

# TRESBP ENVIRONMENTAL MONITORING SUMMARY

## NOVEMBER 2012

### OVERVIEW

In November, 2012:

- 1,070 m<sup>3</sup> of sand was pumped to Duranbah Beach and 26,922 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 calm to average for most of the month with one moderate sea event (occurring on the 11<sup>th</sup> to 12<sup>th</sup>) with peak significant wave heights reaching 2.5 m. Wave directions varied mostly from NE to ESE.
- 1,588 vessel crossings were recorded for the month (this is about 10% less than the November average).
- The estimated amount of sand moving north towards the Tweed River Entrance by natural processes was in the order of 17,000 m<sup>3</sup> (this is about half of the November average).

### 1. SAND PUMPING & DREDGING

#### **Sand Delivery November 2012**

Pumped:	27,992 m <sup>3</sup>
Dredged:	0 m <sup>3</sup>
Total:	27,992 m <sup>3</sup>

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

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

#### **Sand Delivery January to November 2011**

Pumped:	478,356 m <sup>3</sup>
Dredged:	0 m <sup>3</sup>
Total:	478,356 m <sup>3</sup>

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

Pumped:	6,734,508 m <sup>3</sup>
Dredged:	2,039,904 m <sup>3</sup>
Total:	8,774,412 m <sup>3</sup>

