

TWEED SAND BYPASSING

MEETING DETAILS	
Meeting Title:	Tweed Sand Bypass Advisory Committee (AC)
Meeting No.:	03-2024
Date / Time:	5:00pm Monday 19 August 2024
Location:	Kirra Hill Community and Cultural Centre (1 Garrick Street, Coolangatta)
Attendees:	Jane Lofthouse – NSW LGA AC member Councillor Gail O'Neill – Qld LGA AC member Bruce Lee – Guest Wayne Bartholomew – Qld AC member Peter Turner – Qld AC Member Celine Roux – Qld Project Director Nicole Watts – NSW Project Director (chair) Linda Rijkenberg – Qld State AC member Matthew Harry – Principal Manager TSB Adrian Barwick – NSW team member Joshua Taylor - NSW State AC member
Absent / Apologies:	Darren Hulm - NSW AC member Larry Woodland - Proxy for NSW AC member Robert Alexander
Meeting notes prepared by:	Josh Taylor
File Path:	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"> Pumping operations Environmental Monitoring / beach observations Entrance conditions, usage and survey TSB projects and enhancements Communications 	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>Nicole Watts, Director Maritime Infrastructure Delivery Office, will be the acting NSW Project Director until February 2025.</p>
2.	<p><u>Advisory Committee member and community reports</u></p> <p>Wayne Bartholomew – Qld AC member</p> <ul style="list-style-type: none"> • Before last week's NE swell event the southern Gold Coast experienced an excellent run of swell producing great surfing conditions. The SSE swell in mid-July in particular produced great surf without causing a hole in the bank at Snapper. • Last week a strong broken up NE swell scoured the southern Gold Coast beaches and Duranbah, creating a deep section at Froggies and Snapper Rocks. The swell did not seem to impact Rainbow and Greenmount. • With Spring conditions starting, it is expected that it will take some time for the bank at Snapper to recover. As a result, the take-off at Snapper is expected to shift west to Little Marley or beyond. <p>Councillor Gail O'Neill – Qld LGA AC member</p> <ul style="list-style-type: none"> • The Gold Coast 'State of the Beaches' report has been received with Rainbow Bay listed as the most used beach on the Gold Coast. • No complaints have been received from residents regarding the project area. • Council received a report looking into the impacts of the 'Out to Lunch' festival held on Coolangatta beach in May. The report recommends there is not a festival at same time as the annual WSL event or close to another major event (e.g. Coolie Rocks). The report also recommends stricter compliance measure for future beach events. • Surfrider are carrying out water quality testing at the Coolangatta Creek stormwater outlet. • Construction of a seawall at Currumbin is currently underway. • There are plans to renew the Currumbin Alley training wall in the near future. • The planning stage of the Snapper Rocks masterplan project is underway. • Kirra Hill stabilisation works are expected to be completed by the end of the year. • The Kirra Hill Eagle monument is currently being fabricated and will be installed after stabilisation work is complete. <p>Peter Turner – Qld AC Member</p> <ul style="list-style-type: none"> • Fingal beach appears to be quite narrow at the moment. • Surf at Duranbah has been of good quality picking up more swell than Snapper. <p>Jane Lofthouse – NSW LGA AC member</p> <ul style="list-style-type: none"> • Tweed Coastal Hazard Study is in progress with a draft received. • JL requested to present the findings at the next AC meeting. • Following erosion earlier this year at Kingscliff, beach building is now being observed. There is expected to be a sand deficit moving up the coast as a result. • Fingal beach appears to be narrow at the moment.

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MEETING NOTES	
Item:	Description
3.	<u>Project monitoring and operational overview</u> Presentation attached.
4.	<u>Committee Comments / General Business</u> Nil.
	Meeting end: 6:45pm
	Next meeting: November 2024 (TBC)

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Advisory Committee Meeting

19 August 2024

Project monitoring and operational overview

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



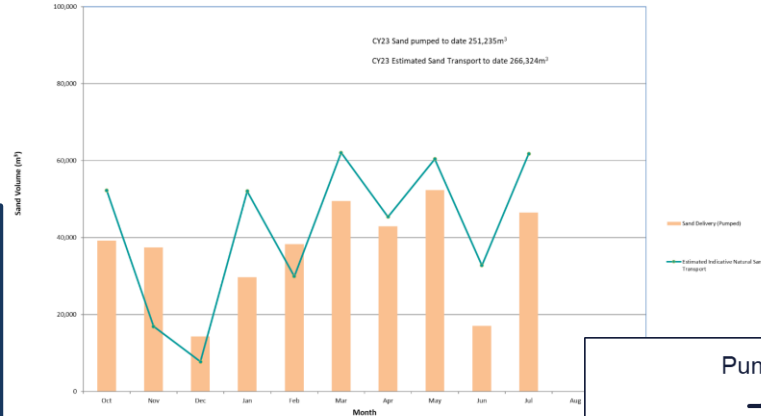
TWEED SAND BYPASSING

Pumping 2024

PUMPING BY JETTY MOUNTED SYSTEM 2024

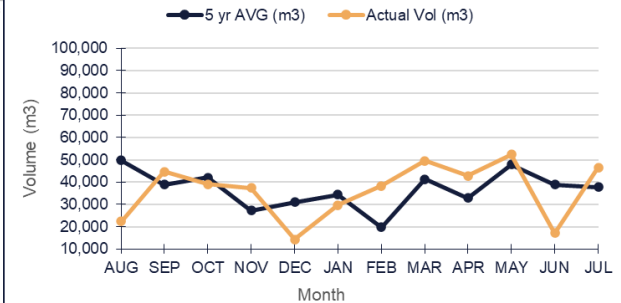
MONTH	Vol SRE (m3)	Vol D'Bah (m3)	Total Vol (m3)	5 Yr AVG (m3)
JAN	29,653	0	29,653	35,974
FEB	38,262	0	38,262	46,566
MAR	49,535	0	49,535	35,719
APR	42,896	0	42,896	49,899
MAY	22,338	30,021	52,359	49,237
JUN	17,077	0	17,077	35,979
JUL	46,502	0	46,502	46,268
AUG			0	25,465
SEP			0	34,447
OCT			0	34,594
NOV			0	23,294
DEC			0	37,831
TOTAL	246,263	30,021	276,284	455,274

CY23 : October 2023 to September 2024
Comparison of Monthly Pumping vs Estimated Sand Transport



The 5 yr average up to July is 299,642m3

Pumped Sand Delivery by Month



Duranbah Beach Nourishment

10th to 30th of May 2024

Location	Volumes (m ³)
Northern mound	7,580
Central mound	9,172
Southern mound	13,269
TOTAL	30,021



Duranbah 10 May (pre-nourishment)



Duranbah 03 June (post-nourishment)

- The surf amenity at Duranbah was maintained throughout the sand nourishment campaign.

