



# Orewa Beach Monitoring Report 2025

Orewa Beach is monitored by Auckland Council’s Coastal Processes Monitoring Programme to determine rates of sand gain (accretion), or sand loss (erosion), identify storm impacts, and monitor beach operations. By improving our understanding of how Auckland’s coastline changes over time, we can make more informed decisions to manage coastal hazards, guide beach maintenance, and support the resilience of our beaches into the future.



Scan the **QR code** to check out all beach data here.

This report presents changes at Orewa Beach over the last year. Check out the latest [State of Environment report](#) to explore long-term trends of beach change in Tāmaki Makaurau or [click here](#) to learn more about how we measure and describe changes at the coast.

## Observed Coastal Change

The Coastal Processes Programme monitors sand levels at Orewa Beach with 10 profile lines running perpendicular to the shoreline (Figure 1). These long-term records help us track changes in beach width and beach volume over time.

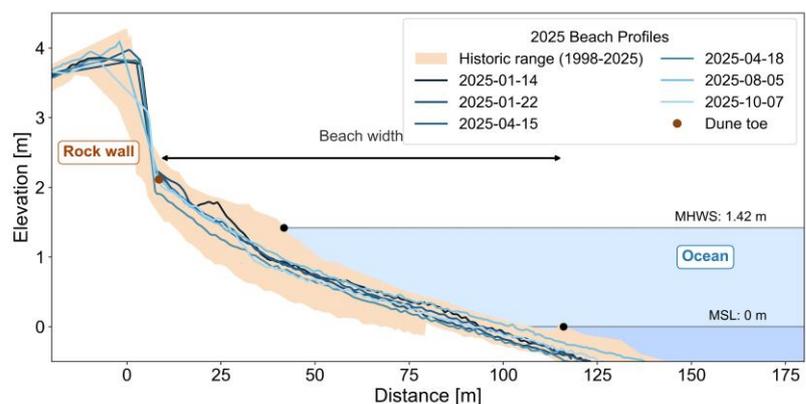


**Figure 1:** Location of the 10 monitored beach profiles at Orewa Beach. The representative profile shown in Figure 2 is highlighted with a black border. All beaches included in this reporting scheme are shown on the right-hand side map of Auckland.

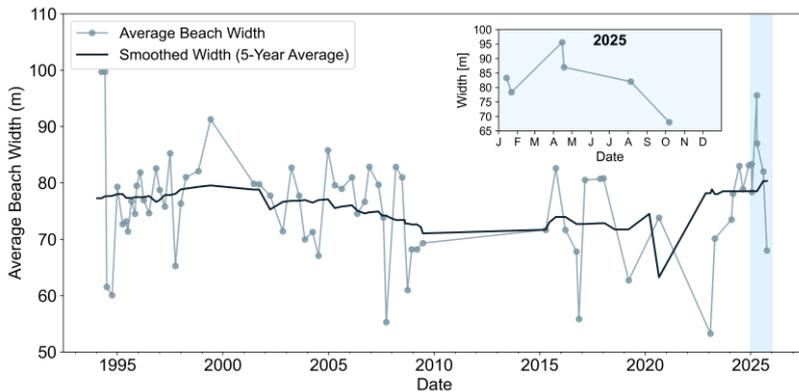
### Change in sand levels:

Figure 2 shows historic sand levels at Orewa Beach Profile 2, from the rock revetment down to the water level. Sand levels at Orewa Beach are currently in the middle of the historic range indicating a moderate beach state relative to past conditions (Figure 2).

In 2025, sand levels dropped after high-energy events at the start of the year, reaching their lowest after Cyclone Tam (April). Since then, the upper beach has partly recovered, but sand levels below MHWS remain low.



**Figure 2:** Changes in sand levels at Orewa Beach P2. Mean Sea Level (MSL) represents the average mid-tide level, Mean High Water Springs (MHWS) marks the average high-tide line. Beach width is the distance between dune toe and MSL.



