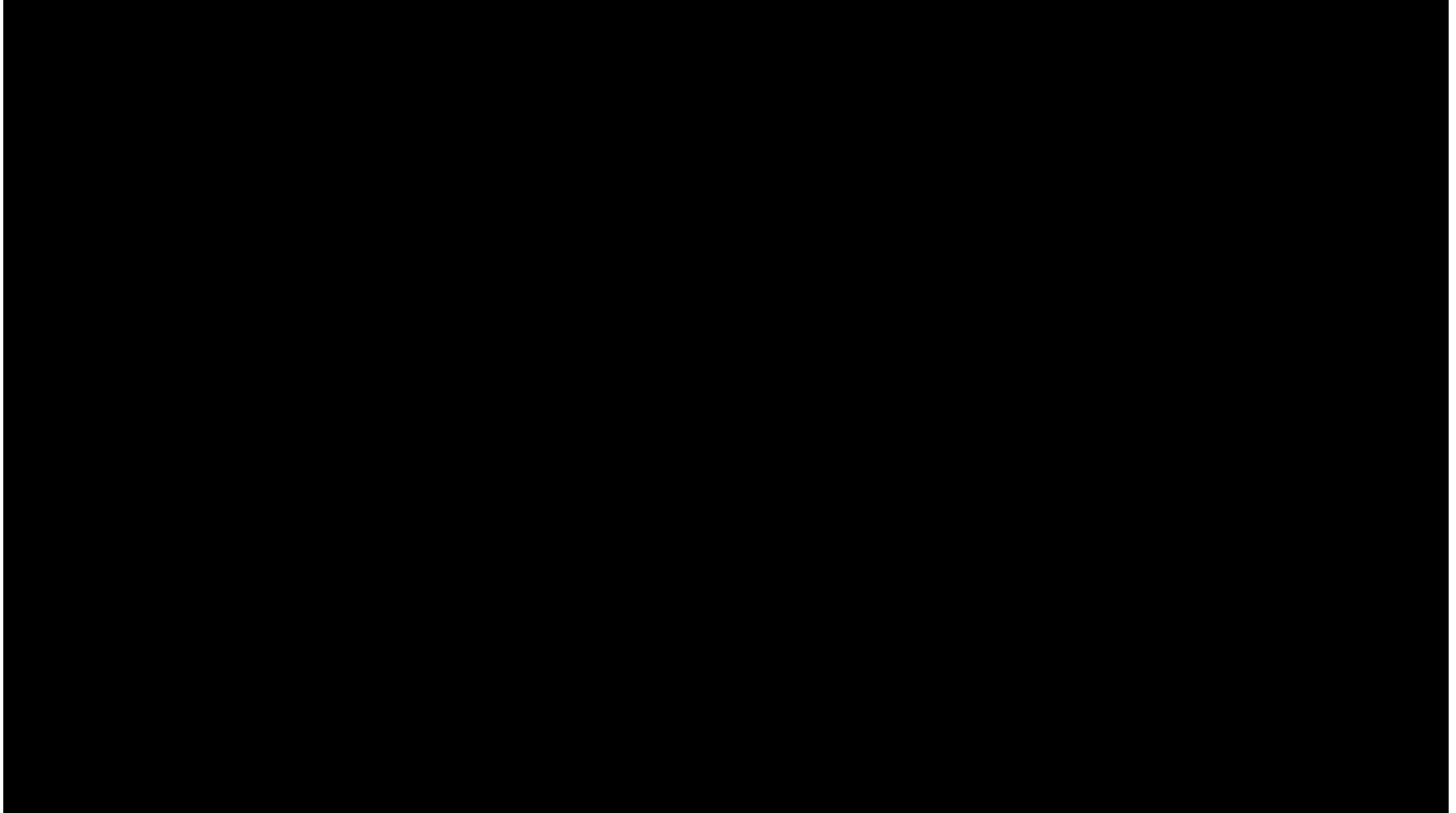


# WHERE ARE YOUR CHANNELS?

Risk assessment and management of fairways and channels

Jonathan Beatty – Assistant Regional Harbour Master (Brisbane)

