

TRESBP ENVIRONMENTAL MONITORING SUMMARY

JULY 2009

OVERVIEW

In July 2009:

- 20,053 m³ of sand was pumped.
- One media article referred directly to the project and was neutral in view.
- Entrance conditions were mainly moderate with 1,888 boat crossings recorded (roughly 85% of the July average).
- Surf quality from Snapper Rocks to Kirra was mainly poor to average due to a lack of swell, except for during 10-13 July when conditions were good to excellent.
- The estimated amount of sand moving north towards the Tweed River Entrance by natural processes was about 65,000 m³ (equal to the July average).

1. SAND PUMPING & DREDGING

Sand Delivery July 2009

| | |
|---------------------|----------------------|
| Snapper Rocks East: | 17,172m ³ |
| Snapper Rocks West: | 2,881m ³ |
| Total: | 20,053m ³ |

Sand Delivery January to July 2009

| | |
|----------|-----------------------|
| Pumped: | 281,068m ³ |
| Dredged: | 0m ³ |
| Total: | 281,068m ³ |

Sand Delivery January to July 2008

| | |
|----------|-----------------------|
| Pumped: | 399,540m ³ |
| Dredged: | 137,172m ³ |
| Total: | 536,712m ³ |

Stage II Sand Delivery May 2000 to July 2009

| | |
|----------|-------------------------|
| Pumped: | 5,286,965m ³ |
| Dredged: | 1,979,755m ³ |
| Total: | 7,266,720m ³ |



Land and Property
Management Authority

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



Queensland Government

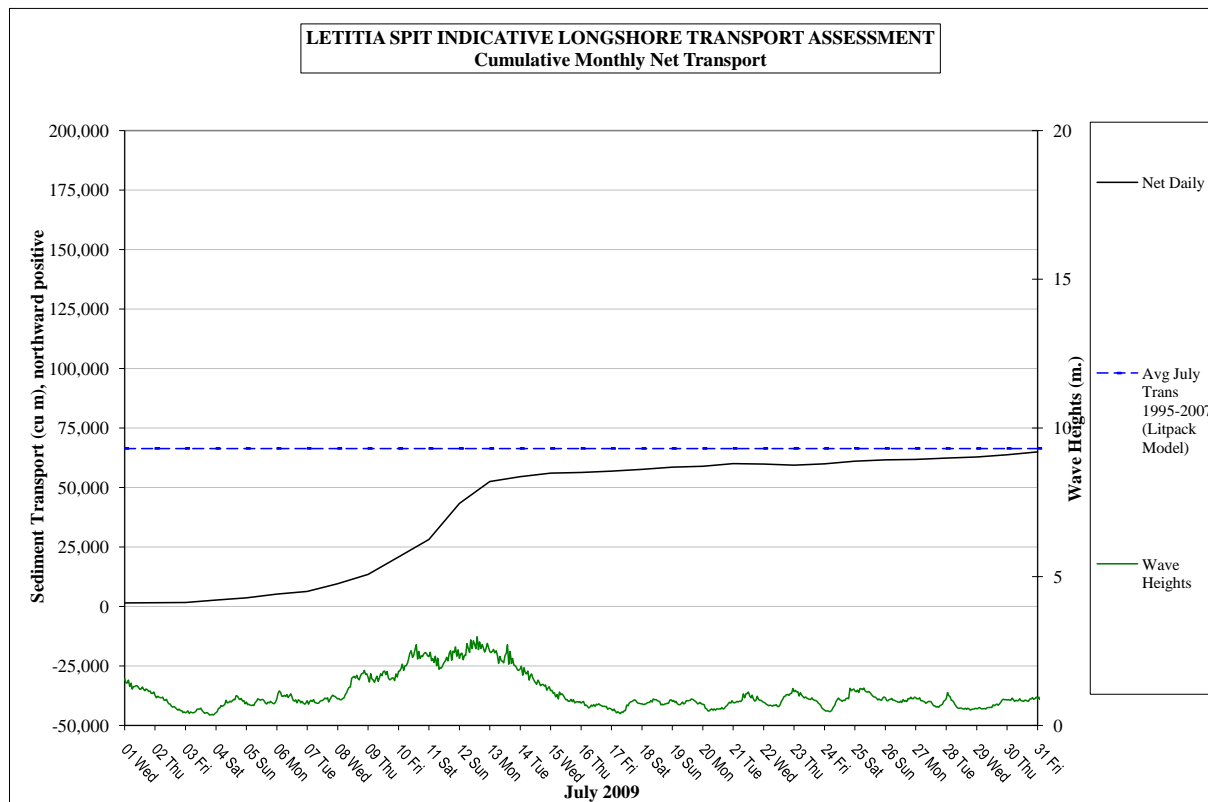


2. INDICATIVE LONGSHORE TRANSPORT

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

July 2009 estimated natural sand transport (moving N towards Tweed entrance): 64,903 m³.


