

# TRESBP ENVIRONMENTAL MONITORING SUMMARY

## AUGUST 2012

### OVERVIEW

In August, 2012:

- 28,406 m<sup>3</sup> of sand was pumped to Snapper Rocks East.
- There were no media articles which related to the project.
- Sea conditions were below average to average for most of the month with two minor moderate sea events (occurring on the 1<sup>st</sup> and 12<sup>th</sup>) with peak significant wave heights reaching 2.3 m. Wave directions varied mostly from E to ESE.
- 2,435 vessel crossings were recorded for the month (this is about 23% greater than the August 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 30% less than the August average).

### 1. SAND PUMPING & DREDGING

#### **Sand Delivery August 2012**

Pumped:	28,406 m <sup>3</sup>
Dredged:	0 m <sup>3</sup>
Total:	28,406 m <sup>3</sup>

#### **Sand Delivery January to August 2012 (YTD)**

Pumped:	311,339 m <sup>3</sup>
Dredged:	0 m <sup>3</sup>
Total:	311,339 m <sup>3</sup>

#### **Sand Delivery January to August 2011**

Pumped:	386,381 m <sup>3</sup>
Dredged:	0 m <sup>3</sup>
Total:	386,381 m <sup>3</sup>

#### **Stage II Sand Delivery May 2000 to August 2012**

Pumped:	6,640,246 m <sup>3</sup>
Dredged:	2,039,904 m <sup>3</sup>
Total:	8,679,350 m <sup>3</sup>