# About us



## Creating a single integrated transport network accessible to everyone

### We manage:



**33,353 km**

state-controlled roads



**3078**

bridges



**20**

ports

### There were:



**3.6m**

drivers licensed



**5.1m**

vehicles registered



**3259**

taxis licensed



**232,901**

recreational boat registrations



**866,194**

recreational boat licences

### We serve:



**3.39m**

customers served face-to-face at

**59**

Customer Service Centres



Our customers conducted

**7.2m**

online services

### Services provided:



**178m**

in SEQ



**11.9m**

outside SEQ

trips taken annually on bus, rail, ferry and light rail



**2.6m**

go cards in use

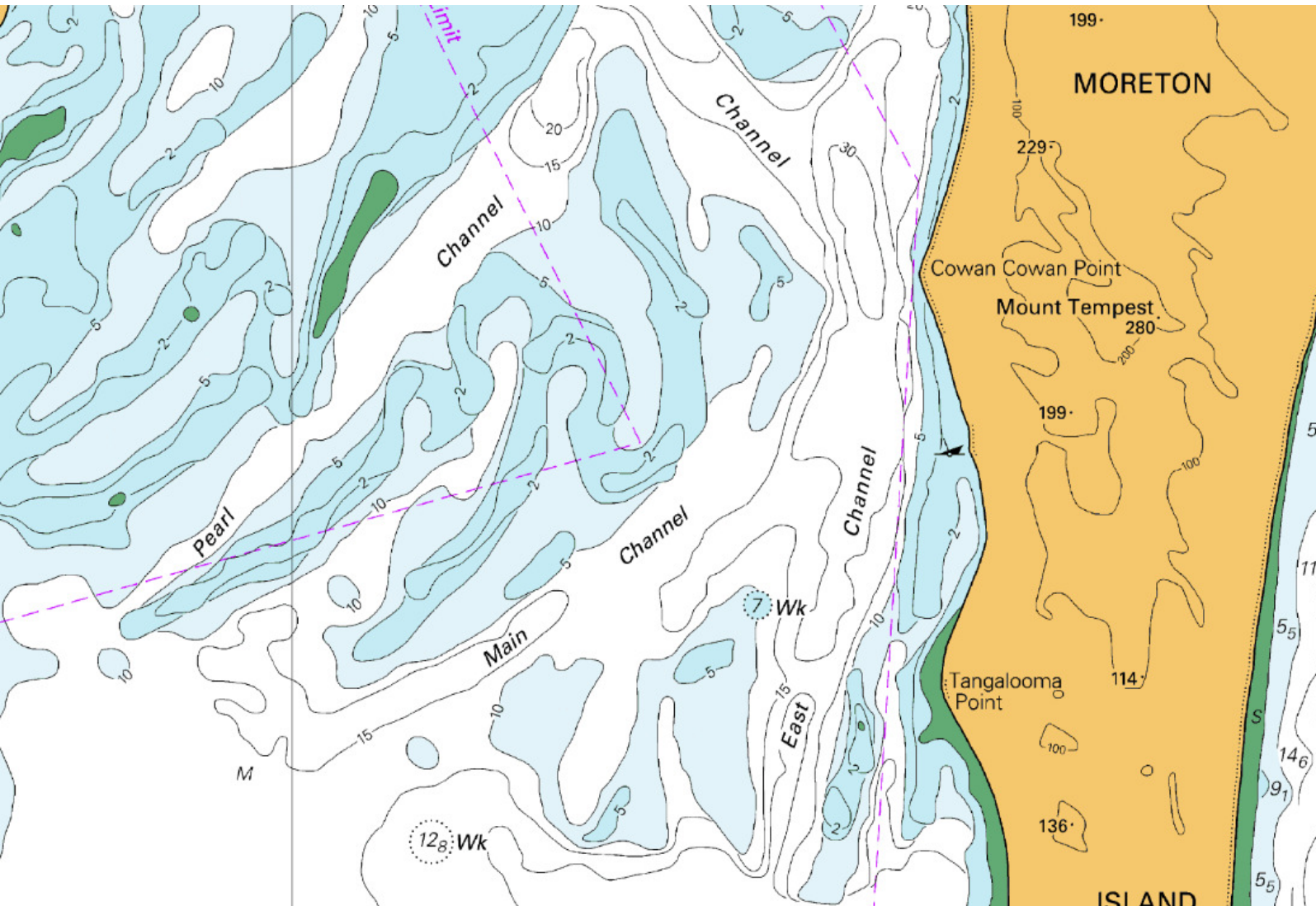


**Over 485,000**

passengers travel on the SEQ network on average each day

Statistics sourced from the Department of Transport and Main Roads Annual Report 2016–17

