TWEEDSAND BYPASSING

OVERVIEW

In January 2017:

- 15,474 m^3 of sand was pumped to Snapper Rocks East.
- 0 m^3 of sand was pumped to Duranbah Beach.
- The Project no longer searches for media articles relating to the area.
- Wave heights ranged from calm to moderate (0.51 to 2.13 m), with a maximum significant wave height of 2.13 on 7th January. Wave directions varied from SE by S to NE by N but mostly from the SE by E.
- 3143 vessel crossings were recorded for the month (This is 162% of the January average).
- The estimated amount of sand moving north towards the Tweed River entrance by natural processes was in the order of 24,548 m^3 (this is 53% of the January average of 45,945 m^3).

1. SAND PUMPING & DREDGING

Sand Delivery January 2017

Pumped:	15,474 m^3
Dredged:	0 m^3
Total:	15,474 m^3

The number of days sand was pumped this month = 22

Sand Delivery January 2017 to December 2017

Pumped:	15,474 m^3
Dredged:	0 m^3
Total:	15,474 m^3

Stage II Sand Delivery April 2000 to January 2017

Pumped:	8,538,103 m^3
Dredged:	2,103,910 m^3 *
Total:	10,642,013 m^3 *

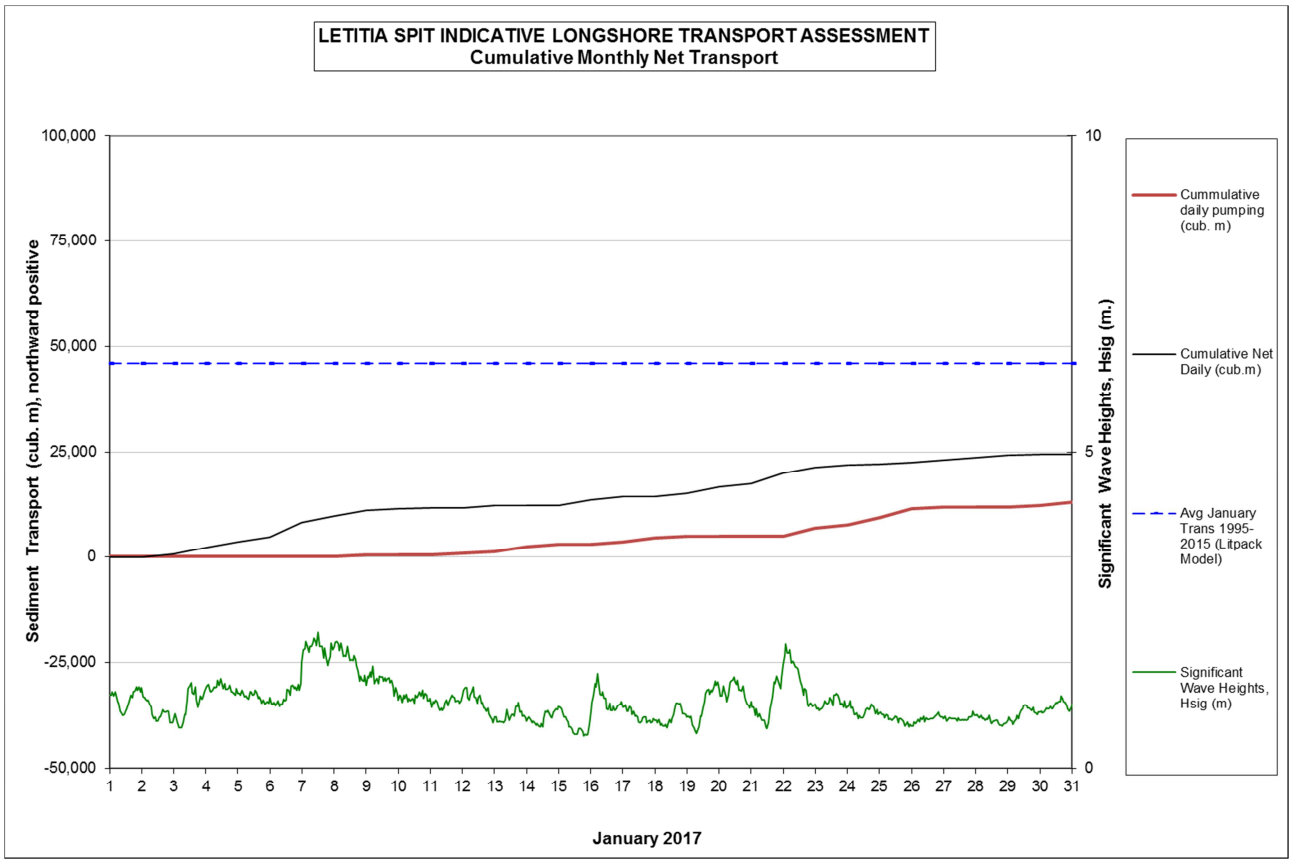
* This Includes 22,870 m^3 of sand delivered by dredge to Palm Beach between June and September 2005

