CHAPTER 1
ESSENTIALS FOR SAFE BOATING
CHAPTER 1: ESSENTIALS FOR SAFE BOATING
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ENVIRONMENT PROTECTION
BEFORE YOU GO BOATING

Before you go boating be prepared for as many possibilities as you can. Have a vessel which is fit for the purpose for which it will be used. Carrying safety equipment relevant to the waterway, and being able to raise the alarm will also dramatically reduce the chance of a small incident having a catastrophic result.

MAINTAINING YOUR VESSEL

Keeping your vessel in good working order or ‘winterising’ it, is a key to enjoying your activity. The table provides information about type of maintenance required for each vessel part. Maintenance periods are broken down into pre-season, mid-season and post-season.

TIPS FOR REFUELLING SAFELY

• No passengers are permitted on board during refuelling or restarting.
• Turn off the engine and electrical equipment before refuelling.
• Don’t overfill your fuel tank and clean up spills immediately.
• Ventilate the tank and engine compartments after refuelling.
• Don’t start the engine if you can detect fumes.
• If possible, fill the fuel tanks away from the vessel in a well-ventilated, no smoking area.
• When refuelling, use a wide-mouthed funnel and clean up any splashes immediately.
• Regularly check perishable fuel lines for wear and tear and carry spares.
• Don’t keep oily or fuel-soaked rags onboard.
• Keep spare fuel in a tightly capped, secure container.

VEssel PART

Fuel tank

Fuel line

Fuel filter

Fuel system (if you suspect any ethanol fuel blend has been used)

Batteries

Wiring

Spark plugs

Steering gear and other moving parts

Cooling system

Propeller

Reserve buoyancy

Hull and outer surfaces
<table>
<thead>
<tr>
<th><strong>PRE-SEASON</strong></th>
<th><strong>MID-SEASON</strong></th>
<th><strong>POST-SEASON</strong></th>
</tr>
</thead>
</table>
| • Avoid using old fuel Keep clean and dry | • Check for water in fuel | • Store in dry place (vented)  
• If metal, swish with 2 stroke oil |
| • Check for cracking and loose fittings | • Watch for leaks | • Drain |
| • Check and replace as necessary | • Check and clean | • Check and clean |
| • Drain and clean out tank  
• Clean fuel lines  
• Change fuel filters  
• Have engine fuel system checked and serviced | • Do not leave ethanol fuel standing in any tanks  
• Check fuel filters  
• Monitor engine operating temperature | • Drain all ethanol blended fuel from tanks, fuel lines and carburettors |
| • Check electrolyte, top up with distilled water  
• Recharge, check mountings, clean terminals | • Check electrolyte top up with distilled water  
• Recharge, check mountings, clean terminals | • Check electrolyte, top up with distilled water |
| • Check for cracking, loose wire and corrosion | | |
| • Clean and check the gap or replace | • Watch for fouling, moisture  
• Keep engine tuned  
• Clean and check the gap as necessary | |
| • Lubrate all moving parts | • Lubricate every 60 days | • Lubricate before storing |
| • Clean passages | • Check ports for weeds  
• Flush after use in salt water | • Flush with water  
• Drain all water by pull starting with plugs disconnected |
| • Sand or file small nicks | • Check regularly | • Check condition  
• Repair if required |
| • Check condition and that it is securely in place, replace worn or degraded materials | • Regularly check it is securely in place | • Keep clean and dry |
| • Clean hull  
• Replace sacrificial anodes as appropriate | • Keep clean | • Keep clean, touch up with paint (but don’t paint the anodes) |

**INTRODUCTION**

**CHAPTER 1: ESSENTIALS FOR SAFE BOATING**
RAISING THE ALARM (CALLING FOR HELP)

There are various ways of calling for help and it is important to be familiar with the features and what is involved in using all the options.

Emergency position indicating radio beacon (EPIRB)

The MSA requires that all recreational vessels venturing more than two nautical miles (nm) from the coast carry a registered, current EPIRB. Although EPIRBs are only required when venturing more than 2 nm from the coast, EPIRBs can be useful for raising the alarm on any waterway.

An EPIRB is waterproof, will float upright for best signal transmission and has a lanyard to attach it to yourself or a floating object. It is also advisable to purchase a model of EPIRB which features a strobe light and GPS enhancement to provide searchers with a smaller search area.

Once activated, an EPIRB transmits a distress signal for at least 48 hours that can be detected by satellite and overflying aircraft. EPIRB alerts detected off Victoria are received by Australian Maritime Safety Authority (AMSA) in Canberra and relayed to the local rescue co-ordination centre.

The EPIRB should be accessible but stowed in a way to avoid accidental activation.

Check the battery and registration expiry date on your EPIRB before taking out your vessel. When testing an EPIRB, strictly follow the manufacturer’s instructions.

Compulsory registration of your EPIRB is free. Visit beacons.amsa.gov.au or call 1800 406 406. Registration details must be updated when any of your registered details change, or every two years. Analogue 121.5MHz beacons are no longer acceptable for use in the maritime environment.

Personal locator beacon (PLB)

A PLB is smaller and more convenient to carry than an EPIRB. A PLB may not float in an orientation that provides good signal transmission. It may not have a lanyard and is required to operate for only 24 hours. A PLB is not an EPIRB and does not meet the legislative requirements for the carriage of EPIRBs. However, MSV recommends that a PLB is worn by all boaters who are boating alone.

Beacon disposal

Please do not throw unwanted beacons in the bin - they can inadvertently activate if incorrectly disposed of in the rubbish.

To dispose of unwanted distress beacons (EPIRBs and PLBs):

Option 1. Contact your local battery store to check whether they can disconnect and dispose of beacons. A small fee may apply.

Option 2. Check the beacon manufacturer’s instructions. They may provide instructions on how to disconnect the beacon battery and how to correctly dispose of the beacon and battery.

After disposing of your unwanted beacon please advise AMSA by updating your account at beacons.amsa.gov.au or phoning 1800 406 406.
Marine radio

A marine radio is:

- A radio operating on VHF marine radio channels
- A radio operating on MF/HF marine radio frequencies
- A radio operating on 27MHz marine radio channels

Marine radios provide a means of:

- calling for assistance if a vessel is in distress
- monitoring and/or updating rescue operations
- positioning a vessel by radio direction finding
- receiving weather forecasts
- communications between vessels


Radio calls are monitored and recorded 24/7 along the entire Victorian coastline to 20 nm from the coast. Operators are also able to check weather conditions and conduct radio checks through Marine Radio Victoria.

Some Marine Search and Rescue agencies provide track following services along the coast on VHF channels.

MF/HF radio for longer range communications is based in Charleville. Charleville Radio (VMC) monitors HF distress channels 24/7 and provides weather information services.

