

# TWEED SAND BYPASSING

MEETING DETAILS	
<b>Meeting Title:</b>	Tweed Sand Bypass Advisory Committee (AC)
<b>Meeting No.:</b>	03-2023
<b>Date / Time:</b>	5:00pm 21 August 2023
<b>Location:</b>	Tweed Sand Bypass Office
<b>Attendees:</b>	Wayne Bartholomew – Qld AC member Peter Turner – Qld AC Member Councillor Gail O'Neill – QLD LGA AC Member Celine Roux – Qld Project Director Kim Bowra – A/NSW Project Director (Chair) Matthew Harry – A/Project Manager Adrian Barwick – NSW State AC member Linda Rijkenberg – Qld State AC member Joshua Taylor - NSW team member
<b>Absent / Apologies:</b>	Jane Lofthouse – NSW LGA AC Member Robert Alexander - NSW AC Member John Ede – NSW AC Member
<b>Minutes prepared by:</b>	J. Taylor
<b>File Path:</b>	M.07.01

AGENDA				
Item	Description	Start	Finish	Duration
1	Welcome and apologies	5.00	5.05	5 mins
2	Community beach and entrance reports / AC member reports	5.05	5.15	10 mins
3	Project monitoring and operational overview <ul style="list-style-type: none"> <li>• TSB 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

# TWEEDSAND BYPASSING

MEETING MINUTES	
Item:	Description
1.	<p><u>Introductions and AC updates</u></p> <p>KB informed the group that John Ede's membership as NSW AC Member will come to an end before the next AC meeting. KB acknowledged John Ede's contribution as NSW AC Member during his tenure.</p> <p>The TSB team will work to fill the NSW AC Member vacancy.</p>
2.	<p><u>Advisory Committee member reports</u></p> <p>Cr Gail O'Neill – QLD LGA AC Member</p> <ul style="list-style-type: none"> <li>Petition from Mr Allsop discussed. Petition has been responded to via the CoGC Committee / Council process.</li> <li>Council report addressing items raised by petitioner also included recommendation that CoGC CEO be able to appoint Working Group member.</li> <li>It is expected CoGC CEO will advise TSB that Liam De Lucia will be the CoGC WG representative.</li> <li>CoGC has recently carried out beach nourishment works in two stages. Sand was sourced from the beach adjacent to the North Kirra SLSC.</li> </ul> <p>Wayne Bartholomew – Qld AC member</p> <ul style="list-style-type: none"> <li>There has been a lack of any large swell events this season which has allowed sand to accumulate on the beaches.</li> <li>No large swell event to move the sand on.</li> <li>Bank conditions have been favourable for short-board surfing at Snapper Rocks.</li> </ul> <p>Celine Roux – Qld Project Director</p> <ul style="list-style-type: none"> <li>The Qld Government is looking to take on a PhD student in the next 12 months in the Qld TSB team with the potential to carry out hydrodynamic modelling in the area.</li> </ul> <p>Peter Turner – Qld AC member</p> <ul style="list-style-type: none"> <li>Surfing conditions have been consistent since last AC meeting.</li> <li>Commended the project team for putting together factual information on the history of the beach conditions in the project areas and project operations noting there are many opinions in the public regarding the project.</li> </ul> <p>Chris @ Ocean Dive report - read by AB</p> <ul style="list-style-type: none"> <li>The first dredge just made the bar more dangerous the second dredge at least dredged a channel which has temporarily made it a lot better until it fills in.</li> </ul>
3.	<p><u>Project overview</u></p> <p>Presentation attached.</p>
4.	<p><u>General Business</u></p>

# TWEEDSAND BYPASSING

MEETING MINUTES	
Item:	Description
	MH advised that TSB is carrying out a project to better understand beach amenity at Kirra in the context of TSB operations. MH to arrange a meeting with AC members to discuss further.
	Meeting end: 7:15pm
	Next meeting: 15 November 2023

# TWEED SAND BYPASSING

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## ADVISORY COMMITTEE MEETING

21 August 2023

## PROJECT MONITORING AND OPERATIONAL OVERVIEW

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



# TWEEDSAND BYPASSING

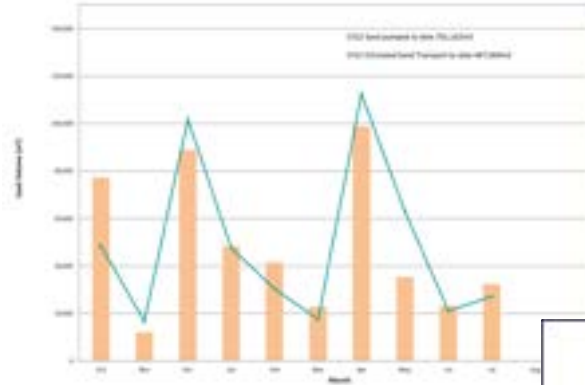
## PUMPING BY JETTY MOUNTED SYSTEM 2023

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			0	27,248
SEP			0	31,027
OCT			0	34,389
NOV			0	19,699
DEC			0	41,258
<b>TOTAL</b>	<b>302,890</b>	<b>0</b>	<b>302,890</b>	<b>435,347</b>

5 yr (2018-22) Avg Vol Jan to Jul = 281,726m3

Act Vol Jan to Jul = 302,890m3

CY23 - October 2022 to September 2023  
Comparison of Monthly Pumping vs Estimated Sand Transport



