

# TRESBP ENVIRONMENTAL MONITORING SUMMARY

## SEPTEMBER 2011

### OVERVIEW

In September, 2011:

- 37,325 m<sup>3</sup> of sand was pumped to Snapper Rocks East.
- There were no media articles referring to the project.
- Sea conditions were calm to average for most of the month with a high sea state on the 27<sup>th</sup>. During September significant wave heights ranged from 0.4 to 2.8 m).
- 2,139 boats crossings were recorded for the month (this is about 21% more than the September average).
- The estimated amount of sand moving north towards the Tweed River Entrance by natural processes in the order of 49,000 m<sup>3</sup> (this is about 175% of the September average).

### 1. SAND PUMPING & DREDGING

#### **Sand Delivery September 2011**

Pumped:	37,325 m <sup>3</sup>
Dredged:	0 m <sup>3</sup>
Total:	37,325 m <sup>3</sup>

#### **Sand Delivery January to September 2011 (YTD)**

Pumped:	423,706 m <sup>3</sup>
Dredged:	0 m <sup>3</sup>
Total:	423,706 m <sup>3</sup>

#### **Sand Delivery January to September 2010**

Pumped:	296,631 m <sup>3</sup>
Dredged:	0 m <sup>3</sup>
Total:	296,631 m <sup>3</sup>

#### **Stage II Sand Delivery May 2000 to September 2011**

Pumped:	6,234,444 m <sup>3</sup>
Dredged:	2,038,900 m <sup>3</sup>
Total:	8,273,344 m <sup>3</sup>