- Dredging commenced at the Tweed River entrance on 21 July 2024
- Target volume of dredged sand is approximately 140,000 m³ with placement at Bilinga (50,000 m³, Fingal 50,000 m³ and Duranbah 40,000 m³).



TWEED SAND BYPASSING

2024 Dredge Placement

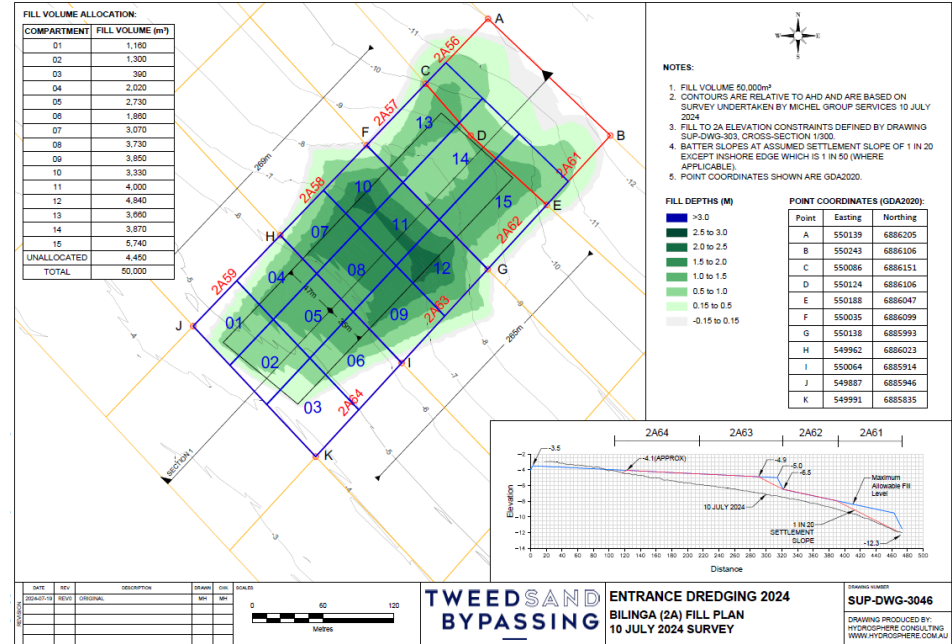
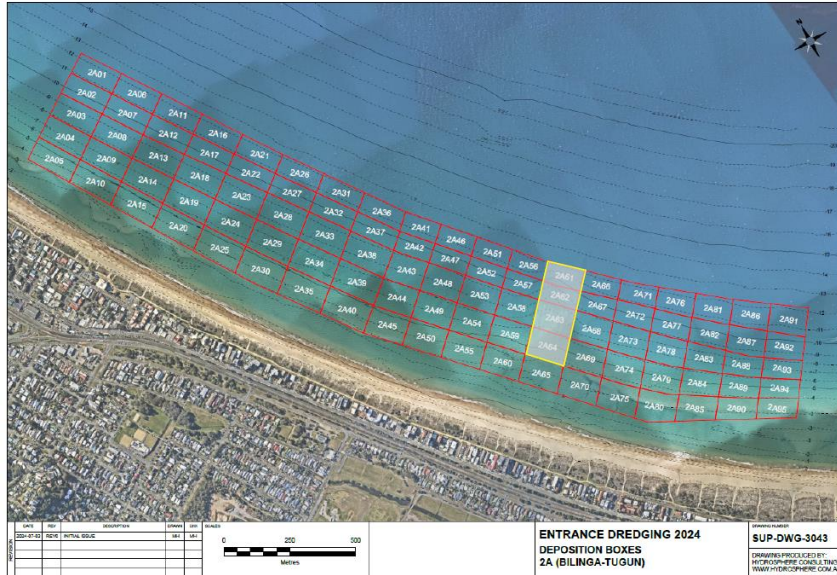
SAND DELIVERY BY DREDGE 2024						
MONTH	Duranbah	SRE	Fingal	Dreamtime	Bilinga	Total Vol (m3)
JAN						
FEB						
MAR						
APR						
MAY						
JUN						
JUL	9,017				26,008	35,025
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	9,017	0	0	0	26,008	35,025

July 2024 Dredge Placement Summary

Placement Location	Sub Box	Vol Nominated	Volume Delivered	Volume Remaining
Bilinga	1	1,160	977	183
	2	1,300	1,526	226
	3	390	785	395
	4	2,020	1,907	113
	5	2,730	2,938	208
	6	1,860	2,098	238
	7	3,070	3,554	484
	8	3,730	7,074	3,344
	9	3,850	3,307	543
	10	3,330	-	3,330
	11	4,000	628	3,372
	12	4,840	1,214	3,626
	13	3,660	-	3,660
	14	3,870	-	3,870
	15	5,740	-	5,740
	unallocated	4,450	-	4,450
Duranbah	DB01	5,500	3,810	1,690
	DB02	6,000	-	6,000
	DB03	5,500	5,207	293
	DB04	5,500	-	5,500
	DB05	6,500	-	6,500
	DB06	5,000	-	5,000
	DB07	3,500	-	3,500
	DB08	2,500	-	2,500
Fingal	F11	15,000	-	15,000
	F12	5,000	-	5,000
	F17	15,000	-	15,000
	F23	15,000	-	15,000
Totals		140,000	35,025	104,975

