

# TWEED SAND BYPASSING

MEETING DETAILS	
<b>Meeting Title:</b>	Tweed Sand Bypass Advisory Committee (AC)
<b>Meeting No.:</b>	02-2024
<b>Date / Time:</b>	5:00pm 13 May 2024
<b>Location:</b>	Tweed Shire Council, Tweed Heads Administration Office
<b>Attendees:</b>	Jane Lofthouse – NSW LGA AC Member Wayne Bartholomew – Qld AC member Councillor Gail O'Neill – Guest (reappointment to Qld LGA AC Member following Local Government elections) Simon Walter – NSW Project Director Darren Hulm - NSW AC member (via MS Teams) Linda Rijkenberg – Qld State AC member (via MS Teams) Celine Roux – Qld Project Director (via MS Teams) Matthew Harry – Principal Manager TSB Sarah Dobe – TSB NSW team member Joshua Taylor - NSW State AC member (chair)
<b>Absent / Apologies:</b>	Peter Turner – Qld AC Member Bruce Lee – Guest Brendon Luke - TSB NSW team member Adrian Barwick – NSW team member Larry Woodland - Proxy for NSW AC member Robert Alexander
<b>Meeting notes prepared by:</b>	J. Taylor
<b>File Path:</b>	M.07.01

AGENDA				
Item	Description	Start	Finish	Duration
1	Welcome, apologies and AC updates.	5.00	5.05	5 mins
2	Advisory Committee member and community reports	5.05	5.15	10 mins
3	Project monitoring and operational overview <ul style="list-style-type: none"> <li>• Pumping operations</li> <li>• Environmental Monitoring / beach observations</li> <li>• Entrance conditions, usage and survey</li> <li>• TSB projects and enhancements</li> <li>• Communications</li> </ul>	5.15	6.00	45 mins
4	Committee Comments / General Business (All)	6.00	6.30	30 mins

# TWEED SAND BYPASSING

MEETING NOTES	
Item:	Description
1.	<p><u>Welcome, apologies and AC updates</u></p> <p>Thanks to Jane, for providing the venue to hold this meeting.</p> <p>Welcome Darren Hulm to the Advisory Committee. Darren currently works for Marine Rescue NSW as the Superintendent – Zone Commander North. Darren provided a career and experience overview showing his extensive experience and knowledge in the maritime / marine sectors in the local area.</p> <p>No other updates to the AC or TSB team.</p>
2.	<p><u>Advisory Committee member and community reports</u></p> <p>Councillor Gail O'Neill - Guest (reappointment to Qld LGA AC Member following Local Government elections)</p> <ul style="list-style-type: none"> <li>• Cr O'Neill read an email from a community member. The community member believes to better manage TSB, the team should investigate the option to backpass sand to Letitia Beach. This was discussed. Matthew Harry – Principal Manager TSB advised he has been in correspondence with the community member, and also invites the community member to contact himself via telephone if he requires more information or to discuss the matter further.</li> <li>• The recent, large music festival held at Coolangatta Beach and adjacent park had a significant impact on beach, dune and park areas. CoGC are preparing a condition report on health of the beach following the event.</li> <li>• Councillor O'Neill provided updates to the committee on current and future projects including seawall and Oceanway construction at Currumbin, Kirra Hill stabilisation project, water quality signage at the Coolangatta Creek North Kirra outlet and Flat Rock Creek Bridge and Flat Rock Creek catchment projects.</li> <li>• Cr O'Neill has recently been appointed as Chair of the Gold Coast World Surfing Reserve Local Stewardship Advisory Committee.</li> <li>• CoGC are planning to carry out a master plan for Snapper Rocks Road area. This will commence in the new financial year.</li> </ul> <p>Wayne Bartholomew - Qld AC member</p> <ul style="list-style-type: none"> <li>• The swell conditions have created a perfectly groomed, stable bank for surfing at Snapper Rocks.</li> <li>• Excellent surf conditions were observed for the World Surfing League Snapper Rocks competition largely due to the great bank.</li> <li>• The WSL Snapper Rocks event was the most viewed WSL event in the world this year.</li> <li>• The surf at Duranbah has been good. WB noted the commencement of sand nourishment.</li> <li>• WB advised that the TSB project was spoken about in the WLS commentary and there was interest in how it works.</li> </ul>

