

## Queensland Adventure Activity Standards

# River Rafting



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 that provide river rafting activities 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 as well as material on the internet links provided.

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: river rafting

River rafting refers to the use of inflatable, multi-chambered boats (rafts), including inflatable kayaks, on white-water rivers where the river section is longer than one kilometre and/or the river grade at any point is greater than Grade 1.

The river rafting AAS is intended for use when planning any organised river rafting trip involving dependent participants, whether commercial or recreational. It is not designed as a guideline for the use of inflatable mattresses, home-made rafts or inner tubes.

Where kayaks and canoes are used, the Canoeing/ Kayaking Adventure Activity Standard may be referred to for more detailed information.

## 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 organisation 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 organisations 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 organisations must comply with and are highlighted as **MUST**.

**Note:** If dependent participants come from a Department of Education, Training and Employment school, organisations should read this document in conjunction with the relevant Curriculum Activity Risk Management Guideline found at <http://education.qld.gov.au/curriculum/carmg/index.html>

## 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 managed 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

Specific operational details were developed through the skills and knowledge of activity specific technical working groups. Representatives consulted in this process included:

- Maritime Safety Queensland
- Work Health and Safety Queensland
- Australian Rafting Federation



- Foaming Fury



- Raging Thunder



- R'n'R Adventures



## 3. Safety and the law

This section provides a general overview of a range of legislation which governs organisations providing river rafting activities, as well as the general law in relation to contract and negligence. While this general information may be helpful, it is offered on the basis that organisations will not rely on it solely, but will obtain their own independent legal advice in relation to their legal obligations for conducting river rafting activities.

River rafting activity operators should familiarise themselves with the relevant provisions of the Acts and Regulations discussed below to ensure they meet all their legislative obligations and requirements.

### 3.1 Legislative Requirements—Maritime Safety

There are a number of statutory boating safety requirements set out in Queensland legislation that organisations providing river rafting activities **MUST** comply with.

These requirements are set out in the *Transport Operations (Marine Safety) Act 1994* (the TOMS Act) and the *Transport Operations (Marine Safety) Regulation 2004* (the TOMS Regulation).

#### 3.1.1 General safety obligations

The TOMS Act imposes general safety obligations on owners and masters (a person having command of the ship) about the condition and operation of their ships, namely that their ship is safe and operated safely. This extends to organisations operating river rafting activities.

Under the TOMS Act a ship is defined as any kind of boat or vessel used in navigation by water or for any other purpose on water, whatever the boat's size and however it is propelled. River rafts fall within the definition of a ship and are therefore subject to the provisions of the TOMS Act.

Organisations providing river rafting adventure activities **MUST** comply with two general safety obligations under the TOMS Act about:

1. the condition of the rafts they use (section 41); and
2. the safe operation of the rafts (section 43).

Section 41 of the TOMS Act requires that rafts not be operated unless they are safe, that is, seaworthy and appropriately equipped and crewed, to meet the ordinary perils of the trip on which the raft is involved. Section 41 places this obligation on the owner and/or master of the raft. There are varying penalties for not complying with section 41. For example, if a marine incident involving an unsafe raft results in the grievous bodily harm or death of a person in the raft, the owner and master may be found to have failed in fulfilling their safety obligations under this section, therefore committing an indictable offence. They could be liable to a maximum penalty of 5000 penalty units or imprisonment for 2 years.

Additionally, section 43 requires that rafts be operated safely, that is, any person involved with a raft's operation (including the owner, master, leader or raft guide) **MUST NOT** cause the raft to be operated unsafely. If any of these people cause a raft to be operated in a way that causes a marine incident involving the death or grievous bodily harm of a person in the raft, then that person may be found to have failed in fulfilling their safety obligations under this section, therefore committing an indictable offence and could be liable to a maximum penalty of 5000 penalty units or imprisonment for 2 years.

### 3.1.2 Notification about commercial rafting operations

Under section 146 of the TOMS Regulation, the organisation operating a commercial ship (a ship other than a fishing ship or a ship only used for private recreation) providing commercial river rafting activities **MUST**, before commencing those activities, notify Maritime Safety Queensland (MSQ) in writing about the proposed commercial rafting business activity.

The written advice should include the business name and address, the principals of the business entity, where the business activities are to be conducted, when the activities are to commence, and a description of the nature of the business activity including risk assessments and safety management plans and procedures.

### 3.1.3 Reporting of marine incidents

The objective of marine incident reporting is to ensure that MSQ, as the marine safety regulator, is properly informed of all incidents that may warrant further enquiry. It is therefore not expected that every minor event should be reported to shipping inspectors of MSQ or the Queensland Police Service.

Rather only those events that properly constitute a marine incident under the TOMS Act should be reported. Section 123 of the TOMS Act defines a marine incident as an event causing or involving:

- a. the loss of a person from a ship; or
- b. the death of, or grievous bodily harm to, a person caused by a ship's operations; or
- c. the loss or presumed loss or abandonment of a ship; or
- d. a collision with a ship; or
- e. the stranding of a ship; or
- f. material damage to a ship; or
- g. material damage caused by a ship's operations; or
- h. danger to a person caused by a ship's operations; or
- i. danger of serious damage to a ship; or
- j. danger of serious damage to a structure
- k. caused by a ship's operations.

In the context of river rafting, for example if persons falling out of the raft is a frequent occurrence, this does not need to be reported to MSQ unless it results in a serious injury or death.

Under section 125 of the TOMS Act marine incidents **MUST** be reported to a shipping inspector (MSQ) in the approved form, generally within 48 hours of the incident occurring. Marine incident report forms are available from the MSQ website at: [www.msq.qld.gov.au/Safety/Marine-incidents.aspx](http://www.msq.qld.gov.au/Safety/Marine-incidents.aspx)

A Memorandum of Understanding between MSQ and Workplace Health and Safety Queensland sets down the roles of each of these agencies in relation to the investigating of reported incidents.

## 3.2 Legislative Requirements— Health and safety

In addition to maritime safety requirements, there are a number of Queensland statutory health and safety requirements which organisations providing river rafting activities **MUST** comply with.

These requirements are set out in the *Work Health and Safety Act 2011* (WHS Act 2011), the *Work Health and Safety Regulation 2011* (WHS Regulation 2011), the *Safety in Recreational Water Activities Act 2011* (SRWA Act 2011) and the *Safety in Recreational Water Activities Regulation 2011* (SRWA Regulation 2011).

In broad terms:

- the main objective of the WHS Act 2011 is to provide a framework to secure the health and safety of workers and workplaces; and
- the main objective of the SRWA Act 2011 is to ensure the health and safety of persons to whom recreational water activities are provided.

### 3.2.1 *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 river rafting 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/](http://www.deir.qld.gov.au/workplace/law/codes/riskman/)

*Further information on the health and safety duties of organisations that provide river rafting activities is provided in section 5.*

### 3.2.2 *Safety in Recreational Water Activities Act 2011* (SRWA Act 2011)

This Act applies directly to river rafting activities. Section 16 of this Act describes the primary duty of the river rafting organisation. It is similar to the primary duty set down in the WHS Act 2011.

The SRWA Act 2011 states that persons providing recreational water activities **MUST** ensure, as far as is reasonably practicable that the health and safety of persons for whom the activity is provided is not put at risk by the provision of the activity. This includes the provision of:

- Safe plant and structures e.g. safe rafting equipment.
- Safe use, handling and storage of plant, structures and substances.
- Provision of information, training and instruction to protect persons e.g. proper induction for participants.
- Monitoring of persons and conditions to prevent injury or illness e.g. monitoring weather conditions and river levels.

All persons involved in river rafting activities, including leaders, guides and participants, 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. They **MUST** comply with any reasonable instruction and cooperate with any reasonable policy or procedure the organisation has in place for the river rafting activity.

### 3.2.3 Health and safety incidents

The objective of health and safety incident reporting is to ensure that Workplace Health and Safety Queensland (WHSQ), as the regulator, is properly informed of all incidents that may require investigation.

