

Wellington Skippers

COCKPIT GUIDE



Everything you need to know
about safe boating in the
Greater Wellington Region.

 **Greater Wellington**
Te Pane Matua Taiao

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Second edition – October 2023

Harbourmaster's team

We provide safe and efficient maritime management for recreational and commercial users of our region's waters.

We operate a 24-hour harbour communication station – Wellington Harbour Radio (Beacon Hill) which primarily manages commercial vessel activity and is the primary contact for the Harbourmaster's Team.

We maintain navigation aids, respond to marine oil spills, manage swing moorings, and respond to safety incidents.

If you witness an oil spill or dangerous activity, please call Beacon Hill 24/7 on 04 388 1911.



The waters of our region extend from the Ōtaki River in the west to the Mataikona River north of Castlepoint in the east.

Did you know: it is compulsory to wear a life jacket in any boat under 6 metres.

The 5 knots

Thou shall knot:

- Leave shore without wearing my life jacket.
- Leave shore without two forms of waterproof emergency communication (wearing one and carrying one).
- Tow a skier or sea biscuit without an observer.
- Exceed 5 knots within 200 metres from shore, structure or dive flag.
- Exceed 5 knots within 50 metres of another vessel or person in the water.

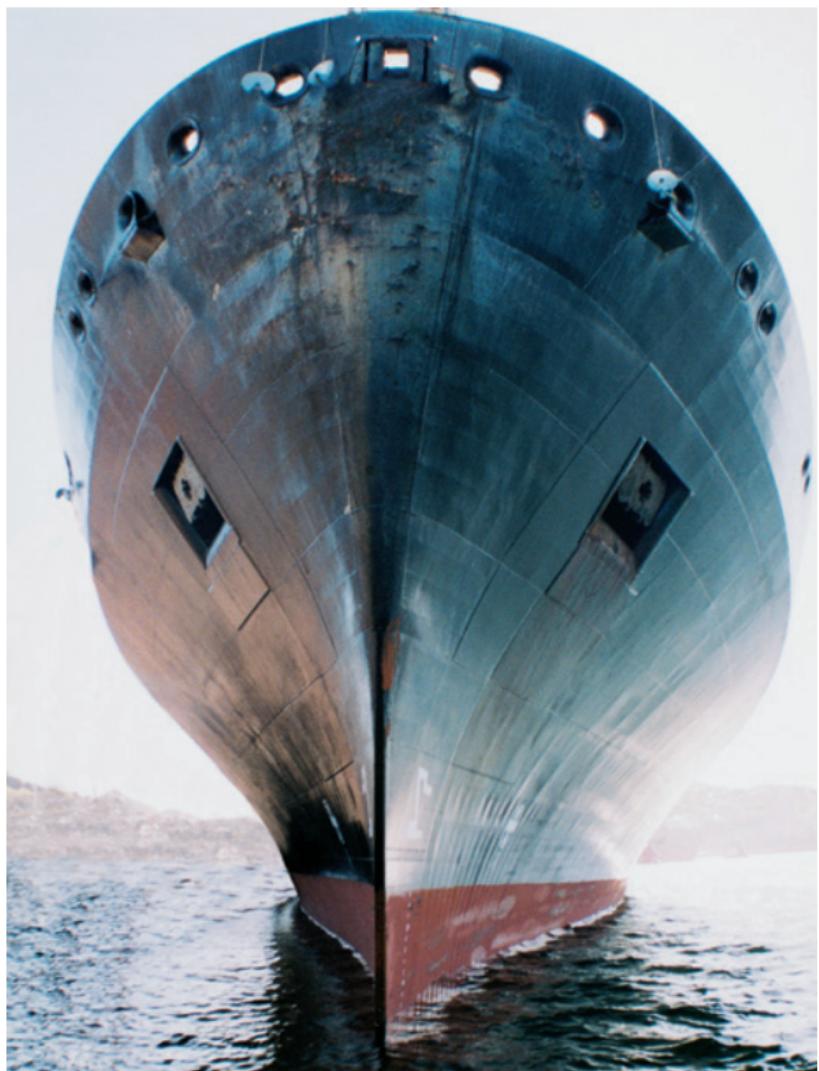


Did you know: you will survive 1-3 hours in the water with a life jacket on and around 10 minutes without. Always wear communications so that you can receive help as soon as possible.

Navigating into Wellington

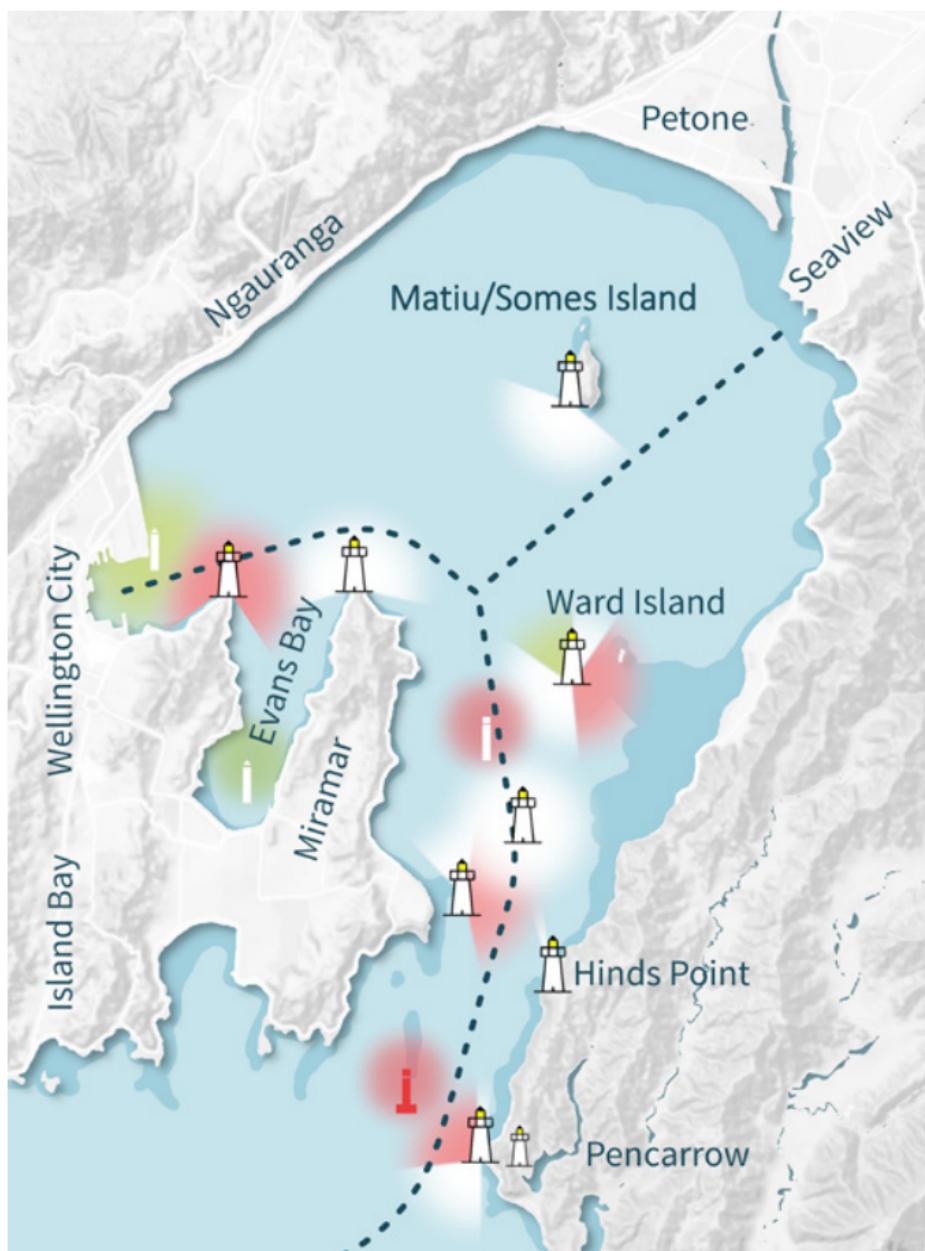
If you intend to pass through the harbour entrance at night or in restricted visibility, you are required to call Wellington Harbour Radio on VHF channel 14. Let them know who you are and where you are going. If unable to contact via VHF please phone on 04 388 1911.

Keep a proper lookout



If the weather is deteriorating, it is best to have an alternative plan before you get to the ramp. It is ok to go on another day.

