15.10 Navigation Data

15.10.1 Moreton Bay Distance Tables

Moreton Bay Distance Tables

Via East Channel

	EB	E5	E3	E1	M7	M5	M4	M1	NW12	NW10	NW3	NW8	NW6	NW4	NW2	FWBY	BG
EB																	
E5	8.40																
E3	9.50	1.10															
E1	11.74	3.34	2.24														
M7	14.09	5.69	4.59	2.35													
M5	15.29	6.89	5.79	3.55	1.20												
M4	17.81	9.41	8.31	6.07	3.72	2.52											
M1	20.11	11.71	10.61	8.37	6.02	4.82	2.30										
NW12	22.46	14.06	12.96	10.72	8.37	7.17	4.65	2.35									
NW10	24.91	16.51	15.41	13.17	10.82	9.62	7.19	4.80	2.45								
NW3	27.41	19.01	17.91	15.67	13.32	12.12	9.60	7.30	4.95	2.50							
NW8	29.76	21.36	20.26	18.02	15.67	14.47	11.95	9.65	7.30	4.85	2.35						
NW6	32.21	23.81	22.71	20.47	18.12	16.92	14.40	12.10	9.75	7.30	48.0	2.45					
NW4	34.61	26.21	25.11	22.87	20.52	19.32	16.80	14.50	12.15	9.70	7.20	4.85	2.40				
NW2	36.32	27.92	26.82	24.58	22.23	21.03	18.51	16.21	13.86	11.41	8.91	6.56	4.11	1.71			
FWBY	38.52	30.12	29.02	26.78	24.43	23.23	20.71	18.41	16.06	13.61	11.11	8.76	6.31	3.91	2.20		
BG	44.52	35.12	35.02	32.78	32.78	29.23	26.71	24.41	22.06	19.61	17.11	14.76	12.31	9.91	8.20	6.00	

Via Main Channel

	EB	Rr/Ld	M8	M9	M7	M5
Rr/Ld	4.25					
M8	7.75	3.50				
M9	11.36	7.10	3.60			
M7	12.90	8.65	5.15	1.55		
M5	14.10	9.85	6.35	2.75	1.20	

Via East Knoll ByPass

	EB	Rr/Ld	M8	M9	EK2	M5
Rr/Ld	4.25					
M8	7.75	3.50				
M9	11.05	6.80	3.30			
EK2	12.15	7.90	4.40	1.10		
M5	13.25	9.00	5.50	2.20	1.10	

EB – BG via East Channel = 44.52
EB – BG via Main Channel = 43.33
EB – BG via East Knoll Bypass = 42.11

15.10.2 Moreton Bay steaming times

Leg	Distance	Speed in knots						
		8	10	12	14	16	18	20
PBG–FWBY	6	45	36	30	26	22	20	18
FWBY–NW2	2.2	17	13	11	9	8	7	6
NW2–NW4	1.71	13	10	9	7	6	6	5
NW4–NW6	2.4	18	14	12	10	9	8	7
NW6–NW8	2.45	18	15	12	10	9	8	7
NW8–NW3	2.35	18	14	12	10	9	8	7
NW3–NW10	2.50	19	15	13	11	9	8	8
NW10–NW12	2.45	18	15	12	11	9	8	7
NW Bypass	12.2	92	73	61	52	46	41	37
NW12–M1	2.35	18	14	12	10	9	8	7
M1–M4	2.30	17	14	12	10	9	8	7
Spitfire Bypass	4.37	33	26	22	19	16	15	13
M4–M5	2.52	19	15	13	11	9	8	8
M5–M7	1.20	9	7	6	5	5	4	4
M7–E1 (TLMA)	2.35	18	14	12	10	9	8	7
E1–E3	2.24	17	13	11	10	8	7	7
E3–E5	1.10	8	7	6	5	4	4	3
EAST E5–EB	8.82	66	53	44	38	33	29	26
M7–M9	1.55	11	9	8	7	6	5	5
M9–M8	3.60	27	22	18	15	14	12	11
M8–Rr/Ld	3.50	26	21	18	15	13	12	11
Rr/Ld–EB	4.40	33	26	22	19	17	15	13
M4–EK2	2.93	8	7	5	5	4	4	3
EK2–M9	1.10	8	7	5	5	4	4	3
PBG to EB via FWY (sth), NW, Spitfire, Main and East (Draft +10m)	47.44	5^h55^m	4^h44^m	3^h57^m	3^h23^m	2^h57^m	2^h38^m	2^h22^m
PBG to EB via FWY(nth), NW, Spitfire, Main and East (Draft 8-10m)	46.06	5^h45^m	4^h36^m	3^h50^m	3^h17^m	2^h52^m	2^h33^m	2^h18^m
PBG to EB via FWY(nth), NWD, Spitfire and Main (Draft 5-8m)	43.53	5^h26^m	4^h21^m	3^h37^m	3^h06^m	2^h43^m	2^h25^m	2^h10^m
PBG to EB via FWY(nth), NWD, Spitfire Bypass and East Knoll Bypass (Draft <5m)	42.01	5^h15^m	4^h12^m	3^h30^m	3^h00^m	2^h37^m	2^h20^m	2^h06^m

Table 20 –Moreton Bay steaming times

15.10.3 Pilotage – Brisbane River removal distances

The table below shows removal distances in nautical miles from Outer Bar Reach Entrance Beacons to berth/anchorage. Distances to BR^ anchorage to be taken from the Outer Bar Beacons to the actual anchorage position at the time

To calculate distances between berths, deduct smaller from larger figure.

