Kayaks and canoes
Safety reference guide
RESPECTING OUR WATERS

Be smart. Paddle safe.

sa.gov.au/boatingmarine
Introduction

The Be smart. Paddle safe. Safety Reference Guide is to be used as a guide only and is based on the Harbors and Navigation Act 1993 and associated Regulations, which includes reference to the Prevention of Collisions at Sea Regulations and safe operation recommendations.

The Department of Planning, Transport and Infrastructure (DPTI) is South Australia’s marine authority responsible for the many functions associated with the use of the State’s navigable waters, including marine safety, education, information and enforcing boating safety laws.

The overriding theme to any law that regulates what we do on the water is safety - to be as safe as possible while you enjoy the many pleasures of paddling your craft. Everyone is responsible for thinking about safety and knowing the rules.

DPTI gratefully acknowledges the support and assistance provided by the Office for Recreation and Sport and Paddle SA (formerly known as Canoe South Australia) in the preparation of this guide.

You are encouraged to read this guide regularly to keep its contents fresh in your mind.

Be smart. Paddle safe.
You’re responsible

Although a kayak or canoe has no engine and the paddler does not need a licence, he or she is in charge of the vessel and is responsible for their own safety and that of any other persons on board.

While paddling a canoe or kayak may look simple, without instruction you may be setting yourself up for injury or worse.

Training courses for canoeing and kayaking are available for all skill levels and it is strongly recommended that you attend training with a qualified training instructor.

Paddlers must observe the boating rules of navigation, carrying of safety equipment, alcohol and drugs etc.
Human powered kayaks and canoes do not require registration or the operator to hold a boat licence.

A person who is 16 years of age or above may operate a canoe or kayak fitted with an electric motor of not more than 150 newtons, with a marine grade closed cell 12 volt battery in protected or semi-protected waters without any requirement for registration or motor boat operator’s licence.

When a vessel is fitted with any other type of engine or motor it must comply with the requirements of motor powered recreational vessels (registration, registration numbers displayed, boat operators licence and carriage of safety equipment).
Before setting out plan your trip and take maps where possible. You should also:

- check the Bureau of Meteorology website for the latest forecast, weather updates and tide information [www.bom.gov.au](http://www.bom.gov.au)

- plan short trips so that you come back with the wind, current or tide as this is when you are likely to be tired

- familiarise yourself with the area you intend to paddle

- seek local knowledge if paddling in unfamiliar waters for potential hazards

- ensure your vessel is suitable for the area you will be paddling, that it is fit for purpose

- check your canoe or kayak prior to each trip for leaks, damage, frayed cables or missing fasteners and general seaworthiness

- ensure you have the required safety equipment for the area you are paddling; check it is accessible, in good working order and correctly stored

- tell someone where you are going, your point of departure and when you expect to return

- always confirm your safe return

- carry sufficient drinking water, food and sun protection.
Safety tips

- Paddle in a group to maximise your safety and keep within voice range.
- Wear bright coloured clothing that is suitable for the conditions to ensure you are visible to other people on the water.
- Attach reflective tape to your vessel, paddles and lifejacket to increase visibility.
- Secure your paddles to your vessel with a paddle leash so you don’t lose them unless you are near or in surf. Stow the leash when paddling in surf or any other conditions where you may become tangled in it.
- Stay close to the shoreline or riverbank where possible and don’t venture too close to cliffs with rebounding waves.
- When in surf or exploring rocky areas, paddlers should wear approved helmets.
• Make sure your skills and fitness level are adequate for the area and the conditions you are paddling.

• Keep a proper lookout; be aware of hazards and changing conditions.

• When paddling on the River Murray or its backwaters be alert for other water-users and hazards. Paddlers should also keep well clear of the weirs, both upstream and downstream due to water turbulence and take care when manoeuvring the craft around or through locks.

