

# TRESBP ENVIRONMENTAL MONITORING SUMMARY

## MARCH 2013

### OVERVIEW

In March, 2013:

- 17,149 m<sup>3</sup> of sand was pumped to Snapper Rocks East and 2,236 m<sup>3</sup> of sand was pumped to Duranbah Beach.
- There were no media articles relating to the project.
- Sea conditions were average for the second half of the month with two moderate storm events (one occurring from the 4<sup>th</sup> to 7<sup>th</sup> and the other occurring from 13<sup>th</sup> to 16<sup>th</sup>) with peak significant wave heights to 2.5 m. Wave direction ranged from NE by E to SE by E but dominantly from E by N.
- 1,488 vessel crossings were recorded for the month (this is about 13% less than the March average).
- The estimated amount of sand moving north towards the Tweed River Entrance by natural processes was in the order of 46,000 m<sup>3</sup> (this is about 77% of the March average of 60,000 m<sup>3</sup>).

### 1. SAND PUMPING & DREDGING

#### **Sand Delivery March 2013**

Pumped:	19,385 m <sup>3</sup>
Dredged:	0 m <sup>3</sup>
Total:	19,385 m <sup>3</sup>

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

Pumped:	88,680 m <sup>3</sup>
Dredged:	0 m <sup>3</sup>
Total:	88,680 m <sup>3</sup>

#### **Sand Delivery January to March 2012**

Pumped:	99,317 m <sup>3</sup>
Dredged:	0 m <sup>3</sup>
Total:	99,317 m <sup>3</sup>

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

Pumped:	6,853,679 m <sup>3</sup>
Dredged:	2,039,104 m <sup>3</sup>
Total:	8,892,783 m <sup>3</sup>

