

44 Taurikura Bay and Urquharts Bay

44.1 Description and geomorphology

Taurikura Bay and Urquharts Bay are located on the western shore of Whangarei Heads, just inside the mouth of Whangarei Harbour. The harbour mouth, defined by Marsden Point to the west and Home Point to the east is located 2.5 km from Taurikura and 2.0 km from Urquharts. Taurikura and Urquharts Bay are separated by a small headland but are part of a wider bay (2.5 km long) between Mt Aubury to the north and Home point to the south.

Taurikura and Urquharts are grouped together for this assessment and a map of the site showing key coastal features is provided in Figure 44.1. Photos of the site are presented in Figure 44.2. No coastal erosion hazard assessment was undertaken at this site and therefore the site has not been separated into coastal cells. The settlements of Taurikura and Urquharts are developed on an underlying geology of allochthonous material located at the seaward end of valleys that have formed between the hillslopes of Whangarei Heads. Streams flowing into both sites have assisted forming low-lying shoreline terraces at the base of higher hill slopes.

At Taurikura Bay, the northern and southern sections are consolidated headland and the main central section of the bay is unconsolidated shoreline terrace. The shoreline terrace is narrow, with just enough space for a band of houses and Whangarei Heads Road. Most houses are located seaward of the road, but some at the central bay and southern bay are located seaward of the road and have private shore protection features. The northern section of Taurikura is largely natural, with a grass reserve providing access to a mixed sand and shell beach (Figure 44.2 B). Some shore protection structures are located at the base of a cliff at the central section where private houses are located (Figure 44.3 Mod-A), and a cliff planting program has been implemented for stabilisation along a section of road (Figure 44.3 Mod-B). At this location, a naturally formed rock dyke known as the Taurikura Natural Jetty sticks out into the bay and has the appearance of a manmade groyne structure (Figure 44.2 C). The south end of Taurikura has a small section of natural beach (Figure 44.2 D) before a seawall protects the road for the rest of the bay (Figure 44.3 Mod-C, Mod-D).

At Urquharts Bay, the road runs along the coast for the length of the bay and no properties are located seaward of the road. Small beach sections at the north, centre and south of the bay have natural reserve space and unmodified shorelines (F, G, H), but the remaining shoreline is armoured to protect the road from coastal erosion. Natural beach sections are characterised by a narrow mixed sand beach between the tidal flat and shoreline terrace.

Taurikura and Urquharts both have tidal flats that extend from the beach toe or cliff toe before a tidal channel that is constrained by Calliope Bank on the harbour side. The tidal flat prevents wave interaction with the shoreline at low tide, but some wave energy from local wind activity can generate waves that drive coastal processes at the shoreline during high tide stages. Wind wave generation is limited by depth, duration and fetch distance to the west and south, with headlands and the harbour mouth providing a local influence on energy received at different locations within the site.