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

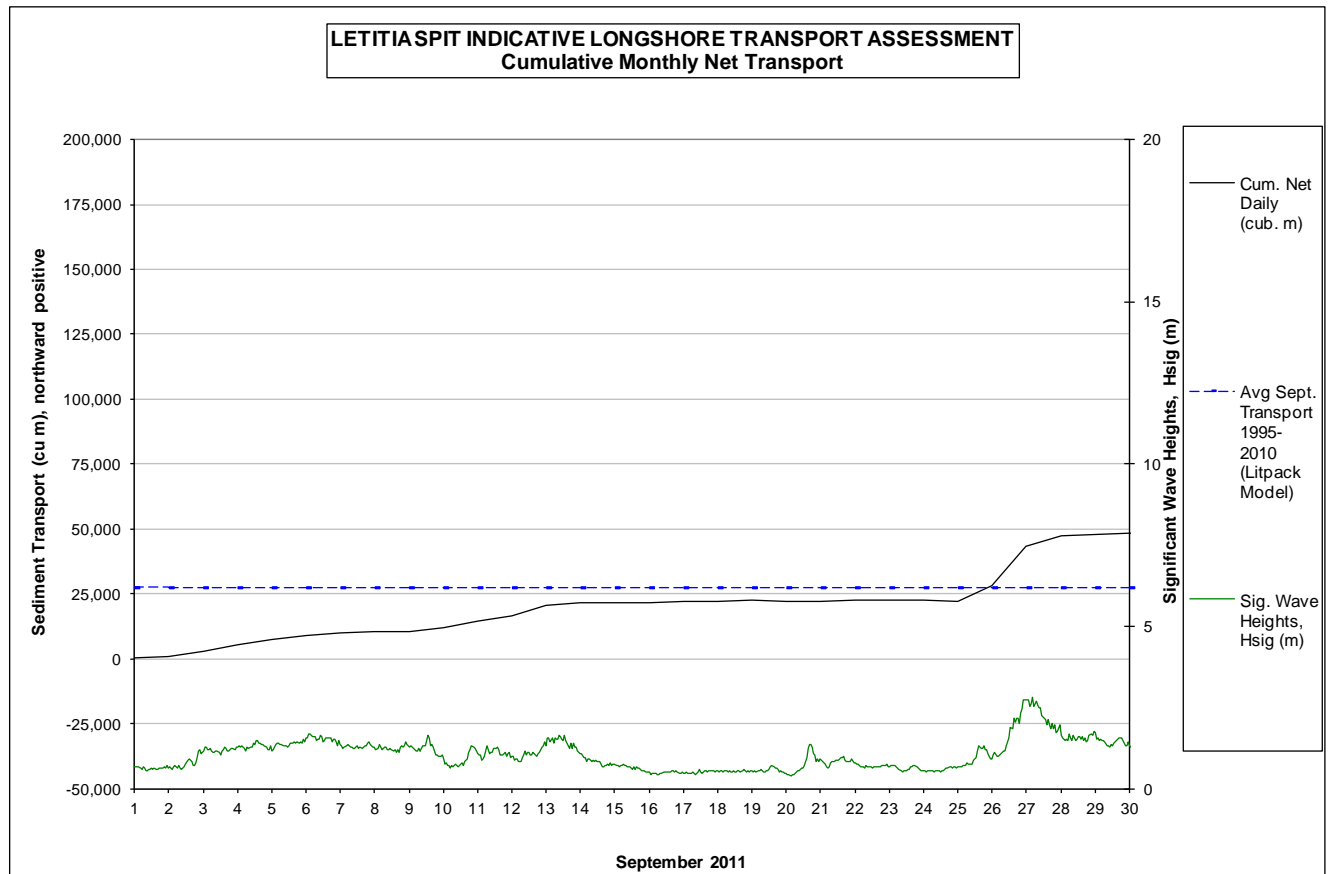


## 2. INDICATIVE LONGSHORE TRANSPORT

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


In September 2011 the estimated natural sand transport (moving N towards Tweed entrance): to be in the order of 44,000 m<sup>3</sup> to 49,000 m<sup>3</sup> (based on two separate models).

This result is higher than the average sand transport quantity for the month of September (ie about 175% of the average).