• Although not part of the required safety equipment, when operating in protected and semi protected waters where you may be operating within mobile phone range, you may consider carrying a mobile phone (carried in a waterproof bag or container) as a means of communication to raise the alarm if necessary or advise of a change to your plans.
Sea kayaking is a complex activity in a demanding environment. We strongly suggest that you take instruction from qualified instructors, and that you always paddle as a group of at least three or four.

**Choice of sea kayak**

Choose a seaworthy craft to suit you and the conditions you are likely to experience. Be aware of the limitations of the sea kayak you are paddling. Realise that you will need to be committed to learning and practising the skills and techniques necessary. Trial different kayaks and learn from qualified instructors, other kayak owners and retailers about the pros and cons.

**Fitness**

Fitness is critical for enjoyment and survival. If weather or sea conditions worsen, you may need energy in reserve to complete your journey. Be conservative in your plans until you have suitable fitness and experience.

**Safety equipment for unprotected waters**

Ensure your kayak is equipped with the right safety equipment. It is also recommended that you take:

- first aid kit and have the skills to use it
- water and food - take a little extra in case of emergency
- warm dry clothing in a dry bag
- repair kit suited to the kayak and the proposed trip.

**Assisted rescue**

- Seek instruction and practise the various methods of rescuing and being rescued – these are essential skills
- Carry a 15 metre tow rope and know when and when not to use it.
Capsize and self rescue

• To minimize capsize risk, learn support and bracing strokes.

• If you fall out, stay with the kayak - a kayak is a lot easier to spot in the water than a person.

• Learn the paddle float rescue, paddle float roll or re-enter and roll.

• If capsized, the best self-rescue is the Eskimo roll – learn how to do this.
It’s very important to know about the likely weather and water conditions before you start your trip. Learn how to read a weather map, check the latest forecast and keep an eye on your local conditions, which may be different from the general forecast. Check the Bureau of Meteorology (BOM) for up to date conditions and once on the water, keep a watch for signs of approaching bad weather.

- www.bom.gov.au
- Warnings 1300 659 215
- Call BOM on 8366 2600 for further information

Wind can change direction and strength very quickly. You need to understand the following terms when reading a weather report:

- when wind is mentioned in forecasts it refers to the average wind over a 10 minute period at a height of 10 metres
- gusts are increases in wind speed lasting for just a few seconds; they typically range 30-40 percent greater than the average wind speed
- squalls are a sudden large increase in wind speed (usually accompanied by a change in wind direction) that can last for several minutes or up to half an hour and then suddenly dies.

The BOM issues wind warnings – wind speeds of the various warnings are as follows:

- strong wind warning – 25-33 knots
- gale warning – 34-47 knots
- storm warning – 48 knots and more.

*Note:* wind speed over the water is given in knots – 1 knot is equivalent to 1.85 kilometres per hour
As a guide to interpret wind speeds:

- novice and inexperienced paddlers – limit yourself to flat sheltered waters with light winds - <11 knots or 19km per hour
- paddlers with moderate skills – limit yourself to moderate conditions with winds - <17 knots or 29km per hour and waves <0.5 metres
- skilled paddlers - limit themselves to fresh conditions - <25 knots.

Waves are a major cause of accidents on both inland and coastal waters. A forecast of the height of the waves refers to the average wave height of the highest one third of waves – the largest waves may be up to twice that size.

**Check the weather before heading out and if in doubt don’t go out**
Safe loading

Overloading your craft seriously reduces stability making your vessel more likely to capsize.

If the craft is a decked canoe or kayak or is otherwise fitted with individual cockpits, the number of persons carried on the craft must not exceed the number of individual cockpits in the craft irrespective of the age of the person.

Follow the manufacturer’s guide for the recommended weight capacity and the number of people your vessel is designed for and stow all items securely.

