

## Chapter Two

# SETTLEMENT, STAGNATION AND GROWTH

## 1840 - 1899

At the time of European settlement the lands of the Hutt Valley were recently (c. 1833) Te Ati Awa, a tribe related to the earlier occupants Ngati Mutunga and Ngati Tama, who had displaced the Ngati Ira (a branch of the Ngati Kahungunu from the East Coast) c. 1825. This ended the Ngati Ira occupation which had continued from the 17th century. Under threat from the Ngati Ira (Wairarapa) and from Te Rauparaha (Kapiti) the largest proportion of the Ngati Mutunga and Ngati Tama people fled the area in 1835 to take over the Chatham Islands from the Moriori. The principal settlements which remained were at Ngau-ranga (Chief Te Wharepouri), Pito-one (Chief Te Puni) and at Hikoikoi (Chief Te Puwhakaawe). From *Petone: A History*, Susan Butterworth. The Ngati Ira Pa at Waiwhetu was also occupied, as were sites in the Upper Valley.

In comparison with the rapid growth of Wellington City, the Hutt Valley remained a remote agricultural settlement, poorly developed and underfunded by absentee landowners. Although the 1855 uplift improved access to Wellington, commuting was impractical until the construction of the rail and road links between 1875 and 1880. Land speculation by the original owners of New Zealand Company blocks - individuals who enjoyed wide political influence - remained the principal deterrent to progress. Later industrial development on the Petone wastelands led to a powerful commercial lobby with the wealth to proceed regardless of the political opportunism within Lower Hutt Borough.



**Plate 7: "Warepori, or Dark House"**

Source: Sketch c. 1845 published in *Illustrations to Adventure in New Zealand* by Edward Jerningham Wakefield. Alexander Turnbull Library neg. F313MNZ.



**Plate 8: Honiana Te Puni.**

Source: Sketch c. 1877 published in *Barrauds New Zealand*. Alexander Turnbull Library neg. 127180.

The dominant Chiefs of the lands surrounding Port Nicholson at the time of the European colonisation. Both men were instrumental in the peaceful transition from Maori to European rule.

## Maori Settlement

Although there are accounts of Maori habitation of the Wellington area as far back as the 13th century [refer G R Stevens, *Rugged Landscape* p. 246] the climatic, geographical and tactical limitations of the Wellington basin discouraged widespread permanent settlement.

The Maori population appears to have grown to significant numbers around 1820 as intertribal conflict forced Maori to move from the Taranaki, Manawatu, and Wairarapa regions.

Settlements dotted the perimeter of the Harbour and occupied tactical positions in the Upper Hutt Valley, and in the western areas towards the more heavily populated Porirua Harbour and Kapiti Coast.

Protected by its remoteness the virgin state of the Hutt Valley was left unchanged by Maori. As Maori made no attempt to modify or control the river system discussion of the Maori history has not been included in this Volume. **Hutt River Flood Control Review Phase 1 - Environmental Investigations, Maori Component** contains a detailed history of Maori of the Hutt Valley, prior to and during the European settlement, and subsequently during the period of accelerated flood plain development which forced most of the original inhabitants to abandon their lands.

## European Settlement

There seems little doubt that Europeans were the first to attempt to settle on the river plains or to try to win this land from the river. Although their first occupation evidenced a remarkable ignorance of rivers and their propensity to flood, their continued occupation is an indication of the desperation for titled land that existed during the first 10-20 years of the European migration.

An absorbing account of the early settlement of Petone is contained in *Petone: A History* by Susan Butterworth, **Petone Borough Council (1988)**. The early history of Lower Hutt is well documented in *Once Upon a Village* by David P Millar, **Lower Hutt City Council (1961)**, and both the Boroughs' centennial histories: *Petone's First Hundred Years* W B Nicholson ed., **Petone Borough Council 1940**, and *Lower Hutt Past and Present*, **Lower Hutt Borough Council, 1941**. A modern history of the Upper Hutt Valley has yet to be written.

Contained below and drawing heavily on these sources is a brief description of the events directly influencing the river plain development. A knowledge of this early time is necessary in order to understand the constraints on development in the Valley in earlier years. For example, why did it take 60 years to construct stopbanks costing only half of the speculative profit made on the subdivision of just one of the original "100 acre" riparian blocks?



**Plate 9: Looking across the Hutt River to All Saints Church, Taita, 1894.**

Source: Alexander Turnbull Library, H M Gore, Art Room ref. Rack 221.

