

# TRESBP ENVIRONMENTAL MONITORING SUMMARY

## NOVEMBER 2013

### OVERVIEW

In November, 2013:

- 19,526 m<sup>3</sup> of sand was pumped to the Snapper Rocks East primary outlet and 1,642m<sup>3</sup> of sand was pumped to Duranbah Beach.
- There were no media articles relating to the project.
- Significant wave heights were mostly calm to average for the month (0.5 m to 1.5 m) with peak significant wave heights up to 1.9 m. Wave direction ranged from NE to SE but was dominantly from the E to the SE.
- 1,502 vessel crossings were recorded for the month (this is about 14% fewer than the October average).
- The estimated amount of sand moving north towards the Tweed River Entrance by natural processes was in the order of 30,000 m<sup>3</sup> (this is about 90% of the November average of about 33,000 m<sup>3</sup>).

### 1. SAND PUMPING & DREDGING

#### **Sand Delivery November 2013**

Pumped:	21,168 m <sup>3</sup>
Dredged:	0 m <sup>3</sup>
Total:	21,168 m <sup>3</sup>

#### **Sand Delivery January to November 2013 (YTD)**

Pumped:	298,314 m <sup>3</sup>
Dredged:	0 m <sup>3</sup>
Total:	298,314 m <sup>3</sup>

#### **Sand Delivery January to November 2012**

Pumped:	405,601 m <sup>3</sup>
Dredged:	0 m <sup>3</sup>
Total:	405,601 m <sup>3</sup>

#### **Stage II Sand Delivery May 2000 to November 2013**

Pumped:	7,063,313 m <sup>3</sup>
Dredged:	2,039,104 m <sup>3</sup>
Total:	9,102,417 m <sup>3</sup>