# Where exactly is the channel?

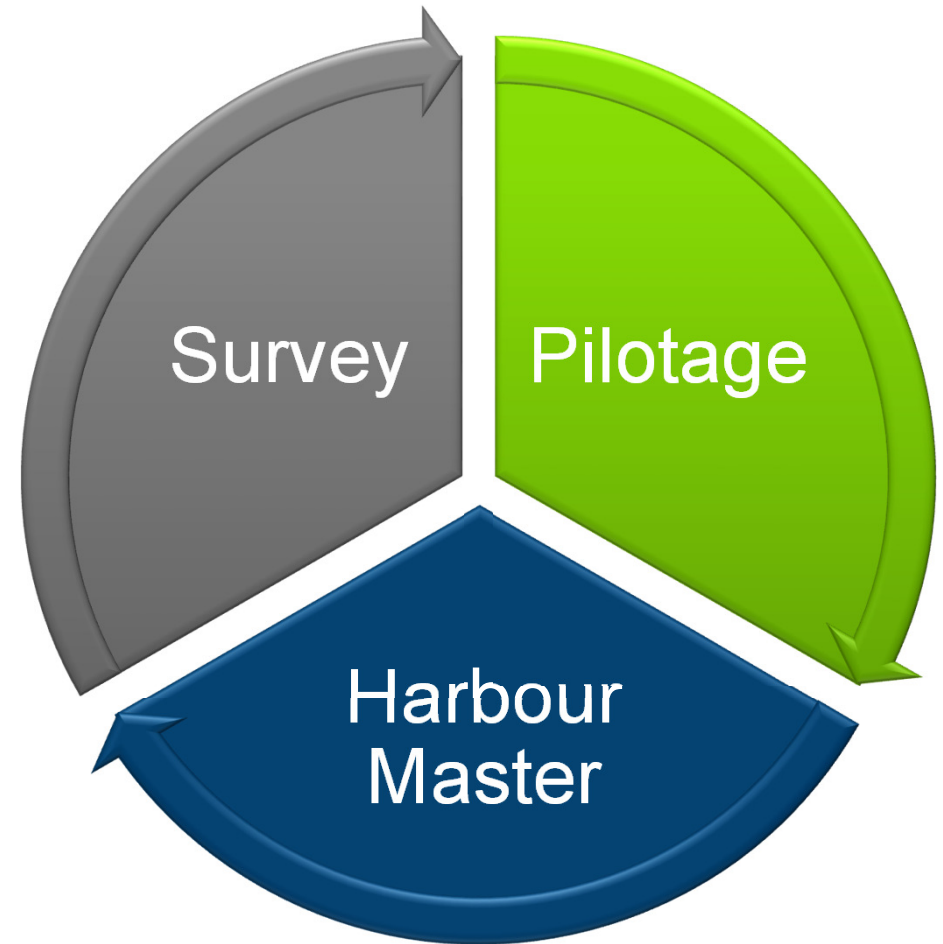
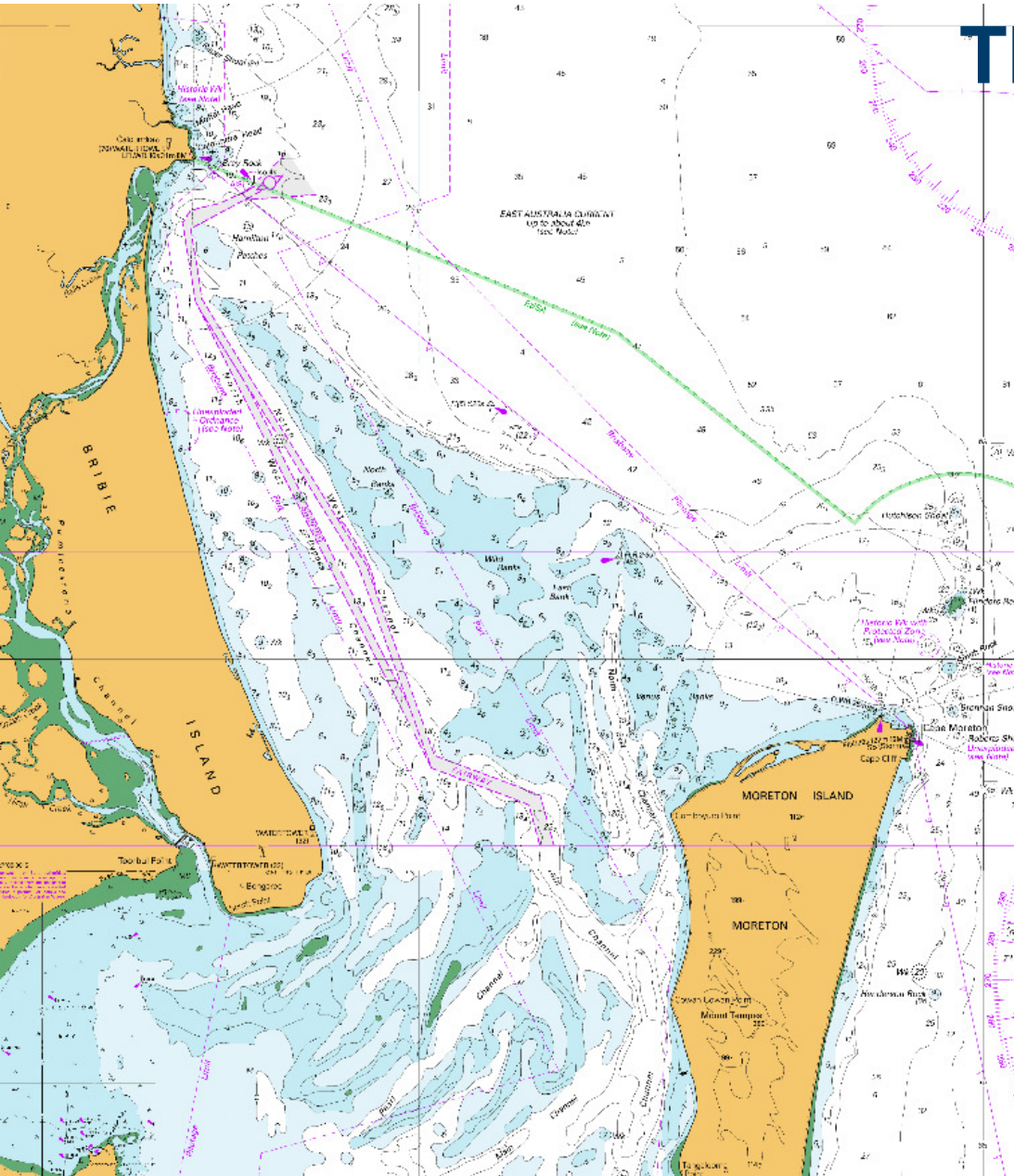


What is a channel?

What is exactly?