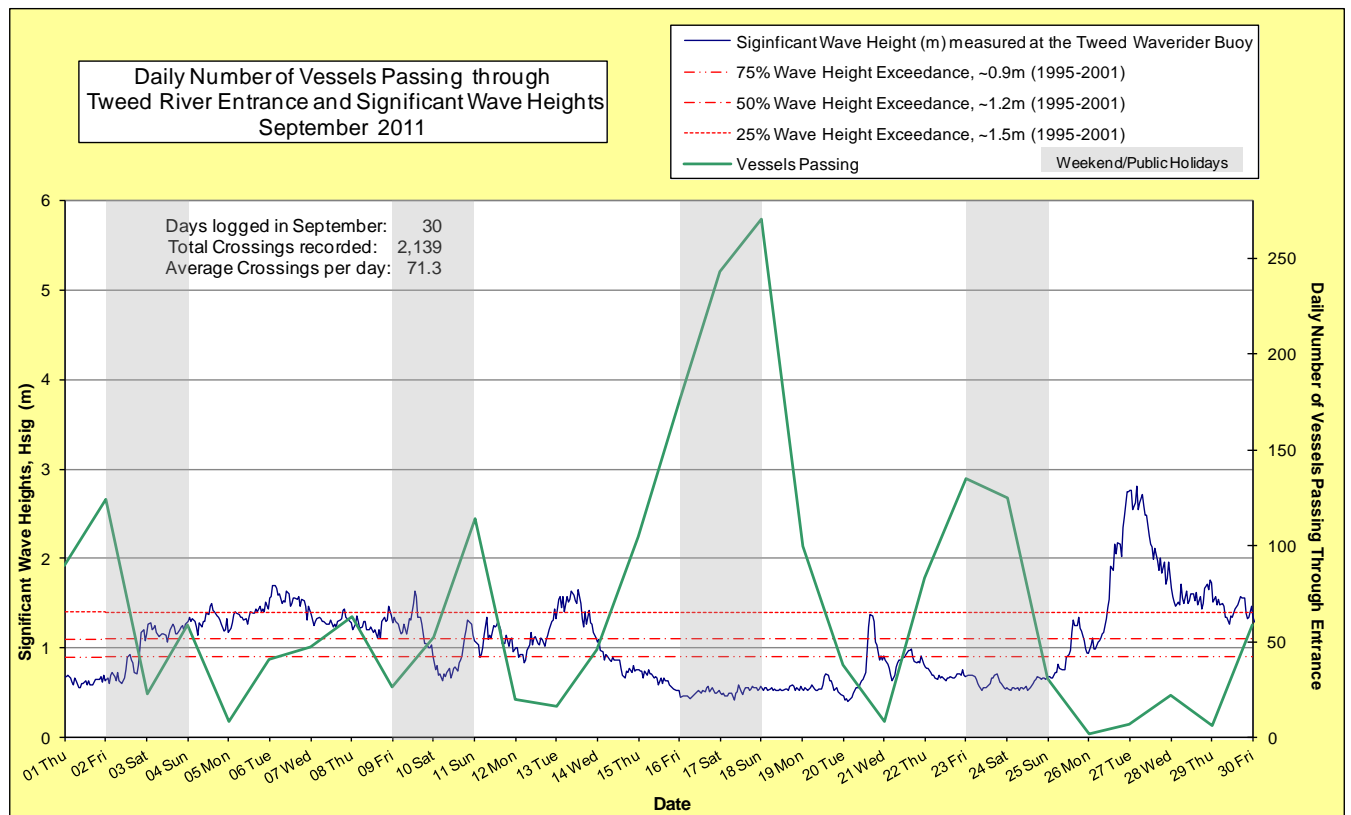
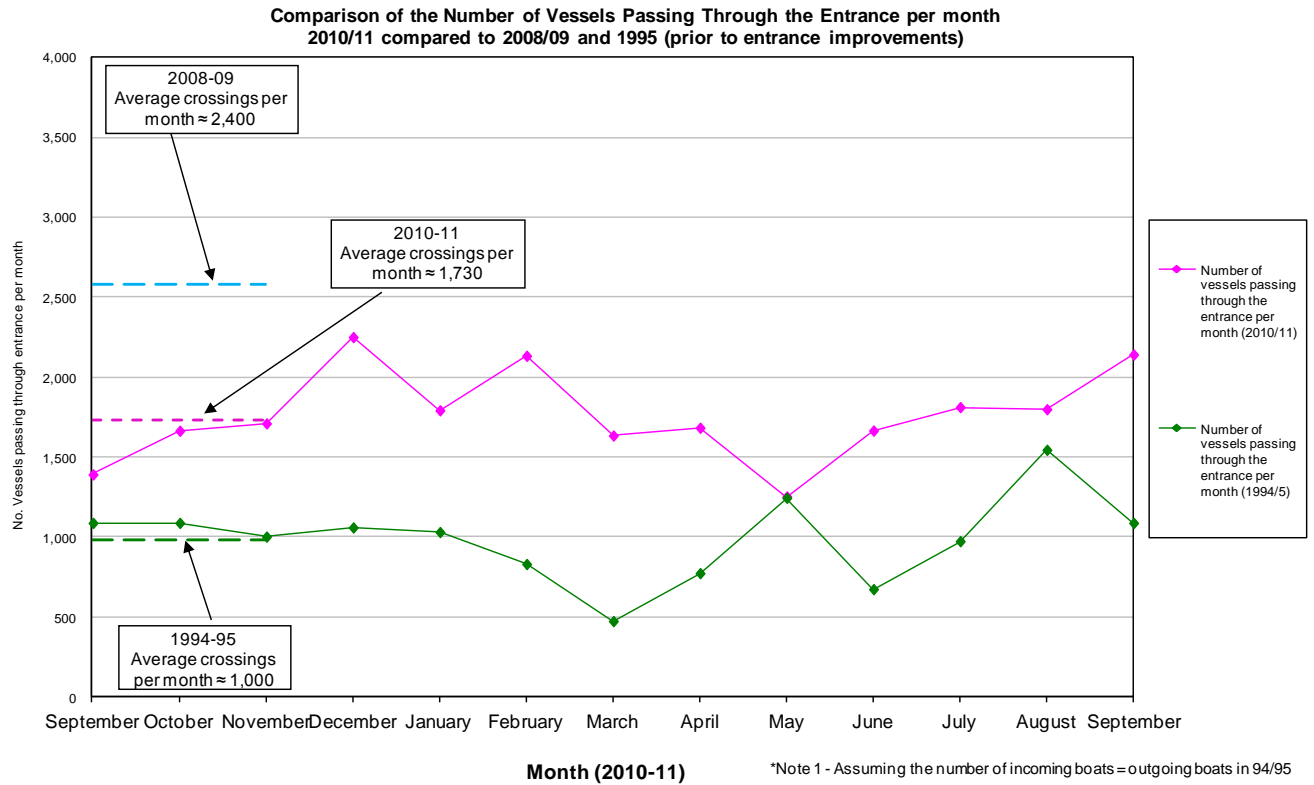


## 3. MEDIA COVERAGE

No media coverage referring to the project this month.