Both the WHS Act 2011 and SRWA Act 2011 require certain incidents to be notified to WHSQ 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](http://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 degloving)
  - › 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:

- Uncontrolled escape 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

A Memorandum of Understanding between MSQ and Workplace Health and Safety Queensland sets down the roles of each of these agencies in relation to the investigating of reported incidents.

## 3.3 Summary overview on legal liability in contract and negligence

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 organisation's circumstances.

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

### 3.3.1 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 *Limitation 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.

### 3.3.2 Contract

A contract may be written, oral, implied or a combination of the three. When considering a claim in contract in relation to personal injury a contract must exist between the person who has suffered the loss or injury and the organisation. If injury or damage occurred because the organisation did not exercise reasonable care in providing the service, a court may find that they breached the contract, which may entitle the party to claim damages as compensation for the loss or injury suffered as a result of the breach.

### 3.3.3 Negligence

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

The essential elements of a claim in negligence are that:

- the organisation owes a duty of care and, therefore, **MUST** 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
- a breach of this duty of care occurred;
- the breach caused the harm suffered by the client or participant.

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.

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.

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. In determining the standard of care, a court will consider the experience of the organisations and participants, and the conditions at the time of the incident, and may seek guidance from experts in the field. 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.

One defence in a claim in negligence is that the organisation took appropriate precautions in the 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 should implement risk and safety management processes. To develop these processes, the organisation 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 information on this topic, please refer to Appendix 1.*

## 4. Risk Management and Planning

### 4.1 Risk management framework

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 organisations providing outdoor activity experiences.

Given the nature of adventure activities, as the likelihood of injury is increased, an organisation may also be held to owe a higher standard of a duty of care to participants where the nature of the activity is inherently more dangerous. While the risk of injury cannot be removed entirely, there are practices that organisations can implement to lessen this risk.

Possible injury and 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 Managing risk in sport and recreation, 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 the consequences be?
3. **Choose measures to control the risks**—Can you eliminate the risk? Cancel the trip? Use another venue? Use personal protective equipment? Bring in an expert? Substitute with an activity with less risk? Substitute real risk with 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?

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 measures 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.

*Further information on risk management can be found in:*

- *How to Manage Work Health and Safety Risks 2011 code of practice;*
- *HB 246–2010 Managing risk in sport and recreation. This document can be purchased through the Standards Australia website: <http://infostore.saiglobal.com/store/Details.aspx?ProductID=1421050>;*

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 Risk management planning for river rafting activities

A risk management plan helps an organisation or leader define and achieve objectives, and minimise the inherent risks to participants. Activities can be planned in various ways, and each organisation will have their own approach to planning. Each organisation can determine how much of the plan they need to document. The leader should carry out the activity in accordance with the risk management plan.

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, ‘strainers’ such as fallen trees or rock formations, dangerous river flows such as recirculations, high winds or danger from local wildlife. They do not include factors inherent in the adventure activity, such as getting wet while rafting.

Organisations 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.

Organisations should note foreseeable risks and develop strategies to manage, avoid or minimise them. Importantly, the group leader should understand these risks and strategies.

### 4.2.1 People

#### 4.2.1.1 Participants

Risk management for river rafting activities should consider the following in relation to the people participating in the activity:

- Activity objectives (desired outcomes) and participant expectations
- Size of the group
- Age, experience and skills of participants (including swimming ability)
- 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
- Duration of activity

The following should be documented in relation to participants:

- Names and addresses, medical information and emergency contact detail for all participants, leaders, guides, backup personal and external non-participating contacts.
- Medical conditions and management strategies for all participants should be documented, including details of condition/s (e.g. asthma) and any medication or actions to be taken (e.g. self-administered inhaler).
- Conditions to be considered 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 affecting balance, recent or long-standing injuries, disability, illness or other medical conditions relevant to the ability to participate (e.g. heart conditions, migraines or pregnancy);
  - › Information for all participants, leaders and guides on food allergies – magnitude of reaction and management strategies as well as medications and who can administer these;
  - › A signed consent from each participant acknowledging the risks and that they have been briefed on the inherent risks of the activity (see section 5.2.2 for further information on pre-activity briefing requirements) and including their agreement for medical assistance to be sought if required;
  - › Signed consent by a parent or legal guardian for participants under the age of 18; and
  - › Any other documentation as required by insurance/legal adviser

#### 4.2.1.2 Group size

The group's size is important when considering group management and ways to protect the environment. Organisations and trip 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
- a land/water manager's specific restrictions
- 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 guides who independently adhere to the organisation's safety management plan and procedures, risk assessment and this AAS.

#### 4.2.1.3 Restricting participation

There may be times when an organisation or 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 river conditions, flood, drought, lightning and fire.

#### 4.2.1.4 Leader

Activity planning should consider:

- Leader/guides to participant ratio
- Leaders' skills and competence to conduct the activity, effectively manage incidents and achieve the planned objectives
- Leaders'/guide's familiarity with the area
- Working With Children Check for individual leaders, where applicable (Section 4.5)
- Cancellation, modification or postponement procedure (e.g. due to forecasted or current adverse weather conditions, insufficient equipment, restrictions dictated by the land/ water manager or environmental factors such as flood, high river levels, drought, lightning or fire, etc).

### 4.2.2 Environment

#### 4.2.2.1 Documented site-specific risk assessments

It is recommended that site specific hazards be considered and planned for and a documented risk assessment be prepared, with the understanding that river conditions can rapidly change.

Site specific hazards to be considered for each rapid section include known:

- Entrapment points
- Dangerous drops
- Sieves or strainers
- Dangerous recirculations

Entrapment within white water rapids provides a significant hazard that has had fatal consequences in a number of cases. Given the level of risk, the identification of entrapment hazards is a very important part of the risk assessment process.

Entrapment can occur when a passenger has been flipped or has fallen from the raft and a body part, usually their foot becomes entrapped in rocks. The force of water along with the entrapment can then submerge the person leading to death from drowning.

Other site specific considerations include:

- Terrain and water characteristics (e.g. grade, technical difficulty) and associated implications/hazards (see Appendix 2 Australian White Water Rafting Rapid Grading System)
- Land or water manager's requirements (access restrictions, group sizes, permit requirements, booking requirements)
- Site's ability to withstand visitation with minimal impact
- Seasonal factors (rain, fire, availability of drinking water, river levels, other users)
- Remoteness and accessibility

Documented site-specific risk assessments should include the following:

- a. Documentation of designated and start and finish times, and a route description;
- b. Detailed maps of each rapid section that show:
  - › site specific hazards;
  - › preferred routes;
  - › routes to avoid;
  - › location of supervisory and rescue personnel and equipment.
- c. procedures for management of hazards;
- d. course of action should weather change;
- e. participants briefed on hazards and risks prior to trip;
- f. ongoing assessment of the river conditions;
- g. notable hazards documented post trip;
- h. information made readily available within the organisation; and
- i. hazards reported to the land/water manager where relevant.

Multiple or overlay maps may be required to address operational and environmental variables.

The maps should be used in the training and evaluation of all guides.

The maps should be reviewed regularly to ensure they remain relevant and effective.

In assessing the risk from each hazard identified, consideration should be given to different rafting or canoeing conditions. For example a foot entrapment risk at a particular place may be medium at low river heights but becomes higher as the river level rises.

Please see Appendix 3 for an example of a documented risk assessment that could be consulted when an entrapment hazard has been identified.

#### 4.2.2.2 Weather

Effective planning requires access to up-to-date weather and fire information, which is generally available through newspapers, radio and television. The most up-to-date information is available on the website of the Bureau of Meteorology at [www.bom.gov.au/qld](http://www.bom.gov.au/qld). This website provides information on weather, seas and hydrology, and some historical data.

#### 4.2.3 Equipment

Equipment requirements will vary according to the planned activity (including the route and its 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.