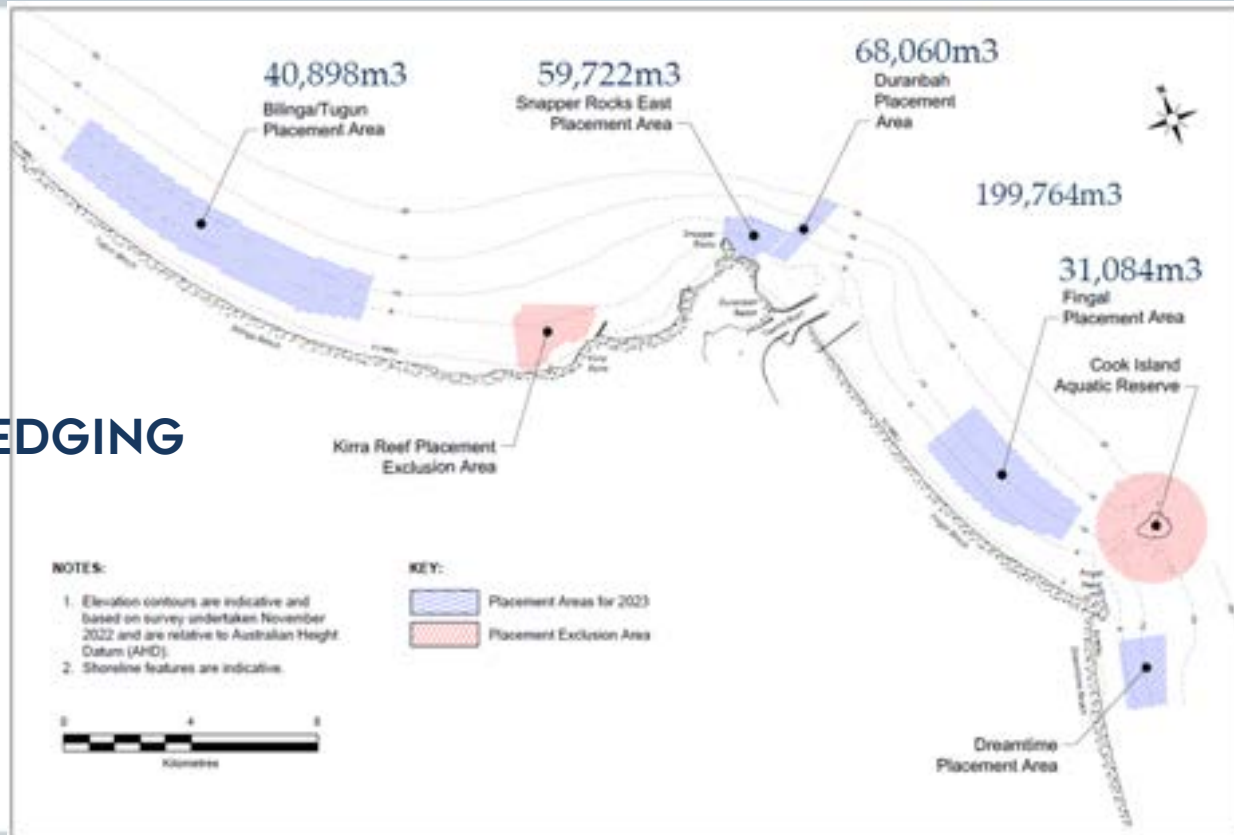
## PUMPING OPERATIONS 2023

Pumped Sand Delivery by Month - 2022/23

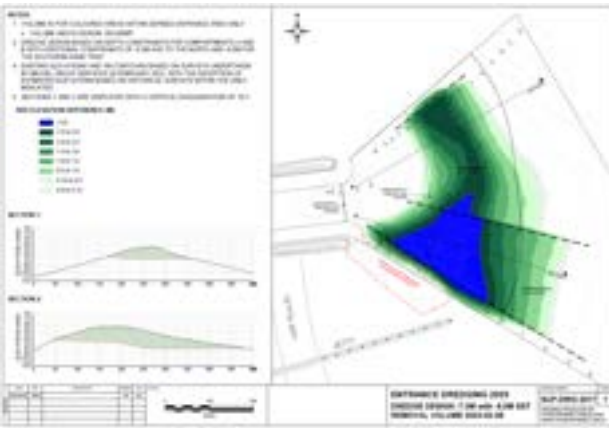


# TWEED SAND BYPASSING

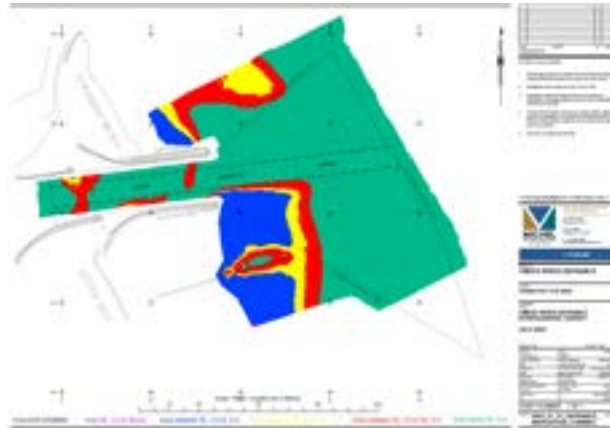
## 2023 DREDGING



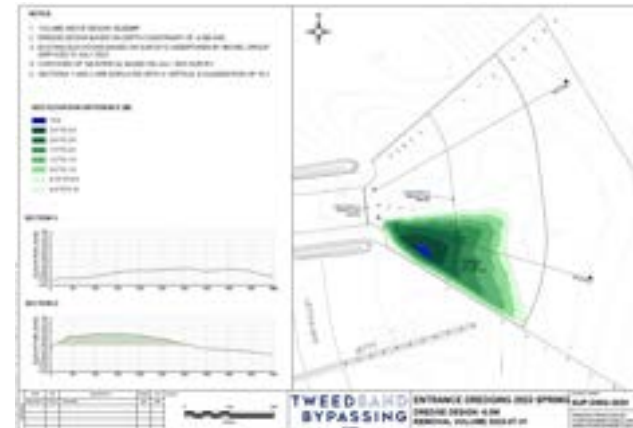
## 2023 DREDGE REMOVAL



260,000m<sup>3</sup> total removal planned



199,764m<sup>3</sup> removed



60,000m<sup>3</sup> remaining

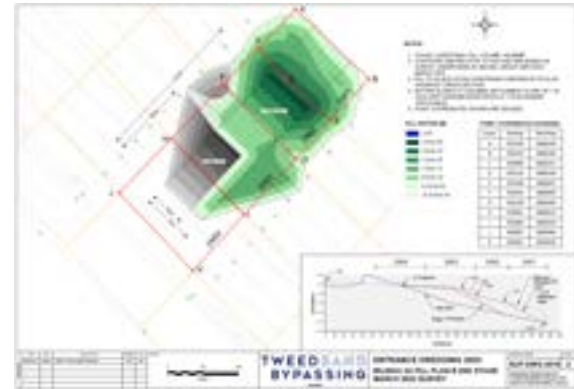