Marine radio channels

**DISTRESS CHANNELS/FREQUENCIES**

<table>
<thead>
<tr>
<th>Radio</th>
<th>Channel/Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>VHF</td>
<td>16 (67 alternative)</td>
</tr>
<tr>
<td>HF (frequency)</td>
<td>4125, 6215 and 8291 kHz</td>
</tr>
</tbody>
</table>

27 MHz radio is no longer recommended for marine use. Its broadcasting and reception is not as reliable as VHF and it is not consistently monitored along the Victorian coastline.

For emergency radio use and messages see chapter 3 about emergency procedures.
**HF Radio**

A marine radio is required on most vessels when venturing further than 2 nm from the coast.

Refer to safety equipment tables on pages 37-40 to understand when a marine radio is required.

The Marine Radio Operator’s Handbook, available through the Australian Maritime College at amc.edu.au/industry/omc, provides information on correct operating procedures, maintenance of equipment and how to deal with minor faults at sea. The person operating the marine transceiver must hold an appropriate qualification.

**Marine radio operator certification**

An operator’s certificate is required to transmit using VHF and HF radio.

Qualifications and The Marine Radio Operator’s Handbook are available through the Australian Maritime College at amc.edu.au/industry/omc.

MF/HF radio sets require an apparatus licence administered by ACMA.

For further information about marine radio requirements, including any changing requirements, please visit the Australian Communications and Media Authority (ACMA) website: acma.gov.au

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**VHF MARINE RADIO CHANNELS**

- **6**: Search and rescue operations
- **70**: DSC
- **74**: Port operations
- **19**: Commercial fishing vessels
- **14**: Commercial vessels
- **13**: Recreational vessels
- **81**: VHF Repeaters
- **82**: 77, 73, 72, 78

**DISTRESS AND CALLING**

16 67
Flares

All registered vessels are required to carry two hand-held red distress flares and two hand-held orange smoke signal flares, of an approved type, when operating on coastal and enclosed waters. Additionally, when operating more than 2 nm offshore in coastal waters, a mechanically or sailed powered vessel must carry one red star parachute rocket flare.

Orange smoke signals, which can be seen for up to 4 km (10 km by aircraft) should be used in daylight to pinpoint your position.

Red distress flares, which have a visibility range of 10 km, are designed for use at night but can also be seen during the day.

A red star parachute distress rocket is designed to fire a single red star to a height of approximately 300 m. The star burns while falling for at least 40 seconds and can be seen from the greatest distance due to its intensity and elevation from sea level.

Using and maintaining flares

Always delay using flares until you can see an aircraft, or until people on shore or in other boats are in visual range.

- Keep flares away from fuel and combustibles.
- Ensure flares are stored in an accessible but dry place, as they attract moisture.
- Be prepared – ensure everyone on board your vessel knows where the flares are stored and how to use them.
- Ensure that you carefully follow the activation instructions of all flares.

Expired flares

Approved smoke signals, distress flares and parachutes have expiry dates clearly marked. Expired flares should not be carried on your vessel. Flares can become dangerous and unpredictable as they age. Their life span is usually three years and you must ensure they are replaced when the expiry date is reached.

Boat owners should dispose of their expired flares at selected police stations. Contact your local police station for specific locations.
SAFE LOADING

The MSR requires that a person must not act as the master of a recreational vessel or a hire and drive vessel that is overloaded. Overloading is dangerous and seriously reduces the stability and seaworthiness of your vessel.

A recreational vessel is overloaded if the number of persons on board the vessel exceeds the maximum number of persons specified by the manufacturer of the vessel on a capacity plate or an Australian Builder’s Plate (ABP). Or the number specified against the vessel length in the table below.

Vessels with a fly bridge are prone to capsizing if the fly bridge is overloaded.

Unless specified by the manufacturer, the maximum number of people which can be carried in a recreational vessel is represented in the table below.

<table>
<thead>
<tr>
<th>LENGTH OF VESSEL</th>
<th>MAXIMUM PASSENGERS*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 3 m</td>
<td>Two people</td>
</tr>
<tr>
<td>3 m to less than 3.5 m</td>
<td>Three people</td>
</tr>
<tr>
<td>3.5 m to less than 4.5 m</td>
<td>Four people</td>
</tr>
<tr>
<td>4.5 m to less than 5 m</td>
<td>Five people</td>
</tr>
<tr>
<td>5 m to less than 5.5 m</td>
<td>Six people</td>
</tr>
<tr>
<td>5.5 m to less than 6 m</td>
<td>Seven people</td>
</tr>
</tbody>
</table>

Note:

a. a child up to and including one year of age does not count for the purpose of calculating maximum passengers
b. each child over one year and under 12 years equals half an adult
c. on recreational vessels with individual cockpits (for example, decked canoes or kayaks), the number of persons carried on the vessel must not exceed the number of individual cockpits, irrespective of the age of the person.

*WARNING: This is the maximum carrying capacity for good conditions. A reduction in the maximum number of persons must be made in adverse conditions or when on the open sea. Capacity of a person is assessed at 75 kg per person with an additional allowance of 15 kg per person for personal gear. A reduction in the number of persons must be made when equipment and supplies exceed total weight allocated.
CHAPTER 1: ESSENTIALS FOR SAFE BOATING
**VESSEL STABILITY**

Overloading your boat seriously reduces stability and free board making your boat less able to resist waves and more likely to be swamped and capsize.

**CAN RESIST WAVES 300MM HIGH**

Can heel to 30°

**LIGHTLY LOADED WITH TWO PEOPLE**

Can take no heel before swamping

**BOAT LOADED TO MAXIMUM OF FOUR PEOPLE CAN HEEL LESS BEFORE SWAMPING**

**CANNOT RESIST ANY WAVE**
FLOTATION

The occupants of a swamped or flooded vessel will have a greatly improved chance of survival if it remains floating, upright and level. This can be achieved by correctly sized and fitted internal buoyancy because it:

• minimises the occupants’ immersion in water, avoiding drowning and hypothermia
• provides access to the vessel’s safety equipment, such as flares, radios, EPIRB or torch
• provides a larger target for searchers to see (a vessel is easier to see than people in the water)
• provides some shelter from wind and weather.

Many vessels, if full of water, may not have sufficient buoyancy to support the crew. If your vessel does not have an Australian Builders Plate (ABP), or if the plate does not state that the vessel has level flotation, it may not have sufficient buoyancy. This can even apply to relatively new vessels as the ABP has only been required in Victoria since 2012.

Basic flotation

A vessel that is fitted with basic flotation is not designed to support passenger weight when flooded. It may float at any orientation allowing occupants to hold, or climb onto, the upturned hull.

Level flotation

Level flotation is when a boat continues to float in an upright position that allows occupants to remain in the vessel, in calm water, and possibly bail it.
BOATING WITH CHILDREN

Many children love boating and other water activities. You can improve their confidence—and your peace of mind—by investing some time in training and education before you hit the water.