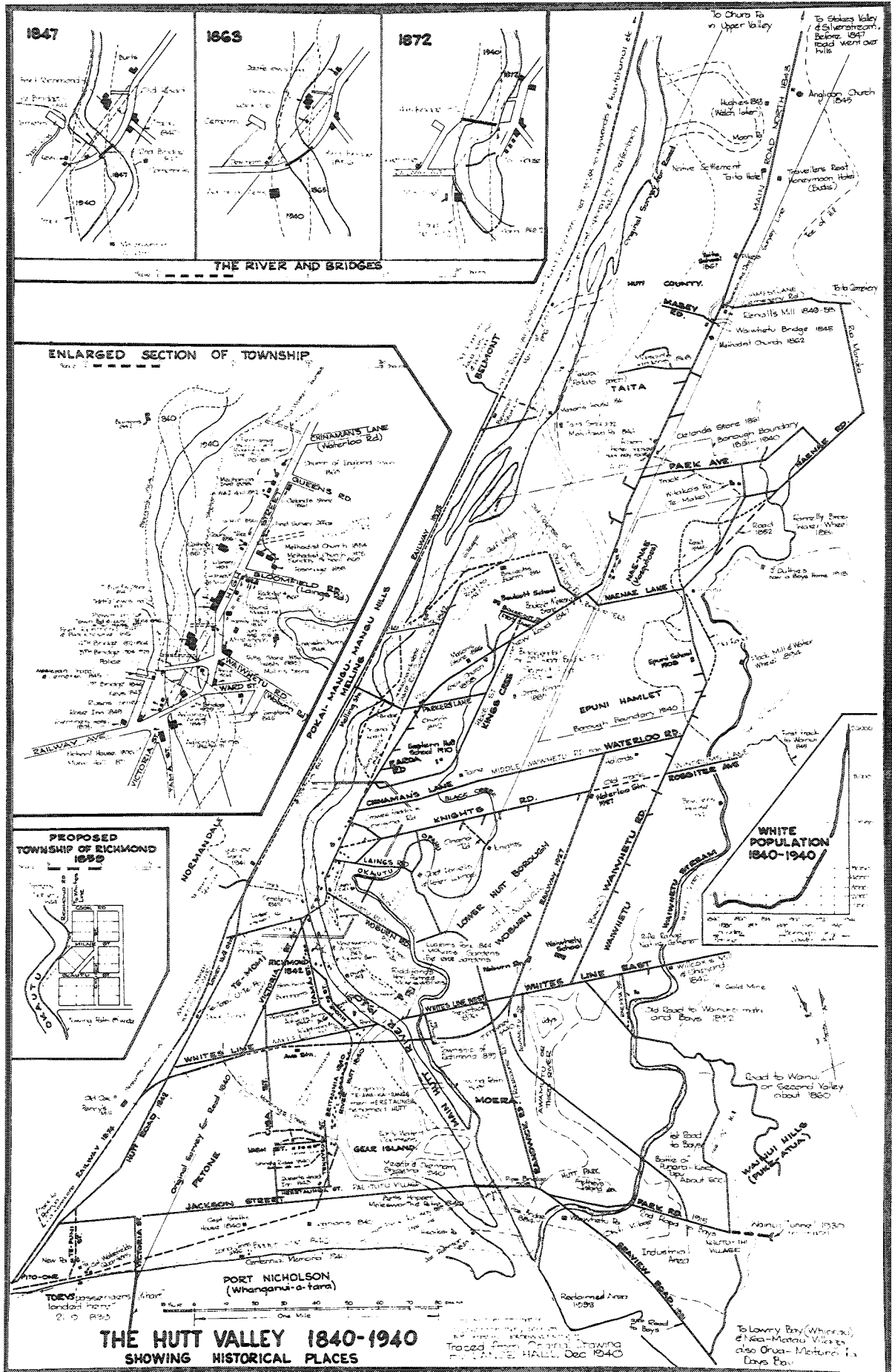


Plate 10: The Hutt Valley 1840-1940. Lance Hall, December 1940, Lower Hutt Memorial Library.

## The Valley in 1840

In 1840 the Valley was much as it had been for 400 years. Prior to the 1855 uplift the foreshore followed the line of Adelaide Street (see figure 3, p. 12).

*The village lay, as its maori name (Pitone or "End of the Sand") implied, at the western end of the sandy beach, which is about two miles long. The main river falls into the sea at the eastern end, about a quarter of a mile from the hills which bound the valley to the east, and is called the Heretaonga. A merry, brawling stream, called the Korokoro, or "throat", flows between the village and the western hills. The valley seems to preserve an average width of two miles to a considerable distance, bounded on either side by wooded hills from 300 to 400 feet in height. It was covered with high forest to within a mile and a half of the beach, when swamps full of flax, and a belt of sand-hummocks intervened.* E J Wakefield, op. cit., vol. 1, p. 74, from *Pitone: A History*, Susan Butterworth p. 22

On the valley-side shoulders flanking both the western and eastern hills the Maori population had established root and cereal crop patches which their owners were later to expand into market gardens to provide the bulk of the Region's produce for years to come. There were well developed tracks to all the surrounding districts but in the lower valley the river was the main transport route.