# TWEED SAND BYPASSING

## 2023 DREDGING



# TWEED SAND BYPASSING

## 2023 DREDGE PLACEMENT BILINGA

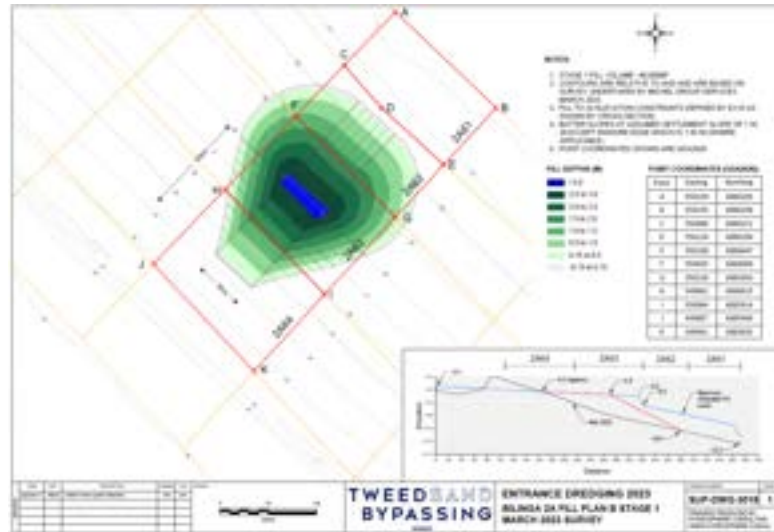


# TWEED SAND BYPASSING



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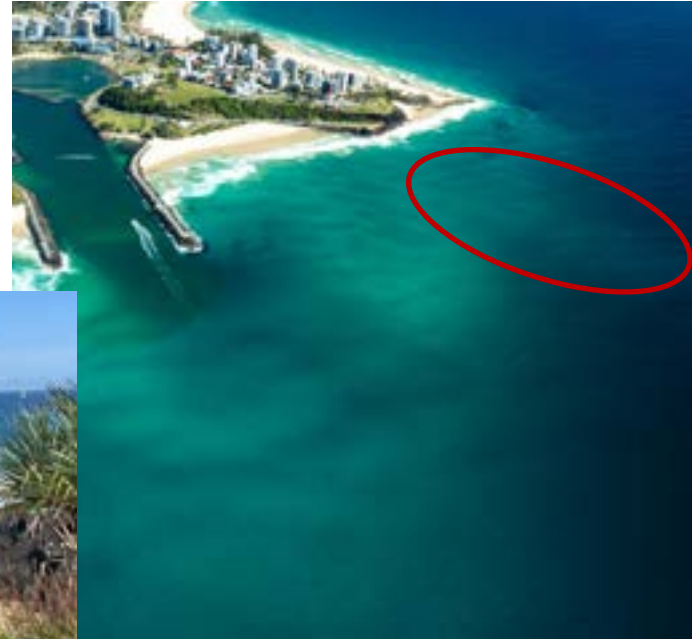
## 2023 DREDGE PLACEMENT - BILINGA



## 2023 DREDGE PLACEMENT - FINGAL

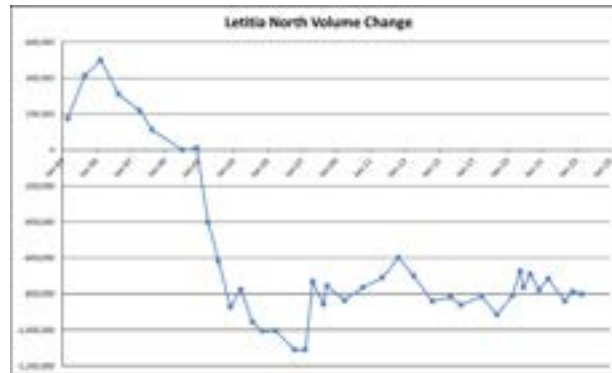
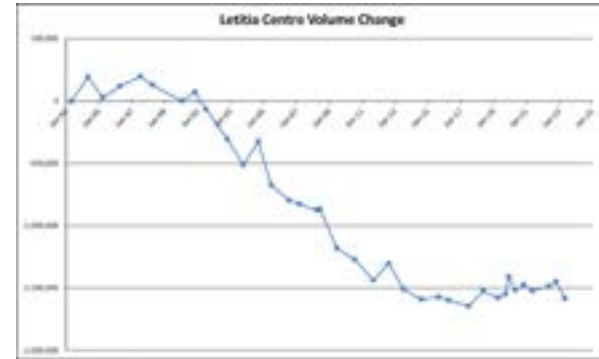
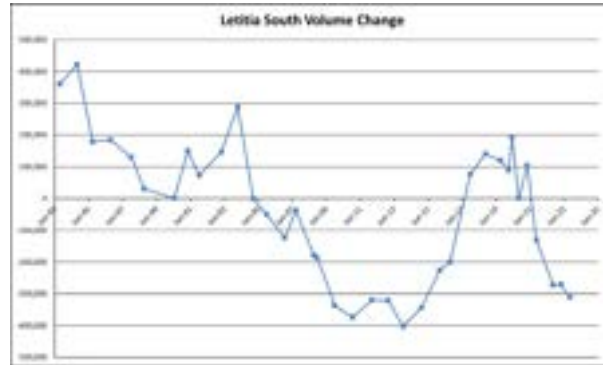
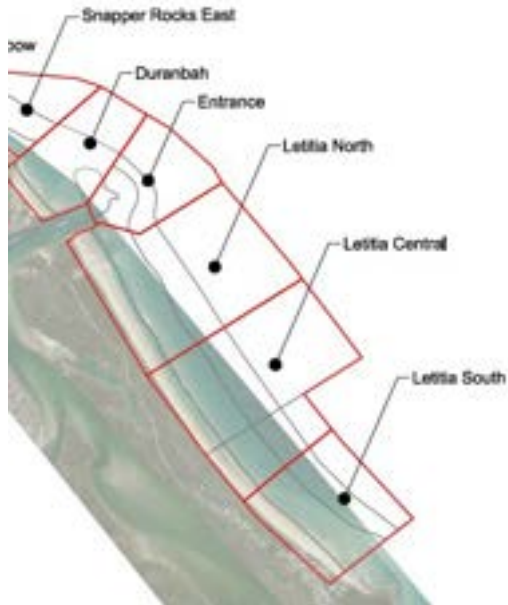