Please use this map as an indication only and not for navigating.

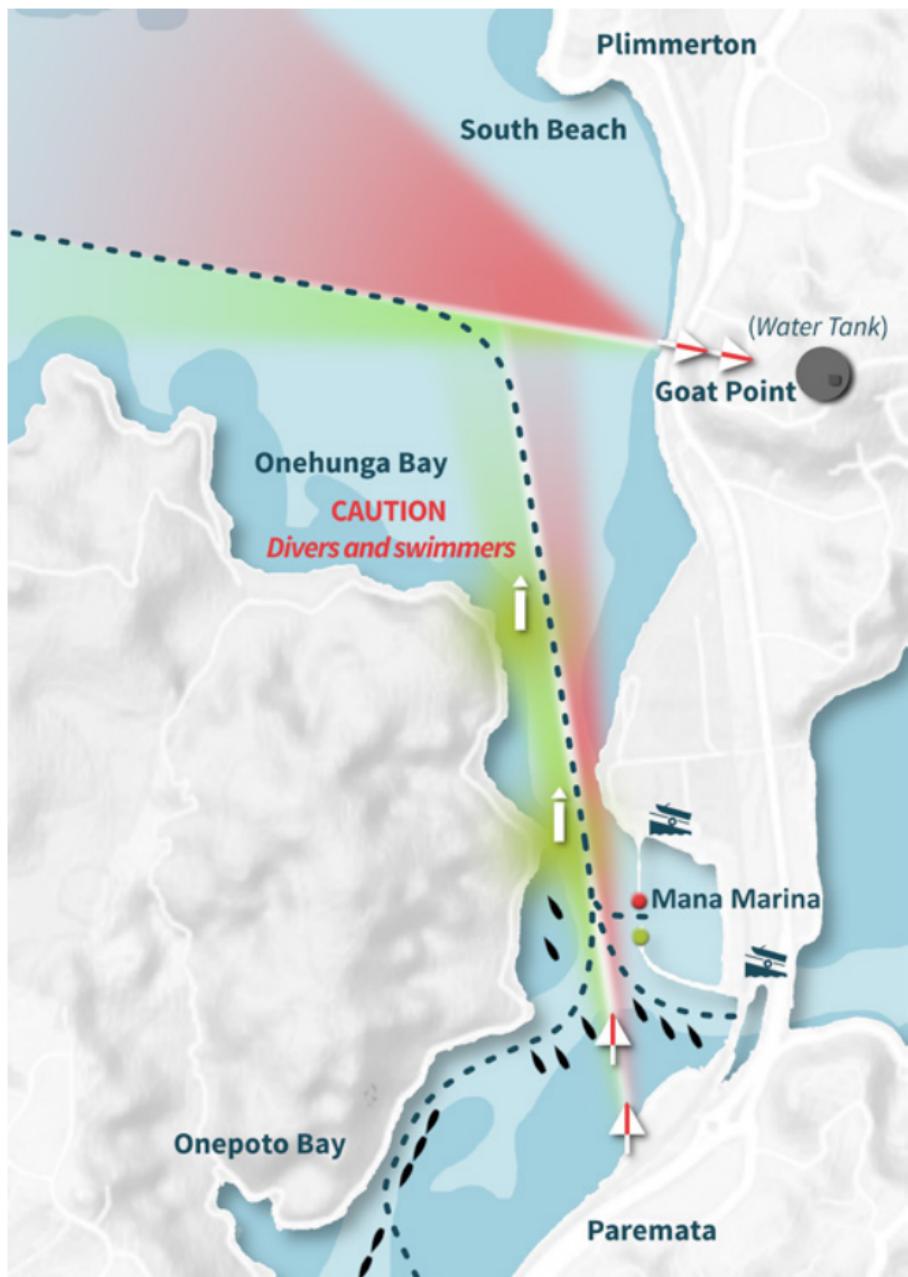


Key

Red areas:	you should see a red light when you're in these areas.
Green areas:	you should see a green light when you're in these areas.
White areas:	you should see a white light when you're in these areas.
Flashing light:	lighthouse lights have distinctive flashing patterns (specific details can be found on your navigation chart). See page 51.

The coloured halo depicted around each lighthouse indicates the colour of the light that is emitted and in what direction.

Navigating into Mana



On the image where the red light is indicated, you will see a red light on the water. Please use this map as an indication only and not for navigating.

Always maintain your course and speed.

In high north-westerly winds, kite surfers operate in the Paremata channel. We ask them to pass astern of vessels and maintain 50 metres distance if exceeding 5 knots.

Local boating weather

Wellington is the windiest city in the world. Winds reaching or exceeding gale force are recorded 233 days out of the year.

Weather can change unexpectedly. Monitor the weather regularly and keep up to date with local knowledge to help keep you and your whānau safe.

Keep an eye on these pages for weather updates:

- **MetService - forecast**

<https://www.metservice.com/marine>



- **PortWeather - live weather**

<https://centreport.co.nz/home/weather>



- **Now casting VHF channel 20**

or the coastguard app - <https://www.coastguard.nz/boating-safely/coastguard-app-the-boaties-best-mate/>



What to look for in the weather forecast

- Plan to go out on an improving or dropping forecast.
- Light offshore winds of 0 -15 knots.
- Low swell < 1 metre.
- Slack tides or small tides - scan the QR code to check the Māori fishing calendar.
- Consistent wind direction for a couple of days improves visibility.
- Check what unit of measurement your forecast is using; it could be metres per second, kilometres per hour or knots (nautical miles per hour).
1 knot = 1 nautical mile per hour
1 nautical mile = 1,852 metres



Have a plan B. Remember there is always another day if the weather isn't looking good!

Did you know: always wearing at least one form of emergency communication means that a call for help can be made early, increasing your chance of survival.

Windy Wellington – where should I go?

Southerly wind:

West Coast (Ohau – Ōtaki) tends to be suitable in light – medium southerly winds.

West Coast safe haven:

Paraparaumu and Waikanae beaches are long and sandy.

North-westerly wind:

South Coast (Baring Head – Oteranga Bay) tends to be suitable in light – medium NW winds.

South Coast safe haven:

Island Bay is a safe place to recover a trailer boat if the swell was to increase during the day, especially if you have launched from Ōwhiro Bay.



Waves:

Waves are mainly created by wind. The size of a wave is dictated by the strength of the wind, the length of time the wind blows, the distance the wind blows over the water (or ‘fetch’) and the contours of the sea floor.

Offshore winds – Winds blowing away from the shore create flat water close to shore. This is great for water skiing and diving, however it will get progressively rougher the further you go out. If you break down, you will be blown offshore quickly into rough water. Petone beach is a great example where people can get into trouble, leaving the beach in flat water and then struggling to return, while getting blown toward the harbour entrance.

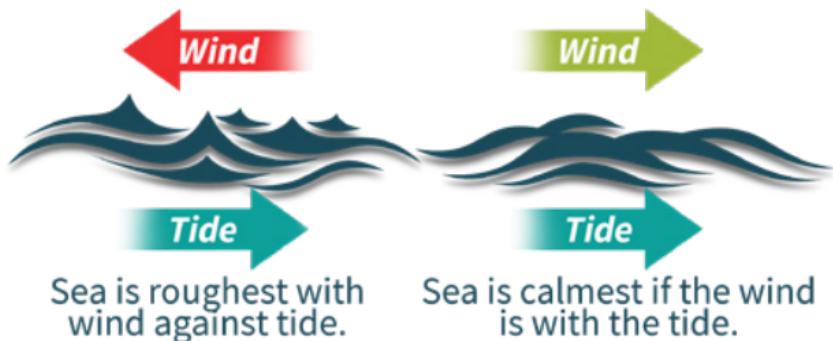
Wind chop – Waves start to white cap at 12-15 knots. This can make it hard to see and locate divers. We recommend avoiding areas with strong winds or strong currents. Safety sausages and air horns can assist in diver recovery.

Swell – The kinetic energy from previous wind energy creates swells.

Swells can range from 0.5 – 10 + metres and can make launching and retrieving difficult, dangerous and uncomfortable.

Ōwhiro Bay is potentially dangerous to retrieve from in a swell as it curls around the corner. In a Southerly swell, consider retrieving at Island Bay.

For a pleasant day on the water, the ideal conditions are < 1 metre and easing. Wellington can experience larger southerly swells from further away while still having light winds locally, so always check the swell forecast.



