

TAI TIMU TAI PARI: THE EBB AND FLOW OF THE TIDES

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This presentation draws on research by the ‘Let the River Speak’ Marsden team at the University of Auckland, led by Dan Hikuroa and me, with Prof Gary Brierley from the School of Environment and Billie Lythberg from the Business School and a team of graduate students.

We’ve had the good fortune to work with fantastic collaborators, including the Waimata Catchment Group, Manu Caddie, Sheridan Gundry, Abigail Forbes, Mike Marden, Colin Mazengarb, Rina Kerekere and Jon Tunnicliffe, and alongside the hapu and iwi teams working on the river. There’s also our team at Waikereru, our restoration project on the banks of the river 9 km from town, including Malcolm Rutherford, Graeme Atkins, Lois Easton and Jennie Hindmarsh Harre.

In its history and current state, the Waimatā River and its estuary exemplify many of the challenges faced by waterways and coastal zones across Aotearoa and around the world.

From the late nineteenth century, Western ideas of ‘landscape’ became dominant in Tairāwhiti. Land was divided from the sea and into blocks demarcated by fences and protected by private rights and laws of trespass; the sea from the coast, rivers and streams; and people from the land, from other living beings, and from each other as property-owning, rights-bearing individuals.

In this siloed logic, where the aim is to make clear-cut distinctions between one category and another, interstitial spaces such as estuaries and coastlines, where land, river, sea, people, and other life forms intermingle, are problematic.

In te reo, on the other hand, the term for ‘coast’ is ‘tai,’ which also refers to the sea, and the tides; and one term for an estuary is wahapū—literally the speaking mouth (waha) of the awa, a term that also applies to an eloquent speaker on the marae. Wahapū is a place of utterance and co-mingling, rich in knowledge and stories.

As Dame Mira Szászy once said, *Kahore te ture i hanga pērā me te kūpenga hī ika, hei here, hei pupuri, engari, pērā i te tai nekeneke, hei arahi* [Tikanga] is not crafted like a fishing net, to trap and confine us; rather, it is a tide that keeps on moving, to guide us.

Likewise, the wahapū of the Waimatā River is not confined, but animated by tides that surge in and out, not confined by divisions between land and sea, nor by disciplinary boundaries.

So in the ‘Let the River Speak’ project, the river is seen as a living community of land, water, plants, animals and people, and we seek to trace its life through time, as far as possible.

That work is ongoing. Around 15,000 years ago, during the last Glacial Maximum, the sea level in the harbour was approximately 130m lower than it is today. At that time, the Tūrangānuī River, where the Waimatā and the Taruheru join to flow into the ocean—currently just 1.2 km long and considered to be the shortest river in Aotearoa—was an

entrenched river system extending many kilometres beyond the position of the contemporary shoreline (cf., Walsh et al. 2007).

Once sea-levels reached their current level about 5,000 years ago, interactions with the much larger Waipaoa sedimentary system shaped the evolution of the estuary. Adjustments over recent millennia saw the realignment of the Taruheru River as it hugs terraces at the former coastal margin.

The depth of ancestral thinking about rivers, the ocean, and estuaries is evident in a letter by Wiremu Tamihana, who helped to establish the Māori King movement, at the outbreak of the Land Wars in the 1860s.

After accusing Governor Gore-Brown of being ‘double hearted,’ favouring Pākehā (associated with saltwater, wai tai) over Māori (associated with freshwater, wai māori), he added:

This is my thought with regard to the inland rivers that flow into their deep channels from their sources with their mouths open, until they reach the point where they terminate. I thought that the currents of every river flowed together into the mouth of Te Parata [a great taniwha in the ocean, whose breathing caused the tides], where no distinction is made. (Tamihana 1865)

Here, Tamihana argues that each river (with its kin groups, whose life force flows with its currents) runs into the ocean where they converge in Te Parata, a vast whirlpool at the heart of Te Moana-nui-a-Kiwa (the Pacific Ocean). Te Parata is also the throat of Tangaroa, the ancestor of fish, sea, and rivers, whose breathing causes the ebb and flow of the tides.

Tamihana’s argument about rivers and the ocean, and the estuaries and other places where they meet, has particular resonance with the Waimatā River and its wahapū by virtue of its histories.

Once the first star navigators arrived and settled around the mouth of the Waimatā river, the life of the awa began to change in new ways. Once known as Ngā Waiweherua (the waters split in two), the wahapū where the Waimatā and the Taruheru run together into the ocean and become the Turanganui, the shortest river in New Zealand, is a voyaging site, rich in stories.

According to Te Kani te Ua’s account, the crew of the *Horouta* canoe, which had sailed from Hawaiki, came ashore here and settled, followed by the sacred canoe Tākitimu, marking the long-range voyaging of the ancestral star navigators.

According to Rongowhakaata Halbert, when the *Horouta* arrived at the Ohiwa estuary, hit a submerged rock and capsized, the crew split up, and a skeleton crew led by Kiwa sailed the damaged canoe south. The rest of the crew travelled overland to Tūranga, led by their captain Paoa.