## 2023 DREDGE PLACEMENT - DURANBAH



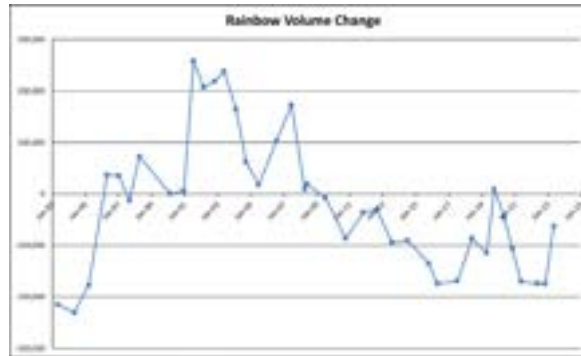
# TWEED SAND BYPASSING

## VOLUME ANALYSIS



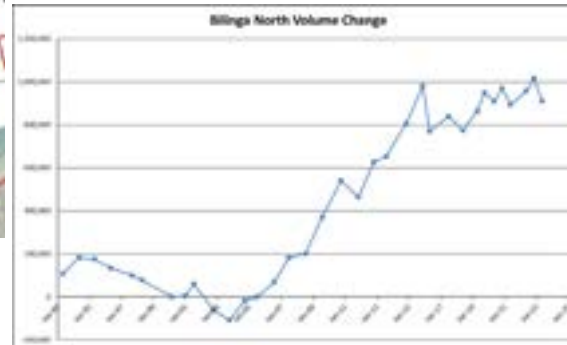
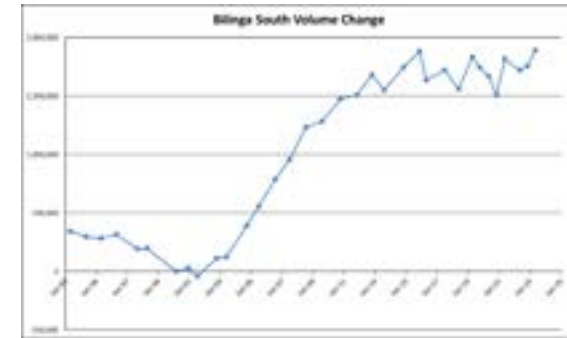
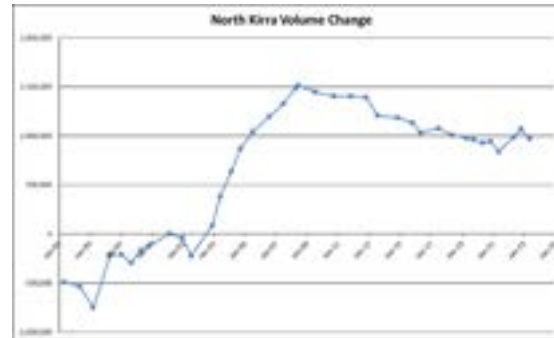
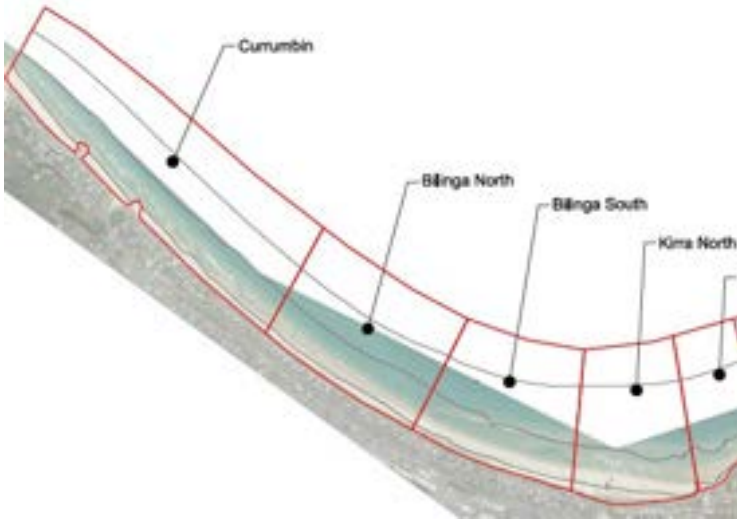
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## VOLUME ANALYSIS