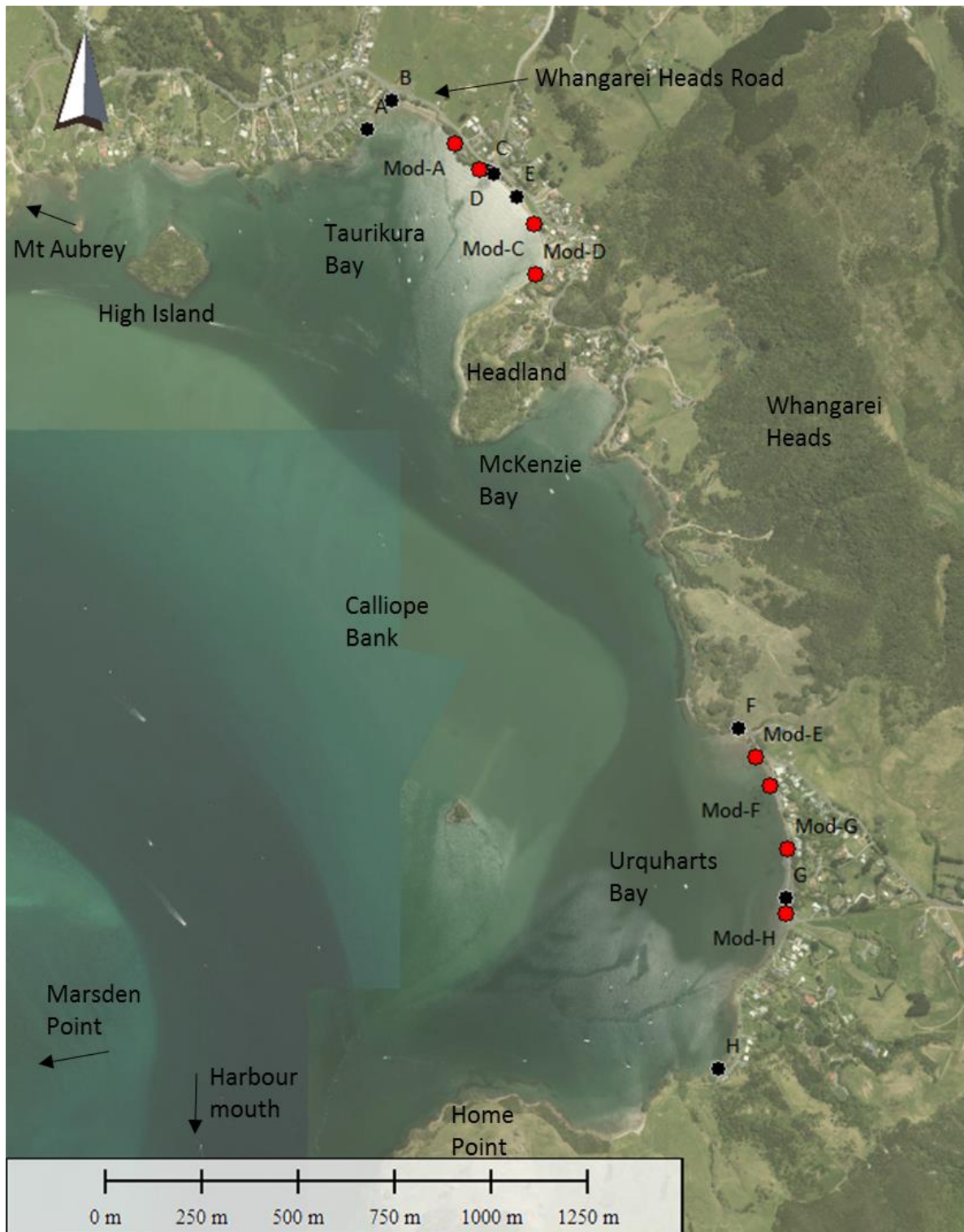


Figure 44.1: Map of the site showing location of site photos (black dots) and shoreline modification photos (red dots)

