

TWEED SAND BYPASSING

Advisory Committee and Community Meeting 16 February 2021

Summary of Discussions

Welcomes / Apologies – Manager, TSB Kim Bowra welcomed attendees and paid respect to the traditional owners. Apologies were received from some Advisory Committee Members.

Beach and Entrance Condition reports - Reports were received from various surf clubs, boardrider clubs and entrance users:

Volunteer Marine Rescue – provided by Glenda Ashby, Unit Commander

Marine Rescue Point Danger has been observing the Tweed Bar entrance daily.

For the last six months from August 2020 to January 2021 has seen 27 days seeing some difficulty in crossing the Tweed Bar along with 4 days of being unpassable.

These would all be weather related. The Tweed Bar should be always monitored for sand build up due to the rock walls.

Fingal Rovers SLSC – provided by Jane Colvin, President

As requested, 6 monthly (September - February 2021) observation report on beach conditions at Fingal Beach between the northern end of the Fingal Caravan Park and the southern end of Fingal Beach (ie Fingal Rovers' Primary and Secondary Patrol Zones):

From observation, plenty of sand has been arriving and building up on our beach. Currently there are no exposed rocks/hazards which limit Rovers' ability to set a patrol location within our Primary Patrol area.

Ocean Dive Charters – provided by Chris Mair

At the moment there is a large build-up of sand between the walls causing large & dangerous pressure waves making it dangerous to cross in 1.2 m swell or larger on the run out tide.

Snapper Rocks Surfriders – provided by Lorraine Bryant

We desperately need sand at Snapper and Duranbah beach.

The rocks at Snapper are really exposed and Duranbah is like a cliff face.... It is evening out a bit now with people using the beach.

In addition AC attendees provided the following comments:

- Duranbah scarping from December weather event is being flattened by beach users foot traffic.
- A lot of sand has been moving around Fingal headland from Kingscliff.
- Recovery from the 9 & 10 December low has been slow. Debris from Froggies currently being cleared by City of Gold Coast.
- Entrance bar crossings were dangerous during December weather event. Debris from this event from Bilinga to NSW was abnormally high.
- During December weather event there was breakthrough on northern Bribie Island, but southern Gold Coast beaches were fine with the exception of Snapper. Coolangatta beach and surf conditions have been good.
- Concern over Duranbah beach users safety due to exposed rocks
- First set of tests from Bilinga physical wave model have commenced

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Sand Placement / Pumping – In the calendar year of 2020, 427,031m³ of sand was pumped and 110,178m³ was removed and placed by dredge making a total of 537,209m³

Total pumped for January 2021 was 12,694m³ this was below the 5 year average of 30,806m³ for January due to unfavourable conditions (predominately easterly swell).

Wave Conditions – Wave conditions were presented describing the period August 2020 to February 2021. There was a significant swell event in December which produced waves over 6m from the ENE direction. For the remainder of the period conditions were relatively mild, although compared to the same period 12 months earlier the wave directions were more frequently from the ENE and East.

Beach Conditions – Aerial images were shown for each beach compartment and generally covered the period between mid-2020 to January 2021. Fingal and Letitia aerials showed stable conditions since with some drawback of the shoreline near the jetty following the December swell event. It appears along Letitia sand has moved cross-shore resulting in a wider and shallower surf zone. Duranbah aerials highlight the impact of the December swell event with visible scarping and loss of upper beach, this is supported by the beach width analysis also presented. Aerials show a deepening off Snapper Rocks and the movement of sand from Rainbow Bay through to and past Greenmount. At Coolangatta the beach width near Greenmount has varied considerably since June 2020 as a large volume of sand has moved through the beach compartment over summer. The aerials of Kirra show that it has deepened along Kirra groyne although the bank alignment has generally been stable.

Surf Amenity - It was noted that up until the mid December 2020 swell event, Duranbah and Snapper Rocks had high quality surfing banks. After the swell, sand banks at Snapper Rocks and Duranbah deteriorated. Rainbow through to Greenmount has had reasonable bank quality throughout January and February 2021. Kirra had quality, high performance waves during the mid December 2020 swell. Kirra has remained good for longboarding and beginners on small swells.

Entrance Conditions and Usage – Entrance surveys between July 2020 (pre-2020 dredge campaign) and January 2021 were shown in sequence demonstrating a consistently clear navigation channel. An animation based on entrance survey data was used to illustrate the evolution of the entrance over recent years, this highlighted the effect of dredging campaigns and also the dynamic nature of the entrance. Entrance usage (via VMR records) has shown the number of entrance crossings to be above the pre TRESBP totals.

TSB Projects – Updates were provided on the following projects;

- TSB Transition – Phase 1 investigations are complete, Phase 2 underway, on track for successful completion early 2021
- Reef Monitoring 2020 - complete
- Duranbah Access Pit – complete, used successfully in November 2020
- LTA report - complete
- Letitia Coastal Processes Study – scope developed
- Bilinga Physical and numerical modelling – Queensland Hydraulics Laboratory.

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Communications –

- Preparation of a communications plan for 2021 dredging campaign underway
- The TSB App and Instagram site will be updated for sand delivery locations

General Business – open to all attendees:

- Q: Does the new North Duranbah access pit provide any cost savings?
A: Reduction in mobilisation time, improved flexibility regarding placement at northern Duranbah, does not require Duranbah valve switching, potential cost savings if only placing sand at northern end of Duranbah.
- Q: What is going to be the fix for the Duranbah erosion?
A: A nourishment plan was always planned for February/March 2021 and will remain.
- Q: Long term sand supply queries were raised.
A: The long term sand supply quantities for Duranbah are within the legislated tolerances (upper limit 10%)
- Q: Why such low volumes being pumped to Snapper Rocks east location?
A: Unfavourable pumping conditions occurred throughout much of January 2021 resulting in a below average volume for the month.