ADVENTURE ACTIVITY GUIDELINES

# Rafting

Schools must follow the Department’s [Excursions Policy](https://www2.education.vic.gov.au/pal/excursions/policy) and [Guidelines](https://www2.education.vic.gov.au/pal/excursions/guidance) and the requirements outlined in this document when planning, conducting and approving adventure activities.

These guidelines are for developing risk management plans specific to the location, activity and group participating. They are not intended to be used as a training manual. Staff instructing the activity must have sufficient knowledge/expertise in the activity.

Rafting activities usually involve the movement of participants down a river on inflatable crafts of various sizes, designed for more than two people. Many rafts have the capacity and buoyancy to carry equipment on extended journeys. Typically, rafting activities involve travelling on rivers where the gradient fall is sufficient to create white water, and may involve travelling through gorges. This guideline does not include paddling in canoe or kayak style craft including inflatable canoe and kayaks, sometimes referred to as sport rafts. Separate guidelines have been developed for [Canoeing and Kayaking.](https://nginx-php-content-policy-det-vic-gov-au-production.lagoon.vicsdp.amazee.io/sites/default/files/2020-04/Canoeing_PAL_Word_layout.docx)

Students must not be taken through rapids known to be or, in the circumstances, likely to be at or above Grade 4 (see the International River Classification System in these guidelines under definitions). Students must not self-guide rafts in situations where they may be swept into sections of moving water known to be at or above Grade 4.

Rafting activities conducted on open waters and moving water can pose an increased risk to students’ safety. Access to safe shorelines can become more difficult and group management and rescues more complex. Such raft activities require an emergency response plan which gives consideration to the:

* educational merits of the activity
* size, age and previous activity experience of the group
* skills and experience of the supervising staff
* prevailing, forecast and observed weather conditions
* availability of rescue vessels
* characteristics of the location.

These guidelines do not apply to activities using inflatable mattresses, student-built or staff-built rafts, or inflatable tubes.

If an overnight camping component is planned, please also refer to [Camping guidelines](https://nginx-php-content-policy-det-vic-gov-au-production.lagoon.vicsdp.amazee.io/sites/default/files/2020-04/Camping_PAL_Word.docx).

**definitions**

[Transport Safety Victoria – Maritime Safety](https://transportsafety.vic.gov.au/maritime-safety) provides the following definitions of waterways in Victoria to aid guidance of minimum safety equipment and preparation:

**Inland waters** – rivers (inside the seaward entrance), creeks, canals, lakes, reservoirs and any similar waters either naturally formed or man-made and which are either publicly or privately owned but does not include any navigable rivers, creeks or streams within declared port waters.

**Enclosed waters** – any declared port waters inside the seaward entrance. See the [Victorian Recreational Boating Safety Handbook](http://transportsafety.vic.gov.au/maritime-safety/recreational-vessel-operators/powerboat/victorian-recreational-boating-safety-handbook) for all listed port waters.

**Coastal waters** – all waters other than inland waters or enclosed waters, including all beaches with direct access to ocean waters, any beach exposed to ocean swell, and any beach that is exposed to currents, rips, strong winds or surf. This may include enclosed waterways at times with these features.

In addition to the definitions above, this document uses the following terms for specific types of waterways:

**Flat water** – non-flowing water not affected by tides or currents and relatively sheltered from wind.

**Open water** – a wide body of water than has the potential to be greatly affected by wind.

**Swift water** – flowing river water which may be categorised according to the international river classification system. This covers water commonly known as ‘swift water’ or ‘white water’. This covers water commonly known as ‘moving water’ or ‘white water’ but also refers to flowing water which may not look either ‘swift’ or ‘white’ to an observer.

**Coastal offshore** – all waters greater than two nautical miles from the coast.

## International river classification system

**Grade 1:** slow to fast moving water with few or no obstacles. There may be river features such as strong currents, ripples and visible eddy lines present. Passages are wide open and easily discerned from the river.

**Grade 2:** well defined rapids with obstacles and regular features such as waves. Passages are open and obvious without scouting yet, may require manoeuvring.

**Grade 3:** rapids with regular features that require manoeuvring to negotiate. Passages can be narrow and features such as holes and irregular waves must be run to negotiate the rapid. Higher risk of injury.