Things to consider include:

- Equipment, food and clothing requirements
- Condition and suitability of all equipment
- Expected weather conditions and implications (hypothermia, hyperthermia)
- 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
- First aid requirements
- Support/evacuation capabilities (vehicle etc.) and availability of emergency medical assistance.

Before each river rafting activity, the organisation providing the river rafting activity should ensure rafts and their equipment are inspected for seaworthiness and that they are appropriately equipped for the journey proposed.

Leaders/guides should comply with the manufacturer's specifications for use of rafts and safety equipment. Leaders/guides and groups should have easy access to emergency/contingency equipment.

#### 4.2.3.1 Leader's and guide's equipment

At a minimum, the trip leader should have equipment as stated in Section 4.2.3.2 and also have easy access to:

- a PFD (appropriate for trip) in accordance with Australian Standard specification (or relevant International Standard) for type 1 (AS1512), type 2 (AS1499) or type 3 (AS2260); the type 3 standard should be a buoyancy vest and cannot be a wetsuit and should include a rescue harness.
- a pea-less whistle
- watch
- basic equipment to facilitate a Z-Drum rescue
- flip line or tape
- 2 prussic loops
- 3 karabiners
- an appropriate knife
- a helmet which quickly and easily distinguishes the trip leaders and guides from participants, so they are immediately identifiable
- rescue line or throw bag (2 per guide)
- map clearly showing river section to be rafted and all road access points if required.

#### 4.2.3.2 Participant equipment

Participants should have appropriate clothing for the duration and objectives of the trip. Equipment requirements applying to all dependent participants include, but may not be limited to:

- a PFD (appropriate for trip) in accordance with Australian Standard specification (or relevant International Standard) for type 1 (AS1512), type 2 (AS1499) or type 3 (AS2260); the type 3 standard should be a buoyancy vest and cannot be a wetsuit. PFDs should be checked for fit by the leader prior to a trip, worn at all times and properly adjusted during the trip
- a helmet designed for river rafting or kayaking; helmets should be checked for fit by the leader prior to a trip, worn at all times and properly adjusted during the trip
- a paddle with a specifically designed 'T' grip, made of a material that will not shatter or crack leaving sharp edges
- suitable footwear
- any personal medication; the leaders should understand the participant's particular requirements.

#### 4.2.3.3 Group equipment

Rafts should be selected for their suitability to the appropriate river conditions and conditions reasonable to assume may occur during the rafting trip.

Rafts should be constructed in accordance with:

- International Standards ISO 6185 – 1982, Shipbuilding and marine structures - Inflatable boats – Boats made of reinforced elastomers or plastomers or
- Australian Standard AS 2677 – 1983, Inflatable boats; and must be in serviceable condition and used/loaded as per manufacturer's instructions.

Organisations providing river rafting activities must ensure that the rafts are only used for the purpose for which they were designed and that all health and safety features of the raft are used in accordance with the instructions and information from the manufacturer.

Rafts should also include or carry

- bailer system or self bail system
- bow line and stern line (floating safety lines)
- Groups should have access to:
  - › adequate spare paddles or oars
  - › appropriate length of rope for rescue on the selected river section
  - › an appropriate first aid kit
  - › emergency communication equipment
  - › a repair kit if necessary for the conditions/trip. A repair kit is normally only required for multi-day or overnight trips.
  - › If required a repair kit should include suitable material to repair a tear in a raft, emery cloth/roughing tool, glue cleaning solvent, patching tools, channel lock or similar pliers, spare valve cover, duct tape roll, screwdriver
  - › an inflation pump

#### 4.2.3.4 Maintenance and storage

- All personal and group equipment used in river rafting activities should be used, maintained and stored according to manufacturers' specifications where applicable; equipment aged beyond the manufacturer's expiry date should not be used.
- All personal and group equipment used should be in a good condition, of sufficient quality, adequate range of sizes and checked before and after each trip.
- All issued equipment used should be carefully washed after each trip and wet suits should be disinfected after each use.
- Where appropriate, a log of all equipment use and maintenance should be kept current.

- Maintenance records should include raft and equipment type, design specifications and details on how the owner ensures that no raft or equipment will be used in a substandard condition e.g. inspection and maintenance schedule, retirement policy.

#### 4.2.4 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:

- outcomes of the risk assessment process
- the leader’s experience
- participants’ expected capabilities (i.e. experience, competence, fitness)
- conditions (environment, weather)
- planned duration of the activity
- number of participants and optimum group size (see Section 4.2.1.2)
- multi-day or remoteness of the activity
- suitability and availability of equipment
- the likelihood a leader may become incapacitated or separated from participants
- rapid grading.

Land/water managers or relevant authorities may suggest ratios that differ from those recommended in the AAS. If these suggest a ratio with fewer participants per leader, they will be regarded as minimum requirements. For example, if the activity ratio is one leader to six participants, but the land/ water manager’s ratio is one leader to four participants, the land/water manager’s ratio is considered the minimum standard.

The following indicative ratios have been provided, based on ideal/or best-case scenarios, to help organisations and leaders determine ratios. Organisations and leaders may use these numbers as a starting point and then modify the number in their group according to the outcome of their risk management process and the organisation’s safety management plan and procedures, accounting for the above variables and the information on group size in Section 4.2.1.2.

Ratios should take into consideration the following for both rafts with a guide on board and self-guided rafts without a guide on board:

- Depending on the river grade and water levels, there should generally be two craft at all times on every trip on all rivers. This may be one raft and one safety kayak, provided the safety kayaker is an appropriately qualified person (See Section 5.)
- Every trip should have a designated trip leader.
- No group should be left unsupervised in the event of an accident/incident involving the trip leader or guide.
- There should be a minimum of one trip leader and one guide on every trip
- A raft may only be ‘self-guided’ on Grade 1, 2 and 3 rapids. On Grade 3 rapids self-guiding may be permitted only after a specific risk assessment for that trip has been carried out
- If a raft is self-guided, the trip leader should make sure the self-guiding participants are competent in skills to the level considered reasonable for the river section. Self-guiding has recognised beneficial outcomes but, by its nature, a trip involving a self-guided raft requires at least the same supervision level as that of a guided raft. The trip leader is responsible for the decision to self-guide a river section.
- Group rafting should only be conducted on Grade 1 and 2 rapids, except that Grade 3 rapids may be rafted where the organisation’s safety management plan and procedures and a risk assessment identify suitability of the river and the skill level of the group, for group rafting.

Table 1 applies the indicative minimum ratios of trip leaders and guides to participants, to river rafting operations conducted on Grades 1 and 5 rapids.

Number of participants	Minimum number of trip leaders	Minimum number of guides to assist the trip leader
1 – 15	1	1
16 – 22	1	2
23 – 30	1	3
31+	Follow same ratio principles as above	

Please note that these are minimum ratios. In many circumstances depending on the risk assessment, greater supervision by guides will be required.



## 4.2.5 Emergency strategy

Even with appropriate policies and procedures and risk management plans 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. Organisations, activity leaders and guides 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 5.2.2).

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/water 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 to communicate with on-river leaders and off-river support personnel; backup arrangements where communication fails
- contingency plans if the leader/guide has become incapacitated or separated from participants
- training and exercises to prepare the organisation's employees for effective implementation of the emergency plan
- relevant aspects of the land/water managers' emergency strategy
- strategies relevant to the specific features of the areas being visited (e.g. rock scrambles or portage)
- 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).

River and site specific rescue scenario training should take place regularly to ensure that familiarity with emergency procedures is maintained.

### 4.2.5.1 Backup personnel

Throughout any river rafting trip a responsible designated person off-river should be aware of the rafting trip details, including participation numbers, the river being run and estimated time of return. It is recommended that this person be able to initiate any emergency remedial action in accordance with the approved operating procedures.

All rafting trips are to be organised so that a single leader/guide is not in sole charge of a trip without some form of adequate backup. Backup should include extra guides. They should be able to cover situations where the guide/trip leader becomes incapacitated and/or separated from the passengers and is unable to continue to guide the trip safely.