Remember overloaded and unevenly loaded vessels or craft with unsecured loads are unstable and dangerous.
The most obvious of the navigation rules to be followed are:

- in a river, creek or marked channel keep to the right hand side of the waterway in the direction you are travelling
- it can be safer to operate outside of the marked channel where large vessels are operating in harbours or in high speed areas
- observe give way rules but be aware not all vessels may be able to see you or stop quickly
- when crossing a channel ensure you don’t interfere with other vessels
- observe navigational signage (refer section on Buoys, marks and beacons)
- between the hours of sunset and sunrise or in periods of reduced visibility a waterproof torch is to be used to indicate your presence in time to prevent a collision.
Kayaks and canoes or similar unpowered vessels are required by law to carry the items of safety equipment listed below - paddlers should be aware of what equipment is required for the area they will be paddling in.

**NOTE:** Legislation has been amended and we now refer to Personal Flotation Devices (PFD) as lifejackets. The various PFD types are now referred to as Levels – Level 100 or higher (PFD Type 1), Level 50 (PFD Type 2) and Level 50s (PFD Type 3)

**PROTECTED WATERS** are inland waters other than Lakes Alexandrina, Albert and the Coorong

**SEMI PROTECTED WATERS** are inshore of a line 2 nautical miles seaward of the low water mark of the mainland coast & Kangaroo Island or of the banks of Lakes Alexandrina and Albert

- Approved lifejackets Levels 100 or higher, Level 50 or 50S must be worn at all times, be of an appropriate size for the wearer and properly adjusted
- Bailer with line attached or other suitable device for removing water (excluding vessels with permanently enclosed hulls)
- Waterproof buoyant torch (sunset to sunrise)
**UNPROTECTED WATERS** are offshore of a line 2 nautical miles seaward of the low water mark of the mainland coast & Kangaroo Island or of the banks of Lakes Alexandrina and Albert.

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Requirement</th>
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<tbody>
<tr>
<td>Approved lifejackets</td>
<td>Levels 100 or higher or Level 50 must be worn at all times, be of an appropriate size for the wearer, properly adjusted and have a whistle attached.</td>
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<tr>
<td>Bailers with line attached</td>
<td>or other suitable device for removing water (excluding vessels with permanently enclosed hulls).</td>
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<tr>
<td>Waterproof buoyant torch</td>
<td>(sunset to sunrise)</td>
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<tr>
<td>1 litre fresh water</td>
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<tr>
<td>Spare paddle</td>
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<td>'V' sheet</td>
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<tr>
<td>Tow line (minimum 15 metres in length)</td>
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<tr>
<td>406MHz EPIRB</td>
<td>must be registered with AMSA.</td>
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<tr>
<td>Compass</td>
<td>(liquid damped magnetic, fixed to vessel)</td>
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<tr>
<td>Two flares and two smoke signals</td>
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<tr>
<td>Navigation Chart</td>
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# **not required if travelling with at least two similar vessels or support vessel PROVIDED that at least one vessel carries all listed safety equipment AND vessels stay within 50 metres of the equipped vessel at all times**
Buoys, marks and beacons are like marine traffic signals and have particular meanings – warning of dangers, directing you to deep water and keeping you on the correct side of a channel. You need to understand and recognise these whether in the River Murray or on coastal waters.

If you notice any buoys, marks or beacons that are damaged, in poor condition or not working, contact the DPTI Traffic Management Centre on 1800 018 313.
**Lateral**

- When entering a harbour, or travelling upstream on a river:
  - Pass on your Port
  - Pass on your Stbd

- When leaving a harbour, or travelling downstream on a river:
  - Pass on your Port
  - Pass on your Stbd

Refer to shape in poor light as colour may not be obvious. Vessels underway must keep to the starboard (Stbd) side of the channel.

**Blocked Channel**

- Day Shape: Pass on your Port
- Night Shape: Pass on your Stbd

At night display lights Red over Green over Red

**Cardinal**

- North Cardinal (safe water to north): Continuous quick flashes.
- West Cardinal (safe water to the west): 3 flashes in a group.
- East Cardinal (safe water to the east): 3 flashes in a group.
- South Cardinal (safe water to the south): 6 flashes in a group & 1 long flash. Fitted lights are white.