When Kiwa landed at Tūranga, he decided to settle on the west bank of Ngā Waiweherua, near where the Gladstone Road and railway bridges now stand, which he named ‘Tūranga-nui-a-Kiwa,’ the great standing place of Kiwa.

Later, according to Te Kani, the *Tākitimu* canoe made its landfall, a sacred canoe crewed by high-born men and women led by Ruawharo and the high priest Matuatonga (Te Ua 1932, p. 39–41). When the *Tākitimu* sailed south, Matuatonga and his wife Hamo-te-rangi stayed on and settled at Tūranga, where they built a house called Matatuahu, about where Pitt Street meets Read's Quay.

According to Rongowhakaata Halbert, they were followed by people from the Mataatua canoe, whose irascible rangatira Maia, another tohunga, settled at Puhikaiti on the east side of the river, near where the Cook and Puhī Kai Iti Memorials now stands.

During the period of Māori occupation, the fertile flats around the mouth of the river were settled and cleared for houses and gardens, although scattered stands of bush remained on the plains for birds, berries, and building timber. Gardens were established on the flood plains and foothills, with kūmara grown on sunlit, sandy mounds, and taro in damp hollows.

Eel weirs were built along the Waikanae stream, and thousands of ducks lived in the Awapuni Lagoon. The bay teemed with fish, and to the north and south, its rocky shores were encrusted with shellfish and koura (crayfish), while the sandy beaches were rich in pipi (Salmond 1991, p. 119; Coombes 2000, p. 213–223).

In ancestral times, the Waimatā was a highway, linking Tūranga with Ūawa and Whāngara on the east coast (Philipps and Salmond 2019). Inland, the river ran through deeply incised valleys covered with bush where people gathered birds, berries, and other bush foods, and small alluvial flats where gardens were established.

This hinterland often served as a refuge for kin groups who were escaping conflict on the coast or had been defeated in battle. The Waimatā River itself was an interstitial space, at once a boundary and a place of kinship and exchange.

Below the high hill Titirangi, which stands above the east side of the estuary, the Kopuwhakapata stream flows into the river; while the Waikanae stream, once famed for its eel weirs and shoals of mullet (kanae), runs into the west side of the awa.

Between the Waikanae stream and Oneroa, a long, curving beach that runs south to Te Kuri a Paoa ('Paoa's dog), an area known as Te Wai-o-Hīharore was set aside as a safe haven where kin groups from the interior could come and fish (Philipps and Salmond 2019, p. 15, p. 16, p. 119–124). There, a freshwater spring ran underground into the sea, attracting shoals of kahawai, according to ancestral stories (Philipps and Salmond 2019, p. 14; see Figure 1).

Many generations later, when the *Endeavour* commanded by Lieutenant James Cook made landfall at Tūranga-nui-a-Kiwa and the first Europeans landed at the river mouth in October 1769, the encounters with local Māori turned violent. During their first landing when Te Maro, a Ngāti Oneone rangatira, and his companions challenged Cook's men on the north side of the Tūranganui river mouth, he was shot dead; and other shootings followed.

Despite this unpropitious beginning, when the first European whalers and flax traders arrived in Tūranga, they lived among Māori families, often intermarrying with them. The local people began to cultivate wheat, maize, and potatoes, raised pigs and became successful exporters (Mackay 1949, p. 125–126).

When war broke out in the 1860s, Poho-o-Rawiri marae on the east bank of the river became a military encampment. After the confiscation of local land in the 1860s, a town sprang up around the estuary. As the remaining land was surveyed into blocks and went through the Native Land Court, much of the Waimatā catchment was first leased and then sold to European farmers, who from the 1880s onwards bought large blocks, first in the lower reaches of the Waimatā, and progressively upriver (Gundry 2019, p. 1–2).

In the 1870s and 80s, crops were grown at Score Point (Anzac Park); bridges and a breakwater were built; and despite the vehement protests of tāngata whenua, Te Toka-a-Taiao/u and other rocky formations near the mouth of the river were blown up by the Harbour Board (Spedding 2006, p. 16).

The river was much used for recreation, with picnics at the Hole in the Wall upriver, for example. Roads were built alongside the river; and as the land was burned off and cleared, it was planted with grass as pasture, and sheep farming began in the hilly hinterlands.

Upriver on the Waimatā, tree-felling inland was followed by large-scale burn-offs; for instance, as reported in the *Poverty Bay Herald* in December 1895, “Some four thousand acres of bush country were cleared by fire in the Waimata district yesterday, a good burn being obtained” (*Poverty Bay Herald* 18 December 1895). The plumes of smoke rose so high that people on ships out at sea thought that a volcano had erupted. During the day, the lights had to be turned on in the offices in town (Kenway 1928, p. 47).