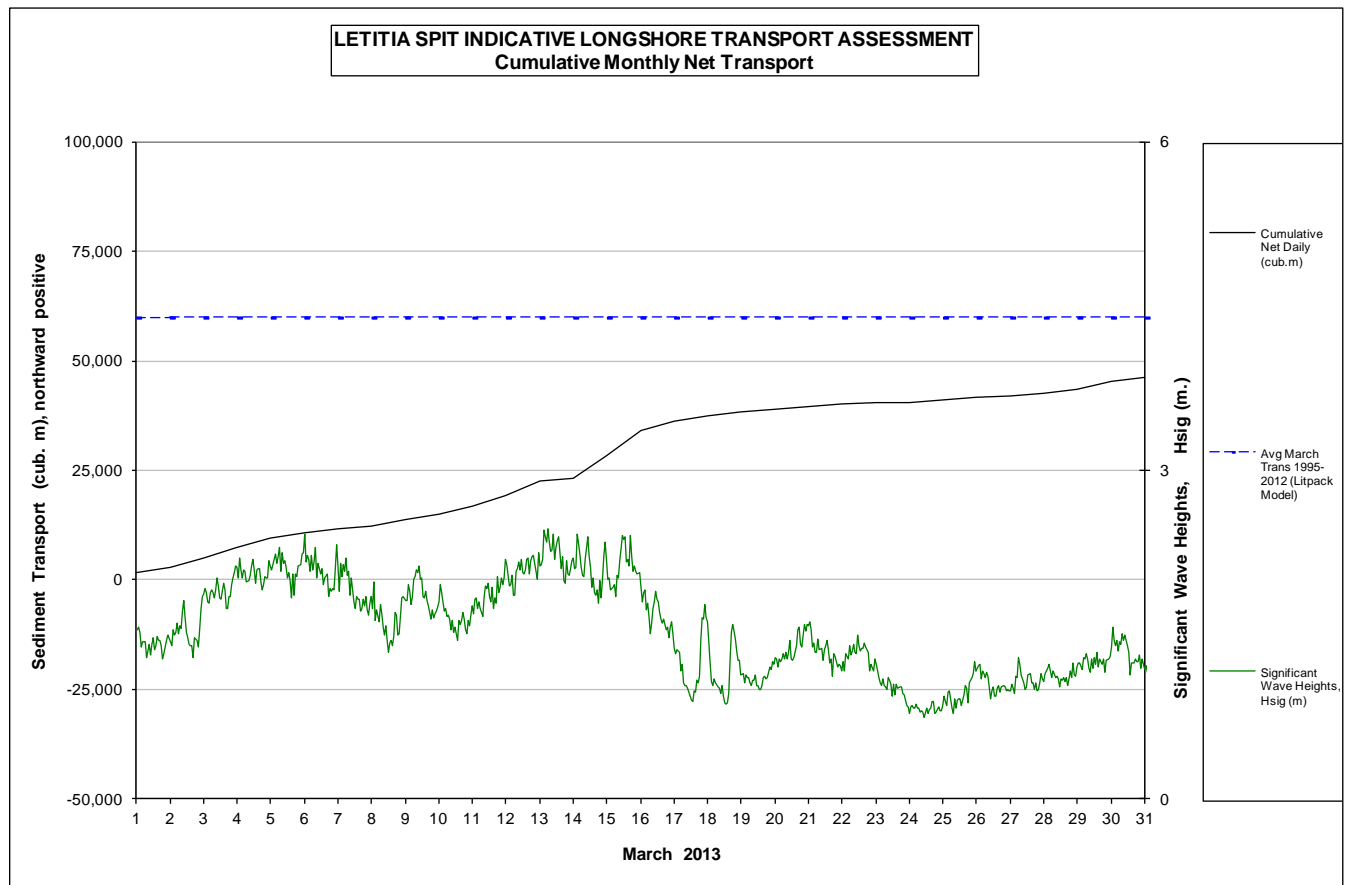


## 2. INDICATIVE LONGSHORE TRANSPORT

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


In March 2013 the estimated natural sand transport (moving North towards the Tweed River entrance): was calculated to be in the order of 46,000 m<sup>3</sup>.

This result is 77% of the average estimated sand transport quantity of approximately 60,000 m<sup>3</sup> for the month of March.



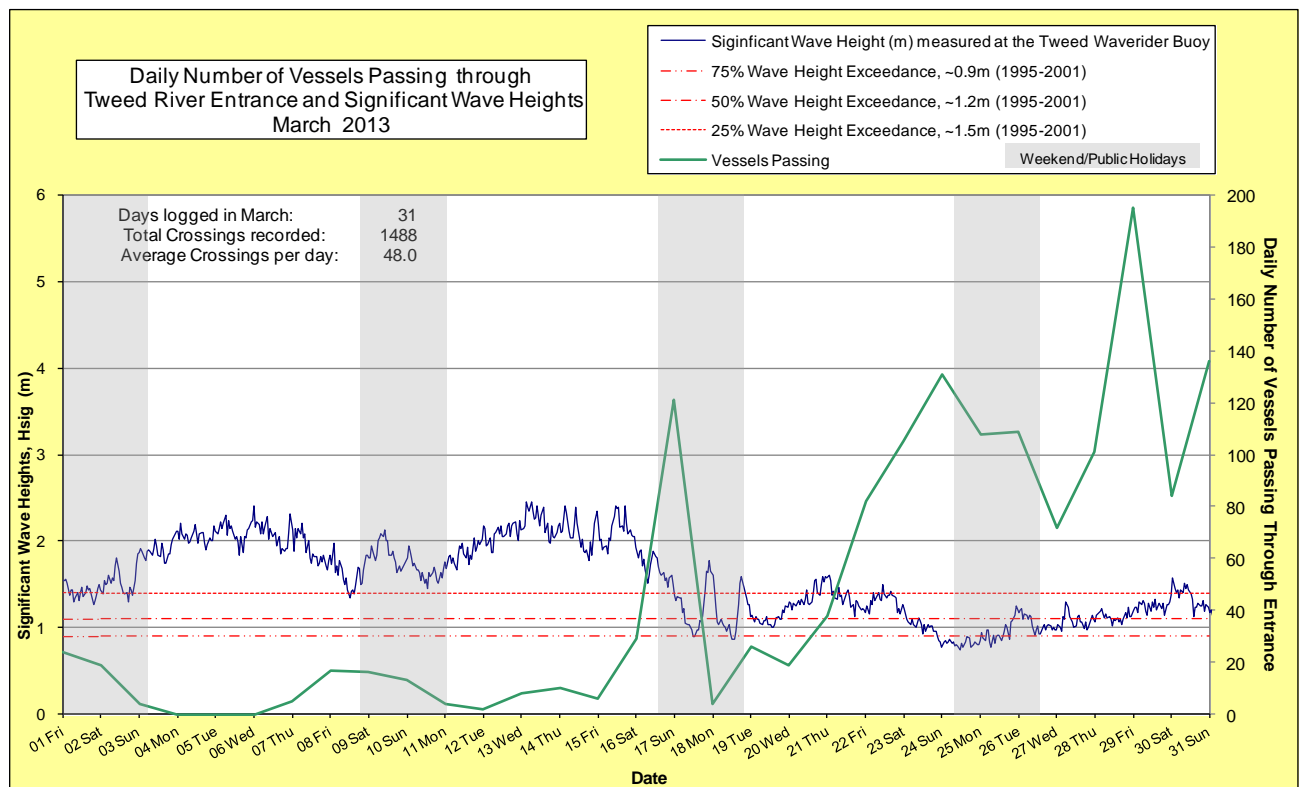
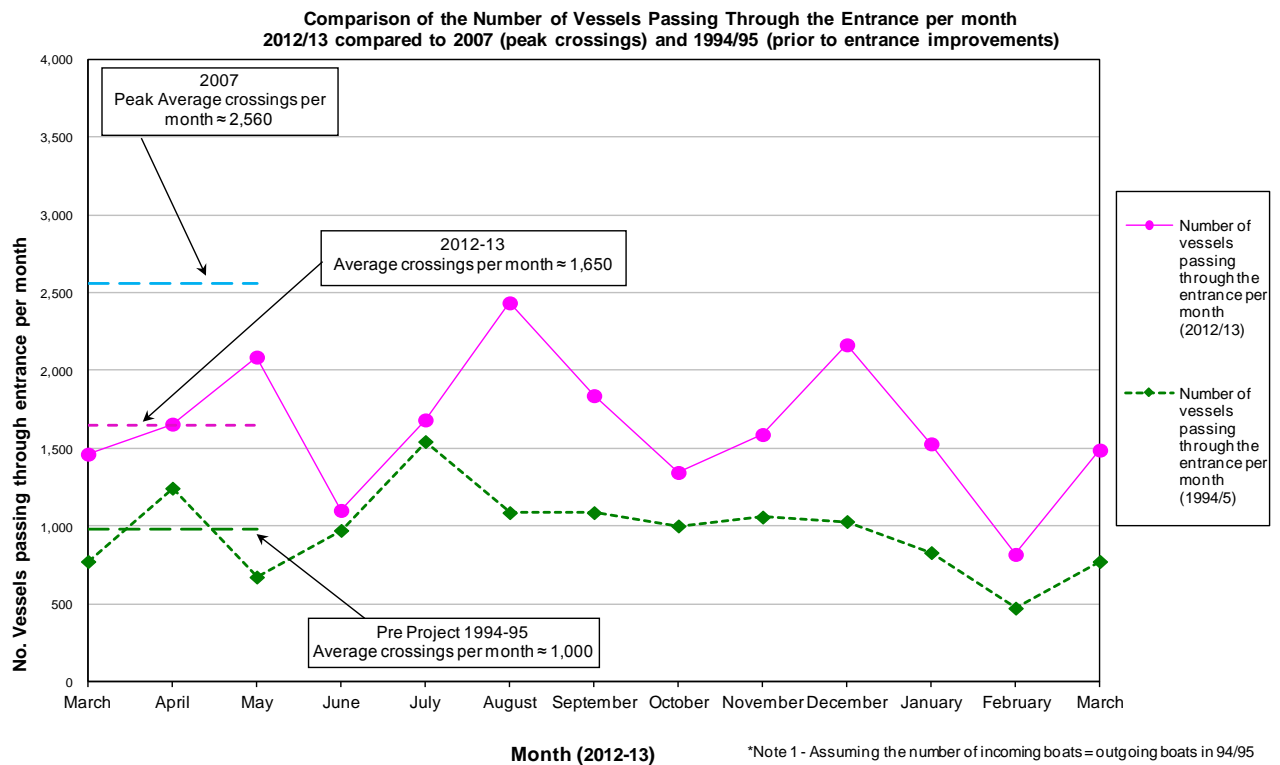
## 3. MEDIA COVERAGE

