

# Maraetai Beach Monitoring Report 2025

Maraetai 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 Maraetai 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 Maraetai Beach with 4 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.

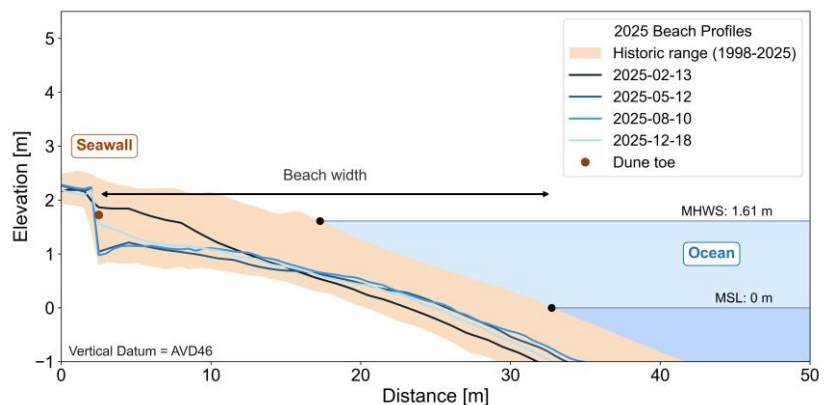


**Figure 1:** Location of the 4 monitored beach profiles at Maraetai Beach. The representative profile shown in Figure 2 is highlighted with a black border. All beaches included in this reporting scheme are shown on the right-hand side map of Auckland.

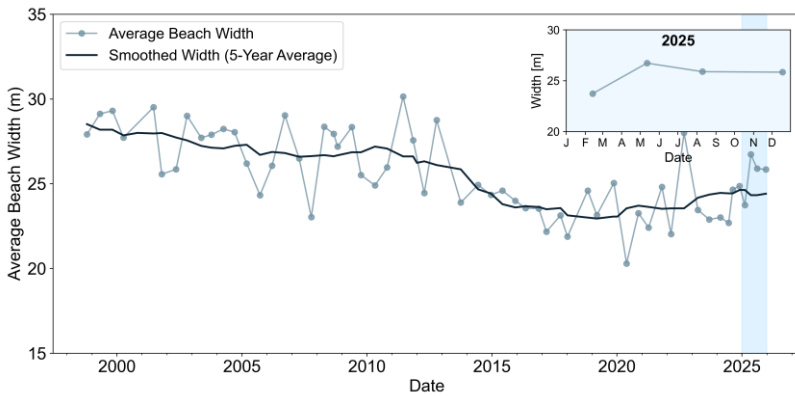
**Change in sand levels:**

Figure 2 shows historic sand levels at Maraetai Beach Profile 2, from the seawall down to the water. Current sand levels sit within the lower half of the historic range (Figure 2).

In May 2025, sand levels dropped along the upper beach and remained low through to August. Since then, sand levels have started to recover, increasing at the upper beach and decreasing slightly at the lower beach as sand is naturally redistributed across the profile.



**Figure 2:** Changes in sand levels at Maraetai 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.



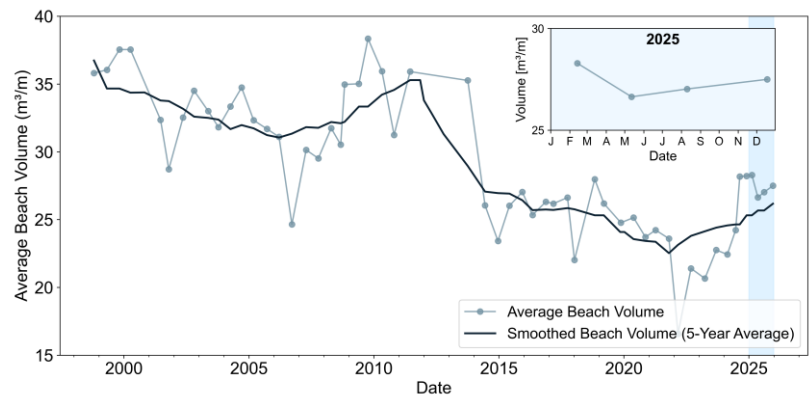
**Figure 3:** Beach-wide averaged width (calculated between dune toe and MSL) at Maraetai Beach.

### Change in beach width:

Figure 3 indicates that beach width at Maraetai Beach exhibits long-term erosion but with considerable short-term fluctuations likely driven by sediment redistribution during storm events and recovery, and coastal management interventions (Figure 3).  
In 2025, average beach width increased in May as sediment from the upper beach was transported to the lower beach resulting in a lower and flatter beach. Beach width remains relatively stable for the remainder of the year as sediment is naturally redistributed across the beach profile.

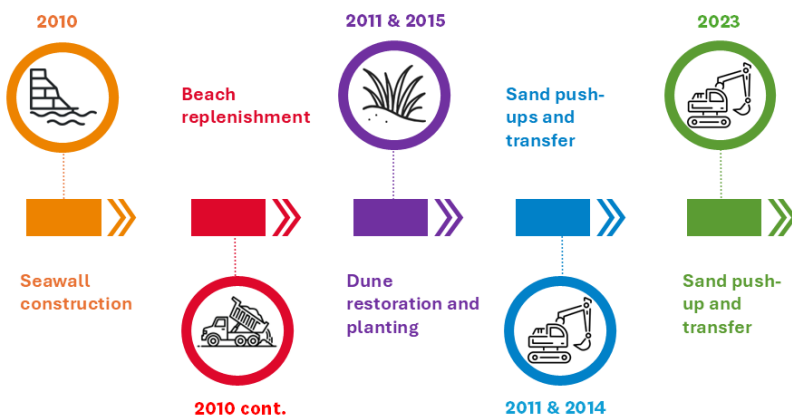
### Change in beach volume:

Since consistent monitoring began in the 1990s, the amount of sand at Maraetai Beach has reduced considerably, with large fluctuations observed throughout the record, most recently in 2022, 2018 and 2014, likely due to storm events temporarily transporting sediment offshore (Figure 4).  
In 2025, beach volume dropped between February and May, before recovering throughout the rest of the year as sand is naturally brought back onto the beach face.



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

## Coastal Management Activities



### What has been going on?

A seawall was constructed at Maraetai Beach in 2010 to address shoreline erosion, along with beach replenishment with approximately 400 m<sup>2</sup> of imported sand. Sand push ups (moving sand from the intertidal zone to the upper beach) have been carried out to redistribute sand along the beach. Dune restoration and planting at the eastern end of the beach have been undertaken to help stabilise the backshore.  
Learn more about [Auckland's Shoreline Adaptation Plans](#).

# MARAETAI BEACH

**4** BEACH PROFILES are used to monitor Maraetai Beach

**54** SURVEYS RECORDED a detailed monitoring record

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

**27** YEARS OF DATA tracking coastal change at Maraetai Beach

**1998** START monitoring began over two decades ago