# TRESBP ENVIRONMENTAL MONITORING SUMMARY JUNE 2012

## OVERVIEW

In June, 2012:

- 64,953 $m^3$ of sand was pumped to Snapper Rocks East.
- There were no media articles which related directly to the project and only one media article that related to ocean storm conditions.
- Sea conditions were above average for most of the month with two major ocean storm events ($12^{th}$ - $14^{th}$ & $29^{th}$) with peak significant wave heights to 5.2 m.
- 1,100 vessel crossings were recorded for the month (this is about 40% less than the June average).
- The estimated amount of sand moving north towards the Tweed River Entrance by natural processes is in the order of 167,000 $m^3$ (this is about three times the June average).

## 1. SAND PUMPING & DREDGING

### Sand Delivery June 2012

| | |
|---|---|
| Pumped: | 64,953 $m^3$ |
| Dredged: | 0 $m^3$ |
| Total: | 64,953 $m^3$ |

### Sand Delivery January to June 2012 (YTD)

| | |
|---|---|
| Pumped: | 234,590 $m^3$ |
| Dredged: | 0 $m^3$ |
| Total: | 234,590 $m^3$ |

### Sand Delivery January to June 2011

| | |
|---|---|
| Pumped: | 276,509 $m^3$ |
| Dredged: | 0 $m^3$ |
| Total: | 276,509 $m^3$ |

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

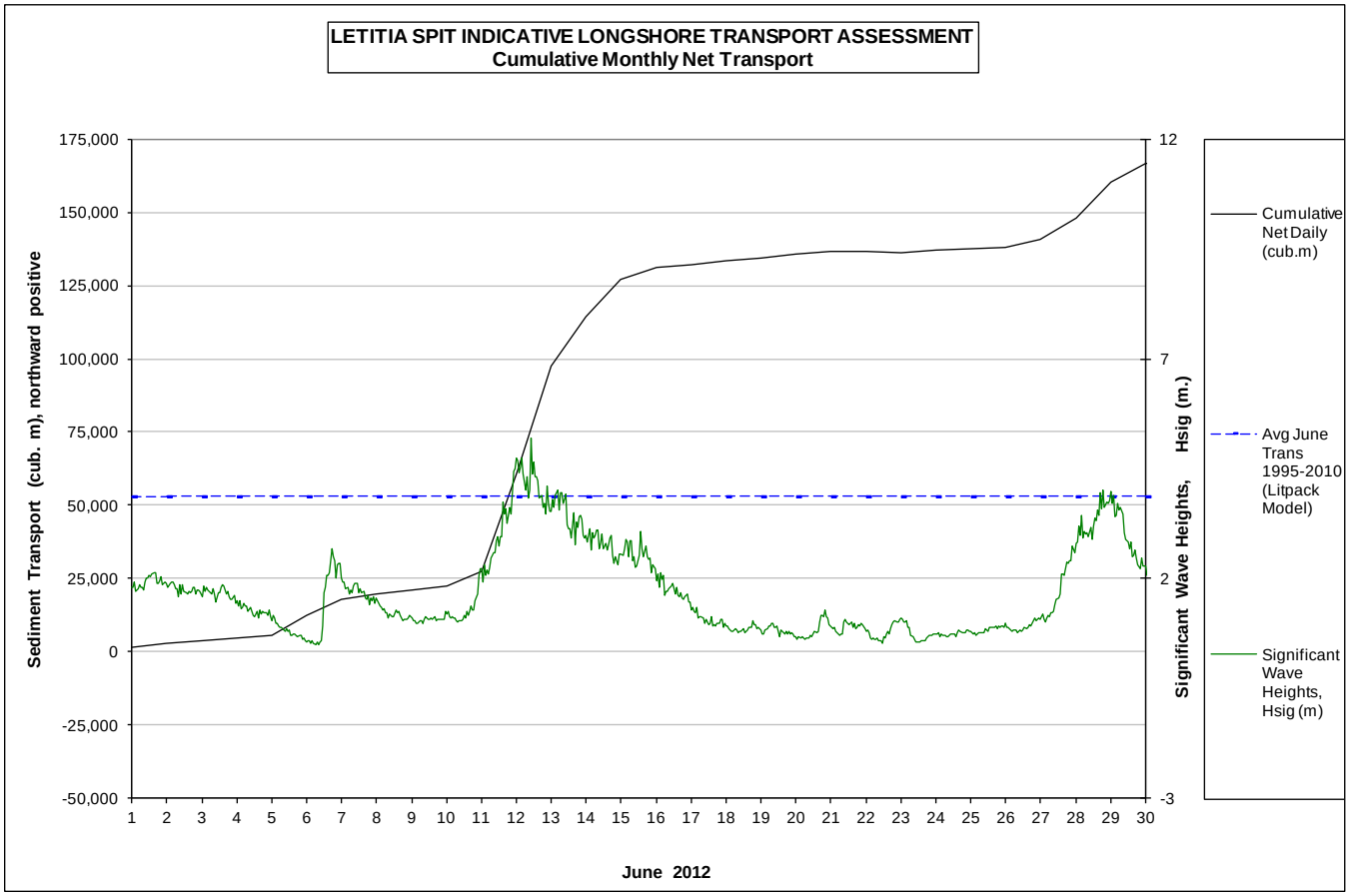
| | |
|---|---|
| Pumped: | 6,563,497 $m^3$ |
| Dredged: | 2,039,104 $m^3$ |
| Total: | 8,602,601 $m^3$ |