## 4.3 First aid

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: <http://www.deir.qld.gov.au/workplace/law/codes/index.html>).

The unit of competency, HLTA301C 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 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.

## 4.4 Sun safety in Queensland

Sunburn is a risk for anyone who participates in outdoor activities, particularly in Queensland. Organisations and 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](http://www.sunsafety.qld.gov.au)
- Cancer Council Australia: <http://www.cancer.org.au/preventing-cancer/sun-protection>

## 4.5 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>

## 4.6 Protecting the Natural Environment

*Minimal impact—the seven principles of Leave No Trace*

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 river rafting activities take place.

### 1. Plan ahead and prepare

- 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.

### River

- Always utilise recognised access (put in), egress (take out) and rest locations. If this is not possible, access and egress should occur only at locations with a robust bank or beach on which landing and launching of rafts will have minimal impact.
- Choose durable surfaces like gravel or sand to load and unload your boat.
- Lift boats over soft riparian areas – do not drag them.
- Tying craft to trees or other vegetation should always be avoided. If this is not possible, extreme care should be taken to prevent damage from rope movement.
- Do not create new tracks.
- Use formed tracks.

### 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 dishwater.
- 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 or craft, 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 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](http://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

- Travel quietly.
- 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
  - › marine stingers
  - › 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: <http://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.
- Respect others wilderness experience and minimise your impact on others.
- Observe the safety of other groups by proper signalling of falling rock and other hazards.

Further information is available at Leave No Trace Australia [www.lnt.org.au](http://www.lnt.org.au)

#### 4.7 Activity planning checklist:

- Sought approval for activity from relevant land or water manager
- Clearly stated objectives and learning outcomes
- Completed risk assessment (e.g. route, area significance, maps, river levels etc.)
- Ensure site specific hazards are identified and control measures are in place relevant to the operational and environmental conditions of the day.
- Checked weather and made necessary alterations (e.g. gear, route)
- Maintained equipment logs
- Identified participants' social and cultural needs
- Assessed competence of leaders and (guides) (including the Working with Children check if applicable)
- Assess the experience, medical fitness, swimming ability and comprehension of all participants and if required restrict unsuitable persons from participating
- 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. Duties of organisations providing river rafting activities

In addition to the duties under the WHS Act 2011, SRWA Act 2011 and TOMS Act discussed in section 3 of this AAS, this section provides further information on the responsibilities of organisations and persons conducting a business or undertaking providing river rafting activities.

### 5.1 Staff selection, training and supervision

Organisations should have in place:

- Policies and procedures that identify the skills and experience required by leaders to ensure employment of persons who have those skills and experience
- details of job descriptions identifying key tasks and responsibilities of rafting leaders and management, in relation to safety
- details of how the organisation will ensure the leaders are medically and physically fit to work as rafting leaders and guides
- details of the procedure to be followed by leaders and guides should a rafting leader choose to accept or refuse to work on the grounds of compromised safety to themselves, other rafting leaders or passengers. It is recommended that this procedure clearly identify the situations to which it applies.

#### 5.1.1 Training and competencies

Under section 39 of the WHS Regulation 2011, a person conducting a business or undertaking must ensure that information, training and instruction provided is suitable and adequate having regard to the nature of the work and the risks associated with the work.

The organisation providing river rafting activities should ensure that leaders and guides employed or engaged by the organisation in relation to river rafting activities have the experience and skills to safely lead or guide the activity, regardless of the river and weather conditions. The organisation should also ensure that leaders and guides fulfil their respective responsibilities as outlined below.

Organisations must ensure that competency levels reflect risk assessments in the organisation's safety management plan and procedures.



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. This training package has competencies relating to river rafting activities including specific competencies providing training and assessment on entrapment rescue skills.

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 river rafting leader and guide training are available at: <http://www.nprsr.qld.gov.au/recreation/pdf/river-rafting.pdf>

While neither a full qualification nor a statement of attainment of units of competency is compulsory to lead a river rafting 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 or have access to records of activities to encourage currency and demonstrate experience. The log should include the river rafting 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.

### Example pathways to demonstrate competency

#### River Rafting Leader or guide

A river rafting leader or guide should attain one of the following:

- Certification by a Registered Training Organisation (RTO) delivering the Sport, Fitness & Recreation Training Package; or
- An International Rafting Federation (IRF) certification suitable for the environment and level of responsibility required (e.g. IRF raft/guide/trip leader); or
- A statement of attainment or Outdoor Recreation qualification with the appropriate units of competencies specified; or

- Demonstrated, to the satisfaction of the organisation, skills and currency that meet the leadership, group management, technical capacities and safety requirements of the specific circumstances being addressed.

## 5.2 The Leader

This AAS refers to leaders and guides.

In many instances, the leader will also be the person conducting a business or undertaking.

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

### 5.2.1 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.

The leader for a river rafting activity should comply in every respect with the organisation's safety management plan and procedures, and the trip plan. The leader/guide should monitor the operation of the rafts involved in the activity to monitor that they are being operated safely.

Recommended leader responsibilities include:

- working within the policies, procedures and activity standard operating procedures of the organisational stakeholders and land/water managers (where applicable)
- researching and planning for likely hazards, incidents and emergencies
- confirming the risk management plan
- 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 the raft and all group and personal equipment prior to departure and on return for wear, damage and improper inflation

- ensuring all loose equipment, containers and other objects are properly stowed and secured
- ensuring there are no loose loops or ends of rope or other tie down material
- carrying out a full briefing session and ensuring that all participants and staff understand it (Section 5.2.2)
- 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 there is sufficient space on the raft for all participants to be seated safely; sufficient participants are able to safely propel the raft so that the rafting leader can maintain control (in the case of oar rafts, there are sufficient oars and space to allow the rafting leader to control the raft)
- 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 4.6)
- 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/water manager's requirements, including permits and approvals
- controlling the pace of the group and resting the group if necessary
- maintaining observation of participants
- maintaining communication between the participants, backup personnel and external non-participating contact person
- 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.

### 5.2.2 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 and backup personnel
- the outline of activity objectives
- the characteristics of the activity and their environment, sufficient to inform participants' decisions consistent with their needs and abilities
- the activity's nature and inherent risks
- current and anticipated conditions (e.g. environment, remoteness, weather, river conditions)
- land/water managers requirements (e.g. specific conditions that apply to the site)
- basic river characteristics including river location, shoreline features and other hazards
- safety techniques including:
  - › raft handling, swamping, capsizing,
  - › buddy system
  - › overboard drill
  - › avoiding entrapment of arm or leg and use of the white water float position
  - › assisting a swimmer
  - › defensive swimming position
  - › use of a throw bag
  - › procedure for a flipped raft and seating assignments
- correct use and/or fit of essential equipment and clothing including:
  - › Personal Floatation Device (PFD):
    - features and demonstration of proper fitting of PFD
    - check participants' PFDs and
    - instruction to participants to wear PFD fastened and properly adjusted at all times
  - › Helmet
    - features and demonstration of proper fitting of helmet
    - check participants' helmets
    - instruction to participants to wear helmets fastened and properly adjusted at all times

- › Raft
  - demonstration of how to enter/exit raft
  - move in the raft
  - handholds
  - correct foot position and correct sitting position in the raft
- › Paddle
  - demonstration of correct use of paddle and paddle grip
  - strokes to be used
- the response to commands relevant to river specific conditions (e.g. forward, backward, stop, ‘hold on’, ‘get down’ and turns)
- the type of food, the amount of food and water they will need and water availability
- 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
- the leader’s expectations of participants, and their responsibility to behave as requested (e.g. conduct, safety zones, equipment)
- screening procedures restricting participation where participants are not permitted on board if a leader believes they are in a state of impairment that may be a hazard to him/herself or other participants
- the agreed methods of communication within the group (signals and calls), which should be devised before commencing the activity; ensure participants from non- English speaking backgrounds understand information and safety procedures.