This result is about equal to the average sand transport quantity for the month of July.



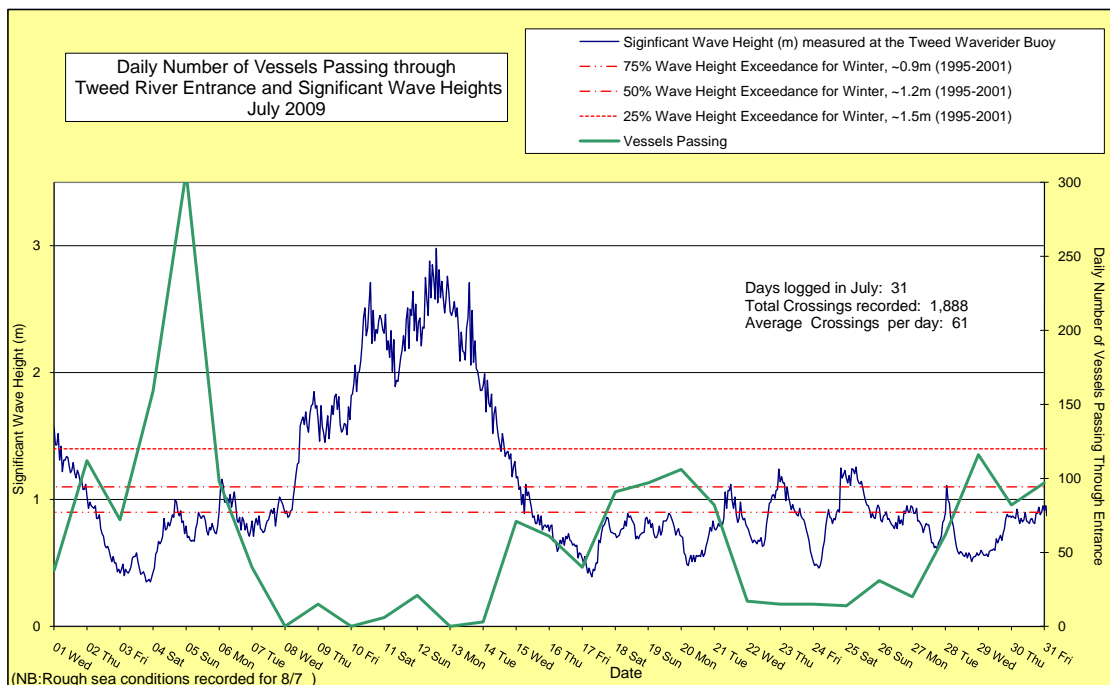
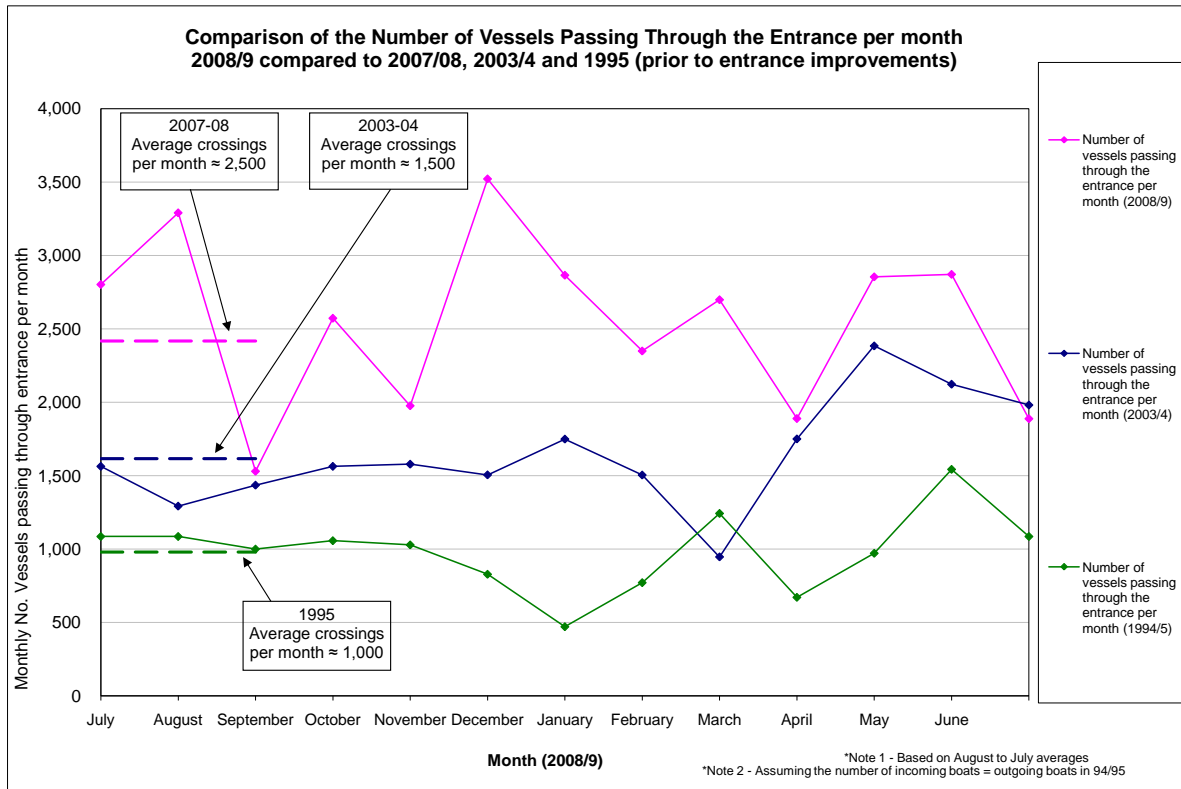
3. MEDIA COVERAGE