## 2. INDICATIVE LONGSHORE TRANSPORT

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

In June 2012 the estimated natural sand transport (moving N towards Tweed entrance): to be in the order of 167,000 $m^3$.

This result is about three times the average sand transport quantity of approximately 53,000 $m^3$ for the month of June.




## 3. MEDIA COVERAGE

There were no media reports directly relating to the project during June 2012.

However, the media did report on the ocean conditions resulting from severe ocean storm of 12th to 14th June with,

http://www.mydailynews.com.au/story/2012/06/18/tweed-buoy-records-9m-waves/ reporting in part,

*"The Tweed wave rider buoy registered a humungous high reading of 9m..."*

Please note that this wave height is a maximum recorded individual wave height and is distinct from the peak significant wave height of 5.2 m defined in Section 5 below.

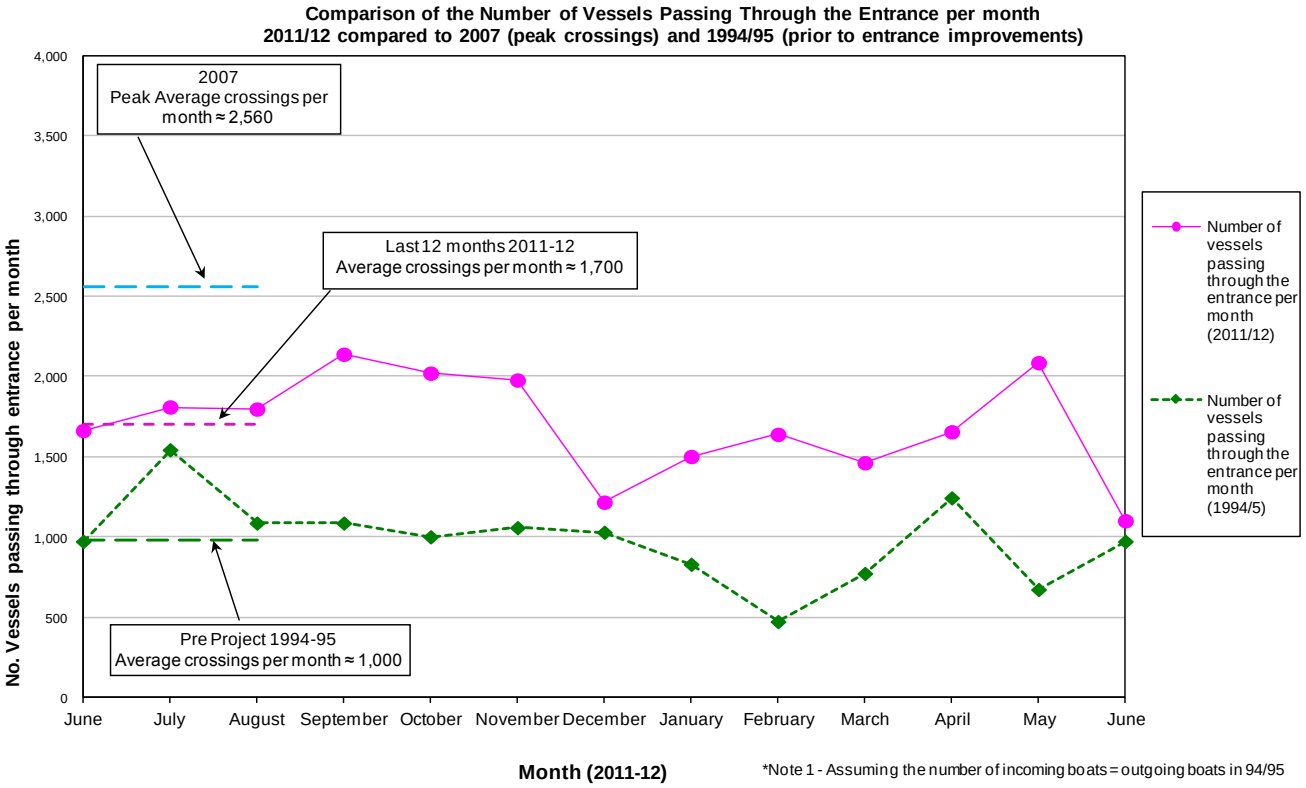
## 4. TWEED RIVER ENTRANCE CONDITIONS

### MARINE RESCUE NSW - MONITORING RESULTS

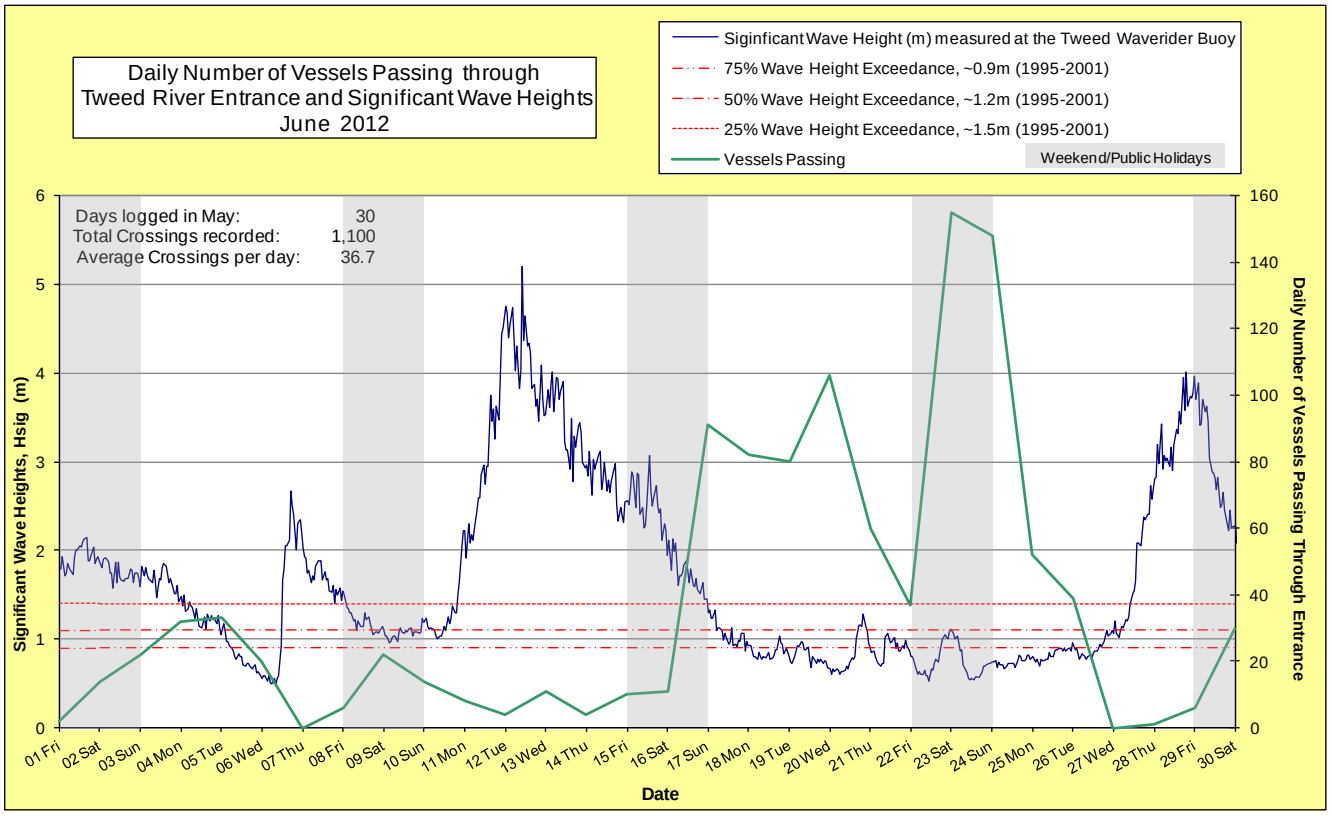