# TWEED SAND BYPASSING

## MEETING NOTES

Item:	Description
	<p>Bruce Lee – guest (relayed by Matthew Harry)</p> <ul style="list-style-type: none"> <li>Great banks at Snapper Rocks at the moment.</li> <li>During WSL event, BL had the opportunity to explain how the TSB system works to members of the community.</li> </ul> <p>Jane Lofthouse – NSW LGA AC Member</p> <ul style="list-style-type: none"> <li>JL noted current sand nourishment campaign at Duranbah Beach. Tweed Shire Council (TSC) will locally push sand up to the gravel path at the southern end of Duranbah once nourishment has been completed.</li> <li>TSC will repair gravel path scoured due to stormwater runoff.</li> <li>Tweed Coastal Hazard Study in progress – a draft will be provided to TSB for review in coming months.</li> <li>JL noted localised beach erosion at Kingscliff.</li> </ul> <p>Darren Hulm - NSW AC member</p> <ul style="list-style-type: none"> <li>DH advised that he had not heard anything negative in relation to the Tweed River entrance conditions. Sources of information are Marine Rescue, Maritime Boating Safety Officers and Water Police.</li> <li>There are calls for dredging of the Tweed River upstream of the entrance at the confluence of Terranora Inlet and Tweed River. Noting this is outside of TSB responsibility.</li> <li>Marine Rescue now occupy the new facility at the Point Danger lighthouse. It is a great new facility with excellent vantage point of the Tweed River entrance and Duranbah.</li> </ul> <p>Ocean Dive Charters (via email - read by JT)</p> <ul style="list-style-type: none"> <li>The channel the dredge dug has filled in, once the average swell is over 1.5 m on a runout tide it creates for a very unsafe bar crossing. We usually have to cancel our charters.</li> </ul> <p>Linda Rijkenberg – Qld State AC member</p> <ul style="list-style-type: none"> <li>No updates from Queensland government.</li> </ul> <p>Celine Roux – Qld Project Director</p> <ul style="list-style-type: none"> <li>CR notes the busy period TSB is in and notes the good teamwork between Qld and NSW teams.</li> <li>Congratulations to Sarah Dobe – NSW Team Member for the big effort in getting the TSB Management System Environmental Plans finalised for review.</li> </ul> <p>Simon Walter – NSW Project Director</p> <ul style="list-style-type: none"> <li>Thanked the TSB team for the presentation and work to date leading up to transition.</li> </ul> <p>Peter Turner – Qld AC Member (provided post meeting)</p> <ul style="list-style-type: none"> <li>Noted the success of the WSL event and high-quality waves during the competition.</li> <li>Has observed a lot of sand movement and how much Kirra has changed from eroded to now plenty of sand.</li> </ul>

# TWEED SAND BYPASSING

MEETING NOTES	
Item:	Description
3.	<u>Project monitoring and operational overview</u>  Presentation attached.
4.	<u>Committee Comments / General Business</u> <ul style="list-style-type: none"><li>• Nil</li></ul>
	Meeting end: 6:30pm
	Next meeting: August 2024 (TBC)

# TWEED SAND BYPASSING

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Advisory Committee Meeting

13 May 2024

## Project monitoring and operational overview

- Pumping operations
- Environmental Monitoring / beach observations
- Entrance conditions, usage and survey
- TSB projects and enhancements
- Communications

# TWEED SAND BYPASSING

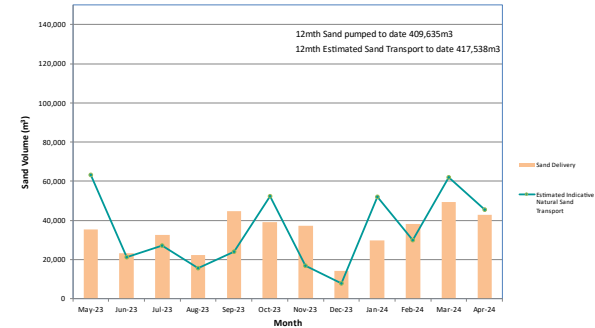
## Pumping operations 2023

PUMPING BY JETTY MOUNTED SYSTEM 2023				
MONTH	Vol SRE (m3)	Vol D'Bah (m3)	Total Vol (m3)	5 Yr AVG (m3)
JAN	48,339	0	48,339	32,712
FEB	41,601	0	41,601	45,401
MAR	22,898	0	22,898	38,229
APR	98,757	0	98,757	34,569
MAY	35,478	0	35,478	49,844
JUN	23,324	0	23,324	38,920
JUL	32,493	0	32,493	42,051
AUG	22,418	0	22,418	27,248
SEP	44,687	0	44,687	31,027
OCT	39,147	0	39,147	34,389
NOV	37,414	0	37,414	19,699
DEC	14,328	0	14,328	41,258
<b>TOTAL</b>	<b>460,884</b>	<b>0</b>	<b>460,884</b>	<b>435,347</b>