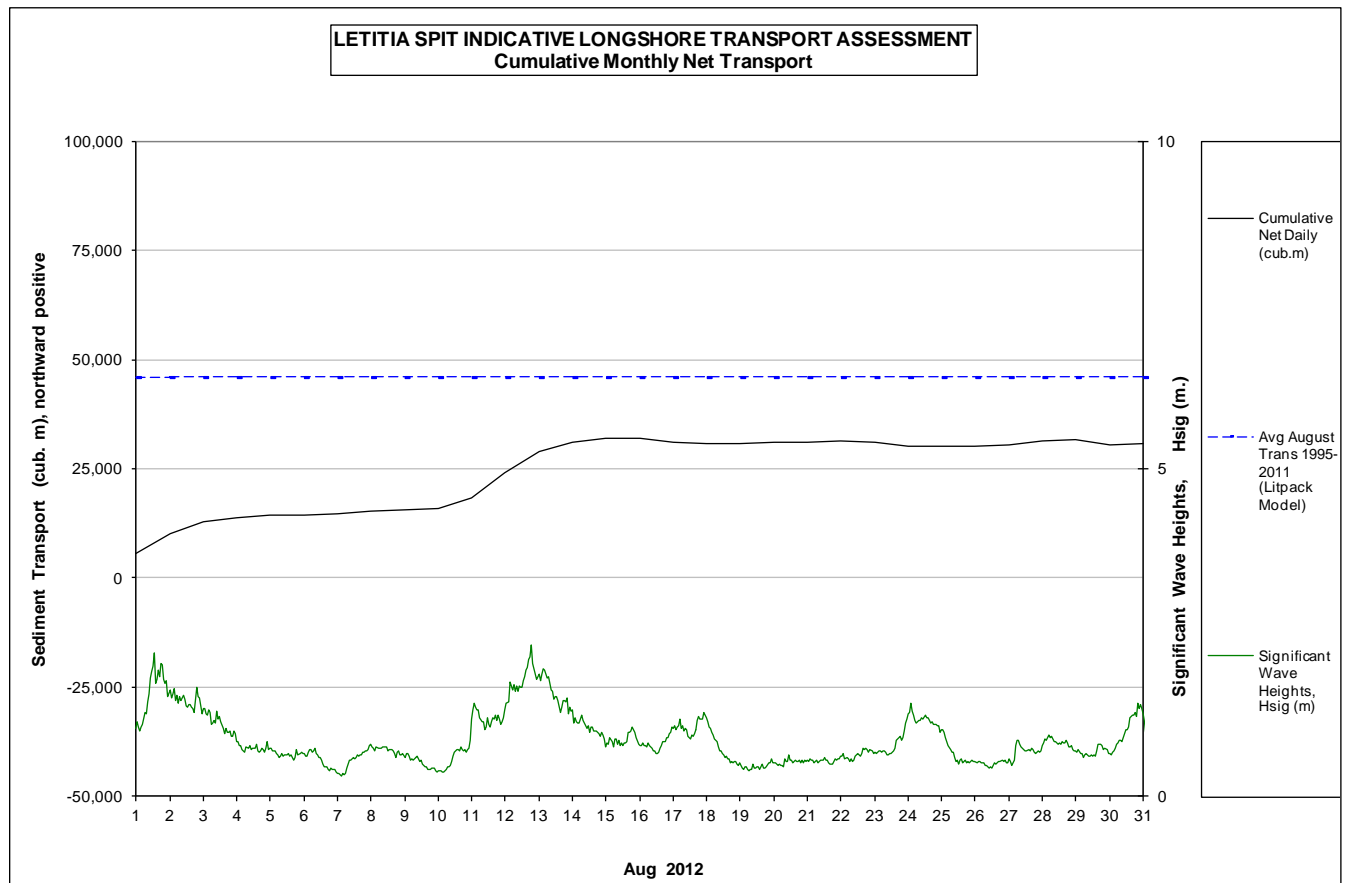


## 2. INDICATIVE LONGSHORE TRANSPORT

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


In August 2012 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 30% less than the average estimated sand transport quantity of approximately 45,000 m<sup>3</sup> for the month of August.



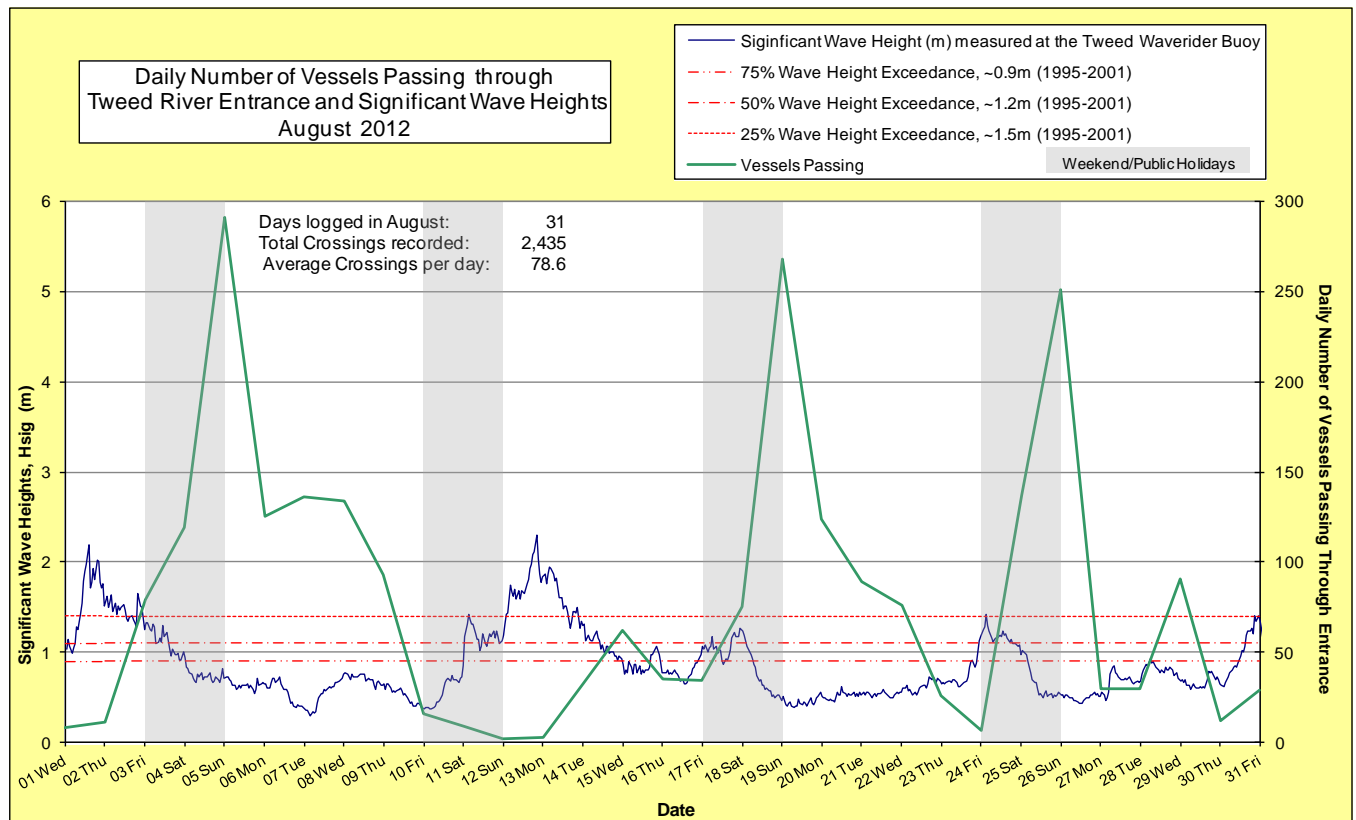
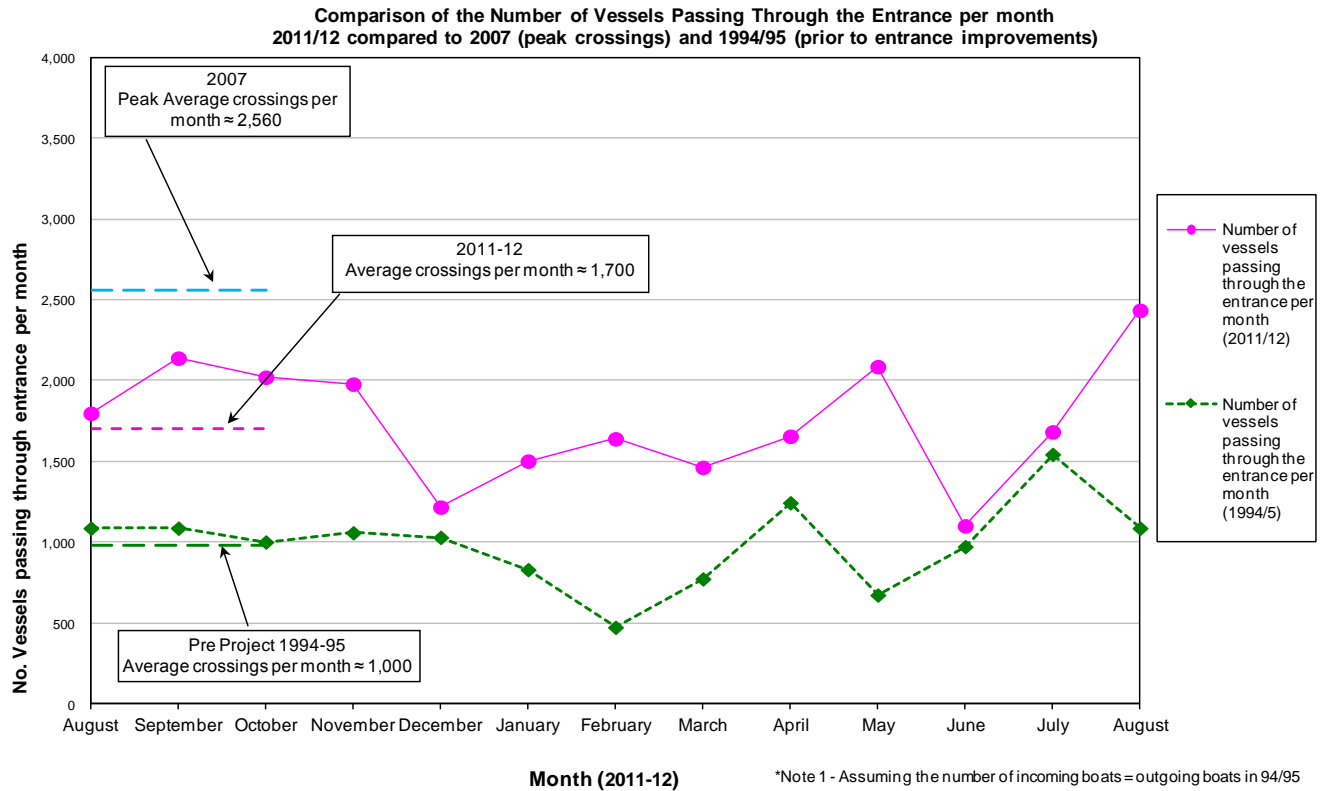
## 3. MEDIA COVERAGE