Weekends and public holidays

| Date | Navigation Rating Impassable----------Good | | | | | Number of Boats |
|---|---|---|---|---|---|---|
| | Impassable (1) | Difficulty Encountered (2) | Some Difficulty Encountered (3) | Relatively Good Crossing (4) | Good Conditions (5) | |
| 1st | | | | | | 2 |
| 2nd | | | | | | 14 |
| 3rd | | | | | | 22 |
| 4th | | | | | | 32 |
| 5th | | | | | | 33 |
| 6th | | | | | | 20 |
| 7th | | | | | | 0 |
| 8th | | | | | | 6 |
| 9th | | | | | | 22 |
| 10th | | | | | | 14 |
| 11th | | | | | | 8 |
| 12th | | | | | | 4 |
| 13th | | | | | | 11 |
| 14th | | | | | | 4 |
| 15th | | | | | | 10 |
| 16th | | | | | | 11 |
| 17th | | | | | | 91 |
| 18th | | | | | | 82 |
| 19th | | | | | | 80 |
| 20th | | | | | | 106 |
| 21st | | | | | | 60 |
| 22nd | | | | | | 37 |
| 23rd | | | | | | 155 |
| 24th | | | | | | 148 |
| 25th | | | | | | 52 |
| 26th | | | | | | 39 |
| 27th | | | | | | 0 |
| 28th | | | | | | 1 |
| 29th | | | | | | 6 |
| 30th | | | | | | 30 |
| | | | | | **Total** | **1,100** |

