

## 6. Weather information

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. As a general rule, when mean wind speeds are in excess of 25 knots vessel movements in the port will be suspended.

A Tropical Cyclone Watch (Blue Alert) message is issued by the Bureau of Meteorology (BOM), when a cyclone or potential cyclone is expected to affect conditions in the area within the next 48 hours and is reviewed every six hours.

A Tropical Cyclone Warning (Yellow Alert) message is issued when a cyclone or potential cyclone is expected to affect conditions in the area within the next 24 hours and is reviewed every three hours or sooner depending on circumstances.

Cyclone warnings and reports may be obtained from the Australian Bureau of Meteorology (BOM) website ([www.bom.gov.au](http://www.bom.gov.au)). (appendix –[Cyclone Tracking Chartlet](#)).

The [Extreme Weather Event Contingency Plan](#) for the Port of Gladstone contains the procedures to be followed for all vessels during extreme weather events, which includes cyclones.

### 6.1 Tidal information

The mean spring tidal range is 2.4 metres and the mean neap range is 1.1 metres. The tides are much affected by the prevailing winds and the stream sets are very strong at times in the channels.

Tidal streams in excess of four knots may be experienced between the entrance at Burnett Heads and the berths; the tides set across the channel in the Sea Reaches. An extremely strong northerly set is frequently experienced just seaward of the South Head lighthouse.

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 be accessed on the [Bureau of Meteorology](#) website; additional information regarding Burnett Heads (storm tide data and tide predictions) can be accessed on the [Queensland Government](#) website.

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

#### 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 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).

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