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.

### 5.3 Responsibilities of guides

Like the leader, guides offer the experience of the activity and achieve the activity’s objectives. Guides will support and assist the leader as instructed. Therefore, guides might need to understand the detail of the risk management plan and emergency strategy. Guides must not be under the influence of alcohol or drugs.

To be included in a leader-to-participant ratio, guides 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 a guide. As such, it is not recommended that leaders include these people in the leader-to-participant ratio.

**Note:** If an organisation’s dependent clients come from a Department of Education, Training and Employment school, this AAS should be read in conjunction with the relevant Curriculum Activity Risk Management Guideline, which is available at: <http://education.qld.gov.au/curriculum/carmg/index.html>

## 6. Definition of terms

### Organisation

A person or group of persons organised for a particular purpose that provides a river rafting activity for either commercial (for profit) or non-commercial (not-for-profit or community group) purposes. Under the WHS Act 2011 an organisation is considered a person conducting a business or undertaking unless it is a voluntary organisation with no paid employees (see section 5 of the WHS Act 2011).

### 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.

### 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.

### 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.

### MUST

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

### Should

In this document, should indicates a recommendation.

## 6.1 Summary of abbreviations

<b>AAS</b>	Adventure Activity Standards
<b>EPIRB</b>	Emergency Position-Indicating Radio Beacon
<b>MSQ</b>	Maritime Safety Queensland
<b>NOLRS</b>	National Outdoor Leader Registration Scheme
<b>OCA</b>	Outdoor Council of Australia
<b>PCBU</b>	Person conducting a business or undertaking
<b>PFD</b>	Personal flotation device
<b>PAP</b>	Partnered Assessment Provider
<b>PLB</b>	Personal Locator Beacon
<b>QPWS</b>	Queensland Parks and Wildlife Service
<b>RTO</b>	Registered Training Organisation
<b>SIS10</b>	Sport, Fitness Recreation Training Package
<b>TGA</b>	training.gov.au
<b>TOMS</b>	Transport Operations Marine Safety legislation

## 7. Further information

### 7.1 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](http://www.nprsr.qld.gov.au)

#### **Queensland Outdoor Recreation Federation**

150 Caxton Street, Milton Qld 4064

Phone: (07) 3369 9455

[www.qorf.org.au](http://www.qorf.org.au)

#### **Outdoor Council of Australia**

150 Caxton Street, Milton Qld 4064

Phone: (07) 3369 9455

[www.outdoorcouncil.asn.au](http://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](http://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](http://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](http://www.skillsalliance.com.au)

#### **Service Skills Australia**

GPO Box 4194, Sydney NSW 2001

Phone: (02) 8243 1200

[www.serviceskills.com.au](http://www.serviceskills.com.au)

### 7.2 Resources

#### **General websites**

##### **Blue cards**

<http://www.ccypcg.qld.gov.au/bluecard/index.html>

##### **Bureau of Meteorology**

[www.bom.gov.au/qld](http://www.bom.gov.au/qld)

##### **Cancer Council Australia**

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

##### **Civil Liability Act 2003**

<https://www.legislation.qld.gov.au/LEGISLTN/CURRENT/C/CivilLiabA03.pdf>

##### **Child Protection Act 1999**

<https://www.legislation.qld.gov.au/LEGISLTN/CURRENT/C/ChildProtectA99.pdf>

##### **Department of Environment and Heritage Protection**

<http://www.ehp.qld.gov.au/>

##### **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 of written approval for special activities**

[http://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**

<http://www.deir.qld.gov.au/workplace/managing-whs/first-aid-and-emergency-plans/index.htm>

##### **HQPlantations Queensland**

<http://www.hqplantations.com.au>

##### **TGA (training.gov.au)**

[www.training.gov.au](http://www.training.gov.au)

##### **Queensland Fitness, Sport and Recreation Skills Alliance**

[www.skillsalliance.com.au](http://www.skillsalliance.com.au)

##### **Queensland Health**

[www.health.qld.gov.au](http://www.health.qld.gov.au)

##### **Department of Agriculture, Fisheries and Forestry**

<http://www.daff.qld.gov.au/>

##### **Queensland Rural Fire Service**

[www.ruralfire.qld.gov.au](http://www.ruralfire.qld.gov.au)

##### **Standards Australia**

[www.standards.org.au/](http://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**

[http://www.legislation.act.gov.au/sl/2011-36/  
current/pdf/2011-36.pdf](http://www.legislation.act.gov.au/sl/2011-36/current/pdf/2011-36.pdf)

### **Cultural heritage**

#### **Department of Aboriginal and Torres Strait Islander and Multicultural Affairs**

[www.datsima.qld.gov.au](http://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](http://www.datsima.qld.gov.au)

### **Risk management websites**

Australian Standard - AS/NZS ISO 31000:2009

Risk management - Principles and guidelines  
[www.riskmanagement.com.au](http://www.riskmanagement.com.au)

(including HB 246–202 Guidelines for managing risk in sport and recreation)

Commission for Children and Young People and Child Guardian — Risk management requirements  
[http://www.ccyipc.qld.gov.au/bluecard/risk-  
management.html](http://www.ccyipc.qld.gov.au/bluecard/risk-management.html)

How to Manage Work Health and Safety Risks  
[www.deir.qld.gov.au/workplace/law/codes/  
riskman/index.htm](http://www.deir.qld.gov.au/workplace/law/codes/riskman/index.htm)

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

[outdoorsvic.org.au/activity\\_standards\\_review.php](http://outdoorsvic.org.au/activity_standards_review.php)

#### **Tasmanian AAS:**

[http://sportandrecreation.tas.gov.au/sportrectas/  
publications/adventure\\_activity\\_standards](http://sportandrecreation.tas.gov.au/sportrectas/publications/adventure_activity_standards)

#### **South Australian AAS:**

[http://www.getoutandstayout.org/sa-adventure-  
activity-standards.html](http://www.getoutandstayout.org/sa-adventure-activity-standards.html)

#### **Western Australian AAS:**

[www.outdoorswa.org/page.php?id=7](http://www.outdoorswa.org/page.php?id=7)

### **Activity Specific Resources**

#### **Australian Rafting Federation**

[www.austraffed.com/](http://www.austraffed.com/)

#### **International Rafting Federation**

[www.intraffed.com/](http://www.intraffed.com/)

#### **Maritime Safety Queensland**

GPO Box 2595

Brisbane Queensland 4001

Phone: 07 3120 7462

[www.msq.qld.gov.au/](http://www.msq.qld.gov.au/)

## 8. 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 river rafting 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.

#### *Safety in Recreational Waters Activities Act 2011 (SRWA Act)*

This Act sets down the primary duty of the person conducting the business or undertaking (the PCBU). Under section 16 of the SRWA Act, PCBU has the primary duty to ensure, as far as is reasonably practicable, that persons for whom the recreational activities are provided are not exposed to health and safety risks arising from the provision of the recreational water activity. This duty requires the person to eliminate or minimise those risks so far as is reasonably practicable. It should be noted that certain offences under the SRWA Act constitute a crime and that the Criminal Code of Queensland may be applicable.

#### *Transport Operations (Marine Safety) Act 1994 (Qld) (the TOMS Act) and the Transport Operations (Marine Safety) Regulation 2004 (Qld) (the TOMS Regulation)*

The TOMS Act imposes general safety obligations on owners and masters (a person having command of the ship) about the condition and operation of their ships, namely that their ship is safe and operated safely. This extends to organisations operating river rafting activities.

Under the TOMS Act a ship is defined as any kind of boat or vessel used in navigation by water or for any other purpose on water, whatever the boat's size and however it is propelled. River rafts fall within the definition of a ship and are therefore subject to the provisions of the TOMS Act.