There was no media articles relating to the project during March.

**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>						24
2 <sup>nd</sup>						19
3 <sup>rd</sup>						4
4 <sup>th</sup>						0
5 <sup>th</sup>						0
6 <sup>th</sup>						0
7 <sup>th</sup>						5
8 <sup>th</sup>						17
9 <sup>th</sup>						16
10 <sup>th</sup>						13
11 <sup>th</sup>						4
12 <sup>th</sup>						2
13 <sup>th</sup>						8
14 <sup>th</sup>						10
15 <sup>th</sup>						6
16 <sup>th</sup>						29
17 <sup>th</sup>						121
18 <sup>th</sup>						4
19 <sup>th</sup>						26
20 <sup>th</sup>						19
21 <sup>st</sup>						38
22 <sup>nd</sup>						82
23 <sup>rd</sup>						105
24 <sup>th</sup>						131
25 <sup>th</sup>						108
26 <sup>th</sup>						109
27 <sup>th</sup>						72
28 <sup>th</sup>						101
29 <sup>th</sup>						195
30 <sup>th</sup>						84
31 <sup>st</sup>						136
Total						1,488

Source: Marine Rescue NSW, Point Danger



## 5. WAVE CONDITIONS

Wave Conditions over the month: Significant wave heights were average for the second half of the month. Two moderate storm events were recorded (one occurring from the 4<sup>th</sup> to 7<sup>th</sup> and the other occurring from 13<sup>th</sup> to 16<sup>th</sup>) with peak significant wave heights to 2.5 m. Wave direction ranged from NE to SE but dominantly from ENE.

