

# TRESBP ENVIRONMENTAL MONITORING SUMMARY

## MAY 2013

### OVERVIEW

In May, 2013:

- 26,706 m<sup>3</sup> of sand was pumped to Snapper Rocks East and 3,885 m<sup>3</sup> of sand was pumped to Duranbah Beach.
- There were no media articles relating to the project.
- Sea conditions were generally calm to average throughout the month. There was a moderate sea event on the 25<sup>th</sup> to 26<sup>th</sup> with peak significant wave heights to 2.7m. Wave direction ranged from ENE to SE but were dominantly from ESE.
- 1,505 vessel crossings were recorded for the month (this is about 26% less than the May average).
- The estimated amount of sand moving north towards the Tweed River Entrance by natural processes was in the order of 70,000 m<sup>3</sup> (this is about equal to the May average of about 71,000 m<sup>3</sup>).

### 1. SAND PUMPING & DREDGING

#### **Sand Delivery May 2013**

Pumped:	30,591 m <sup>3</sup>
Dredged:	0 m <sup>3</sup>
Total:	30,591 m <sup>3</sup>

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

Pumped:	138,677 m <sup>3</sup>
Dredged:	0 m <sup>3</sup>
Total:	138,677 m <sup>3</sup>

#### **Sand Delivery January to May 2012**

Pumped:	169,637 m <sup>3</sup>
Dredged:	0 m <sup>3</sup>
Total:	169,637 m <sup>3</sup>

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

Pumped:	6,903,676 m <sup>3</sup>
Dredged:	2,039,104 m <sup>3</sup>
Total:	8,942,780 m <sup>3</sup>