Gold Coast Mail, 22 July, "Kirra's Surfstock boost"

"The Queensland government has agreed to consider questions submitted by coastal environment consultant Neil Lazarow and Currumbin MP Jann Stuckey about the controversial \$70 million sand-pumping contract with McConnell Dowell, following a failed freedom of information bid to obtain the contract. The questions relate to environmental care, surf quality, amounts of sand pumped, possible penalties for over-supplying sand, and flexibility in the contract terms."

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

| Date | Entrance Conditions | Navigation Rating Impassable-----Good | | | | | Number of Boats |
|------------------|---------------------|--|------------------------|-----------------------------|--------------------------|-----------------|-----------------|
| | | Impassable | Difficulty Encountered | Some Difficulty Encountered | Relatively Good Crossing | Good Conditions | |
| 1 st | Moderate | | | | | | 38 |
| 2 nd | Moderate | | | | | | 112 |
| 3 rd | Moderate | | | | | | 72 |
| 4 th | Moderate | | | | | | 159 |
| 5 th | Moderate | | | | | | 307 |
| 6 th | Moderate | | | | | | 98 |
| 7 th | Moderate | | | | | | 40 |
| 8 th | Rough | | | | | | 0 |
| 9 th | Moderate | | | | | | 15 |
| 10 th | Moderate | | | | | | 0 |
| 11 th | Moderate | | | | | | 6 |
| 12 th | Moderate | | | | | | 21 |
| 13 th | Moderate | | | | | | 0 |
| 14 th | Moderate | | | | | | 3 |
| 15 th | Moderate | | | | | | 71 |
| 16 th | Moderate | | | | | | 61 |
| 17 th | Moderate | | | | | | 40 |
| 18 th | Moderate | | | | | | 91 |
| 19 th | Moderate | | | | | | 97 |
| 20 th | Moderate | | | | | | 106 |
| 21 st | Moderate | | | | | | 82 |
| 22 nd | Moderate | | | | | | 17 |
| 23 rd | Moderate | | | | | | 15 |
| 24 th | Moderate | | | | | | 15 |
| 25 th | Moderate | | | | | | 14 |
| 26 th | Moderate | | | | | | 31 |
| 27 th | Moderate | | | | | | 20 |
| 28 th | Moderate | | | | | | 62 |
| 29 th | Moderate | | | | | | 116 |
| 30 th | Moderate | | | | | | 82 |
| 31 st | Moderate | | | | | | 97 |
| | | | | | | | 1,888 |



5. WAVE & SURFING CONDITIONS

Dominant swell condition: Calm ESE waves throughout the month, except for 10 to 13 July when a ESE moderate sea event occurred, and 22 to 24 July when waves were small from NE.