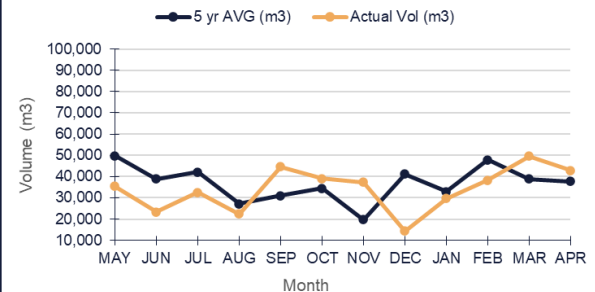
## Pumping operations 2024

PUMPING BY JETTY MOUNTED SYSTEM 2024				
MONTH	Vol SRE (m3)	Vol D'Bah (m3)	Total Vol (m3)	5 Yr AVG (m3)
JAN	29,653	0	29,653	32,883
FEB	38,262	0	38,262	47,807
MAR	49,535	0	49,535	38,925
APR	42,896	0	42,896	37,685
MAY			0	52,676
JUN			0	39,143
JUL			0	49,712
AUG			0	26,227
SEP			0	31,887
OCT			0	33,456
NOV			0	19,765
DEC			0	43,707
<b>TOTAL</b>	<b>160,346</b>	<b>0</b>	<b>160,346</b>	<b>453,872</b>

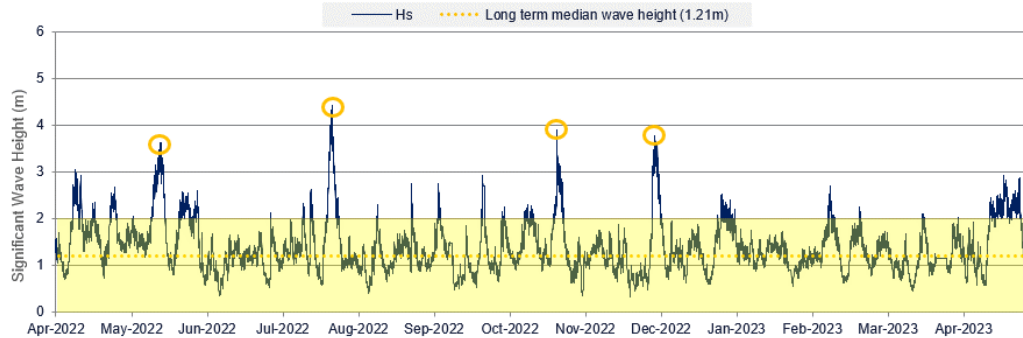
Comparison of Monthly Pumping vs Estimated Sand Transport



Pumped Sand Delivery by Month



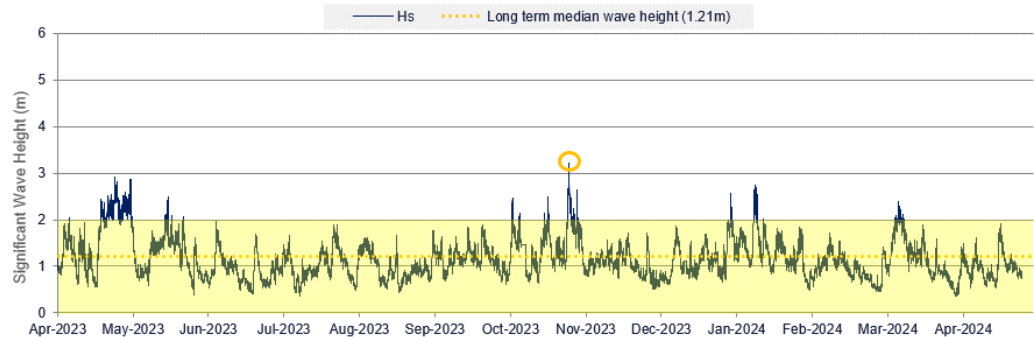
## Environmental Monitoring / beach observations



**April 2022-23**  
Estimated transport  
600,000 m<sup>3</sup>

**April 2023-24**  
Estimated transport  
484,000 m<sup>3</sup>

Overall, it has been a relatively  
low energy period compared to  
the previous year