**4. TWEED RIVER ENTRANCE CONDITIONS****MARINE RESCUE NSW - MONITORING RESULTS**
 Weekends and public holidays

Date	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>						90
2 <sup>nd</sup>						124
3 <sup>rd</sup>						23
4 <sup>th</sup>						59
5 <sup>th</sup>						8
6 <sup>th</sup>						41
7 <sup>th</sup>						47
8 <sup>th</sup>						63
9 <sup>th</sup>						26
10 <sup>th</sup>						52
11 <sup>th</sup>						114
12 <sup>th</sup>						20
13 <sup>th</sup>						16
14 <sup>th</sup>						46
15 <sup>th</sup>						105
16 <sup>th</sup>						176
17 <sup>th</sup>						243
18 <sup>th</sup>						270
19 <sup>th</sup>						100
20 <sup>th</sup>						38
21 <sup>st</sup>						8
22 <sup>nd</sup>						83
23 <sup>rd</sup>						135
24 <sup>th</sup>						125
25 <sup>th</sup>						31
26 <sup>th</sup>						2
27 <sup>th</sup>						7
28 <sup>th</sup>						22
29 <sup>th</sup>						6
30 <sup>th</sup>						59
Total						2,139



## 5. WAVE & SURFING CONDITIONS

Dominant swell condition: Wave heights ranged from calm to average seas for most of the month (0.4 to 1.5 m) but a short high sea condition occurred on 27<sup>th</sup> with  $H_s$  recorded up to 2.8 m. Wave directions varied from NE to SE but predominantly from the ESE.

High sea events: 27<sup>th</sup> September.

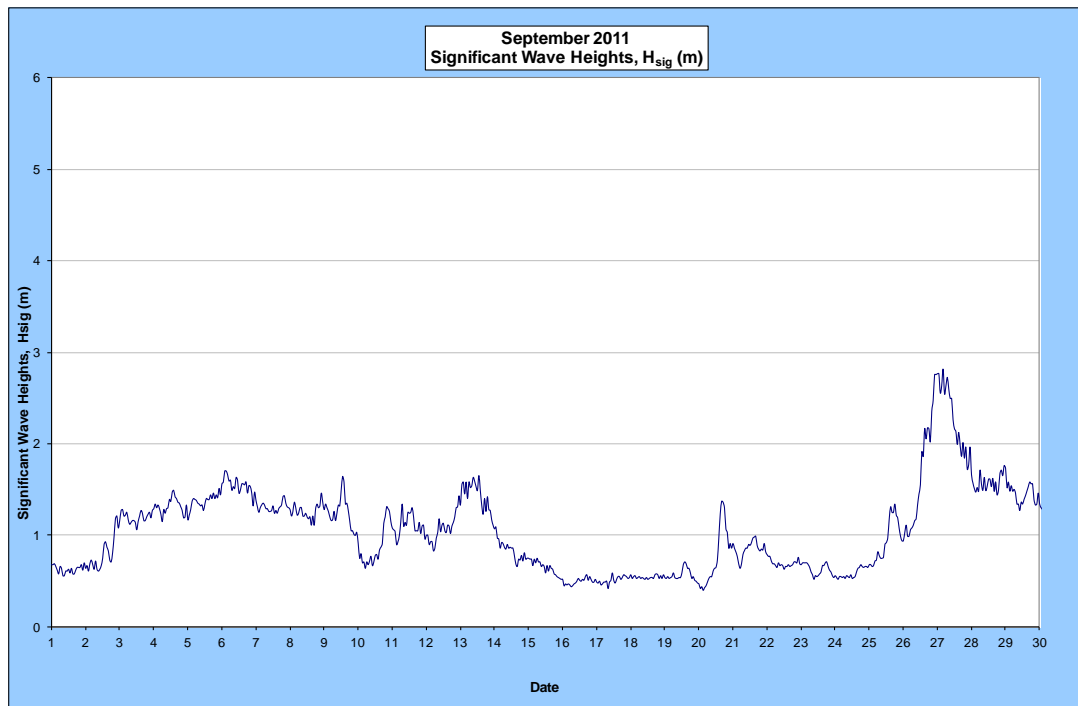
Monthly minimum significant wave height: 0.4 m on 20<sup>th</sup> September