**Figure 3:** Beach-wide averaged width (calculated between dune toe and MSL) at Orewa Beach.

**Change in beach width:**

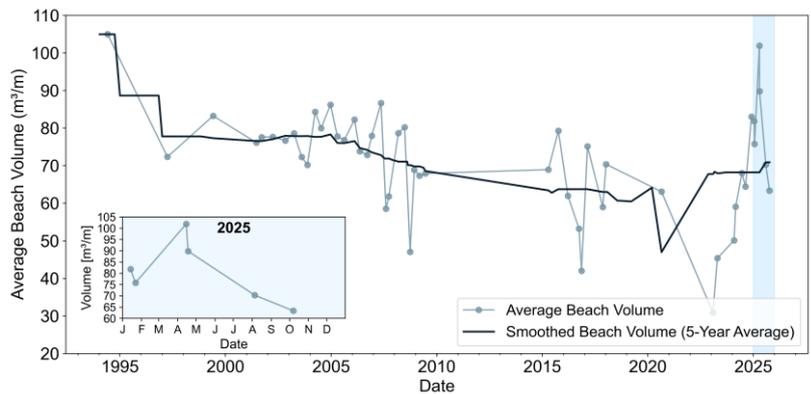
Figure 3 indicates that beach width at Orewa Beach exhibits long-term stability but with considerable short-term fluctuations likely due to storms and large swell events temporarily moving sediment offshore. For example, beach width reduced by ~15 m after Cyclone Gabrielle in 2023.

In 2025, beach width decreased after a January storm before recovering as sand returned to the beach. It dropped again after Cyclone Tam and continued to reduce over the rest of the year (Figure 3).

**Change in beach volume:**

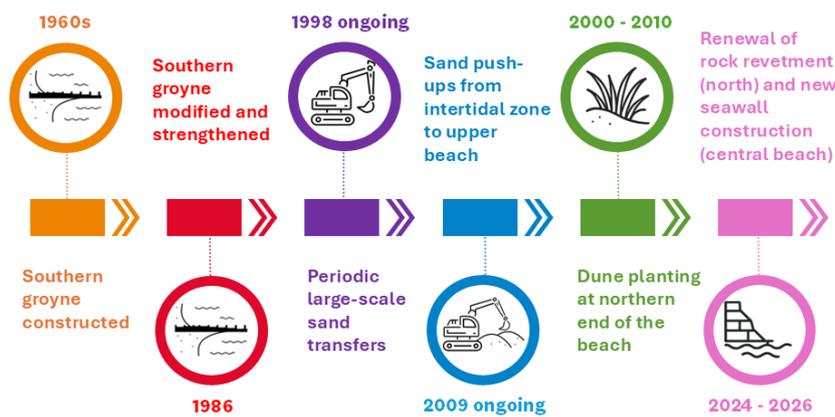
Since consistent monitoring began in the 1990s, the amount of sand at Orewa Beach has remained relatively stable but with large fluctuations observed throughout the record (Figure 4).

Similar to changes in beach width, beach volume dropped following Cyclone Tam in April, and has continued to decrease throughout the year, likely due to winter wave conditions keeping sediment offshore.



**Figure 4:** Beach-wide averaged volume (calculated above MSL) at Orewa Beach.

**Coastal Management Activities**



**What has been going on?**

Orewa Beach is a relatively modified beach with a number of engineered structures and ongoing operations to maintain the position of the shoreline and help keep sand on the beach. A new seawall along the central to northern beach is due to be completed early 2026.

Large-scale sand transfers (last undertaken in 2023), and sand pushups, are also periodically undertaken to redistribute sediment on the beach.

Learn more about [Auckland's Shoreline Adaptation Plans](#).

**OREWA BEACH**

**10** BEACH PROFILES are used to monitor Orewa Beach

**111** SURVEYS RECORDED a detailed monitoring record

**4** SURVEYS A YEAR beach is surveyed every 3 months

**45** YEARS OF DATA tracking coastal change at Orewa Beach

**1981** START monitoring began over four decades ago