



Muriwai Beach Monitoring Report 2025

Muriwai 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 Muriwai 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 Muriwai 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 Muriwai 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 Muriwai Beach Profile 3, from the dunes down to the water level. Sand levels at Muriwai Beach currently sit in the middle of the historic range but fluctuate considerably, and the foredune is at the most landward position on record.

In 2025, sand levels reached the top of the historic range in April before lowering to the middle of the historic range again by November (Figure 2).

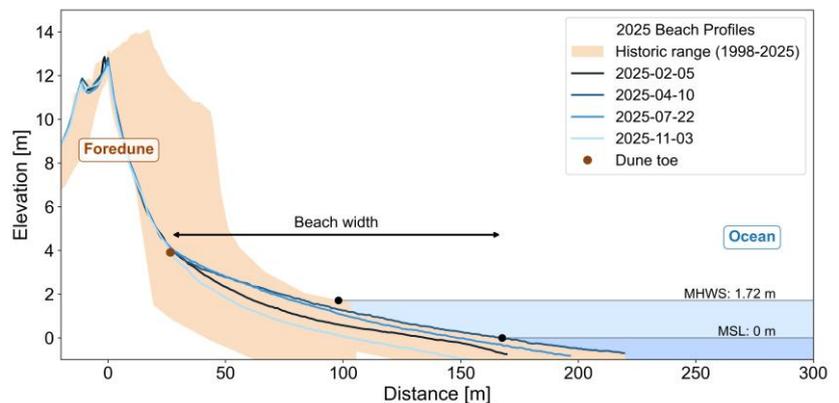


Figure 2: Changes in sand levels at Muriwai Beach P3. Mean Sea Level (MSL) represents the average mid-tide level, Mean High Water Springs (MHWS) marks the average high-tide line. Beach width is the distance between dune toe and MSL.

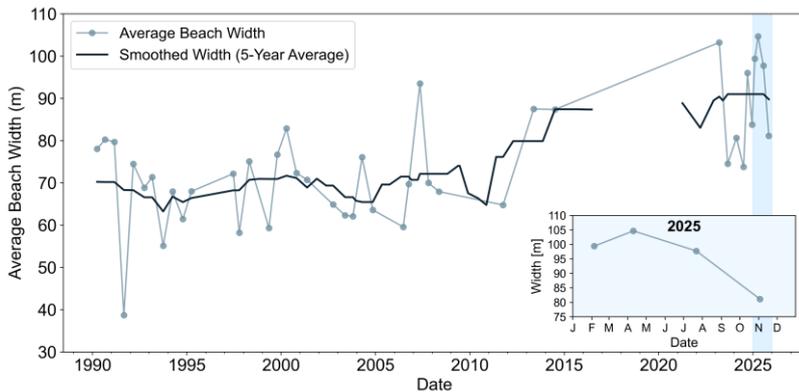


Figure 3: Beach-wide averaged width (calculated between dune toe and MSL) at Muriwai Beach.

Change in beach width:

Muriwai Beach shows long-term beach widening with substantial short-term fluctuations likely driven by storms and large swell events eroding the beach and foredune (Figure 3). Throughout 2025, Muriwai Beach has experienced a reduction in average beach width, decreasing from ~100m in January to ~80 m in November. Since 2010, foredune erosion combined with relatively stable beach sand levels has likely contributed to a wider beach face (Figure 2).

Change in beach volume:

Since monitoring began in the 1990s, the amount of sand at Muriwai Beach has decreased, with notable fluctuations such as the large change in 2006 (Figure 4). This year, average beach volume was relatively stable between February and August before a drop in sand levels in November led a sharp reduction in beach volume (Figure 4). Although Muriwai Beach has a long monitoring record, gaps in older profiles limit historic volume calculations. Recent survey methods now capture the full beach profile.

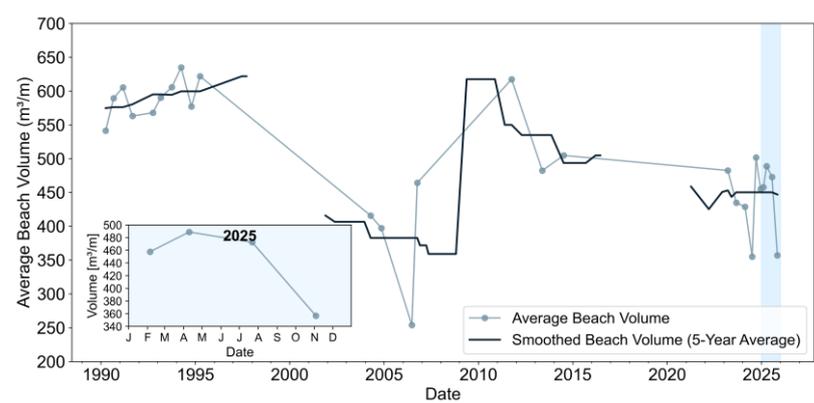
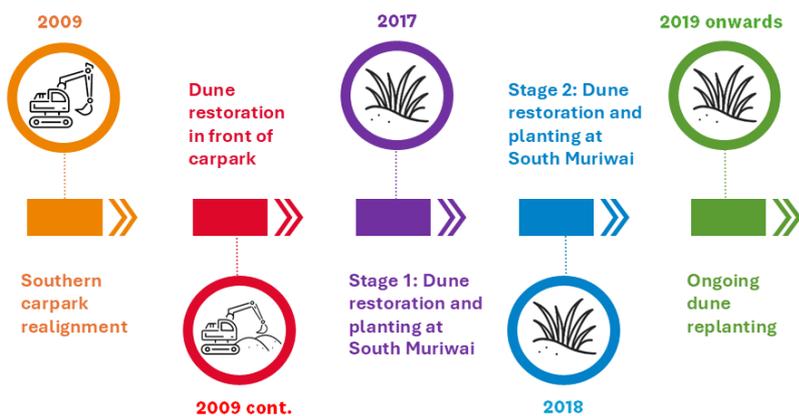


Figure 4: Beach-wide averaged volume (calculated above MSL) at Muriwai Beach.

Coastal Management Activities



What has been going on?

Muriwai Beach is relatively natural with minimal coastal management interventions. Following a period of extensive erosion between 2005 and 2007, the southern carpark was realigned ~40-50 meters landward and the foredune was restored to help buffer and protect the area. In 2017, dune restoration and planting efforts were carried out at South Muriwai and have continued periodically since. Learn more about [Auckland's Shoreline Adaptation Plans](#).

MURIWAI BEACH

5 BEACH PROFILES are used to monitor Muriwai Beach

65 SURVEYS RECORDED a detailed monitoring record

4 SURVEYS A YEAR beach is surveyed every 3 months

35 YEARS OF DATA tracking coastal change at Muriwai Beach

1990 START monitoring began over three decades ago