### *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 river rafting 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: Australian white water rafting rapid grading system 1995

### Grade 1

Rapids are small to regular waves. The passage is clear and easy to recognise and negotiate. Care may be needed with obstacles like fallen trees and bridge piers

### Grade 2

Rapids with regular medium sized waves (less than 1 m); low ledges or drops; easy eddies and gradual bends. The passage is easy to recognise and is generally unobstructed although there may be rocks in the main current, overhanging branches or log jams.

### Grade 3

Rapids with fairly high waves (1-2 m); broken water, stoppers and strong eddies; exposed rocks; small falls. The passage may be difficult to recognise from on the river and inspection from the bank may be required. Manoeuvring to negotiate the rapids is required.

### Grade 4

Difficult rapids with high, powerful, irregular waves; broken and confused water; often boiling eddies; strong stoppers; ledges; drops and dangerous exposed rocks. The passage is often difficult to recognise and inspection from the bank is preferable. Precise and sequential manoeuvring is required.

### Grade 5

Very difficult rapids with confused and broken water; large drops; violent and fast currents; abrupt turns; difficult powerful stoppers and fast boiling eddies; numerous obstacles in the main current. Detailed inspection from the bank is normally required and is strongly recommended for rapids not recently transited at the prevailing water level. Complex, precise and powerful sequential manoeuvring is required. A buoyancy vest equipped swimmer risks injury and this is the extreme for commercial operations.

### Grade 6

All previous difficulties increased to the limit of practicability. Nearly impossible, very dangerous and cannot be attempted without a definite risk of life.

## Appendix 3: Risk assessment for entrapment in white water

Entrapment within white water rapids provides a significant hazard that has had fatal consequences in a number of cases. Entrapment can occur when a passenger has been flipped or has fallen from the raft and a body part, usually their foot, becomes entrapped in rocks. The force of water along with the entrapment can then submerge the person leading to death from drowning.

In providing this example risk assessment, it is acknowledged that rivers are dynamic environments. The presence and location of submerged hazards may be difficult to identify and may shift after identification. Even professional guides and highly experienced participants experience risk when participating in river rafting.

While all the following steps should be implemented to the extent that is feasible, emphasis should be given to Step 3 (e)(ii), the pre-activity briefing, including practice and reinforcement of the white water floating position that participants should adopt if they find themselves in the water.

### Step 1—Identify the hazard

#### Hazard—entrapment: limb or body

Part of the hazard identification process is the identification of potential entrapment points in the routes to be taken through each rapid.

This information should be documented with maps and explanatory notes.

- If possible leaders and guides should scout the rapids at low water and other times of various water flows to identify and map dangers such as potential flip-over and entrapment points to avoid. Alternative rafting routes should also be identified and mapped. Ongoing monitoring of water flows should be a part of the on-site risk assessment.
- In the event of flip-over or the spill of rafters into the rapids, the likely path they would take through the rapids also needs to be identified.
- The location of cover positions that will enable rafters to be retrieved should be identified at this time.
- Scouting of the rapids should also be a part of the induction process for new guides.

The outcome of the above process should be a map showing:

- preferred paths and alternatives through the rapids that minimise the risk of flip-over or spill of persons overboard;
- locations where there is a risk of flip-over and accompanying notes setting out strategies for reducing that possibility;
- the location of known entrapment points;
- the locations of cover positions;
- accompanying notes that discuss alternative strategies for reducing risk to an acceptable level and identifying factors such as substandard crew work that might heighten risk beyond an acceptable level.

### Step 2—Control the risks

- Eliminate the hazard—Do not raft this particular rapid. Portage the rafts instead.
- Substitute the hazard for something safer—Choose an identified alternative safer route to raft this rapid.
- Isolate the hazard from people—Not applicable in this instance.
- Reduce exposure to the hazard through redesign or engineering controls—
  - › Find an alternative way down the rapid that reduces the likelihood of flip-over and avoids entrapment hazards.
  - › Increase the ratio of guides to rafters so that more assistance will be on hand if any rafters spill into the water.
  - › Change the number and location of covers at the rapid to speed up the retrieval of spilled rafters before they reach entrapment points.
- Administrative controls—
  - › Take steps to reduce the likelihood of flip-over through improving and maintaining the skill level of all leaders and guides. As well as in-house training, all leaders / guides to undertake as a minimum, training equivalent to the following competencies, which cover rescue from entrapment; from SIS10 Sport, Fitness Recreation Training Package:
    - For Grade 3 rapids – SISOWWR302A Demonstrate white water rescues and recoveries
    - For Grade 4 rapids – SISOWWR403A Perform complex white water rescues and recoveries

- › This training and other competencies shown on the Department of National Parks, Recreation, Sport and Racing website may also reduce the likelihood of flip-over.
  - All participants to be briefed so they clearly understand the hazards and how they can work as a team with the guide to avoid flip-over and the possibility of entrapment.
  - Ensure all participants are physically capable and sufficiently skilled to raft the rapids. If not, arrange portage for these participants over the rapids.
- Use personal protective equipment—See part 4.2.3 of the AAS for a list of equipment. Participants should have appropriate equipment and clothing for the duration and objectives of the trip.

### Step 3—Review control measures

All the above control measures should be reviewed regularly and after each flip-over and rescue incident to ensure they remain effective.

**Example—risk assessment for entrapment in white water**

**TULLY RIVER- SITE SPECIFIC RISK ASSESSMENT**

**Rapid:** Alarm Clock

**Grade:** 4

Hazards	Id	River height 36-44	River height 54-66	River height 72-88	River height 100+
1. Wall Flip	50D	Medium	High	Medium	Medium
2. Rooster-tail Rock (Clock Rock)	50D	Medium	Medium	Medium	Medium
3. Recirculating Hole	60D	Low	Low	Medium	Medium
4. Strainer & Under-cut (Trainees Trench)	90C	Low	Low	Medium	Medium

	<b>Low</b> —Monitor and manage
	<b>Medium</b> —Monitor and maintain strict measures
	<b>High</b> —Review and introduce additional controls to lower the level of risk
	<b>Extreme</b> —Do not proceed, immediately introduce further control measures to lower the risk. Re-assess before proceeding

**Controls**

1. Training & Knowledge
2. Training & Knowledge
3. Safety Training & Knowledge
4. Safety Training & Knowledge

**Safety Procedure**

First Guide eddies out far river left (10E), securing raft. (Guests may get out and watch in safe location).