2. INDICATIVE LONGSHORE TRANSPORT

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

In January 2017 the estimated natural sand transport moving north towards the Tweed River entrance was calculated to be in the order of 24,548 m^3.

This result is 53% of the average estimated sand transport quantity of approximately 45,945 m^3 for the month of January.



3. TWEED RIVER ENTRANCE USAGE

Marine Rescue NSW - Monitoring Results (Not including trawlers)

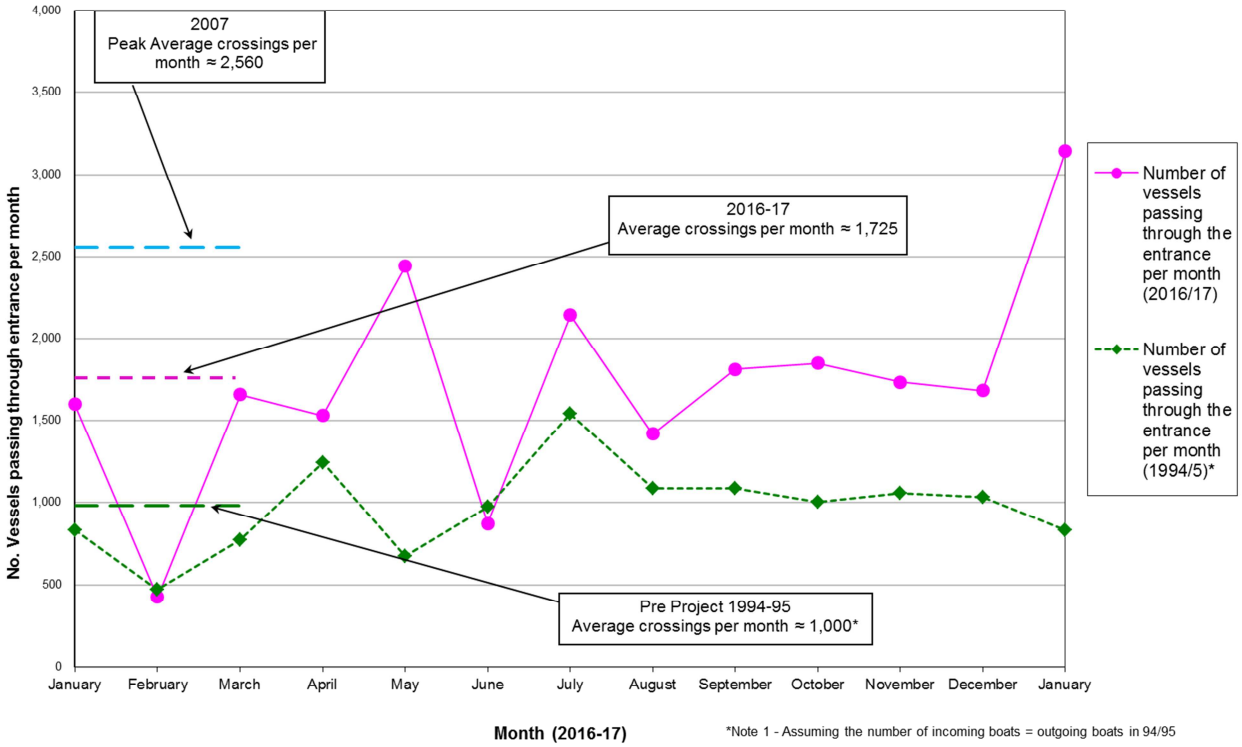
Weekends and public holidays

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						14
2nd						83
3rd						24
4th						22
5th						124
6th						164
7th						25
8th						40
9th						117
10th						88
11th						30
12th						57
13th						180
14th						31
15th						149
16th						116
17th						217
18th						31
19th						8
20th						86
21st						87
22nd						75
23rd						77
24th						95
25th						84
26th						311
27th						134
28th						228
29th						345
30th						60
31st						41
					Total	3143

