

TRESBP ENVIRONMENTAL MONITORING SUMMARY

FEBRUARY 2014

OVERVIEW

In February, 2014:

- 28,780 m³ of sand was pumped to Snapper Rocks East.
- There were no media articles which related to the project.
- Sea conditions were calm to moderate for most of the month with a moderate event occurring on the 5th with peak significant wave height reaching 2.3 m. Wave directions varied mostly from NNE to SE but dominantly from E to ESE.
- 1,859 vessel crossings were recorded for the month. (This is about 20% greater than the February average)
- The estimated amount of sand moving north towards the Tweed River Entrance by natural processes was in the order of 30,000 m³ (this is about 55% of the February average).

1. SAND PUMPING & DREDGING

Sand Delivery February 2014

Pumped:	28,780 m ³
Dredged:	0 m ³
Total:	28,780 m ³

Sand Delivery January 2014 to February 2014

Pumped:	83,691 m ³
Dredged:	0 m ³
Total:	83,691 m ³

Stage II Sand Delivery May 2000 to February 2014

Pumped:	7,168,573 m ³
Dredged:	2,039,104 m ³
Total:	9,207,677 m ³

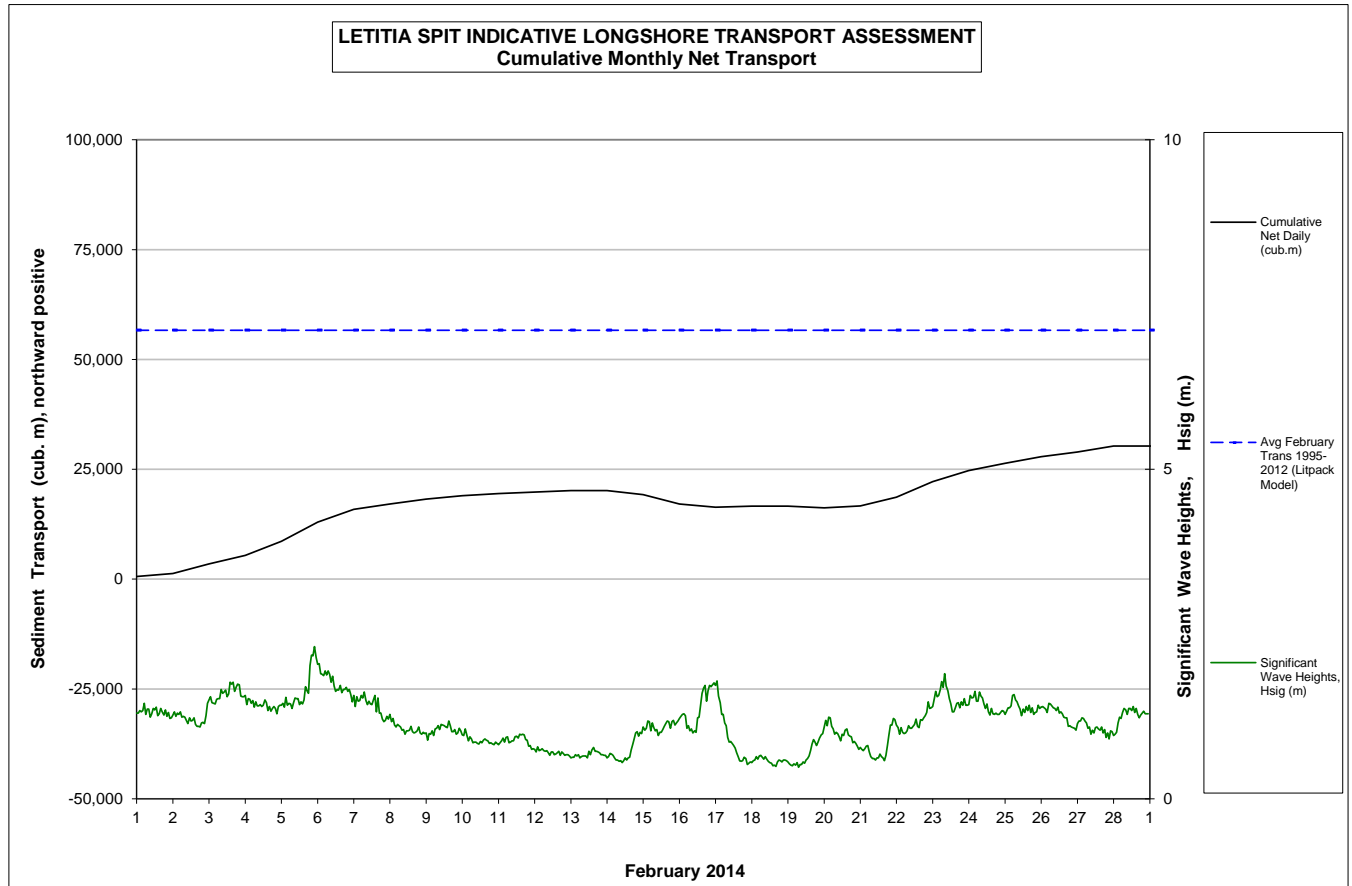


2. INDICATIVE LONGSHORE TRANSPORT

The graph below is based on simplified sediment transport modelling and is indicative only.