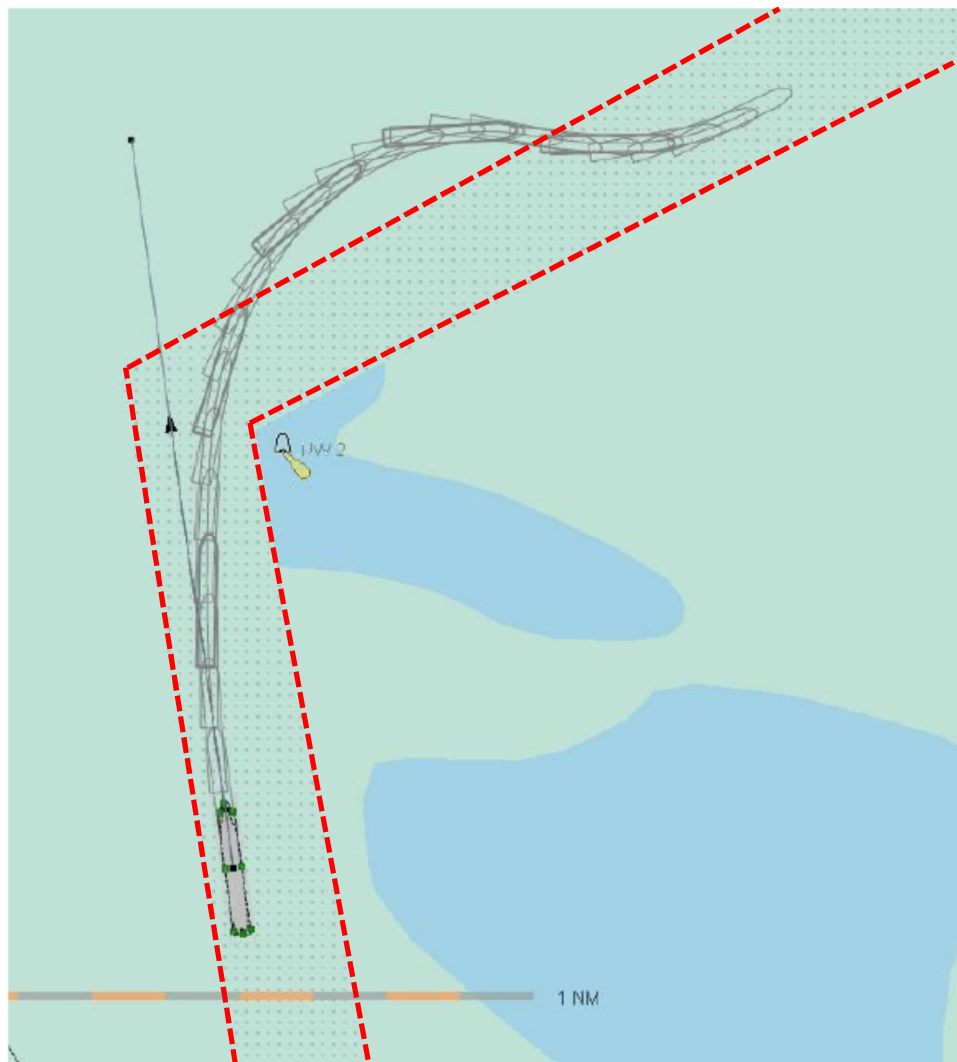
Is 'exactly' the same for all stakeholders?