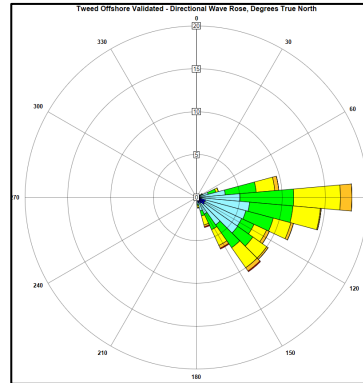
# TWEED SAND BYPASSING

## Environmental Monitoring / beach observations

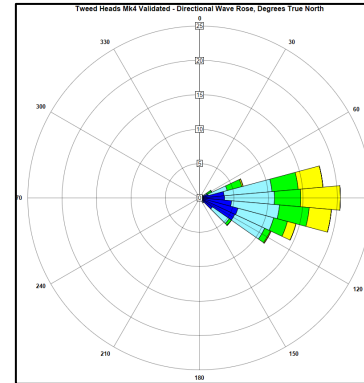


**Tweed wave buoy  
(nearshore)**

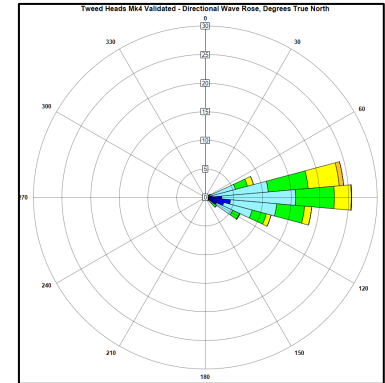
**Tweed offshore  
wave buoy**



2024 Feb - 2024 Apr  
Offshore



2023 Feb - 2023 April  
Inshore



2024 Feb - 2024 Apr  
Inshore

## Recent conditions

**February** - February had consistent strong E offshore swell direction and moderate wave heights. The sediment transport rate was significantly lower than February average. The conditions continue to move sand out from Rainbow Bay and Greenmount with additional sand observed at Kirra. The longshore bar and nearshore trough remains good swimming conditions.

**March** – March had a consistent strong E offshore swell direction with significant wave heights. The conditions affected the upper beach at Duranbah, with scarping observed exposing the Tyalgum wreck and mid-tide rocks. Frog Beach was also depleted of sand during the high energy conditions.

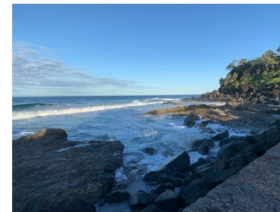
**April** – Observed a mix of calm and active conditions and moderate wave heights with E wave direction. Beach building was observed at Duranbah and Frog Beach. The sediment transport rate was less than the April average.



Rainbow Bay 13 February 'south aspect'



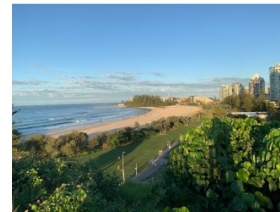
Kirra 13 February



Frog Beach 08 April



Frog Beach 03 May



Greenmount 08 April



Duranbah 08 April

# TWEED SAND BYPASSING

Fingal



10 August 2023



11 October 2023



5 February 2024



11 April 2024



# TWEED SAND BYPASSING



11 October 2023

Letitia

5 February 2024



11 April 2024

# TWEED SAND BYPASSING



5 February 2024



11 April 2024



**Duranbah Beach**



# TWEED SAND BYPASSING

28 March 2024



2 April 2024



15 April 2024



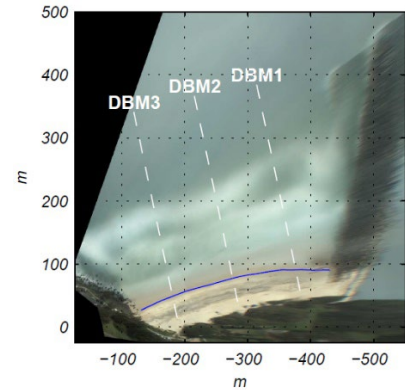
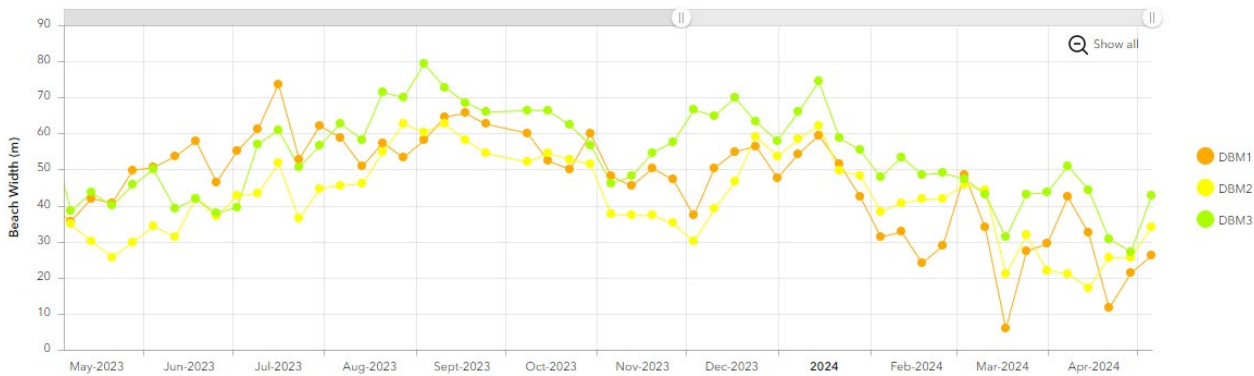
Duranbah Beach

## Duranbah Beach Nourishment

- Temporary pipe has been mobilised
- Pumping commenced Friday 10th May
- Estimated sand delivery 25,000m<sup>3</sup> - 30,000m<sup>3</sup> total
  - Southern mound 10,000m<sup>3</sup> to 14,000m<sup>3</sup>
  - Central mound 9,000m<sup>3</sup> to 10,000m<sup>3</sup>
  - Northern mound 6,000m<sup>3</sup>
- 4 – 6 week campaign
- Day and night pumping



