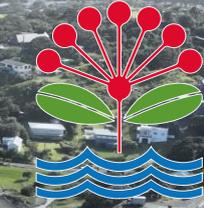




# Piha Beach Monitoring Report 2025

Piha 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 Piha 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 Piha Beach with 5 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.

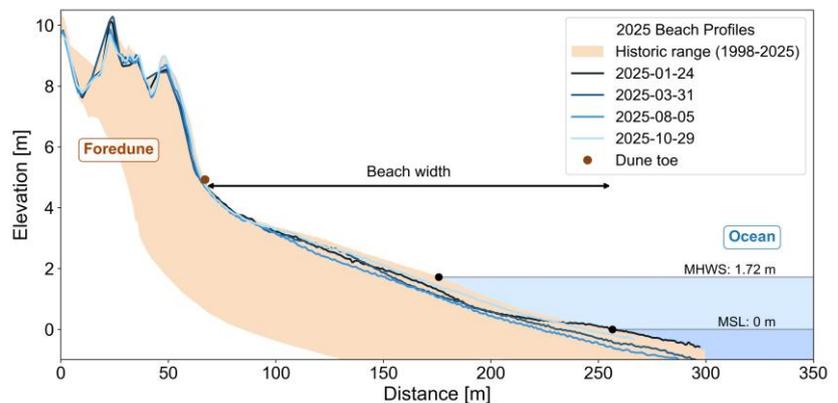


**Figure 1:** Location of the 5 monitored beach profiles at Piha Beach. The representative profile shown in Figure 2 is highlighted with a black border. All beaches included in this reporting scheme are shown on the right-hand side map of Auckland.

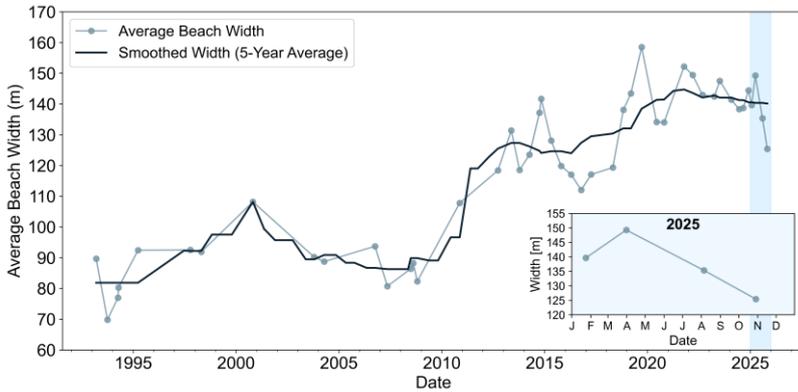
### Change in sand levels:

Figure 2 shows historic sand levels at Piha Beach Profile 1, from the dunes down to the water level. Sand levels at Piha Beach are currently extremely high with the four 2025 beach surveys positioned at the top of the historic range (Figure 2).

In 2025, sand levels have not changed considerably. Beach lowering can be seen in August, but by December sand levels are again at the top of the historic range indicating that Piha Beach is experiencing the highest sand levels on record.



**Figure 2:** Changes in sand levels at Piha Beach P1. 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 Piha Beach.

### Change in beach width:

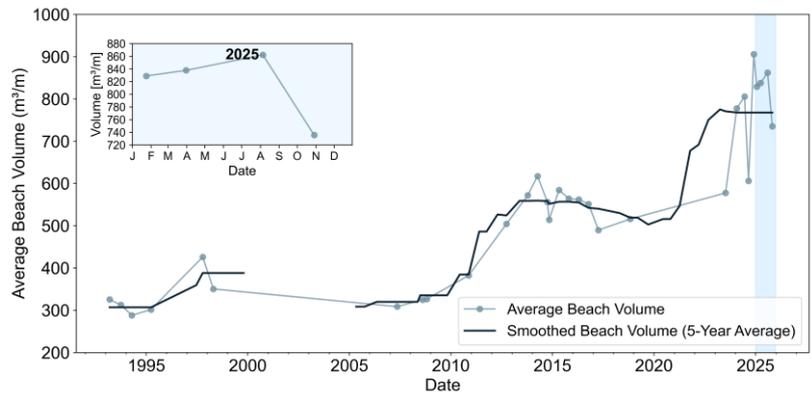
Piha Beach exhibits long-term widening (accretion) but with considerable short-term fluctuations likely due to storms and large swell events (Figure 3).

For example, beach width increased from ~140 m in January to nearly 150 m in April, before narrowing to ~125 m in October this year. Sand levels remain high at North Piha (Profile 1; Figure 2), but recent losses at South Piha (Profiles 2–5) have reduced the average width to below 125 m.

### Change in beach volume:

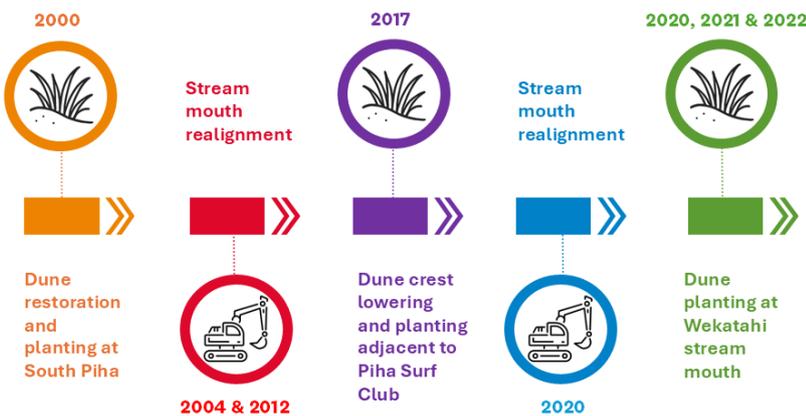
Since consistent monitoring began in the 1990s, the amount of sand at Piha Beach has roughly doubled (Figure 4). Despite the long-term trend of sand gain, large drops in beach volume can be observed throughout the record likely in response to storm events temporarily transporting sediment off the beach.

This year, recent erosion at South Piha significantly reduced the average beach volume measured in late October (Figure 4).



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

## Coastal Management Activities



### What has been going on?

Piha Beach is a relatively natural beach, with only limited coastal management activities over the years. Stream channel excavations were carried out in 2004, 2012, and 2020 to realign the Wekatahi and Marawhara stream mouths, helping to reduce dune erosion and flooding risk. Due to the beach accretion and dune growth, management of windblown sand and dune accessways is ongoing as required.

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

# PIHA BEACH

**5** BEACH PROFILES are used to monitor Piha Beach

**79** SURVEYS RECORDED a detailed monitoring record

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

**44** YEARS OF DATA tracking coastal change at Piha Beach

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