# The Port of Brisbane Problem





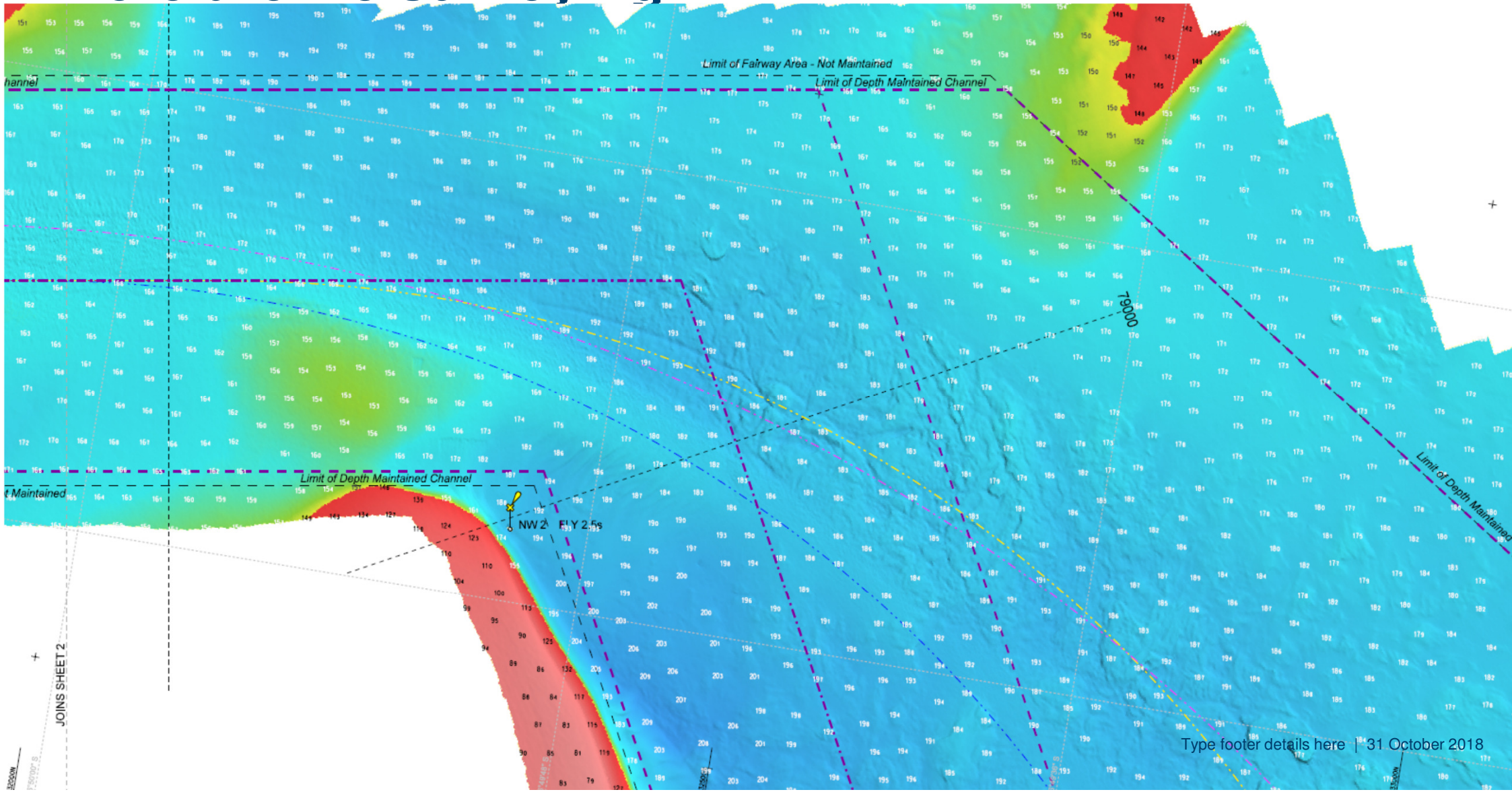
# Where are we going – Pilotage



71

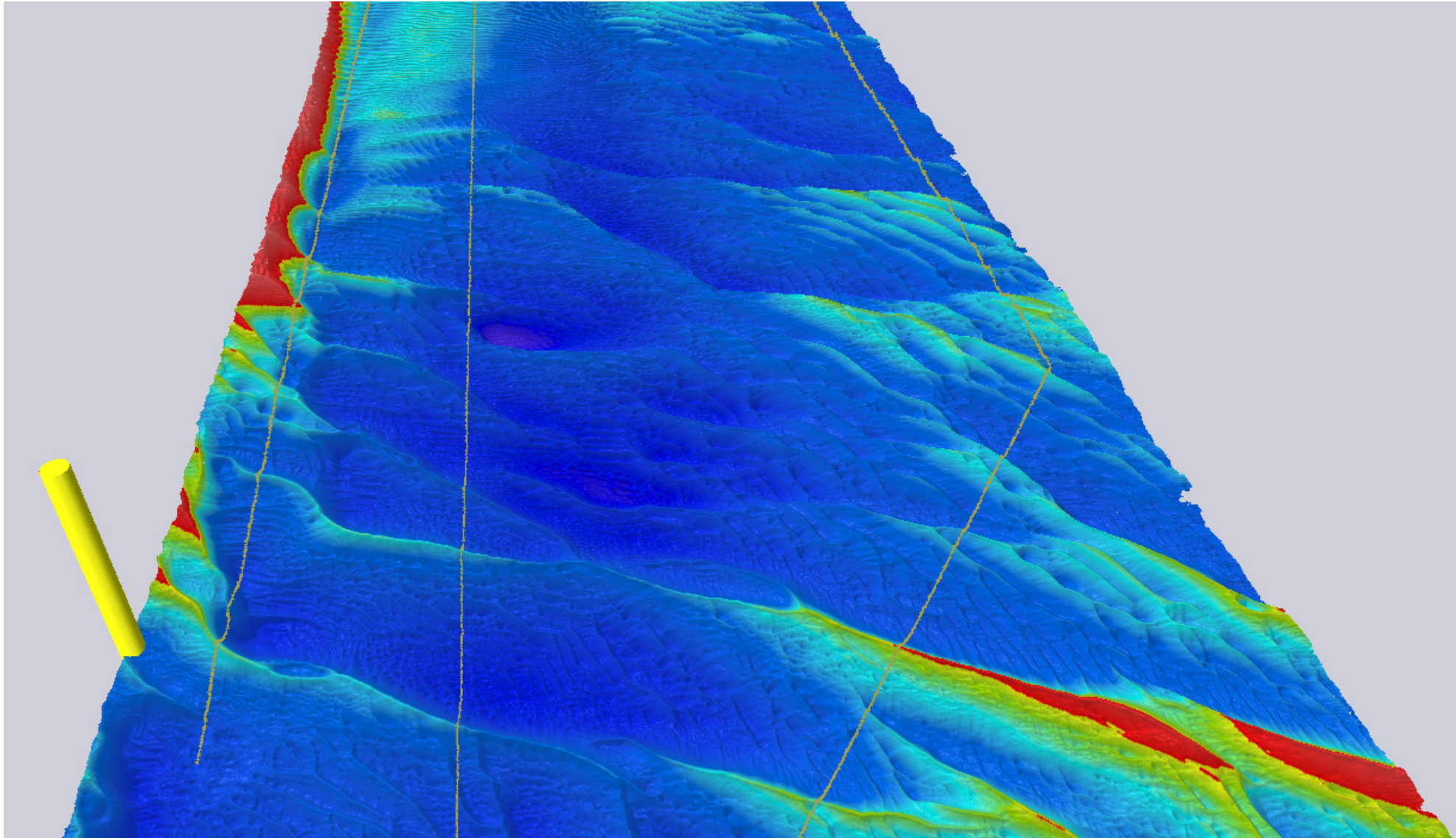


# Where are we surveying?





# Where are the Navigation Aids?



# UKC Management



Vessel Name: ANL WENDOUREE

Forecast Issued: 05-September-18 05:21

Transit Description: NW Fairway to Autostrad Terminals



Commencement Window: 04-September-18 22:50 to 05-September-18 06:00

Selected Transit Start Time: 05-September-18 03:00

Vessel	
Name:	ANL WENDOUREE
IMO No	9297527
Type	Container Vessel
Beam	32.2 m
LPP	283.2 m
Speed Setting	Slow

