



DUNE MANAGEMENT: FISH HOEK

Prepared by: Coastal Management Branch

Environmental Management Department

Queries: enviro@capetown.gov.za

Tel: 021 487 2284 or 021 487 2350

MOTIVATION FOR PROJECT

The Fish Hoek beachfront extends from the Restaurant in the south to Clovelly in the north east.

This 1.5 km stretch of coastline is not only a favourite recreation area and a prime tourist attraction, but also a popular whale watching spot for local and international visitors during the spring months.

Natural coastal processes lead to sand being deposited on the beach and the beach thickening during the winter months. This sand used to be transported by the prevailing summer winds to Noordhoek.

This process still continues, but the sand can no longer move to Noordhoek and is trapped within the narrow dune belt that now needs to be managed.

These remaining dune systems are important to protect surrounding infrastructure and buffer the coastline against storm surge events and sea level rise.

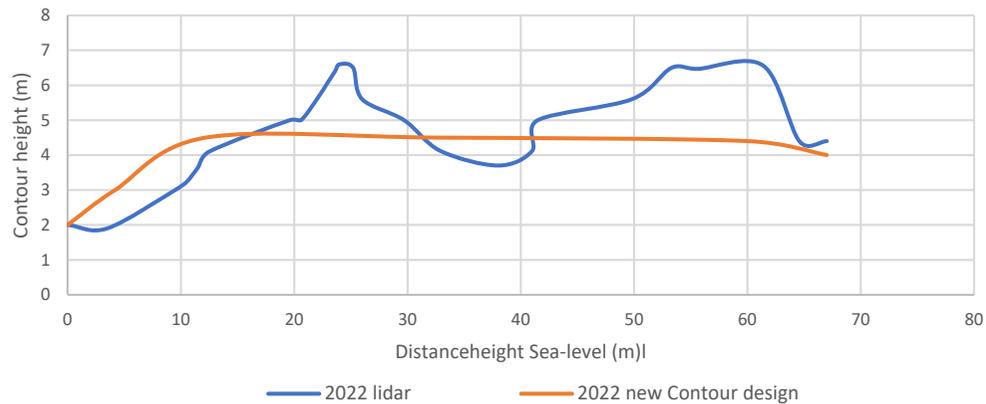
Coastal Management has taken the opportunity to include the Fish Hoek dune system in its dune management plan, along with Kommetjie, Hout Bay, Table View and Gordon's Bay.

FISH HOEK DUNE PROJECT

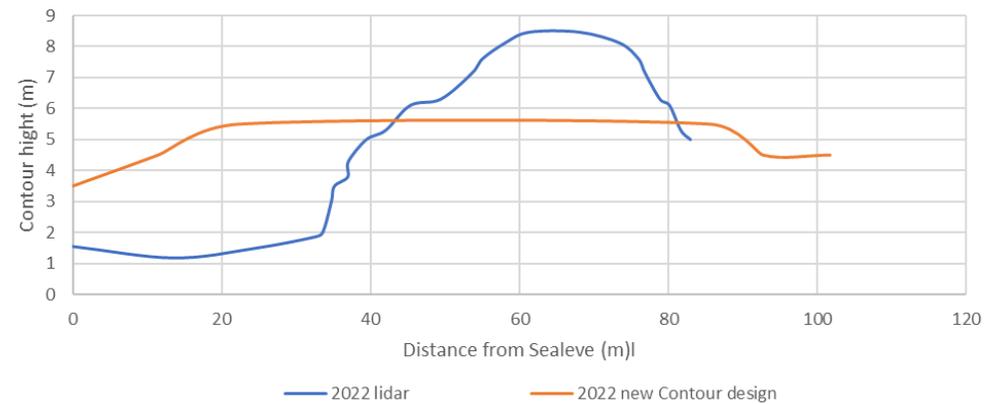
- Reprofile and vegetate the dunes to mitigate accumulation of windblown sand on adjacent infrastructure, including stabilisation and rehabilitation of the dune cordon.
- Install irrigation that will encourage vegetation establishment.
- Install dune nets to facilitate the stabilisation, trapping and placement of windblown sand within the dune area.
- Restore coastal infrastructure - beach access, pathways and fencing.
- The project will be completed in 5 "Management Units".
- Earthworks to be complete by end of May 2023. Project to be fully implemented by end of June 2024. After which, the City will continue maintenance.