Major sea events: 4<sup>th</sup> to 7<sup>th</sup> and 13<sup>th</sup> to 16<sup>th</sup> of March.

Monthly minimum significant wave height: 0.74 m on 24<sup>th</sup> March.

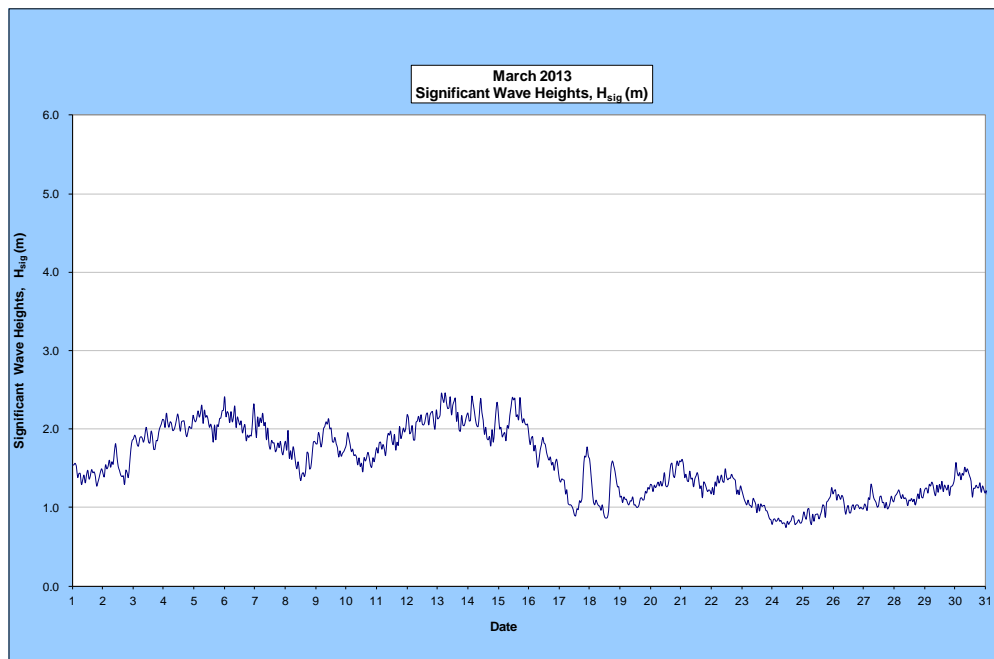
Monthly peak significant wave height: 2.5 m on 13<sup>th</sup> March.

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

Number of days on which waves were above 2.0 m: 9 days

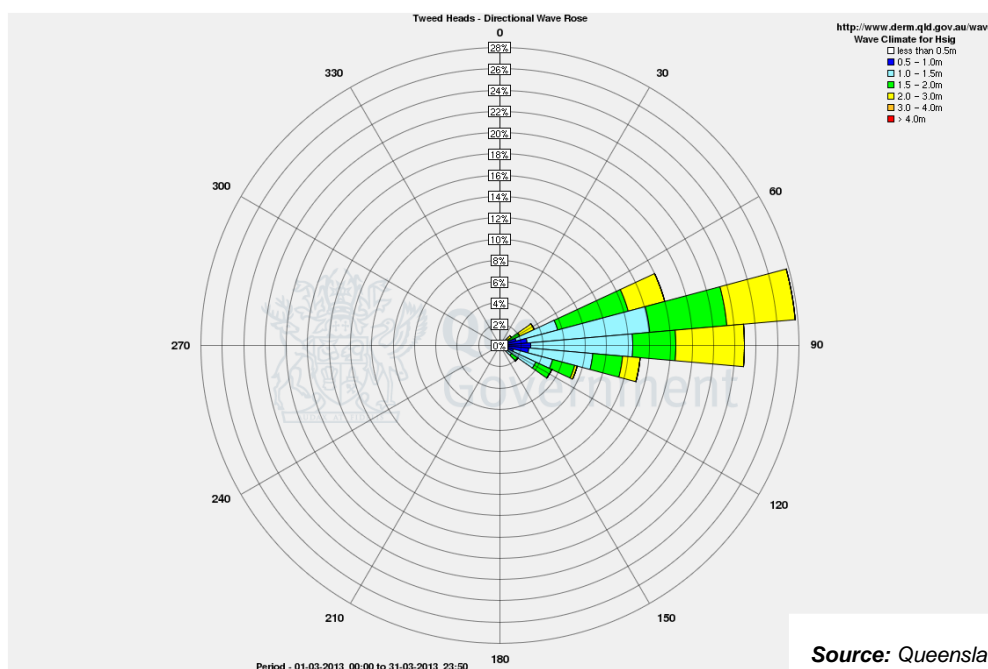
**Note:** Significant wave heights or  $H_{sig}$  is the average of the highest one third of recorded waves.

(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