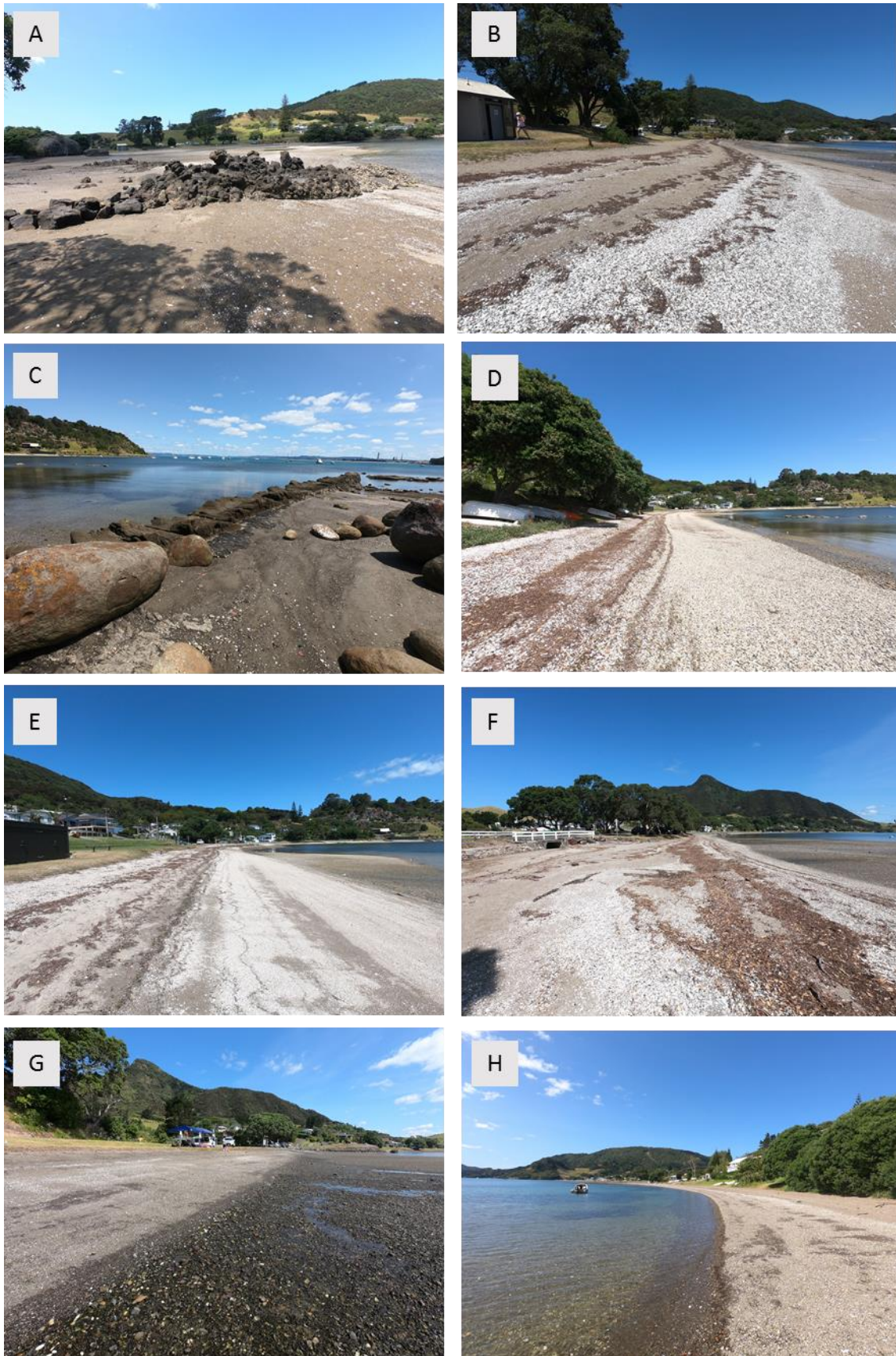


Figure 44.2: Site photos highlighting natural coastal features as located on the map

44.2 Local considerations

A significant proportion of the shoreline at Taurikura and Urquharts have been modified with coastal protection structures. Examples of the different structures at the site are presented in Figure 44.3. Most structures are for stabilising the shoreline from erosion to protect the road, in the form of a seawall or rock armour. Planting has also been undertaken to stabilise the cliff along the road near the natural jetty (Mod-B). Other coastal modifications include some private properties at Taurikura (e.g. Mod A) and a boat ramp is located at the south end of Urquharts Bay (Mod-H).



Figure 44.3: Examples of coastal protection structures and coastal modification along the site

44.3 Summary

No coastal erosion hazard assessment was undertaken at Taurikura Bay or Urquharts Bay. The proximity of main roads to the coast, and various existing coastal protection structures of different condition require more localised management. It is recommended that a protection history and condition assessment is undertaken at this site, so that Council can comfortably rely on the performance of the structures or upgrade the structures if required, which would justify the decision not assessing coastal erosion hazards for this site.