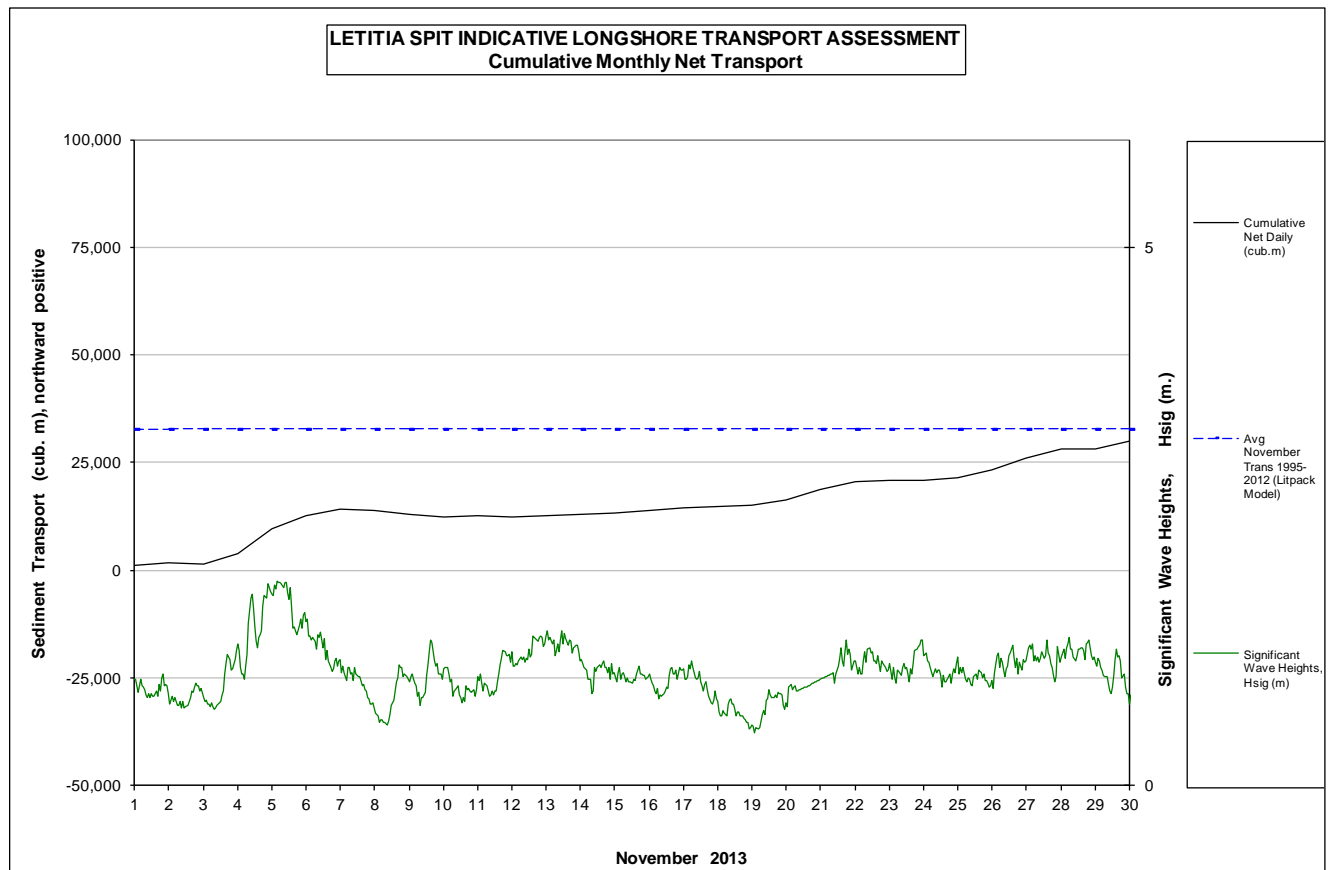


## 2. INDICATIVE LONGSHORE TRANSPORT

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


In November 2013 the estimated natural sand transport (moving North towards the Tweed River entrance) was calculated to be in the order of 30,000 m<sup>3</sup>.

This result is about 90% of the average estimated sand transport quantity of approximately 33,000 m<sup>3</sup> for the month of November.