• Show children around the vessel—especially where PFDs, the first aid kit and other equipment are kept.
• Teach them emergency procedures, particularly that if the boat capsizes everyone should stay with it or an easily seen floating object.
• Teach them about stability, getting on and off the boat, and distributing the load evenly.
• If they are old enough, show children how to use safety equipment such as the radio, EPIRB and flares.
• Before you take them boating, encourage children to learn to swim, and practise emergency positions in the water, such as treading water, HELP (heat escape lessening posture) and Huddle.
Recreational boaters are at heightened risk when they are in a vessel that is underway and is:

- crossing or attempting to cross an ocean bar (see page 56), or operating within a Designated Hazardous Area (see page 8)
- being operated by a person who is the only person on board the vessel
- being operated during the period commencing one hour after sunset and ending one hour before sunrise
- disabled
- a yacht where no safety barriers lifelines, rails, safety harnesses or jacklines are in use
- being operated during a period of restricted visibility
- being operated in an area where a current warning of the following kind has been issued by the Bureau of Meteorology:
  - gale warning
  - storm force wind warning
  - hurricane force wind warning
  - severe thunderstorm warning
  - severe weather warning
- when there is significant likelihood that the vessel may capsize or be swamped by waves or the occupants of the vessel may fall overboard or be forced to enter the water
- when there is a restriction on the ability to anticipate such an event, such as when a hazard cannot be seen
- up to and including 4.8 metres, and are in an open area of the vessel.

Heightened risk is not limited to when the vessel is underway. When launching and retrieving, vessels are often in restricted areas and the risk of being nudged by another vessel or bumping into a jetty or other object is high.

What does underway mean?
Underway means not at anchor, not made fast to the shore, or aground. If you are drifting you are underway. Vessels travelling at any speed are at risk of being involved in an incident resulting in the occupants unexpectedly entering the water.

While launching or retrieving, a vessel being driven off or onto a trailer is considered to be underway if it is on water.

When are you considered the only person on the vessel?
You are considered to be the only person on the vessel when you are boating with a child or someone of limited strength or mental capacity.

If there is another person on board with you, they must be capable of:

- manoeuvring the vessel around to get you if you are in the water
- pulling you back on board if you fall out of the vessel and cannot help yourself
- returning the boat to the jetty or beach if you are incapacitated
- calling for help when necessary.
What is meant by an open area of a recreational vessel (excluding kayaks and canoes)?

- All deck areas including coach roofs, superstructures, open fly bridges, trampolines and nets, but excluding areas within a rigid deckhouse, a rigid cabin, a rigid half-cabin or a securely enclosed under-deck space.
- For vessels without a deck, the whole vessel, excluding areas within a rigid cabin, rigid half cabin or a securely enclosed space.

Reducing risk

During times of heightened risk, it is critical that you know how to handle your vessel and know what safety equipment you need, particularly what lifejacket you need to wear. Use the lifejacket selector at wearalifejacket.vic.gov.au

It is extremely difficult (and in some circumstances impossible) to put a life jacket on if you are in the water. Avoid this situation by wearing your life jacket at all times and requiring the occupants of your vessel to do so.

SAFETY EQUIPMENT

The minimum safety equipment requirements vary under the MSA depending on the class of vessel being operated, and in which areas and types of waterways it’s operated.

The tables overleaf show the minimum safety equipment that must be carried on board each class of vessel, such as powerboat, yacht or human powered vessels.

See Lifejacket Wear section (page 45) for lifejacket types.

SAFETY EQUIPMENT EXEMPTIONS

A person operating a vessel on Victorian waters who normally resides outside Victoria is exempt from carrying the prescribed safety equipment for a period of up to three months provided the vessel complies with the safety equipment requirements of their home state or territory.

All interstate visitors must comply with the requirements to wear personal flotation devices (lifejackets) under the conditions required in marine safety law.

SAFETY EQUIPMENT MAINTENANCE AND PLACEMENT

All safety equipment worn or carried on board must be:

- easily accessible
- kept in good working condition
- maintained or serviced in a way that ensures it can be operated in the way that it was designed to be operated, and
- serviced on or before the date specified by the manufacturer.
**LENGTH OF VESSEL**

The length of a vessel is important to know when estimating:

- vessel carrying capacity
- the number of fire extinguishers to be carried
- when lifejackets are to be worn when in an open area of a vessel that is underway.

The length of vessel means the length of the hull (LH) and it determines the safety equipment requirements for your vessel. This includes all structural and integral parts of the craft, such as wooden, plastic or metal stem or sterns, bulwarks and hull/deck joints. This length excludes removable parts that can be detached in a non-destructive manner without affecting the structural integrity of the craft, for example, outboard motors, swimming platforms, bowsprits, fittings or attachments.

**You are at heightened risk at all times when you are in an open area of a vessel that is underway and the vessel is up to and including 4.8 metres.**
## SAFETY EQUIPMENT CARRIAGE CHECKLIST – POWERBOAT

<table>
<thead>
<tr>
<th>POWERBOAT</th>
<th>Coastal offshore (&gt;2 nm from coast)</th>
<th>Coastal inshore (&lt;2 nm from shore)</th>
<th>Enclosed (bays and estuaries)</th>
<th>Inland (rivers, lakes and dams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifejacket (per person on board/towed)</td>
<td>Type 1</td>
<td>Type 1</td>
<td>Type 1</td>
<td>Type 1, 2 or 3</td>
</tr>
<tr>
<td>Approved fire extinguisher</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Where any fuel is carried, refer to fire fighting equipment tables to determine number and capacity required.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waterproof buoyant torch</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Anchor and chain or line or both</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Bailer (if no electric or manual bilge pumping system)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Bucket with lanyard (can also double as a bailer)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Electric or manual bilge pumping system (if vessel has covered bilge or closed underfloor compartments other than airtight void spaces)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Pair of oars with rowlocks or pair of paddles (if vessel is up to and including 4.8 m)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hand held orange smoke signals</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Hand held red distress flares</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Lifebuoy (if vessel is more than 8 m but less than 12 m in length)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lifebuoy (if vessel is more than 12 m in length)</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Dinghy or liferaft (if vessel is more than 12 m in length)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compass</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marine radio</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red star parachute distress rocket</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered EPIRB</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## SAFETY EQUIPMENT CARRIAGE CHECKLIST – PWC

<table>
<thead>
<tr>
<th>PWC</th>
<th>All waters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifejacket (per person on board/towed)</td>
<td>Type 1, 2 or 3</td>
</tr>
<tr>
<td>Waterproof buoyant torch</td>
<td>1</td>
</tr>
<tr>
<td>Registered EPIRB</td>
<td>1 if more than 2 nm from coast (coastal offshore)</td>
</tr>
</tbody>
</table>
### SAFETY EQUIPMENT CARRIAGE CHECKLIST – YACHT