A calm sea can turn very rough with a change of tide

Big tides and currents – The region is famous for its very strong tides and currents. These can run up to 7 knots or more, so must be respected at all times. Cook Strait is considered one of the most dangerous and unpredictable bodies of water in the world.

Tides can vary greatly depending on the phases of the moon. Full moons and new moons are times of the greatest water movement. We recommend that you avoid areas of high tidal activity or strong current during these periods. Always check the MetService website.



Hope for the best, prepare for the worst, and watch for change.

Cook Strait Tide Offsets

We recommend that you always go with an experienced local guide anywhere west of Sinclair Head (Devils Gate).

Cook Strait predictions can be unreliable. Always remain observant to the ever-changing conditions you may experience.

When closer to shore the tide strength, time and direction varies more. When further offshore the tide tends to be more predictable and flows 6 hrs each way.

These indications of tidal flows and duration have been provided by knowledgeable locals.

Warning: these tide offsets are indicators only.

- **Ohau Point:** slack water is LW at Port Taranaki. After that it flows 3 hrs to the north and then turns and flows 9 hrs to the south.
- **North Side Oteranga Bay:** out to 20 metres depth on the line of cable protection markers on the hill, slack water is approximately 1 hr after LW Wellington. It then flows south until approx. 3 hrs after HW Wellington, where it will go back to the north.
- **Thoms Rock:** slack water is approximately 3 hrs after LW Wellington, after which the water should flow to the west. 3.5 hrs after HW Wellington it will flow to the east.
- **Sinclair Head:** the current flows to the west until 1 hr before LW Wellington. It then flows to the east until 2 hrs after LW Wellington.
- **Arabella Rock:** slack water is 1.5 hrs before LW Wellington after which it flows to the east and is slack 1 hr before HW Wellington after which it flows to the east.

Warning: Diving and anchoring in currents is extremely dangerous.

These tidal areas should be avoided during big (spring) tides.

Tide can be affected by things such as wind and weather patterns. Allow time to factor any variation from the predicted tide time, and always check the MetService tide forecast or the latest updates.

Don't rely on the published 'high and low tide timing' being exact. Give yourself some leeway and turn up 1 hour early to ensure you catch the tide.

Anybody intending to cross the Cook Strait can refer to the Cook Strait info on the Lowry Bay Yacht Club website.

Key

HW – High water (or high tide)

LW – Low water

MHWS – average of the highest tides

Flood – direction of incoming tides

Ebb – directions of outgoing tide

Spring – greater difference in height and stronger currents

Slack water – the time of least current between flood and ebb flows

Neap – less difference in height and less current

Time and tide wait for no one.

The Māori fishing calendar is a great resource for showing the days with smaller tides and ultimately better fishing days.

Longer bite times are recorded during times of small tides (see QR code on page 7).

Cable Protection Zone - Wellington region

If you intend to tow a vessel through the cable protection zone, you need to contact the Harbourmaster first on 04 388 1911.



Within the blue zone following the coast line above, you may dive during daylight hours only.

You must stay outside of the yellow signs and within 200 metres of shore. Support vessels must not anchor or line fish.

For more information about the Cable Protection Zone please visit www.transpower.co.nz/cpz

The maximum fine for fishing or anchoring in the Cable Protection Zone is \$250,000. The cost of any damage can cost millions of dollars and take months to repair.

Essential equipment



Lifejackets

It is compulsory to have a properly fitted jacket for everyone onboard your boat. If your boat is under 6 meters everyone must wear their lifejacket when underway.



Waterproof communications

Two means of waterproof communications need to be carried on all vessels except for paddled craft less than 1 km from shore who only require one.



Bailing system

Even if you have an electric bilge pump, always carry a bucket or bailer. It can be used to put out fires and has many other uses. Water in the bottom of a boat creates instability.



Knife

A knife can be a lifesaving tool. It can free someone entangled in rope, free an entangled propellor, or it can release a stuck anchor before your boat is pulled under.

Keep it within reach and make sure it's sharp.

Did you know: the best bailer is a scared person with a bucket.

Rope

Rope can be used for:

- lashing loose equipment
- towing
- a line for launching and tying up your boat.



Always carry an extra length (or two) of rope. Avoid nylon rope for towing as it stretches and breaks with a bang!



Anchor

Use a grapnel anchor for rocks, and a Danforth or CQR anchor for sand. Using the wrong anchor can either result in dragging or quickly get stuck.



Alternative power

Having a spare outboard motor, oars or paddles will help you manoeuvre the boat in the event of a power failure or if the wind dies away while sailing.



Water, treats and toilet paper

Keeps the crew happy for a pleasant day out.



Wind breakers

Body heat is lost 25 times faster in water than in air. Wind chill also lowers core body temp quickly, so cover up early to maintain your body temperature.

Get out of the water and the wind as soon as possible to keep warm. Make sure the crew has warm layers onboard.



Torch

Always carry a torch with spare batteries. Test it before you head out, as it can be used for emergency signalling.



First aid kit

Your kit should contain enough supplies to cover minor accidents or injuries as well as sunblock, and medication for headaches and sea sickness.



Fire extinguisher (dry powder)

We recommend dry powder extinguishers for:

- Electrical.
- Fuel.
- Outdoor.
- Tip it upside-down periodically as the powder compacts over time and won't work.
- Shake prior to use.



Throwing line (stuffing bag)

This is a floating line at least 12m in length stuffed in reverse order into a bag. Once thrown, one end fills with water.

If it doesn't reach the person the first time, simply haul it back in and throw again. Do not wrap the cord around your hands. Repack it in reverse order to ensure correct operation.



Boat hook

As well as being used to pick up lines, buoys and objects in the water, your boat hook can be used for checking the depth of water, pushing off, or helping recover a person overboard.

Keep fingers, arms, and other body parts onboard when coming alongside wharves.



Bucket

A good bucket (with a well attached handle) is multipurpose and useful. Neatly stow your anchor wrap, bail water out of the boat, it's a fire-fighting device and you can even keep your catch in it.



Navigation

If you go more than a mile or two from shore you will need (at the very least) a chart and compass and/or GPS.

Boat briefing

Before going out make sure all your passengers are familiar with how to operate your boat and how to use the safety equipment. If you are incapacitated or lost overboard this information could save your life. See an example on page 64.

If your boat is over 6m in length and you travel between Ward Island and the harbour entrance, you must have a chart NZ4633 or an electronic equivalent. This provides info on obstructions, navigation lights and where large ships are likely to be.

Basic VHF radio setup

- Turn on.
- Adjust squelch until the static just stops.
- Ensure radio is in ‘international’ mode (not USA or Canadian).
- Select high power (good default setting).
- Listen to channel 16 as default (this is the emergency and initial contact channel).
- Ensure the microphone is sheltered from the wind.

Carry out a radio check

- Select channel 16.
- Wait and listen for no traffic.
- Depress transmit button.
- “Maritime radio” x 3
“This is [name of vessel and call sign] x 3

Wishing to conduct a radio check.

How do you copy? Over”

- Release transmit button to listen.
- Maritime radio will respond with a clarity rating.
- Respond with “*copy that, out*”.



Get your callsign now:



Did you know: callsigns enable Maritime Radio to have your emergency contact details and a description of your boat on file. This aids in rescuing you in an emergency.

Phonetic alphabet

This is used to spell words, or parts of a message containing letters and numbers to avoid confusion. This is useful as many letters sound similar, for instance 'n' and 'm' or 'f' and 's'.

The potential for confusion increases if static or other interference is present.

Alpha	Juliet	Sierra
Bravo	Kilo	Tango
Charlie	Lima	Uniform
Delta	Mike	Victor
Echo	November	Whiskey
Foxtrot	Oscar	X-ray
Golf	Papa	Yankee
Hotel	Quebec	Zulu
India	Romeo	

Radio calls can alert all boats around you, but a call on a cell phone only goes to one person.

Wellington marine VHF radio channels



Leave Your Radio On 16

Mobile phone use:

Emergency – call 111 and ask for police.

Coastguard – call *500 (non-urgent breakdown etc.)

Wellington maritime radio – call 04 914 8333
(cancelling trip reports if out of VHF coverage)

Beacon Hill – call 04 388 5470 (notifying entry
and exit of Wellington Harbour at night or in low
visibility only if unable to do this by VHF)

It is a requirement to be a trained operator, however anyone can use a VHF during an emergency, but in an emergency you will wish you had done the training course.