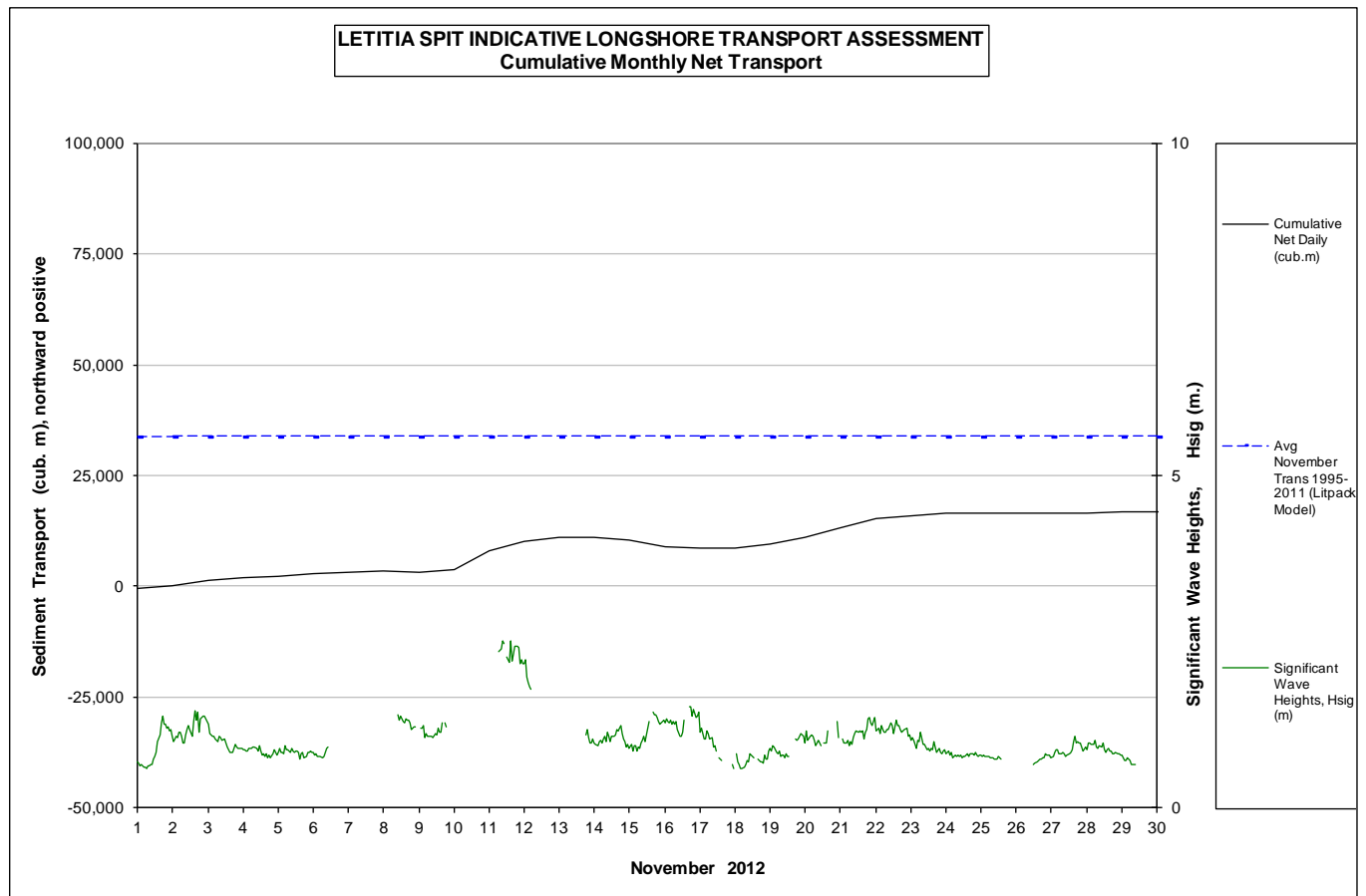


## 2. INDICATIVE LONGSHORE TRANSPORT

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


In November 2012 the estimated natural sand transport (moving North towards the Tweed River entrance): was calculated to be in the order of 17,000 m<sup>3</sup>.

This result is about 50% of the average estimated sand transport quantity of approximately 34,000 m<sup>3</sup> for the month of November.

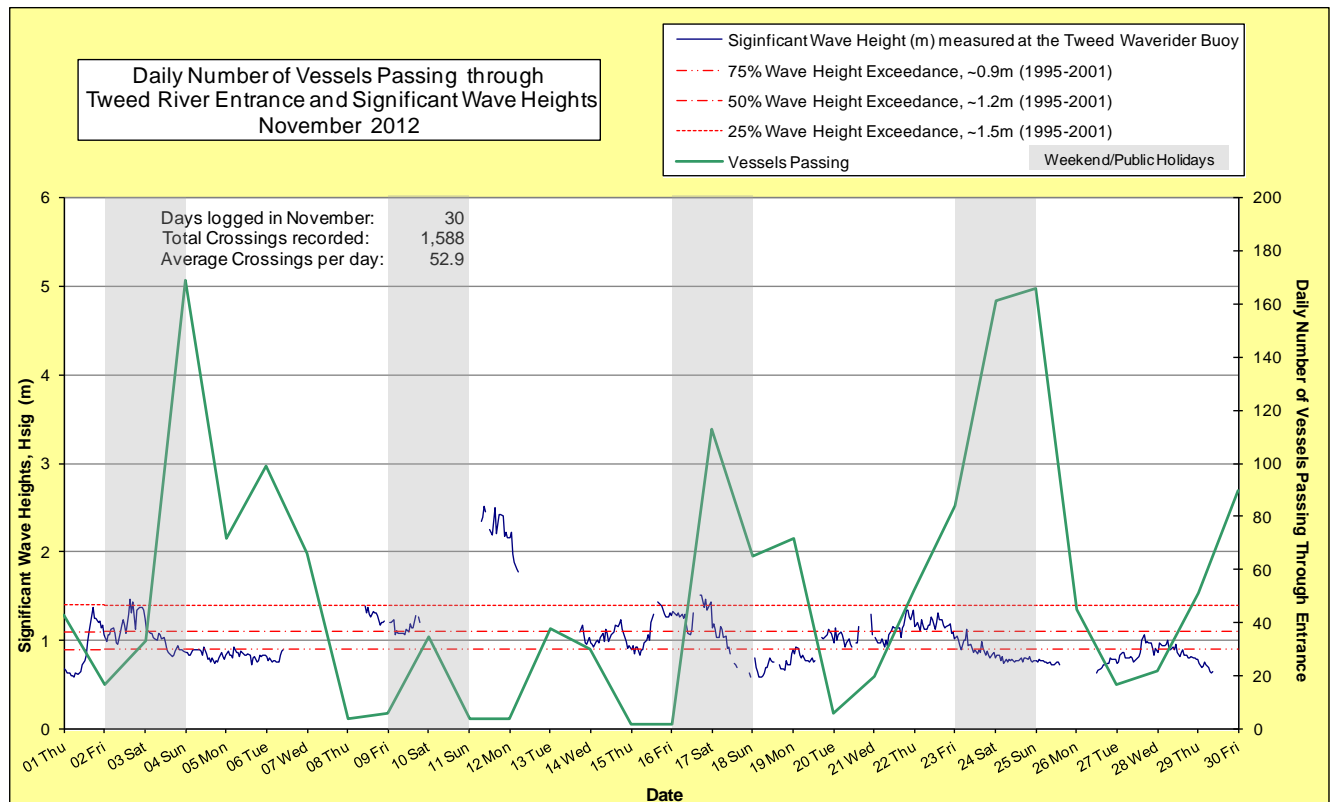
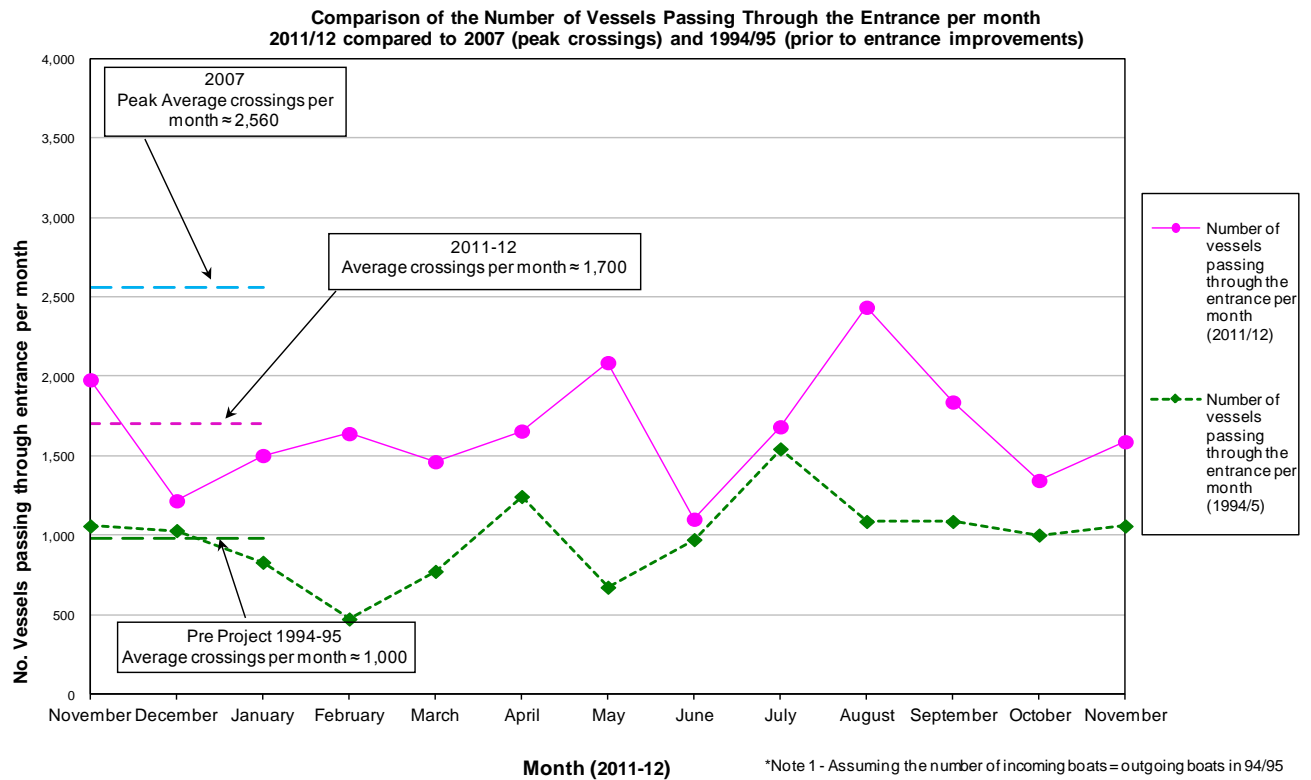