<table>
<thead>
<tr>
<th>YACHT</th>
<th>Coastal offshore (&gt;2 nm from coast)</th>
<th>Coastal inshore (&lt;2 nm from shore)</th>
<th>Enclosed (bays and estuaries)</th>
<th>Inland (rivers, lakes and dams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifejacket (per person on board/towed)</td>
<td>Type 1</td>
<td>Type 1</td>
<td>Type 1 or 2</td>
<td>Type 1 or 2</td>
</tr>
<tr>
<td>Approved fire extinguisher</td>
<td>Where any fuel is carried, refer to fire fighting equipment tables to determine number and capacity required.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waterproof buoyant torch</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Anchor and chain or line or both</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Bailer (if no electric or manual bilge pumping system)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Bucket with lanyard (can also double as a bailer)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Electric or manual bilge pumping system (if vessel has covered bilge or closed underfloor compartments other than airtight void spaces)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hand held orange smoke signals</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Hand held red distress flares</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Lifebuoy (if vessel is more than 8 m but less than 12 m in length)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lifebuoy (if vessel is more than 12 m in length)</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Dinghy or liferaft (if vessel is more than 12 m in length)</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compass</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marine radio</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red star parachute distress rocket</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered EPIRB</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### RECREATIONAL TENDER

All occupants on a recreational tender must wear a Type 1 lifejacket on coastal waters, a Type 1 or 2 on enclosed waters, and either a Type 1, 2 or 3 on inland waters.
### SAFETY EQUIPMENT CARRIAGE CHECKLIST – OFF-THE-BEACH SAILING YACHT

**OFF-THE-BEACH SAILING YACHT**

<table>
<thead>
<tr>
<th></th>
<th>Coastal offshore (&gt;2 nm from coast)</th>
<th>Coastal inshore (&lt;2 nm from shore)</th>
<th>Enclosed (bays and estuaries)</th>
<th>Inland (rivers, lakes and dams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifejacket (per person on board/towed)</td>
<td>Type 1 or 2</td>
<td>Type 1 or 2</td>
<td>Type 1 or 2</td>
<td>Type 1 or 2</td>
</tr>
<tr>
<td>Bail (if no electric or manual bilge pumping system)</td>
<td>1 if vessel is not self-draining without intervention from the crew</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric or manual bilge pumping system (if vessel has covered bilge or closed underfloor compartments other than airtight void spaces)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hand held orange smoke signals</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hand held red distress flares</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compass</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marine radio</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red star parachute distress rocket</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered EPIRB</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SAFETY EQUIPMENT CARRIAGE CHECKLIST – STAND UP PADDLEBOARD

**STAND UP PADDLEBOARD**

<table>
<thead>
<tr>
<th></th>
<th>Coastal offshore (&gt;2 nm from coast)</th>
<th>All other waters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifejacket (per person on board/towed)</td>
<td>Type 1, 2 or 3</td>
<td>Type 1, 2 or 3 &gt;400m from shore</td>
</tr>
<tr>
<td>Waterproof buoyant torch</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Hand held orange smoke signals</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Hand held red distress flares</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Compass</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Registered EPIRB</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
### SAFETY EQUIPMENT CARRIAGE CHECKLIST – HUMAN POWERED VESSELS

**HUMAN POWERED VESSELS**
**INCLUDINGS KAYAK, CANOE, RAFT AND ROWING BOAT**

<table>
<thead>
<tr>
<th>Safety Equipment</th>
<th>Coastal offshore (&gt;2 nm from coast)</th>
<th>Coastal inshore (&lt;2 nm from shore)</th>
<th>Enclosed (bays and estuaries)</th>
<th>Inland (rivers, lakes and dams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifejacket (per person on board/towed)</td>
<td>Type 1, 2 or 3</td>
<td>Type 1, 2 or 3</td>
<td>Type 1, 2 or 3</td>
<td>Type 1, 2 or 3</td>
</tr>
<tr>
<td>Waterproof buoyant torch</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bailier (if no electric or manual bilge pumping system)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Electric or manual bilge pumping system (if vessel has covered bilge or closed underfloor compartments other than airtight void spaces)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Spare oar with rowlock or spare paddle</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hand held orange smoke signals</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hand held red distress flares</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compass</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered EPIRB</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SAFETY EQUIPMENT CARRIAGE CHECKLIST – FUNBOAT AND PEDALBOAT

**FUNBOAT AND PEDALBOAT**

<table>
<thead>
<tr>
<th>Safety Equipment</th>
<th>All waters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifejacket (per person on board/towed)</td>
<td>Type 1, 2 or 3</td>
</tr>
</tbody>
</table>
SAFETY EQUIPMENT FEATURES AND STANDARDS

This section outlines the minimum features and standards your safety equipment requires to perform as you expect when needed.

**Lifejacket (also known as a personal flotation device (PFD)) standards**

All lifejackets that are manufactured to comply with the Australian Standard, require legible markings that declare they meet the Standard.

Australian Standards Markings include:

- the manufacturer’s name, trade name or trademark
- the words PFD TYPE 1 - or level 275, 150 or 100, PFD TYPE 2 - or level 50, or PFD TYPE 3 - or level 50 special purpose
- manufacturer’s model identification, batch identification and year of manufacture
- intended body mass range
- illustrated instructions for donning the PFD
- instructions for storage and care
- information relating to replacement or checking of gas cylinders of inflatable PFDs. Lifejackets with a Standards Australia mark must also carry a label identifying the level number.

You can ensure your lifejackets are compliant with the Australian standards by shopping for jackets bearing the compliance marks of accredited certification bodies.


Some international lifejackets are now also accepted as alternatives to Australian Standards. To obtain a list of all accepted lifejackets visit wearalifejacket.vic.gov.au/lifejacket-laws

**Beyond compliance**

The safety equipment tables on pages 37-40 represent minimum requirements as described in the legislation (see Acts and Regulations section). You should make a safety assessment of your vessel operations and determine whether more equipment is required to take reasonable care of everyone’s safety. Thinking beyond the minimum compliance requirements will also give you a better boating experience.

Although not prescribed under Victorian law, there are many extra items that the master of a vessel can carry on board their vessel that can be easily acquired and at reasonable cost. For example, it is recommended that you have:

- a first-aid kit
- adequate drinking water
- a basic tool-kit
- an EPIRB on all waters
- a PLB
- red, parachute rocket flares on all waters.
Anchors

An anchor is an important item of equipment and should be selected carefully. Choose an anchor that will suit your circumstances and the area of operation. The most common are:

<table>
<thead>
<tr>
<th>Anchor Type</th>
<th>Features</th>
</tr>
</thead>
</table>
| DANFORTH             | • recommended for small craft  
• small, light, easy to handle  
• excellent holding power, especially in sand, but may get caught on reefs. |
| PLOUGH               | • suited to larger and heavier vessels  
• excellent holding power, but best suited to mud; may get caught on reefs. |
| GRAPNEL              | • flexible prongs (suitable for anchoring on reefs)  
• suited to snag and rock conditions (for example, the River Murray) |
| SARCA (SAND AND ROCK COMBINATION ANCHOR) | • superb holding power  
• multi-purpose—suited to mud, sand, gravel and rock bottoms not suited to snags (for example, the River Murray). |
| SEA ANCHOR OR DROGUE (NOT AN APPROVED ANCHOR) | • this may be anything that can be used for offshore boating to slow rate of drift, eg. a large bucket trailing behind the vessel (drogue) or from the bow (sea anchor).  
• a sea anchor or drogue will not hold your vessel fast, so if using a sea anchor you must also carry an approved type of anchor. |
ANCHOR LINE SELECTION TIPS

Consider the following points in selecting the line you will be using:

- don’t use a line that floats such as polypropylene as it inhibits the anchor’s ability to dig in and is prone to being cut by other propellers
- nylon and silver ropes have strength, stretching ability and resistance to abrasion, and don’t easily float in water
- nylon is stronger than silver rope.

