licences ...

A valid licence, obtained through an approved Boat Safe provider, is required to operate all recreational vessels powered by a motor over 6HP (min age 16 years).
Queensland licences are issued for a lifetime. Unlicensed drivers may drive a boat of 6HP and over provided they are accompanied by a licensed driver who can take immediate control of the vessel. Unlicensed drivers are NOT permitted to tow (eg water skiing). A separate licence is required to operate a Personal Watercraft (Jetski).

getting around your boat ... *(port, starboard, bow, stern)*

You should know that the front of your boat is called the bow, and the back is called the stern. The left side of your boat is called PORT and the right side is called STARBOARD.
A Bollard is a short vertical post that can be found on the ship's deck tor tying onto wharves, jetties or moorings.

vessel registration ...

All boats fitted with a motor of 4HP or over MUST be registered. Registration forms are available from Queensland Transport Customer Care Centres. Fees are calculated according to the boat's length. Registration labels MUST be attached to the exterior of the boat above the waterline on the PORT side. Your boat will be allocated registration SYMBOLS; these must be clearly visible (from at least 30 metres) in plain characters in a contrasting colour to the hull of the boat. Vessels capable of planing must have their characters at least 200mm high on BOTH sides; vessels not capable of planing (canoes with motors, yachts etc) must have their characters at least 75mm high on BOTH sides or on the stern.

lateral, cardinal, special, safe water & isolated danger marks ...

lateral marks ...

Port and starboard marks are referred to as "lateral marks". They indicate the PORT-hand and STARBOARD-hand sides of navigable waters. When both the PORT (red) and STARBOARD (green) marks are placed near to eachother, travel directly between them.
When going upstream (away from the sea) ...

- keep red (PORT) markers on the LEFT side (to PORT);
- keep green (STARBOARD) markers on the RIGHT side (to STARBOARD)

When going downstream (towards the sea) ...

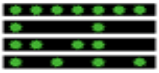
- keep red (PORT) markers on the RIGHT side (to STARBOARD);
- keep green (STARBOARD) markers on the LEFT side (to PORT).

PORT Marks

STARBOARD Marks

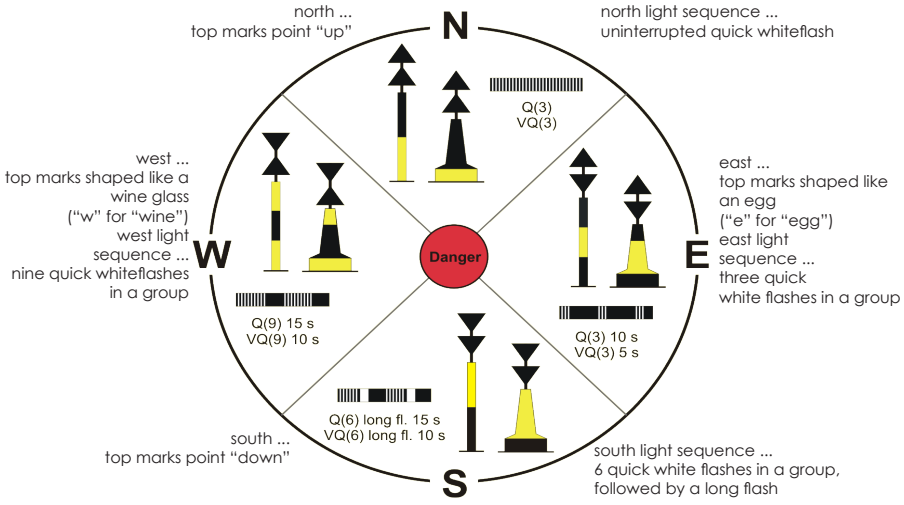
PORT Light Sequence

STARBOARD Light Sequence



cardinal marks ...

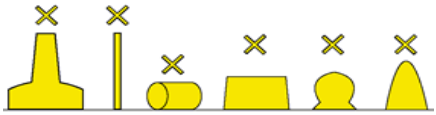
A cardinal mark indicates where the deepest and safest water can be found (ie safe passage). It also indicates the safe side on which to pass danger and to draw attention to a feature in the channel such as a bend or junction.



special marks ...

