TRESBP ENVIRONMENTAL MONITORING SUMMARY AUGUST 2011

OVERVIEW

In August, 2011:

- 56,251 m³ of sand was pumped to Snapper Rocks East.
- There were no media articles referring to the project.
- Sea conditions were calm to average with a minor storm of about two days duration during the fourth week (during August significant wave heights ranged from 0.6 to 3.3 m).
- 1,797 boats crossings were recorded for the month (this is about 8% fewer than the August average).
- The estimated amount of sand moving north towards the Tweed River Entrance by natural processes in the order of 56,000 m³ (this is about 125% of the August average).

1. SAND PUMPING & DREDGING

Sand Delivery August 2011

Pumped: $56,251 \text{ m}^3$ Dredged: 0 m^3 Total: $56,251 \text{ m}^3$



Pumped: $386,381 \text{ m}^3$ Dredged: 0 m^3 Total: $386,381 \text{ m}^3$

Sand Delivery January to August 2010

Pumped: $268,923 \text{ m}^3$ Dredged: 0 m^3 Total: $268,923 \text{ m}^3$

Stage II Sand Delivery May 2000 to August 2011

Pumped: 6,197,119 m³
Dredged: 2,038,900 m³
Total: 8,236,019 m³



Department of **Environment** and **Resource Management**





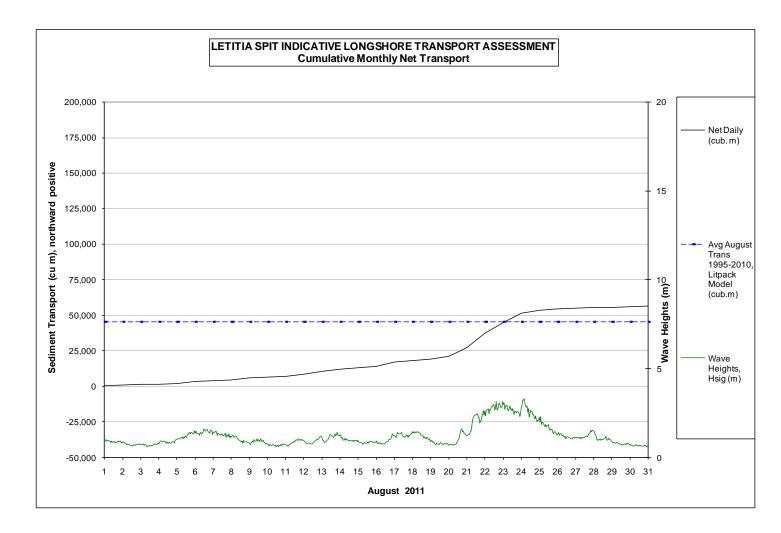
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2. INDICATIVE LONGSHORE TRANSPORT

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

In August 2011 the estimated natural sand transport (moving N towards Tweed entrance): to be in the order of 51,000 m³ to 56,000 m³ (based on two separate models).

This result is higher than the average sand transport quantity for the month of August (ie about 125% of the average).



3. MEDIA COVERAGE

No media coverage referring to the project this month.