**Grade 4:** rapids with highly irregular features. Complicated passages that often include vertical drops and may require scouting to find safe passages. Linked manoeuvres are required in convoluted passages. Increased risk of injury and possible risk to life.

**Grade 5:** rapids with violent and irregular features. Extremely congested passages that require scouting to determine safe routes. Most Grade 5 rapids include vertical drops and require running large-scale features in a complex series of manoeuvres. Definite risk of serious injury and possible risk to your life.

**Grade 6:** the difficulties of Grade 5 taken to the extreme. Rapids with extremely violent and complicated features where experts require considerable advance scouting and planning to determine possible passages. All Grade 6 rapids require the paddler/s to negotiate powerful rapids and large technical features. Always a risk to life. Generally only possible at certain water levels.

## Staffing definitions

**Staff** – any adult approved by the principal who provides supervisory, instructional or educational elements of the activity or excursion. See [Excursions Guidelines – Staffing](https://www2.education.vic.gov.au/pal/excursions/guidance/staffing-roles-and-responsibilities) for further details.

**Teacher** – a staff member registered with the Victorian Institute of Teaching who provides a supervisory role on a program.

The following roles can be filled by school staff, a teacher, an external provider or a volunteer (See: [Volunteers in Schools Policy](https://www2.education.vic.gov.au/pal/volunteers/policy)):

**Designated Instructor** – the appointed staff member on a program who provides the lead technical expertise and supervision for the activity.

**Instructor** – a staff member who provides professional, technical expertise and supervision for the activity.

**Assistant Instructor** – a staff member who provides assistance to the instructor(s) in the provision of technical expertise and supervision for the activity.

**Raft Guide** – the staff member in charge of guiding the raft down the river. Where there is more that one raft, there will be more than one raft guide. This role may be undertaken by the designated instructor.

## Student preparAtion and skills

Planning for rafting activities should begin with an assessment of students’ current knowledge, skills and experience in relation to rafting, swimming and water environments.

Students can be classified as either:

* **Beginner swimmers**

Students with little or no experience including in shallow water.

* **Intermediate swimmers**

Students with basic skills, able to swim 25 metres with a recognisable stroke.

* **Advanced swimmers**

Students able to swim 50 to 100 metres using two recognisable strokes and to demonstrate one survival stroke in deep water.

Schools must consider the swimming competency of students in particular water environments when deciding on the venue, staff-student ratio, risk management plan and emergency response plan. If the activity is to take place in swift water, it is recommended that staff or instructors assess students swimming ability in the designated swift water environment.

The assessment of students’ current knowledge, skills and experience in the activity should be documented using [Documentation of Participant Preparation, Prerequisite Skills/Knowledge](https://www.education.vic.gov.au/Documents/school/principals/safety/participrep.doc)​.

The instructor should ascertain the previous experience of each student.

Instructional staff must brief students on:

* equipment, clothing and footwear that is suitable for the activity and location
* safety measures appropriate to control risks associated with the activity and the environment
* minimal environmental impact techniques relevant to the activity and location
* historical and cultural considerations relevant to the activity and location
* activity scope and boundaries
* communication and communication signals
* relevant terminology.

A basic introductory briefing must also include:

* activity scope and boundaries
* equipment use
* the response of students in the event of a capsize or someone falling in
* principles of self-rescue
* communication and signals
* float and swimming methods
* explanation of relevant rafting terminology.

Students should also undertake navigation training suitable for the location and activity.

In addition, when paddling on moving water, students must be instructed on:

* basic water behaviour and hydrology
* how to enter, sit and move about in craft securely and safely
* specific boat based risks, such as impact and entanglement which are associated with paddle T grips, branches, ropes and straps and how to manage these
* specific swimming based risks such as entrapment, associated with underwater obstacles, strainers, sieves and stoppers and how to manage these
* raft flip/righting procedure and what to do if caught in or beneath the raft
* re-entering and assisting others to re-enter raft
* appropriate swimming and self-rescue techniques including, defensive and aggressive swimming
* how to receive a throw bag.

To self-guide rafts on moving water or white water, students must be able to:

* control their craft effectively
* identify river features including the area of main current flow, eddies and eddy lines and safe eddies
* break in and out of the current
* ferry glide across the current
* swim into a safe eddy
* empty a capsized raft, if not self-bailing
* manoeuvre a capsized raft to shore
* perform raft flip/righting technique
* assist swimmers back into raft
* identify and avoid river hazards including strainers, sieves and stoppers.