Monthly maximum significant wave height: 2.8 m on 27<sup>th</sup> September

Number of days on which waves were below 1.0 m: 15 days

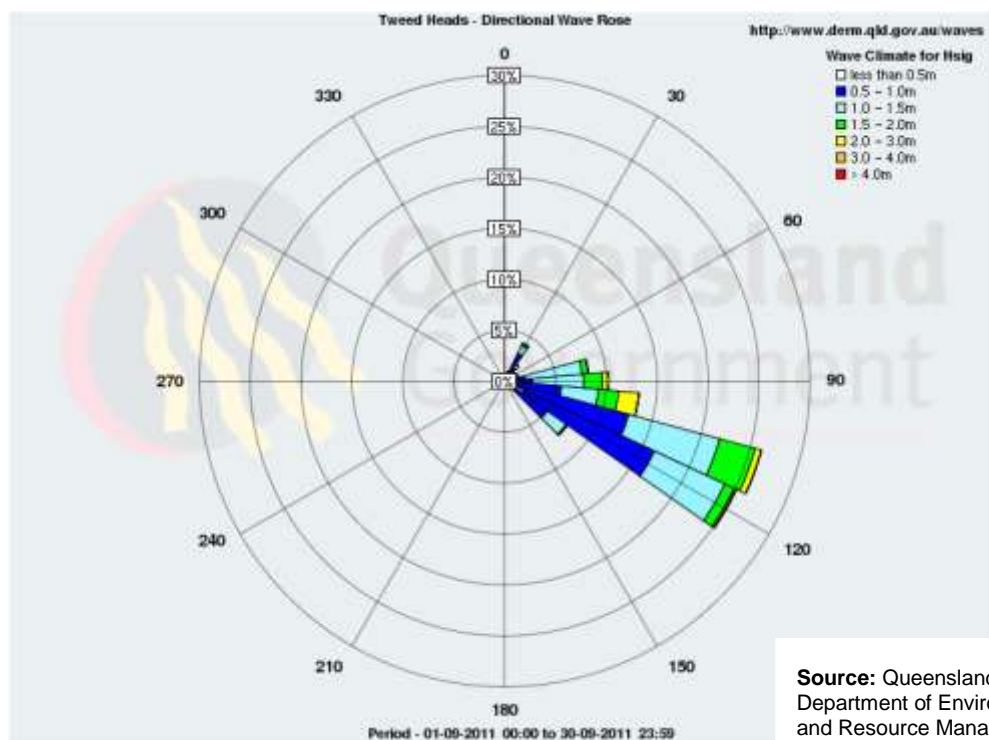
Number of days on which waves were above 2.0 m: 2 days

(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



**Source:** Queensland Department of Environment and Resource Management

## 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



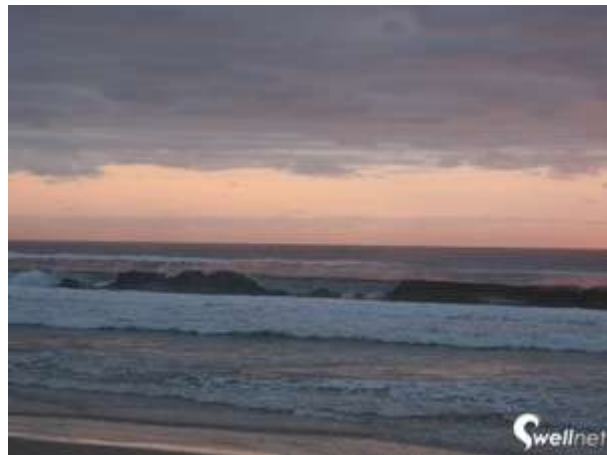
Greenmount, 13 September 2011 (source: Swellnet Surf)



Snapper Rocks, 26 September 2011 (source: Swellnet Surf Report)



Greenmount, 26 September 2011 (source: Swellnet Surf)



Coolangatta, 28 September 2011 (source: Swellnet Surf)