The European arrivals in the summer of 1839/40 had come under the auspices of the New Zealand Company, a public company with the aim of establishing a unique and profitable colony in New Zealand. The company obtained its support by promising a politically egalitarian society and by offering land speculation opportunities in the form of advance land orders; a £101 package of one town acre plus a local 100 acre rural block. This was an attractive price for the town acre alone and the initial release of 1,000 orders was taken up within a month, well before land had been purchased.

The New Zealand Company negotiated the right to settle within the Wellington/ Hutt Valley area from the Te Ati Awa Maori during the September 1839 visit by Colonel Wakefield, the Company's "Principal Agent" (and, note, not a representative of the British Government). Wakefield left instructions for vegetable gardens and temporary shelters to be established in the Thorndon area of Wellington for the impending arrival of the first of the Company sponsored immigrants.

Wakefield had inspected the Hutt and was aware that the Valley flooded but apparently considered the land would be habitable following the construction of drainage and flood control works.

*This river is 7 or 9 feet deep at its mouth where it spreads itself over a large extent, forming a lagoon, influenced by the tide. It has also made for itself 3 other streams, which divide at a distance of many miles from the mouth and increase the extent of inundated land.* Colonel W Wakefield, op. cit., p. 85 from *Pitone: A History*, Susan Butterworth

Although there appears to have been some doubt about the extent of land available in the Wellington area, and particularly of the extent of the Hutt Valley, Wakefield realised that it could not provide the 110,000 acres required by the New Zealand Company. He left Wellington on 4 October 1839 in order to find other land and a site for a second, agricultural settlement.

Shortly after his departure (4 June 1840) the Company's surveyor, Captain Mein Smith arrived with instructions to set out the model township as planned in London.



Although Wakefield had left instructions to survey a town at Thorndon, the surveyor found that the land at Thorndon could not accommodate the model plan and considered it impractical for the settlers to be separated from their country acres by a harbour crossing. He considered it impractical for the settlers to be separated from their country acres by a harbour crossing which was often-times a treacherous sea passage. Although the passage was short, it cost many lives as poorly equipped and overloaded boats foundered in heavy squalls. The alternative was to follow the track along the base of the "Nga-uranga" cliff which became impassable at high tide and crossed three large streams.

Because of the commuting difficulties and the limited area of flat land at Thorndon, Captain Mein Smith set about surveying the township in the Hutt Valley. Captain Smith also noticed signs of flooding and:

*... made many enquiries of the natives ... whether these rivers ever overflowed their banks. They assured me they did not. I therefore proceeded with my plan of the town site cutting lines about six feet wide for the lines of the streets which tho' necessary was a very tedious operation on account of the extreme density of the forest.* W M Smith, jour. qms, SMI vol. 3, 5/1/1840, ATL, from *Petone: A History*, Susan Butterworth, p. 31.

The survey had not proceeded far by the time Wakefield returned. Wakefield, although concerned at the change of site, felt disinclined to order another change until pressure from a group of settlers, led by a Dr Evans, forced him to reconsider. In April 1840 Wakefield requested a report from his surveyor.

*... asking for his assessment of the merits of the two sites; he was particularly to consider whether the Hutt Valley could be made secure against flooding within the financial means at his disposal ... Smith replied ... that the flooding nuisance could be overcome by clearing the watercourse of snags and cutting flood channels, but probably not within the £2000 allowed by the directors for such purposes. He still preferred the Hutt site and suggested that the land-order holders should tax themselves £5 per town acre to bridge the deficit.* *Petone: A History*, Susan Butterworth, p. 39.

Acting on this advice Wakefield wrote to Evans:

*... the town was to be at Britannia (Petone), that the swamps would be thrown out and that the survey would proceed as rapidly as possible.* *Once Upon A Village*, David P Millar, p. 32

This was not received well by Evans who replied:

*in the event of a selection being made (where now proposed) on the banks of the river, a very large proportion of the colonists, both land owners and labourers have made up their minds to abandon the undertaking altogether.* G S Evans to Colonel Wakefield, March 15 1840, quoted by John Millar *Early Victorian New Zealand*, p. 46, and *Once Upon A Village*, David P Millar, p. 32.

