# TRESBP ENVIRONMENTAL MONITORING SUMMARY FEBRUARY 2012

### **OVERVIEW**

In February, 2012:

- 32,198 m³ of sand was pumped to Snapper Rocks East.
- There were five media articles in total relating to the issues within the Project area. Three related to sinking of a fishing trawler attempting to cross the Tweed River entrance, one related to an attempt to dredge the entrance sand bar and one related to conservation of the surf breaks.
- Sea conditions were calm to average for most of the month with two moderate sea events (4<sup>th</sup>/5<sup>th</sup> and 25<sup>th</sup>/26<sup>th</sup>) with waves up to 2.6 m.
- 1,639 vessel crossings were recorded for the month (this is about the February average).
- The estimated amount of sand moving north towards the Tweed River Entrance by natural processes is in the order of 34,000 m<sup>3</sup> (this is about 63% of the February average).
- Flooding of the Tweed River occurred during the last week of the month.

# 1. SAND PUMPING & DREDGING

# Sand Delivery February 2012

Pumped:  $32,198 \text{ m}^3$ Dredged:  $0 \text{ m}^3$ Total:  $32,198 \text{ m}^3$ 

# Sand Delivery January to February 2012 (YTD)

Pumped:  $57,451 \text{ m}^3$ Dredged:  $0 \text{ m}^3$ Total:  $57,451 \text{ m}^3$ 

# Sand Delivery January to February 2011

Pumped:  $65,262 \text{ m}^3$ Dredged:  $0 \text{ m}^3$ Total:  $65,262 \text{ m}^3$ 

#### Stage II Sand Delivery May 2000 to January 2012

Pumped: 6,386,358 m<sup>3</sup>
Dredged: 2,039,101 m<sup>3</sup>
Total: 8,425,459 m<sup>3</sup>





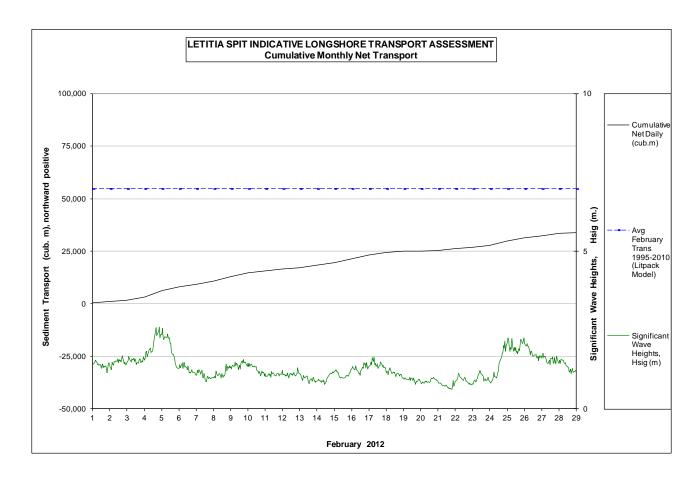


# 2. INDICATIVE LONGSHORE TRANSPORT

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

In February 2012 the estimated natural sand transport (moving N towards Tweed entrance): to be in the order of 34,000 m<sup>3</sup>.

This result is well below the average sand transport quantity for the month of February (ie about 63% of the average).



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# 3. MEDIA COVERAGE

#### www.mydailynews.com.au, 1 February 2012: Surfers risk lives near wreck

"DURANBAH Beach surfers are risking their lives as they pass close to the trawler wrecked at the Tweed River mouth on Monday." ....

# www.mydailynews.com.au, 2 February 2012: Talks to remove sunken trawler

"NSW Maritime has warned swimmers and surfers to stay away from the wreck at Duranbah Beach.

A trawler has sunk in a rip, close to the northern rock wall...."

# Gold Coast Bulletin, 7 February 2012: Even a dredge can't handle the bar

"A DREDGE sent to clear the heavily silted Tweed bar was sent back after it nearly ran aground.