The use of a length of chain between the anchor and line is recommended. The purpose of the chain is to keep the shank of the anchor down as near as possible to parallel to the sea bottom. As a guide, the length of the chain should be approximately equal to the length of the vessel. For further information on anchoring, refer to the Anchoring section in the Safe Operation chapter.
Fire extinguishers

The master of a recreational vessel that carries fuel on board (excluding PWCs), or that is equipped with an electric start motor, gas installation or fuel stove, must ensure that:

- the vessel is equipped with the number of portable fire extinguishers prescribed (see table below)
- at least one of those portable fire extinguishers is of the minimum nominal capacity prescribed (see table below)
- one of the portable fire extinguishers is positioned adjacent to the engine and fuel carrying spaces of the vessel and is readily accessible
- when more than one fire extinguisher is required to be carried they must be located in separate positions on the vessel.

Fire blankets

If a vessel has cooking facilities located within an enclosed space on the vessel, the master of the vessel must ensure that a fire blanket is positioned in a conspicuous location and that it is readily accessible to a person using the cooking facilities.

A fire blanket must comply with Australian Standard AS/NZS 3504:2006 “Fire blankets”.

Fixed fire extinguishing systems

In some circumstances, vessels fitted with a fixed fire extinguishing system can be exempt from the requirement to carry a portable fire extinguisher of the minimum nominal capacity.


### NUMBER OF PORTABLE FIRE EXTINGUISHERS REQUIRED TO BE CARRIED ON A VESSEL

<table>
<thead>
<tr>
<th>Vessel size</th>
<th>Number required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 8 m</td>
<td>1 (of the minimum nominated capacity)</td>
</tr>
<tr>
<td>8 to 12 m</td>
<td>2 (one of the minimum nominated capacity)</td>
</tr>
<tr>
<td>More than 12 m</td>
<td>3 (one of the minimum nominated capacity)</td>
</tr>
</tbody>
</table>

### MINIMUM CAPACITY OF PORTABLE FIRE EXTINGUISHERS ON A VESSEL

<table>
<thead>
<tr>
<th>Volume of flammable or combustible liquids that are able to be carried on vessel</th>
<th>Minimum nominal capacity of fire extinguisher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 115 litres</td>
<td>0.9 kg</td>
</tr>
<tr>
<td>115 to 350 litres</td>
<td>2.0 kg</td>
</tr>
<tr>
<td>351 to 695 litres</td>
<td>4.5 kg</td>
</tr>
<tr>
<td>More than 695 litres</td>
<td>9.0 kg</td>
</tr>
</tbody>
</table>
LIFEJACKET WEAR

Under marine safety law, you are required to wear a lifejacket in the circumstances listed below. Lifejackets must be correctly fastened when worn, otherwise penalties apply.

WHEN IN AN OPEN AREA OF A VESSEL THAT IS UNDERWAY

You are required to wear a specified lifejacket when in an open area of a vessel that is underway (see page 47) if you are an occupant of any of the following:

- a power-driven vessel up to and including 4.8 m in length
- an off-the-beach sailing yacht
- a personal watercraft (PWC)
- a canoe, kayak, raft or rowing boat
- a stand-up paddleboard, kiteboard or sailboard when more than 400m from shore
- pedal boat or fun boat
- recreational tender.

DURING TIMES OF HEIGHTENED RISK

All occupants of vessels listed above are to wear a specified lifejacket at times of heightened risk (see page 34) when in an open area of a vessel that is underway. This also applies to occupants of the following vessels:

- yachts (including monohull, trailerable and multihull yachts but excluding off-the-beach sailing yachts)
- power driven vessels greater than 4.8 m and less than 12 m.
LIFEJACKET TYPES

Lifejackets come in a variety of types with different characteristics and are also referred to as PFDs (personal flotation device).

**Type 1 - Level 100 and over**

A lifejacket Type 1 provides a high level of buoyancy and keeps the wearer in a safe floating position. They are made in high visibility colours with reflective patches.

**Type 2 – Level 50**

A lifejacket Type 2 is a buoyancy vest. It provides less buoyancy than a lifejacket Type 1 but sufficient to keep you afloat.

**Type 3 – Level 50S**

A lifejacket Type 3 is a buoyancy garment. It has similar buoyancy to a lifejacket Type 2 but is manufactured in a wide variety of colours and is shaped or equipped for particular activities.
The information below details the requirements for which specified lifejacket must be worn. Lifejacket types are described in Schedule 1 of the MSR at legislation.vic.gov.au

<table>
<thead>
<tr>
<th>VESSEL CLASS</th>
<th>COASTAL WATERS</th>
<th>ENCLOSED WATERS</th>
<th>INLAND WATERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powerboat up to and including 4.8 m in length</td>
<td>Type 1</td>
<td>Type 1</td>
<td>Type 1, 2 or 3</td>
</tr>
<tr>
<td>Powerboat more than 4.8m but not more than 12 m in length (at times of heightened risk)</td>
<td>Type 1</td>
<td>Type 1</td>
<td>Type 1, 2 or 3</td>
</tr>
<tr>
<td>Personal watercraft</td>
<td>Type 1, 2 or 3</td>
<td>Type 1, 2 or 3</td>
<td>Type 1, 2 or 3</td>
</tr>
<tr>
<td>Towed sport</td>
<td>A person who is being towed by a vessel must wear a lifejacket at all times.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recreational tender</td>
<td>Type 1</td>
<td>Type 1 or 2</td>
<td>Type 1, 2 or 3</td>
</tr>
<tr>
<td>Off-the-beach sailing yacht</td>
<td>Type 1 if &gt;2 nm from coast, Type 1 or 2 if &lt;2 nm from coast</td>
<td>Type 1 or 2</td>
<td>Type 1, 2 or 3</td>
</tr>
<tr>
<td>Yacht (at times of heightened risk)</td>
<td>Type 1</td>
<td>Type 1 or 2</td>
<td>Type 1, 2 or 3</td>
</tr>
<tr>
<td>Kiteboard or sailboard</td>
<td>Type 1, or 2</td>
<td>Type 1, 2 or 3</td>
<td>Type 1, 2 or 3</td>
</tr>
<tr>
<td>Canoe, kayak, rowing boat, raft, stand-up paddleboard, pedal boat or fun boat</td>
<td>Type 1, 2 or 3</td>
<td>Type 1, 2 or 3</td>
<td>Type 1, 2 or 3</td>
</tr>
<tr>
<td>Scuba or hookah diving equipment (underwater breathing apparatus of a kind that is self-contained (scuba) or is surface supplied)</td>
<td>A person who is wearing, or in the process of donning or removing, diving equipment is not required to wear a lifejacket.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
LIFEJACKETS ON CHILDREN
The master of a recreational vessel or a hire and drive vessel that is underway must ensure that every person aged less than 10 years old who is on an open area of the vessel wears a lifejacket at all times. Penalties apply when lifejackets are not worn. When choosing a lifejacket for a child, care must be taken to ensure that the garment fits the child and that small children do not slip out when they are in the water. Where possible, a child’s lifejacket that features a crotch strap is strongly recommended, as it assists to hold the child in the jacket.