**Special**

These markers indicate Pipe Outfalls, Spoil Grounds, Fish Farms, Oyster Leases and so on. Navigate with care. Markers will flash yellow when lit.

**Isolated Danger**

**Safe Water**

- KEEP WELL CLEAR: safe water all around. 2 white flashes in a group when lit
- Indicates navigable water all around the mark. Sometimes used as a mid-channel buoy. If fitted, white light will be ISO phase, occulting showing long flashes every 10 seconds or morse 'A'.
All operators of vessels need to be aware of the risks associated with different types of vessels using the water at the same time.

- **Large vessels:**
  - often cannot see small vessels from their bridge (steering position)
  - can have a blind spot that extends for many hundreds of metres
  - can travel at deceptively high speeds – more than 20 knots
  - cannot alter course quickly and cannot stop quickly
  - can cause propeller (prop) wash and bow waves (waves and turbulence) which may lead to capsize.

- **Small vessels should:**
  - never assume that they have been seen
  - keep a constant watch (look and listen) for hazards including other vessels
  - cross channels at the shortest distance and only when safe
  - avoid shipping activity around wharves
  - be aware of prop wash and bow waves.
Size matters - be prop aware

Just as your craft makes waves, so do big vessels - waves big enough to cause capsize. Keep well clear of large vessels, and if you do have to cross their waves do so head on.

Smaller vessels should be aware of propeller (prop) wash, bow waves and turbulence from propellers. This disturbed water may extend for hundreds of metres behind large ships and is best avoided.

Bow waves are large surface waves that can swamp a small vessel hundreds of metres away from the ship.

The general rule is simple: if it’s larger or faster than your craft, keep out of its way.
Alcohol and drugs
It’s an offence to operate a vessel (powered or unpowered) and to have a blood alcohol concentration (BAC) of **0.05 or more**; or to be under the influence of alcohol or drugs.

A person does not have to be **0.05 or more** to be charged with driving under the influence. If you are incapable of exercising effective control of the vessel or fulfilling your duty on the vessel due to alcohol or any other drug you can be charged with operating under the influence.

Alcohol and drugs, both illicit and prescription, may impair your ability to make sound decisions and affect your co-ordination which may cause you to capsize.

Other effects include:
- slower reaction time
- poor judgement
- reduced visual attention and hearing
- a false sense of confidence leaving you less able to cope with unexpected events
- increased effects of hypothermia.

If you are on prescription drugs, ask your doctor or pharmacist if they will affect your ability to operate a vessel safely.
Hypothermia

Paddlers have a greater exposure to the elements than most and boating in cooler weather means a higher risk of developing hypothermia from wind-chill, capsizing or damp and wet clothes.

Hypothermia is the effect of heat loss from the body. Immersion in cold water causes the body to lose heat up to 25 times faster than normal.

Sudden immersion in cold water can be life threatening especially to people who are older, unfit or under stress from being in the water.

So plan and prepare to avoid hypothermia:

- attend a recognised course to learn support and rescue techniques
- check the weather and if in doubt, don’t go out
- wear clothing appropriate for the weather and location
- avoid alcohol - this increases the body’s heat loss
- if you capsize and cannot get back into your vessel adopt the huddle or H.E.L.P (Heat Escaping Lessening Posture) position to reduce heat loss
- minimise swimming or strenuous activities.
### Signs of hypothermia may include:
- lethargy and difficulty in reasoning
- poor sense of touch and clumsiness
- slurred speech
- developing muscle rigidity
- swollen lips, hands and feet
- rigid muscles
- very slow, weak pulse and breathing
- unconsciousness
- cold and bluish-grey skin
- dilated and unresponsive pupils.