In February 2014 the estimated natural sand transport (moving North towards the Tweed River entrance): was calculated to be in the order of 30,000 m³.

This result is about 55% of the average estimated sand transport quantity of approximately 57,000 m³ for the month of February



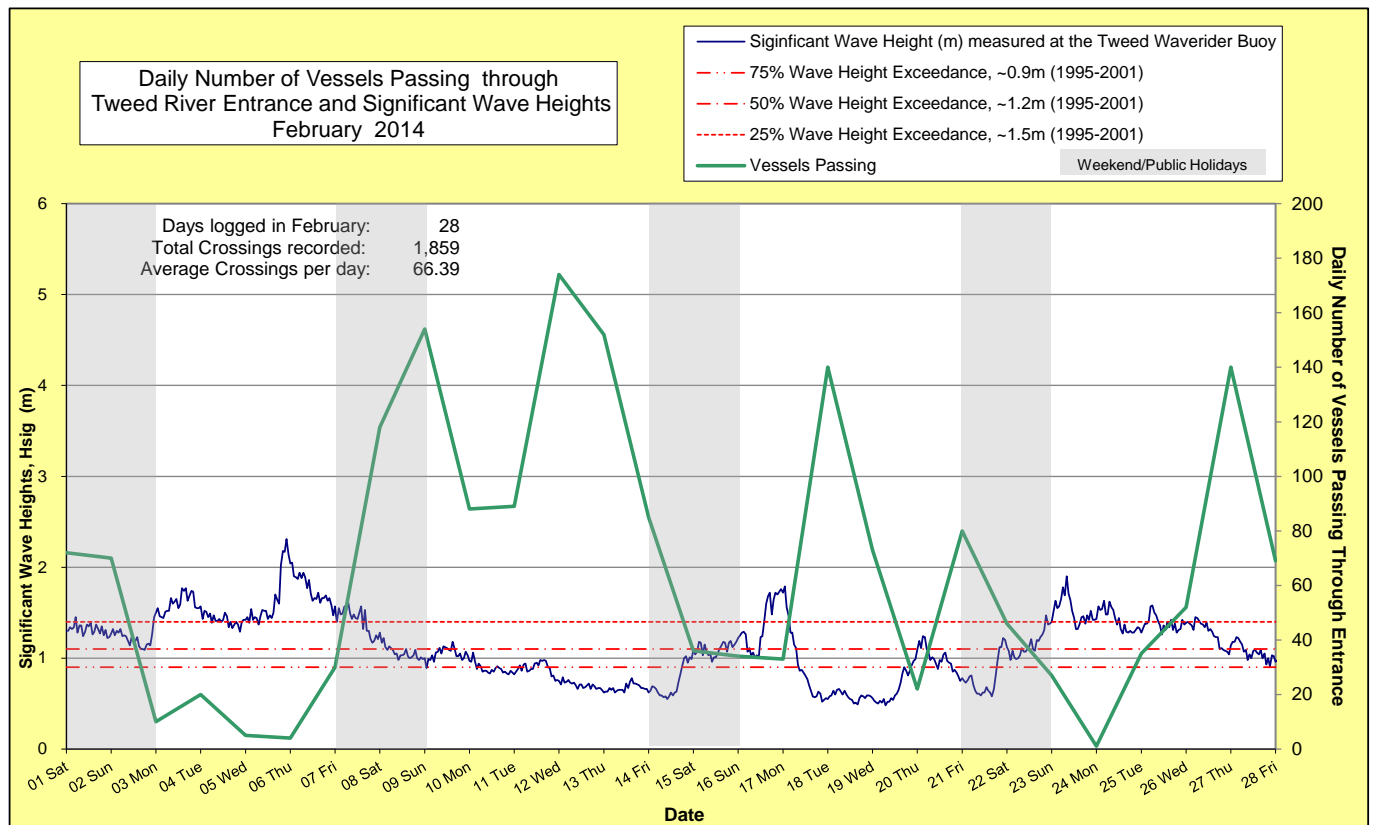
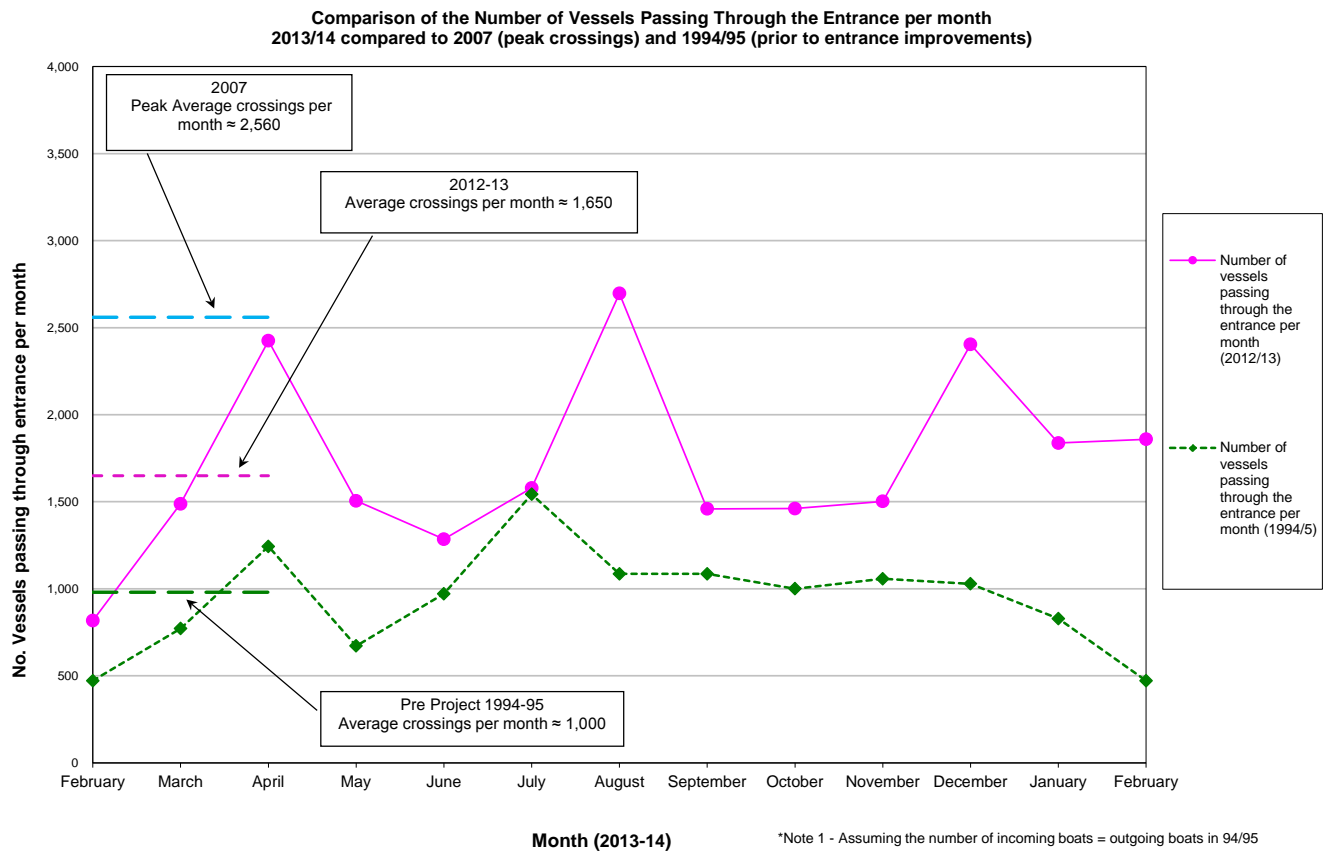
3. MEDIA COVERAGE