NSW Government officials yesterday admitted the vessel was sent to clear the clogged channel at the Tweed River mouth just before Christmas."....

#### www.mydailynews.com.au, 7 February 2012: All signs of wreck buried

"THE sea has claimed the trawler that was wrecked at Duranbah Beach last week.

Any sign of the Toni Kylie that struck troubles as it was leaving the Tweed River on January 30 was buried."

#### www.goldcoast.com.au, 24 February 2012: Surf breaks saved

"SURFERS will have a greater say on protecting the Gold Coasts iconic southern breaks with the declaration today of the coastal stretch from Burleigh to Snapper as a National Surf Reserve."....

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# **4. TWEED RIVER ENTRANCE CONDITIONS**

# MARINE RESCUE NSW - MONITORING RESULTS

Weekends and public holidays

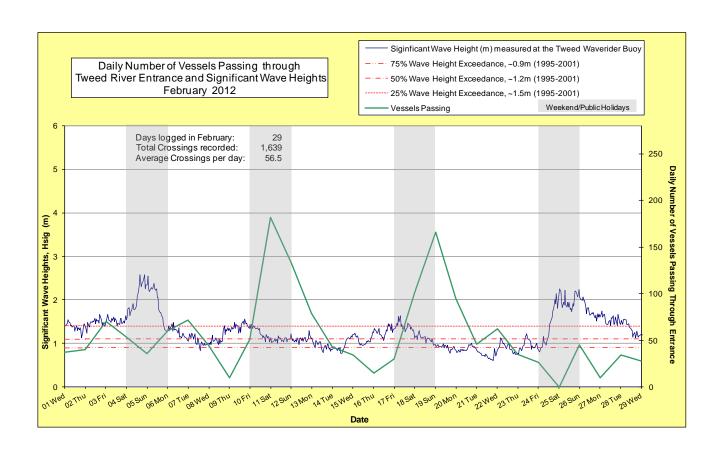
Date	Impassable (1)	Difficulty Encountered (2)	Some Difficulty Encountered (3)	Relatively Good Crossing (4)	Good Conditions (5)	Number of Boats
1 <sup>st</sup>						37
2 <sup>nd</sup>						40
3 <sup>rd</sup>						70
4 <sup>th</sup>						54
5 <sup>th</sup>						36
6 <sup>th</sup>						60
7 <sup>th</sup>						72
8 <sup>th</sup>						44
9 <sup>th</sup>						10
10 <sup>th</sup>						51
11 <sup>th</sup>						182
12 <sup>th</sup>						133
13 <sup>th</sup>						79
14 <sup>th</sup>						43
15 <sup>th</sup>						34
16 <sup>th</sup>						15
17 <sup>th</sup>						30
18 <sup>th</sup>						102
19 <sup>th</sup>						166
20 <sup>th</sup>						95
21 <sup>st</sup>						46
22 <sup>nd</sup>						62
23 <sup>rd</sup>						35
24 <sup>th</sup>						26
25 <sup>th</sup>						0
26 <sup>th</sup>						45
27 <sup>th</sup>						10
28 <sup>th</sup>						34
29 <sup>th</sup>						28
					Total	1,639

Source: Marine Rescue NSW, Point Danger

# Comparison of the Number of Vessels Passing Through the Entrance per month 2011/12 compared to 2008/09 and 1995 (prior to entrance improvements) 4.000 2008-09 Average crossings per month ≈ 2,400 3,500 Number of vessels passing through the entrance per month (2010/11) 3,000 2010-11 No. Vessels passing through entrance per month Average crossings per month ≈ 1,730 2 500 Number of vessels passing through the entrance per month (1994/5) 1.500 500 Average crossings per month ≈ 1,000 March June August September October November December January February April Mav July February

Month (2011-12)

\*Note 1 - Assuming the number of incoming boats = outgoing boats in 94/95



# 5. WAVE & SURFING CONDITIONS

Dominant swell condition: Wave heights ranged from calm to average for most of the month (0.6 m to 1.5 m) and two moderate sea events (4<sup>th</sup>/5<sup>th</sup> & 25<sup>th</sup>/26<sup>th</sup>) with waves to 2.6 m. Swell direction ranged from ENE to ESE but dominantly from the E.