# TWEED SAND BYPASSING



## DURANBAH BEACH



13 April 2024



# TWEED SAND BYPASSING



11 October 2023



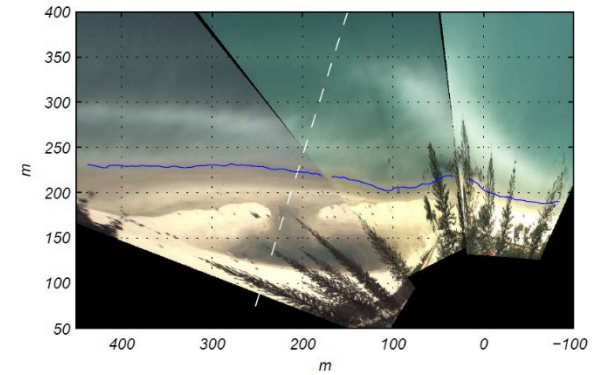
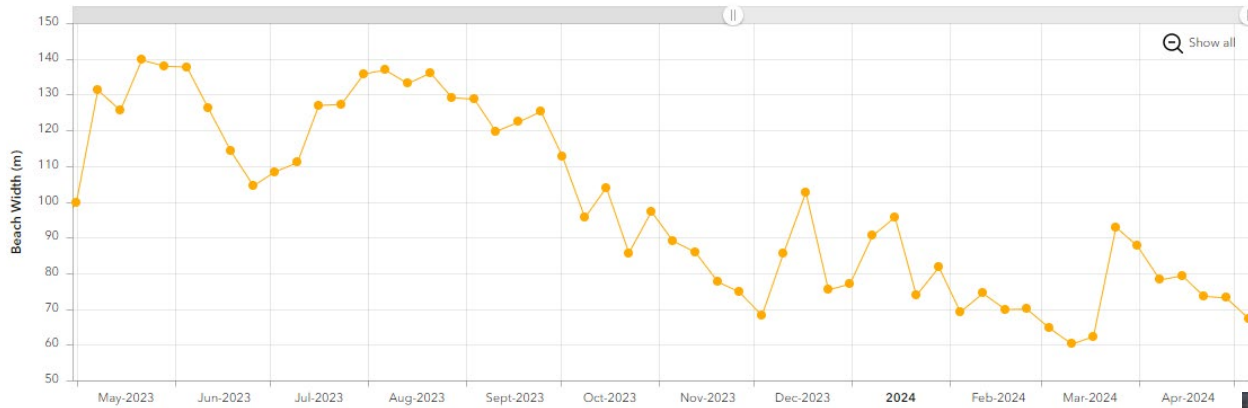
11 April 2024

**Snapper Rocks  
Rainbow Bay**



5 February 2024

# TWEED SAND BYPASSING



## Rainbow Bay





# TWEED SAND BYPASSING

## Coolangatta



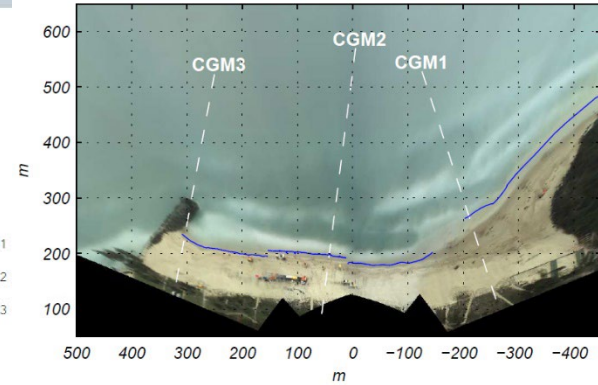
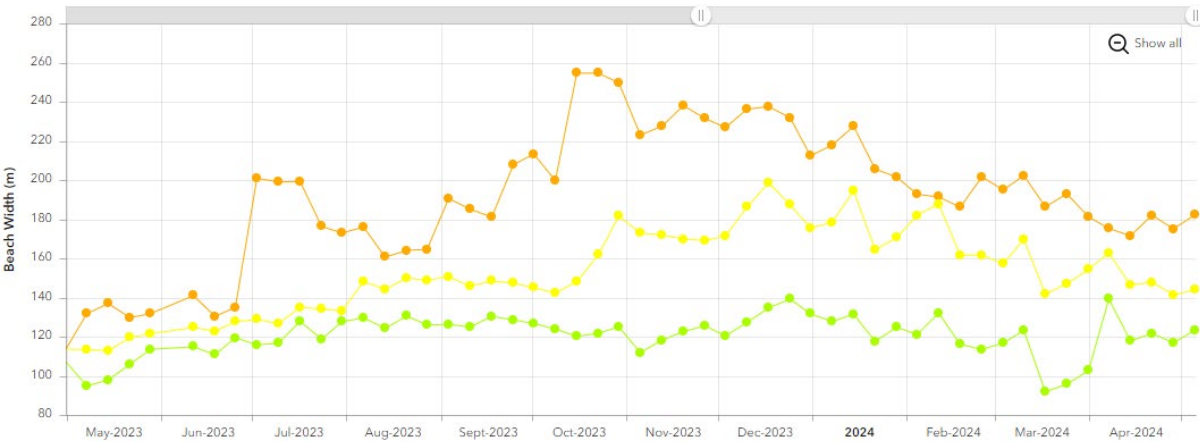
11 October 2023

