

Adelaide's Living Beaches: A Strategy for 2005–2025



Adelaide's southern and central metropolitan beaches are eroding because sand is being pushed north along the coast by waves. If we don't keep sand on the beaches, rock and clay will be all that remains, and roads and houses along the coast will inevitably be damaged by storms.

In November 2005, the Government of South Australia endorsed a new strategy for managing Adelaide's metropolitan beaches. It is called *Adelaide's Living Beaches: A Strategy for 2005–2025*.

The strategy will keep sand on Adelaide's beaches for recreation, amenity and protection purposes, while reducing the amount of sand carting required. In the long term, the strategy is expected to reduce the cost of managing Adelaide's coastline by about 20%.

The strategy works in five ways:

- 1 Southern and central beaches will continue to be replenished with sand to maintain the sandy foreshore and protect coastal infrastructure.
- 2 Sand will be recycled from north to south using a pipeline system, which will minimise the need for sand carting using trucks.
- 3 Sand will be brought in from sources outside the metropolitan beach system to tackle the ongoing loss of dune volume and beach width caused by sea level rise.
- 4 Structures such as offshore breakwaters and short geotextile groynes will be built in a few critical locations to act as sand traps.
- 5 Sand management at the Glenelg and West Beach harbours will be linked more effectively with the beach replenishment program.

The strategy will be phased in over five years, commencing with trials of sand acquisition devices and pumping systems. Consultation with the community will take place before any permanent systems are installed.



Storm damage at Glenelg, 1960



Glenelg in more recent times (photo by Johnny Kamma)



Dredging of sand and seagrass at the Glenelg harbour



Example of sand acquisition pipeline (Noosa, Queensland)

How will the strategy affect Glenelg?

- After sand acquisition devices and pumping systems have been trialled, the Department for Environment and Heritage intends to construct a permanent pipeline to recycle sand from Glenelg to Kingston Park. The pipeline will be about 30 cm in diameter and will be installed unobtrusively behind the dunes or, where there are no dunes, in or behind the seawall.
- Most of the sand building up south of the harbour at Glenelg will be recycled through the pipeline to southern beaches rather than being bypassed around the harbour to replenish Glenelg North.
- A sand acquisition device will be needed at Glenelg to remove sand from the beach, mix it with seawater to form a slurry mixture, and pump this slurry into the pipeline. Booster stations will be required every 2 km to pump sand along the pipeline. They will be designed to limit noise and visual impacts.
- A dredge will be used to maintain the depth of the Patawalonga channel, manage seagrass wrack, and bypass a reduced quantity of sand.

For further information contact:

Department for Environment and Heritage
Phone 8124 4882 or visit www.coasts.sa.gov.au and select Adelaide Coast Protection