Milford Beach Monitoring Report 2025

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

Milford 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.

This report presents changes at Milford 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 Milford 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 Milford 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 Milford Beach Profile 2, from the seawall down to the water level. At the upper beach sand levels are currently very high with the December survey sitting close to the top of the historic range (Figure 2).

In 2025, sand levels at the upper beach lowered considerably over winter but recovered to the top of the historic range by December. While the lower beach accreted during winter, it subsequently lowers back to the middle of the historic range by end of the year.

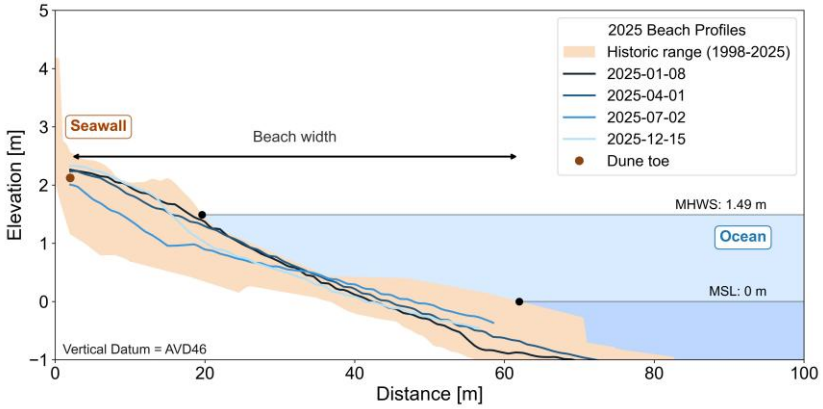


Figure 2: *Changes in sand levels at Milford Beach P2. Mean Sea Level (MSL) represents the average mid-tide level, Mean High Water Springs (MHWS) marks the average high-tide line. Beach width is the distance between dune toe and MSL.*

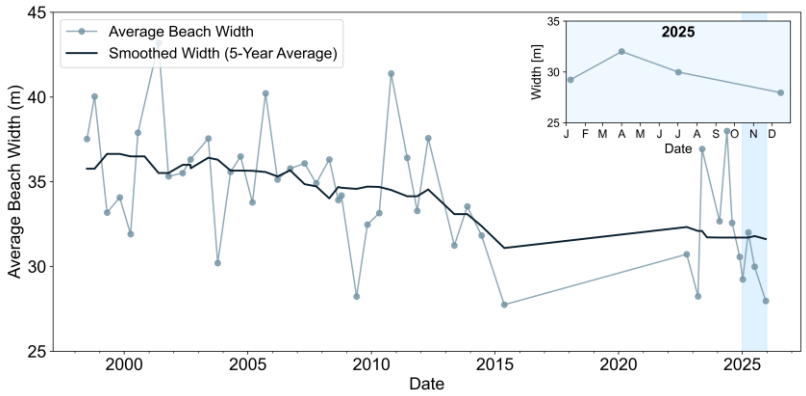


Figure 3: *Beach-wide averaged width (calculated between dune toe and MSL) at Milford Beach.*

Change in beach width:

Milford Beach experiences long-term narrowing with considerable short-term fluctuations in beach width observed throughout the record. However, Milford Beach exhibits considerable inter-beach variability with accretion at the north end of the beach and erosion at the south.

In 2025, average beach width increased by ~2 m between January and April, before reducing to below January levels by December (Figure 3).

Change in beach volume:

Since consistent monitoring began in the 1990s, the amount of sand at Milford Beach has fluctuated considerably but over the long-term beach volume has remained relatively stable (Figure 4).

In 2025, average beach volume decreased considerably over winter before experiencing a small recovery by December. The July decline in average beach volume is largely driven by sand loss from the northern part of the beach during winter.

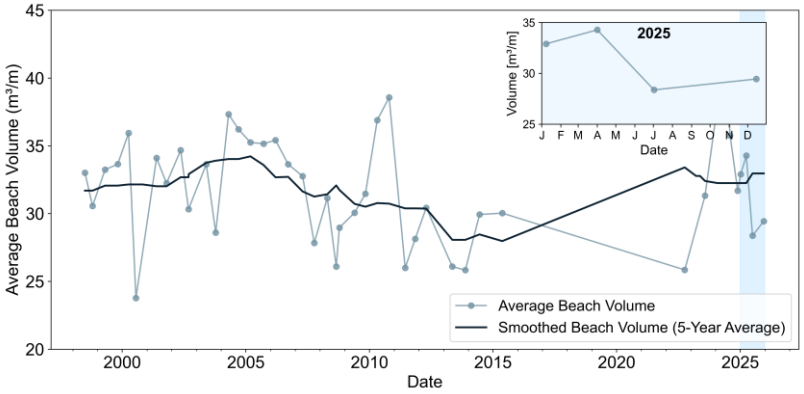
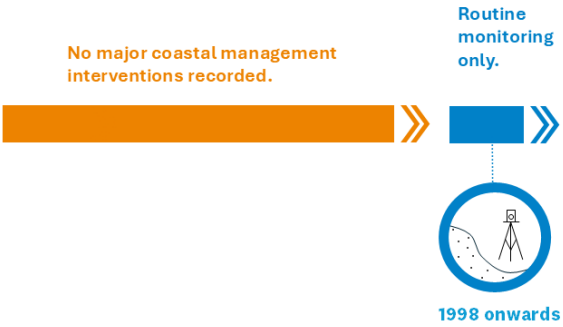


Figure 4: *Beach-wide averaged volume (calculated above MSL) at Milford Beach.*

Coastal Management Activities



What has been going on?

There have been no coastal management activities undertaken at Milford Beach, any seawall construction has been undertaken by private property owners. Routine beach profile surveys have been ongoing since 1998.

To learn more about how Auckland's coastline is being managed checkout Auckland's Shoreline Adaptation Plans.