5 February 2024



11 April 2024

# TWEED SAND BYPASSING



## COOLANGATTA



# TWEED SAND BYPASSING



11 October 2023

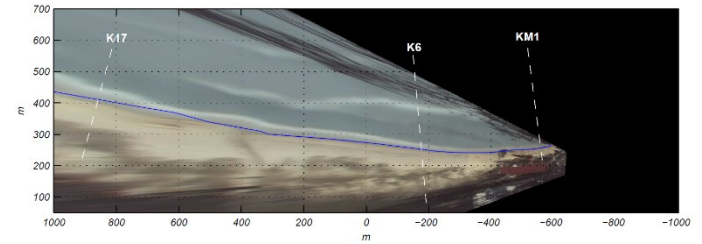
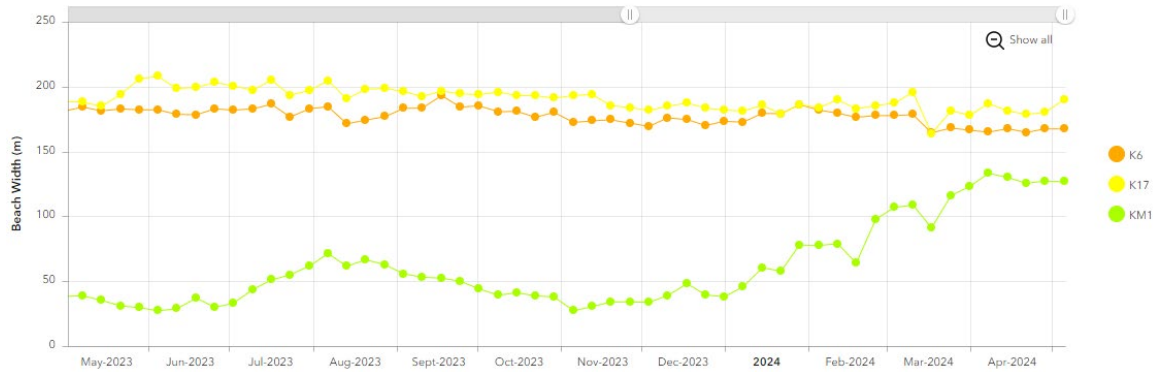
**Kirra**

