

# How to use your Beacon to Beacon Guides

## Navigation information

Many aspects of the maps have been designed for local conditions. Although the maps are suitable for navigation under the IALA buoyage system (<https://www.msq.qld.gov.au/Safety/Navigation-buoys-marks-and-beacons>), some of the symbol standards have been modified for use in Queensland. For example, navigation aid symbols may be shown in similar colours as you would see out on the water.

**Changes in channels and banks:** Changes may result in navigation aids being moved from their charted position, altered, removed or new navigation aids being established. Changes to most navigation aids can be found on the Maritime Safety Queensland website (<https://www.msq.qld.gov.au/>) under Notice to Mariners.

**Clearances for overhead bridges, cables and pipeline crossings:** Shown above Highest Astronomical Tide (HAT). The deepest channel may not always occur at the clearance height or centre of the crossing. Cable clearances are generally given for the lowest point of sag. Cable TV wire may decrease the available height on some crossings. Clearances may not be available for all crossings. **Maintain a proper lookout.** Due to the extent of coverage of the Beacon to Beacon Guides, waterways crossings clearances and positions may become dated. Should you have any doubts about crossings, contact your local council or utility company.

**Compass bearings:** True bearings may be converted to magnetic bearings by applying the compass variation. You can calculate the magnetic declination for any point when using the maps in the Beacon to Beacon Guides, by visiting the Geoscience Australia website at <https://geomagnetism.ga.gov.au/agrf-calculations/agrf-form> and following the onscreen instructions. In the calculation results, the item called "D" is your magnetic variation and the field "dD" is the rate of annual change.

**Dates of depth contours:** Due to the extent of coverage of the Beacon to Beacon Guides, depth contours may become dated. As required, areas are surveyed for specific projects. Navigation aids are maintained to ensure that when following beacons and buoys, you should generally be in the best water available but conditions can change frequently so keep a proper lookout. When travelling outside of marked channels, particularly following significant floods, travel slowly and with a proper lookout (or depth sounder). Where surveys have been taken, sweeping the seabed for obstructions has not been undertaken.

**Damaged or defective aids to navigation or marine infrastructure:** Damaged or defective aids may be reported to Maritime Safety Queensland. To report this, visit the "Contact us" page on the Maritime Safety Queensland website at <https://www.msq.qld.gov.au/About-us/How-to-contact-us/Regions.aspx>.

**Horizontal datum:** GDA2020 or GDA94. Check the Key Sheet within each Guide. Compatible with WGS84 for general navigation. Ensure your GPS receiver is set to the correct datum. Selective availability of satellites may degrade your observed position.

**Map projection:** Universal Transverse Mercator (UTM) Zone 56 with latitude and longitude values shown in degrees and minutes with decimals (for example, latitude 26° 25.267' S).

**Place names:** May not always be official place names. Please check the official place names website at <https://www.qld.gov.au/environment/land/title/place-names> if using any name in a legal context.

**Public boat ramps, pontoons and jetties:** These destinations are shown. Other facilities may be private (no access) whilst commercial facilities may charge a fee.

