

TREBP ENVIRONMENTAL MONITORING SUMMARY

FEBRUARY 2015

OVERVIEW

In February 2015:

- 66,014 m³ of sand was pumped to Snapper Rocks East.
- There were 6 media articles relating to the project area. Detail is given in Section 3.
- Wave heights were mostly average to moderate seas (1 to 2 m) with moderate sea events on the 3rd to 6th (up to 2.0 m), 11th to 15th (up to 2.1 m), and high seas on the 18th and 20th to 22nd (up to 2.8 m). Two minor storms were recorded on the 19th (up to 3.2 m) and 22nd to 23rd (up to 3.5 m) associated with degraded cyclone Marcia. Wave directions varied from ENE to ESE but mostly from the East.
- 698 vessel crossings were recorded for the month (this is about 55% less than the February average).
- The estimated amount of sand moving north towards the Tweed River Entrance by natural processes was in the order of 75,000 m³ (this is about 135% of the February average).

1. SAND PUMPING & DREDGING

Sand Delivery February 2015

Pumped:	66,014 m ³
Dredged:	0 m ³
Total:	66,014 m ³

The number of days sand was pumped this month = 25

Sand Delivery January 2015 to February 2015

Pumped:	105,119 m ³
Dredged:	0 m ³
Total:	105,119 m ³

Stage II Sand Delivery April 2000 to February 2015

Pumped:	7,655,502 m ³
Dredged:	2,061,972 m ³ *
Total:	9,717,474 m ³ *

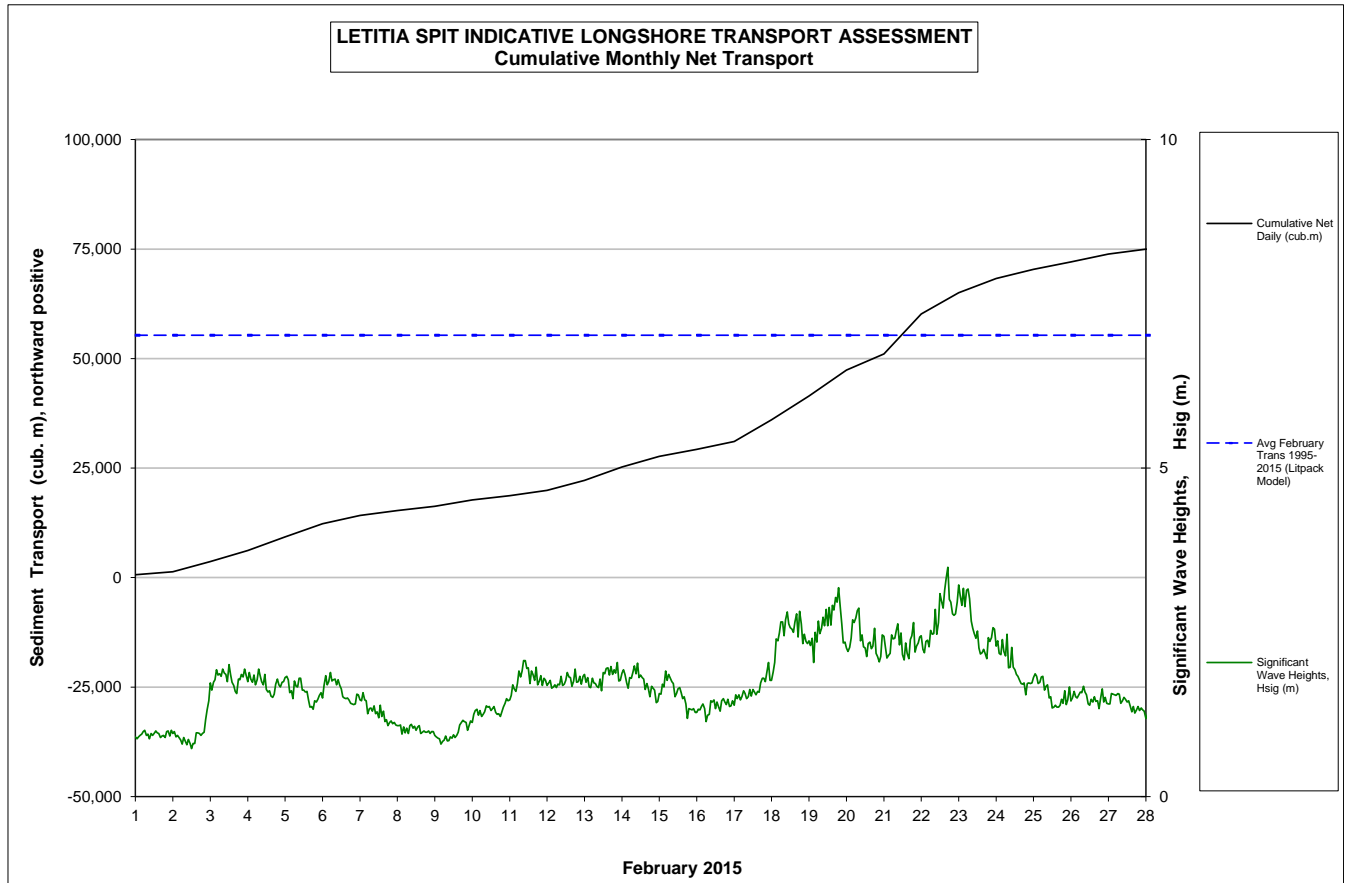
* This Includes 22,870 m³ of sand delivered by dredge to Palm Beach between June and September 2005