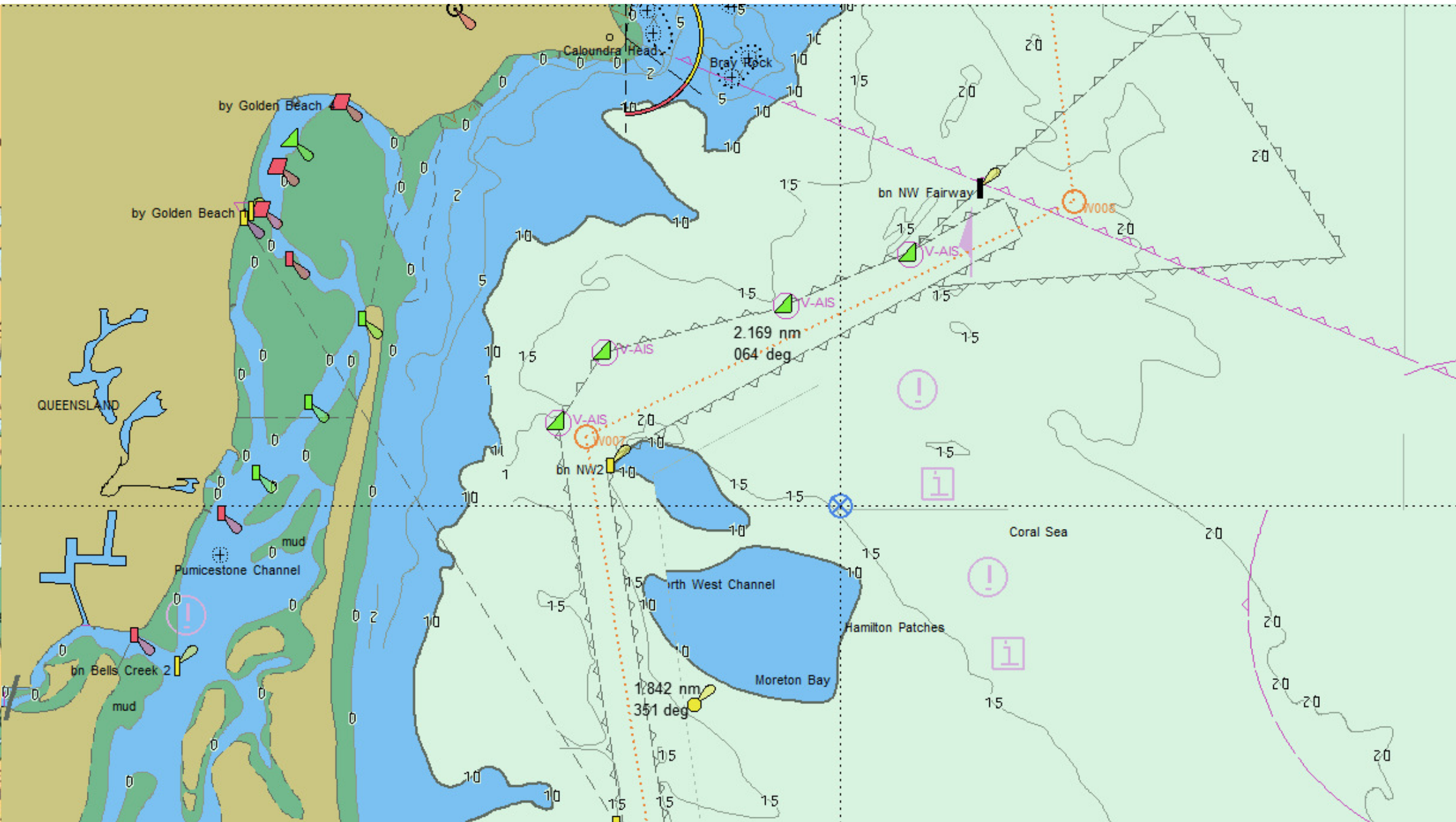
Stability Data	
Draft Fore	12.3 m
Draft Mid	12.55 m
Draft Aft	12.8 m
Displacement	82621 t
KGs	14.13 m
GMf	0.83 m

Environmental Conditions		
Station Name	MN1	
Tide Residual	0.06	
	Model	Measured
HsSwell	0.58 m	1.05 m
TpSwell	8.9 m	8 m