LIFEJACKETS ON BABIES AND TODDLERS
MSV does not recommend taking infants on board a recreational boat. The varying weight distribution of babies means it is difficult to design jackets which have flotation in the right places to keep them afloat. The lifejackets currently available for newborns up to 10 kilograms may not provide a proper fit or perform as expected. You must be sure the lifejacket you have works for your infant. MSV recommends that children are not exposed to any risk on a boat on the water.
LIFEJACKET MAINTENANCE

Lifejackets must be maintained in accordance with manufacturers’ recommendations to ensure the devices continue to operate the way they are supposed to. Refer to the manufacturers’ website or information provided at time of sale for full servicing details relevant to your lifejacket.

Lifejacket style and maintenance

Inflatable lifejackets need to be inspected and serviced periodically, in order to comply with the legislation.

Buoyant lifejackets, such as foam lifejackets, should be self-inspected regularly. Check for mould, wear and tears.

Get to know your lifejacket

There are some simple checks that can be carried out regularly:

• Look over the jacket for any signs of physical damage that has occurred during storage or use.
• Make sure the indicator on inflatable lifejackets is green and that the CO2 cylinder is in good condition and screwed down tight on the ‘O’ ring.
• Check the lifejacket’s fabric, flotation, zippers, buckles, waist belts and all fastenings for signs of excessive wear, cracking, fraying or anything to indicate possible loss of strength or flotation.

Self-inspection

A self-inspection is a yearly activity carried out by the owner of the lifejacket. See wearalifejacket.vic.gov.au/looking-after-your-lifejacket

Professional service

A professional service is carried out by an agent approved by the lifejacket manufacturer.

Most manufacturers provide a maintenance schedule including self-checking inspection and periodic servicing by an approved service agent.

If you have any concern, contact the manufacturer or place of purchase.

Remember that your lifejacket is a life saving device. Care for it as though your life depends on it. One day it might.
TRIP PREPARATION

Every accident or incident is unique but a common theme is that multiple things go wrong. Almost all incidents can be minimized or prevented completely with good pre-trip planning and by making good decisions.

Thorough preparation gives the master of a vessel the best opportunity to make good decisions while on the water.

The master of a recreational vessel should always undertake a safety assessment of the particular vessel and its intended operation. In addition to the minimum safety equipment carried in accordance with the MSR, the master should ensure the vessel is carrying any additional safety equipment that may be appropriate to control risks to acceptable levels.

- Get information about the area you are operating in, that is, how to get there, how long it will take, how to get back, and what safety or specialist equipment you may need.
- Check the sea conditions, tide levels, current, tidal and river flows, weather and bar conditions as appropriate.
- Find out about any local dangers and special rules or regulations for the area.
- Consider undertaking a coastal navigation course.
- Carry the appropriate chart for the area in which you will be navigating.

PRE-TRIP CHECK LIST

A thorough check of vessel, equipment and weather before each trip is recommended for safer boating. Download your pre-trip checklist flyer from the TSV website transportsafety.vic.gov.au/msv/trip-prep or obtain a hard copy from MSV, from info@transportsafety.vic.gov.au

LET SOMEONE KNOW BEFORE YOU GO

Always let someone know where you are going, your point of departure and when you plan to return. Agree on next steps or who to call if you haven’t returned as planned. Also provide your contact person a description or photo of your vessel, vessel registration number and details of the number of passengers on board. This will assist emergency services, should the need arise. If your plans change, let someone know.

Download or request a handy ‘I’ve gone boating’ trip details flyer at transportsafety.vic.gov.au/msv/gone-boating
STUDY THE WEATHER

Base your decision to go out on the water on the knowledge of what weather conditions you, others on board and your boat can handle.

Weather forecasts and warnings produced by the Bureau of Meteorology are available on all media. It is vitally important to be aware of the current weather conditions in the area you plan to boat in, and also how conditions will develop over the course of your trip – and a bit longer, just in case.

Internet

Visit bom.gov.au/marine for the latest weather charts, satellite and radar images as well as warnings and forecasts for the next four days. This site also provides links to tidal information, sunset and sunrise times as well as full schedules for all radio and phone services. Before heading out, run through the five vital weather safety checks to be prepared.

MetEye

MetEye shows the official forecasts produced by the Bureau of Meteorology in an interactive map. Forecasts are available for wind, waves, weather and much more in three hourly increments for up to seven days ahead.

Marine Lite

For boaters in areas of marginal mobile phone coverage, or whose offshore access is limited to satellite internet communication channels, text only webpages of the Bureau’s Marine forecasts and warnings are provided at bom.gov.au/marine/lite.

VHF Radio weather services

Marine Radio Victoria (MRV) provides twice daily local weather forecasts on VHF radio, with instructions and broadcast times announced regularly on Channel 16. MRV also broadcast current weather warnings at 00:47, 02:48, 04:48, 06:48, 08:48, 10:48, 12:48, 14:48, 16:48, 18:48, 20:48 and 22:48 eastern standard time (EST) on VHF channel 67 following the initial broadcast until notice of the cancellation is received by the Bureau of Meteorology.

The Bureau of Meteorology broadcasts weather forecasts to eastern Australia from Charleville on:

- 8176 and 12365kHz – all hours, 4426 and 16546kHz – all day (7am-6pm) and 2201, HF 6507kHz – by night (6pm-7am)

Scheduled broadcast times for Victorian coastal waters are: 0130, 0530, 0930, 1330, 1730 and 2130 EST (add one hour for EDST).

Warnings are broadcast every hour starting 0000 EST.

WEATHER HAZARDS AND CONDITIONS

Check the weather forecasts and warnings, which are regularly updated and give warnings of strong winds and gales. Sudden squalls are not easy to predict in Victoria, so keep a sharp lookout and regularly check the horizon for tell-tale clouds or whitecap waves.

If caught out in bad weather head for sheltered water, for example, the shore or the protected side of an island.

If possible, head into the wind and waves at a steady speed.

Squalls usually last only for a short period. It is often best to ride them out, keeping your bow into the wind and maintaining a speed sufficient to give you steering. Don’t let the vessel drift side on to the wind and waves, your vessel may take on water or capsize.

If your vessel does not have power or anchor, drag a sea anchor from the bow, keeping the bow into the wind and waves. A sturdy bucket or oar on a rope may make an adequate sea anchor.