2. INDICATIVE LONGSHORE TRANSPORT

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

In February 2015 the estimated natural sand transport moving North towards the Tweed River entrance was calculated to be in the order of 75,000 m³.

This result is about 135% of the average estimated sand transport quantity of approximately 55,000 m³ for the month of February.



3. MEDIA COVERAGE

Gold Coast Bulletin published a media article on the 23rd reporting that Cyclone Marcia battered The Gold Coast and Tweed causing minor to moderate beach erosion with the worst effect limited to southern north facing beaches.

Surfer Today published a media article on the 23rd reporting that man-made surf break located in the Coolangatta offers one of the longest wave rides in the world.

Gold Coast Bulletin published a media article on the 24th reporting that while Snapper Rocks Super-bank appear to have avoided damage from Cyclone Marcia the organisers of Quiksilver Pro and Roxy Pro will be watching nervously on Saturday when competition starts to see if swell has been affected.

Stab Magazine published a media article on the 25th reporting that the Quiksilver Pro, Snapper Rocks is the only event on WSL calendar where the event organisers can directly alter the playing field namely via Tweed River Sand Bypassing programme.

Gold Coast Bulletin published a media article on the 26th reporting that the Gold Coast Super-bank is one of the surfing's crown jewels, producing waves so cylindrical and perfect.

World Surf League published a media article on the 28th reporting that prior to sand pumping, Snapper was pretty average and semi-reliable but rarely anything like today. It was a big deal to connect a wave all the way west, to the rocks at Greenmount head.