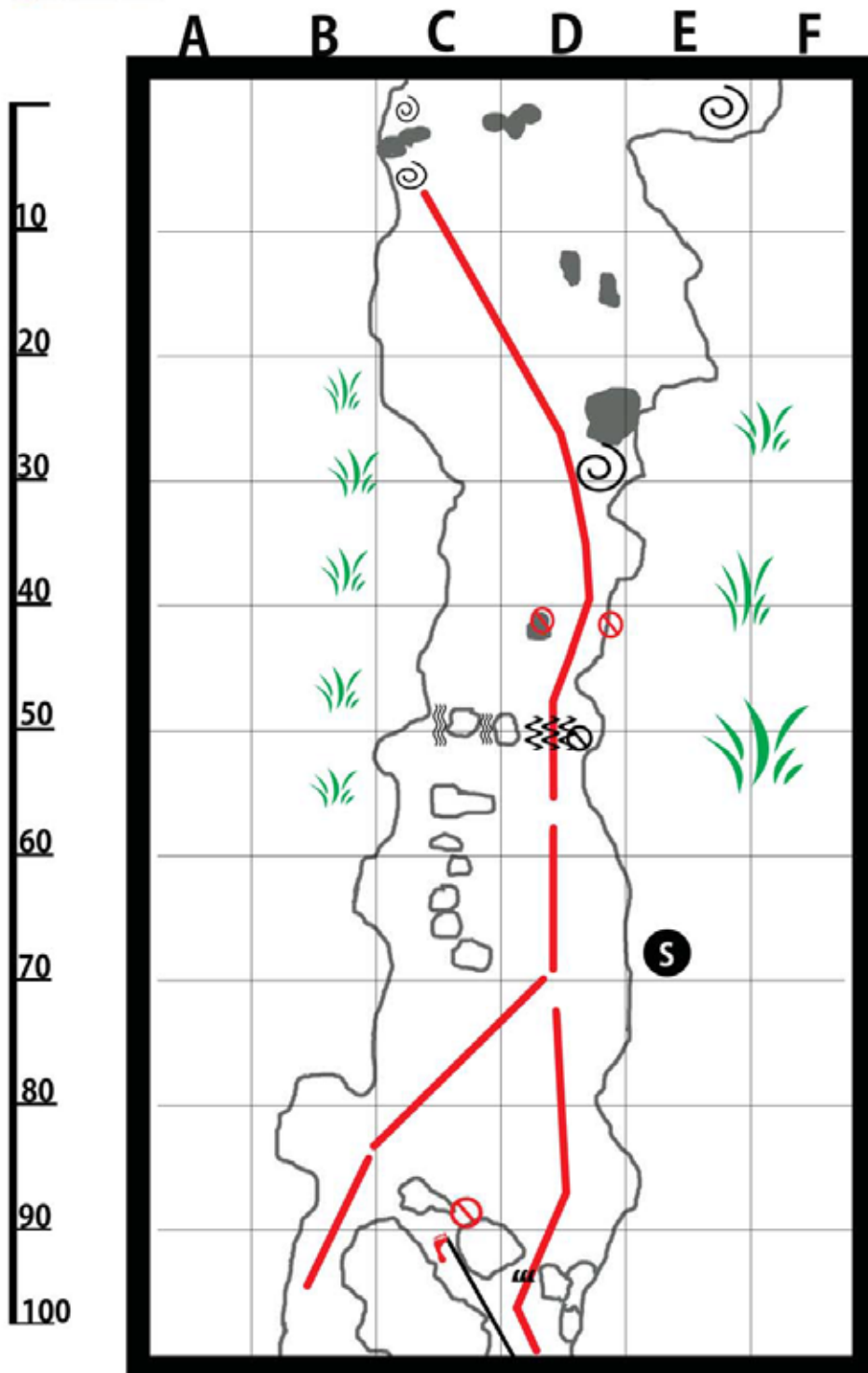
Guide walks down to safety point (70E) located opposite rocks above trainee’s trench. Guide should be in view of rafts at entrance to Alarm Clock, throw bag ready. Control rapid with appropriate signals. Objective here is to keep rafts and people away from trainee’s trench, as this is a known sieve, where rafts can wrap quite badly. Guide to delegate replacement Guide to perform safety at designated point.







Thanks to Raging Thunder for this exemplar Risk Assessment and Incident Map.



### RIVER INCIDENT MAP - ALARM CLOCK



### LEGEND

-  Danger
-  Foot Entrapment
-  Preferred Routes
-  Drop
-  Waves
-  Safety
-  Eddy
-  Riverbank

### Example Risk assessment and control

Fill in one form for each hazard identified.

Workplace activity: White water Rafting Ref. no: \_\_\_\_\_  
Form completed by: \_\_\_\_\_ (print name) \_\_\_\_\_ (sign)  
Date form completed: \_\_\_\_\_

#### Hazard identification

Hazard: Entrapment  
Associated risk: Drowning or injury to limbs  
Specific circumstances relating to the risk: Flip-over or collision causing one or more rafters to spill into the water  
Persons at risk: Anyone in white water

#### Risk assessment

Existing control measures (if any):

Likelihood (circle):	Almost certain	Likely	<u>Possible</u>	Unlikely	Rare
Consequences (circle):	Catastrophic	<u>Major</u>	Moderate	Minor	Insignificant

#### Risk control

Possible control options:

- Elimination
- Substitution, Isolation or Redesign/Engineering
- Administrative or personal protective equipment

Preferred control options (and why):

- Redesign—this option continues the rafting experience by finding a safer way through the rapids.
- Administrative—this option ensures that all leaders / guides / rafters receive thorough training to meet the risks.
- Personal protective equipment (PPE)—this option ensures all rafters are equipped with the correct equipment and clothing for the duration and expected risks they will face.

(continued over)

## Implementation plan

Control option	Associated activities	Resources required	Person(s) responsible	Proposed implementation date	Sign off and date	Scheduled review date
Redesign	Map alternative entry and exit routes and note possible entrapment sites. Increase ratio of guides to rafters.	Rafting organisation/leader and staff time. Equipment	Rafting organisation/leader			
Administrative	Training through registered training organisation	Time Finance	Rafting organisation			
PPE	as indicated in part 4.2.3.2 of the AAS	Finance	Rafting organisation/leader			

## Review

Are control measures in place?

- Yes  
 No, comment (why not):

\_\_\_\_\_

\_\_\_\_\_

Are controls preventing or minimising the risk?

- Yes  
 No, comment (why not):

\_\_\_\_\_

\_\_\_\_\_

Are there any new problems with the risk?

- No  
 Yes, comment (what are they):

\_\_\_\_\_

## Appendix 4: 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: River rafting – Russell River

HAZARD	RISK	RISK ASSESSMENT	CONTROL MEASURE	EVALUATION/ COMMENTS
Environment				
Contact with stinging trees	Painful sting	Prob M Mag L	Brief participants on stinging trees and include information in handouts Identify stinging trees for participants so they may avoid Maintain the rainforest track for overhanging stinging trees All Guides Senior First Aid trained Appropriate first aid kit with every guide	
Dead/Loose tree branches	Injury, tripping		Maintain tracks into and out of river ...	
Snakes	Venomous bites Shock Death	Prob L Mag H Prob L Mag H Prob L Mag H	Brief participants Wear closed in shoes on trail ... First aid kit with every leader Have access to emergency transport/ evacuation capacity e.g. carry communication equipment to call support	
Heavy rain	Rising water levels Unsafe conditions for rafting	Prob M Mag M Prob M Mag H	Staff trained in monitoring water levels Check of BOM for weather forecast Office staff to monitor rainfall & river levels Maintain vigilant communication with office for updated information	

HAZARD	RISK	RISK ASSESSMENT	CONTROL MEASURE	EVALUATION/ COMMENTS
People		Rate Probability & Magnitude as High, Medium or Low		
Ill Prepared participants	Stress Reduced involvement Put others at risk	Prob L Mag H Prob M Mag H	<p>Screen participants for suitability</p> <p>Medical questionnaire completed and reviewed by trip leaders</p> <p>Minimum of two guides on each trip</p> <p>Thorough briefing of participants on experience and expectations</p> <p>Maintain constant supervision of participants</p> <p>All participants to wear buoyancy vests correctly at all times (checked by guides)</p>	
Entrapment - limb or body	Drowning Injury	Prob L Mag H	<p>All leaders/ guides to undertake as a minimum, training to the equivalent of the following competencies shown in SIS10 Sport, Fitness Recreation Training Package:</p> <ul style="list-style-type: none"> <li>• SISOWWR302A Demonstrate white water rescues and recoveries</li> <li>• SISOWWR403A Perform complex white water rescues and recoveries</li> </ul> <p>Both of these competencies cover rescue from entrapment.</p> <p>All leaders/guides to ensure information and instructions set down in the Safe Operational Plan</p> <p>All participants to be briefed so they clearly understand the hazard and how they can avoid it or work with the guide to escape the entrapment.</p> <p>Ensure all participants are physically capable and sufficiently skilled to raft the rapids. If not arrange portage for these participants over the rapids</p>	