11 April 2024

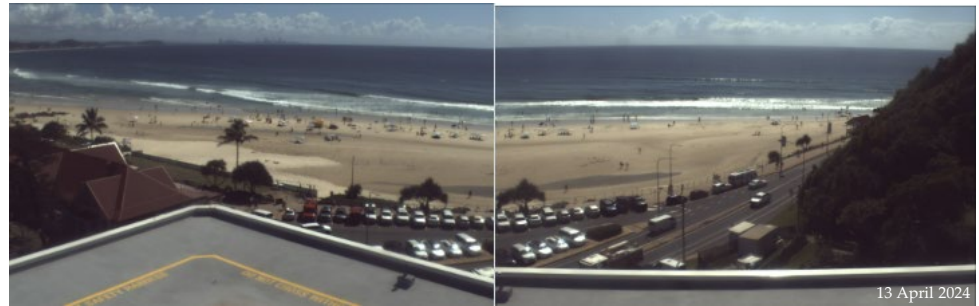




# TWEED SAND BYPASSING



Kirra



# TWEED SAND BYPASSING



11 October 2023

**Bilinga**

5 February 2024



11 April 2024



OFFICIAL

# TWEEDSAND BYPASSING



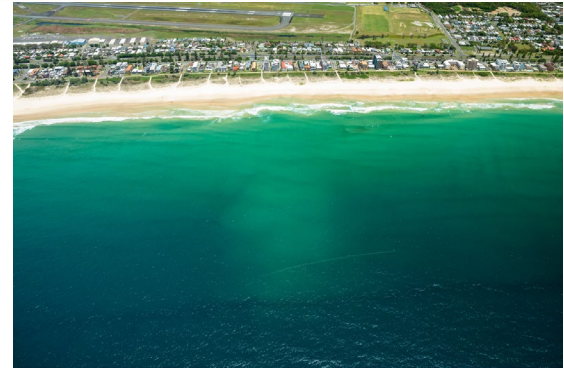
**Bilinga – February 2024**

**Bilinga – April 2024**



**Bilinga – February 2024**

**Bilinga – April 2024**



**Bilinga – February 2024**

**Bilinga – April 2024**





# TWEED SAND BYPASSING

11 April 2024



5 February 2024



# TWEED SAND BYPASSING

15 February 2024



20 April 2024



## Surf Conditions - Duranbah

21 March 2024



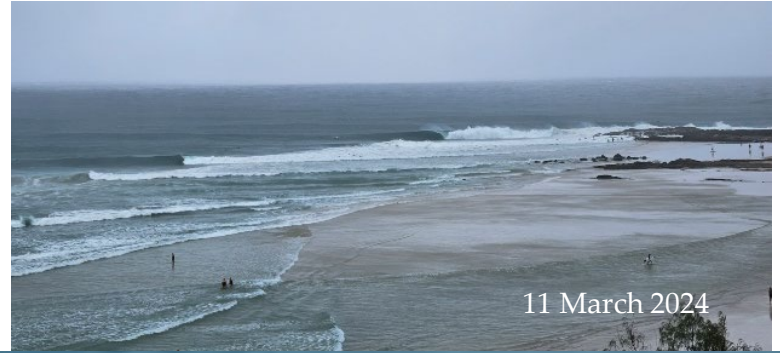
# TWEED SAND BYPASSING

## Surf Conditions – Snapper Rocks

27 April 2024



11 March 2024



27 April 2024





# TWEED SAND BYPASSING

## Surf Conditions – Kirra

11 March 2024



12 March 2024

# TWEED SAND BYPASSING

## Entrance conditions, usage and survey



11 April 2024

# TWEED SAND BYPASSING

## TWEED RIVER ENTRANCE AS AT 10th JANUARY 2024

**WARNINGS:** Extreme caution should be used when navigating this entrance.

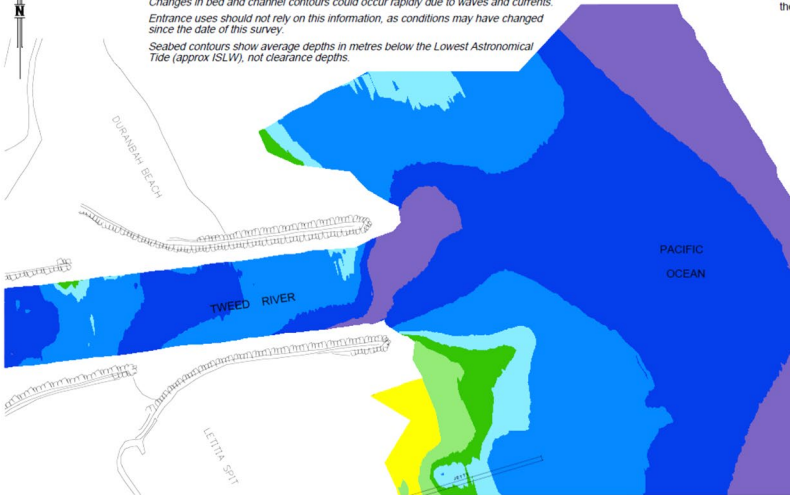
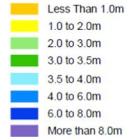
Changes in bed and channel contours could occur rapidly due to waves and currents.

Entrance uses should not rely on this information, as conditions may have changed since the date of this survey.

Seabed contours show average depths in metres below the Lowest Astronomical Tide (approx ISLW), not clearance depths.

### LEGEND

Average Depths in metres below the Lowest Astronomical Tide

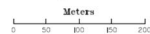


### NOTES:

1. Survey information collected by Michel Group Services on 10th JANUARY 2024.
2. This plan prepared by Michel Group Services on 10th JANUARY 2024.
3. Surveys are undertaken for Tweed Sand Bypassing every three months to monitor entrance seabed levels.

### TWEED SAND BYPASSING

Tweed Sand bypassing is a joint project of the New South Wales and Queensland Governments, with the support of the Gold Coast City Council, and in conjunction with Tweed Shire Council.



## TWEED RIVER ENTRANCE AS AT 2nd APRIL 2024

**WARNINGS:** Extreme caution should be used when navigating this entrance.

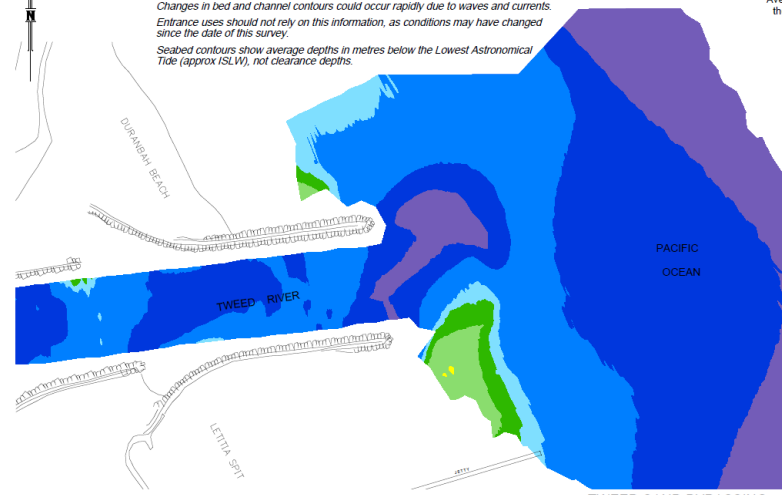
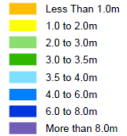
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Seabed contours show average depths in metres below the Lowest Astronomical Tide (approx ISLW), not clearance depths.