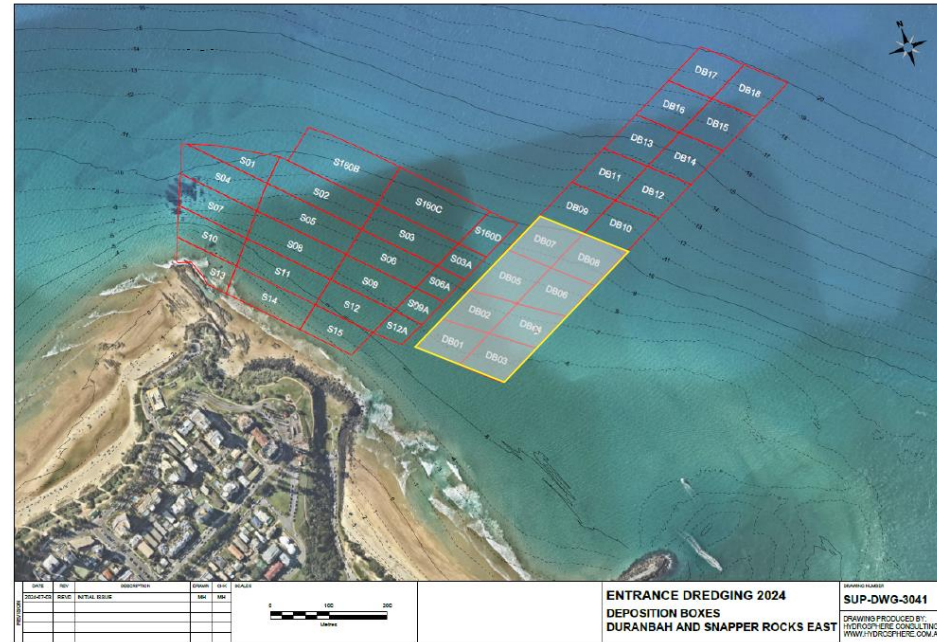
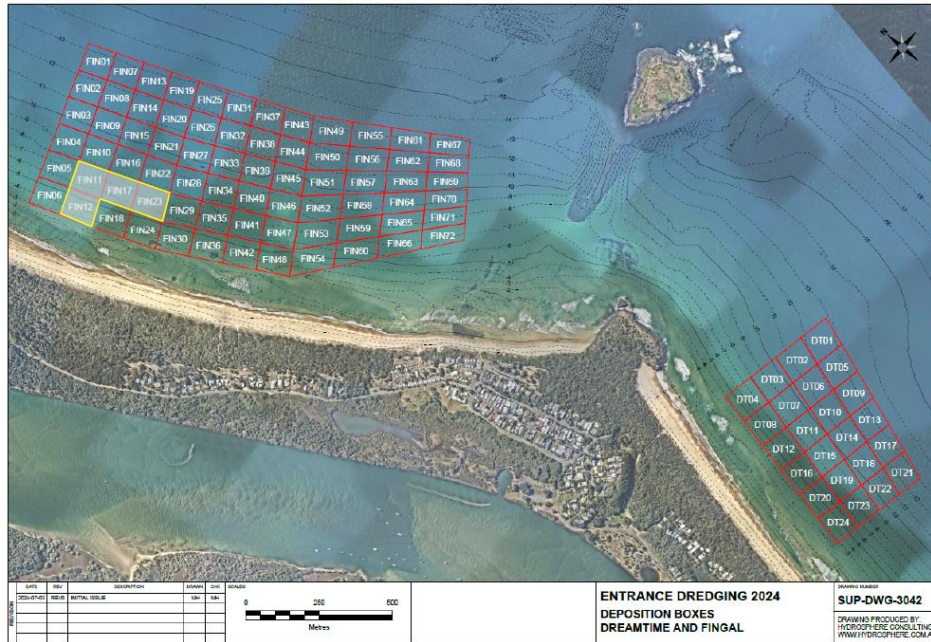
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2024 Dredge Placement - Bilinga

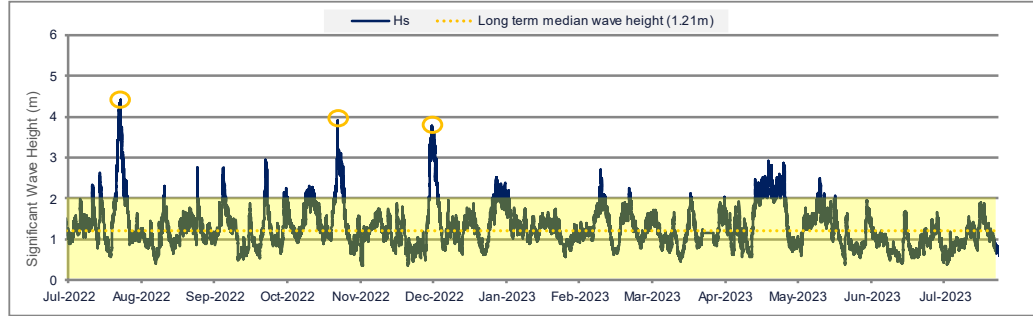


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2024 Dredge Placement – Fingal and Duranbah



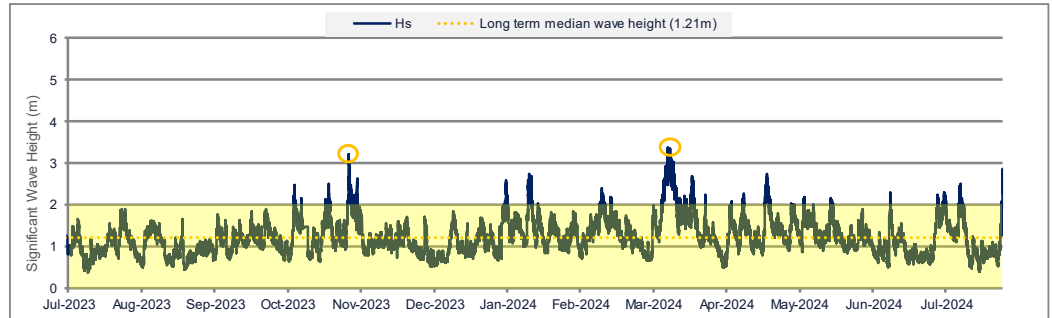
Environmental Monitoring / beach observations



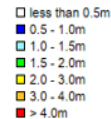
July 2022-23
Estimated transport
655,000 m³

