Visiting Lake Macquarie

Lake Macquarie is the largest coastal salt water lake in Australia and is a prime boating destination for both small and large vessels. Many sailing regattas and fishing activities are held on the lake. When cruising offshore, Swansea Heads, the entrance to the lake is approximately 36NM north of Broken Bay and 12NM south of Newcastle.

The Lake is 22 Km long, with an average depth of 8 metres, an area of 100 sq. Km. The Lake offers visitors all the facilities to relax and enjoy a break.

Entrance into Lake Macquarie is via the Swansea Channel at GPS location S33° 05.08’ E151° 39.93’.
Swansea Bar

PLEASE NOTE: IT IS A REQUIREMENT OF NSW MARITIME REGULATIONS THAT ALL OCCUPANTS OF A VESSEL MUST WEAR AN APPROVED LIFE JACKET WHEN CROSSING SWANSEA BAR, REGARDLESS OF CONDITIONS.

Skippers unfamiliar with entry to Lake Macquarie should note the following.

The worst bar condition tends to occur, when there is a wind and sea/swell from the NE, the tide is near low but still running out. Moon Island and the bomboras to its south, give some protection to the bar from a southerly swell. (In adverse conditions the skipper should consider going to Newcastle Harbour which is a safe deep water port in all conditions.)

Prior to your voyage we suggest that you consult map 8A available on the RMS website here at Maps or at the end of this document

The entrance into the channel has two sets of leads, plus some port lateral marks. There are no starboard markers (See chart insert above). When approaching from the South the leads are visible as you round Moon Island (Navigation Mark is an East Cardinal Mark, white flashing three quick flashes).

When approaching from the North, DO NOT cut the corner of the northern break wall, as yachts will surely run aground. Vessels are advised to keep an easterly position off Moon Island before turning to align the leads.

The bottom conditions do vary, but as a guide, the minimum depth on the line of the leads, is approx. 1.4 metres plus the tide height. Any sea/swell will of course reduce the depth in the troughs by approx. half the wave height.

Deep draft (1.6 metres plus) vessels should endeavour to cross the bar in the third hour of the rising tide. The tides given are for Swansea Heads. The tide difference at Swansea Bridge is approximately one hour later and at “the drop over” the tide difference is three hours later than Swansea Heads.

The ENTRANCE leads are red squares, blue lights at night, on a bearing of 255.6 degrees true, as shown on the chart below. Once inside the entrance there are the CROSSOVER leads at 127.7 degrees true, skippers INBOUND to the lake should use the reciprocal bearing of 307.7 degrees true when turning to align the secondary leads, which will be behind them on the hill.

Swansea Channel

The channel is approximately 6.7 Km from the entrance to the drop over (locals call the last set of port and starboard markers into the lake “the drop over” as there is a large increase in depth at this point, and is the shallowest point of the channel prior to the
drop over), It is 2.5 Km from the entrance to the bridge and a further 4.2 Km to the drop over.

Channel conditions through to “the drop over”, vary and will depend on when the last dredging was carried out. The trouble areas tend to be just west of the eastern entrance to Swan Bay and then closer to “the drop over” itself.

**Navigating Swansea Channel**

When navigating Swansea channel maintain a situational awareness at all times. Be aware that navigational markers are rarely on the edge of deep water. You may need to stand off from the navigational marker to maintain suitable water depth under your keel. Be sensible, transiting a shallow channel during the hours of darkness when unfamiliar with the area is a recipe for disaster.

If you are a first time visitor to Lake Macquarie we strongly recommend that you do not attempt a night navigation of the channel. Pick up a courtesy mooring and wait until morning.

Vessels unfamiliar with the Swansea channel can request an assist by contacting the Marine Rescue Lake Macquarie Radio Base. (See contact details under Radio Channels below)

**Swansea Bridge**

**Important Notes:**

- **Contact details** for Marine Rescue Lake Macquarie, VHF channel 16, 27 MHz channel 88 and telephone 02-49713498.
- There are three Pink coloured courtesy moorings on the Eastern side of Swansea Bridge and two Pink coloured courtesy moorings on the Western side (Lakeside) plus the Public wharves for vessels waiting for a bridge opening.
- Skippers, who intend using the courtesy moorings in Swansea Channel East, should monitor the depth of water beneath the vessel at all times, particularly on an ebbing tide and when the vessel has a significant draft. The mooring closest to the RSL (if available) may offer a deeper mooring.
- Swansea Bridge clearance heights when closed, **2.0 metres under opening span** and **2.2 metres under fixed span AT LOW TIDE**. Due to strong tidal flows extreme caution should be exercised when navigating in the vicinity of Swansea Bridge.
- The Bridge will not be opened in winds above **27 knots**.

**Bridge Bookings - Larger Vessels**

**Bridge bookings can only be made through Marine Rescue Lake Macquarie**

(See **Contact details** above)
The bridge only opens on the hour, with various conditions as set out below.

**Weekdays:** From 6am to 6pm, one hour's notice is required to book a bridge opening. Due to heavier road traffic no opening is available at 8am or 4pm weekdays. 7pm – 5am, 6 hours’ notice is required.

**Weekends and Public Holidays**

Same opening hours as weekdays, except the 8am and 4pm conditions do not apply. A vessel should make a booking through the Marine Rescue Lake Macquarie Radio Operator first as this will assist the bridge operator to coordinate the marine traffic.

You must provide the following information to the Marine Rescue Lake Macquarie Radio Operator **when a bridge opening is requested:**

1. Opening time required
2. Vessel name
3. Vessel registration
4. Whether the vessel is navigating into or out of Lake Macquarie
5. A mobile phone number to contact the vessel where the opening is required between 8pm and 5am.

**Bridge - Smaller vessels**

If your boat can pass under the bridge you may transit any span providing there is an adequate depth of water and vertical clearance for your vessel. You must keep **right (starboard)** whilst transiting under the selected span.

If the bridge is opening or is open you **must** obey the navigation lights on the open section and only progress on the **green light** through the open section.

**Radio Channels**

In order to reduce congestion on VHF working channels, Marine Rescue NSW have allocated different working channels for adjacent radio bases. Marine Rescue Lake Macquarie’s radio base at Swansea Heads is now using VHF Channel 19 as its main working channel. Some VHF sets can be switched between International and USA. Vessel owners need to ensure their radio is set to “International” not “USA”, in order to satisfactorily converse with our radio base on Ch. 19. Please refer to our website **Boating Info** Channel 19 usage and setup.

Marine Rescue Lake Macquarie monitors **VHF Ch. 16, 19, 27MHz Ch. 88, telephone: (02) 49713498**
Please be aware that the skipper remains responsible for the safe navigation of the vessel at all times.