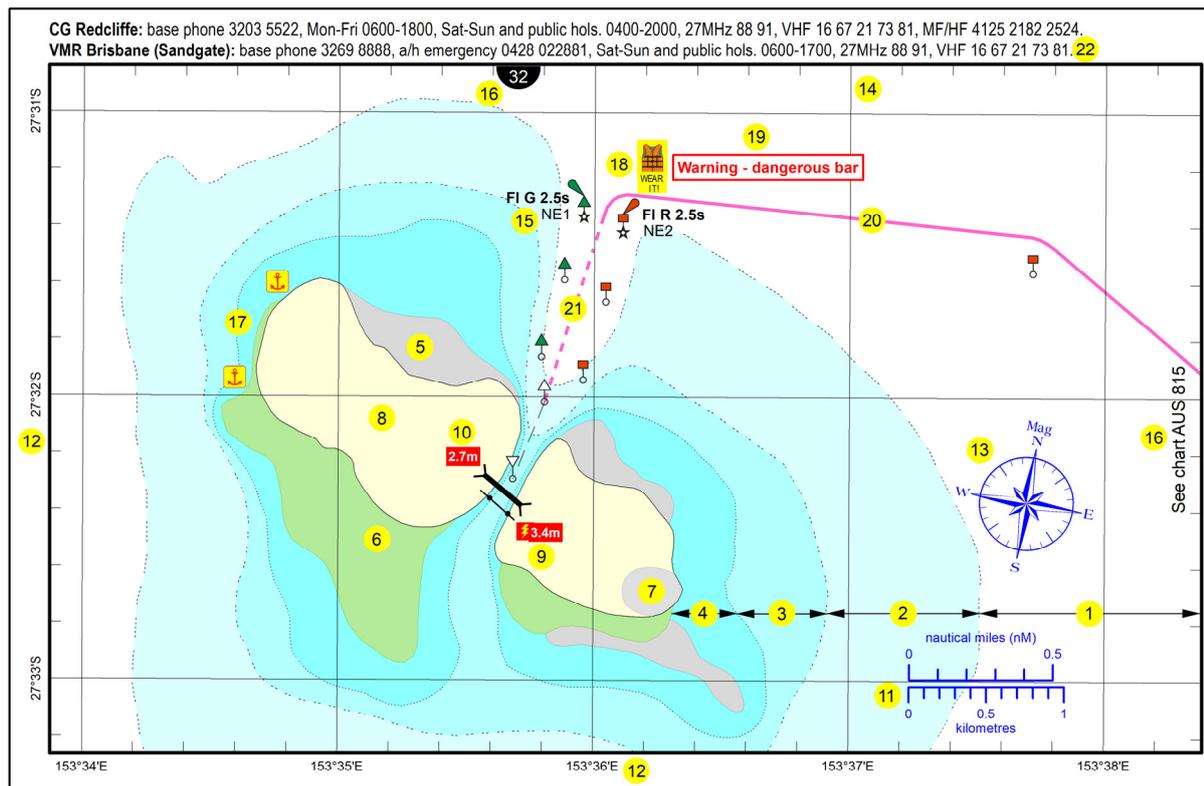
**Speed restrictions:** Restrictions shown on the maps as an approximate dashed line indicate restrictions generally for all recreational vessels and/or recreational vessels over 8m. To determine the speed restriction that applies to your recreational vessel, review the list of gazetted speed restrictions on the Maritime Safety Queensland website at <https://www.msq.qld.gov.au/> under waterways > speed limits.

**Submarine and overhead cable crossing:** Information is based on data provided by the responsible authority and is not guaranteed. At some scales, not all crossings may be shown over navigable waters. Do not anchor on or near submarine cables or pipelines and always keep a proper lookout.

**Vertical Datum:** Lowest Astronomical Tide (LAT). Depth ranges in metres

**Ship Navigation Area:** The use of Ship Navigation Areas (also known as Shipping Fairways) are not mandatory for ships but strongly recommended. The International Regulations for Preventing Collisions at Sea 1972 apply to all vessels (including recreational) navigating within, crossing, or near the Ship Navigation Area and anchoring in the area should be avoided except in emergency. For more information see <https://www.msq.qld.gov.au/Safety/Ship-navigation-area-warning>.

# Reading the maps



1	Depth of water over 5m at Lowest Astronomical Tide (LAT).	12	Latitude and longitude in degrees and minutes, and at larger scales with decimals of a minute.
2	Depth of water between 2m to 5m at LAT.	13	Approximate magnetic north.
3	Depth of water between 1m to 2m at LAT.	14	True north lies along the lines of longitude.
4	Depth of water between 0m to 1m at LAT.	15	If lit, the light characteristic and if applicable, the name or identifier of the navigation aid.
5	Depth of water between HWM and 0m at LAT (drying sand banks).	16	Adjoining map number or adjoining charts (AUS) published by the Australian Hydrographic Service may be referred to. These maps and charts may be at different scales.
6	Mangrove areas.	17	Anchorage sites.
7	Saltpan areas.	18	A life jacket should be worn while crossing a bar. It is compulsory when crossing designated coastal bars in open boats under 4.8m. (See MSQ website under Safety > Life-jackets)
8	Land areas above the tide.	19	Warnings or cautionary notes.
9	Overhead power lines with safety clearance shown, where known, above Highest Astronomical Tide (HAT) and generally at the lowest point of sag. Often marked by signs on the shore. Keep a good lookout overhead at all times for power lines. Due to scale or currency, not all overhead power lines may be shown.	20	A suggested track intended only to show which side a vessel should pass navigation aids. The track should not be considered as an accurate prescribed course. Navigation aids shown on maps may not keep pace with changes in channels, depths and banks. A careful lookout should be maintained at all times.
10	Where known, clearances in metres of structures (bridges, pipelines) above HAT. The deepest channel may not occur at the point of maximum clearance.	21	A suggested track (as above) but shown dashed where an enforceable speed limit exists for safety (including smooth waters) or environmental reasons. For more information on speed limits see MSQ website under Waterways > Speed limits
11	Scale bar in nautical miles and kilometres. One international nautical mile = 1852m.	22	Marine rescue services contact details. Note: w/e = weekends, p/h = public holidays, a/h = after hours.