***Source:*** *Marine Rescue NSW, Point Danger*




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



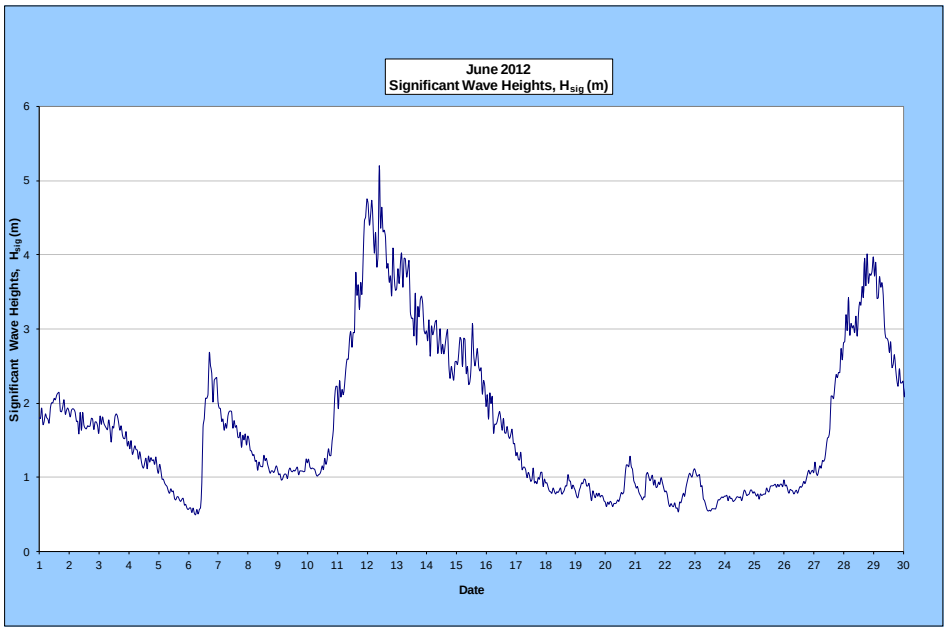
## 5. WAVE CONDITIONS

Dominant swell condition: Significant wave heights were above average for most of the month. There were two major ocean storm events (12th - 14th and 29th) with peak significant wave heights to 5.2 m. Swell direction ranged from ENE to ESE but dominantly from the E.

Major sea events: 12th - 14th and 29th June
Monthly minimum significant wave height: 0.5 m on 6th June.
Monthly peak significant wave height: 5.2 m on 12th June.
Number of days on which waves were below 1.0 m: 10 days
Number of days on which waves were above 2.0 m: 10 days

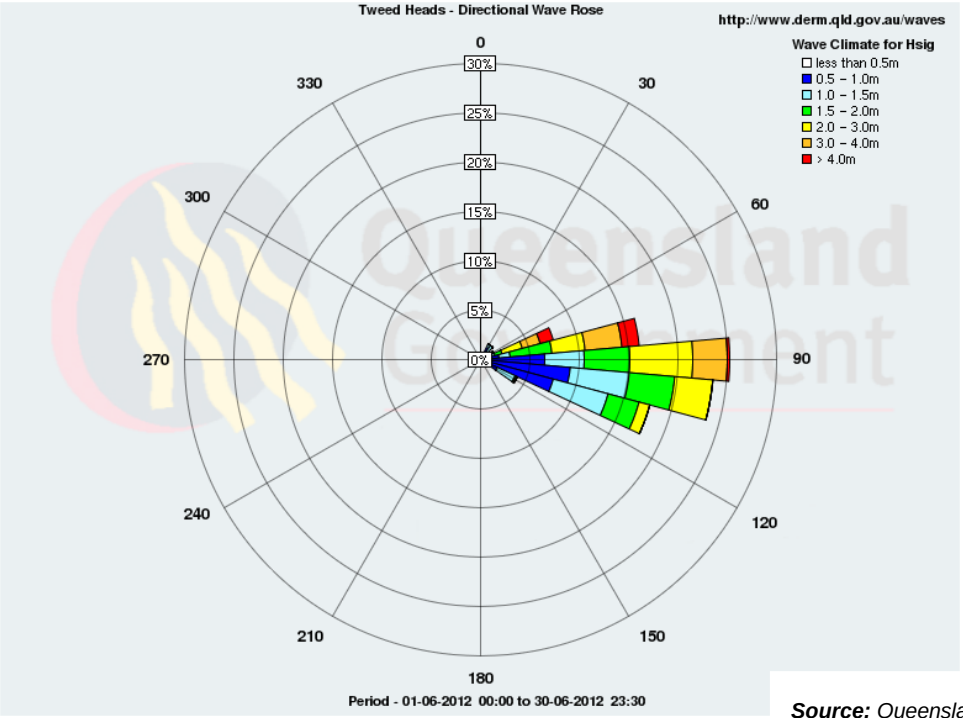
**Note:** Significant wave heights or $H_{sig}$ is the average of the highest one third of recorded waves.

*(**Source:** Tweed & Brisbane Wave Buoy; QLD Dept. Of Environment & Heritage Protection)*




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




***Source:*** *Queensland Government*

**END**