manufactured for rock climbing / abseiling and which adheres to UIAA, CE or equivalent; must be used in accordance with manufacturers' specifications
- Appropriate belay device where required
- Clothing appropriate to the requirements of the site and weather conditions
- Sturdy, enclosed footwear
- Participant's personal medication
- Appropriate footwear must be worn both to access the site (where relevant) and for the session
- All equipment must be used in accordance with the manufacturers' specifications

Leader's Equipment*

The following equipment requirements, in addition to that listed above, apply to leaders conducting dependant group climbing activities

- Knife suitable for cutting ropes in emergency situations (preferably on a lanyard)
- Whistle
- Spare sling
- A rescue pack of pulleys, prusik loops or ascenders, and a belay device should be accessible for rescue

Group Equipment*

The following equipment is required for all dependant group abseiling activities

- Ropes and all protective equipment (karabiners, slings, belay devices and chocks) which adhere to UIAA, CE, ANSI or equivalent must be manufactured specifically for rock climbing / abseiling and used according to the manufacturer's specifications and accepted practice
- Emergency communication equipment (mobile phone, radio, PLB if in remote area etc.)
- A First Aid Kit appropriate for the level of training completed and the size of the group
- Tools for proper waste disposal (ie trowel if necessary)
- Equipment to clean footwear, tyres, hardware and ropes in areas affected by soil borne pathogens such as phytosphthora

**** to be read and applied in conjunction with additional details in the Western Australian Roping Code of Practice***

DEFINITION OF TERMS

- **Activity Provider** – an entity, person or group of persons assuming the role of providing the activity (the activity provider) for a group of dependent persons for a specific commercial or not – for – profit purpose
- **Dependent Group / Participant** – a group or individual within a group whose welfare associated with participating in the activity is in part the responsibility of the leader; who is dependent upon the leader for their safe participation in the activity which may be so deemed by law or contract
- **Outdoor Leader** - term for an individual accepting the roles of leading and managing the outdoor activity; can be a guide or instructor; can be paid or voluntary; must be a registered leader in NOLRS (does not refer to lead climber)
- **Competency** - minimum industry agreed standard of skill and knowledge necessary for a specific activity being conducted at a specific level
- **Responsible Adult** – adult person deemed, by the outdoor leader, as adequately capable of accepting responsibility for selected aspects of the management of the group and or its participants in conjunction with the safe conduct of the activity
- **UIAA** – Union Internationale des Associations d’Alpinisme
- **CE** – European Community
- **ANSI** – American National Standards Institute
- **PLB** – Personal Locator Beacon
- **Phytophthora** – Phytophthora Dieback: is a microscopic soil borne water mould that attacks plants. It impacts 40 percent of our native plant species and threatens whole communities including animal habitats. It is spread in the movement of infested water, soil or plant material. As the name water mould suggests, it requires moist conditions to thrive. Its food source is the root and basal stem tissue of living plants. It is currently the biggest threat to biodiversity in Australia and it is spread extensively by human activity. More information is available online at www.dieback.net.au
- **Belay** - technique of controlling the rope so that a falling climber does not fall very far. This task is assigned to a belayer. The term belay is also used to mean the place where the belayer is anchored. Control of the rope is achieved through applying friction, which allows control of the speed at which the rope slides past the belayer. This friction is generally achieved by forcing the rope through tight bends and past rough surfaces. Belaying is a critical part of the climbing system. By using a correct belaying method, the belayer can hold the entire weight of the climber by using relatively little force, and can easily arrest even a long fall. By using a mixture of belaying angle and hand-grip on the rope, a climber can be lowered gently by the belayer to a safe point where climbing can be resumed
- **Bouldering** - a style of rock climbing undertaken without a rope and normally limited to very short climbs so that a fall will not result in serious injury. Bouldering is a style of climbing emphasizing power, strength, and dynamics. Its focus is on individual moves or short sequences of moves. For protection, climbers typically put a bouldering mat (crash pad) on the ground to break their fall and have one or more spotters, who work to direct the climber's body toward the crash pad during a fall, while protecting the climber's head from hazards

- **Spotting** - a technique used where participants are close to the ground and ropes are not used. The spotter stands below the participant, with arms raised or at the ready. If the participant falls, the spotter does not catch the participant but redirects the participant's fall so that they land safely. At the very least the spotter ensures that the participant's head and back do not strike the ground directly. If the participant jumps down, the spotter can also help prevent stumbles and injuries on uneven ground. When spotting you should always use "spoons" (all fingers together) because fingers can be broken if your fingers are spread apart. A spotter should always be used for accident prevention. A spotter will typically hold their arms up with hands in a supporting position for more or less vertical climbs. When the participant falls, the spotter's hands lightly hold the participant's hips or lower back, near their centre of gravity. This allows the spotter to help guide the participant's fall effectively, helping them keep the centre of gravity over their feet. When on steeper, past vertical activities, the spotter will hold their arms out in a cradling position. If the participant were to unexpectedly fall, the spotter supports the upper and middle back, helping the participant, land on their feet

ACKNOWLEDGEMENTS

The Adventure Activity Standards initially developed by The Outdoor Recreation Centre in Victoria proved to be an invaluable resource in the development of the Western Australian Adventure Activity Standard for rock climbing.

FEEDBACK, REVIEW & APPEALS

The AAS are designed to be 'living' standards with feedback, requests for review and/or appeal against aspects of a standard considered to be healthy part of the development process, one that will ensure the currency & relevancy of the standards. Feedback, requests for review and/or appeals will be managed by the Industry Standards Panel. Details and proformas are available at www.outdoorswa.org / industry quality framework / Industry Standards Panel.

FURTHER INFORMATION

Contact Outdoors WA for further information or to obtain contact details of the organisations conducting rock climbing activities and training.

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