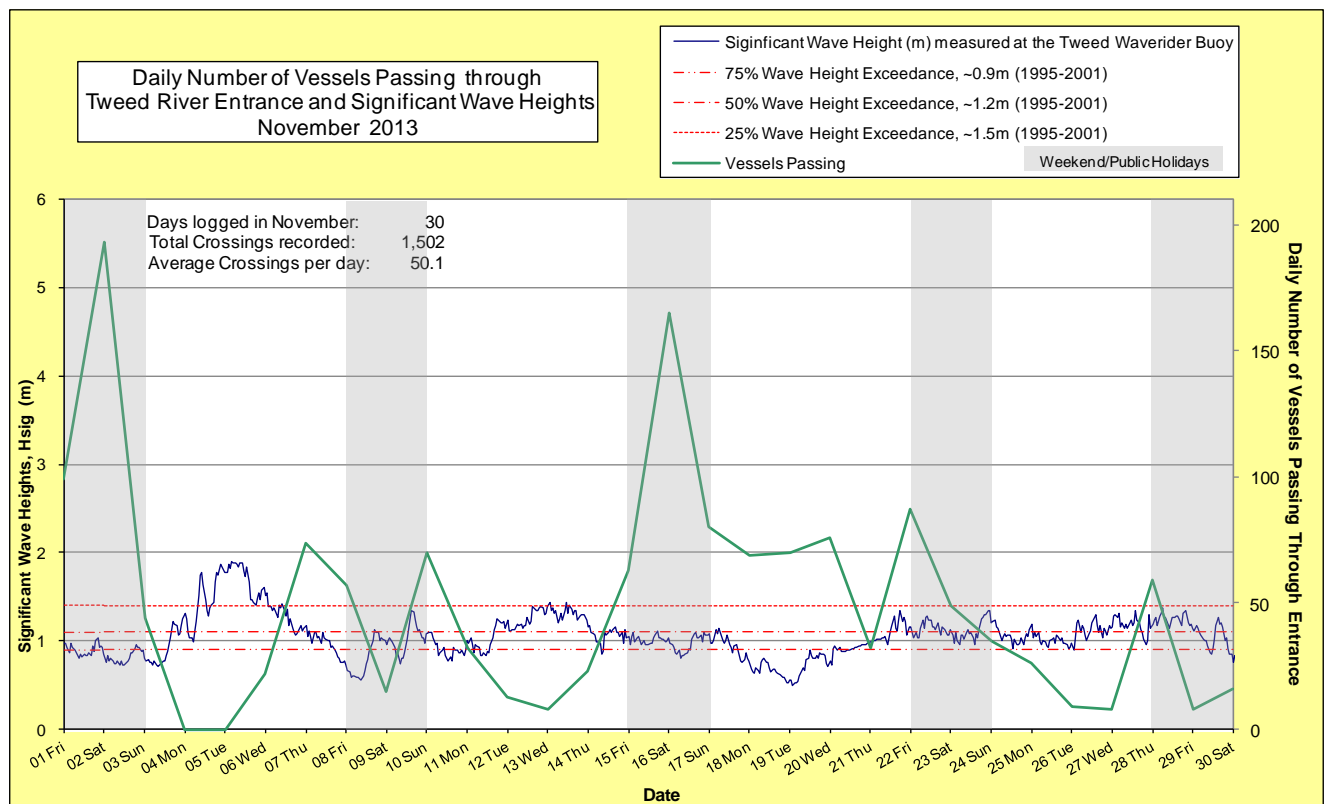
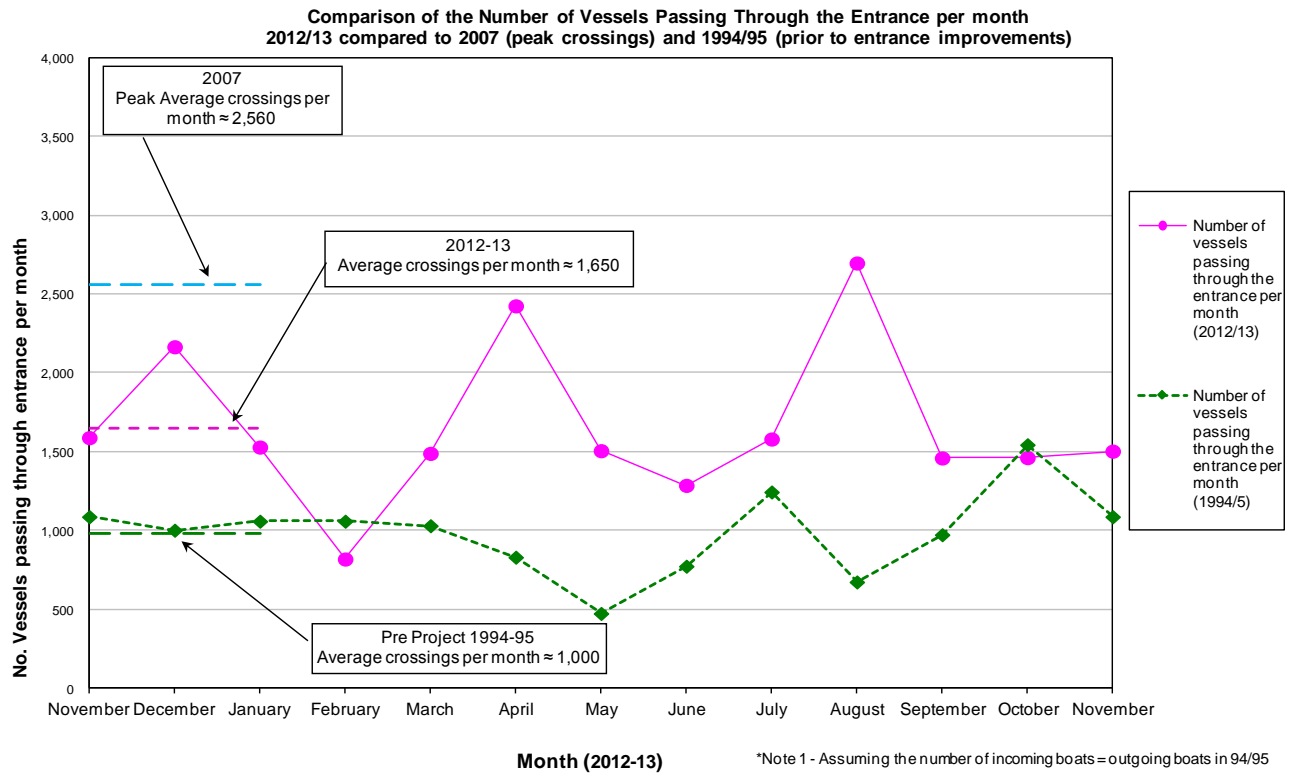
## 3. MEDIA COVERAGE