High sea events: None. Moderate sea from 10 to 13 July (max Hsig = 2.98 m)

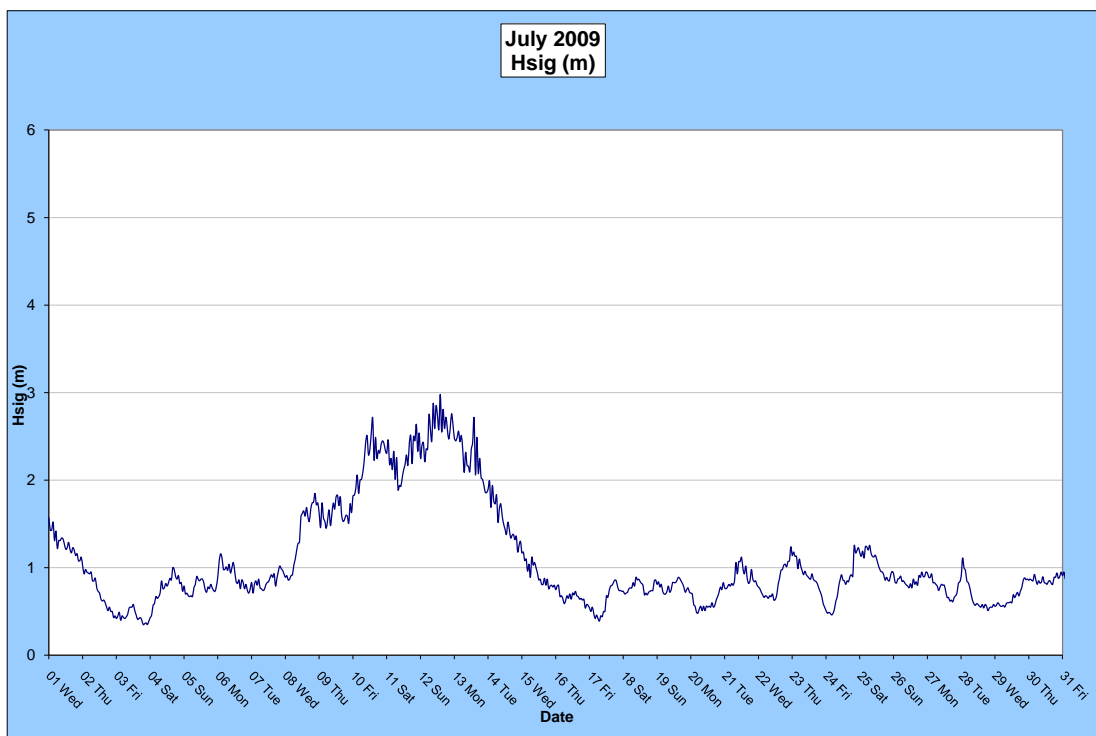
Monthly minimum significant wave height: 0.35 m on 3 July

Monthly maximum significant wave height: 2.98 m on 12 July

Number of days with waves below 1.0 m: 24 days

Number of days with waves above 2.0 m: 4 days

(Source: Tweed & Brisbane Waverider Buoy; BoM)



A link to data recorded by the Tweed Waverider Buoy is available at <http://www.epa.qld.gov.au/projects/waves/site.cgi?siteid=28&noback=4>

UPCOMING SURF & SURF LIFE SAVING EVENTS

- High Performance Adult Surf Camps – 1 to 23 August, Tweed-Byron Coast
- Redbull Junior Surf Masters Qualifier – 15 to 16 August, Gold Coast
- Mark Richards Elite Surf Camp – 24 to 28 August, Tweed-Byron Coast

Source: Surfing Australia & Surf Life Saving Queensland

SURF REPORT OVERVIEW

Based on media reports and surf quality observations by volunteer Mr Brian Mason.

| Date | Surfing Conditions |
|------------|---|
| 1/7 | Average sized SE swell, fun waves before strong afternoon NNW winds. |
| 2/7 | Lots of small SE waves along the coast. |
| 3-8/7 | Flat to tiny ESE waves, light offshore winds but few waves for surfing |
| 9-10/7 | Rising SE swell with S winds making for good average-sized point waves |
| 11-13/7/09 | SE swell rising from average to large with light offshore winds. Outer storm banks at Rainbow Bay and Burleigh blocking waves in these areas. Elsewhere some excellent waves for surfing. |
| 14-15/7 | E swell dropping in size from large to average. Offshore winds and good surfing waves. |
| 16-23/7 | Only small waves from ESE to ENE, wind affected at times. |
| 24-30/7 | Tiny to small SE waves. Light winds and calm conditions but few waves for surfing. |

END