July 2023-24
Estimated transport
488,000 m³

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

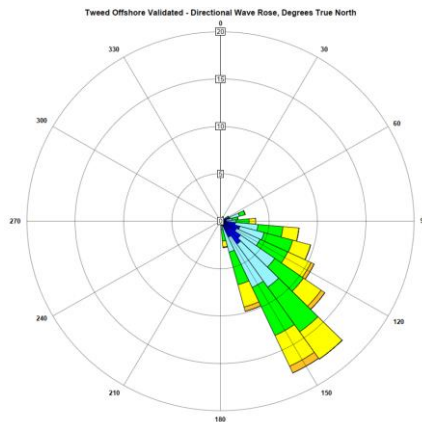


Environmental Monitoring / beach observations

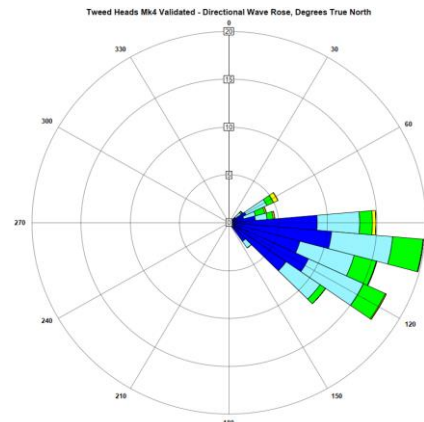


Tweed wave buoy
(nearshore)

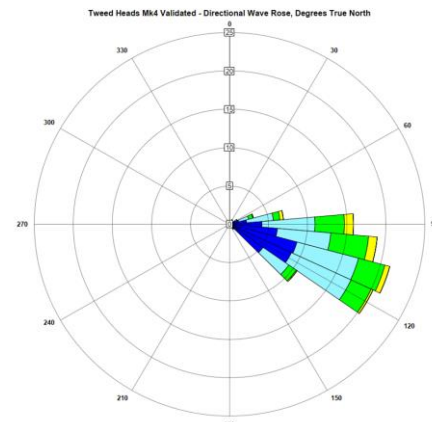
Tweed offshore
wave buoy



2024 May – 2024 July
Offshore



2023 May – 2023 July
Inshore



2024 May – 2024 July
Inshore

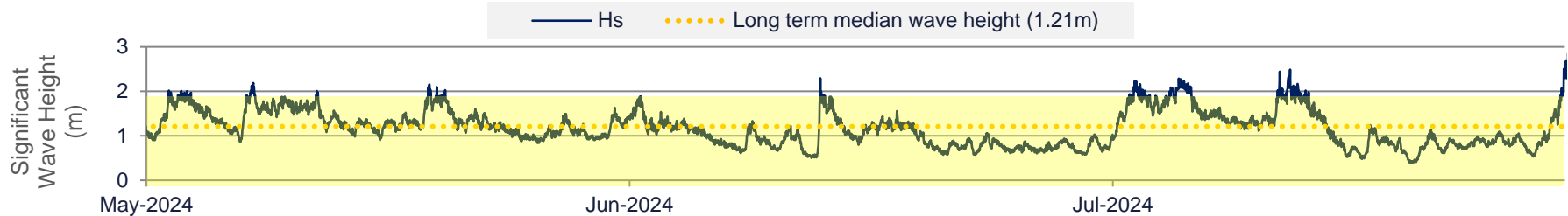
Recent conditions

May - Moderate conditions in May produced excellent surf particularly at Duranbah. Although smaller in size, Snapper Rocks produced long clean rides for surfers. Beach profiles remained relatively stable during the month and sediment transport was calculated at 95 percent of the estimated average.

In response to sand loss at Duranbah upper beach a nourishment campaign was completed delivering a total volume of 30,021m³ over a three-week period. The surf amenity at Duranbah was maintained throughout the sand nourishment campaign.

June - Relatively calm conditions across the month, with wave heights under 1m Hsig for the majority of June. In mid June a swell over 2m produced quality waves at Duranbah and Snapper Rocks. Sediment transport was calculated at half of the expected average for June and vessel counts were well above average with extremely high entrance usage.

July - The first 2 weeks in July had energetic conditions with consistent wave heights between 1.5 m and 2.5 m Hsig. Calmer conditions of 1m Hsig or less were experienced for the remainder of the month before the maximum wave height for July was observed on the last day, reaching 2.87 m Hsig. Duranbah suffered some upper beach erosion during large tides combined with active wave conditions and is continuing to be monitored.