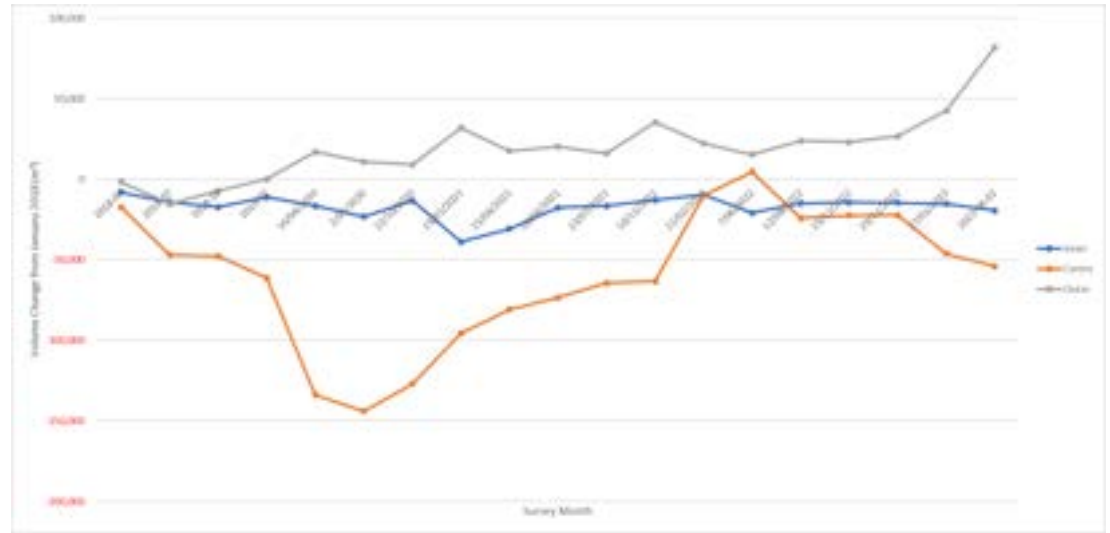
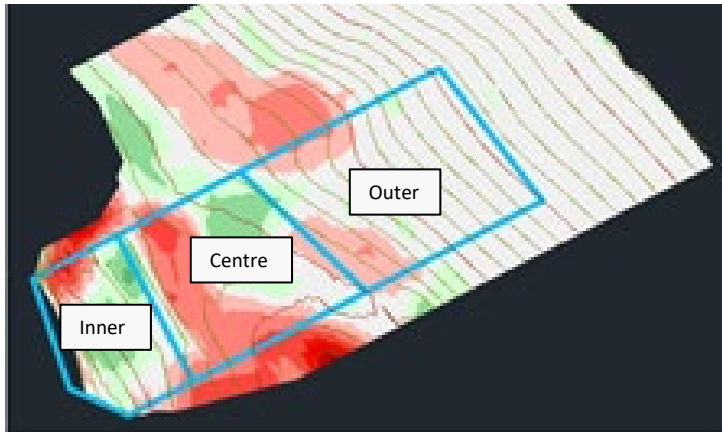
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## VOLUME ANALYSIS