## 3. MEDIA COVERAGE

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

**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>						43
2 <sup>nd</sup>						17
3 <sup>rd</sup>						33
4 <sup>th</sup>						169
5 <sup>th</sup>						72
6 <sup>th</sup>						99
7 <sup>th</sup>						66
8 <sup>th</sup>						4
9 <sup>th</sup>						6
10 <sup>th</sup>						35
11 <sup>th</sup>						4
12 <sup>th</sup>						4
13 <sup>th</sup>						38
14 <sup>th</sup>						30
15 <sup>th</sup>						2
16 <sup>th</sup>						2
17 <sup>th</sup>						113
18 <sup>th</sup>						65
19 <sup>th</sup>						72
20 <sup>th</sup>						6
21 <sup>st</sup>						20
22 <sup>nd</sup>						52
23 <sup>rd</sup>						84
24 <sup>th</sup>						161
25 <sup>th</sup>						166
26 <sup>th</sup>						45
27 <sup>th</sup>						17
28 <sup>th</sup>						22
29 <sup>th</sup>						51
30 <sup>th</sup>						90
					<b>Total</b>	<b>1,588</b>



## 5. WAVE CONDITIONS

**Dominant swell condition:** Significant gaps occur in the currently available record for November due to telemetering problems. However, the full data record has been saved on the waverider buoy and will be made available once downloaded.  
Significant wave heights were calm to average for most of the month with a moderate sea event (occurring on the 11<sup>th</sup> to 12<sup>th</sup>) with peak significant wave heights to 2.5 m.  
Swell direction ranged from NE to ESE but dominantly from the ESE.