In some cases, parts of briefings and instruction may occur on or next to the water/swift water. Supervising staff must be able to provide close instruction, supervision and seek acknowledgement of understanding.

Rafts can be heavy and awkward to carry. Students must be shown safe methods to get paddle craft on or off waterways and boat landings.

Students must be instructed on safe lifting techniques for carrying and lifting canoes if required to do so. For assistance in the determination of appropriate lifting techniques, load sizes and weights, please see WorkSafe’s [Manual Handling Topic.](https://www.worksafe.vic.gov.au/hazardous-manual-handling-safety-basics)

## Equipment

All equipment used must be in sound condition, and must meet applicable industry safety standards. It is important that all craft and equipment be suited to the activity and the environment in which it is undertaken.

##### Rafts

Construction of rafts, including air chambers and buoyancy and the requirements for perimeter grab lines and D-rings must comply with International or Australian Standards (AS 2677 – Inflatable boats). Craft type and size should be matched to the activity undertaken.

When the raft is fully inflated, the perimeter grab lines threaded through the D-rings on the side of the raft should be taut.

A bow and stern line must be securely attached to the raft. All rope must be managed in a manner that it cannot cause entrapment.

Types and sizes of rafts should be selected based on their suitability for the river section, the water level and the abilities of the participants. Manufacturers’ raft weight load limits for people and equipment must not be exceeded.

Small inflatable plastic, single chamber rafts are not recommended for rafting activities. These can only be used in grade 1 or 2 rapids, in non-remote locations where access and support are readily available.

##### Repair equipment

Repair methods and equipment will vary according to the construction materials of the craft. Temporary repairs may be undertaken as long as the structural integrity of the craft is maintained. Temporary repairs are to be replaced with more permanent repairs prior to the next use.

##### Helmets

Helmets specifically designed for water activities must be worn when participating in a rafting activity on moving water or where the activity involves entry or exit through a surf zone. Otherwise, helmets may be worn after consideration of:

* students’ rafting experience and skills
* the risk of participants sustaining a head injury due to the nature of the activities being undertaken during the session, for example, running on top of the rafts or using paddles in games.

##### Paddles

Paddles must be:

* buoyant
* of construction appropriate to the activity.

Paddles should be the correct length for the paddler and type of paddling activity to avoid injury.

As a minimum, a spare paddle should be carried on each guided boat for rafting trips.

##### Life jackets

The wearing of a securely fitted Australian certified life jacket is required under Victorian marine safety law on all paddle craft that are underway on all Victorian waters. Type 2 ­– Level 50 life jackets are considered the most appropriate for rafting activities. See: [Life jacket laws](http://www.wearalifejacket.vic.gov.au/lifejacket-laws).

##### Rescue equipment

Rescue equipment that is suitable for the location or trip and category of water conditions must be in good condition, securely stored and readily accessible. Staff must be proficient in its use. Under the Maritime Safety Act, a bailer or bilge pump is required for human powered vessels, which include canoes, kayaks and rafts. Other key safety equipment items that should be carried (in a swift water environment this is required) include a towing system, rescue knife, throwbag, whistles, wrap or pin kit and a repair kit.

##### Overnight excursions

For any overnight programs ensure all essential dry equipment, for example, food, clothing, sleeping gear, stoves, camping equipment, communication equipment is carefully stored in a waterproof manner. Do not use drums that have been used to store chemicals. All contents should be secure within the craft. Contents must not impede the handling of the craft or become a hazard in the event of capsize.

## Clothing

Participants must dress in a manner that will not hinder flotation. For example, heavy boots or bulky clothing must not be worn. Life jackets must be the outermost layer. Participants must wear footwear suitable both for in the craft and for use in the event of capsize or a walkout. Wear well secured sunglasses. Do not wear loose jewellery. Rings, if worn, should be removed or taped. A complete change of clothing should be available.

## Experience and qualifications

Staff instructing the activity should have sufficient knowledge and experience of the activity and the activity environment to operate in all reasonably foreseeable conditions.

The designated raft guides must have one of the following:

* a raft guide qualification, or proven equivalent, or National Training Package units of competency appropriate for the level of activity being undertaken
* equivalent documented training and experience from another training provider or education institution.