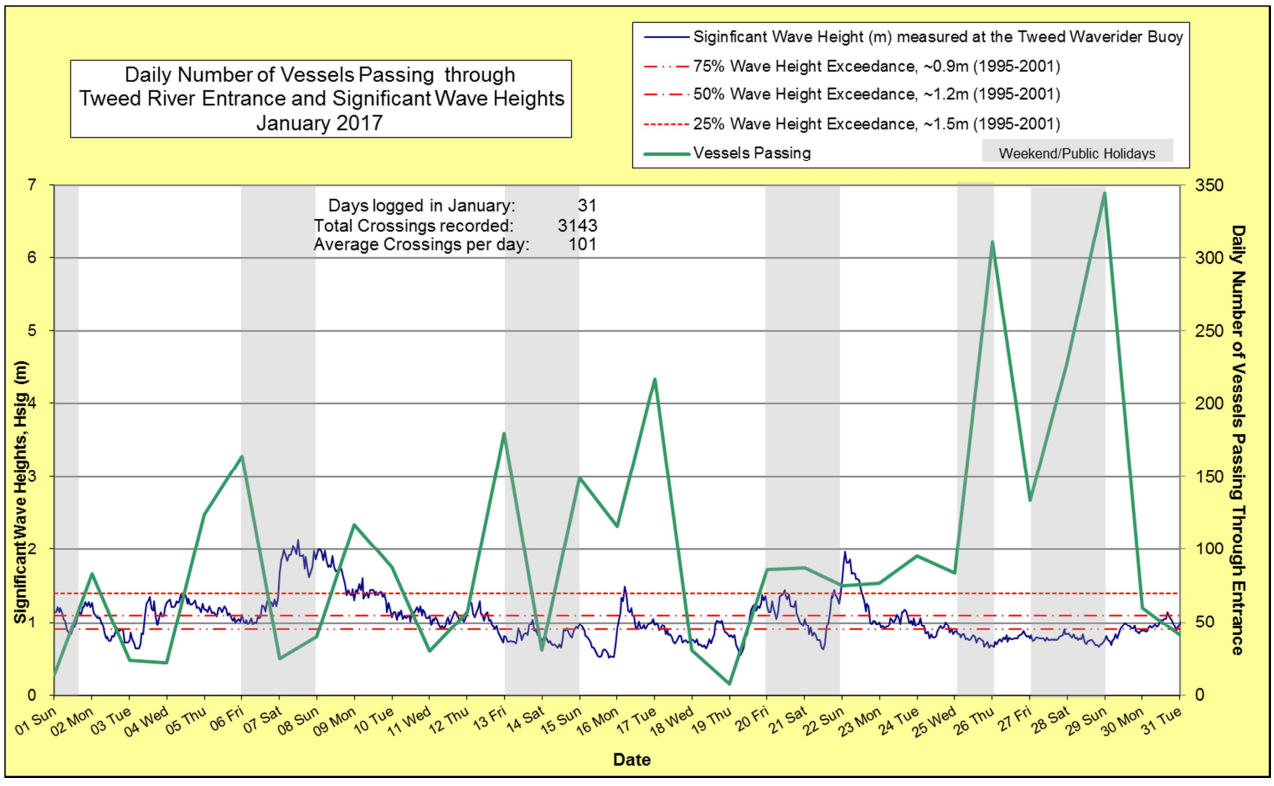
Source: *Marine Rescue NSW, Point Danger*

TWEED SAND BYPASSING

Comparison of the number of vessels passing through the entrance per month 2016/17 compared to 2007 (peak crossings) and 1994/95 (prior to entrance improvements)