## SURF REPORT OVERVIEW

DATE	SURF	DIRECTION	COMMENTS
1	Clean, 0.3-0.6m	SE	Another day with very tiny surf across the Goldy.
6	Peak, 0.6-0.9m	SE	It's a little scrappy looking but we do have some fun waves about the Cooly region this morning.
8	Bumpy, 0.6m	SE	0.6m consistent swell.
9	Inconsistent, 0.6m	ENE	Bit of a bump and wobble out there this morning as the swell has a stronger hint of NE.
12	Clean, 0.3-0.45m	S	Try the usual wave magnets for the odd set on the lower tide as the wind goes more to the south.
13	Clean, 0.6m	S	Plenty of crew picking up on the increase at D'bah
14	Inconsistent, 0.3-0.6m	S	Some bigger sets still pushing into D'bah.
15	Peak, 0.3-0.45m	SE	Micro conditions. If you're desperate or learning, you'll find something on the Tweed coast or down D'bah way
16	Inconsistent, 0.3-0.45m	SE	Not much doing this morning. Coolie is for intents and purposes ... flat.
19	Inconsistent, but flat	SSE	No waves
20	Inconsistent, but flat	S	Carbon copy of yesterday
21	Choppy, but flat	SE	Still flat.
22	Inconsistent, <0.3m	E	Pretty much a carbon copy of yesterday's conditions.
23	Clean, 0.3m	ESE	It's still a lake out there today.
26	Clean, 0.3-0.6m	SE	The first edge of the new swell has arrived from the SSE.
27	Bumpy, 1.2-1.8m	ESE	Some good sand around, the points are more than good.
28	Inconsistent, 0.6-0.9m	SE	There's still 0.9m of solid long SE lines shutting down the beachies, and firing down the points
29	Lumpy, 0.9m	E	Not exactly a peach of a morning. There's around 0.9m of Easterly swell.

**Source:** Swellnet - Coolangatta Surf Report

Generally, September experienced mostly calm to average sea conditions with a short high seas condition on 27<sup>th</sup>.