### Treatment may include:
- keep the person under continuous observation
- do not massage their skin
- shelter them in a warm environment
- replace wet clothes with dry clothes
- restore core temperature gradually
- share body warmth with them
- apply gentle warmth to head, neck, chest and groin
- give warm sweet drinks (not alcohol), if conscious
- seek medical advice as soon as possible.
Reporting incidents

If you observe or experience careless or dangerous operation of a vessel you can report the matter to the Marine Operations Section on 1300 183 046 or email the Boating Safety Unit at dpti.recreationalboatingunit@sa.gov.au.
If your craft is involved in an accident or incident or if you witness an incident you have a legal obligation to stop and provide assistance. Where additional assistance is required and you have a mobile phone with you dial 000 to alert the appropriate authority.

If you are involved in an accident that results in death, or injury requiring medical attention to any person, or damage to property exceeding $300, the matter must be reported to a police officer nearest the place of the incident or a Marine Safety Officer within 48 hours of the event.

You will be required to provide the time and place of the incident, the circumstances, names and addresses of witnesses and the nature of the property damage or loss. Forms are available from police stations or a vessel accident report form can be downloaded from the website at www.sa.gov.au/boatingmarine under the heading Boating and marine safety. If you do not have access to the internet, telephone the Boating Safety Unit on 1300 183 046 and a vessel accident report form will be sent to you.

The 1300 183 046 number is staffed during normal office hours and a message can be left at other times.
Education - Marine Safety Officers
Marine Safety Officers undertake a variety of activities to ensure all water users are aware of safety and navigation rules and act responsibly. Educational activities include talking to vessel operators on the water and promoting safety messages within the community and at special events.

Marine Safety Officers patrol the navigable waters of the state, monitor behaviour of all water based activities, conduct alcohol breath tests and examine vessels to make sure they are seaworthy and carrying the correct safety equipment.

These officers may caution or fine vessel operators (both powered and unpowered craft) and crew members (including water skiers), prevent vessels from being launched, or direct vessel operator’s to move inshore or return to shore.
Murray Watch - River Murray

Murray Watch is a seven day a week contact point where concerned citizens can report offences or incidents and areas of concern which they have witnessed occurring along the river, lakes and environs.

Information is used to follow up complaints, and for targeted patrols where patterns of behaviour are identified. You should provide a return phone number so that a compliance officer can make contact if further details are required. For emergencies call 000.

For further information go to www.murraywatch.org.au or telephone 8531 0710.
Further information

For further information refer to the *Harbors and Navigation Act 1993* and the *Harbors and Navigation Regulations 2009*.

To obtain a free copy of the *South Australian Recreational Boating Safety Handbook* call 1300 183 046 or visit www.sa.gov.au/boatingmarine

**The Office for Recreation and Sport**

The Office for Recreation and Sport (ORS) is the lead agency for the Government’s policy on sport and active recreation.

www.ors.sa.gov.au

**South Australian Adventure Activity Standards (AAS) for canoe/kayaking**


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**Paddle South Australia**

Paddle South Australia Inc. is the governing body of paddle sport and recreation in South Australia, and is affiliated with Australian Canoeing (the national association).

Paddle SA offer courses for Australian Canoeing awards from entry level to Instructor qualifications. You can find more information at www.paddlesa.org.au
Emergency procedures

ALL OCCUPANTS MUST
WEAR A LIFEJACKET

Raise the alarm
Stay with your boat

Flares
Activate when you see a potential rescuer

EPIRB
Activate your distress beacon

Call 000
Phone

Kayakers and canoeists are reminded that they must comply with the Harbours and Navigation Act 1993 and regulations and that it is their own responsibility to ensure the safety of themselves and their vessels.

The information contained in this publication is intended to be a guide only. While every effort has been made to ensure that it is accurate, it is only advisory and general in nature and should not be relied upon to meet individual requirements.

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