**Major sea events:** 11<sup>th</sup> to 12<sup>th</sup> of November

**Monthly minimum significant wave height:** 0.5 m on 30<sup>th</sup> November.

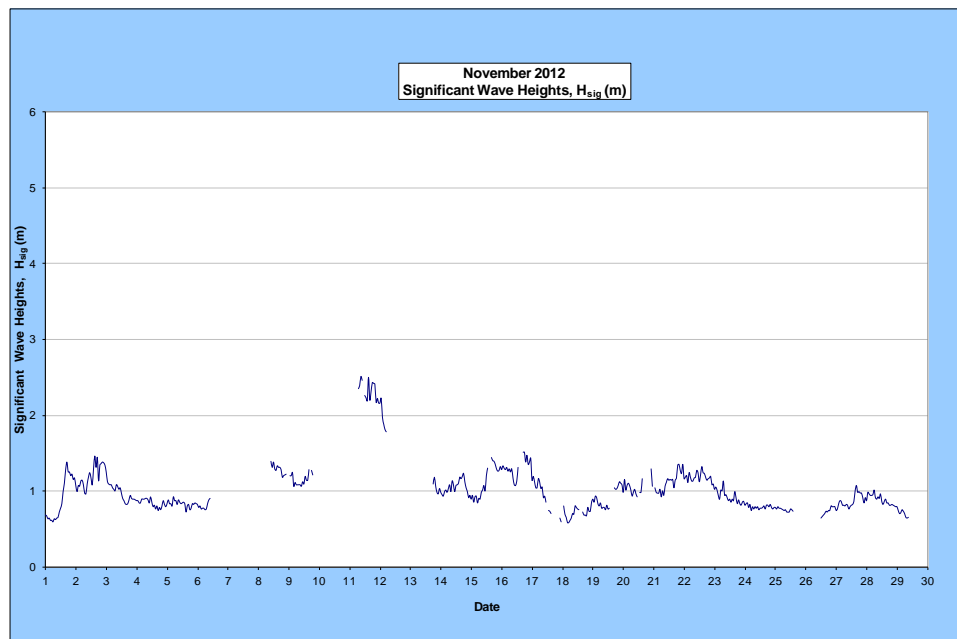
**Monthly peak significant wave height:** 2.5 m on 12<sup>th</sup> November.

**Number of days on which waves were below 1.0 m:** 17 days

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

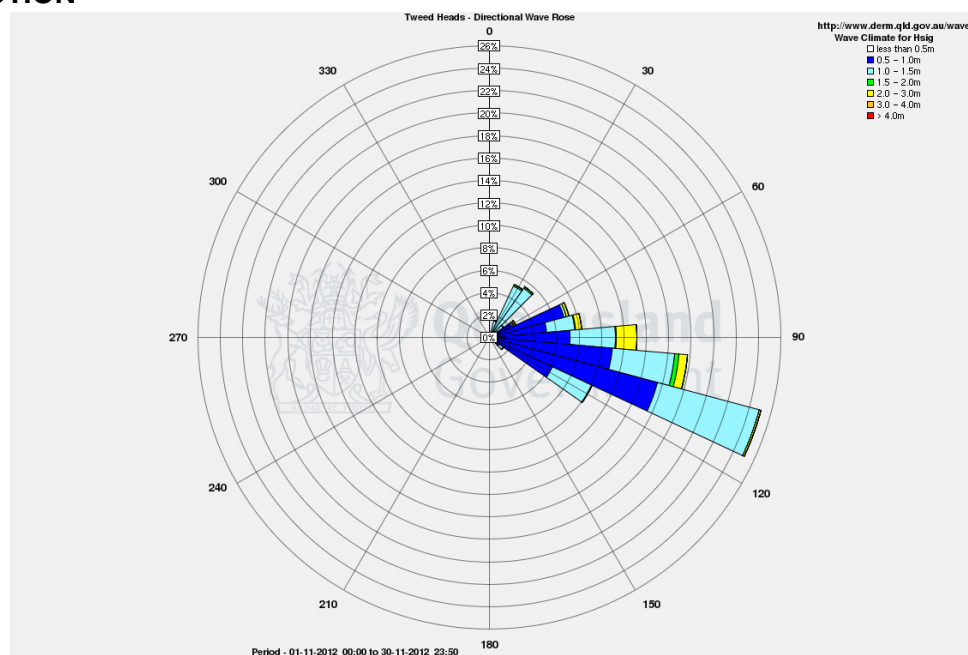
**Note:** Significant wave heights or  $H_{sig}$  is the average of the highest one third of recorded waves.

(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



END

Source: Queensland Government