There was one media article relating to the project area on 30 November ([www.news.com.au](http://www.news.com.au)). The article related to a proposal for an ocean shipping terminal and associated development at North Kirra/Bilinga. There was no direct reference to the TRESBP.

**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 <sup>st</sup>						99
2 <sup>nd</sup>						193
3 <sup>rd</sup>						44
4 <sup>th</sup>						0
5 <sup>th</sup>						0
6 <sup>th</sup>						22
7 <sup>th</sup>						74
8 <sup>th</sup>						57
9 <sup>th</sup>						15
10 <sup>th</sup>						70
11 <sup>th</sup>						32
12 <sup>th</sup>						13
13 <sup>th</sup>						8
14 <sup>th</sup>						23
15 <sup>th</sup>						63
16 <sup>th</sup>						165
17 <sup>th</sup>						80
18 <sup>th</sup>						69
19 <sup>th</sup>						70
20 <sup>th</sup>						76
21 <sup>st</sup>						32
22 <sup>nd</sup>						87
23 <sup>rd</sup>						49
24 <sup>th</sup>						35
25 <sup>th</sup>						26
26 <sup>th</sup>						9
27 <sup>th</sup>						8
28 <sup>th</sup>						59
29 <sup>th</sup>						8
30 <sup>th</sup>						16
					<b>Total</b>	<b>1,502</b>

Source: Marine Rescue NSW, Point Danger



## 5. WAVE CONDITIONS

Wave Conditions over the month: Significant wave heights were mostly calm to average for the month (0.5 m to 1.5 m) with peak significant wave heights up to 1.9 m. Wave direction ranged from NE to SE but was dominantly from the E to the SE.

Major sea events: Nil.

Monthly minimum significant wave height: 0.5 m on 19<sup>th</sup> November.

