

# Kawakawa Bay Monitoring Report 2025

Kawakawa Bay 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 Kawakawa Bay 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 Kawakawa Bay 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.

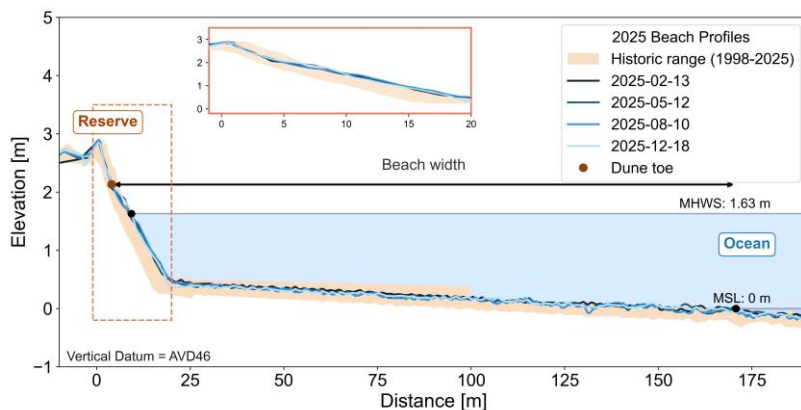


**Figure 1:** Location of the 4 monitored beach profiles at Kawakawa Bay. The representative profile shown in Figure 2 is highlighted with a black border. All beaches included in this reporting scheme are shown on the right-hand side map of Auckland.

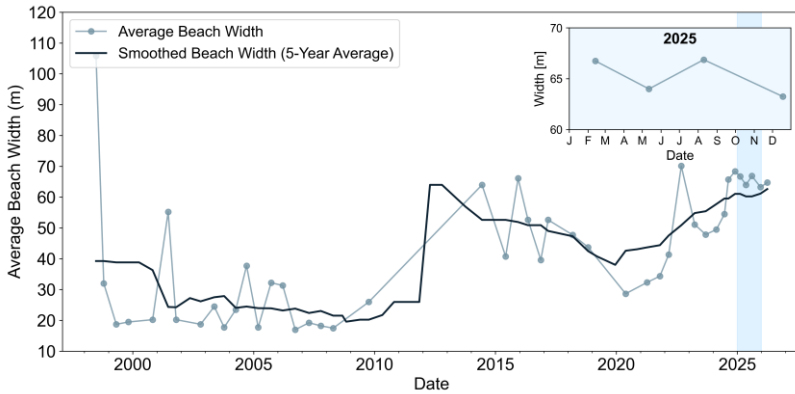
### Change in sand levels:

Figure 2 shows historic sand levels at Kawakawa Bay Profile 1, from the reserve down to the water. Kawakawa Bay is tidally dominated with a wide intertidal zone. Current sand levels sit close to the top of the historic range indicating Kawakawa Bay is currently experiencing some of the highest sand levels on record.

In 2025, sand levels remained relatively consistent across the beach profile with only a slight drop in upper beach sand levels in May and August (Figure 2).



**Figure 2:** Changes in sand levels at Kawakawa Bay 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:** Average shoreline change at 0.5 m above MSL at Kawakawa Bay.

**Change in beach width:**

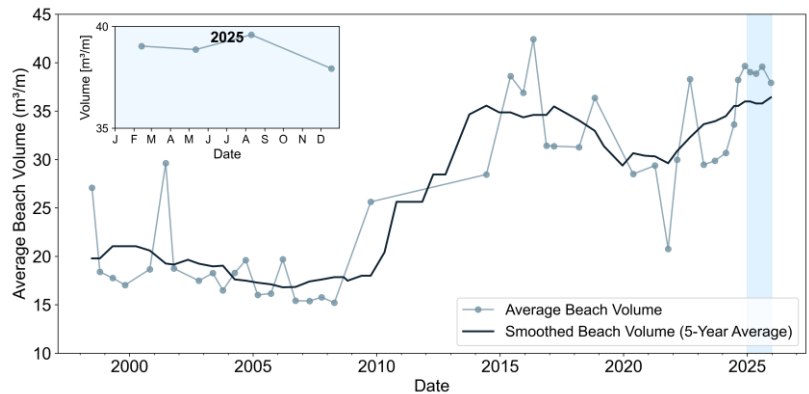
Figure 3 shows that Kawakawa Bay has experienced long-term beach widening, with short-term fluctuations likely driven by alongshore sediment transport and interactions with the stream and storm water outlets along the shore (Figure 3).

As profiles at Kawakawa Bay do not extend to MSL, shoreline change is measured at 0.5 m above MSL. In 2025, small fluctuations were observed, with widening in March and August and narrowing in May and December (Figure 3).

**Change in beach volume:**

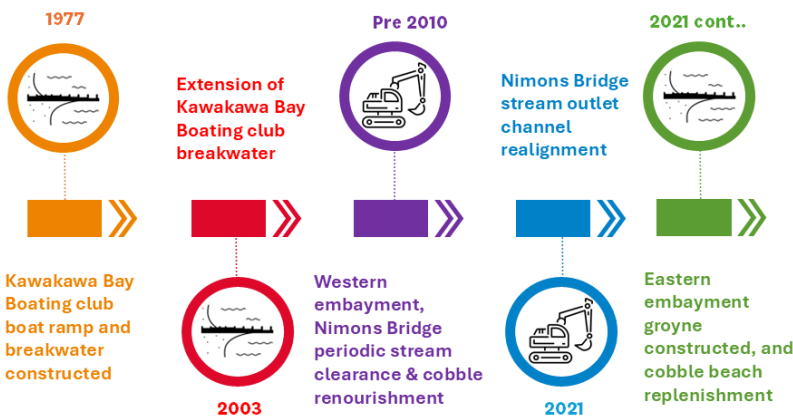
Since consistent monitoring began in the 1990s, the amount of sand at Kawakawa Bay has nearly doubled with large fluctuations throughout the record. Changes in beach volume are likely driven by alongshore sediment transport and stream and storm water outlets that can intercept and transport sediment offshore (Figure 4).

In 2025, average beach volume remained stable for the first half of the year before increasing slightly in August and then dropping in December (Figure 4).



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

**Coastal Management Activities**



**What has been going on?**

Maintenance operations at Kawakawa Bay have been undertaken to retain and redistribute sand on the beach including periodic stream clearance to manage sediment build-up and reduce flood risk. In 2021, the stream outlet at Nimons Bridge was realigned, redistributing around 2,000 m³ of sand, with 600 m³ moved to the eastern embayment. A small groyne was also built, and about 1,000 m³ of cobble imported for beach replenishment.

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

**KAWAKAWA BAY**

**4** BEACH PROFILES are used to monitor Kawakawa Bay

**56** SURVEYS RECORDED a detailed monitoring record

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

**27** YEARS OF DATA tracking coastal change at Kawakawa Bay

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