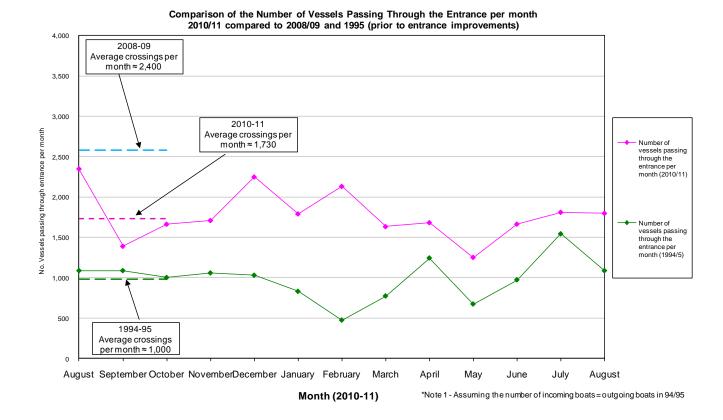
4. TWEED RIVER ENTRANCE CONDITIONS

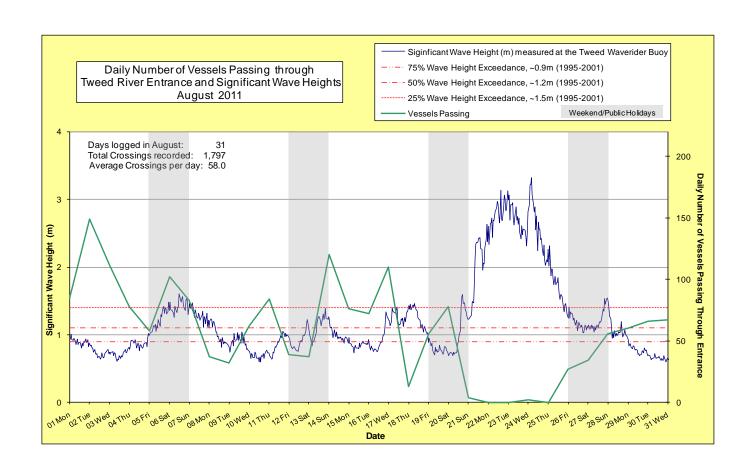
MARINE RESCUE NSW - MONITORING RESULTS

Weekends and public holidays

Date	Impassable (1)	Difficulty Encountered (2)	Some Difficulty Encountered (3)	Relatively Good Crossing (4)	Good Conditions (5)	Number of Boats
1 st						84
2 nd						149
3 rd						111
4 th						78
5 th						58
6 th						102
7 th						83
8 th						37
9 th						32
10 th						62
11 th						84
12 th						39
13 th						37
14 th						120
15 th						76
16 th						72
17 th						110
18 th						13
19 th						56
20 th						78
21 st						4
22 nd						0
23 rd						0
24 th						2
25 th						0
26 th						27
27 th						34
28 th						56
29 th						60
30 th						66
31 st						67
					Total	1,713

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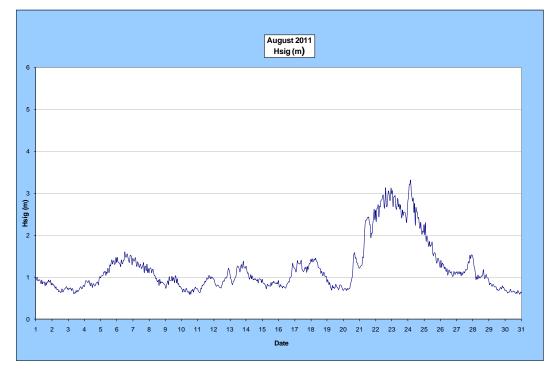
5. WAVE & SURFING CONDITIONS

<u>Dominant swell condition</u>: Wave heights ranged from calm to average seas for most of the month (0.6 to 1.5 m) but an ocean storm occurred over 22nd to 24th with H_s recorded up to 3.3 m. Wave directions varied from E to ESE.

High sea events: 22nd to 24th August

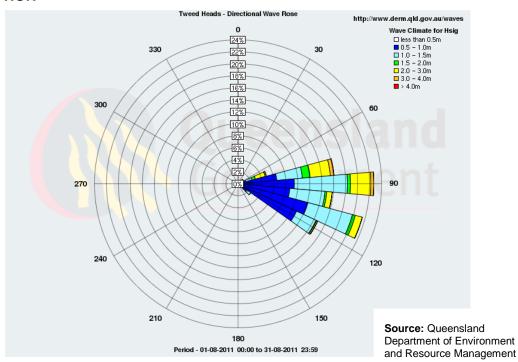
Monthly minimum significant wave height: 0.6 m on 31st August Monthly maximum significant wave height: 3.3 m on 24th August Number of days on which waves were below 1.0 m: 19 days Number of days on which waves were above 2.0 m: 5 days