Special marks can be used to mark a specific structure or feature such as a cable or pipeline, or to indicate that a channel divides. The direction to navigate around a special mark is obvious when using a chart.

At night the light is yellow and the rhythm may be any other than those used for the white lights of cardinal, isolated danger and safe water marks (check your chart for sequences). Variations in the design of buoys will exist in many areas, illustrations indicate the approved shapes, colouring and top marks.



special marks Light Sequence

safe water marks ...

Indicates that there is navigable water all around the mark eg mid channel.

At night a white light shows a single long flash every 10 seconds. To remember this, associate a single sphere with a single flash.

isolated danger marks ...

Indicates that there is an isolated danger with navigable water all around it eg an isolated shoal, rock or wreck.

At night a white flashing light shows groups of two flashes. The best way to remember this is to associate two flashes with two spheres as the top marks.

collision rules ...

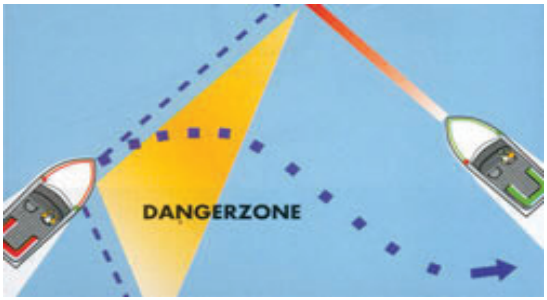
Don't assume that the driver of another boat will observe rules, and always be prepared to take immediate action in order to avoid a collision. A power boat always gives way to a sail boat (unless vessel is restricted in its ability to manoeuvre)!

keep a good lookout ...

Keep a good lookout at ALL times. Be aware of other boats, especially in bad weather, restricted visibility and in darkness.

assess risk of collision and take immediate action ...

- stay right
- alter course to right (in a large enough action to be obvious)
- give way to right



speeding ...

All boats must travel at a safe speed at which you can act to avoid collision or stop to avoid danger which may arise suddenly. Wash created by speed must NOT create any damage to the shoreline or any other vessel (slow down). When driving a boat you must:

visibiltiy
drive slower in rain, fog, mist, smoke and glare and take special care at night when hazards are even harder to distinguish

other boats
slow down in congested areas, near moored or anchored boats, and where large vessels with resticted manoeuvrability are working

navigation hazards
slow down in shallow areas and unfamiliar territory where water depth can vary quickly; STOP your motor when you are near swimmers!

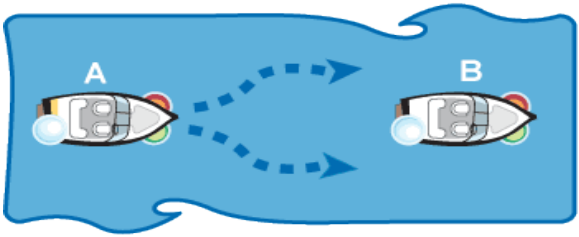
waves and wind
slow down in rough conditions

narrow channels ...

When operating in narrow channels, all boats should still travel on the STARBOARD (right) side and avoid anchoring (especially near markers).

overtaking ...

If you are overtaking a boat, you can do so on either side (whichever is safest).



speed limits ...

Six (6) knots (No Wash) is the minimum speed limit and is equal to a brisk walking pace (approx 11 km per hour). However, there are instances when the boat's master should reduce speed even further to be safe (eg when creating excessive wash). The maximum speed limit you are allowed to travel in smooth water limits and dams is 40 knots.

distance off ...