HAZARD	RISK	RISK ASSESSMENT	CONTROL MEASURE	EVALUATION/ COMMENTS
Participants not following instructions	Wrong entry to rapid Injury Capsize ...		Guides to give thorough safety briefing prior to commencement of a rapid including the order to negotiating the rapid & the way participants will know it is their turn to begin negotiating a rapid Guides to constantly monitor up and down stream & monitor participants who are waiting to ensure they remain in a safe place Guides supervise participants throughout to ensure they are holding their paddles correctly Guides ensure participants have their safety gear on at all times on the river Brief participants on river calls and communication ...	t
Injury to Guide/Leader	...	...	...	
Equipment				
Insufficient equipment	Loss of experience ...	Prob L Mag M	Trip leaders to check right amount of gear is packed including spares Record list of equipment taken before trip leaves base site	

HAZARD	RISK	RISK ASSESSMENT	CONTROL MEASURE	EVALUATION/ COMMENTS
Faulty raft	Leak Swimming Unable to complete river raft	...	All rafts checked prior to trip departing Any rafts with faults recorded and removed for maintenance Any rafts developing a leak during tour set aside for repair All rafts check for faults as they are packed up Brief participants on safety All participants to wear safety gear at all times on the river ...	
Faulty safety equipment	...	...	All gear checked prior to trip departing Any gear with faults recorded and removed for maintenance Any gear damaged during tour set aside for repair or retired depending on manufacturers' requirements All gear checked for faults as they are packed up Spare equipment packed including extra buoyancy vests or helmets All participants' safety equipment checked by guides to ensure they are fitted correctly & stay on for the duration of the trip ...	

HAZARD	RISK	RISK ASSESSMENT	CONTROL MEASURE	EVALUATION/ COMMENTS
Swimming in white water	<p>Foot/ body entrapment see Appendix 3</p> <p>Injury from impact with rocks/ objects in water</p> <p>Emotional distress</p> <p>Drowning</p>	<p>Prob L Mag H</p> <p>Prob M Mag H</p> <p>Prob M Mag M</p> <p>Prob L Mag H</p>	<p>Brief participants and provide with information to read</p> <p>All participants to sign Waiver of Liability to ensure they are aware of inherent risks</p> <p>All participants to wear buoyancy vests correctly at all times (checked by guides)</p> <p>All participants to wear helmets correctly while on river (checked by guides)</p> <p>Participants instructed not to intentionally enter the water</p> <p>Train participants to hold onto ropes if they fall out of rafts and guides will rescue them</p> <p>...</p>	

### **General Raft Control Measures in Place at all Rapids**

- Comprehensive safety talks given to all participants
- Guides conduct ongoing Dynamic Rafting Risk Assessments during the trip
- Guides to instruct customers to appropriately 'hold on' over every rapid unless they are needed to paddle
- Rafts to be fitted with Outside Lines so participants can hold onto the outside if they fall out or the raft capsizes
- Guides to always take the easiest, safest passage
- Guides to never intentionally position their raft in a place that will encourage customers to fall out
- Guides to provide constant rolling cover
- Guides to constantly watch up and down stream to monitor their surroundings
- Guides to ensure participants keep their safety equipment on at all times
- Guides to follow established rafting routes
- Guides to know specific rapid grading, river levels and site specific risks

**Thanks to Foaming Fury for this exemplar Risk Assessment and Management plan**

## Risk management plan

### Activity: Canoeing (Noosa River)

DANGER	RISK ITEMS	MANAGEMENT STRATEGIES	EVALUATION/ COMMENTS
Environment Sun exposure	Sunburn Dehydration Heat exhaustion/stroke	Participants advised on appropriate clothing and equipment. Clothing with sleeves must be worn under PFD'S. Participants carry minimum of 3L water. Refill stops. Particular pointers to apply sunscreen to backs of hands and inside thighs. Regular rest stops. Encourage peer reminders and monitoring. Monitor Weather.	
Winds	Capsizing, Entrapment (refer Appendix 3) Multiple Rescue Group Separation	Monitor winds before departure. White caps are an indication of thinking about strong management strategies or cancellation. Set safety guidelines- distance between canoes, whistles, rafting up. Set expectation of group travelling together. Participants are empowered to manage group distance and to show raft up sign if the group gets too far apart. Ropes are carried so that there is an option of tying boats together for more stability. Participants are briefed on capsizing procedures.	Where possible try to make the larger open water crossings earlier in the morning. Keep in mind hugging the bank or walking canoes as an option.
Rain	Wet Equipment Hypothermia	Pre-briefing and equipment list outlines appropriate clothing and wet weather gear. Participants are shown how to waterproof equipment. Group condition is monitored closely during wet weather.	

DANGER	RISK ITEMS	MANAGEMENT STRATEGIES	EVALUATION/ COMMENTS
Submerged Logs	Capsizing Entrapment (refer Appendix 3) Impact Injuries	Participants are briefed about the presence of submerged items. Participant behaviour is monitored around areas where submerged logs are prevalent. Participants are briefed on capsizing procedures.	
Dead Trees	Impact Injuries Canoe Damage	Participants are briefed about the dead trees and the likelihood of tree fall if a canoe hits. Participants are asked to care for equipment.	
Steep Banks	Sprains & Strains	Appropriate exits and entry points are chosen to avoid any difficulties. Use National Parks developed entry and exit points.	
Rubbish	Cut Feet Embedded Objects	Participants are expected to wear closed in shoes at all times.	
Environmental Impact	...	Participants are to be briefed on specific environmental factors that concern the Noosa River. This is supported by 'Leave No Trace' DVD. Ensure rubbish is 'carried out'. Ensure that the designated landing areas are used and no landing zones are observed.	
People	Loading & Unloading Canoes	Loading is supervised by adult. Participants are briefed about communicating with each other prior to lifting. A minimum of four participants are to carry a canoe. Canoes on the top rung are to be managed carefully.	
	Strains Finger injuries Damage to canoes		



DANGER		RISK ITEMS	MANAGEMENT STRATEGIES	EVALUATION/ COMMENTS
Poor Communication with Partner	Capsizing Entrapment (refer Appendix 3) Collision Emotional or Relationship Difficulties			
Split Up of Group	Lost Participants Unsupervised Participants	Set expectation of the group travelling together. Participants are empowered to manage group distance and to show raft up sign if the group gets to far apart. Set safety guidelines- distance between canoes, whistles, rafting up		
Swimming	Submerged Objects Spinal Injuries Drowning	Participants are expected to wear shoes and PFDs whilst swimming. Before entering the water the area should be assessed for hazards such as submerged logs or tree roots. The participants' medical form indicates whether they are confident to swim 50m which gives an indication of swimming ability. Safety guidelines should be set according to the area eg boundaries Swimming is to be supervised by an adult. No jumping or diving from jetties, banks or trees.		
Canoe collision	Finger injuries Paddle impact Damaged Canoes	Participants to be briefed in control strokes of canoeing (steering, emergency stops). Participants briefed on letting occupants of other canoes know if they are likely to hit their canoe.		

DANGER	RISK ITEMS	MANAGEMENT STRATEGIES	EVALUATION/ COMMENTS
Motorised Craft	Capsize Collision	Set expectation of group travelling together. Participants are empowered to manage group distance and to show raft up sign if the group gets to far apart. Set safety guidelines- distance between canoes, whistles, rafting up. Group should travel together so that motorised craft have space to manoeuvre. Group to travel close to banks where possible. Participants are briefed on capsized procedures.	This is of particular concern around Kin Kin Creek, Fig Tree Point and Como Reach areas.
Public	Ill will Reputation tarnished	Instructors should choose appropriate areas to brief and unload canoes so that public are not restricted in access and participants are not distracted. Instructors to monitor noise and behaviour of group.	
Equipment			
Canoe Faulty	Leaky canoe	General condition of canoes is monitored when loading and unloading of canoes and faults recorded. Canoe condition is checked yearly.	
Trailer	Canoes coming free from trailer Trailer coming off car	Suitably skilled adults are responsible for tying on canoes. The driver should check that canoes are securely on the trailer before driving away. The driver is responsible for checking that the trailer is sitting on the tow ball correctly and that the safety chain is secured.	

**Thanks to James McIntosh for this exemplary Risk Assessment and Management plan.**

## Appendix 5: 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. Guide	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.