To find out more google search 'Boating education VHF operator's certificate'

Voyage or trip report

A trip report (TR) is a message that you pass to ‘Maritime Radio’ to advise them of your area of departure, intended destination, people on board and your expected time of return.

They record this information against your callsign. This information is used to help identify you and your vessel for search and rescue purposes, **but only if you’re reported overdue by a third party.**

How to make a trip report

- Select channel 16.
- Wait and listen to ensure there is no-one else using the channel.
- Press and hold the transmit button.
- “Maritime radio” x 3.
- “This is [name of your vessel and call sign]” x 3.
- “Wishing to do a trip report, over”.
- Maritime Radio will get you to change channels (probably to 68, 69 or 71).
- Repeat the message on the channel indicated.
- Give them your departure location, destination, POB, time of return, then say “over”.
- Maritime should respond with that’s all copied
- Both respond with “out”.

You can also log a trip report via the Coastguard app.

Tell someone where you are going, when you will be back and what time they should call the police on 111 if you don’t return.

Did you know: failing to do a trip report with Maritime Radio is unlikely to spark a rescue. Telling someone where you are going and when to raise the alarm is key.

Has someone got your back?

Tell a friend or family member where you're going, when you'll be back, and when to call the police on 111 to report you as 'overdue'.

Make sure they know when to raise the alarm by calling 111. It's helpful if the following information is written down in one place: vessel description, safety equipment, number of people on board and your trailer registration. Keep this info on a 'Two minute form' which can be ordered from the Harbourmaster's office. One side has the info that doesn't change; the other can be added on the day with a whiteboard marker. There are also other options like the Coastguard app. Ensure your responsible person knows when and how to follow it up.

How to call for help in an emergency

On your VHF, make a Pan-pan or Mayday call on channel 16, or if using your cell phone dial **111**
and ask for Police.

Coastguard Callout

Flat battery, out of fuel, non-urgent breakdown etc.
(call ***500**).

There are no tow costs for Coastguard members.

Radio distress signals - when to use them

Mayday: Life-threatening imminent danger (fire, sinking, struck rocks, heart attack, unconscious person, drowning, missing diver).

1. VHF Ch 16.
2. MAYDAY MAYDAY MAYDAY.
3. This is YOUR VESSEL NAME (THREE TIMES).
4. Call sign OF THE VESSEL (ONCE).
5. MAYDAY VESSEL NAME AND CALL SIGN.
6. Vessel's LOCATION, any nearby landmarks, or latitude/longitude.
7. Nature of distress and assistance required.
8. Any other information e.g. number of persons on board, description of vessel, liferaft or dinghy carried.
9. OVER.
10. Allow a short time for a reply. If no reply, repeat the distress call. If contact is made with a shore station, tell them if you have activated your distress beacon and follow their instructions.

Pan-pan: Urgent situation with NO immediate danger (engine failure, drifting safely etc). Substitute PAN-PAN for MAYDAY in the example above.

Emergency communications

If you can't call for help no one can rescue you.

It is a requirement for all vessels to carry two forms of waterproof emergency communication in case you go overboard or the boat sinks.

Pros	Device	Cons
<p>Portable - wear it around your neck or in a pocket.</p> <p>When triggered, it transmits your exact location for 24 hours +</p>	 <p>Personal locator beacon (PLB)</p>	<p>Some personal locator beacons sink in the water. You can purchase a neoprene pouch to make it float.</p> <p>You need to keep the aerial vertical.</p>
<p>Portable - wear it around your neck or in a pocket.</p> <p>Waterproof.</p> <p>Some float.</p> <p>Two-way communication.</p>	 <p>VHF handheld radio</p>	<p>Speaker and mic may be compromised when wet. Some radios have a function to create a buzzing sound that shakes water from the speaker.</p>

Pros	Device	Cons
Portable - wear it around your neck or in a pocket. This phone should be fully charged and dedicated for emergency use only.	 Mobile phone	Operation can be impaired in waterproof bag. Limited battery life. The speaker, mic and touchscreen can be compromised when wet. Try it in the bag before you need it to ensure that you can make an emergency call through the plastic or without using the touch screen.
When triggered, transmits your exact location for 48 hours + Emergency position indicating radio beacons are designed to float.	 EPIRB - Electronic position indicating radio beacon.	Waterproof phones without the bag cannot be relied upon in an emergency and can sink.

If you accidentally activate your PLB or EPIRB, call 0508 472 269 or Maritime Radio on VHF 16.

Distress signal flares

- Get to know your flares before you use them. They are all different!
- Only let them off if someone is around to see them.
- Identify wind direction. Stand on the downwind side of boat, so the sparks blow away from you and the boat.
- Identify and extend handle for handheld flares.
- Locate the hot end and point it away from you.
- Pull the cord with the flare held over the water and ensure it's pointing down wind.
- Beware smoke flares are slightly delayed.
- Never look at a flare. Throw overboard any flare that has failed to go off.
- Flares will continue to burn even underwater, so great care is required.
- Expired flares can be given to the NZ Police, Police Maritime unit, Coastguard, and some boat shops.



Did you know: Expired distress flares must be disposed of appropriately. You can contact your local police station for information on who to give them to.

Man overboard

Shout – to alert the skipper.

Point – keep pointing in the direction of the person in the water, even if you can't see them.

Throw – things that float to make a path back and gives the person in the water something to grab onto.

Avoid jumping in the water if possible. If you must, ensure that you take a flotation device to offer support if you get tired.

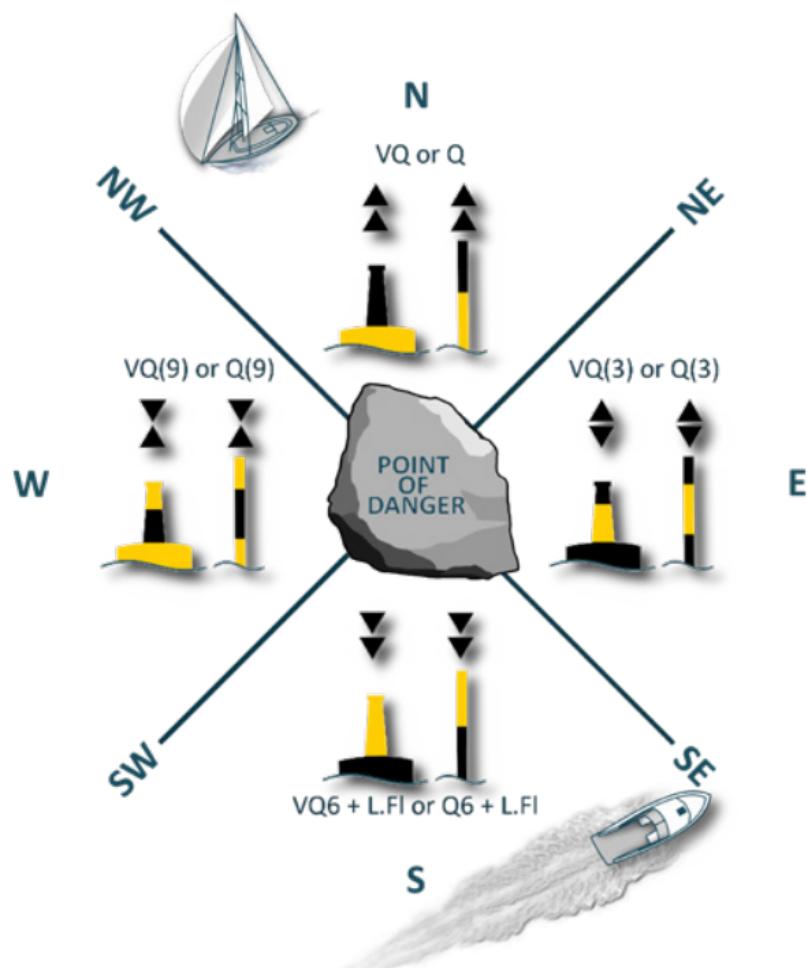
Recovery under sail



Cardinal marks

A cardinal mark shows the safe side on which to pass a hazard, such as a rock. You may see a single marker, or a group.

Cardinal marks are always painted in yellow and black horizontal bands and their distinctive double cone top marks are always black. The light when fitted is white. The flash character (flash pattern) identifies the type of cardinal mark. See page 51 for a key to the light characteristics



There are three cardinal markers in Oriental Bay marking a reef protecting the beach.