TWEED SAND BYPASSING



5 February 2024

Fingal



11 April 2024



14 June 2024



TWEED SAND BYPASSING

Letitia



May 2024



August 2024

TWEED SAND BYPASSING

Duranbah Beach

16 May 2024



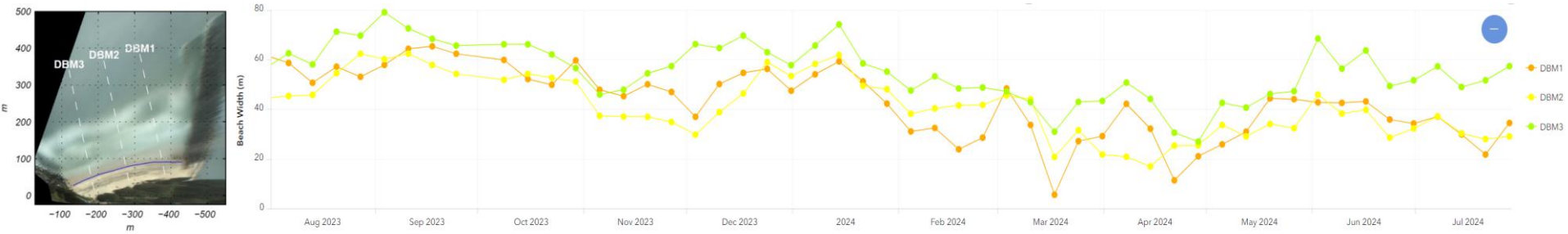
3 June 2024



15 July 2024



TWEED SAND BYPASSING



DURANBAH BEACH



March 2024

May 2024

August 2024

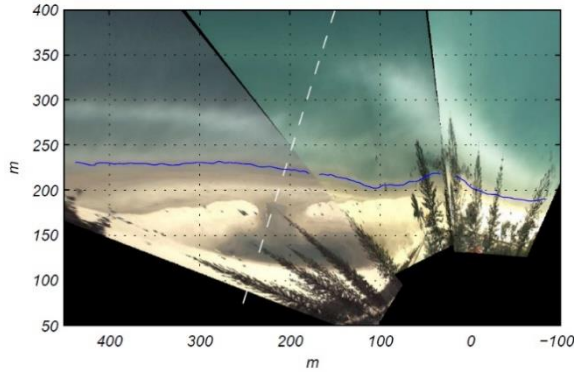
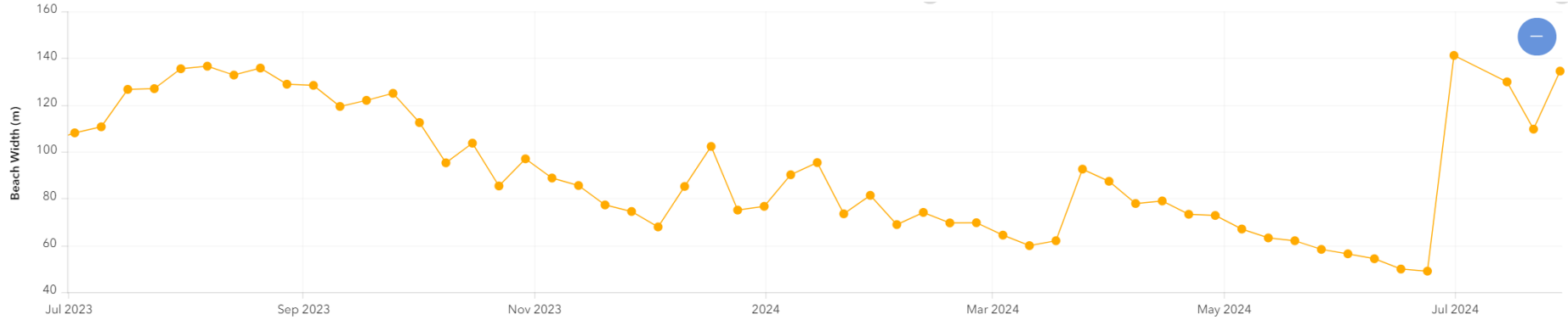
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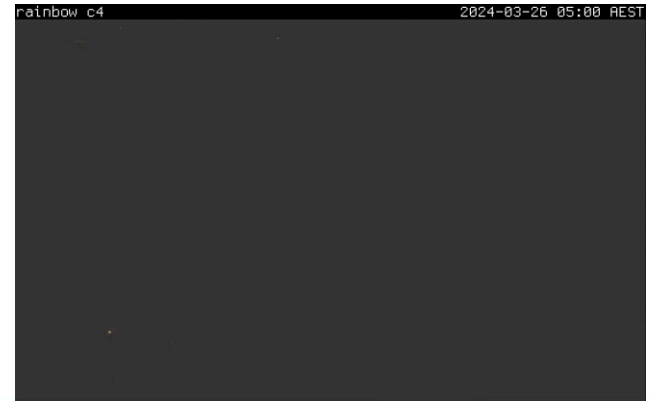
**Snapper Rocks
Rainbow Bay**