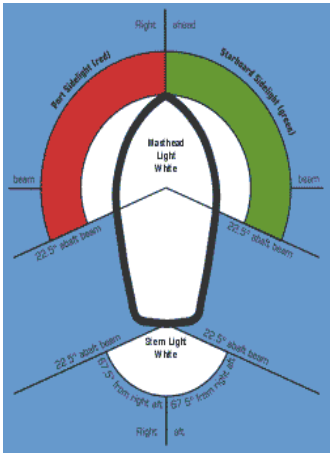
Six knots applies within 30 metres of

- boats anchored, moored to the shore, or aground
- jetty, wharf, pontoon or boat ramp
- people in the water
- boat harbours, canals and marinas
- shoreline (or any fixed object - bridges or pylons)

RULES APPLY WHETHER THERE ARE SIGNS OR NOT.

navigation lights ...

Boats operating from sunset to sunrise, by law (whether at anchor or under way) MUST display the correct lighting. Navigation lights must also be used in daylight hours during periods of restricted visibility and must be positioned so that they are not obscured by the boat's superstructure or interfered with by deck lighting. Lights should be fitted by the manufacturer.



A powerboat less than 12 metres MUST display:

- sidelights (Port - red, Starboard - green)
- white masthead light
- white stern light
  (or an all round white light instead of the mast and stern light)

Trawlers MUST display an additional green over white light up the mast.

sound signals ...

Sound signals are used in restricted visibility to alert others of their position. Be prepared to take immediate action in order to stop or slow down.

Boats over 12 metres should carry sound signals, a whistle and a bell. Vessels under 12 metres should have some means of making an efficient sound signal.

one short blast ...
I'm altering my course to Starboard

two short blasts ...
I'm altering my course to Port

three short blasts ...
I'm going astern

five short blasts ...
I'm unsure of YOUR intentions

safety equipment ...

Boats requiring registration (4HP and over) MUST carry the regulated safety equipment. Boats not requiring registration (less than 4HP) do not have to carry the regulated safety equipment, but need to satisfy their General Safety Obligation i.e. if you fail to carry a piece of equipment that could have assisted to prevent an accident, YOU could be prosecuted.

Personal Flotation Devices (PFDs) / lifejackets ...

Under 12, under 4.8 metres, underway - children under the age of 12 in open boats under 4.8 metres MUST wear properly fitted lifejackets whilst underway (underway includes drifting). Emergency or high risk situations often arise quickly on the water, even if conditions are calm. Once IN the water, it is extremely difficult and almost impossible to put a lifejacket on.

PFD Type 1 ... (MUST comply with Australian Standard 1512)

For use in smooth, partially smooth or open waters; provides sufficient flotation to support the body and head and has reflective tape for visibility. The flotation collar keeps your head above water. Remember PFD1 is NOT to be used for ANY type of water sports.

PFD Type 2 ... (MUST comply with Australian Standard 1499)

For smooth or partially smooth waters ONLY. Will keep you afloat but does not have a collar to keep your head above water.

PFD Type 3 ... (MUST comply with Australian Standard 2260)

For smooth waters ONLY where the user is likely to be in the water for only a short time (eg waterskiing); has the same buoyancy as PFD Type 2, although the colours are not as visible.

Ensure that all PFDs are up to standard wiith the manufacturer's name, model, batch and year of manufacture; type of PFD, cautions, intended body mass, illustrated instructions for donning the PFD and instructions for storage and care (ensure elements such as stitching and colour have not deteriorated).

OPEN WATERS ...

EPIRB

All boats, regardless of whether they are registrable, operating beyond smooth water and partially smooth waters (more than 2 nautical miles from land) MUST carry an EPIRB (Emergency Positioning Indicating Radio Beacon).

PARTIALLY SMOOTH WATERS ...

V-Sheet ...
Flares ....
All vessels operating beyond smooth water limits MUST carry orange (daytime use) and red (use in the dark) hand flares as part of their safety equipment. Always read the instructions and familiarise yourself with them before storing on board (in a readily accessible dry place).

SMOOTH WATERS ...

Signalling Devices ...
A signalling device is COMPULSORY for all boats operating between sunset and sunrise. A torch, fluorescent light, lantern or cyalume stick are all suitable provided they generate enough light to be seen by other boats to attract attention and prevent a collision.
Lifejacket ...
Appropriate type and fit for every person on board over the age of 1.
Fire Fighting Equipment...
Fire fighting equipment is required to be carried by all vessels over 5 metres in length (fire extinguisher).

safety obligation ...