On 5 April the colonel agreed to move the town to Thorndon:



**Plate 11: Petone before the Boom. View from the Mill at what is now Percy's Reserve.** Source: Alexander Turnbull Library, James Bragge, neg F13373.

*If, after persisting till the winter, we should then be obliged to give up the plan, such a retreat would amount to a disaster ruinous to the Colony. Petone: A History, Susan Butterworth.*

For the next 10 years Petone remained a halfway house for the new arrivals while they found a place to live. Most settled in the Wellington City area with only a small population of farmers, sawyers, boat builders and traders occupying the Hutt Valley.

## First European Settlement

Between 1848 and 1875 Petone was virtually deserted. Prior to the 1855 earthquake and accompanying uplift, "what was not beach was swamp" and thereafter the land was poor and badly drained, being an undulating sea bed area with hillside creeks wandering through it. By 1872 there was only the Maori community and 13 settler families within the Petone Borough.

*Petone in those days was divided up into 100 acre sections. White's Line, the boundary of these sections up the valley, used to be a swamp in winter, making access to them almost impossible, but it was fairly dry in summer. There was little grazing ground in Petone of much value. Over the paddocks there grew rushes flax and toi-toi. Not a great deal of farming was done that returned a great return to the owner. Mr Buick, who was believed to have paid a pound an acre for his land, grazed a few sheep and other property owners had cattle, but the land was so poor that it took about two acres to keep a cow. Streams ran down from the hills, and at times covered Petone, down as far as the present site of Jackson Street, with water.*





**Plate 12: Petone c. 1843, S C Brees. Bridge across Moreing's Creek (now culverted), Alicetown.**

Source: Alexander Turnbull Library Art Room B31/2

*On the present site of the tobacco factory of Messrs W D & H O Wills, [Richmond Street] there would be about four feet of water all winter. During one or two exceptional floods, the whole of Petone was covered, with the exception of some of the raised portions of the ground....*  
*Evening Post (Wellington), 1 August 1935, interview E Maimment, from Petone: A History, Susan Butterworth.*

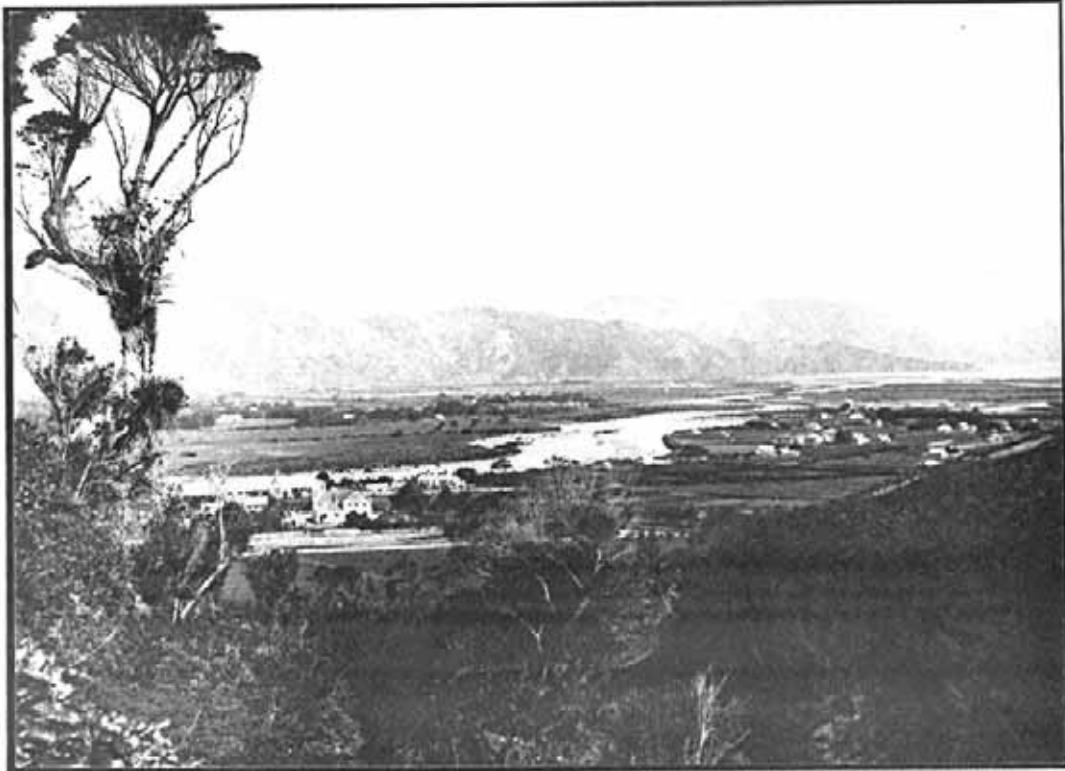
By contrast the population of Lower Hutt (and similarly the Upper Valley) continued to grow, although slowly, being less than 1,000 at the turn of the century.