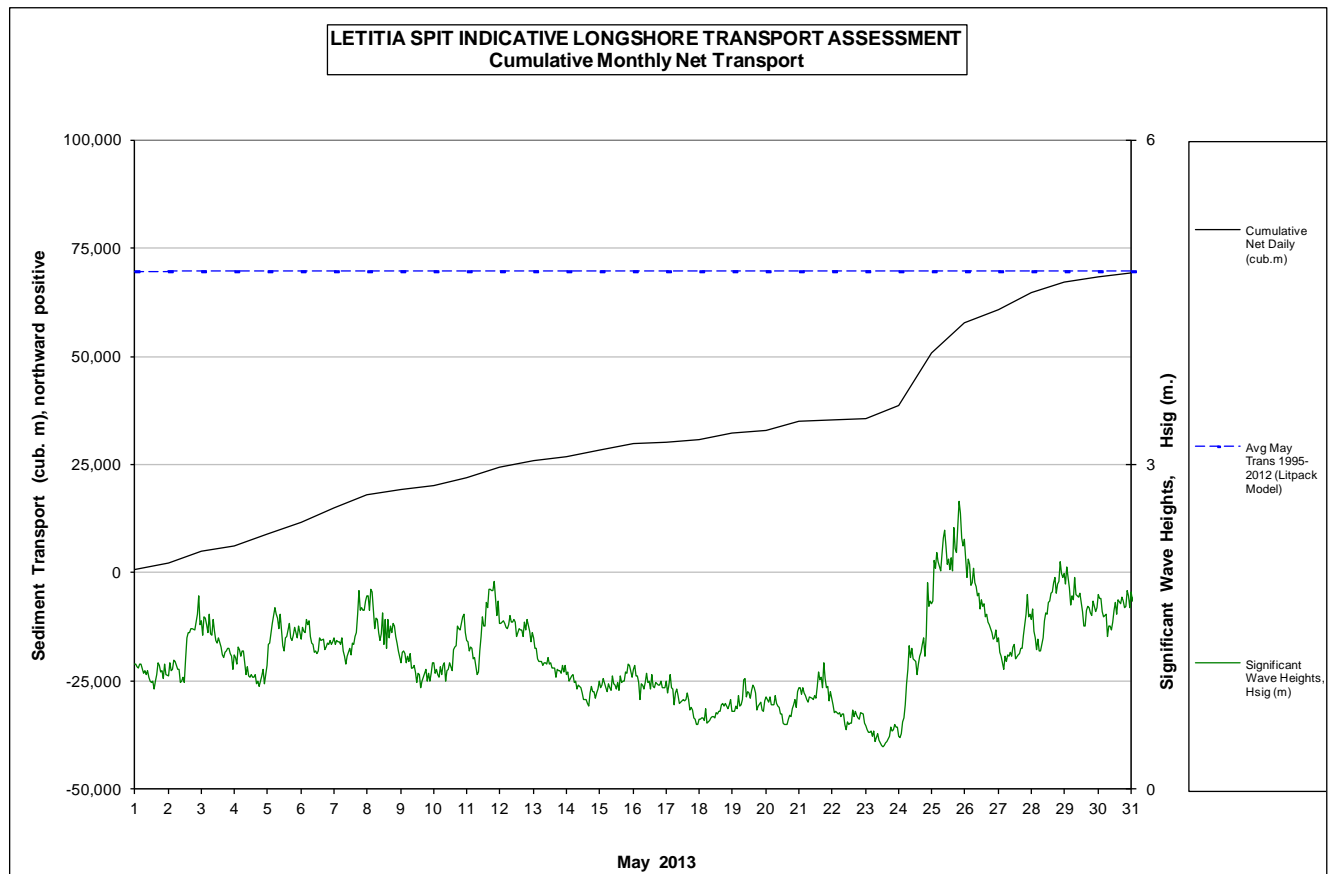


## 2. INDICATIVE LONGSHORE TRANSPORT

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

In May 2013 the estimated natural sand transport (moving North towards the Tweed River entrance): was calculated to be in the order of 70,000 m<sup>3</sup>.


This result is about equal to the average estimated sand transport quantity of approximately 71,000 m<sup>3</sup> for the month of May.



## 3. MEDIA COVERAGE

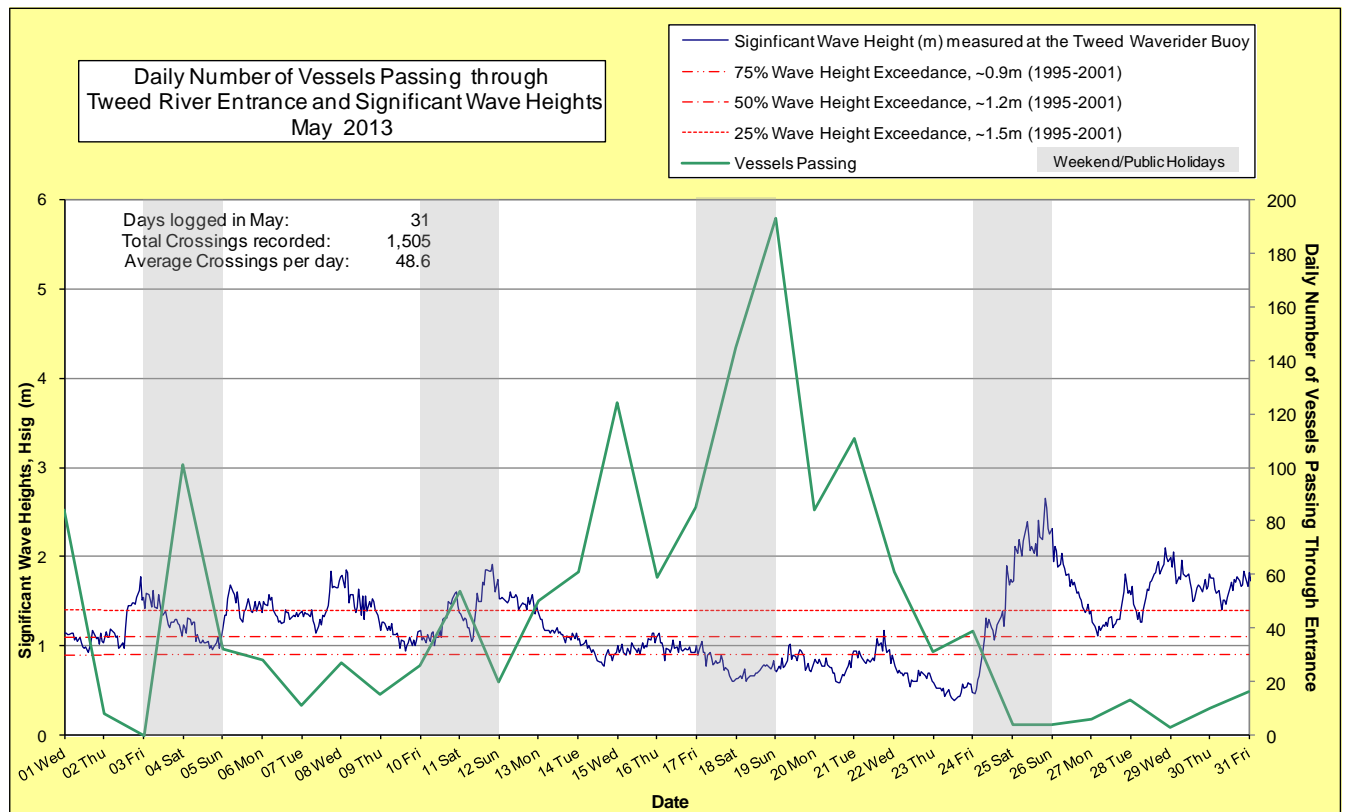
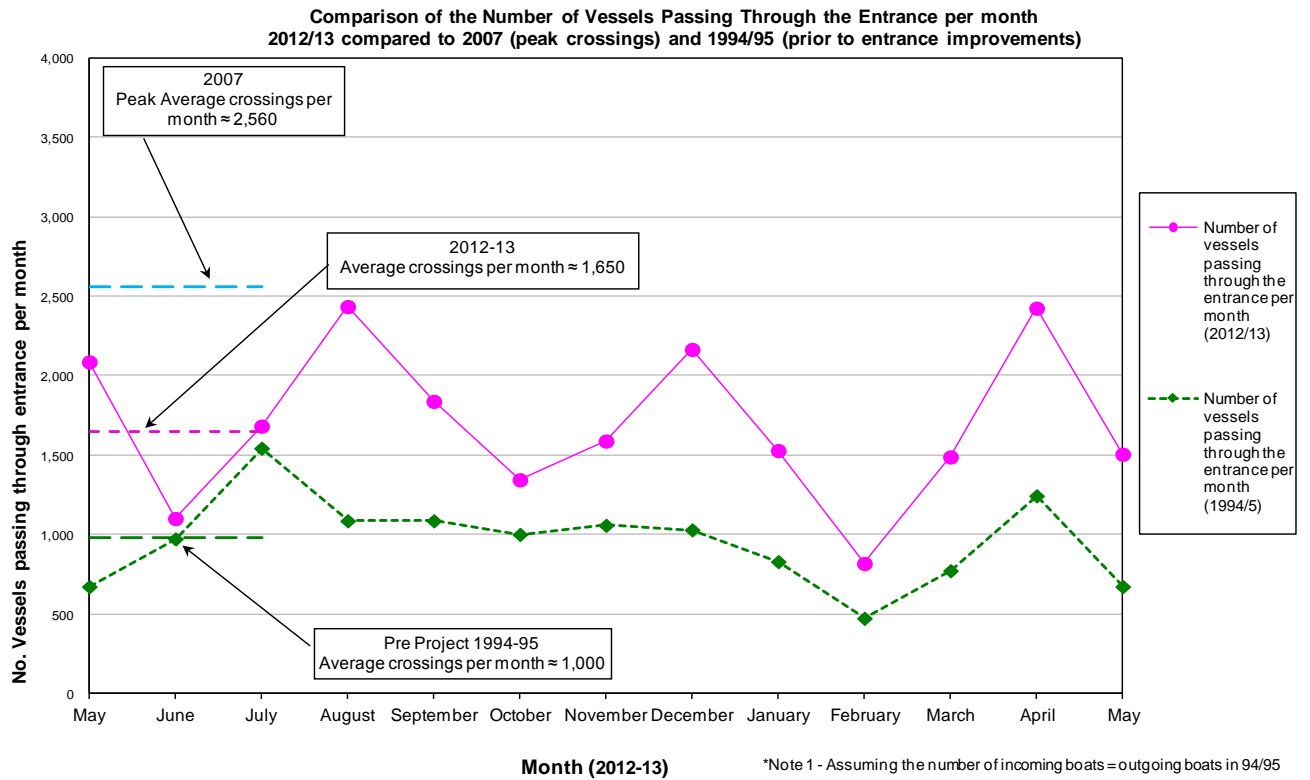
There were no media articles directly relating to the project during May. However, there was an article on storm erosion on some of the project beaches in Tweed Daily News on 28 May 2013,