BE PREPARED

Weather conditions on Victorian waters can change very quickly and a hot day can deteriorate into a cold and windy one.

Be prepared by:
- taking warm clothing
- knowing what to do in reduced visibility
- understanding what the clouds tell you about wind direction and strength
- having a global positioning system (GPS), charts and maps to help you navigate
- recognising that weather changes can create a situation of heightened risk.
KNOW WHAT THE FORECAST IS TELLING YOU

Wind can change direction and strength very quickly. It is important to understand the key terms when reading a weather report.

• Wind speed over the water is given in knots. Wind mentioned in forecasts refers to the average wind over a 10 minute period at a height of 10 m.
• Gusts are increases in wind speed lasting for just a few seconds. They typically range 30-40 per cent greater than the average wind speed.
• Squalls are a sudden large increase in wind speed (usually accompanied by a change in wind direction) that lasts several minutes and then suddenly dies.

The Bureau of Meteorology issues a:

<table>
<thead>
<tr>
<th>Strong wind warning</th>
<th>Gale warning</th>
<th>Storm warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>For winds averaging more than 25 knots and up to 33 knots</td>
<td>For winds averaging 34 knots and up to 47 knots</td>
<td>For winds averaging 48 knots or more</td>
</tr>
</tbody>
</table>

Maritime Safety Victoria strongly advises operators of small craft not to go boating when one of the above weather warnings has been issued.

The Bureau of Meteorology’s marine forecasts describe mean conditions over reasonably large areas such as Northern Bass Strait or Port Phillip. Reference to squalls and thunderstorms alert vessel operators to adverse weather conditions expected for short periods of time within the forecast period. Forecasts may not reflect local conditions where topographic influences might channel or block wind and affect wave development. Vessel operators should be familiar with local variations in certain wind streams before venturing out – ask the locals for advice.

WAVES

Wave heights mentioned in forecasts refer to significant wave height – being the average of the highest one third of waves. Larger waves do occur, especially in regions where tides and currents oppose wind-driven wave direction. Be aware of offshore winds and changes in wave height as you get further offshore i.e Altona below.
THUNDERSTORMS

Thunderstorms are a serious hazard for boats. Cumulonimbus or thunderstorm clouds (see diagram) produce strong, gusty winds that blow out from the front of the storm. If you see this type of cloud, you should watch which way it is moving – clouds often move in different directions from the wind at the surface. If it looks like it will pass over or within a few kilometres of you, head for shore immediately.

Safety hints

- Ensure you are carrying the prescribed safety equipment.
- Ensure you wear a lifejacket where required and consider wearing a lifejacket at all times while operating a vessel.
- Know the local factors that influence sea conditions and know where shelter can be reached quickly.
- Learn how to read the weather map.
- Be aware that the weather map in the morning newspaper was drawn the day before.
- Always check the latest forecast and warnings before going to sea and know what conditions exceed your safety limits.
- Beware of rapidly darkening and lowering cloud – squalls may be imminent.
- When at sea, listen to the weather reports on public or marine radio.
- Be flexible – change your plans if necessary.
- Be prepared to head back to shore regardless of how far you have travelled.
- Be prepared for changes in conditions and take warm clothing.
**OFFSHORE WINDS**

In offshore winds, sea conditions deteriorate the further you are from the shore. The relatively smooth conditions at the water’s edge are not true indications of the conditions further out. Wave size and whitecaps may not be visible as you are viewing the backs of the waves. Strong offshore wind conditions may prevent you from being able to make your way back to the shore. These hazards increase significantly when operating in offshore winds in remote locations and on large expanses of water.

**Safety hints**

- Know your location and the risks involved - choose a suitable location for your activity and understand how the wind direction and sea conditions impact on the safety of that location (seek local knowledge from someone if you are unfamiliar with the location).
- Check the weather when planning your activity as well as on the actual day (before you head out).
- If operating near the coast understand the effects of topography on the wind and know how to identify the lee (wind shadow) visually.
- Know your limitations and that of your craft and equipment and ensure they are suitable for the expected conditions and your planned activity.
- Do not rely on minimum safety equipment requirements.

**LOCAL KNOWLEDGE**

In addition to complying with the appropriate Victorian boating legislation and requirements, it is important to find out if there are any special local rules. Seek advice on local conditions and carry the appropriate navigational chart of the area in which you will be navigating. Maps are available that show shallow areas by figures or colours and give accurate details of launching ramps and anchorages. Contact local waterway managers for local requirements.

**NAVIGATIONAL CHARTS**

It is recommended that vessels carry a navigational chart of the waters they are navigating. Navigation charts should:

- be suitable for navigation purposes
- be up to date
- help the operator plot a course or destination
- identify navigation features including the location of shipwrecks and other submerged hazards, depth of water, and the location of islands and hidden reefs
- show details such as navigation beacons and markers to harbours and channel entrances, transit zones and channels.

GPS plotters, while useful, should never be relied on as the sole means of information regarding your position and course. A chart can help to determine your position which can be of importance in an emergency.
CROSSING OCEAN BARS

The MSR defines an ocean bar as an area in state waters comprising a ridge of sand or gravel near or slightly above the surface of the water that:

- is located near or at the entrance to the sea from a bay, inlet, river or other waterway
- extends across the mouth of that bay, inlet, river or waterway or parallel to the shore
- is permanent or occurs from time to time.

This includes all waters within 500m of the ridge/bar.

There are many bar crossings in Victoria, including the entrances to:
- Andersons Inlet
- Lakes Entrance
- Marlo
- Barwon Heads
- Mallacoota
- McLoughlins Beach

The MSR requires that a lifejacket must be worn on certain recreational vessels and hire and drive vessels during times of heightened risk, such as when crossing or attempting to cross an ocean bar.

Contact local water police, port authorities, waterway managers, fishing and boating clubs, tackle shops, chandlaries and commercial operators for advice on bar conditions and peculiarities. Assess weather conditions and obtain tide information. Observe local operators crossing the bar but do not cross if you are not adequately prepared.

EXERCISE EXTREME CAUTION

- Conditions on a bar change quickly and without warning.
- No amount of experience or boat type makes crossing a bar safe.

BE AWARE

- Night crossings are more hazardous.
- Vessels attempting to cross a bar at, or near, low water are more likely to experience adverse conditions.

PREPARING TO CROSS A BAR

- Ensure deck openings, hatches and doors are securely battened down.
- Stow all loose gear and put on lifejackets if you aren’t already wearing them.

CROSSING A BAR

- Monitor the:
  - prevailing wind
  - wave pattern timing, that is, look for sets
  - course to follow
  - bar traffic
  - alternate routes.

- Motor slowly toward the breaking waves looking for the area where waves break least or not at all.
- If there seems no break in the waves, slowly power through each oncoming wave.
- Ensure that you are not going too fast over each wave as this would cause the vessel to ‘bottom out’ if it dives heavily.
- If possible, make the crossing with the waves slightly on the bow so that the vessel gently rolls over the crest of each wave.
- When approaching from sea, increase power of the vessel to catch up to the bigger set of waves and position the vessel on the back of a wave. Do not surf down the face of a wave.