# Legend

## AIDS TO NAVIGATION

All charts conform with the IALA Maritime Buoyage System "A" for red to port and green to starboard when entering port or in the direction of buoyage. The actual location of all navigation aids is at the centre of the circle at the base of the symbol. Heights of navigation aids, if shown, are above Mean High Water Spring tides.

**DIRECTION OF BUOYAGE:** Keep red to port, green to starboard if travelling in the direction of the arrow.

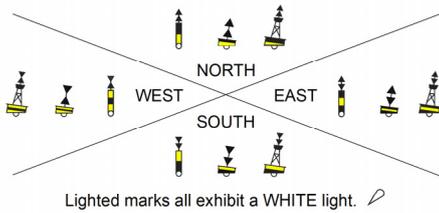
**NE1** indicates a numbered navigation aid. Not all numbers are shown.

**LATERAL MARKS:** mark defined channels in the direction of buoyage.

**PORT:** exhibits a red light when lit. **STARBOARD:** exhibits a green light when lit.



**CARDINAL MARKS:** indicate navigable water for the area beyond the mark in the direction depicted.



**SPECIAL MARKS:** indicate several features (eg: pipe outfall) where navigable water is usually evident from the map. Exhibits a yellow light when lit.

**ISOLATED DANGER MARKS:** are stationed over a submerged hazard. **KEEP CLEAR.** Exhibits a white light when lit.

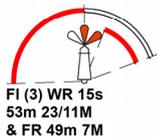
**SAFE WATER MARKS:** indicate fairway markers, mid channel, with navigable water all round. Exhibits a white light when lit.

**EMERGENCY WRECK MARKS:** placed as close as possible or in a pattern around the wreck.

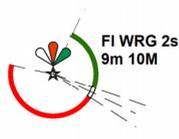
**MARINE PARK BUOYS:**

**CHANNEL LEADS:** indicate a line of safe water through a narrow passage.  
 Back Lead — Front Lead *Line of leads 261° T*  
 Lights may be of any colour to distinguish from background lighting.

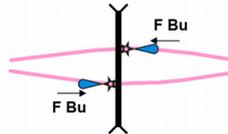
**LIGHTHOUSE:**



**PEL LIGHT:**



**BRIDGE LIGHT NAVIGATION SPAN:**



## LIGHTS AND COLOURS

Lights on aids to navigation exhibit the following colours

R = red G = green Y = yellow Bu = blue Or = orange No colour = white

**ABBREVIATIONS:**

F = Fixed, FI = Flashing, Q = Quick Flashing, Oc = Occulting, V = Very, L = Long, I = Interrupted, Iso = Isophase, Al = Alternating, U = Ultra, Mo (A) = Morse Code (A) FI(3) = Group Flashing 3 secs, Q(3) = Group Quick Flashing 3 secs, Dir = Directional

## SYMBOLS

Anchorage .....	
Boat ramp (public).....	
Waterway sign .....	
Wreck (partially above low water) .....	
Sunken wreck or reef .....	
Rock; Submerged hazard .....	
Rock edge .....	
Pilot boarding ground; Ship anchorage .....	
Tower; Pile .....	
Buoy mooring .....	
Marine rescue services.....	
Life jacket .....	
Swimming enclosure .....	
Bridge (clearance).....	
Footbridge (clearance).....	
Weir .....	
Lock .....	
Overhead cable .....	
Overhead pipeline .....	
Submarine cable (shown dashed if disused) .....	
Submarine pipeline .....	
Road .....	
Track .....	
Suggested small craft track .....	
Suggested small craft track (speed restricted).....	
1 metre contour (blue if approximate).....	
2 metre contour (blue if approximate).....	
5 metre contour (blue if approximate).....	
10 metre contour (all blue if approximate).....	
25 metre contour (blue if approximate).....	
Dries at low tide (LAT).....	
Water depth 0m to 1m deep.....	
Water depth 1m to 2m deep.....	
Water depth 2m to 5m deep.....	
Water depth deeper than 5m.....	
Mangroves.....	
Rocky foreshore .....	
Reef areas (submerged or awash).....	
Ship navigation area .....	
Marine National Park Zone (no fishing).....	
Go slow for turtles and dugongs .....	
Go slow for natural features .....	
Go slow - vessels over 8m in length .....	

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You may print for free as many copies of the booklet and/or maps as you need. The maps are designed for inserting into your own clear plastic A4 size "envelopes" available from most newsagents or department stores.

## Acknowledgements

Moreton Bay Marine Park "green" and "go slow" zones courtesy of the Department of Environment and Science. There may be more marine parks, "green" and "go slow" zones declared for areas other than those shown for Moreton Bay. For more details and maps of marine parks (including Great Sandy marine park), visit <https://parks.des.qld.gov.au/parks/>.

Waterways crossings compiled from information sourced from the appropriate local government and utility organisations.

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