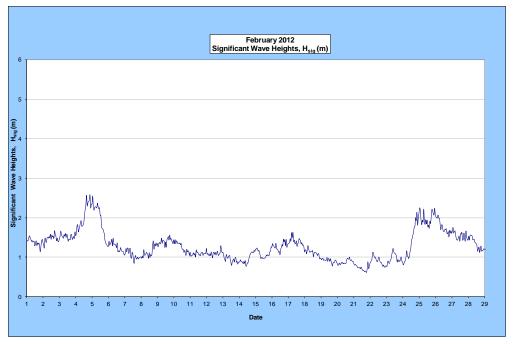
<u>Moderate sea events</u>: 4<sup>th</sup>, 5<sup>th</sup>, 25<sup>th</sup>, and 26<sup>th</sup> February. <u>Monthly minimum significant wave height</u>: 0.6 m on 21<sup>st</sup> February.

Monthly maximum significant wave height: 2.6 m on 4<sup>th</sup> February.

Number of days on which waves were below 1.0 m: 12 days

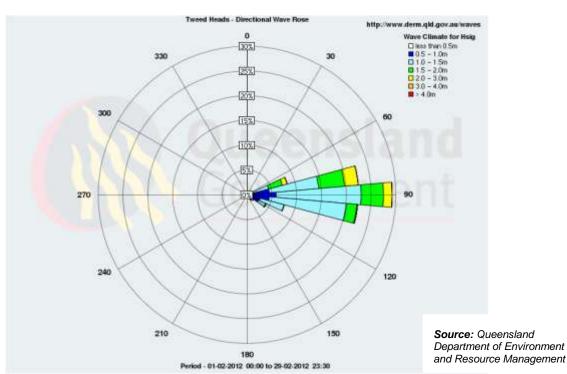
Number of days on which waves were above 2.0 m: 4 days

(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**



# TRESBP ENVIRONMENTAL MONITORING SUMMARY - FEBRUARY 2012

# **UPCOMING SURF AND SURF LIFESAVING EVENTS**

- 2012 Quicksilver and Roxy Pro's, 25 February to 7 March 2012, Gold Coast, Qld
- 2012 International Student Surf Challenge, 17 to 18 March 2012, Gold Coast, Qld
- CHIKO MP Classic, 14 & 15 April 2012, Coolangatta, Qld
- CHIKO Alley Classic, 5 & 6 May, 2012, Currumbin Alley, Qld

# PHOTOGRAPHS OF SURF CONDITIONS



Snapper Rocks, 3 February 2012 (source: Coastal Watch)



Rainbow Bay, 6 February 2012 (source: Coastal Watch)



Kirra Point, 8 February 2012 (source: Swellnet)



Duranbah, 9 February 2012 (source: Coastal Watch)



Rainbow Bay, 10 February 2012 (source: Coastal Watch)

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Greenmount Point, 15 February 2012 (source: Coastal Watch)



Greenmount Point, 17 February 2012 (source: Coastal Watch)