At times of heavy rainfall, the exposed mudstone hillsides slid and slipped, blocking the river. When these earth dams burst, they released surging waves downstream, eroding river banks, washing out fences and roads, flooding houses, and choking the estuary with sediment and the beaches with logs (Coombes 2000, 2.39–53).

Major floods in 1876, 1880, 1892, 1894, 1902 and 1910 caused significant damage. So much sediment and so many logs were swept into the harbour and onto the beaches that he advised the Harbour Board that the Ngā Waiweherua river should be separated from the port (Gundry 2019, p. 10–22).

Given the flume-like nature of the Waimatā River system, with its channels confined by terraces (Marden et al. 2008), in high rainfall events, flow, sediment, logging debris, and human waste are rapidly conveyed through the system from the headwaters to the ocean, sometimes temporarily accumulating and being reworked at the river mouth, out to sea and along the coastline.

These impacts are aggravated when the land is cleared, exposing the soft, steep papa slopes, which are readily cut through by water and logs. Large areas of earthflows and

localized mud volcanoes recurrently contribute fine-grained materials to the sediment cascade.

In the early twentieth century, to deal with these effects, some suggested that the lower reaches of the Waimatā should be diverted into a canal via the Wainui stream to the east coast at Wainui beach, or via a tunnel from the Hole in the Wall to the Hamanatua stream at Okitu (Ferguson 1916, p. 14).

However, these schemes were too costly, and in the 1920s, work began instead on splitting the river from the port. This included shifting Poho-o-Rāwiri marae inland from beside the river, despite Ngāti Oneone's vehement objections; dredging the port, which happens on an ongoing basis; carving an artificial channel, the 'Cut,' encased in concrete, for the river, allowing the Waimatā to carry its sediment, logs, and pollution out to sea while avoiding the port; and reclaiming land for industrial and port buildings and storage, while burying much of the rocky reef, including its ancestral waka (and later boat) channel (see Figure 2).

The town's sewage and wastewater were channelled into pipes, with discharge outlets into the river and a major pipe running to a sewerage tank in the port that carried human waste out into the harbour. (Coombes 2000, 6.143-182; 7.192-202; 8.214-242; 257-272; 10.345-356).

Although the 'Cut' was completed in 1931, the Waimatā continued to flood, in 1938 for instance. In 1944 a large flood washed trees downstream, damaging the William Pettie bridge, while in 1948, 1955, 1958, and 1968, large slips dammed the river, bursting and causing downstream damage to houses, roads, and jetties.

Despite heavy erosion in the catchment, the 1950 Marginal Lands Act led to more native forest being cleared for pasture, a process that has continued with scrub-cutting and, more recently, aerial spraying of regenerating bush (Forbes 2019).

In the 1960s, poplars and willows were planted along the Waimatā and its tributaries to try and hold the banks, but these trees were not trimmed and often choked the river or were dislodged and swept downstream during flooding.

In 1971, 1977, and 1981, there were more severe floods, followed by Cyclone Bola in 1988 and more flooding in 2009 and 2015. In 2015, forestry slash damaged the Gladstone Road bridge, which carries power, water, and stormwater for Gisborne city.

During these floods, millions of tonnes of soil have been washed downstream. In an effort to mitigate this erosion, from the 1980s, pine plantations were planted in the upper and mid reaches of the Waimatā catchment, helping to stabilise the land.

Once these plantations began to be harvested twenty-five to thirty years later, however, slash and sediment caused more severe problems for farmers and other landowners downstream, causing the river base to aggrade, increasing the flood risk to Gisborne city and leaving piles of slash on the beaches.

During the floods, too, and even in heavy rain, sewage flows into the wastewater system in the lower reaches of the catchment and is discharged into the river, polluting fish and shellfish and putting at risk the health of swimmers, paddlers, and rowers (Coombes 2000, 10.324-355).

Since the Waimatā is the most popular river for recreation in Tairāwhiti, with its lower reaches used by world-class waka ama paddlers, kayakers, and rowers for training, this is another major challenge.

Since 2019, the history of the estuary is being reimagined. At Puhi Kai Iti a granite obelisk commemorating 'Cook's Landing' is now encircled with Joseph Bank's words of regret for the 1769 shootings, and flanked by hue (gourds) that recall the agricultural prowess of Te Maro and the calabashes of atua brought by Kiwa. On the slopes of Titirangi, a new memorial to Te Maro, illuminated at night, further elevates his legacy.

But the river and the estuary are still choked with sediment and polluted with sewage, taking their toxins along the coast and down into the throat of Te Parata. No wonder Tangaroa and his children are suffering, as we saw during Cyclone Gabrielle, when all those baby koura were left stranded among the logs on the beaches.

If more people understood the world like this, and we could weave our different knowledges together, perhaps human beings would behave differently, and our children and grandchildren might have a better chance of surviving, and thriving.

Land Court records
Waitangi Tribunal reports, including Brad Coombes
Historic Poverty Bay
Echoes from the Pa
Rongowhakaata Halbert's book
Sheridan's book
Poverty Bay Herald
Tai Rawhiti Museum