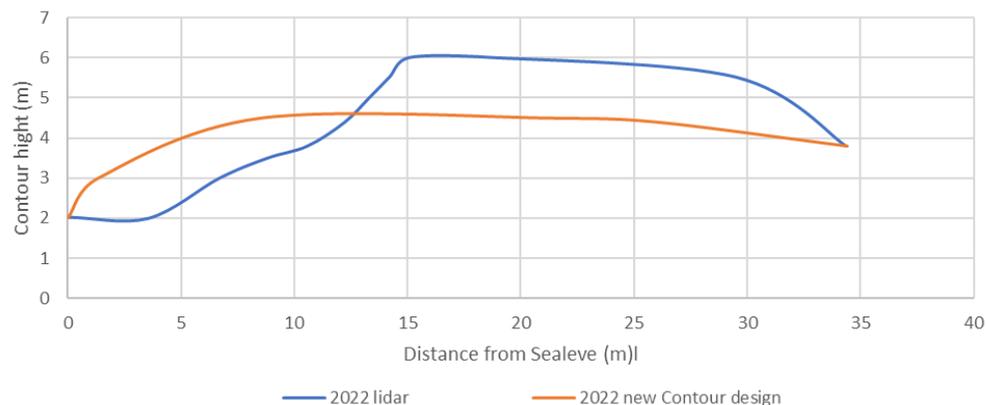
Dune Profiles Along A-A transect



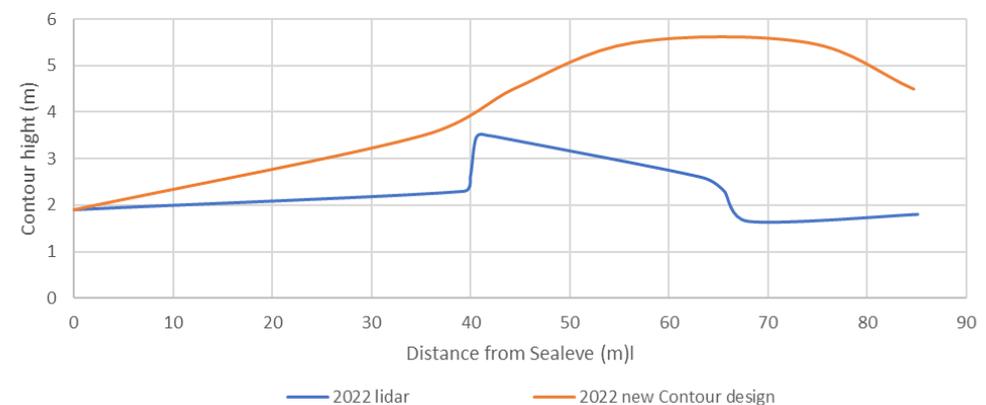
Dune Profiles Along E-E transect



Dune Profiles Along D-D transect



Dune Profiles Along F-F transect



OPERATIONS

- During reprofiling of the dune system, organic material and other waste items that were uncovered from the earthworks, were collected daily and removed off site.
- A beach cleaning protocol was implemented to remove organic wash up from the beach.
- Ad hoc large scale clean-ups were undertaken as and when required.
- Irrigation was installed to guarantee establishment and long-term sustainability of the dune vegetation.

INFORMATION SHARING

- The works were undertaken by the City's Maintenance Management Plan (MMP) as authorised by the Provincial Environmental Authorities.
- 17 January 2023 - Public meeting held at Fish Hoek Council Chamber. Invites sent to Ratepayer Association, Ward Councillor, Sub council Manager and directly adjacent facilities and residences impacted by works
- 23 Feb 2023 - Press release issued advising of proposed works, start dates and duration
- 04 May 2023 - Article in the False Bay Echo upon commencement of works explaining the Fish Hoek & Glencairn dune projects specifically.