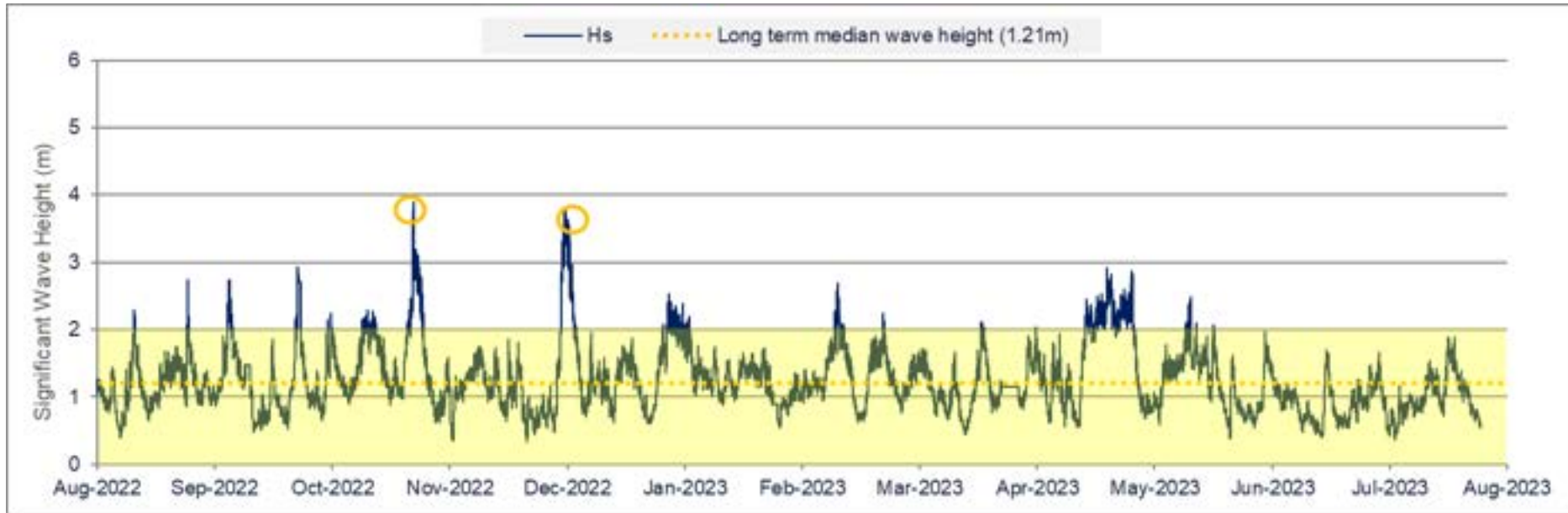


## VOLUME ANALYSIS

Duranbah Beach



## ENVIRONMENTAL MONITORING / BEACH OBSERVATIONS

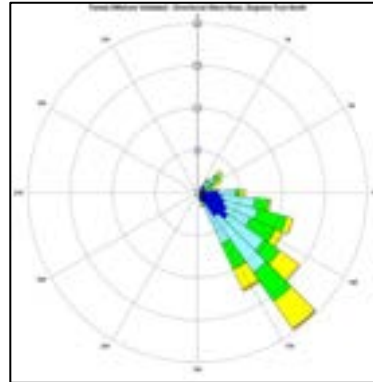


## ENVIRONMENTAL MONITORING / BEACH OBSERVATIONS

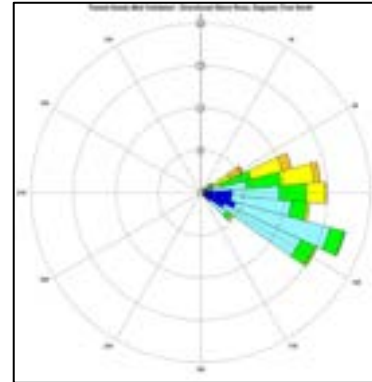


**Tweed wave buoy  
(nearshore)**

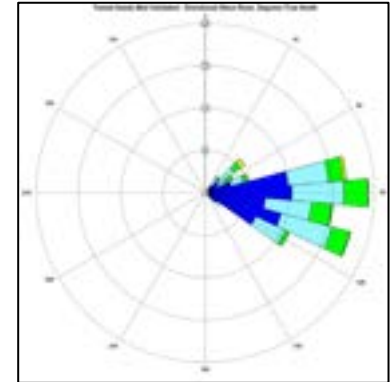
**Tweed offshore  
wave buoy**



2023 May - 2023 Jul  
Offshore



2022 May - 2022 Jul



2023 May - 2023 Jul

# TWEED SAND BYPASSING

## RECENT SATELLITE IMAGERY COMPARISON

- Energetic conditions through late April sculpted the storm bar
- Rainbow Bay beach has straightened, sand has built around Greenmount and supplied Coolangatta, Kirra upper beach has widened (assisted by nourishment)
- The bar has moved shoreward up to 75m in some locations between May and August



15<sup>th</sup> May



18<sup>th</sup> Aug



# TWEED SAND BYPASSING



15 October 2022



11 April 2023

## FINGAL



19 January 2023



10 August 2023

# TWEED SAND BYPASSING



19 January 2023

LETITIA

11 April 2023



10 August 2023

# TWEED SAND BYPASSING



19 January 2023



11 April 2023

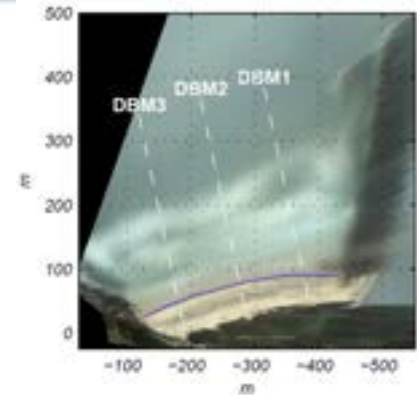
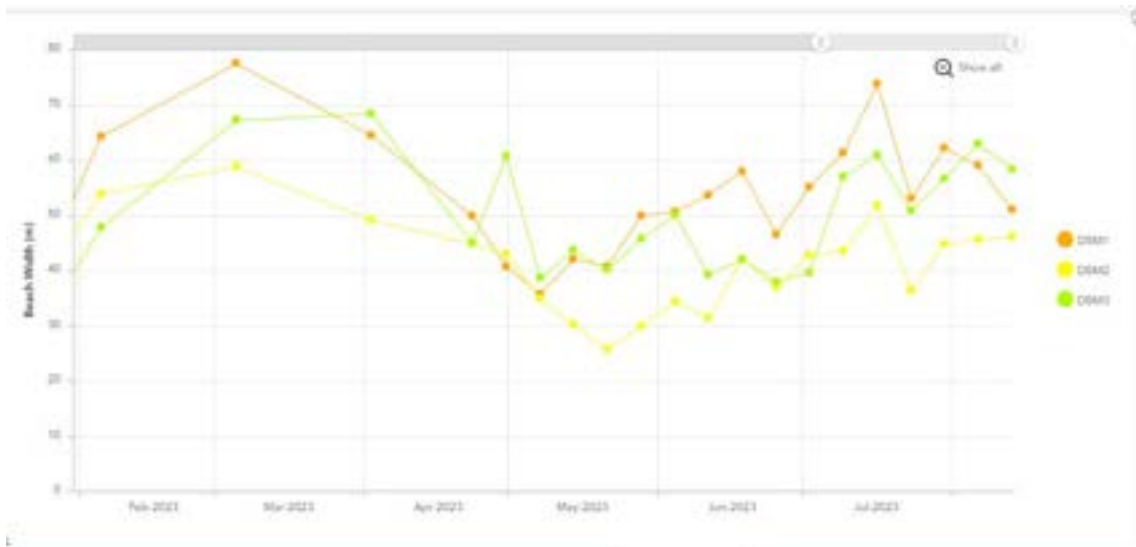