There were no media articles relating to the project during February.

4. TWEED RIVER ENTRANCE CONDITIONS**MARINE RESCUE NSW - MONITORING RESULTS**
 Weekends and public holidays

Date	Navigation Rating Impassable-----Good					Number of Boats
	Impassable (1)	Difficulty Encountered (2)	Some Difficulty Encountered (3)	Relatively Good Crossing (4)	Good Conditions (5)	
						72
						70
3 rd						10
4 th						20
5 th						5
6 th						4
7 th						30
						118
						154
10 th						88
11 th						89
12 th						174
13 th						152
14 th						85
						36
						34
17 th						33
18 th						140
19 th						73
20 th						22
21 st						80
						46
						27
24 th						1
25 th						35
26 th						52
27 th						140
28 th						69
29 th						
30 th						
31 st						
Total						1,859

Source: Marine Rescue NSW, Point Danger



5. WAVE CONDITIONS

Wave Conditions over the month: Significant wave heights were calm to moderate throughout the month with one moderate event (occurring on the 5th) with peak significant wave height to 2.3 m. Wave direction ranged from NNE to SE but dominantly from the East to ESE.

Major sea events: 5th and 6th of February

Monthly minimum significant wave height: 0.5 m on 19th February.

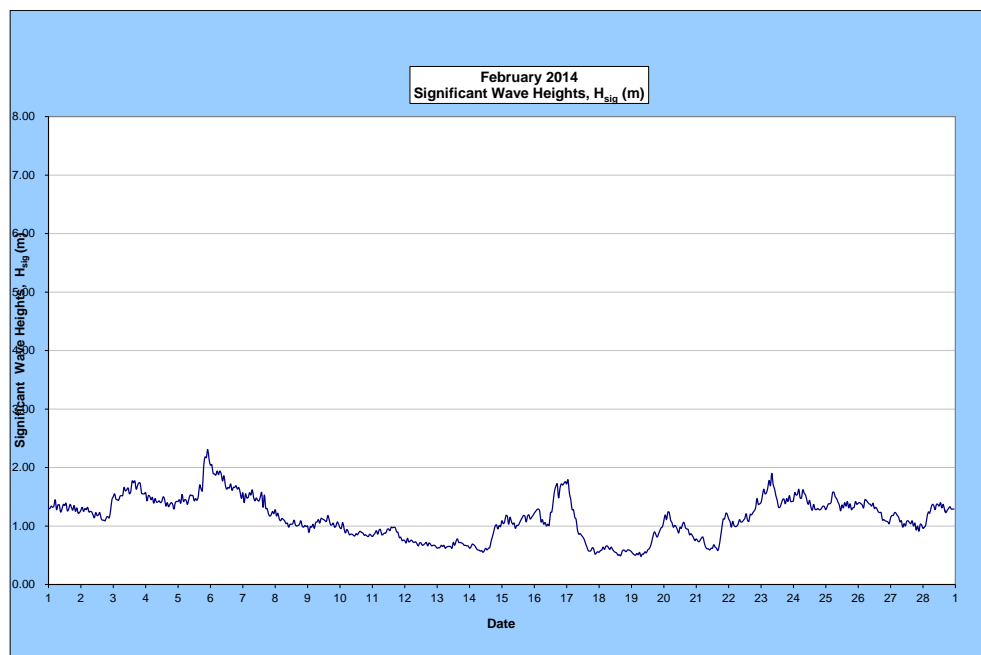
Monthly Maximum significant wave height: 2.3 m on 5th January.

Number of days on which waves were below 1.0 m: 16 days

Number of days on which waves were above 2.0 m: 2 days

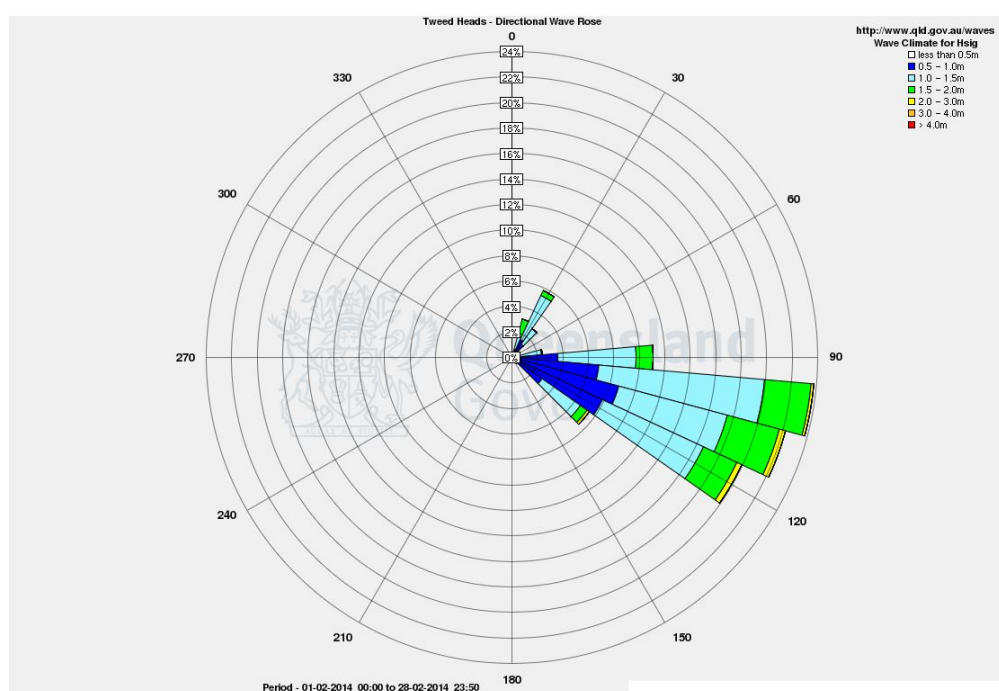
Note: Significant wave heights or H_{sig} is the average of the highest one third of recorded waves.

(Source: Tweed & Brisbane Wave Buoy; Queensland Government)



A link to data recorded by the Tweed Waverider Buoy is available at: <http://www.qld.gov.au/waves>

WAVE DIRECTION



END

Source: Queensland Government