

6. Weather information

6.1 General

The prevailing winds tend to be easterly to south easterly. Although calmer conditions occur during the winter months, they may become very difficult during the summer months when the sea breeze augments the prevailing south easterlies.

Weather charts, satellite images, warnings and reports may be polled by fax on 1800 630 100 and from the [Bureau of Meteorology](#).

[Coastwatch](#) is a website with useful nautical information links.

6.1.1 Extreme Weather Contingency Plan

The Mourilyan Extreme Weather Contingency Plan can be found at the following link to the MSQ website:

See <https://www.msq.qld.gov.au/Safety/Preparing-for-severe-weather>

6.2 Tidal information

Mourilyan harbour is a standard port in the Queensland Tide Tables.

The flood tide sets south along the coast towards the southern shore in the entrance. It then sweeps towards the wharf and turns around Camp Point into the Moresby River. The ebb tide sets towards the wharf, then nearly due east through the entrance, and when abreast of Hall Rock veers away to the north.

On spring tides, a strong eddy is experienced setting off the western end of the wharf at all stages of the tide. Spring tides run in and out of the port at rates of three to five knots.

After very heavy rains, a considerable amount of fresh water runs into the harbour from the river. This has an appreciable effect on slack water in the entrance and the rate of the ebb tide.

6.2.1 Tide boards/gauges

A tide pole is situated at either end of the berth and an automatic tide recorder at the rear of the berth. Tide height may vary up to 30 cm from prediction due to atmospheric pressure and weather patterns

The recorder refers to LAT and shows the [actual tide height](#) above LAT. Maritime Safety Queensland provides tidal predictions for pilotage areas. The tidal times and heights for standard Queensland ports are available in the 'Queensland official tide tables and boating guide' and may 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.

Table 9 Tidal information

Tidal information			
HAT	3.38 m	LAT	0 m
MHWS	2.55 m	MLWS	0.73 m
MHWN	1.89 m	MLWN	1.39 m
For tidal stream data refer to Australian Pilot and Hydrographic Chart			

6.2.2 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 coast-line 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 Pacific Tsunami Warning Centre (PTWC) in Hawaii and for the Indian Ocean region by the Japan Meteorological Agency (JMA). The Australian Tsunami Warning System is expected to be operational by June 2009.

Mariners are advised to take heed of such warnings, plan their bar crossings and tend their mooring or anchorages accordingly.

6.3 Water density

Sea water is usually 1025 kg/m³ but will vary during the summer months after periods of heavy rain.