10 August 2023



## DURANBAH BEACH

# TWEEDSAND BYPASSING



DURANBAH BEACH

# TWEED SAND BYPASSING



21 May 2023



13 August 2023

Restoring Coastal Sand Drift - Improving Boating Access

OFFICIAL

# TWEED SAND BYPASSING



19 January 2023



10 August 2023

## SNAPPER ROCKS RAINBOW BAY

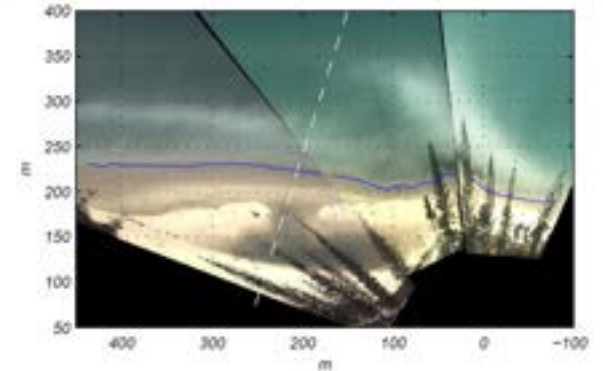


11 April 2023

# TWEED SAND BYPASSING



**RAINBOW BAY**  
beach width consistent with  
historical seasonal variation



# TWEED SAND BYPASSING

## COOLANGATT



19 January 2023

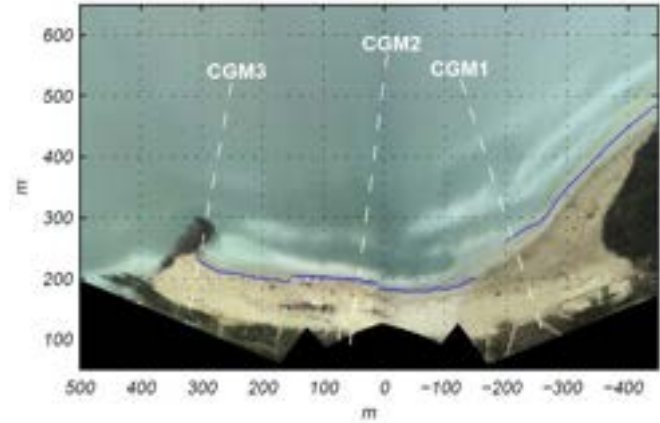
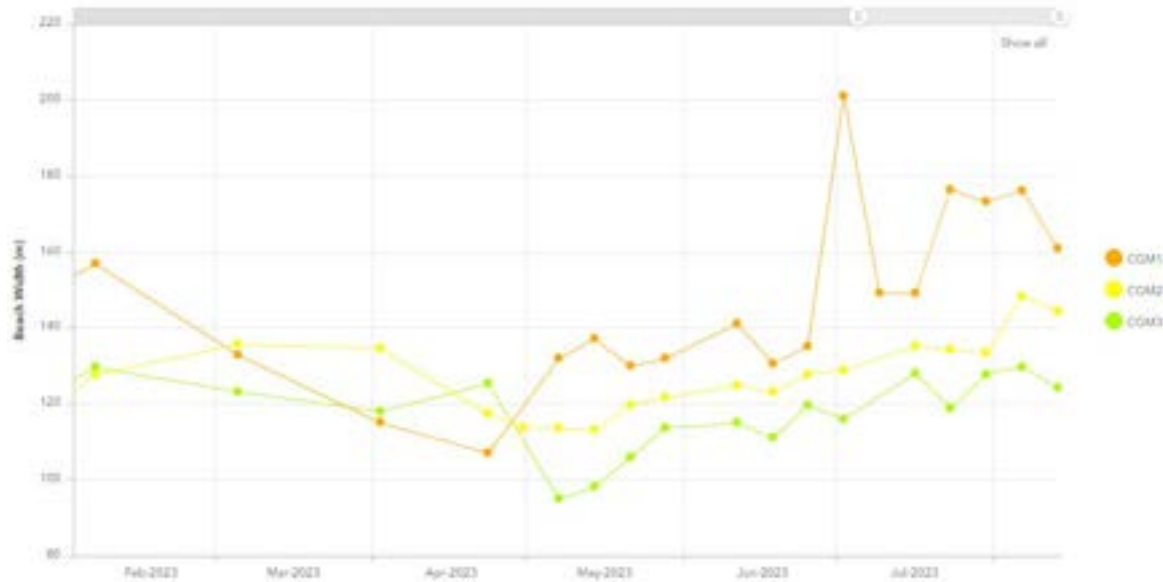


11 April 2023



10 August 2023

# TWEED SAND BYPASSING



## COOLANGATTA



# TWEED SAND BYPASSING



19 January 2023

**KIRRA**

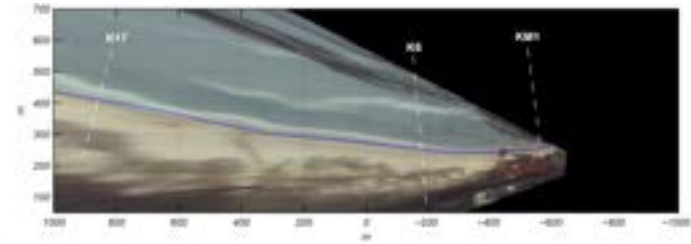


11 April 2023

10 August 2023



# TWEED SAND BYPASSING



KIRRA

# TWEED SAND BYPASSING



# TWEED SAND BYPASSING



19 January 2023



11 April 2023



10 August 2023

## BILINGA

# TWEEDSAND BYPASSING



10 August 2023

# TWEED SAND BYPASSING

21 June 2023– Duranbah



## SURF CONDITIONS



7 August 2023– Snapper Rocks



# TWEEDSAND BYPASSING

## BEACH & SURF CONDITIONS

Cooly Classic Swim – 27 May 2023



Duranbah – 21 June 2023



Snapper Rocks – 6 August 2023



## ENTRANCE CONDITIONS, USAGE AND SURVEY



# TWEED SAND BYPASSING

## TWEED RIVER ENTRANCE AS AT 26th JUNE 2023

### 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 users should not rely on this information, as conditions may have changed since the date of this survey.  
Sealed contours show average depths in metres below the Lowest Astronomical Tide (approx 30.00), not clearance depths.