Lateral marks

Red and green lateral marks often mark the sides of a channel.

When entering the harbour, channel, or marina:

- The red port (left) mark should be kept on the boat's port (left) side.
- The green starboard (right) mark should be kept on the boat's starboard (right) side.

When leaving the harbour, channel, or marina:

- The red mark should be kept on the boat's starboard (right) side.
- The green mark should be kept on the boat's port (left) side.

Stay on the right-hand side when entering or exiting a narrow channel.



Port hand marks

Colour: red

Top mark: single red cylinder (can)

Light (when fitted) colour: red



Starboard hand marks

Colour: green

Top mark: single green cone, pointing upwards

Light (when fitted) colour: green

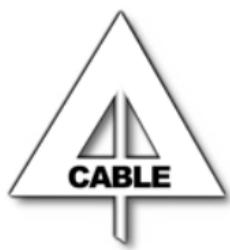
Did you know: you must stay on the RIGHT HAND SIDE of narrow channels. Boats in this situation pass port side to port side.

Other marks



Isolated danger

These marks are placed on, or near to a small dangerous area that has navigable water all around it. They have distinctive double black spherical top marks, a black base with red band, and when fitted, a white light flashes in groups of two.



Underwater cable - do not anchor or fish

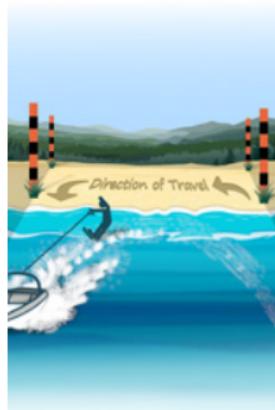
There are multiple underwater cables in the Wellington region. Their landing position may be marked onshore by a white triangular cable sign. You will also see these clearly marked on appropriate marine charts.



Flagged areas on beaches

Surf Life Saving NZ may set aside areas of beaches as flagged areas for the purposes of swimming and body boarding only.

You should stay out of flagged areas with your vessel.



Water-ski access lane

Access lanes enable vessels towing water skiers to legally leave or approach the shore at speeds exceeding 5 knots. Direction of travel is anticlockwise. All access lane marker poles are coloured orange and black.

It takes three to ski

Any vessel (including a jet ski) towing a person on a wakeboard, sea biscuit, water-ski etc., must have a:

- Skipper.
- Skier.
- Dedicated observer (over 10 years old) watching the person being towed to alert the skipper when someone falls off.



You must always travel in and out of a water-ski lane on your starboard (right-hand) side, in an anti-clockwise direction.



Reserved Area

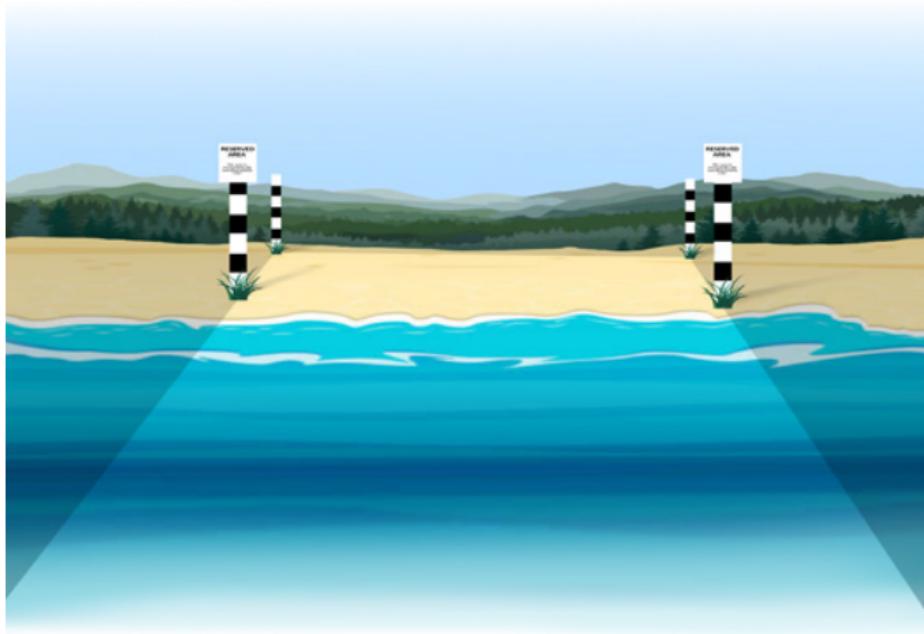
Reserved area

Black and white poles mark a reserved area for a specified purpose.



These can be used to identify areas that Personal Water Craft (PWC) can exceed 5 knots close to shore, or areas reserved for non-powered craft only.

Check the signs on top of the posts for information – getting this wrong could result in an infringement. Local Reserved Areas for PWC are located at the Wellington Jet Sport Club, Onepoto and Hikoikoi.



Might is right

Any craft (including paddle and sail craft) must give way to any vessel over 500 gross registered tonnage (GRT) in Wellington harbour.



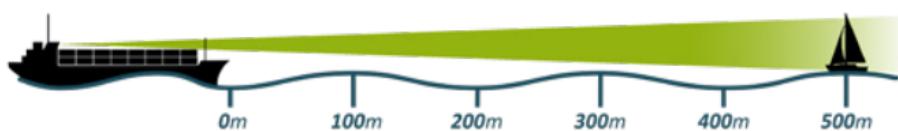
**Please always pass astern
(behind the back of the ship).**

If a large ship is passing close to your boat, communicate with the vessel directly via VHF or contact Beacon Hill signal station with your intentions.

Large ships can lose sight of small boats within 250 metres of their bow. Always keep your distance and stay out of shipping channels.

It is impossible for large vessels to stop or alter course quickly.

Always be cautious around larger ships. Give yourself more room and time to move than you think you'll need.



Did you know: it can take less than 60 seconds for a ship to travel 500 metres.

Rules of the road

Powered vessels

When risk of collision exists



Vessels overtaking

Every overtaking boat gives way (including sailing vessels).

Powered vessels head on

Both alter to starboard (right).

Pass each other's port sides.

Powered vessels crossing

Power boats give way to others on their starboard (right) side.

Boats giving way should cross behind.

Powered vessel meets sail, paddle or rowing craft

With exception to specific events, powerboats must give way unless the craft is overtaking.

When altering course to avoid another boat make the alteration early and obvious.

When two sailing vessels meet



Sailing vessels

When the wind is coming from different sides, the boat with the wind on the port (left) side must give way.



Sailing vessels

If both boats have the wind on the same side, the windward (upwind) boat must give way.

Special rules may apply between yachts competing in the same race.

It is every skipper's responsibility to avoid collision.

Can you be seen?

Navigation lights must be shown from sunset to sunrise, and when visibility is restricted.



Boats less than 7 metres long and not capable of more than 7 knots (including kayaks and paddle craft) may carry navigation lights or display a 360° all-round white light when in Wellington or Porirua harbours.



Yacht – Sailing

When underway, sailing boats (not using power) must show sidelights and a stern light. These may be combined into a tri-colour lantern at the top of the mast on vessels less than 20 metres long.



When underway, powerboats less than 12 metres long may combine their stern and masthead lights into a single all-round white masthead light. The boat should also have red and green sidelights.



Yacht – Motoring

Sailing boats under auxiliary motor power should display a white masthead light, red and green sidelights and a white stern light.

You should not use a tri-colour lantern when motoring.



When underway, powerboats over 12 metres long should show a white masthead light, red and green sidelights, and a white stern light.

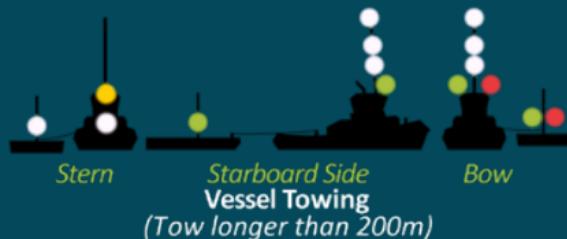
Note: the red, green and white areas indicate colour of light and direction.

As an indication, if you are on the water and can see the streetlights are coming on, it is time to put your navigation lights on, or be off the water.

Navigation lights



The white, green and red shapes on this image indicate what coloured lights you'll see from different angles.



Red over white – fishing tonight.
Green over white – trawling tonight.
White over red – pilot ahead.