(Source: Tweed & Brisbane Wave Buoy; QDERM)



A link to data recorded by the Tweed Waverider Buoy is available at: http://www.derm.qld.gov.au/waves

WAVE DIRECTION



UPCOMING SURF AND SURF LIFESAVING EVENTS

- Qld State Junior Surfing Titles, 3-4 September 2011, Gold Coast
- Ocean & Earth Teenage Rampage, 17-18 September 2011, Gold Coast
- Open Day, Kirra Surf Lifesaving Club, 25 September 2011, Kirra
- Surfing Qld World Tour Trials for the Trials, 22 October 2011, Gold Coast
- 2011 Wahu Surfer Grom Comp, 10-11 December 2011, Gold Coast

PHOTOGRAPHS OF SURF CONDITIONS



Rainbow Bay, 10 August 2011 (source: Swellnet Surf)



Duranbah, 11 August 2011 (source: Swellnet Surf Report)



Greenmount, 11 August 2011 (source: Swellnet Surf)



Coolangatta, 22 August 2011 (source: www.goldcoast.com.au)



Coolangatta, 22 August 2011 (source: www.goldcoast.com.au)



Coolangatta, 22 August 2011 (source: www.goldcoast.com.au)

SURF REPORT OVERVIEW

DATE	SURF	DIRECTION	COMMENTS
1	Clean, 0.3-0.6m	SE	Small waves and early light SW winds.
2	Clean, 0.3-0.6m	SE	Almost a carbon copy of yesterday, with small surf and early light offshore winds. Just another day of tiny uninspiring winter waves along the Gold Coast.
3	Clean, 0.3-0.45m	E	The high tide is swallowing what little peelers were breaking early this morning.
4	Clean, 0.3-0.45m	Е	The high tide is swallowing what little peelers were breaking early this morning
5	Clean, 0.3-0.6m	SE	Another day with small peaky waves and early light winds
7	Peaky, 0.6-0.9m	SE	Great waves along the beachbreaks today (particularly south of the border).
9	Peaky, 0.3-0.6m	SE	Clean across the beachies with light NW winds. Nothing happening on the points due to the wind.
10	Clean, 0.3-0.6m	SE	Try Snapper to Greenmount mid to late morning, but don't expect much
11	Glassy, 0.3-0.6m	ESE	Less swell around today. Try the open beachies early, D'bah to Palmy.
15	Clean, 0.3-0.45m	SSE	The surf has little pulse and the points have tiny peelers
16	Clean, 0.3-0.45m	SSE	Carbon copy of yesterday.
17	Clean, 0.6-0.9m	SE	0.6m to nearly 0.9m sets breaking out the back of Snapper with consistent 0.9m around the corner at D'bah
18	Choppy, 0.9m	SE	Size is around 0.9m on the points, with bigger 1.2m sets at D'bah and exposed spots.
19	Clean, 0.6m	SE	0.3-0.6m peelers breaking down the points, with the odd bigger set round at D'bah.
23	Bumpy, 1.8m	SE	Conditions aren't as clean as yesterday morning but they're still pretty bloody good
24	Clean, 1.8m	SE	Slightly cleaner conditions out the back of Snapper with a solid 1.5-1.8m+ swell still pushing through. Wave heights back off gradually as you make your run towards Kirra.
25	Clean, 1.2-1.5m	ESE	Pumping! Conditions are near perfect with a SSW wind, and it's heavily populated.
26	Clean, 0.9m	ESE	Into the backend of this swell now with sets in the 1.2m range becoming rarer, with 0.9m waves the norm.
29	Clean, 0.3-0.6m	SE	Another day of small waves
30	Peaky, 0.3-0.45m	SE	Very tiny and uninteresting this morning
31	Clean, 0.3-0.45m	SE	Tiny beachbreaks once again with very little happening across most of the coast

Source: Swellnet - Coolangatta Surf Report

Generally, August experienced mostly calm to average sea conditions with larger storm swells from 22nd to 24th.

END