### LEGEND

Average Depths in metres below the Lowest Astronomical Tide

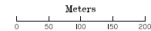


### NOTES:

1. Survey information collected by Michel Group Services on 2nd APRIL 2024.
2. This plan prepared by Michel Group Services on 10th APRIL 2024.
3. Surveys are undertaken for Tweed Sand Bypassing every three months to monitor entrance seabed levels.

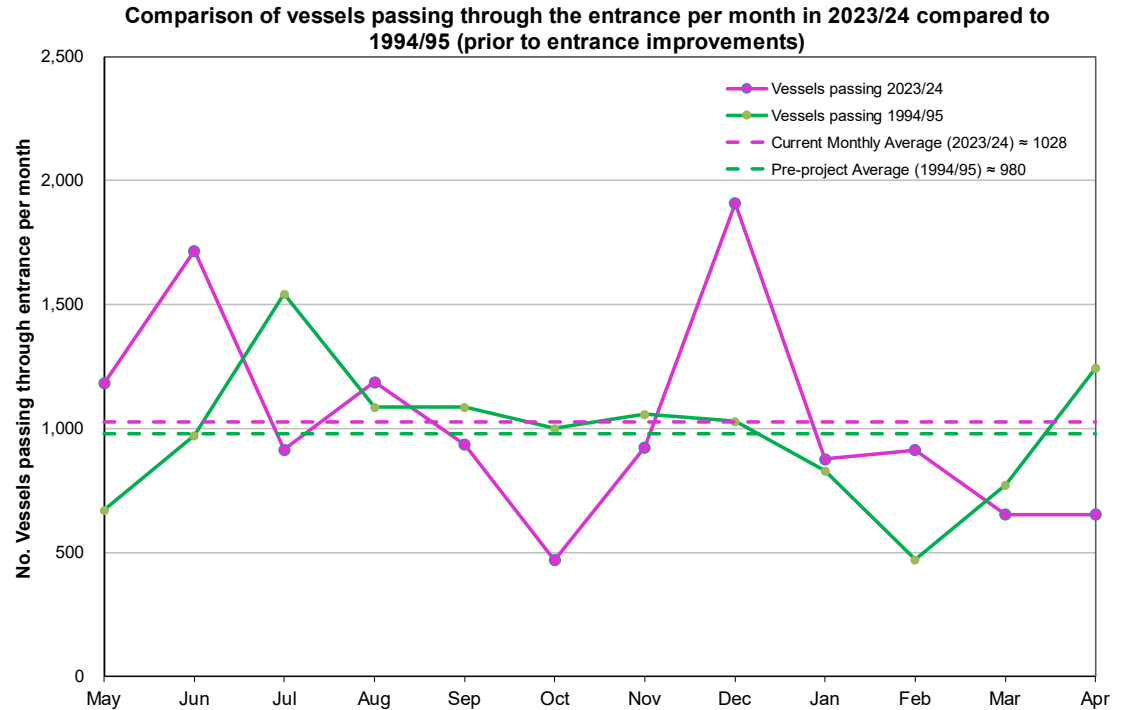
### TWEED SAND BYPASSING

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## Entrance usage

- Vessel numbers were below monthly averages for February and March before increasing in April.



## Projects and enhancements

### TSB Transition

New network connection to jetty by June, New SCADA hardware and software. Intergovernmental Agreement prepared for Minister approval. Asset handover and rectification underway.

### Low Pressure Pump Station deck upgrade

Replacement of timber deck with steel support structure and GRP deck. 'For Construction' draws received. Fabrication to commence in May.

### Environmental Audit

Environmental Audit of TSB environmental Management System nearing completion.

### Kirra Amenity Study

Draft report complete and reviewed. Consultant updating final report.

### Long Term Average Report

Scope complete. To market within coming weeks.

### Environmental Management Plan

Submission of EMP to commence the regulatory approvals process.



## Communications and engagement

TSB store at WSL Snapper Rocks event

Preparation of Dredge Communications plan for mid 2024

Routine App and website maintenance



# TWEED SAND BYPASSING

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## Thank you

- TSB is a joint coastal management initiative of the New South Wales and Queensland State Governments
- Please provide any feedback to the TSB Project Office email [TSB@transport.nsw.gov.au](mailto:TSB@transport.nsw.gov.au)