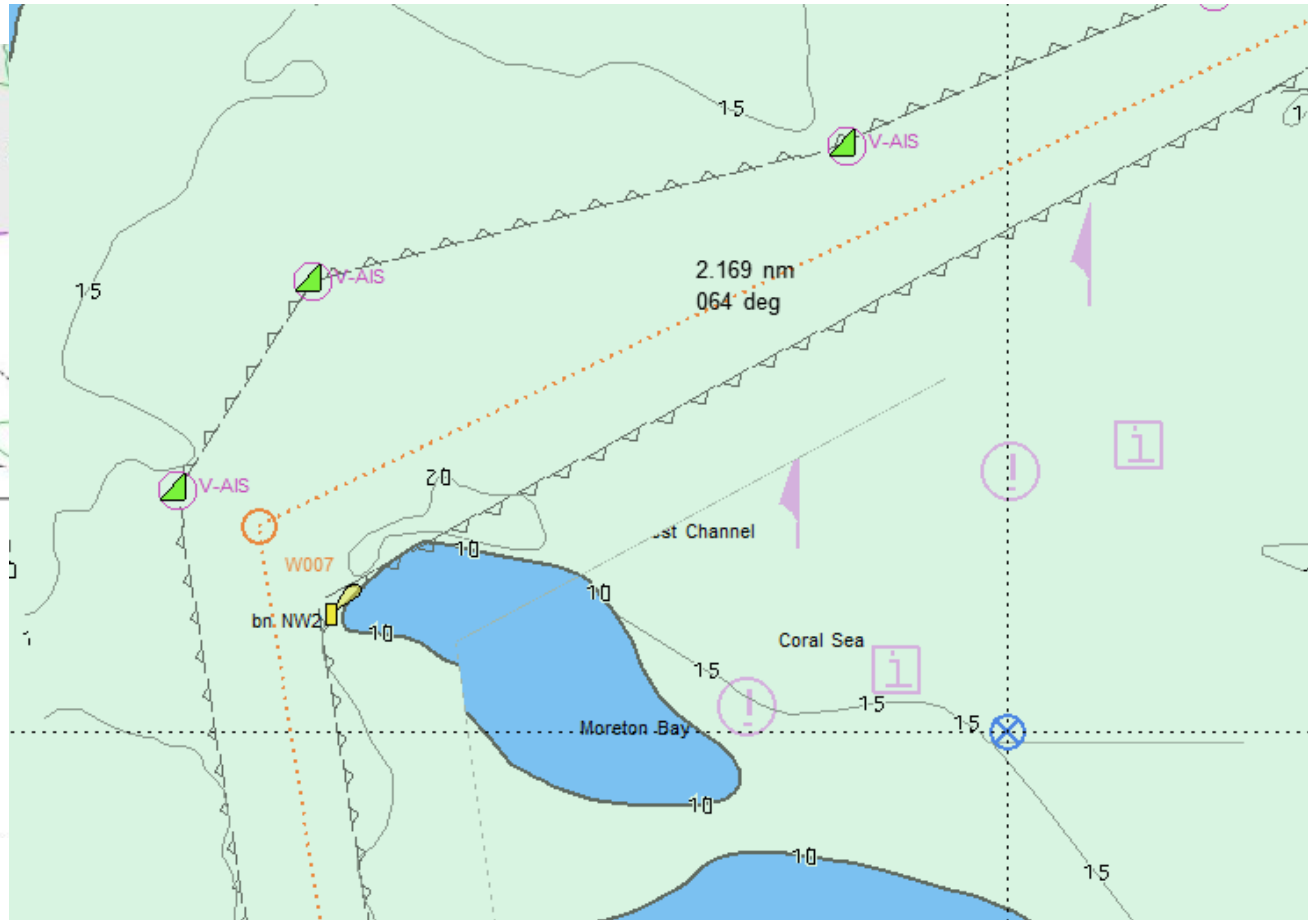
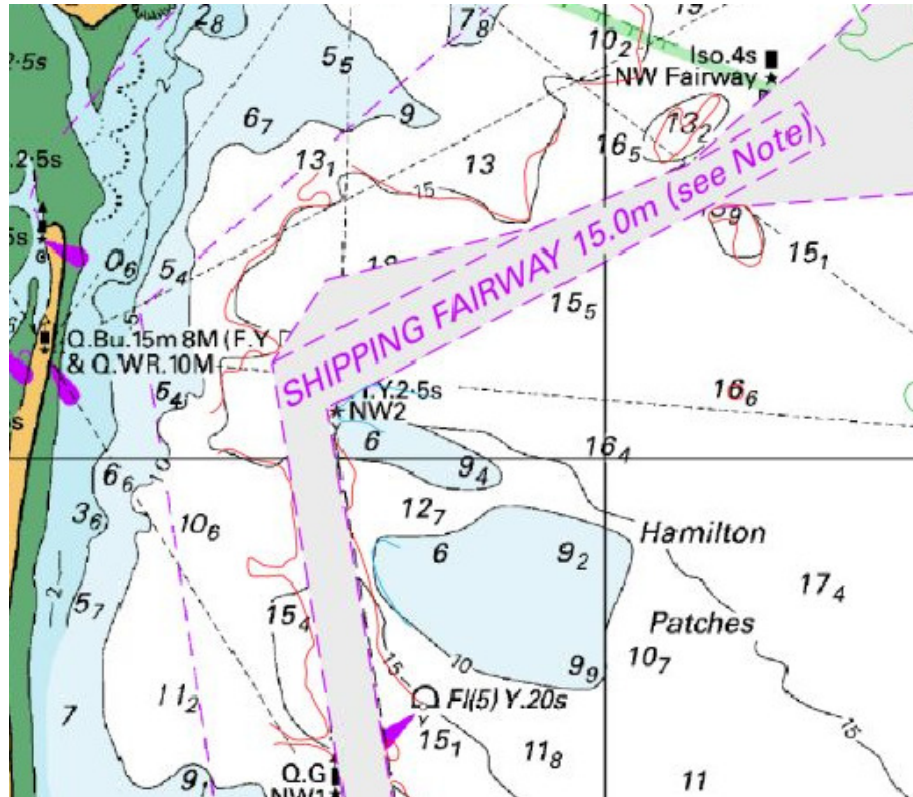
Predicted Max Roll - Outside NFWFY		
Vessel Heading	Speed	Worst Case
350 deg	10.0	1.00
170 deg	10.0	0.48

Safety Factors	
Safety Margin	0.5 m
Manoeuvrability Margin	0.9 m
Bed Allowance	0 m
Dredging Tolerance	0 m