Navigation Equipment
Pumping and Baling
Anchor
Manual Propulsion
Drinking Water

water skiing ...

The owner / driver of a boat is responsible for the safety of others and has a general safety obligation to:

- ensure the boat is safe and capable of towing skiers
- take all the necessary safety equipment for the skiers and passengers
- operate the boat as safely as possible and check the area is safe by noting the depth of water, width to make turns and any hazards

Lifejackets (PFDs) for skiiers ... Skiers MUST wear a lifejacket at ALL times:

- Smooth Water Limits - PFD Type 2, 3, or a wetsuit with inbuilt flotation approved as a PFD Type 3
- Partially Smooth Water Limits - PFD Type 2

Observers ... MUST be 12 years or over and competent to watch the skier at all times, notifying the driver immediately if there is danger, the skier signals the observer or if the skier has a fall.
Direction of Travel ...
Boats should travel in an anticlockwise pattern.

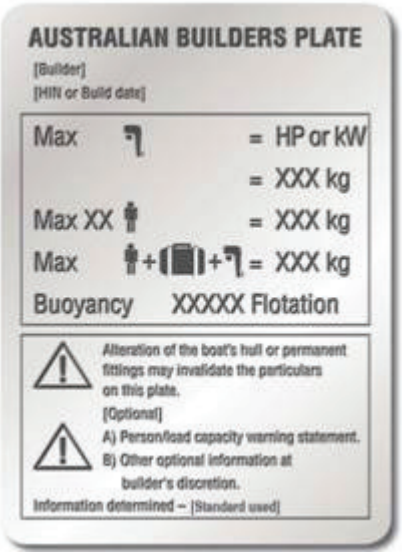
bar crossing ...

A bar is an accumulation of sand or silt at the entrance of a river, creek, lake or harbour (eg the Gold Coast SeaWay, Jumpinpin, South Passage Bar, Wide Bay Bar, Noosa, Caloundra, Maroochydore and Mooloolaba). Crossing a coastal bar CAN BE DANGEROUS.

Conditions prevailing on a bar can cause steep and often breaking seas. EVERYONE IN OPEN BOATS UNDER 4.8 METRES, WHILST CROSSING A COASTAL BAR, **MUST** WEAR A LIFEJACKET! When conditions are adverse, don't take a risk - if in doubt, don't go out!

Australian Builders' Plate ...

The Australian Builders' Plate is required for new and imported recreational boats built from 1 July 2006, providing essential safety information on uses and limitations eg maximum number of passengers as well as buoyancy performance and engine weight and rating. The Australian Builders' Plate should be permanently fixed and readily visible to the boat's operator.



trip preparation and planning ...

Boat is maintained / serviced

Service your boat's engine according to Manufacturers instructions by a specialised workshop. Reguarly inspect and maintain:

Water Pump
Propellers
Spark Plugs
Gearbox Oil
Fuel System
LPG
Batteries
Electrical System
Pumps

Inspect your boat for signs of corrosion, cracks, wear & tear. Ensure bungs are suitable and in good condition. Ensure bilges are clean & dry. Keep your boat clean and polished, check all screws, bolts and other fittings are secure.

Mooring and Berthing apparatus is maintained / serviced

- Ropes, lines and fenders should be checked regularly, in good condition, ready for use.

- Check that appropriate anchors / sea anchor are on board and are properly rigged, stowed and ready for use. For boats less than 5m, can be chain or rope of 18m with chain of at least 2m. For boats over 5m, can be all chain or 2m of chain and 35m of rope; 2 anchors should be carried. For boats over 8m, two anchors with 37m chain & rope each.

Weather Conditions

- Weather is important to safety. Also check and understand the weather before and during your boating. If the weather looks "dicey" don't go out, it the weather starts to turn "dicey" head straight for shelter.