INTERESTING FACTS

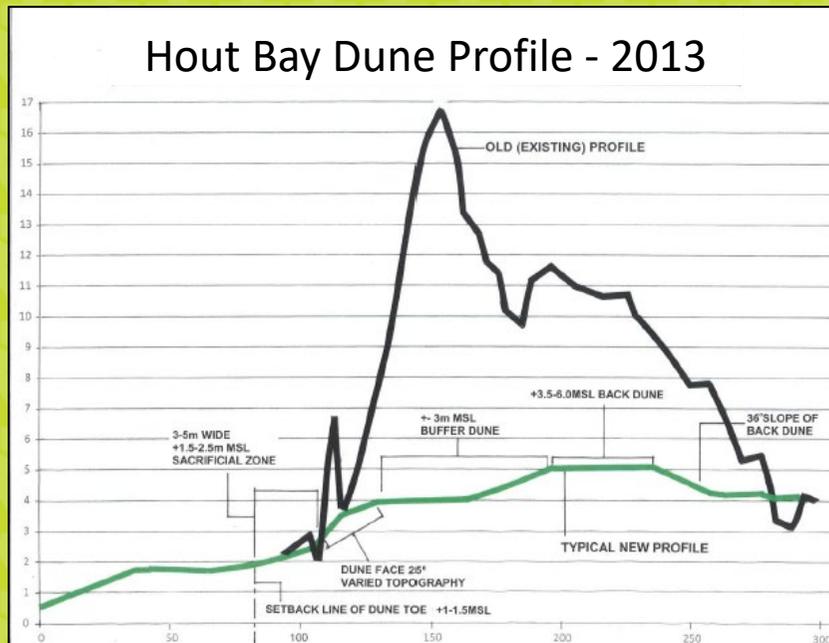
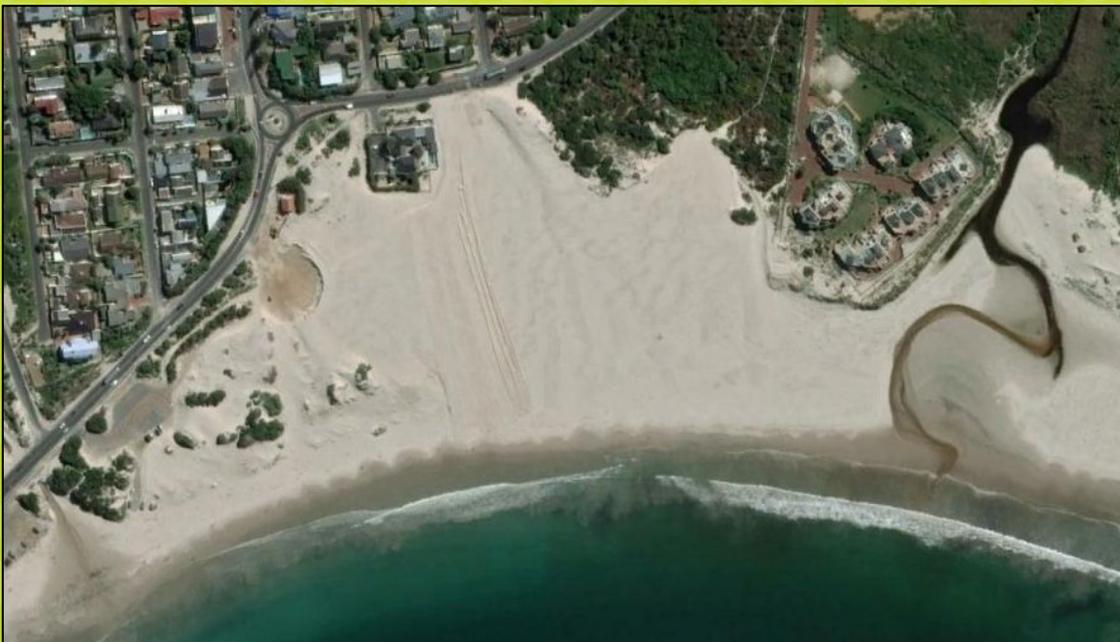
- 4.5 ha of dune was rehabilitated.
- 40 000 m³ of sand was moved.
- 9570 m³ of sand was returned to the ocean for circulation within the system.
- Approximately 22 710 plants were rescued from the dune system and reused.
- Approximately 82 670 plants were planted within the dune system.
- Approximately 6500m of wind nets were installed to manage wind-blown sand.
- Plant species diversity and abundance increased due to variety planting of dune species.



SUCCESS TO DATE..



BASE MODEL - HOUT BAY BEACH BEFORE SAND MANAGEMENT..



HOUT BAY BEACH AFTER SAND MANAGEMENT..

