

# Securing the future of our coastline

## FAQs – Quarry sand trials at West Beach

**December 2020**

As part of the *Securing the future of our coastline* project the state government has committed to deliver a large quantity of sand (500,000 cubic metres) to West Beach from outside of Adelaide's beach system to make up for losses that have occurred since the late 1990s.

Sand is a finite resource and there is a limited amount of sand in Adelaide's beach system. Investigations into sourcing sand from offshore sand deposits and land-based sources (quarries) are underway. These investigations and other planning and approvals are required before the external sand can be delivered.

Small amounts of sand from South Australian quarries (land based sources) have been placed on the beach in front of the West Beach Parks dunes and are being assessed as part of the investigations.

### About the quarry sand trials

The Department for Environment and Water has shortlisted various land based sands (from quarries) which meet departmental guidelines and 150 tonne of each sample has been placed on the beach at West Beach as a trial.

- The sand has been placed in front of the West Beach Parks dunes from Hamra Avenue northwards for approximately 200 metres in a single row.
- The trial sand was delivered to the beach in the week commencing Monday 7 December 2020.

### Where has the quarry sand coming from?

The sand is from licensed quarries in South Australia located in Golden Grove, Mt Compass, Wellington and Clinton on the Yorke Peninsula (see overleaf for photos and details). Further sands may also be trialled as part of the assessment.

### Is the quarry sand clean and safe?

The sand sources are from naturally occurring sand deposits and are not from any waste or recycled products. The sands are available for purchase by the public.

- The sands are screened to the desired sizing and then washed to remove silt and clays leaving a very clean natural sand.
- The mining and processing of these sands are monitored under EPA and extractive licences and comply with the relevant Acts.

About 2000 tonnes of one of the trial sands was used for Olympic volleyball events held at Glenelg in 2008.

### Can any type of sand go onto the beach?

No, the sand we are looking for both from quarries and from offshore sources needs to have certain characteristics to do the job of beach and dune stabilisation. Coarser sands (larger grain sizes) are better because they are heavier and are less likely to be moved along the coast by wind and waves.

The sand also needs to have a low percentage of silt and clay particles so that plumes aren't caused after the sand is placed on the beach.



Sands are located at the West Beach Parks dunes from Hamra Avenue northwards for approximately 200 metres in a single row. Visit to check out the sands - from south to north the sands are as follows:

<b>Trial sand product name</b>	<b>Image</b>	<b>Colour</b>	<b>Quarry location</b>
5GS Glass Grade Sand 5 piles		Off white	Mt Compass
N40 Nalpa Washed 5 piles		Light yellowish brown	Nalpa near Wellington
Clinton SPTC SQSW Washed 5 piles		Light grey	Clinton, Yorke Peninsula
Selected Bulk Washed 4 piles		Off white	Mt Compass
AFS20 5 piles		Light brown	Mt Compass
Selected Bulk Washed (same sand as sample above) 4 piles		Off white	Mt Compass
FSA Filter Sand 5 piles		Pale brown	Golden Grove
TDS Top Dressing Sand 3 piles		Off white	Clinton, Yorke Peninsula
Clinton Concrete Sand 2 piles		Yellow	Clinton, Yorke Peninsula
TDS Top Dressing Sand (same sand as sample above) 5 piles		Off white	Clinton, Yorke Peninsula

*\*Further sands may be also be trialled as part of the assessment.*

## **How will the quarry sand be assessed?**

The department will undertake the following assessments of the quarry sand:

- Engineering qualities – movement with wave and wind action by observation
- Colour – as first placed and after bleaching with time
- Grain size – visual and feeling underfoot
- Tactile – shape of grains and feeling underfoot, change in shape with time
- Turbidity – visually monitor potential for plume formation during high tides
- Public feedback.

## **Will the quarry sand bleach and blend in?**

It is expected that the sand will bleach after being exposed to the sun and seawater and the sand will be assessed on how well it bleaches and blends in as part of the trial.

## **Feedback or questions?**

If you have any feedback or questions about the sand trial please email [DEWCoasts@sa.gov.au](mailto:DEWCoasts@sa.gov.au) or phone (08) 8124 4928.

**[View more FAQs regarding the \*Securing the Future of our Coastline\* initiative](https://environment.sa.gov.au/coasts)**  
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*This information sheet was updated on Friday 18 December 2020. Note works are subject to change.*