TWEED SAND BYPASSING



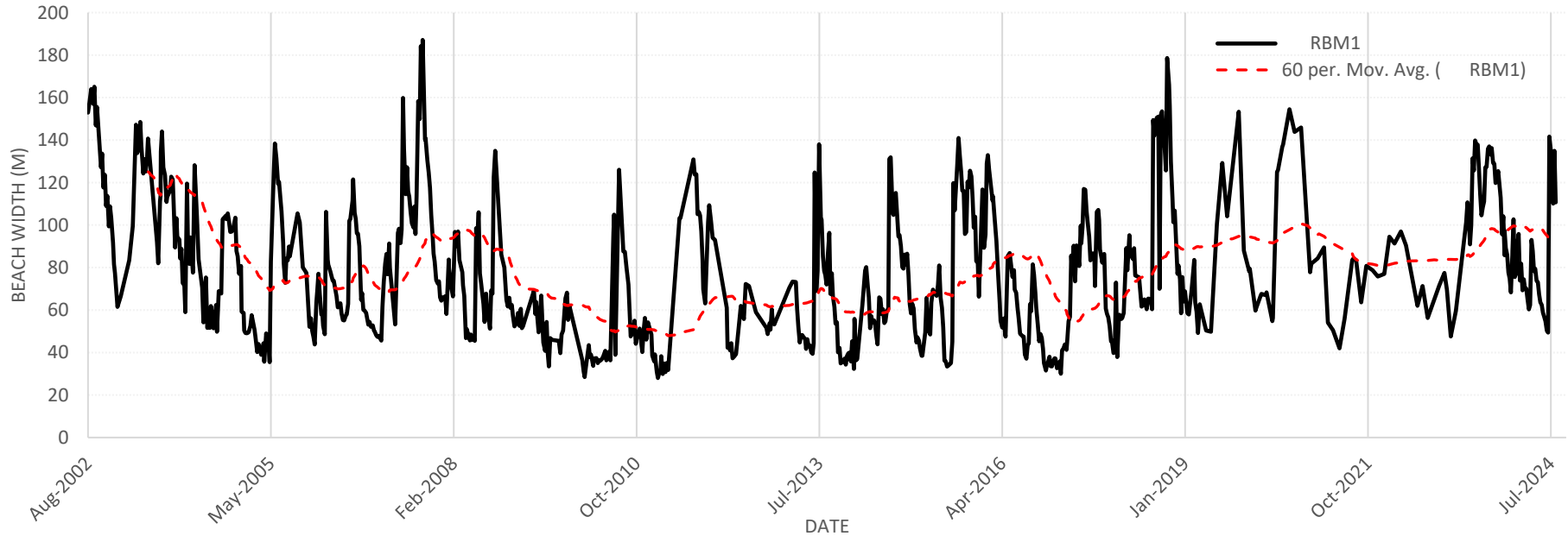
Rainbow Bay



TWEED SAND BYPASSING

Rainbow bay

Historical beach width data

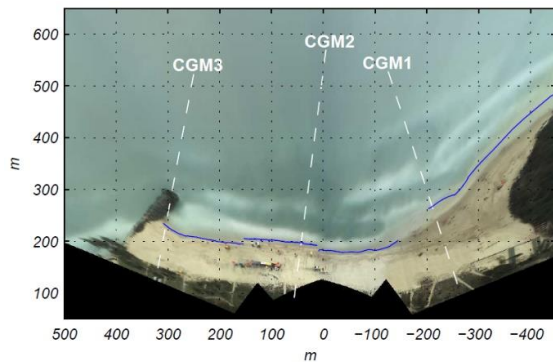
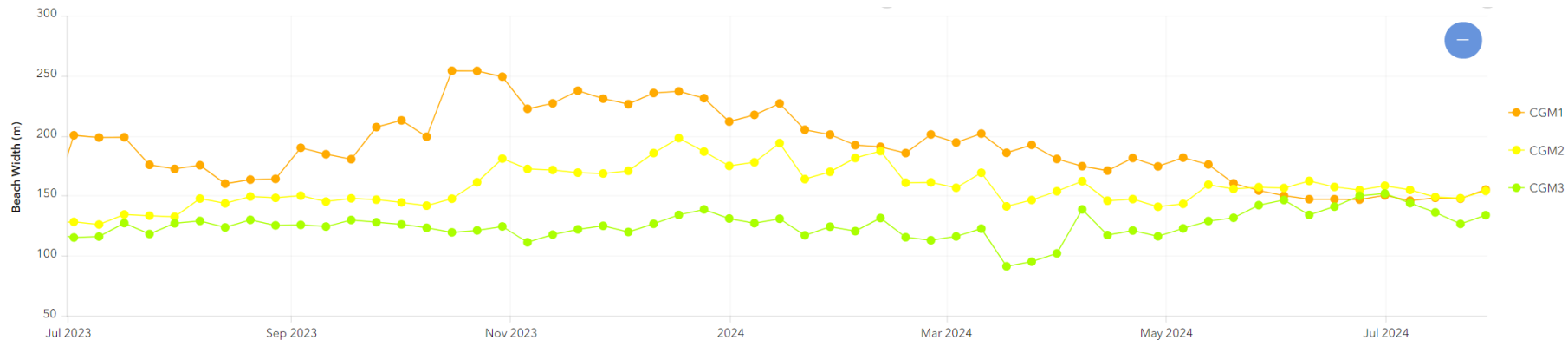


TWEED SAND BYPASSING

Coolangatta



TWEED SAND BYPASSING



COOLANGATTA



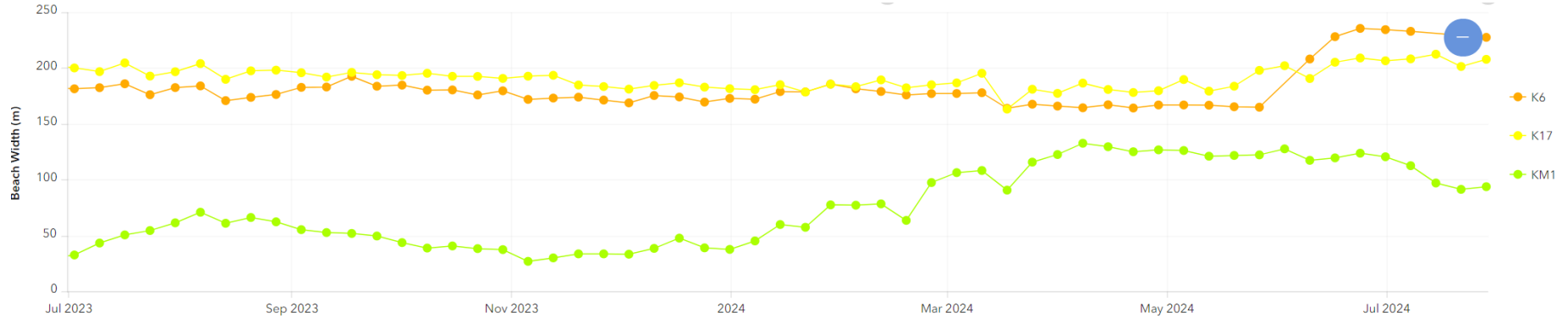
29/07/2024, 3:00 pm

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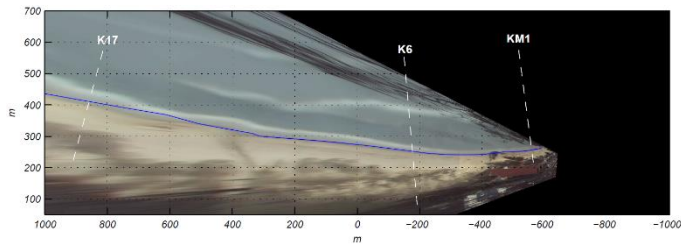
Kirra



TWEED SAND BYPASSING



Kirra

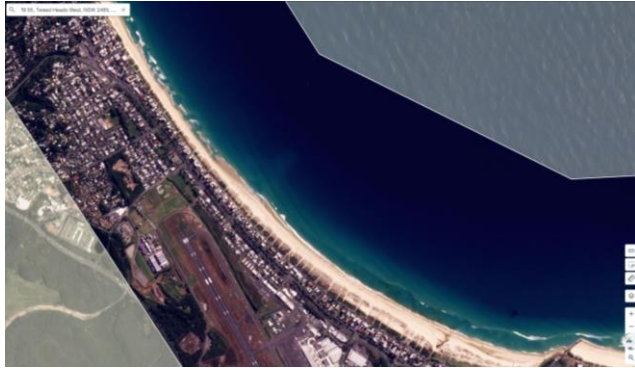


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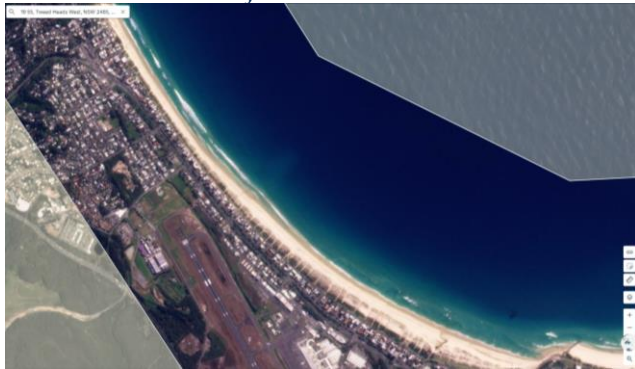