4. TWEED RIVER ENTRANCE CONDITIONS

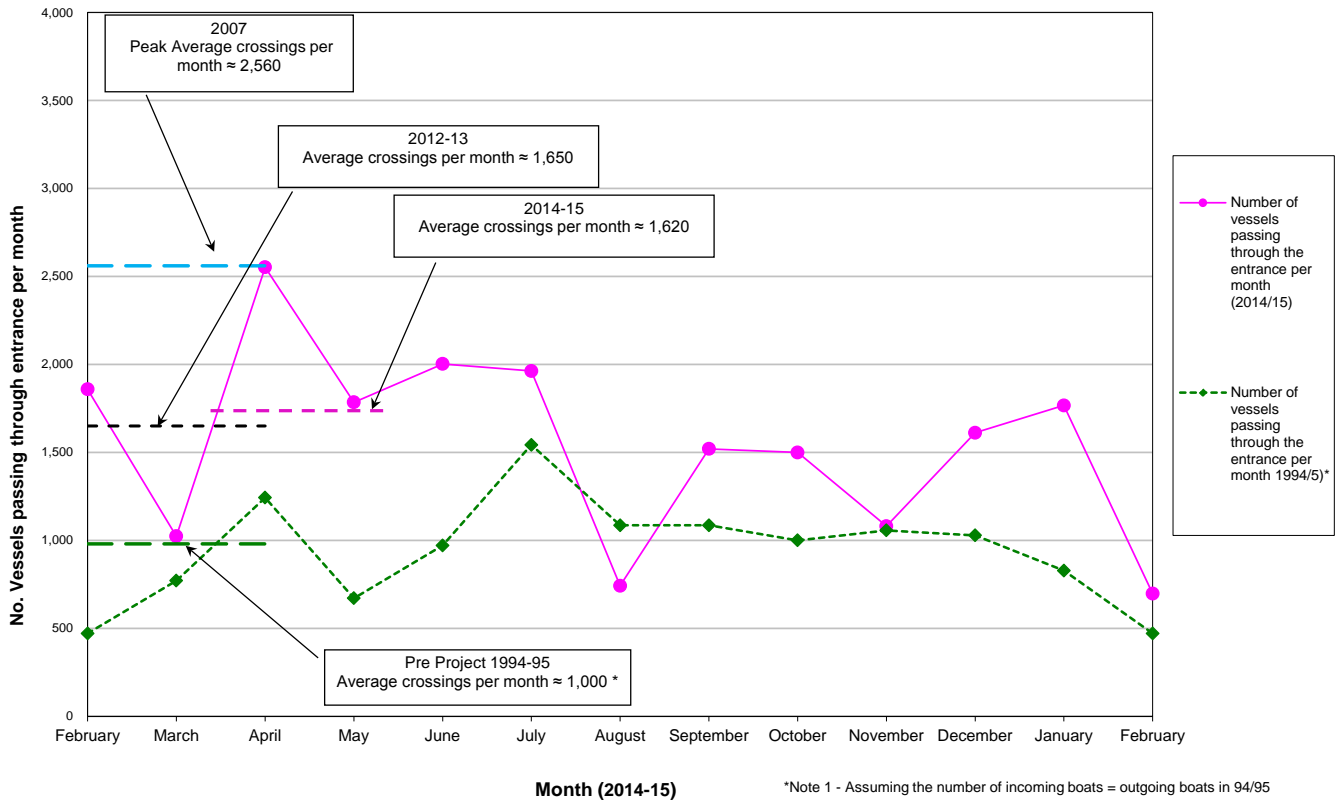
MARINE RESCUE NSW - MONITORING RESULTS

☐ Weekends and public holidays

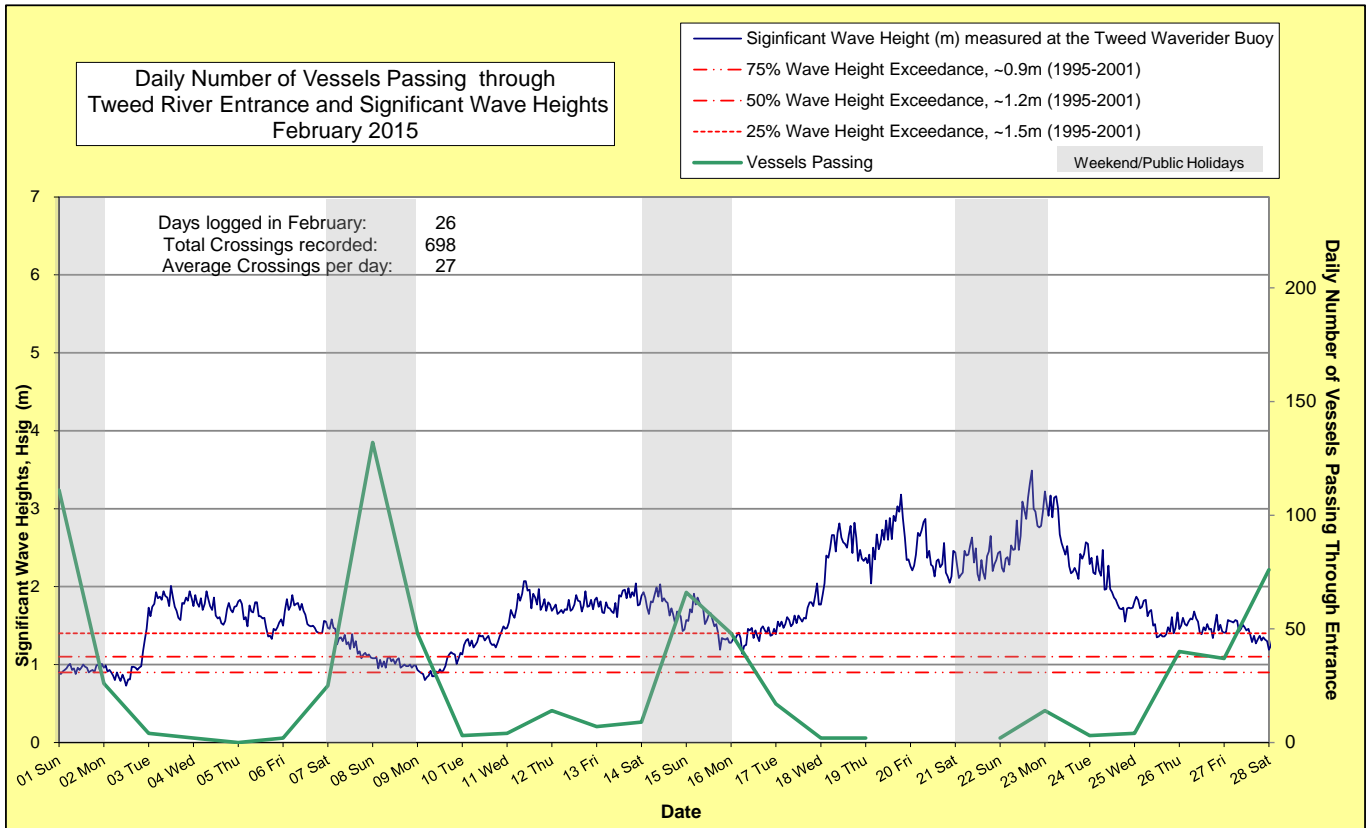
Date	Navigation Rating Impassable-----Good					Number of Boats
	Impassable (1)	Difficulty Encountered (2)	Some Difficulty Encountered (3)	Relatively Good Crossing (4)	Good Conditions (5)	
1 st				☐		111
2 nd			☐			26
3 rd		☐				4
4 th		☐				2
5 th	☐					0
6 th		☐				2
7 th				☐		25
8 th				☐		132
9 th				☐		48
10 th			☐			3
11 th		☐				4
12 th		☐				14
13 th		☐				7
14 th		☐				9
15 th				☐		66
16 th				☐		48
17 th			☐			17
18 th		☐				2
19 th		☐				2
20 th	Radio Room closed due to water leaking to room					
21 st						
22 nd	☐					2
23 rd		☐				14
24 th		☐				3
25 th			☐			4
26 th			☐			40
27 th				☐		37
28 th					☐	76
					Total	698

