TRESBP ENVIRONMENTAL MONITORING SUMMARY AUGUST 2015

OVERVIEW

In August 2015:

- 45,146 m³ of sand was pumped to Snapper Rocks East.
- There was one media article relating to the project area during August.
- Wave heights ranged from calm to average (0.5 to 1.5 m) with a maximum significant wave height of 1.5 m on 22nd August. Wave directions varied from NE to ESE but mostly from East and ESE.
- 1868 vessel crossings were recorded for the month. (This is about 5% less than the August average).
- The estimated amount of sand moving north towards the Tweed River Entrance by natural processes was in the order of 27,000 m³ (this is about 60% of the August average).

1. SAND PUMPING & DREDGING

Sand Delivery August 2015

Pumped: $45,146 \text{ m}^3$ Dredged: 0 m^3 Total: $45,146 \text{ m}^3$

The number of days sand was pumped this month = 21

Sand Delivery January to August 2015

Pumped: $372,119 \text{ m}^3$ Dredged: 0 m^3 Total: $372,119 \text{ m}^3$

Stage II Sand Delivery April 2000 to August 2015

Pumped: 7,922,502 m³

Dredged: 2,061,972 m³ *

Total: 9,984,474 m³ *







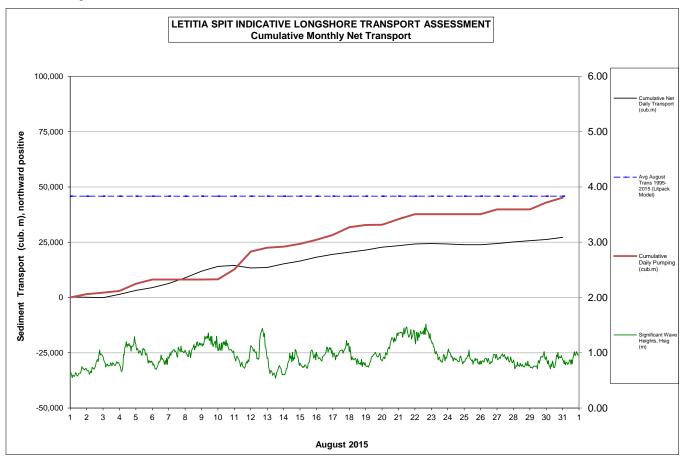
^{*} This Includes 22,870 m³ of sand delivered by dredge to Palm Beach between June and September 2005

2. INDICATIVE LONGSHORE TRANSPORT

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

In August 2015 the estimated natural sand transport moving North towards the Tweed River entrance was calculated to be in the order of 27,000 m³.

This result is about 60% of the average estimated sand transport quantity of approximately 46,000 m³ for the month of August.



3. MEDIA COVERAGE

Coastal Watch online magazine published a media article on September-October issue reporting that state of the sand (*banks sic*) along the Gold Coast is mind bending. It's hard to leave and it deserves to be documented in a time capsule because it holds a unique place in the Australian surfing experience.





4. TWEED RIVER ENTRANCE CONDITIONS

MARINE RESCUE NSW - MONITORING RESULTS

Weekends and public holidays

	Navigation Rating ImpassableGood					
Date	Impassable (1)	Difficulty Encountered (2)	Some Difficulty Encountered (3)	Relatively Good Crossing (4)	Good Conditions (5)	Number of Boats
1 st						127
2 nd						63
3 rd						9
4 th						6
5 th						65
6 th						56
7 th						26
8 th						55
9 th						85
10 th						54
11 th						46
12 th						0
13 th						28
14 th						137
15 th						79
16 th						61
17 th						76
18 th						66
19 th						51
20 th						26
21 st						29
22 nd						58
23 rd						55
24 th						0
25 th						6
26 th						84
27 th						60
28 th						127
29 th						210
30 th						74
31 st						49
					Total	1868

Source: Marine Rescue NSW, Point Danger

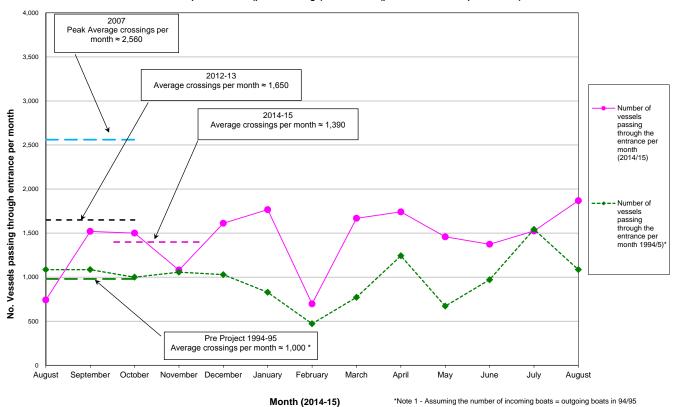


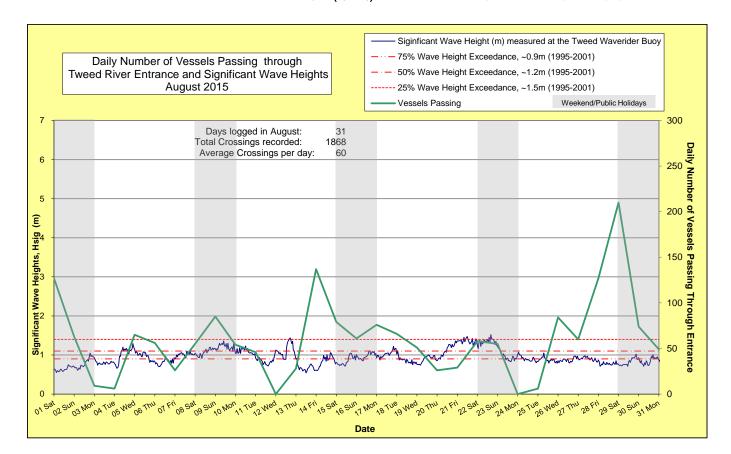




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Comparison of the Number of Vessels Passing Through the Entrance per month 2014/15 compared to 2007 (peak crossings) and 1994/95 (prior to entrance improvements)









TRESBP ENVIRONMENTAL MONITORING SUMMARY - AUGUST 2015

5. WAVE CONDITIONS

Wave conditions over the month: Wave heights ranged from calm to average (0.5 to 1.5 m) with a maximum

significant wave height of 1.5 m on 22nd August. Wave directions varied from NE to

ESE but mostly from East and ESE.

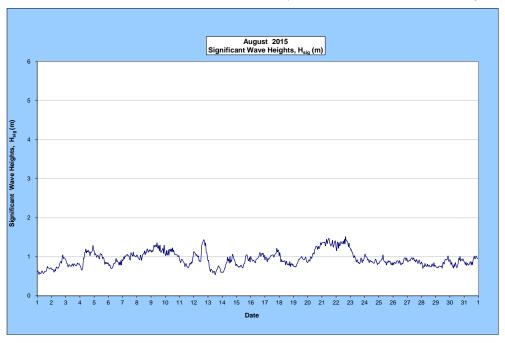
Monthly minimum significant wave height: 0.5 m on 13th August. Monthly maximum significant wave height: 1.5 m on 22th August.

Number of days on which waves were below 1.0 m: 27 days

Number of days on which waves were above 2.0 m: None

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.qld.gov.au/waves

WAVE DIRECTION