29/07/2024, 12:00 pm

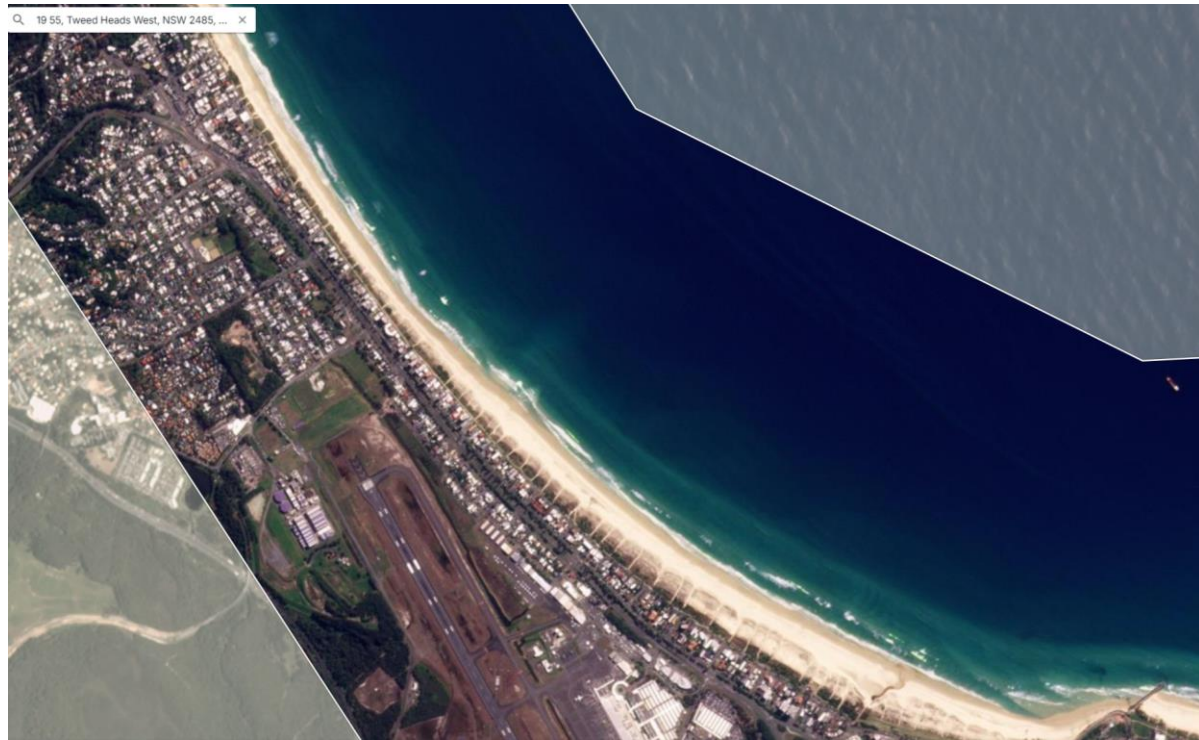
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16 June 2024



15 July 2024



Bilinga

18 August 2024

TWEED SAND BYPASSING

SURFONMARS

20 May 2024

SURFONMARS

19 July 2024

SURFONMARS

4 August 2024

Surf Conditions - Duranbah

Surf Conditions – Snapper Rocks



Surf Conditions – Kirra



August 2024



TWEED SAND BYPASSING

Entrance conditions, usage and survey

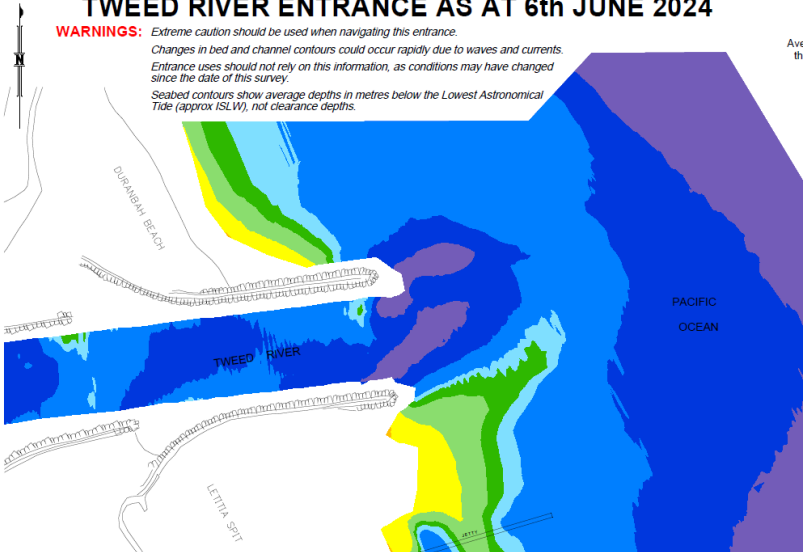
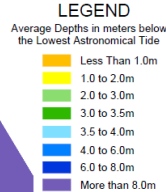


August 2024

TWEED SAND BYPASSING

TWEED RIVER ENTRANCE AS AT 6th JUNE 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.



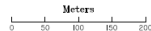
NOTES:

1. Survey information collected by Michel Group Services on 6th JUNE 2024.
2. This plan prepared by Michel Group Services on 18th JUNE 2024.
3. Surveys are undertaken for Tweed Sand Bypassing every three months to monitor entrance seabed levels.



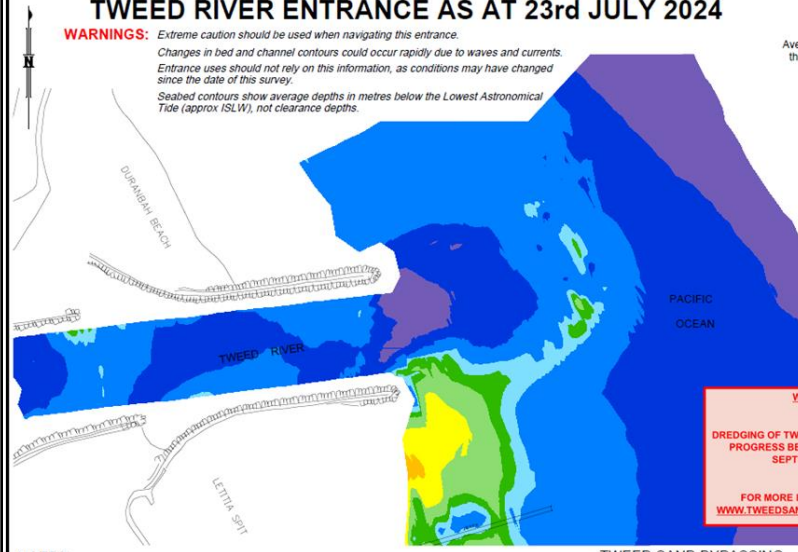
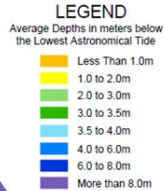
Transport
for NSW

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 23rd JULY 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.



WARNING

DREDGING OF TWEED RIVER ENTRANCE IN
PROGRESS BETWEEN AUGUST AND
SEPTEMBER 2024.

FOR MORE INFORMATION VISIT
WWW.TWEEDSANDBYPASS.NSW.GOV.AU

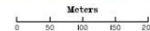
NOTES:

1. Survey information collected by Michel Group Services on 23rd JULY 2024.
2. This plan prepared by Michel Group Services on 28th JULY 2024.
3. Surveys are undertaken for Tweed Sand Bypassing every three months to monitor entrance seabed levels.