Source: Marine Rescue NSW, Point Danger

Comparison of the Number of Vessels Passing Through the Entrance per month 2013/14 compared to 2007 (peak crossings) and 1994/95 (prior to entrance improvements)



Daily Number of Vessels Passing through Tweed River Entrance and Significant Wave Heights February 2015



5. WAVE CONDITIONS

Wave Conditions over the month: Wave heights were mostly average to moderate seas (1 to 2 m) with moderate sea events on the 3rd to 6th (up to 2.0 m), 11th to 15th (up to 2.1 m), and high seas on the 18th and 20th to 22nd (up to 2.8 m). Two minor storms were recorded on the 19th (up to 3.2 m) and 22nd to 23rd (up to 3.5 m) associated with degraded cyclone Marcia. Wave directions varied from ENE to ESE but mostly from the East.

Monthly minimum significant wave height: 0.7 m on 2nd February.

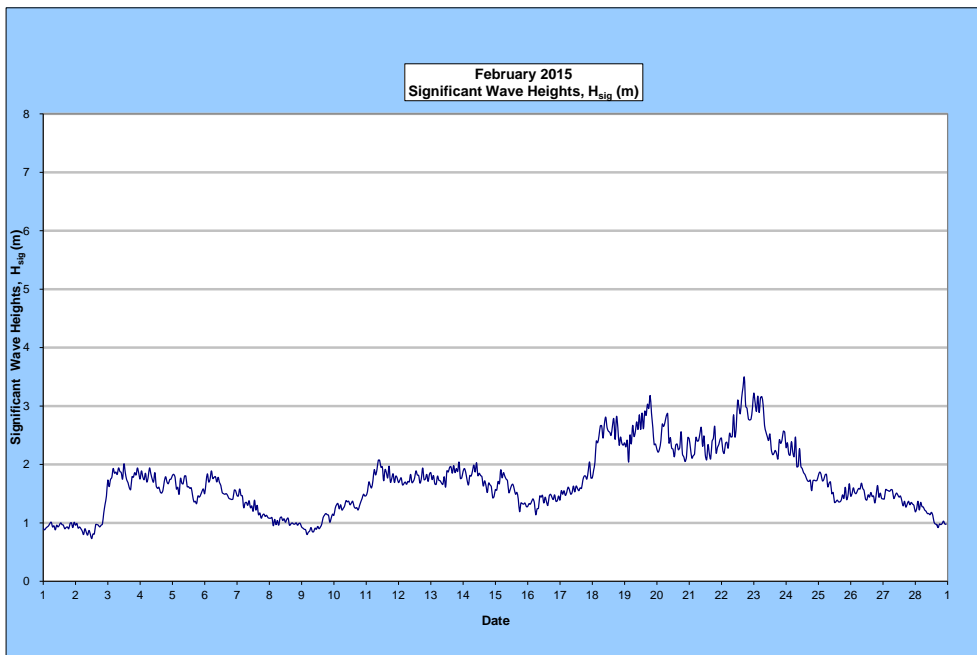
Monthly Maximum significant wave height: 3.5 m on 22nd February.

Number of days on which waves were below 1.0 m: 5 days

Number of days on which waves were above 2.0 m: 12 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

