

## 5. Port infrastructure

### 5.1 Berth channel and swing basin information

The port of Karumba includes an entrance access channel which has a designed depth of 3.4 metres at lowest astronomical tide.

The Entrance Channel has a length of 8.5 nautical miles from beacon number 1 to the swing basin.

**Table 5 - Berth information**

Berth	Designed Depth (Metres)
Entrance Channel	3·4
Swing Basin (diameter 315 metres)	3·6
Mobil/Trinity Wharf	6·3
Raptis Wharf	5·3
Ruby Marine Wharf	5·3
Gulf Freight Services	6·2
Karumba Cold Stores	6·2
Karumba Livestock Loading Wharf	5·4
Gulf Freight Services Ramp	4·6
Minmetals Group Export Wharf	4·2

Please note that the depths are subject to change; for the latest information, please consult the [Notices to Mariners](#).

### 5.2 Leading lights and beacons

#### 5.2.1 Beacons – Entrance Channel

**Table 6 - Channel navigation aids**

Entrance Channel Outer Reach Beacons			
#2	Fairway Beacon	R.W. stripes	Iso. 4s
#1,3,5,7,9	Starboard lateral beacon	G	Fl G 4s
#4,6,8	Port lateral beacon	R	Fl R 4s
#10	Special beacon	Y	Fl Y 4s

Entrance Channel Outer Reach Beacons			
Entrance Channel Middle Reach Beacons			
#11,13	Starboard lateral beacon	G	FI G 4s
#12,14	Port lateral beacon	R	FI R 4s
#15	Special beacon	Y	FI Y 4s
#16	South cardinal beacon	Y.B.	VQ(6) & L.FI 10s
#17	Starboard lateral buoy	G	FI G 2s
#18	Port lateral buoy	R	FI R 2s
#19,21	Starboard lateral beacon	G	FI G 4s
#20,22,24	Port lateral mark	R	FI R 4s
Alligator Point buoy	Special mark		FI Y 2·5s
#23,25	Starboard lateral beacon	G	FI G 4s
Karumba Town Reach			
#27,29	Special mark buoy		FI Y 4s
Off Livestock Loading Wharf	Mooring buoys		Q.R

## 5.2.2 Leading Lights – Entrance Channel

Rear lead – Dir F Blu 8M – and Dir F W 4M – tower

Front lead – Dir F Blu 7M and Dir F W 4M – beacon

Lights in line bearing 119°(T)

## 5.2.3 Leading Lights – Middle Channel

Rear lead – Dir. F Bu. and Dir F W– tower

Front lead – (#9 beacon) Dir. F Bu. and Dir F W - beacon

Lights in line bearing 264·5°(T)

## 5.3 Anchorage conditions

Ships are only to anchor in the area designated by the Port Control. Upon anchoring, ships are to advise Karumba Harbour of their anchoring time and position. Ships at anchor in the

pilotage area are to maintain a continuous listening watch on VHF channel 16 and any other channel as instructed.

Ships are not permitted to immobilise engines without the written approval of the Regional Harbour Master (see [10 Work permits](#)) and are to report to Port Control if dragging their anchor.

## 5.4 Anchorage areas

### 5.4.1 Roadstead anchorage

The Karumba roadstead anchorage was used by vessels loading zinc concentrate . It is situated 14 miles to the northwest of the Karumba Entrance in depths of 9 to 12 metres and is clearly indicated on chart AUS 303.

### 5.4.2 Quarantine anchorage inside the pilotage area

There is good holding ground outside the pilotage area to the west of the Fairway Beacon in four metres of water with a sandy bottom.

A quarantine anchorage exists within an area enclosed within the following positions:

17°– 24·1'S 140°– 42·5'E

17°– 24·1'S 140°– 43·0'E

17°– 24·6'S 140°– 43·0'E

17°–24·6'S 140°– 42·5'E

Vessels requiring quarantine clearance should anchor in this area.

### 5.4.3 Inner channel anchorage

Inside the channel are two anchorages.

- Outside the river mouth two cables off Alligator Point between special mark beacon (FI Y 2·5s) and Beacon #23 (FI G 4s). This is suitable for ships of up to 100 metres overall length. The holding is good with a soft sand and mud bottom in approximately five metres to six metres of water.
- Upstream of the main wharves in the river, adjacent to the slipway. This provides an anchoring radius of approximately 180 metres and is suitable for ships of up to 80 metres overall length. The holding is good with a mud bottom in approximately four to five metres of water.

Note anchoring in the above areas, vessels must not encroach on the channel (see prohibited anchorages). Permission must be sought from the Regional Harbour Master – Cairns prior to entry and or anchoring.

### 5.4.4 Small craft anchorages

The small craft anchorage area is as follows:

- from the western bank of the Norman River to # 25 buoy (yellow buoy)

- thence in a line to # 27 buoy (yellow buoy)
- thence in a line to #29 buoy (yellow buoy)
- thence in a line to the position 17°– 29·83'S 140°– 49·36'E and then in a north-westerly direction towards the bank of the Norman River.

Small craft and other fishing ships should not anchor to the east of the above positions.

### **5.4.5 Prohibited anchorages**

Anchoring within the pilotage area is restricted to the anchorages as described in this section. Anchoring is not permitted within the entrance channels and approaches, ships swing basin, or within the river from Karumba Point to the upstream southern limit of the small craft anchorages.