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

**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>						8
2 <sup>nd</sup>						11
3 <sup>rd</sup>						79
4 <sup>th</sup>						119
5 <sup>th</sup>						291
6 <sup>th</sup>						125
7 <sup>th</sup>						136
8 <sup>th</sup>						134
9 <sup>th</sup>						93
10 <sup>th</sup>						16
11 <sup>th</sup>						9
12 <sup>th</sup>						2
13 <sup>th</sup>						3
14 <sup>th</sup>						33
15 <sup>th</sup>						62
16 <sup>th</sup>						35
17 <sup>th</sup>						34
18 <sup>th</sup>						75
19 <sup>th</sup>						268
20 <sup>th</sup>						124
21 <sup>st</sup>						89
22 <sup>nd</sup>						76
23 <sup>rd</sup>						26
24 <sup>th</sup>						7
25 <sup>th</sup>						137
26 <sup>th</sup>						251
27 <sup>th</sup>						30
28 <sup>th</sup>						30
29 <sup>th</sup>						91
30 <sup>th</sup>						12
31 <sup>st</sup>						29
Total						2,435

Source: Marine Rescue NSW, Point Danger



## 5. WAVE CONDITIONS

**Dominant swell condition:** Significant wave heights were below average to average for most of the month. There were two minor moderate sea events (occurring on the 1<sup>st</sup> and 12<sup>th</sup>) with peak significant wave heights to 2.3 m. Swell direction ranged from NE to ESE but dominantly from the E to SE.