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



4. WAVE CONDITIONS

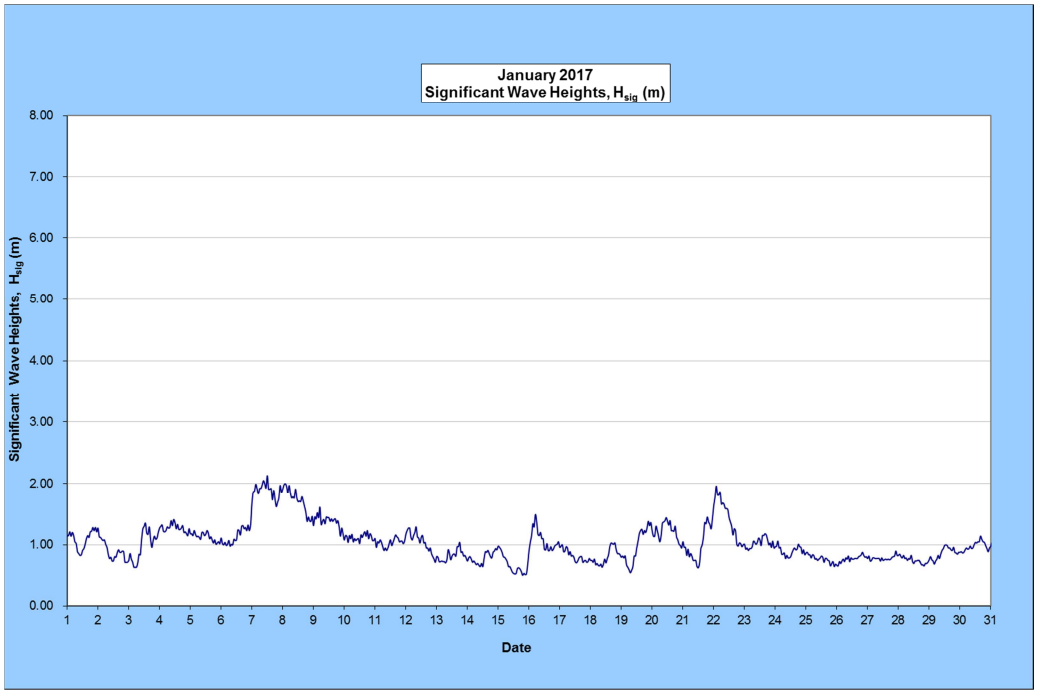
Wave conditions over the month: Wave heights ranged mostly from calm to moderate (0.51 to 2.13 m), with a maximum significant wave height of 2.13 m on 7th January. Wave directions varied from SE by S to NE by N but mostly from the SE by E.

Monthly minimum significant wave height: 0.51 m on 15th January
Monthly maximum significant wave height: 2.13 m on 7th January

Number of days on which waves were below 1.0 m at some point in the day: 25 days

Number of days on which waves were above 2.0 m at some point in the day: 1 day

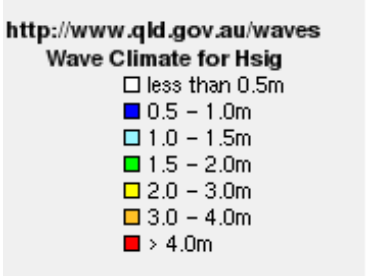
Note: Significant wave height (H_{sig}) is defined as the average of the highest one-third of waves recorded over a period of approximately 30 minutes.

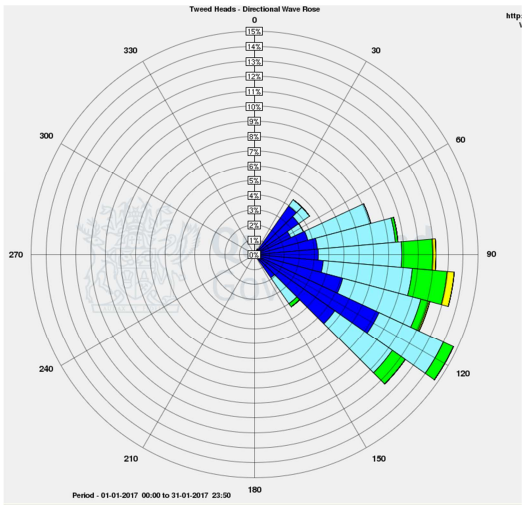


(***Source:*** *Tweed Wave Buoy; Queensland Government)*

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

WAVE DIRECTION





Source: *Queensland Government*