The establishment in 1840 of the township of Britannia (now the suburb of Alicetown) coincided with an "unseasonable" deluge of rain and many houses were moved to higher ground or were rebuilt on poles. One colonist recorded:

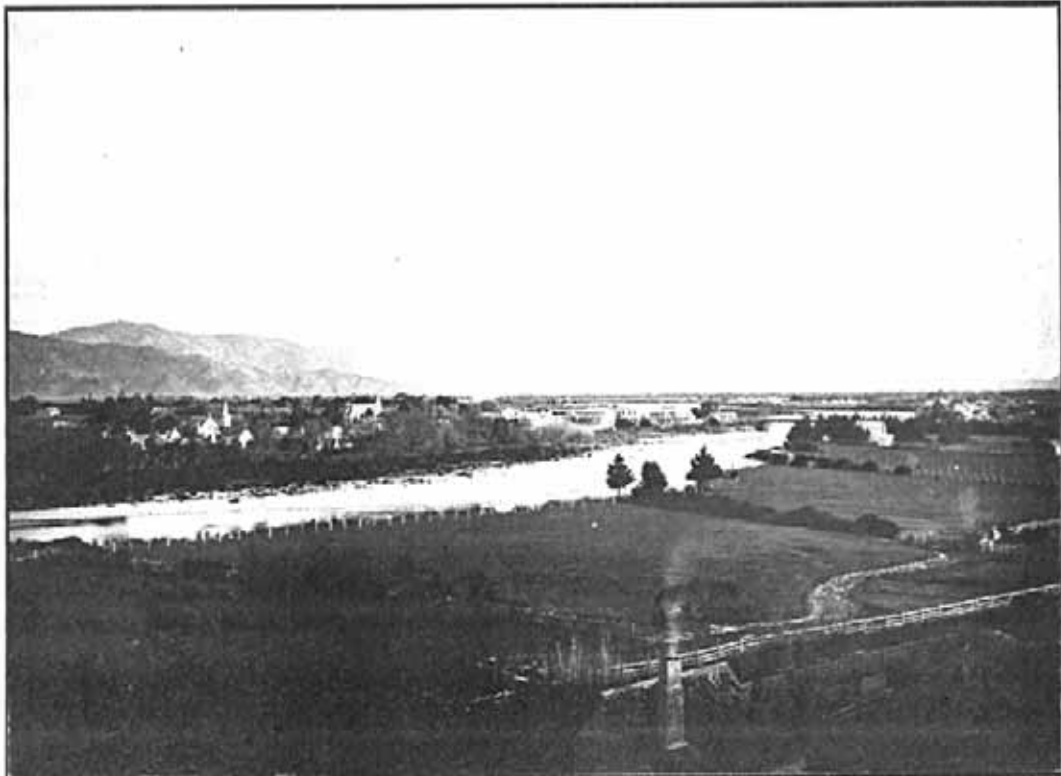
*Our fire-place, which was in the open air, had a joint of pork roasting before it, and the pudding was boiling in the pot, when, by degrees, the water approached...Ember after ember was put out, and the meat half roasted, the half boiled.* The New Zealand Journal, April 24, 1841. From *Once Upon A Village*, David P. Millar, p. 29.

Again on 2 March 1840 a larger flood inundated houses to some depth. As a result about 40 settlers moved to high ground in "Cornish Row", while others returned to the foreshore and eventually to Thorndon or to other settlements.

In 1842 it is reported that the river banks were overtopped 7 times. By then the stripping of the forest had allowed the Hutt to erode the land and change course as never before. The history of the Aglionby Arms (also referred to as "Valentines" after its owner) illustrates the extent of bank erosion.



**Plate 13: Alicetown in the 1880s.** Source: Alexander Turnbull Library, Edgar Williams bequest, neg. G25575



**Plate 14: Lower Hutt in the 1880s.** Source: Alexander Turnbull Library, Edgar Williams bequest, neg. G25584

The building was isolated by the river on three occasions before its timbers were finally used in the construction of the Railway Hotel, a block further away from the river bank.

It is difficult to tell which of the many impediments was dominant in retarding the development of the Hutt. Although flooding in the 1840s was a regular occurrence it appears to have been regarded with a resigned acceptance.