Transport
for NSW

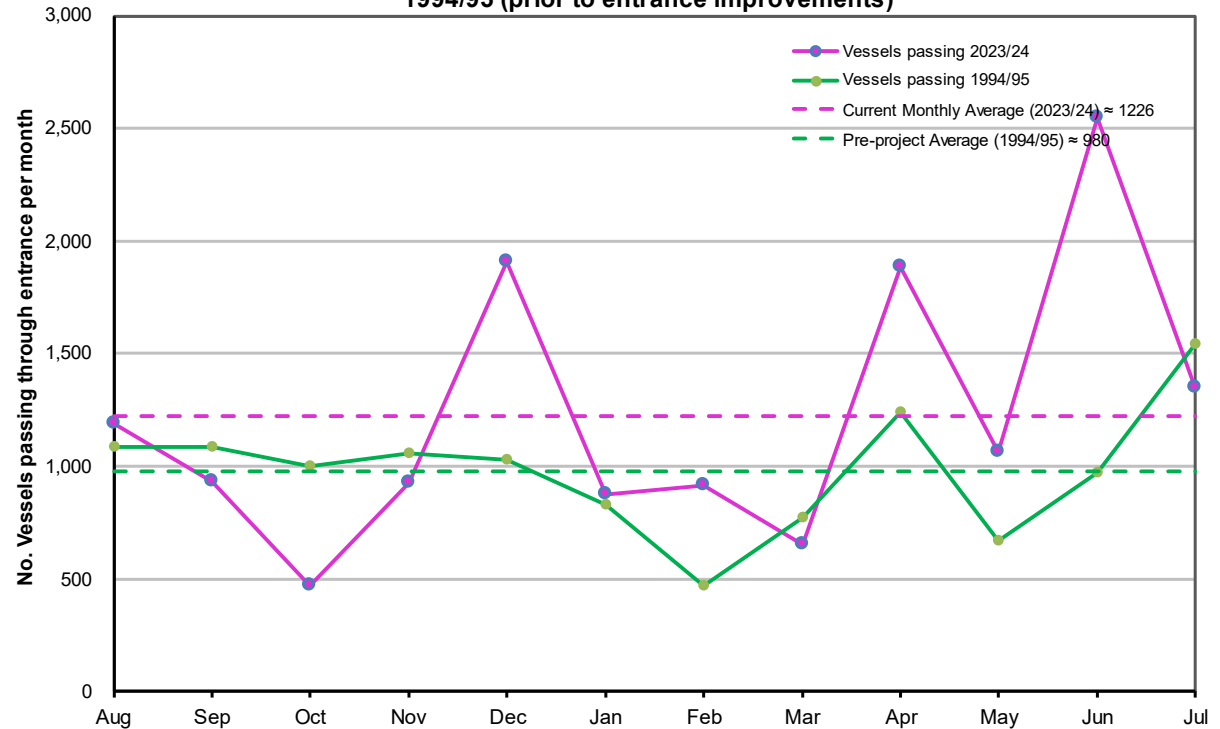
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Entrance usage

- Vessel numbers were on average for the months of May and July, however were unseasonably high during June.

Comparison of vessels passing through the entrance per month in 2023/24 compared to 1994/95 (prior to entrance improvements)



Projects and enhancements

TSB Transition

New network currently being installed, complete by end August. New SCADA hardware and software installed. Intergovernmental Agreement signed by Qld Minister, to be signed by NSW Minister. Asset handover and rectification nearing completion. TSBMS in use. New truck to arrive September. Operations staff recruited. Control room refurbished.

Low Pressure Pump Station deck upgrade

Low Pressure Pump Station deck replacement underway. Asphalt carpark to jetty compound complete. Portable buildings ready for installation.

Environmental Audit

Environmental Audit of TSB environmental Management System complete. No major findings or non-compliances. Has been submitted to Dept of Planning Housing and Infrastructure for review/acceptance.

Kirra Amenity Study

Revised draft received

Long Term Average Report

Scope complete. To market within coming weeks.

Environmental Management Plan

Submission of restructured EMP to regulator including address of stakeholder comments.

TWEED SAND BYPASSING

Communications and engagement

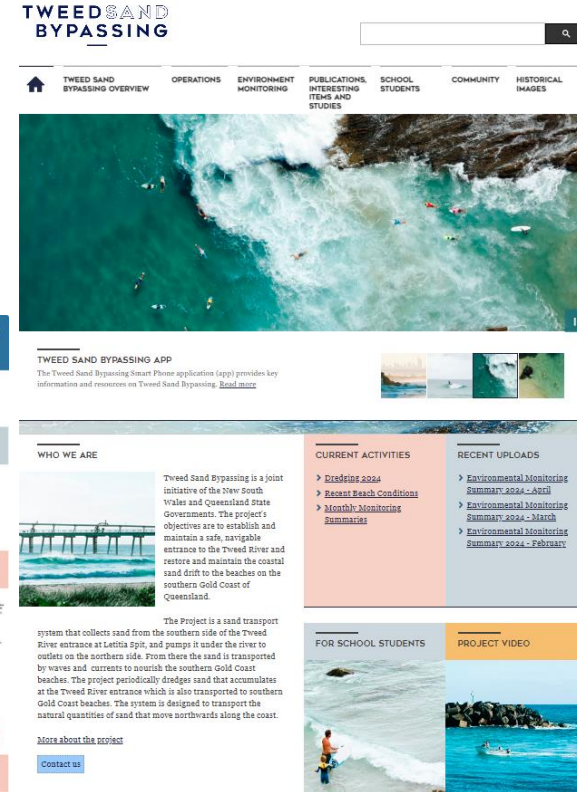
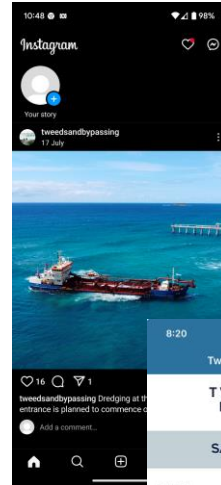
Communication activities (including Instagram posts) similar to previous dredge campaigns are being used for 2024

Jetty tours for Year 10 Geography students – 60 students in July

Routine App and website maintenance

Regular updates of notice boards with entrance maps. New notice board planned at Tweed marina

Media release relating to commencement of dredging. Media response to local newspaper.



TWEED SAND BYPASSING

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