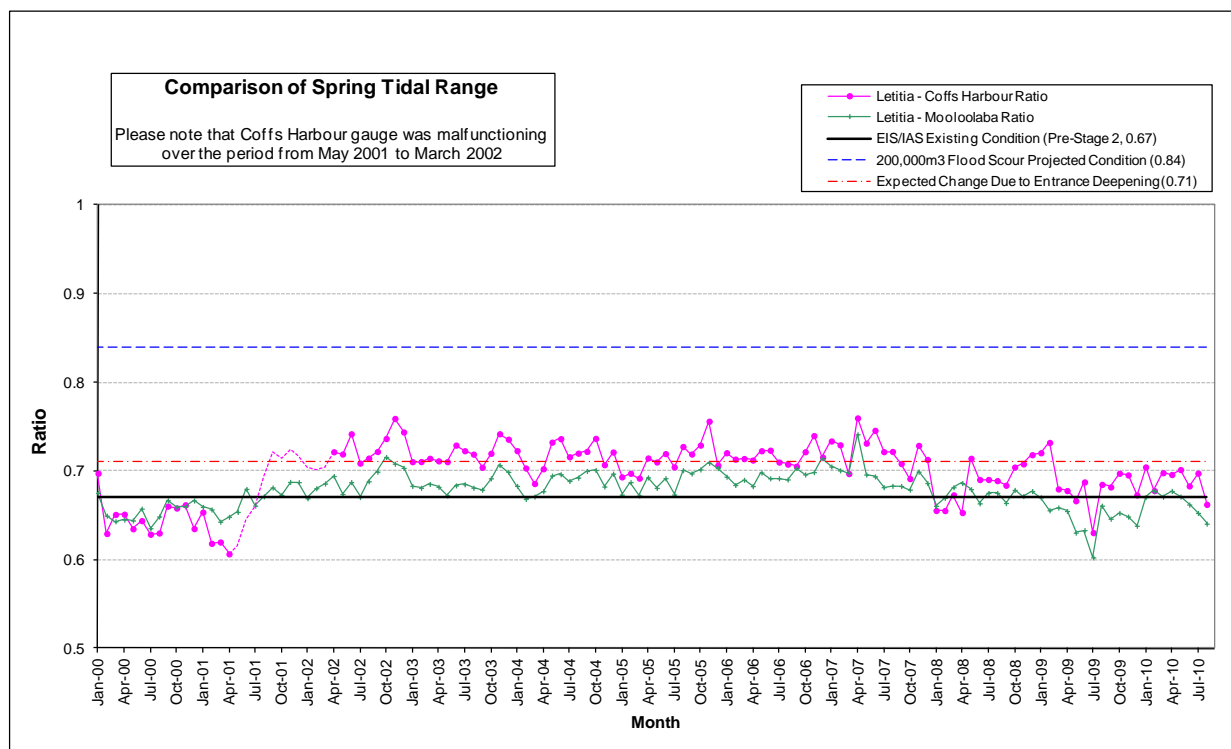
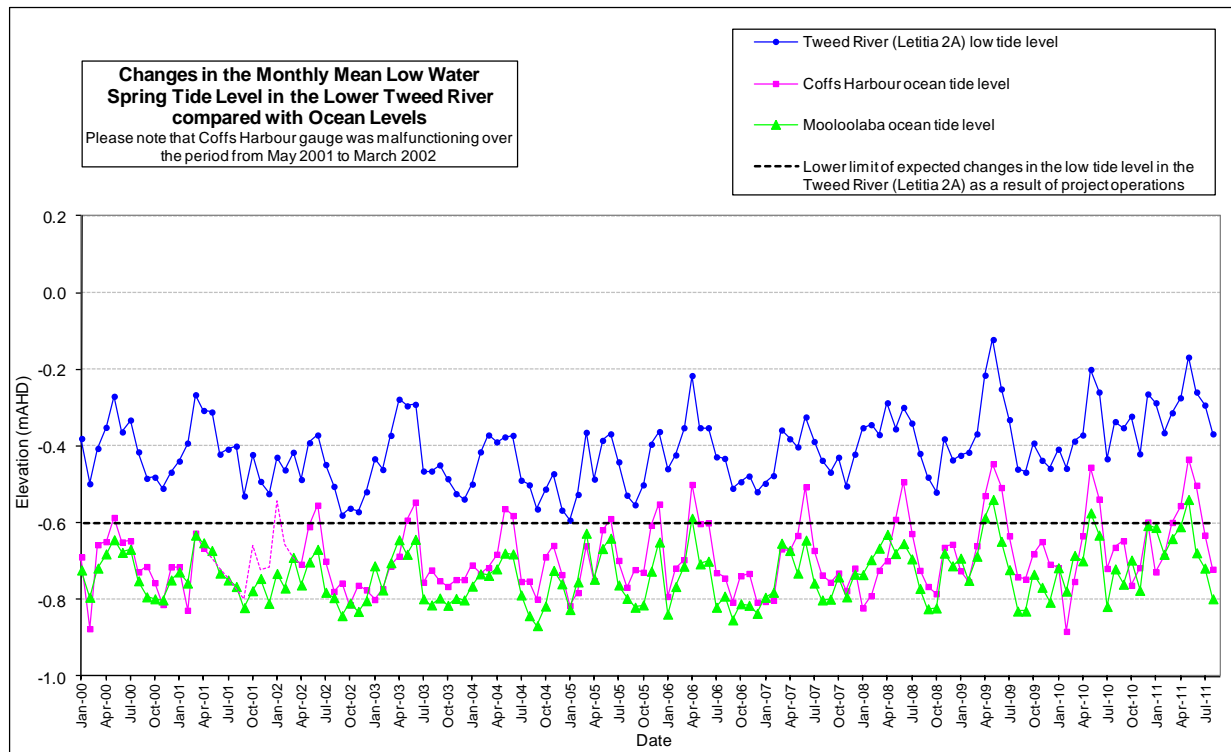
## 6. TIDES

Tweed River Mean Low Water spring (MLWS) tide level varied from a minimum of -0.368 m AHD to a maximum of -0.168 m AHD for the six months March 2011 to August 2011. This is similar to the natural river tidal behaviour prior to project operations.

Over the last six months (March 2011 to August 2011) the river spring tidal range behaviour has been similar to the natural behaviour observed prior to project operations.

The TRESBP has not had a significant impact on the Lower Tweed River tidal behaviour to August 2011.

Next set of data is due in February 2012 (six months).



END