**Major sea events:** 1<sup>st</sup> and 12<sup>th</sup> of August

**Monthly minimum significant wave height:** 0.3 m on 7<sup>th</sup> August.

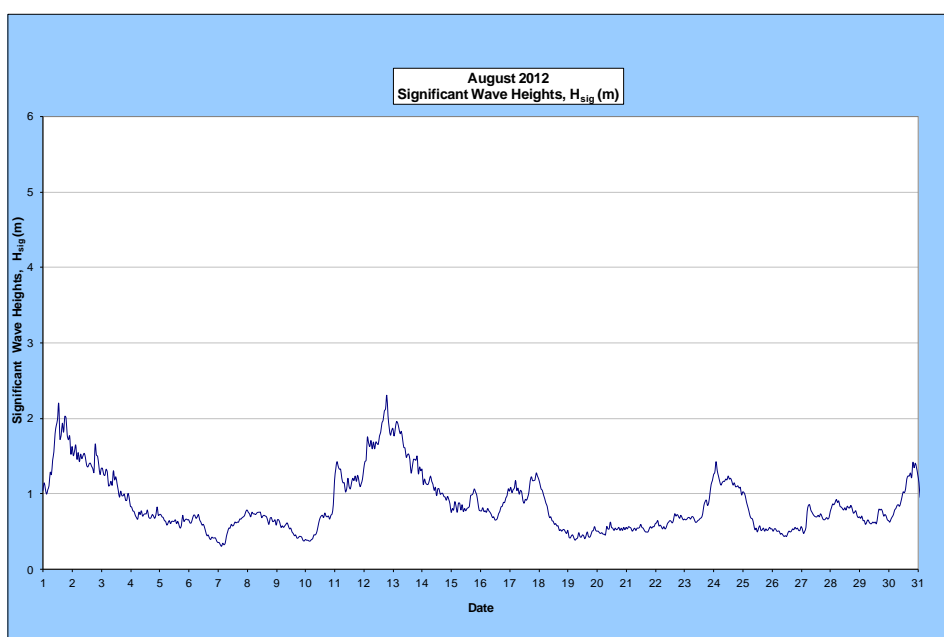
**Monthly peak significant wave height:** 2.3 m on 12<sup>th</sup> August.

**Number of days on which waves were below 1.0 m:** 23 days

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

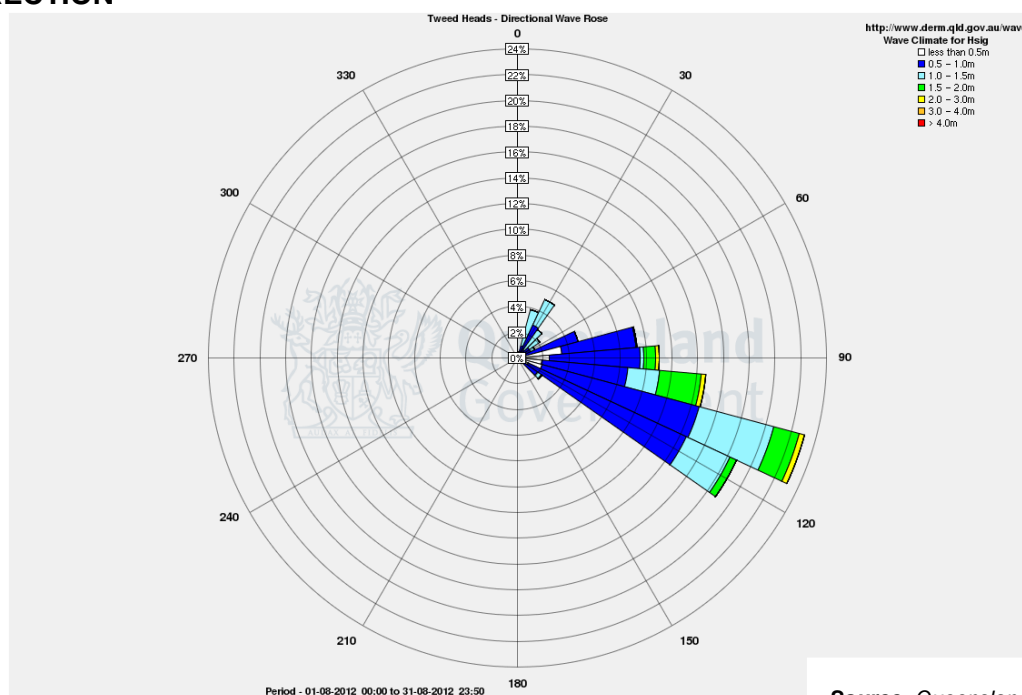
**Note:** Significant wave heights or  $H_{sig}$  is the average of the highest one third of recorded waves.

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



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

## WAVE DIRECTION



Source: Queensland Government

END