

6. Environmental information

The majority of berths at the port of Brisbane are located at Fisherman Islands, at the mouth of the Brisbane River which extends into Moreton Bay. The area is very exposed to the prevailing winds which include fresh to strong SE trades year round, strong N/NE sea breezes in the afternoons during the summer months and strong to gale force SW/W winds in the late winter months.

Weather charts, satellite images, warnings and reports are available from the [Australian Bureau of Meteorology](#).

6.1 Tidal information

Brisbane Bar is a standard port in the Queensland Tide Tables published each year by Maritime Safety Queensland.

The tidal heights are:	HAT	2.78metres
	MHWS	2.22 metres
	MSL	1.32metres
	MLWS	0.42 metres

Mariners can request the actual heights of tide from the Brisbane Bar and Mooloolaba tide gauges by calling VTS on VHF channel 12.

Maritime Safety Queensland provides tidal predictions for pilotage areas. The tidal times and heights for standard Queensland ports are available in the Queensland Tide Tables and may also be accessed at the [Bureau of Meteorology](#) website.

Tidal stream predictions for standard Queensland ports are available upon request through the Regional Harbour Master's office.

Mariners and agents are reminded that tidal ebb and flows can begin or continue after the times of high or low water at various localities in the Brisbane River. This should be borne in mind when booking ships in for 'head up' or 'head down' berthing.

6.1.1 Tidal information – Tsunami effects

The north/west and east coasts of Australia are bordered by active tectonic plates which are capable of generating a tsunami that could reach the coastline within two to four hours. The resultant change in swell height could have an adverse effect on a vessel with a minimum under keel clearance navigating within or close to port areas.

The [Joint Australian Tsunami Warning Centre](#) (JATWC) has been established to monitor earthquake activity that may lead to a tsunami forming. Warnings are currently issued for the Pacific Ocean region by the Australian Tsunami Warning System, Pacific Tsunami Warning Centre (PTWC) in Hawaii and for the Indian Ocean region by the Japan Meteorological Agency (JMA).

VTS will enact its tsunami warning procedures upon receipt. Actions may include: clearing anchorages, suspension of shipping movements and suspension of certain port activities. Mariners are advised to take heed of such warnings, plan their movements and activities accordingly.

6.2 VTS – information services

VTS can provide mariners on request the following on time tidal and current conditions, on time weather information as well as current forecasts, along with shipping schedules, navigational warnings and any special operational requirements.

6.2.1 Tide gauges

Location	Operator	Area of use	Notes
Mooloolaba	DEPH	Mooloolaba, NW Fairway and NW Channel	Real time
NW Front Lead	PBPL	NW Channel – NCOS system	Real time and current residual pattern
Whyte Island	MSQ	Brisbane Bar Cutting Fisherman Islands Lytton Rocks	Real time, electronic and visual gauges
FI Grain Terminal	PBPL	Fisherman Islands	Real time
Pinkenba Base	MSQ	Gateway Bridge	Real time electronic gauge
Queensland Bulk Terminal	PBPL	Gateway Bridge and Hamilton Reach	Real time

Table 13 – Tide Gauges

VTS currently provides tidal residual information for the use of deep draft vessel operations only.

6.2.2 Weather stations

Location	Operator	Area of use	Notes
Maroochy Airport	Bureau of Meteorology	Sunshine Coast	On line, data as per last reading 30 minute intervals. Data retained for 72 hours
Cape Moreton	Bureau of Meteorology	N Moreton Bay	
Spitfire S1	Bureau of Meteorology	Spitfire	
Inner Beacon (Front Reciprocal)	Bureau of Meteorology	Brisbane Roads	
Brisbane Airport	Bureau of Meteorology	Brisbane area	
Banana Banks	Bureau of Meteorology	S Moreton Bay	
Beacon No BC1	MSQ	Fisherman Islands	Real time
Beacon No BC13	MSQ	Fisherman Islands	Real time
Fisherman Islands	PBPL	Fisherman Islands	
Lead 2F	MSQ	Fisherman Islands & River	Real time

Pinkenba	MSQ	Pinkenba	Real time
Lead 8F	MSQ	Pinkenba and Eagle Farm	Real time
Lead 14R	MSQ	Colmslie, Hamilton Reach	Real time
Lead 15F	MSQ	Hamilton Reach	Real time

Table 14 – Weather Stations

(Refer [15.6 Weather Stations](#)).

6.3 Hazard to shipping – Jellyfish

Masters should be aware that during the warmer summer months, from November to March, many incidents have been reported of vessels cooling water intakes being fouled by blue blubber jellyfish. If they are observed, it is wise to take precautions to prevent their ingress.

6.4 Advisory Note – Interaction with Marine Mammals

The presence of whales or marine mammals indicates that our ports are seen as environmentally attractive places. The safety of life and the security of the environment from ship based incidents is paramount.

All vessel masters are required to fully comply with relevant marine mammal legislation, such as the provisions of the [Nature Conservation \(Animals\) Regulation 2020 Chapter 6 Part 1](#) which prescribes minimum approach distances and maximum speeds within proximity to whales as illustrated in the diagram below.

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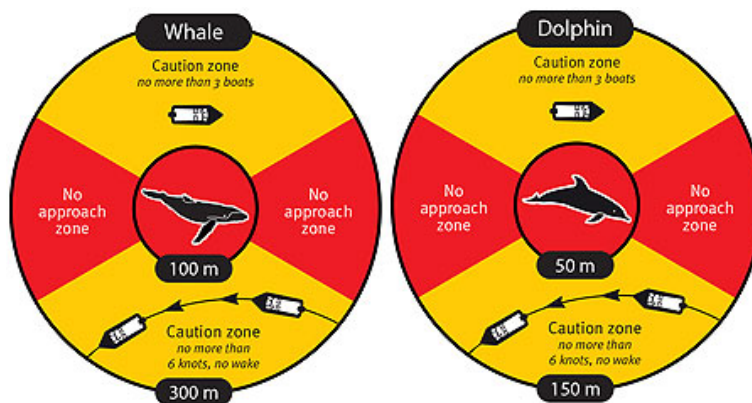


Figure 2 Minimum approach distances and maximum speeds within proximity to whales and dolphins

When whales or marine mammals are reported in the vicinity of port areas and a risk to marine mammals is perceived, then every possible endeavour will be undertaken to manage shipping movements around the marine mammals to keep them safe, provided the safety of life, the ship and other environmental protection objectives are not threatened. Such action may include not commencing transits until the mammals are deemed clear.

In situations where a vessel is underway and restricted in its ability to manoeuvre or constrained to a channel and marine mammals are reported in the vicinity of the transit and a risk to marine mammals is perceived, the master must take all reasonable action necessary to keep them safe, without endangering the vessel, crew and the environment. Such action may include the reduction of speed to the minimum safe speed to safely navigate the channels.

Masters are required to report collisions with marine mammals to VTS and Department of Environment and Science **1300 130 372**

<https://www.qld.gov.au/environment/plants-animals/wildlife/marine-strandings>