# **Surfing Action from the QUICKSILVER PRO 2012**



Kelly Slater



Bede Burbidge



Kai Otten



Jordy Smith

**Source:** http://quiksilverlive.com/progoldcoast/2012/photos%2c143.en.html

# **Surfing Action from the ROXY PRO 2012**





Lakey Petersen

Sofia Mulanovich





Courtney Conlogue

Steph Gilmore

**Source:** http://quiksilverlive.com/progoldcoast/2012/photos%2c157.en.html

# TRESBP ENVIRONMENTAL MONITORING SUMMARY - FEBRUARY 2012

# **SURF REPORT OVERVIEW**

DATE	SURF	DIRECTION	COMMENTS
3	0.6-0.9m	Е	An uneven E swell. The water is starting to clean but is still a bit dirty. Try the S end beachies and the points this morning on the dropping tide. It's not great but beggars can't be choosers. Outlook for the weekend and next week is very good
4	0.9-1.2m	E	Looking good with E swell buried under a 6am high tide. The water is a lot cleaner today. The S end beachies are the go early with the high tide. There will be nice waves on the points as the tide drops during the morning.
5	1.2-1.5m	ENE	Great weekend waves around this morning after yesterday's increase. There's an Easterly swell along the open stretches All roads lead to the points with Burleigh and Currumbin ok on the top of the tide but Kirra to Snapper looking like the all-day pick.
6	0.6-0.9m	E	The swell has dropped and is buried under a high tide. Swell is E and really clean. High tide beachies all along the coast early from D'bah with small fun ones on the points.
7	Clean, 0.6-0.9m	ESE	D'bah is a touch bigger and is the pick early. Small ones on the points as the tide drops later in the morning.
8	Clean, 0.6m	Е	The swell has backed off a touch more and the only options for a half decent wave will be the beachies. 0.6-0.9m of clean ESE swell on the open beaches, a bit more size at D'bah.
9	Clean,0.6-0.9m	ESE	Solid 0.9m sets coming through irregularly with a clean SE swell on the open beaches. Once again there is a bit more size at D'bah with smaller fun ones on the points and S end beachies early.
10	Clean, 0.6m+	ESE	There's 0.6m+ of clean ESE swell with bigger sets, it has been pulsing on the incoming tide
11	Clean, 0.6m+	ESE	Go early with a touch more size at D'bah.
12	Clean, 0.6m+	E	N end beachies, and D'bah will be the pick
13	Clean, 0.3-0.6m	E	Small ones on the points on the low tide then S end beachies & D'bah on the incoming tide
14	Clean, 0.3-0.6m	E 1/10	It's like a hygienic two-year old today. Small and clean
15	Clean, 0.3-0.6m	ESE	It's pretty much looking like a rinse and repeat of yesterday. There are very small ones on the points at Rainbow Bay.
16	Clean, 0.3-0.6m	ESE	Almost a repeat of the last couple of days. There are very small ones on the points on the dropping tide at from Rainbow Bay to Greenmount. D'bah is the pick early with a touch more size before the ESE winds get up.
17	Clean, 0.6m	ESE	The beachies are looking good early, especially the more exposed ones like D'bah.
18	0.6m	Е	0.6m on the open beaches.
19	0.3-0.6m	E	0.3-0.6m on the open beaches
20	Clean, 0.3-0.6m	Е	More of the same with only small waves about again this morning.
21	Clean, 0.3-0.6m	ESE	The beat goes on as the run of very small waves continues.
22	Clean, 0.3m	E	It's small and barely breaking. You'd have to be keen and have patience if you want to surf today.
23	Clean, 0.3-0.6m	ESE	The rain looks set in. Swell is on par with yesterday at around and pretty weak from ESE.
24	0.3-0.6m	ESE	Another day of small waves.
27	Lumpy, 0.9m	E	The E swell is messy from onshore E winds. The Quiksilver Pro is on at Snapper Rocks today.
28	Sloppy, 0.9m	Е	Onshores have hammered the line-up all throughout the night. The points again the only option today.
29	Bumpy, 0.6-0.9m	E	Fun beachies along the N end of the coast and D'bah on the higher tide.

Source: Swellnet & CoatalWatch Surf Report

Generally, February experienced calm to average waves for the most of the month (0.6 to 1.5 m), with two moderate seas events on the  $4^{th}/5^{th}$  (waves to 2.6 m) and  $25^{th}/26^{th}$ .

**END**