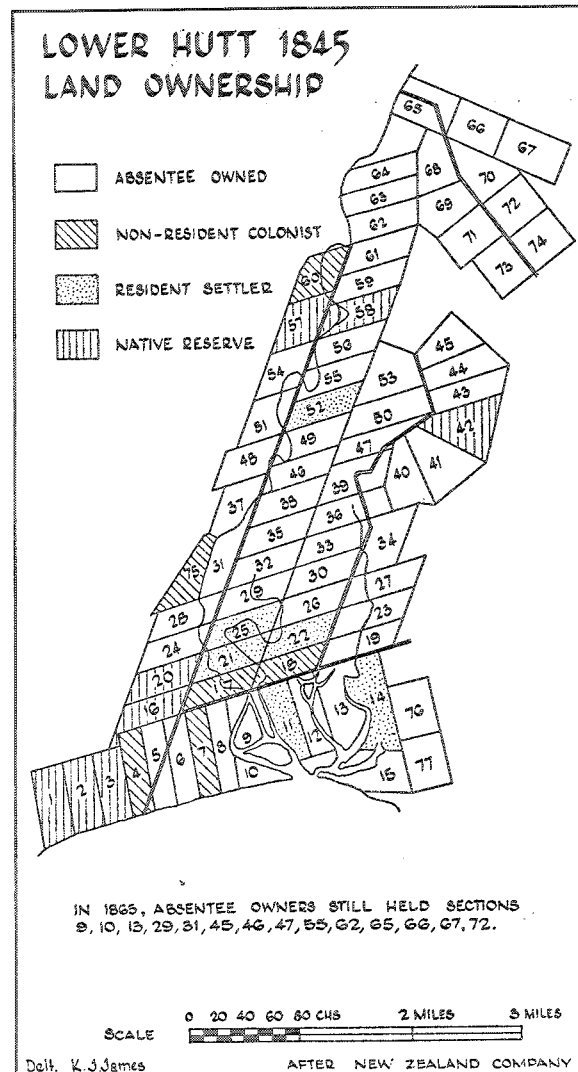
*The flooding of the river was a regular occurrence. The river overflowed about half a dozen times every winter, although on only few occasions was its flooding disastrous. A heavy rain always meant a future flood, and in at least one house, that of James Brown, the downfall was a sign that food had to be cooked to last three days, and plenty of wood put aside in a dry place for use after the waters had receded. As an additional precaution, most people acquired a canoe, which they kept permanently tethered on a lead by the doorway. Once Upon A Village, David P Millar, p. 52.*

The lack of local employment opportunity, or if work could be found in Wellington the difficulty of commuting, reduced residential demand for Hutt land. However, land ownership problems restricted development most and certainly deferred the containment of the river until catastrophic flooding had occurred several times. Absentee (or local and idle) landlords starved the settlers of capital and land.

*In 1845 not less than 64% of Hutt land was locked up in unproductive persons - absentee or otherwise - and it was still as high as 47% ten years later. "....."You absentees ought to do more than feel anxious about the prosperity of Wellington - you should aid in it; as it is you are content to sit by the fire-side and speculate upon the advance which will take place... Not only do you not contribute to our prosperity, but your agents ask higher terms for selling or leasing lands than demanded by settlers. Letters from settlers and labouring immigrants. p. 24-5, from Once Upon A Village, David P Millar, p. 46.*

## The First Natural Disasters

In a manner repeated throughout the Hutt River's history a decade of mild weather in the 1840s was followed by a period of moderate flooding, including probably the greatest flood until then observed in the Hutt River. In 1858 the true flood potential of the Hutt was to be revealed to settlers still shaking from the great 1855 earthquake.



**Figure 7: Land ownership in 1845.**

Source: *Once Upon a Village*, P. Millar, p.47.

Throughout the 1850s flooding became more serious. The river became choked with forest strippings as the plain and river banks were cleared of the protective cover. The river was free to meander into the surrounding land and to rediscover ancient waterways.

The flood of 1849 was to be the first of the "old man" floods of last century. The "heaviest flooding for years" took place with people losing much livestock - one settler lost 180 sheep. There is a flood recorded in December 1852 and following the great earthquake of 23 January 1855 a winter flood rose 2 feet higher than had ever been known before. This event completed the demolition of the Hutt Bridge, destroyed in the earthquake, and carried away 300 sheep.

There is little recorded of the direct effect that the January 1855 earthquake and accompanying uplift had on the river regime. Modern assessments of the ground movement indicate that the grade of the river was marginally increased although the grade upstream of the upper limit of the estuarine area (vicinity of the Melling Bridge) remained essentially the same.