- The Bureau of Meterology issues regular forecasts for small boats operating in coastal waters, including expected wind direction and strength, the state of the sea and swell, visibility, and changes expected during the forecast period.

- Volunteer marine rescue groups provide weather schedules and / or weather information on request on Channel 88 on 27MZ & 67VHF (they are broadcast 5 minutes past the even hour).

- You can also telephone Maritime Safety Queensland's Maritime Weather Service at the cost of a local call.

All of Queensland	1300 360 426
Marine Warnings	1300 360 427
South-East Queensland	1300 360 428

- A full range of weather information is available on the Bureau of Meterology's website www.bom.gov.au

- Tides can impact heavily on the state of waves. Most bars are at their safest before high tide when the flow is still inwards (flood tide), the ebb tide (midway between high and the next low tide) will generally produce the worst conditions (higher waves more likely to "stand up" and break)

- In restricted visibility (day or night) remember:

  turn your navigation lights on
  slow down
  if you have a reliable friend on board, ask them to assist as a second "look out"

Area and Type of Operation

- Know exactly where you are going, how to get there and how long it will take to get back

- Check the tides, tidal flow and bar conditions

- Find out about any local dangers and special rules or regulations for the boating area you are operating in. Information regarding access and exit points, events, safe havens, launching ramps and ports can be obtained from local or official charts, signage at boat ramps, or from rescue groups and maritime authorities.

- Develop a safety plan so that everyone on board knows what to do in case of an emergency. Ensure everyone knows how to swim or tread water and properly don a lifejacket and use all safety equipment for the area you are operating in.

- You should ensure your boat is in proper "seaworthy" condition and that it is used within its operating design limitations. Overloading is dangerous!

Adequate Provisions

Ensure that there is sufficient fresh water and food for the length of the trip with some extra in case of an emergency.
Carry adequate wet weather gear, clothing offering protection from the elements and not restrict movement. Carry sunscreen, first aid kit, personal medications, fresh spare fuel carried in an approved transfer container. Never refill portable fuel tanks in the boat - take them ashore for filling and wipe off any spillage before replacing them aboard.

Trip Details

Plan your day's boating activities, even the smallest trip. Know your destination and how to get there and back. Your plan should include:

- where you intend to go
- nature of your activities
- expected time to return
- the names and telephone numbers of people on board
- shore contact details
- radio used and frequency / call signs
- amount of fuel carried
- a list of safety equipment carried
- where you intend launching
- a description of your boat
- your boat, car & trailer registrations
- what to do if you do not return at the planned time (eg ring Police)

Appropriate Person

Always let someone know your plans in plenty of detail. If you log in by radio, don't forget to log off, and of course, you must follow your trip plan. Inform your local marine volunteer group, as they will keep a radio watch and set search and rescue in action if you fail to sign off at your planned time. Even leave a copy of your Trip Plan in your car!

Pre-Start Check / Safety Equipment

You should make a habit of inspecting the key features of the boat each time before you leave home or the boat ramp, mooring or wharf.

- Before operating any switches or engines, check for petrol and / or liquid petroleum gas (LPG) odours. If such odours exist, fix the fault before you go out.

- Inspect the bilges. If there is more bilge water than usual, find and rectify the fault. When pumping bilges be aware of the environment. Polluting the waterways is an offence. If there is oil or fuel in the bilge water, use special absorbent pads to clean up and dispose of these appropriately. Such pads are available at leading marine stores. Self-draining holes should be clear.

- Check engine oil and coolant levels - top up if required. Examine marine batteries and terminals and ensure the connections are tight. Do the same for the second battery if carried.

- Check the engine, fuel lines, tanks, hoses, spark plugs etc - if it's not working properly - don't go out!