Position	QSHIPS Code	Distance
Ship to Ship Transfer #2	STS2	5.30
Ship to Ship Transfer #1	STS1	4.80
Entrance Beacons	EB	0
Fisherman Island Pump Out	FIPO	2.84
Fishermans Island 12	FI12	3.25
Fishermans Island 11	FI11	3.43
Koopa Swing Basin	KSB	3.56
Fishermans Island 10	FI10	3.63
Fishermans Island 9	FI9	3.82
Fishermans Island 8	FI8	3.96
Fishermans Island 7	FI7	4.08
Fishermans Island 6	FI6	4.17
Fishermans Island 5	FI5	4.28
Fishermans Island 4	FI4	4.43
Fishermans Island 3	FI3	4.59
Fishermans Island 2	FI2	4.72
Fishermans Island 1	FI1	4.83
Fishermans Island Grain Terminal	FIGR	5.00
Brisbane Int Cruise Terminal	BICT	5.05
Fishermans Island Tanker	FITA	5.20
Port North Common User Berth 1	PNCUB1	5.30
Fisherman Island Swing Basin	FISB	5.30
Fishermans Island Coal	FIC	5.40
Fishermans Island GP Berth	FIGP	5.50
Brisbane Crew Change Berth	BCCB	5.67
Whyte Island Tug Base	WITB	6.40
Ampol Products	AMPR	6.60
Cement Australia	CAB	7.20
Cement Australia Swing Basin	CSB	7.20

Position	QSHIPS Code	Distance
Wagner	WAG	7.36
BP Bunker Berth	BPBB	7.73
BP Products	BPPR	7.90
Hemmant Barge Landing	HBL	8.10
Boral	BORL	8.20
Viva Energy	VIVA	8.20
Quantem Liquid Terminal	QLT	8.30
Aquarium Boat Passage	ABP	8.36
Brisbane Ship Lifts (The Yard)	BSL	8.38
Incitec North	INCN	8.50
Incitec South	INCS	8.70
Pinkenba 1	PNK1	8.80
Pinkenba 2	PNK2	8.80
Pinkenba Swing Basin	PSB	8.80
Maritime Safety Queensland	MSQ	9.01
Queensport	QNPT	9.85
Pacific Tug Base	PTB	9.71
Bhagwan Marine Base	BMB	9.83
Holt Street	HOLT ST	9.85
Rivergate Marina	RYM	10.08
Queensland Bulk Terminal	QBT	10.63
Raptis	RAP	10.99
Austral (Brisbane Service Centre)	BSE	11.43
Hamilton Swing Basin	HSB	11.8
HMAS Moreton	BNWF	11.96
Riverside (Newstead)	RTB	14.4
Dockside Marine	DSM	16.6
Town Reach	CITY	18.14
SouthBank	CITY	19.06

Table 21 – Brisbane River removal distances

15.10.4 Passage Planning

Passage through Moreton Bay, from the Pilot Boarding Ground to the Entrance Beacons (Beacons BC1 and BC2), can take a number of different routes.

The available depth of water various across numerous channels, with a summary provided below.

Channel	Design Depth	North Entry	South Entry	Remarks
Fairway	15.0m	Fairway Beacon 26°48.8501'S 153°10.7759'E	NW Front Lead 26°51.5515'S 153°09.1943'E	Port Approaches
North West Channel	15.0m	NW Front Lead 26°51.5515'S 153°09.1943'E	Beacon NW12 27°02.4445'S 153°15.3421'E	Primary Deepwater Route
North West Bypass Channel	9.2m	NW Front Lead 26°51.5515'S 153°09.1943'E	Beacon NW12 27°02.4445'S 153°15.3421'E	Secondary Route Bypass channel for shallow draft vessels. Infrequently surveyed
Spitfire Channel	15.0m	Beacon NW12 27°02.4445'S 153°15.3421'E	Beacon M1 27°03.3352'S 153°18.0588'E	Primary Deepwater Route
Main Channel (Primary)	15.0m	Beacon M1 27°03.3352'S 153°18.0588'E	Beacon M7 27°08.3052'S 153°21.0775'E	Primary Deepwater Route
Spitfire Bypass Channel	12.0m	Beacon S1 27°02.9606'S 153°15.8825'E	Beacon M3 27°05.5706'S 153°18.7952'E	Secondary Route Bypass channel for shallow draft vessels. Infrequently surveyed
Main Channel (Secondary)	10.0m	Beacon M9 27°10.0092'S 153°19.8135'E	Beacon M8 27°12.0342'S 153°16.6618'E	Secondary Route Bypass channel for shallow draft vessels. Infrequently surveyed
East Knoll Bypass Channel	6.0m	Beacon M4-M6 (AIS) 27°06.0608'S 153°19.3414'E	Beacon M9 27°10.0092'S 153°19.8135'E	Secondary Route Bypass channel for shallow draft vessels. Infrequently surveyed
North East Channel	3.0m	Buoy NE2 26°57.0500'S 153°20.2250'E	Beacon M7 27°08.3052'S 153°21.0775'E	Entry with local knowledge only
East Channel	15.0m	Beacon M7 27°08.3052'S 153°21.0775'E	Beacon E5 27°13.8940'S 153°20.1438'E	Primary Deepwater Route

Brisbane Roads	14.7m	Beacon E5 27°13.8940'S 153°20.1438'E	Beacon BC1 27°18.6195'S 153°12.5493'E	Primary Deepwater Route

Table 22 – Passage Planning

The actual depth of channels can differ due to changes in the environmental conditions. Channels are regularly surveyed, though at different frequencies, depending on use. VTS can be contacted for the most up to date information or the Port of Brisbane for specific survey data.

It is the responsibility of the Master to ensure that the vessel is safe navigationally, including the use of the appropriate channels for their vessels draft.