### LEGEND

Average Depths in metres below the Lowest Astronomical Tide



### 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.



### NOTES:

1. Survey information collected by Metek Group Services on 26th JUNE 2023.
2. This plan prepared by Metek Group Services on 26th JULY 2023.
3. Drawings are undertaken for Tweed Sand Bypassing every three months to monitor entrance sealed levels.

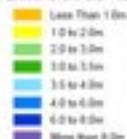
## TWEED RIVER ENTRANCE AS AT 31ST JULY 2023

### 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 users should not rely on this information, as conditions may have changed since the date of this survey.  
Sealed contours show average depths in metres below the Lowest Astronomical Tide (approx 30.00), not clearance depths.

### LEGEND

Average Depths in metres below the Lowest Astronomical Tide



### TWEED SAND BYPASSING

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### NOTES:

1. Survey information collected by Metek Group Services on 31st JULY 2023.
2. This plan prepared by Metek Group Services on 31st AUGUST 2023.
3. Drawings are undertaken for Tweed Sand Bypassing every three months to monitor entrance sealed levels.

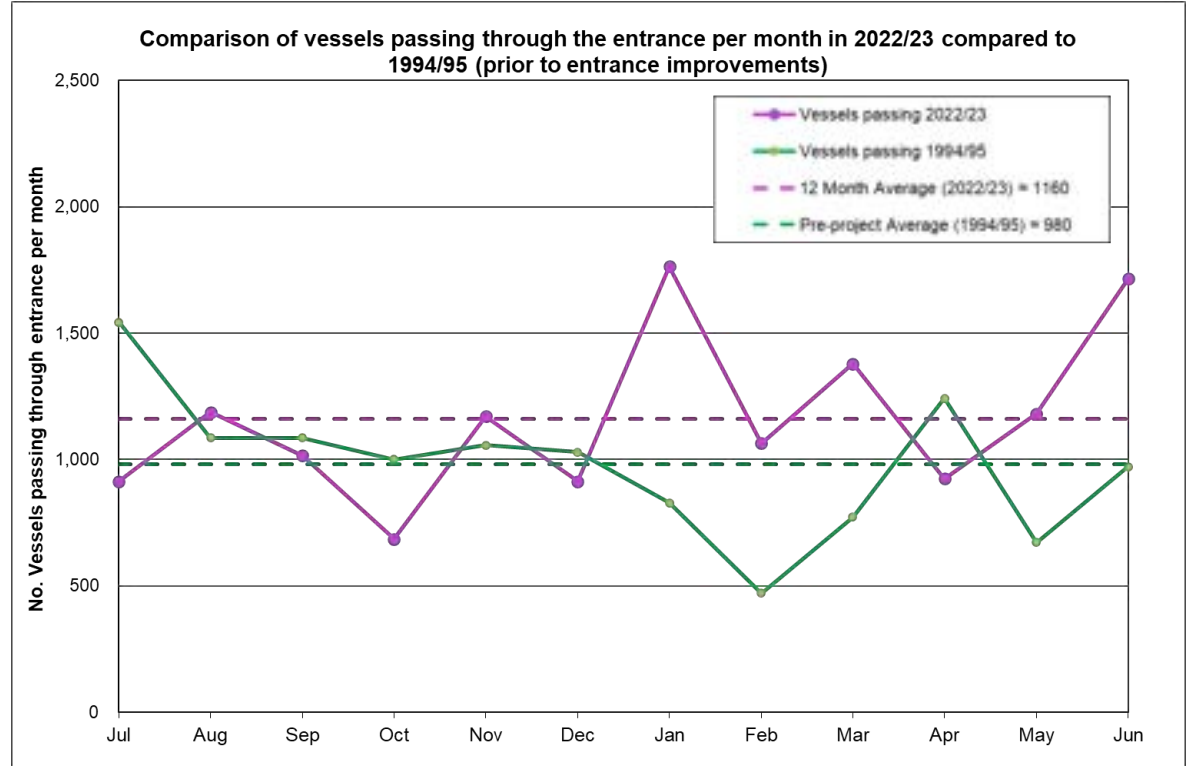


Transport  
for NSW



## ENTRANCE USAGE

- 2023 vessel passing numbers were above average due to periods of calmer weather
- Calm conditions and a clear navigation channel saw high numbers of vessels passing over the last couple of months



## PROJECTS AND ENHANCEMENTS

TSB Transition

Drafting of Management System, ICT preparations, legal instruments, property matters and asset handover, Operations Manager recruitment underway.

New survey contract prep

New Hydrographic survey contract awarded.

Asset valuation

Nearing completion. To be used for financial and asset management purposes.

Reef Monitoring

Kirra and Cook Island reef monitoring complete. Increase in extent of Kirra reef exposure of approx. 400m<sup>2</sup>.

Kirra Amenity Study

Stakeholder workshop arranged for late August early September.

Cathodic Protection

Report received and recommendations being implemented.

## COMMUNICATIONS AND ENGAGEMENT

New signage underway at Dry Dock Rd boat ramp + refresh of existing signs

Dredging Instagram, App and website updates

Jetty Tours – School Students, Korean government delegate

Petition to CoGC regarding Rainbow Bay – Committee decision to accept recommendations of report.

ABC television and written story – mid June 2023

Presentation of a paper at the Australasian Coasts and Ports conference – Sunshine Coast 15-18 August 2023

### How sand pumping helped shape Gold Coast's Superbank, one of Australia's most famous surf breaks

ABC David Green / My Weekends Collection and Work Rights  
Posted Fri 18 Jun 2023 at 9:13am, updated Fri 18 Jun 2023 at 10:04am



# 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 [tresbp.projectoffice.group@transport.nsw.gov.au](mailto:tresbp.projectoffice.group@transport.nsw.gov.au)