- Check maintenance history, log books and compliance.

  compass
  sound signal
  towing harness / tow rope

- Check steering, propeller and shaft condition.
- Check that the fire extinguisher is serviced, in good condition and ready for use. Read the instructions and know how to use it!
- Ensure your lights are in working order - it may be a daylight outing, but you could be delayed returning.
- Test any electrics operating from the battery such as radios, guages, power tilt.
- Steering cables and connections must be in good condition and work perfectly.
- One personal flotation device (PFD - lifejacket) should be available for each person on board.
- If you have a radio, ensure that it is on and working.
- Ensure you have:
  bailers
  dinghy / life raft
  paddles / oars or an alternative means of propulsion (boats under 6m)
  bucket and line
  first aid kit
  charts
- Check the bungs!

respond to boating emergencies and incidents

Brief your Crew and Passengers

Ensure everyone on board knows where to find, and how to use, essential safety equipment such as PFDs and fire extinguishers. Show others how to operate the boat, and radio, and how to deal with emergencies and abandoning procedures. Find out passengers' level of boating knowledge, swimming skills and any personal medication requirements.

Emergencies

FIRE	It is essential to know how to fight a fire and have the correct equipment on board.
GROUNDING	Know how to read the beacons marking the channel, familiarise yourself with the area at low tide, look for signs i.e. ripples on the surface, surface formations changing suddenly, different water colour, use a CHART, test the depth at slow speed. If in doubt, slow down until you are sure of the channel ahead.

PERSON OVERBOARD	Alert the boat's Captain and do not lose sight of the person in the water. Stop the engine and turn the boat so that the stern comes alongside the person in the water. Immediately throw a life-saving device toward the person to give assistance with keeping afloat. Do not go into the water to assist the person unless absolutely necessary. If you do need to go into the water to assist the person, ensure you have a personal flotation device and you are attached to the boat with a line.
CAPSIZE	Avoid capsizing, swamping and sinking by not overloading your boat - overloading slows the boat down and reduces the amount of freeboard (area above the waterline). A low freeboard increases the possibility of swamping the boat or taking on water. Improper weight distribution can make the boat even more unstable. You must locate persons and equipment in order to balance the boat and keep water out. Anticipate all waves and aim the bow into them. Should your boat capsize, take a head count to make sure everyone is there, check for injuries and stay with the boat. Small dinghy-type boats have sufficient flotation to keep afloat if upturned. When reboarding a boat at any time, board over the stern. Never attempt to board over the side of the boat.
ENGINE BREAKDOWN	Practise troubleshooting problems before you leave home and carry essential tools. Use an anchor to face the bow into the sea and try to work under a waterproof cover. It is a good practice to carry an auxilliary motor maintained in good operational order and ready for immediate use if required.
INJURIES / ILLNESS	Captains and crew of small boats need to have the basic first aid skills and are required to respond with knowledge and confidence. Keep an appropriate first aid kit on board, with equipment to provide initial treatment for common injuries. Seek medical assistance if necessary.
HYPOTHERMIA	Severe heat loss from the body can occur due to cold water, wet clothing and cold winds causing hypothermia. If wearing a lifejacket, tilt your head back and rest on the lifejacket, tread water and huddle together if possible (huddling together can increase survival time by up to 50%) by reducing the rate at which the body loses heat.

FUEL Running out of fuel, fire risks associated with fuel and disabled engines resulting from incorrect or dirty fuel or excess moisture in the fuel, can lead to serious emergencies afloat.

Always check your fuel levels before every trip. Carry enough for the trip with an adequate reserve for heavy weather, contingencies and emergencies. Plan to arrive home with at least 30% of your fuel intact. Use fresh fuel (clean out the fuel tank periodically - at least yearly) and always replace old fuel after a period of inactivity.

Preparation for Abandoning the Boat

- Brief everyone on board what to do in order to abandon the boat.
- Make sure that everyone is wearing a lifejacket before going in the water.
- Send a distress call if the boat has a radio.
- Send off distress flares only if they are likely to be seen.
- Activate your EPIRB if carried.
- Don't leave the boat unless there is an uncontrollable fire. A partially submerged boat can be used for support; resist the temptation to swim ashore as distances over water usually appear shorter than they actually are.
- If you leave your boat in a raft etc, take drinking water, emergency equipment, provisions and clothing; deploy your anchor or sea drough (anchor).