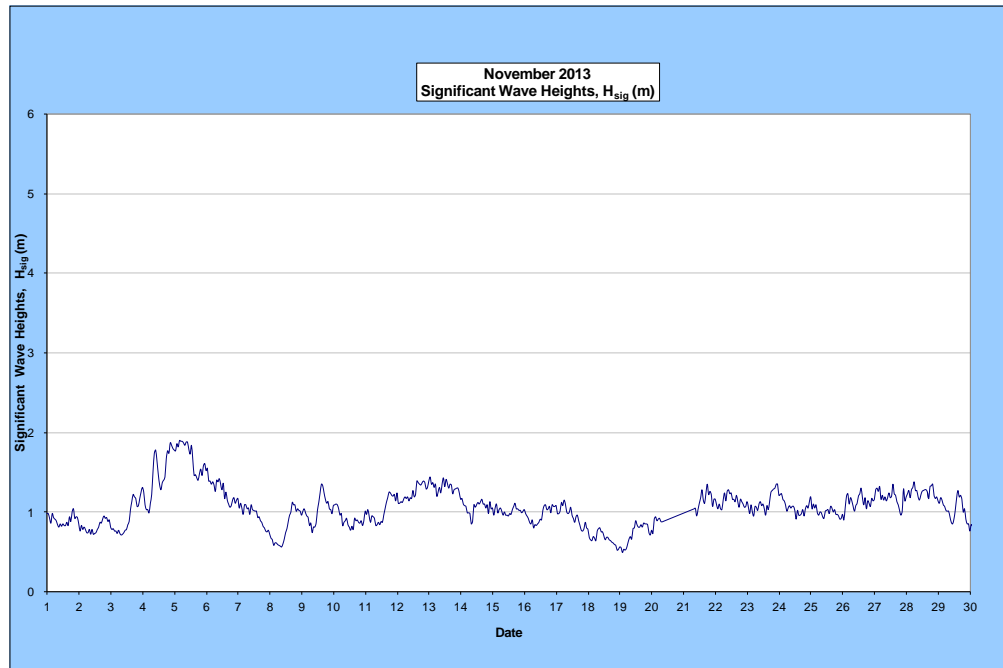
Monthly peak significant wave height: 1.9 m on 5<sup>th</sup> November.

Number of days on which waves were below 1.0 m: 18 days

Number of days on which waves were above 2.0 m: 0 days

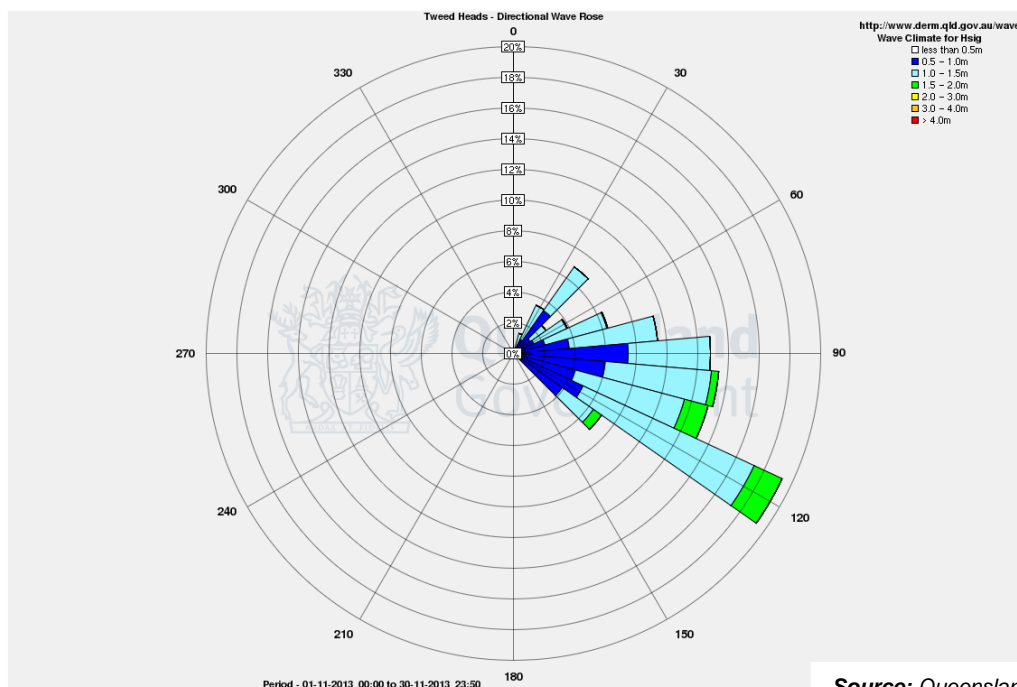
**Note:** Significant wave heights or  $H_{sig}$  is the average of the highest one third of recorded waves.

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



A link to data recorded by the Tweed Waverider Buoy is available at: [www.qld.gov.au/waves](http://www.qld.gov.au/waves)

## WAVE DIRECTION



END