Segment	Fast								Target UKC Profile								Slow								
	Time	Speed	Depth	Tide	BC	MM	GR	MR	Time	ActTime	Speed	Depth	Tide	BC	MM	GR	MR	Time	Speed	Depth	Tide	BC	MM	GR	MR
SEA-NFWF	3:00	11.0	17.39	1.28	4.27	6.87	7.54	1.54	3:00		10.0	17.39	1.28	4.41	7.00	7.54	1.35	3:00	9.0	17.39	1.28	4.52	7.11	7.54	1.24
NFWF-NW2	3:15	11.0	15.20	1.29	1.85	3.23	4.05	2.60	3:17		10.0	15.20	1.29	2.10	3.38	4.05	2.15	3:19	9.0	15.20	1.29	2.20	3.52	4.05	1.86
NW2-NW4	3:26	11.0	15.20	1.30	1.22	3.10	3.93	1.88	3:29		10.0	15.20	1.30	1.43	3.26	3.93	1.64	3:32	9.0	15.20	1.30	1.61	3.40	3.93	1.43
NW4-NW6	3:35	11.0	15.00	1.30	1.50	3.00	3.79	1.67	3:39		10.0	15.00	1.30	1.67	3.15	3.79	1.47	3:43	9.0	15.00	1.31	1.87	3.29	3.79	1.25
NW6-NW8	3:49	11.0	15.00	1.31	1.65	3.07	3.85	0.54	3:54		10.0	15.00	1.31	1.79	3.22	3.85	0.52	4:00	9.2	15.00	1.30	1.90	3.35	3.85	0.52
NW8-NW3	4:02	11.2	15.00	1.31	1.80	3.14	3.90	1.72	4:09		10.2	15.00	1.31	1.94	3.28	3.90	1.52	4:16	9.7	15.00	1.30	1.99	3.34	3.89	1.43
NW3-NW10	4:15	11.7	14.90	1.32	1.40	4.71	5.47	1.81	4:23		10.7	14.90	1.31	1.53	4.85	5.47	1.60	4:30	10.0	14.90	1.31	1.65	4.92	5.47	1.50
NW10-NW12	4:28	12.1	14.80	1.32	1.31	4.98	5.79	2.27	4:37		11.0	14.80	1.32	1.45	5.13	5.78	1.93	4:46	10.1	14.80	1.31	1.56	5.23	5.78	1.77
NW12-M1	4:40	12.5	15.10	1.34	1.66	3.96	4.92	1.63	4:50		11.1	15.10	1.33	1.92	4.17	4.91	1.34	5:00	10.5	15.10	1.32	2.01	4.25	4.90	1.30
M1-M3	4:51	14.6	15.30	1.37	1.36	5.74	6.69	4.36	5:03		13.3	15.30	1.35	1.67	5.94	6.68	3.92	5:14	12.6	15.30	1.34	1.91	5.99	6.66	3.48
M3-M5	5:01	17.6	17.03	1.42	2.81	4.28	6.46	4.23	5:13		16.6	17.03	1.41	3.07	4.56	6.45	3.94	5:25	15.6	17.03	1.38	3.35	4.80	6.42	3.57
M5-M7	5:10	18.0	23.29	1.46	9.38	18.68	19.85	4.18	5:23		17.0	23.29	1.44	9.65	18.79	19.83	3.88	5:35	16.0	23.29	1.41	9.84	18.89	19.80	3.51
M7-E1	5:14	18.0	20.46	1.50	7.02	9.85	11.48	4.12	5:27		17.0	20.46	1.48	7.20	10.02	11.45	3.81	5:39	16.0	20.46	1.45	7.35	10.17	11.42	3.46
E1-E5	5:22	18.0	18.32	1.58	4.70	7.48	9.33	4.04	5:35		17.0	18.32	1.56	4.88	7.67	9.30	3.74	5:48	16.0	18.32	1.52	5.02	7.83	9.26	3.37
E5-EB	5:33	15.9	15.61	1.66	2.70	3.56	4.98	3.97	5:47		14.7	15.61	1.62	3.00	3.81	4.93	3.65	6:01	13.5	15.61	1.57	3.20	4.00	4.87	3.29
EB-IBB	5:57	12.0	14.00	1.68	1.45	2.47	3.27	2.31	6:13		10.5	14.00	1.62	1.70	2.61	3.20	1.88	6:29	9.0	14.00	1.55	1.85	2.71	3.12	1.50
IBB-Autostrad ..	6:18	8.1	14.00	1.65	2.15	3.11	3.50	0.23	6:37		5.9	14.00	1.56	2.25	3.16	3.40	0.21	6:57	4.5	14.00	1.46	2.25	3.26	3.29	0.20



# Prepared for change



---

# Thank you and stay connected

---



Twitter @TMRQld



Facebook @TMRQld



LinkedIn Department of Transport and Main Roads



Blog [blog.tmr.qld.gov.au](http://blog.tmr.qld.gov.au)



© The State of Queensland (Department of Transport and Main Roads) 2018.

The Queensland Government supports and encourages the dissemination and exchange of its information. The copyright in this publication is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](#).



Under this licence you are free, without having to seek permission from the Department of Transport and Main Roads, to use this publication in accordance with the licence terms. You must keep intact the copyright notice and attribute the State of Queensland, Department of Transport and Main Roads as the source of the publication.

**DISCLAIMER OF LIABILITY**

The presentation materials are distributed by the Department of Transport and Main Roads for and on behalf of the State of Queensland as an information source only. The department makes no statements, representations or warranties about the accuracy or completeness of this information, or the suitability of this information for any purpose. The Department of Transport and Main Roads does not accept responsibility for any actions undertaken based on the content of the presentation materials.

The Department of Transport and Main Roads makes no warranties that the information in this third party site is free of infection by computer viruses or other contamination. The department disclaims all liability for any damages arising from access to, use of, or downloading of the presentation materials contained in this site.