Sound signals



- Turning to starboard
- Turning to Port
- Engine going astern
- Make your intentions clear (=get out of the way)
- In Fog - Motor vessel in fog @ 2 minutes
- In Fog - Motor vessel stopped
- In Fog - Not under command, restricted in ability to maneuver constrained by draft, towing, fishing, sailing.
- At Anchor** Vessels >100m
- At anchor**, restricted visibility, warning of collision

Five short blasts from a ship or ferry means that someone is in their way.

Day shapes



Restricted in ability to manoeuvre and unable to give way.



Vessel not under command – crew not able to control the vessel.



Vessel at anchor.

Common flags and meanings



Flag A

Means there is a diver underwater, so keep well clear at a slow speed.

Do not exceed 5 knots within 200 metres and look out for divers.

When displaying this flag, keep it high above the highest point of your boat (the minimum flag size is 600 mm x 600 mm), as it needs to be seen from all directions.



Flag B

Means the boat is taking in, discharging or carrying dangerous goods.

Where possible, vessels must not approach within 200 metres of an oil tanker, or any other vessel that is showing flag B by day, or a red all-round light by night.



Flag D

Means the boat is manoeuvring with difficulty; keep clear.



Flag H

Means there is a pilot on board. Ship is over 500T so give way.



Flags N and C

Distress can be indicated by flying the international maritime signal flags N and C.



This signal must only be used where there is grave and imminent danger to life.

It is hard to distinguish colours from a distance. It will be the flapping that catches another boat's attention first.

Scuba divers: be safe, be seen

Shore – scuba diving

If you're scuba diving further than 200 metres from shore, you must carry a visual signalling device such as a safety sausage to increase your visibility to boats. If you are in a group, consider a central raft with a full-sized flag.

Boat – scuba diving

The skipper and divers are responsible for ensuring that Flag A (minimum of 600mm x 600mm) is displayed so that it can be clearly seen from 200 metres in all directions, even in wind chop and big swells.

Stay safe while diving

- Have your dive flag high and visible 360°.
- Have a dedicated boat person to keep a proper lookout for other boats.
- Manoeuvre the boat to protect divers from other vessels.
- If you swim in a zigzag manner you will stay closer to the boat and be easier to see and pick up.
- Begin your dive swimming into the current and use the current to bring you back to the boat on the surface.
- Avoid strong current areas with wind chop, as it's difficult to see divers when they surface.
- Carry a whistle and safety sausage for signalling your boatman. An air horn is even better.
- Agree on an exact time to call for help if the divers haven't returned.

Requirements for a dedicated ‘boat person’

- Must be able to operate the boat safely. They may have to move it to pick up divers.
- Be prepared to signal to other boats who have not noticed the dive flag.
- Must know how to use emergency communications to raise the alarm if your divers are overdue.
- Monitor your divers location and watch for their bubbles if possible.

Plan your dive, dive your plan

Preparation is key. Time spent making sure everyone is ready to dive will help reduce stress, improve safety, and make the dive more enjoyable.

Dive briefing

Discuss the following before every dive:

- Max depth.
- Bottom time.
- Intended direction, start into the current.
- Current, tide times and weather conditions.
- Buddy separation procedures/missing diver procedure.
- Agreed time to raise the alarm.
- Divers to carry out ‘buddy checks.’
- Agree cylinder pressure to end the dive.
- Double check correct weighting, tank band tightness, tank air pressure and valve fully opened.
- Process for entering and exiting the water such as ‘hand up, weight belt first and then tank second’.
- Pick-up point and what to do if surfacing close to rocks.

- Make sure the boat is out of gear or turned off to protect divers from propellor strike when entering/ exiting the water. Good communication is key.

The skipper should always note the time when the divers submerge and then return to the surface.

Decompression sickness

Nitrogen bubbles are in your bloodstream after every dive. Excessive bubbles can cause paralysis and death.

Safety guidelines:

- Reduce time below the surface, stay out of decompression.
- Slow ascent rates – watch your computer.
- Always do a 5m safety stop for 3 mins.
- Allow a suitable recovery between dives.
- Monitor time, depth and air supply during your dive.

Dive computers are strongly recommended to plan and monitor dives.

Diver emergency hotline:

0800 4 DES 111

0800 4 337 111

Free divers: be safe, be seen

Shore – free diving

Free divers intending to go over 200 metres from shore must tow a brightly coloured float and preferably a small dive flag. If you are in a group, consider a central raft with a full-sized flag.

Boat – free diving

The skipper and divers are responsible for ensuring that Flag A (minimum of 600mm x 600mm) is displayed so that it can be clearly seen from 200 metres in all directions, even in wind chop and big swells.

Upon seeing a dive flag, you must slow down to 5 knots or less within 200 metres (the length of two football fields) or stay clear.

Key pointers to staying visible, while free diving

Note: Small floats and associated flags are hard to see from a distance.

- Keep your flag high and visible 360°.
- Have a dedicated boat person to keep a proper lookout for other boats.
- Manoeuvre the boat to protect your divers from other vessels.
- The one up, one down method enables one diver on the surface to lookout for boats and to monitor and assist their buddy.

Warning to all boat operators: Free divers can surface 50 metres away from their surface floats, so slow down and stay away.

If you see a float, slow your boat.

Requirements for a dedicated ‘boat person’

- Must be able to operate the boat safely. They may have to move it to pick up a diver.
- Be prepared to signal to other boats who have not noticed the dive flag.
- Must know how to use emergency communications to raise the alarm if your divers get into difficulty.



Shallow water blackout is when you pass out without warning during your ascent to the surface.
Avoid hyperventilating and stay within your limits.
Use the one up, one down method with your buddy.

Speed limits



The speed of craft must not exceed 5 knots (about 9 km/hr) when within:

200 metres (two football fields) of:

- Shore or a dive boat.
- A dive flag (Flag A).



50 metres (length of Olympic size pool) of:

- Another vessel.
- A person in the water.



In Lambton Harbour area (as shown on map) keep your speed under 12 knots (about 22 km/hr).



Restricted areas

Tankers

Avoid going within 200metres of any tanker. They can be identified by a red flag during the day, a red light at night and are the only ships that use Seaview and Burnham wharves.



Definition of a Rāhui

Rāhui is tikanga (customary practise) for Māori, that prohibits access to an area of water or land. Rāhui are put in place (and lifted) by tangata whenua.

Rāhui are used to keep people physically or spiritually safe for a variety of reasons; the more common ones are following a death in or on the water or a significant event involving the water.

The duration, extent and conditions are set when the rāhui is announced. Greater Wellington shares any rāhui affecting the water when we are aware of them, and ask water users to consider and respect rāhui when considering activities on or near the water.



Double the knots to calculate speed in km/hr (roughly).

Compass error and chart work

To be able to plot a compass bearing on a chart you must apply both deviation and variation.

Deviation

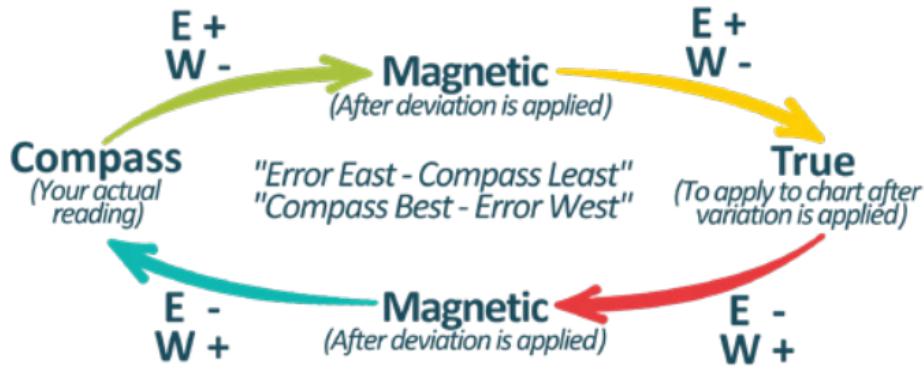
Compass → magnetic

Deviation is the compass error due to magnetic interference from metallic objects or electronics. It is unique to the vessel and a deviation card is created by a compass adjuster.

Variation

Magnetic → true

Compass error due to the ever-changing location of the north magnetic pole. This is displayed on the chart's compass rose and varies depending on your location on the earth's surface.