It is considered best practice that the designated guide must have taken a familiarisation trip or has conferred with others who have recent experience on the river and know the area well.

Raft guides must have their own rescue equipment, suitable for the location and activity. For each guide, as a minimum this should (in swift water environments these are required) include:

* a throw rope, flipline, safely protected river knife and whistle
* access to equipment to perform a ‘mechanical advantage’ rescue.

The designated guide must have the following abilities, experience, knowledge and skills:

* rafting techniques
* raft repair and maintenance
* rescue skills
* rafting instruction
* group management
* local and catchment area knowledge
* weather observations and forecasts.

In some instances, it may be appropriate to employ assistant paddling staff instead of qualified guides as part of the supervisory staff allocation for aquatic activities. An assistant staff leader may hold a qualification such as a Certificate III in Outdoor Recreation with paddling units or have equivalent paddling training and experience. Employing an assistant in the ratio of leaders to participants should only be done after careful consideration of the nature of the paddle activity to be undertaken, the experience of the staff and group, the location and body of water, the paddling conditions and after satisfying any risk management requirements.

The designated assistant must:

* have experience in the activity at the level being offered to students
* be able to assume a supervisory role during the activity
* have the ability to participate competently in emergency response procedures
* have conferred with the guide on the safety requirements of this role.

The designated assistant should have:

* proper paddling techniques
* rescue skills
* group management skills.

[Documentation of staff qualifications and experience](https://nginx-php-content-policy-det-vic-gov-au-production.lagoon.vicsdp.amazee.io/sites/default/files/2020-02/excursion_staff_qualifications.docx) must be used to document staff experience and training in lieu of the listed qualifications.

Where an external contractor is chosen to run all or part of this activity, see: [Excursions Guidelines – External Providers](https://www2.education.vic.gov.au/pal/excursions/guidance/external-providers).

## Supervision

Supervision is a critical factor in managing risk in the outdoors.

A minimum of two staff members must be present for each activity, one with responsibility for activity instruction and the other able to assist the instructor.

It may be necessary to increase the staff allocation based on ability to observe or monitor students on activity with consideration to:

* students (medical conditions, age, physical, mental and emotional maturity, ability and experience)
* group (dynamics and size)
* staff (medical conditions, age, ability and experience, qualifications and skills)
* location (remoteness, communications and environmental conditions).

Reasons for increasing staff allocations must be documented.

The following table shows the minimum staff-to-student allocation that must be used for rafting activities.

|  |
| --- |
| Grade 1–3 Rafting |
| Staff numbers\* | Participant numbers |
| 2 | Up to 12 |
| 3 | 13–18 |
| 4 | 19–24 |

\* Minimum two designated guides that meet the experience/qualifications criteria. Additional staff must have experience in the activity at this level. Any staff member who is not a designated guide or assistant guide is counted as a participant in the supervision ratios. These staff still have a supervisory role of the students during the activity.

The table above indicates minimum guide allocations. Different rivers and river levels may require smaller groups or additional guiding staff.

Group size should not exceed 30 participants in one group for rafting activities. This number may need to be lowered to comply with maximum numbers allowed by land managers. There should be a minimum of two craft for any rafting activity.

Where students are in rafts without guides, the trip leader and guides must consider how this will affect the management of the group. Guides must maintain at least the same guide to student ratio as for guided rafts and may require a greater number of staff.

The teacher in charge is responsible for the supervision strategy, which must be endorsed by the school principal as part of the excursion approval process. Staff members must supervise students according to that strategy and in accordance with their duty of care. It is the role of the teacher in charge to clearly and adequately explain the supervision strategy to all participating staff members.

Students not directly participating in the activity must be separately supervised in line with [Excursions Guidelines – Supervision](https://www2.education.vic.gov.au/pal/excursions/guidance/supervision).

## Peak bodies and expert advice

Paddle Australia <https://paddle.org.au/>

Paddle Vic <https://vic.paddle.org.au/>

Victorian Rainfall and River Height Data <http://www.bom.gov.au/vic/flood/index.shtml?ref=hdr>

Transport Safety Victoria – Maritime Safety <https://transportsafety.vic.gov.au/maritime-safety>

Outdoors Victoria <http://outdoorsvictoria.org.au/>

For further queries please contact community.stakeholders@education.vic.gov.au

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