<http://www.mydailynews.com.au/photos/beach-erosion-2/21212/>

**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>						84
2 <sup>nd</sup>						8
3 <sup>rd</sup>						0
4 <sup>th</sup>						101
5 <sup>th</sup>						32
6 <sup>th</sup>						28
7 <sup>th</sup>						11
8 <sup>th</sup>						27
9 <sup>th</sup>						15
10 <sup>th</sup>						26
11 <sup>th</sup>						54
12 <sup>th</sup>						20
13 <sup>th</sup>						50
14 <sup>th</sup>						61
15 <sup>th</sup>						124
16 <sup>th</sup>						59
17 <sup>th</sup>						85
18 <sup>th</sup>						145
19 <sup>th</sup>						193
20 <sup>th</sup>						84
21 <sup>st</sup>						111
22 <sup>nd</sup>						61
23 <sup>rd</sup>						31
24 <sup>th</sup>						39
25 <sup>th</sup>						4
26 <sup>th</sup>						4
27 <sup>th</sup>						6
28 <sup>th</sup>						13
29 <sup>th</sup>						3
30 <sup>th</sup>						10
31 <sup>st</sup>						16
					<b>Total</b>	<b>1,505</b>

Source: Marine Rescue NSW, Point Danger



## 5. WAVE CONDITIONS

Wave Conditions over the month: Significant wave heights were below average to average for most of the month with one high sea event recorded (from the 25<sup>th</sup> to 26<sup>th</sup>) with peak significant wave heights to 2.7 m. Wave direction ranged from ENE to SE but was dominantly from ESE.