Our current knowledge of the river hydraulics suggest that in the now elevated (previously estuarine) areas the finer bed material laid down under tidal conditions would have been too fine and the bed gradient too flat to resist the scour of the higher velocity flows of an upstream reach. Similarly, the old mouth and delta would have been prone to severe scour during the first major flood. How this regrading and realignment developed is difficult to assess: the river grade and alignment was also affected by the mass clearing of the river berms and hillside forests, and by the enormously increased bedload carried from the upper reaches.

The river engineers of the time did not have to wait long to observe the river's response (the records of the Provincial Council show the theories of river mechanics received considerable attention from the Council Engineers [see *Petone: A History*, Susan Butterworth, p. 82]) for on 17 January 1858 an enormous flood swept the Valley.



**Plate 15: Timber groynes erected after the 1858 flood.**

Source: Alexander Turnbull Library, W H Davis, neg. F52880.



## HISTORICAL FLOODS 1840-1899

(Abbreviations refer to Archive Table 2, p. 7)

A1: 2 Mar 1840: OAV: Houses flooded to some depth. As a result about 40 settlers moved to Cornish Row; others returned to the foreshore.

A2: Winter 1849: OAV: Heaviest flooding for years. People losing much livestock. One settler lost 180 sheep.

A3: Dec 1852: OAV: Flood

A4: Winter 1855: OAV: 300 Sheep lost. River 2' higher than had ever been known before. Completed the demolition of the Second (Percy's) Hutt Bridge, which had already been destroyed by the January 1855 earthquake.

A6: Jan 1858: OAV: Largest flood yet - burst its banks and flowed into the second river (Black Creek). The Aglionby Arms rendered uninhabitable - surrounded by water on 4 sides. A number of sawyers in Upper Hutt narrowly escaped death. Road through Hutt Valley gouged deep in several places. New bridge damaged. 9 people in the vicinity of the Barley Mow Inn, Taita, drowned. Heavy livestock losses.

"The New Zealand Spectator": Continued raining on Sunday evening and continued through to the following evening. Very rapid rise - people had not enough time to move to other ground. Level to the height of the bridge deck at 1.00 pm Tuesday. On Wednesday morning bodies were recovered. Meeting held a few days after 26 January 1858. Reference to damage caused by previous floods.

A7: 17 Jan 1858: LHPP: 9 lives lost. Many acres farmland lost at Taita and 90 acres belonging to Mr Speedy at Belmont.

A8: Sep 1858: OAV: Another flood, but not as bad as January. Swept away half of Carters Bridge (Third Hutt Bridge) and eroded west bank.

A9: Jun 1859: OAV: River becoming increasingly choked with trees dumped into it by settlers hoping the river would carry them away. Throughout the 1850s flooding increased in seriousness

A10: 1868: A jam of logs lifted the Third Bridge off its foundations.

A11: Mar 1871: OAV: Flood swept away 100 ft of the Hutt Bridge, caused by a log jam. During the reconstruction of the Fourth Hutt Bridge, completed in 1872, 3 heavy floods washed away material, equipment and the construction punt. The contractor built 5 timber groynes and filled them with boulders. A small strip of river frontage bought by the Provincial Government was then planted with willows.

Within weeks all the groynes were reported to have slipped out of position and considerable repair work was needed. Floods of 1871 caused abandonment of the third Aglionby Arms, situated to the southwest of the Hutt Bridge. Its timbers went into the Railway Hotel in 1872. The first Aglionby Arms washed out in c. 1845-6. The second Aglionby Arms (c. 1847) was situated in the middle of the present river bed.

A12: 1878: OAV: Two old man floods which swept the valley from side to side.

A13: Mar 1880: OAV: A heavy flood spilled out over many fields, covering them with several inches of water. A child was swept to his death.

A14: 1887: OAV: Spring rain brought another flood to the valley.

A15: Mar 1893: LHPP: Flood: considerable damage. Prompted Petone to negotiate with Lower Hutt to build stopbanks. Negotiations broke down and Petone proceeded independently.

A16: Mar 1893: OAV: Flood: Hutt residents going to Wellington had trouble getting traps through.

A17: Aug 1893: OAV: The lower valley a desolate scene with vast sheets of water covering paddock after paddock.

A18: 1895: OAV: The council had to erect breakwaters to protect the school below the Hutt Bridge from further heavy erosion.

A19: Feb 1896: OAV: A flood brought down an immense amount of timber. The stability of the Hutt Bridge threatened. Alicetown (alleged to have) suffered badly as the Petone stopbank, built after the first 1893 flood, banked up water. Individuals began protecting their own properties with wooden groynes and willows.

A20: 1898: LHPP: Two tremendous floods, June 1898 and 18 November 1898. In one of these floods the waters covered the valley from hill to hill: the greatest flood for 40 years.