Example:

$$\text{Compass} = 174^\circ$$

$$\text{Magnetic} = 174^\circ - 2^\circ \text{W} \text{ (from deviation chart)} = 172^\circ$$

$$\text{True} = 172^\circ + 23^\circ \text{ E} \text{ (from chart)} = 195^\circ$$

Understanding Light Characteristics

This is a quick guide to lights on a nautical chart, more detailed information can be found in the NZ Nautical Almanac (Publication NZ204) available from most boating stores or online, Google “LINZ, nautical almanac”

Code	What does it look like	
Fl	Flashing	Off more than it's on
LFl	Longflash	Still off more than it's on
Q	Quick flash	Flash rate between 50 & 80 times per minute
VQ	Very quick flash	Flash rate between 80 & 160 times per minute
ISO	Isophase	Equal time on and off
OCC	Occulting	On more than its off
F	Fixed	Stays on

(3) a group flash, in this case a group of three flashes then a longer off time before it starts another group of three flashes

12s – the total time of the character of the light, or the time it takes to repeat its patterns, expresses in seconds.

Colours – common colours

Where there is more than one colour it means different colours can be seen from different directions, check the chart.

W = White	
R = Red	
G = Green	
Y = Yellow	
B = Blue	

Height

The height of the light in metres above MHWS (mean high water springs – the average bigger high tide mark).

Range

Nominal range in nautical miles (1nm = 1.852km) the actual range will vary depending on the background lights and weather conditions.

Example

Fl (3) 12s WR 18m 12/15M

This light flashes a group of three every 12 seconds, it is white or red, depending on where you are looking at it from, the light is 18 metres about the high tide line and it should be visible for either 12 or 15 nautical miles, this will depend on which part of the light you are looking at.

This is a prominent light on Wellington Harbour, do you know which one?

Common chart symbols

Tides & Currents

- = *flood tide*
- ← = *ebb tide*
- ~~~~~ → = *current*
- ◊ = *tidal information diamond*
- ~~~~~ = *tide rips or overfalls*
- ◎◎◎ = *tide eddies*