Major sea events: 25<sup>th</sup> to 26<sup>th</sup> of May.

Monthly minimum significant wave height: 0.4 m on 23<sup>th</sup> May.

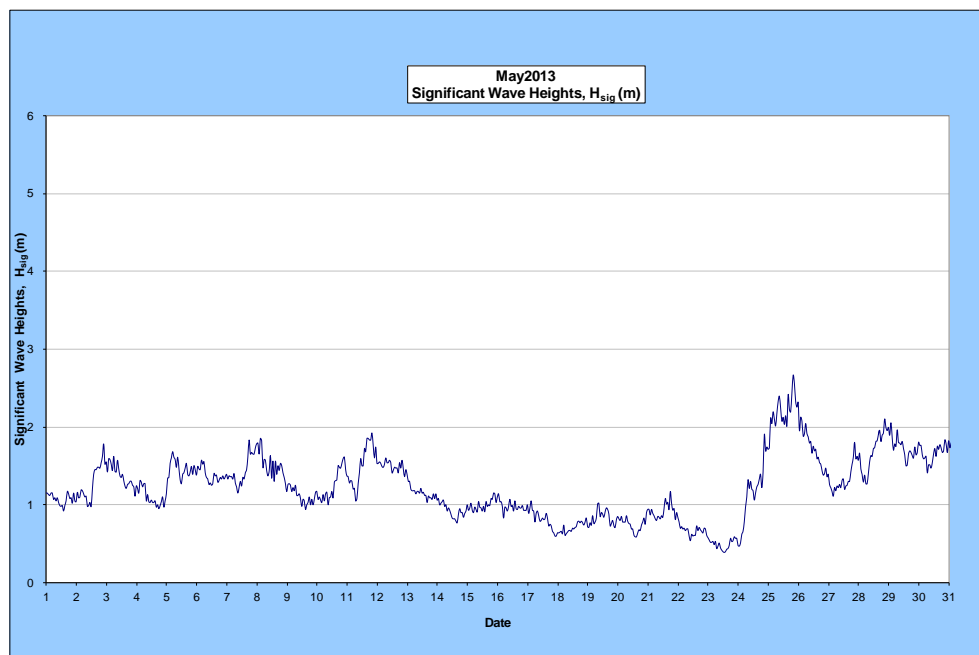
Monthly peak significant wave height: 2.7 m on 25<sup>th</sup> May.

Number of days on which waves were below 1.0 m: 12 days

Number of days on which waves were above 2.0 m: 3 days

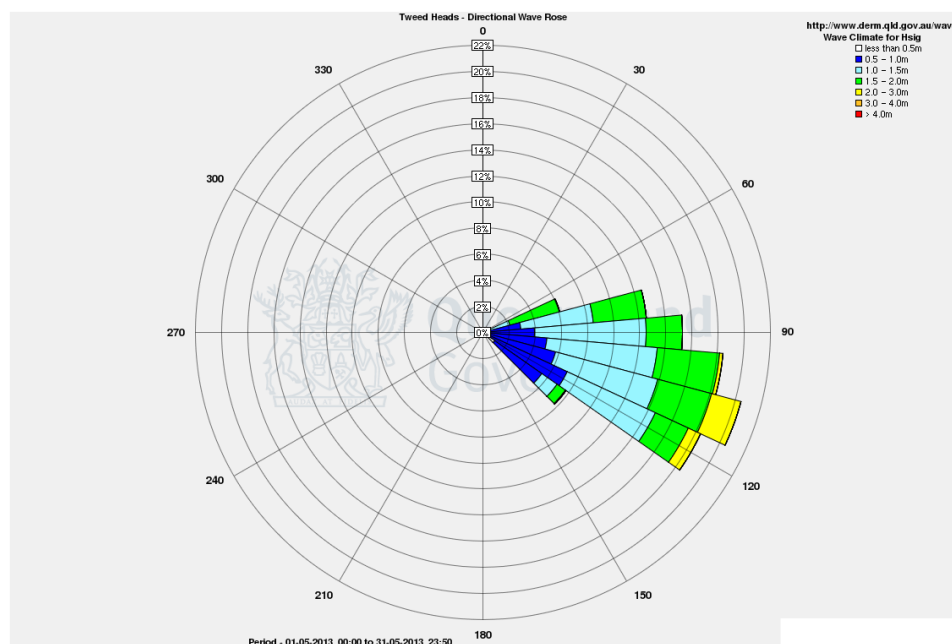
**Note:** Significant wave heights or  $H_{sig}$  is the average of the highest one third of recorded waves.

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



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

## WAVE DIRECTION



Source: Queensland Government

END