Lahar Meets Locomotive: New Zealand's Tangiwai Railway Disaster of Christmas Eve 1953

André Brett

Summary

New Zealand's worst railway disaster occurred on 25 December 1953 at Tangiwai in the central North Island. 151 people died when a lahar from Mount Ruapehu demolished the Whangaehu River bridge ahead of the overnight Wellington–Auckland express. New Zealand's railways had long experience with floods, but lahars were little understood. This tragedy highlights the class dimensions of environmental disaster, with second-class passengers comprising almost all the fatalities. Tangiwai's legacy endures within New Zealand's collective memory: survivors never forgot the sulphuric, muddy torrent, while the environment's perceived caprice has stimulated a small corpus of works wrestling with mortality.

On Christmas morning 1953, an express train from Wellington, New Zealand, was meant to arrive in Auckland. It never did. At 11:21 p.m. the previous evening, it plunged into the Whangaehu River at Tangiwai in the central North Island. Of the 285 passengers on board, 151 died, eclipsing the 21 fatalities at Hyde in 1943 to make it New Zealand's worst railway disaster—and one of the world's worst.



The locomotive, one of the bridge girders, and part of the third carriage, 25 December 1953.

Unknown photographer, 25 December 1953.
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The wreckage of the second carriage sits in the foreground; to the left is the largely intact first carriage, 27 December 1953.

Unknown photographer, 25 December 1953.
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Mount Ruapehu, New Zealand's largest active volcano, towers above the Central Plateau. Its peak Tahurangi is

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the North Island's highest point at 2,797 meters. Ruapehu's crater lake is the Whangaehu's headwaters and it is partly fed from the North Island's only glaciers. An eruption in 1945 formed a tephra dam, behind which the lake grew in volume. The dam collapsed on 24 December 1953, unleashing a lahar—a thick torrent of water, mud, and volcanic debris—down the river.

The North Island Main Trunk Railway—a primary transport artery between New Zealand's capital, Wellington, and its largest city, Auckland—crosses the Whangaehu at a village called Tangiwai, "weeping waters" in Māori. The express reached the bridge at the lahar's peak flow. Cyril Ellis, a motorist who discovered the nearby road bridge was out, tried to alert the crew of the oil-fuelled steam locomotive K^{A} 949, driver Charles Parker and fireman Lance Redman. They shut off steam, applied the emergency brakes, and sanded the tracks—but could only save half the train. Parker and Redman remained at their controls, riding the locomotive into the torrent. The first five carriages followed, all second-class; the sixth, the leading first-class carriage, teetered on the shattered bridge until it too fell. Three more first-class carriages, a postal van, and the guard's van remained on the tracks. Both Parker and Redman died, as did one occupant of the leading first-class carriage and 148 of the 176 second-class passengers.

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Labeled press photograph of the site of the tragedy, looking towards Mount Ruapehu, 25 December 1953.

Unknown photographer, 25 December 1953.
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New Zealand's railways had long experience of flooding but little of lahars. Railways modified rivers nationwide: embankments divided floodplains, riverbanks were stabilized to mitigate erosion, braided rivers were dredged to concentrate their flows. Rivers in turn modified railway routes, undermined their formation, and flooded across lines. The Whangaehu's name describes a turbid river mouth, referring to discoloration from volcanic discharge that also earned the river its nickname of "Sulphur Stream." At least four lahars filled the Whangaehu between 1840, when formal British settlement of New Zealand began, and 1953. Only one occurred after the railway's 1908 opening: this torrent in 1925 damaged but did not destroy the bridge. Some recent assessments, such as British journalist Benedict le Vay's 2013 account—a useful but idiosyncratic book of digressions, unclear sourcing, and generally uncontroversial conclusions presented as original insight—have suggested the New Zealand Railways were negligent in assessing risk. But lahars were rare and poorly understood. Large-scale disaster at Tangiwai was beyond imagination.

The 1953 lahar is not the largest recorded in the Whangaehu, but its arrival at Tangiwai almost simultaneously

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with the express meant it had the greatest effect. Passengers were immersed in sulphuric and muddy water. Pungent oil from the locomotive added to this foul cocktail. Survivors never forgot its smell or consistency. Joan Karam, who escaped the third carriage, struggled to endure the water's icy temperature—an indicator of its glacial origins. Richard Edward "Ted" Brett, a young plumber, was swept to a sheltered part of the river and used rock-climbing experience to surmount the riverbank. For the rest of his life the smell of oil fumes would feel like an unbearable attack upon his body.



Tangiwai as seen in 2018, looking from the disaster memorial up the Whangaehu River to the new railway bridge. The first carriage came to rest on the bank at left, the second carriage in the bend of the river.

Photograph by André Brett.

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The new bridge built after the disaster still carries the North Island Main Trunk Railway across the Whangaehu River. The ill-fated express approached from the opposite bank.

Photograph by André Brett.

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Tangiwai demonstrates acutely the class dimensions common to environmental disasters: only 28 of 176 second-class passengers survived, compared to 108 of 109 in first class. The first-class carriages were marshaled far from the locomotive's noise and smoke—and from danger. Up front the second-class carriages were torn apart. The fifth carriage was carried 2.5 kilometers downriver; the second carriage, turned repeatedly within the torrent, was unrecognizable—with Ted Brett its only survivor. Remarkably, his plumbing equipment, which he was carrying to perform repairs for a relative, was recovered intact and usable at the Whangaehu's mouth.

The anonymizing effects of mud and grime accentuated the traumatic task of identifying victims. Twenty, never found, are believed to have been carried out to sea. Desmond Capper's family viewed many bodies in the hope of identifying him, without success. The Cockburn family could bury one of their dead, Douglas, but all that remained of brother John were tickets from his shirt pocket.

Tangiwai left an indelible mark on New Zealand; the name is synonymous with disaster. It has stimulated a small corpus of works wrestling with loss and mortality. These include numerous iterations of the story of New Zealand cricketer Bob Blair batting against South Africa after learning his fiancée had perished. Others recount

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personal stories: Trish Gray losing her grandparents; James Rowe's experiences as a local telegrapher. Many highlight nature's perceived caprice. The environment brings tragedy; incomplete knowledge and class considerations recede. John Archer, who grew up downriver, penned folksong "Pillows of the Dead" to honor that awful Christmas of his childhood. The disaster is an unfathomable working of the Whangaehu:

> *Well, my pillow case was bulging,*
> *Full of presents, by my bed—*
> *Then the river brought those pillows of the dead*

Tangiwai both shaped and fits a narrative of environmental tragedies in New Zealand as unforeseen and sudden. This is somewhat inaccurate and shorn of its class dimension, but it resonates with personal experiences of disruptive horror.



A memorial listing the 151 victims was erected in 1989; the flower stations dedicated to survivors were added this decade.

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A memorial for locomotive driver Charles Parker and fireman Lance Redman was dedicated in May 2017.

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Further readings:

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About the author:

André Brett
André Brett is a University of Wollongong Vice-Chancellor's Postdoctoral Research Fellow in History, currently researching two major projects: colonial separation movements, and an enviro-economic history of railways in Australasia. He is the author of three books, one on the creation and demise of New Zealand's provincial system of government and two co-authored with Stuart Macintyre and Gwilym Croucher on Australian higher education. He suspects he might be unique in claiming descent from survivors of both of New Zealand's worst railway disasters: Tangiwai survivor Ted Brett was his grandfather, and great-great-grandmother Mary Frater survived Hyde 1943.
https://orcid.org/0000-0001-9476-6549

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