More advice at transportsafety.vic.gov.au/msv/ocean-bars

Crossing bars can be dangerous. Make sure you are adequately prepared. If in doubt, don’t go out.
Safe boating on NSW waterways

When it comes to the Murray River, which borders Victoria and New South Wales, the laws of NSW apply.

INTERSTATE BOATING

When boating interstate you are required to adhere to the safety and operating rules imposed by that state. Victorians visiting other states or territories should contact the relevant local authority prior to travel to ensure compliance with safety equipment and other operating requirements.
Wear a lifejacket

In NSW, appropriate lifejackets must be carried for everyone on board (in most cases) and the must be worn in a range of situations on different types and sizes of vessels and at times of heightened risk. For example, children under 12 years old must wear a lifejacket at all times on vessels less than 4.8 metres and in open areas of vessels under 8 metres while underway.

If using inflatable lifejackets, they must be serviced at least annually or in accordance with the manufacturers’ instructions.

Additional lifejacket rules apply. To find out more visit rms.nsw.gov.au/lifejackets

Keep a safe distance and speed

All vessels must travel at a safe speed for the prevailing conditions and keep a safe distance from people in the water, other vessels, structures and the shore at all times. You must also observe any signposted speed limits.

In NSW, when travelling in a power-driven vessel at six knots or faster, you must keep at least 30 metres from other vessels, structures and the shore. When driving any vessel at any speed, you must keep at least 60 metres from people in the water and any dive flag. If these are not possible, a safe distance and speed must be maintained.

Other safe navigation tips include:

• Keeping a proper lookout at all times
• Using appropriate navigation lights at night
• Keep to the right side in rivers and channels. On lakes, the direction of travel is anti-clockwise unless otherwise stated.

If in doubt, consult the relevant waterway manager and follow authorised signage.

Personal watercraft

In NSW, you must hold a PWC licence to drive a PWC. Operators and passengers must wear approved lifejackets at all times. PWC use is prohibited between sunset and sunrise in NSW.

Go easy on the drink

Both states have strict limits on blood alcohol levels for recreational boat operators. Don’t go boating under the influence of alcohol.

In NSW, the maximum permissible blood alcohol limits are 0.00 for operators aged under 18 years and under 0.05 for those over 18 years.

When engaged in tow sports, alcohol limits apply to drivers, observers and everyone being towed.

Tow safe

Everyone being towed must wear an appropriate lifejacket and no more than three people may be towed simultaneously.

In NSW, observers must hold a boat or PWC driving licence or be 16 years of age or older.

Safe distance requirements apply at any speed to both the vessel and the person being towed. Towing is prohibited between sunset and sunrise.

Consider the impact of your vessel’s wash on other people and the environment. Ensure your wash does not have a dangerous, damaging or unreasonable impact.

For more information contact Roads and Maritime Services rms.nsw.gov.au maritime or call 13 12 36
ENVIRONMENT AND WILDLIFE

Help protect the environment by observing the following common sense rules:

• launch and retrieve your boat at designated boat ramps
• reduce your vessel speed to five knots near the edge of lakes and rivers
• dispose of all rubbish including fishing line, bait bags and food scraps appropriately
• use sewage disposal facilities and prevent pollutants such as petrol and oil from entering the water.


RECREATIONAL FISHING REGULATIONS

Ensure you have a current copy of the Victorian Recreational Fishing Guide or have downloaded the ‘Vic Fishing’ app for smartphones. Visit the Victorian Fisheries Authority (VFA) website vfa.vic.gov.au

Report illegal fishing anytime by calling 13FISH (13 3474)

AQUACULTURE FISHERIES RESERVES

Nine offshore marine aquaculture fisheries reserves have been established in and around Port Phillip, marked by navigation aids with ‘Aquaculture’ written on the yellow ‘X’ cross bar (see picture).

They are lit at night. Recreational users in surrounding waters should proceed with caution if near or entering the reserves to prevent damaging your vessel and the long lines of nylon rope suspended on buoys used in these areas.

WHALES, DOLPHINS AND SEALS

It’s important not to get too close to marine mammals when on the water. This is to reduce the risk of disturbance to natural behaviours.

- boats are not permitted to approach within 100 m of a dolphin or 200m of a whale
- jet skis are not permitted within 300m of either a whale or dolphin.

More stringent requirements apply in relation to narrow waterways (being a waterway of less than 300m in width at its widest point).

To learn more about the restrictions in place for boating and swimming around whales, dolphins and seals, contact DELWP.

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Aquaculture fisheries reserves (AFR)
1. Grassy Point AFR
2. Clifton Springs AFR
3. Bates Point AFR
4. Kirk Point – Werribee AFR
5. Beaumaris AFR
6. Mount Martha AFR
7. Pinnace Channel AFR – Southern Section
8. Pinnace Channel AFR – Northern Section
9. Flinders AFR
10. Dromana AFR
MARINE NATIONAL PARKS AND MARINE SANCTUARIES

The Victorian Government has created 13 marine national parks and 11 smaller marine sanctuaries to ensure that representative samples of Victoria’s marine environment are conserved for future generations.

RESTRICTIONS

All forms of commercial and recreational fishing from sea or shore in Marine National Parks and Marine Sanctuaries are prohibited, including collecting bait, line fishing, setting traps, netting and the use of spears. Heavy penalties apply.

No fishing, netting, spearing, taking or killing of marine life is permitted including all methods of fishing, from the shore or at sea in Marine National Parks or Marine Sanctuaries.

Taking or damaging animals, plants and objects (artefacts) is also not permitted. There are strong penalties under the National Parks Act 1975 (Vic) for fishing in marine national parks and marine sanctuaries.
BOUNDARY MARKERS

Yellow on-shore triangles
These are located at the park boundaries and point in towards the marine national park or marine sanctuary. In some cases there are two yellow on-shore triangles located on separate poles, one taller than the other. These two triangles can be used to get a lead to the boundary by aligning them so one is seen to be directly above the other.

Yellow in-water special mark
These markers are found on buoys and piles and are used to mark the boundaries of zones and other special areas.

PUBLICATIONS AND FURTHER INFORMATION
Parks Victoria is responsible for the day-to-day management of Victoria’s marine national parks and marine sanctuaries. If you would like further information about these, please contact the Parks Victoria Information Centre on 131 963 or visit parkweb.vic.gov.au. On-site signage at key access points, for example, boat ramps, is also provided.

ENVIRONMENT PROTECTION

Some boating activities can have a significant impact on water quality.
For example, the discharge of waste from boats may add nutrients and pollutants to our waterways and can pose a risk to ecosystems and human health. The discharge of oil, chemicals, sewage, garbage, litter or any other waste is prohibited in any waters in Victoria.

To report a waste or pollution incident, contact the Environment Protection Authority (EPA) on 1300 372 842 or visit epa.vic.gov.au.