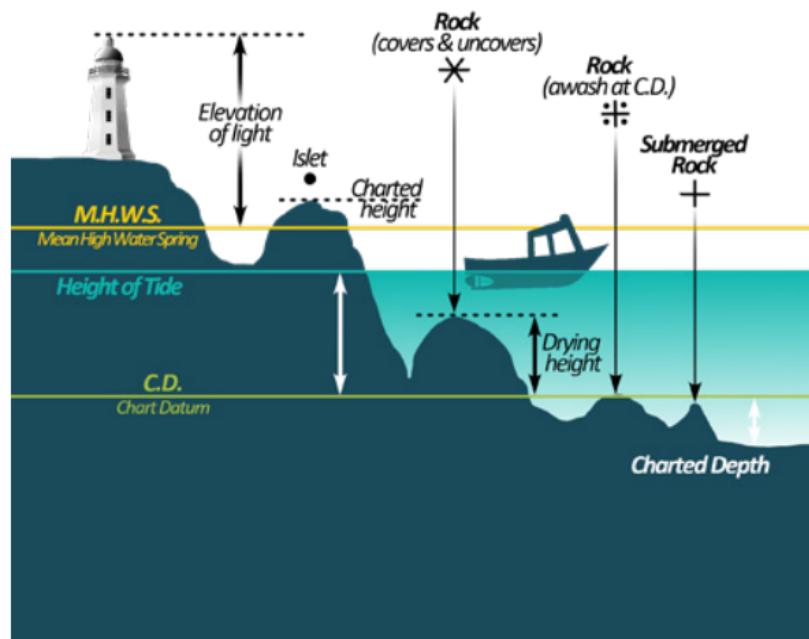
Tides & Currents

- ⚓ = *Anchorage*
- ★ = *Marine Light*
- ~~~~~ = *Breakers*
- ~~~~~ = *Sandy Beach*
- ~~~~~ = *Cliffs*

Nature of the Bottom

- S = *Sand*
- St = *Stone*
- Sh = *Shell*
- M = *Mud*
- SO = *Soft*
- bk = *Broken*
- f = *Fine*
- R = *Rock*

- ▲ = *Cable Sign*
- ~~~~~ = *Underwater Cable Mark*
- = *Pipeline*
- ~~~~~ = *Fish Farm*



The more lines on the rock symbol,
the higher it will be.

Anchoring

Choose the right one for the job

Selecting the right anchor is imperative, whether you need to stay put overnight or if you have a problem or just staying long enough to catch some kai.



Plough or spade anchor = sand or mud



Grapnel = rocks

Minimum:

- Weight of anchor = boat length in metres x 1.5 kg.
- Length of chain = length of boat.
- Length of anchor line = 3 to 5 x depth of water.

Typically plough or spade type anchors are good in sand and mud. Longer chain and rope means a more horizontal pull on the anchor and better holding to keep you in place. It also means a larger swinging circle and you might need to reset the anchor if the current or wind changes. Even with a well-set anchor you should still make regular checks to make sure it isn't dragging.

If fishing or diving around reefs, getting your sand anchor stuck is relatively common, a grapnel with tines (often bent reinforcing rod) will straighten out if it gets stuck and can be retrieved more easily. These are good for short stays and where someone is on board fishing or supervising diving and is alert for the anchor dragging. These are not suitable overnight or for an unattended boat.

When setting/laying an anchor always note the bearing on your compass, so upon retrieval you motor up in the direction of the bearing, in the opposite way you laid the anchor. This helps avoid getting it caught.

Store your anchor rope and chain loosely in a bucket or locker.

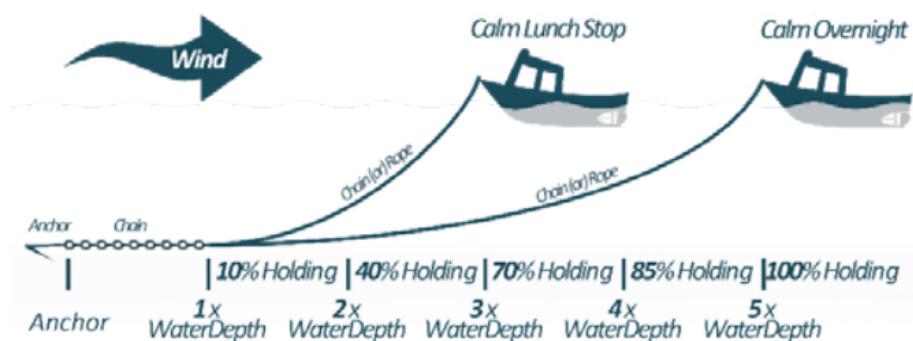
Attach the end of your anchor rope to boat then layer the rest of the rope loosely on top.

Place the chain with the anchor at the top, ensuring it can be quickly deployed in an emergency.

Avoid having loose coils of rope on deck where they can catch people or get tangled when getting deployed.

Always retrieve your anchor over the bow. This ensures you are facing your bow onto the waves, wind and weather. Getting snagged or anchoring at the stern can sink your boat!

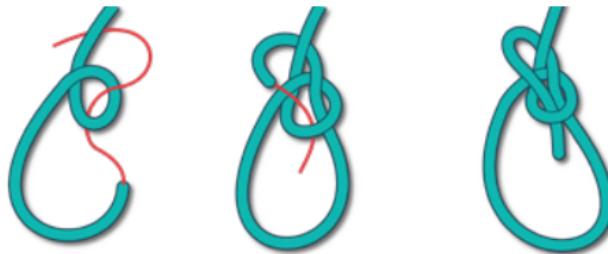
If your anchor gets stuck it may be safer to tie it to a buoy come back another day with a couple of diving friends to release from the bottom safely. Trying to retrieve a stubborn anchor can put your vessel and crew in jeopardy and has caused flooding and sinking in many small boats.



Useful knots

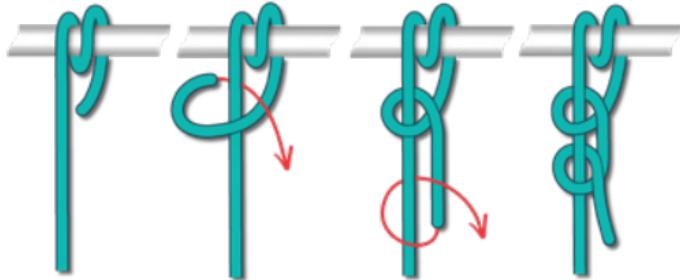
Boating knots

Bowline



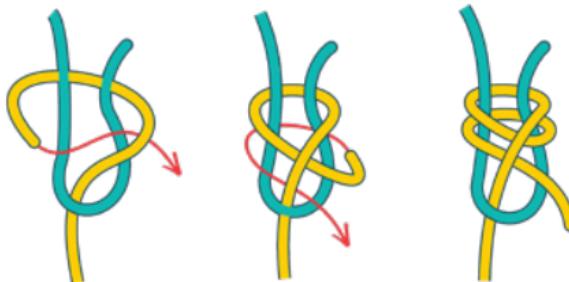
Bowline knots are easy to undo and the loop doesn't tighten under pressure.

Round turn and two half hitches



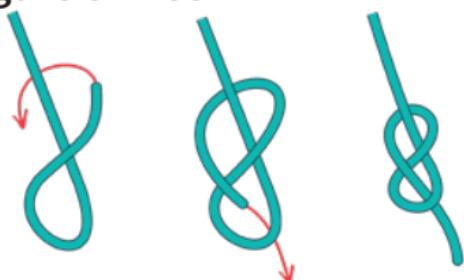
This knot is good for tying up at a wharf.

Double sheet bend



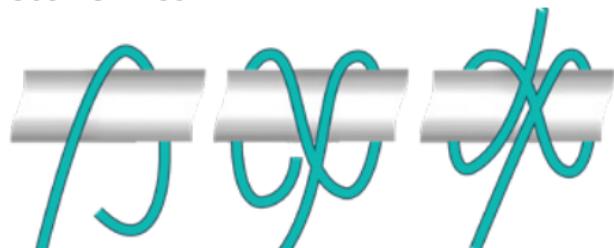
This knot is good for joining ropes.

Figure 8 knot



Stopper knot : Sailors use this to stop ropes going through blocks.

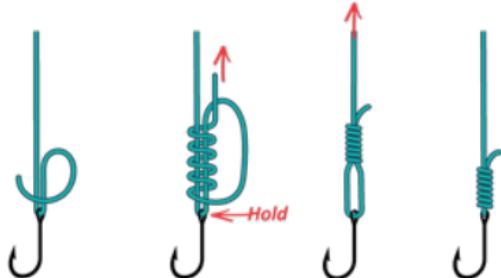
Clove hitch



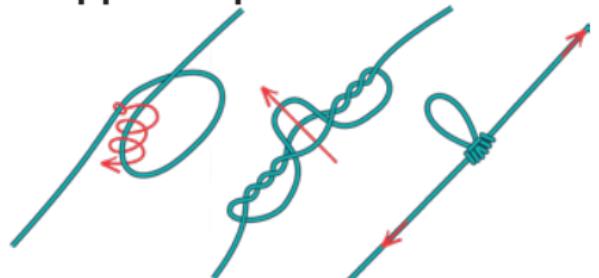
This knot is good for tying around a pipe or round object.

Fishing knots

Uni knot



Dropper loop knot



Boats and young children

Consider the following before starting your trip:

- Kids and non-swimmers should wear an appropriate sized lifejacket at all times.
- Everyone onboard a boat under 6 metres must wear a lifejacket at all times.
- Crotch straps should be fitted to all lifejackets to stop them riding up and coming off.
- Use a child safety harness for young children when needed.
- Teach kids about the dangers and risks of boating.
- Keep body parts well inside vessel when coming alongside the wharf or another vessel – get passengers to sit down.
- Work through an emergency plan for all those onboard.
- Don't go out alone with young children. You need another adult on board that can take charge if something happens to you.
- Make sure everyone is sitting or holding on securely when traveling.
- Kids lose body heat much faster than adults. Consider wearing wetsuits under lifejackets.
- Alcohol affects judgement and survival time in the water – save it until you're safely home.
- Role-model good behaviour to kids: wear your lifejacket.
- Children should use foam filled lifejackets rather than inflatables.

Get the right fit



Weight of user

Make sure it is buoyant enough for the user.



Snug fit

Make sure there is no more than two finger-widths of gap on the shoulders, and it fits snugly so you don't slip out.

All zips and buckles must be tight and adjusted for the individual.



Appropriate size

You must carry lifejackets of an appropriate size for everybody on board your boat.

Crotch straps

Essential for children's lifejackets and useful for adults. These stop the jacket riding up.

Buoyancy vests vs lifejackets

Buoyancy vest

Designed for situations where the user is likely to get wet and freedom of movement is desirable. This also makes getting back on board easier. Designed to minimise neck injury if falling into water at speed.

Useful for:

Water skiing, PWC, sailing dinghies, windsurfing, rowing, kayaking, waka ama, SUPs.

Lifejacket

Keeps your head out of the water and tends to turn you face up if unconscious.

Useful for:

Keel boats, launches, powerboats.



Foam filled lifejackets are best when you're going to be in and out of the water. Inflatable lifejackets can make it tricky to get back into your boat, and need to be checked and repacked before re-using.

Don't leave shore without a lifejacket.

Inflatable lifejackets

- Inflatable lifejackets are great because they're not bulky, but they do require special care and regular safety checks.
- You can service these yourself or take them to someone else to get done.
- They're available in auto or manual inflation systems.
- Get to know your jacket – check it and wear it!

Manual = inflation system needs to be activated by the user. The lifejacket won't activate if the user is knocked unconscious.

Auto = inflation system activates automatically when wet. Good if the wearer is knocked unconscious or falls overboard.

All inflatable lifejackets have a backup oral inflation system.

The heavier and longer your anchor chain is, the better your anchor will stay securely dug into the seabed.

This image shows the inside of your inflatable lifejacket when inflated:



Simple checks

1. Cylinder full and in good condition.
2. Cylinder tight.
3. Cord is free and not tangled or behind the cylinder.
4. Hang it up to avoid physical damage.

Make sure you know how to inflate your lifejacket.

Summary of navigation safety bylaws

- Lifejackets must be worn on vessels of less than 6 metres in length that are underway (not anchored, moored or tied up).
- Two means of waterproof communications need to be carried on all vessels except for paddled craft less than 1km from shore who only require one.
- Swimmers more than 200 metres from shore need to tow a safety float unless accompanied by a support vessel. If you are wearing a swim cap, make it brightly coloured.
- Free-divers that are diving more than 200 metres from shore need to tow a brightly coloured float.
- Scuba divers that are likely to surface more than 200 metres from shore must have a marker float that they can use when they surface.
- Personal Water Craft (Jet skis) need to be registered. The registration number must also be displayed on the trailer.
- Other boats more than 4 metres in length must have a distinctive name or number; at least 90mm high. For trailer boats the name or number must also be displayed on the trailer.
- Vessel under 4 metres must have the owners name and contact details on the vessel; we have stickers to help with this. To order a sticker please email harbours@gw.govt.nz



Boat briefing

So you're at the boat ramp and ready to go. Run through this final checklist with your crew before you hit the water so if something happens to the skipper, everyone knows what to do.

- Lifejacket fitting and operation
- How to call for help
- Emergency equipment
- How to start and operate boat
- Fuel – air vent open. Pumping the bulb.
- Battery switch
- Holding on
- Keeping body parts inboard when coming alongside
- When to use anchor
- Bilge pump, duck bills operation

Contact Directory

Greater Wellington Harbours

04 830 4160

harbours@gw.govt.nz

Beacon Hill

VHF Ch: 14

04 388 5470

- Shipping information
- Marine oil spills
- Recreational boating concerns

Maritime Radio

VHF Ch: 16

04 914 8333

Coastguard

VHF Ch: 62

*500 (non-urgent) breakdowns etc.

Mana Marina

VHF Ch: 63

04 2330091

office@manamarina.co.nz

Seaview Marina

Boat lifting facilities

04 568 3736

www.seaviewmarina.co.nz

Chaffers Marina

Boat lifting facilities

VHF Ch: 16,14,62

04 382 9300

office@chaffersmarina.co.nz

Evans Bay Marina

04 386 2345

marinas@wcc.govt.nz

Porirua Pole Moorings

Porirua City Council

enquiries@poriruacity.govt.nz

Swing Moorings

Harbourmasters Department

04 830 4160

harbours@gw.govt.nz

Evans Bay Yacht & Motor Boat Club

Boat lifting facilities

04 939 4167

gm@ebymbc.org.nz

www.ebymbc.org.nz

Mana Cruising Club

Boat lifting facilities

04 233 1578

office@manacc.co.nz

www.manacc.co.nz



Watch the weather
It can change in a heartbeat



Life jackets
They keep you afloat



Communications
*If you can't raise the alarm
you can't be rescued*