A21: 17 Jun 1898: OAV: The worst flood since 1858; water to within 9" of the Hutt Bridge decking. Water knee deep in the township. Did a great deal of damage to McNab's gardens. Ground floor of house and gardens covered in a sea of mud. Led to sale of gardens in 1901.

A22: 17 Jun 1898: NA PWD96/298000 21/9/54 SCHNACKENBERG. High Street, Lower Hutt under 3 ft water - other parts to a greater depth. Parts of Petone to depths of 8-10'.

River alignment from Engineering Survey of a portion of the Hutt River, June 1871. Copy held in Rivers Department, WRC. Map Copyright WRC 1990.

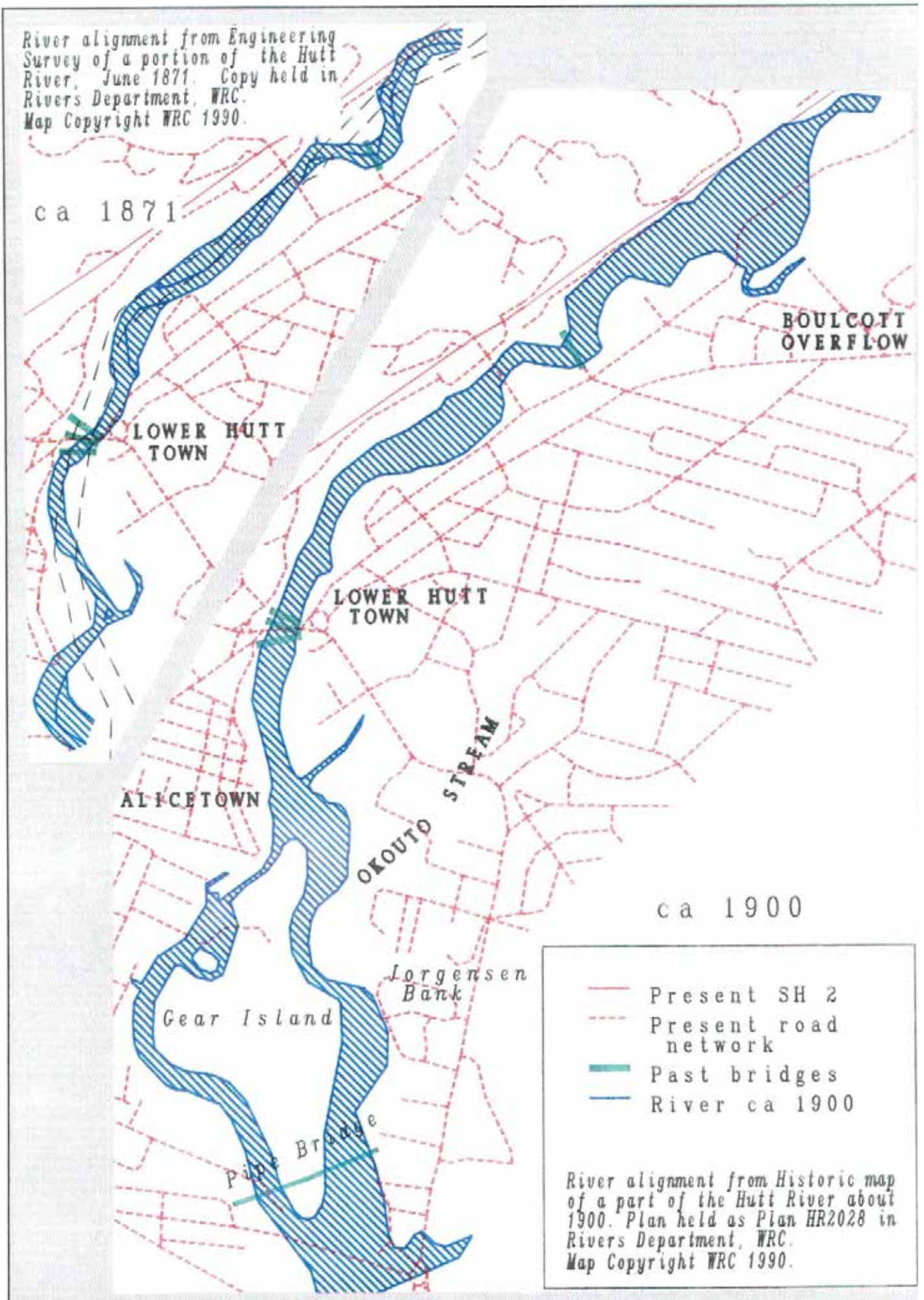


Figure 8: 1871 and 1900 River alignments between Melling and Estuary Bridge.



This was followed in September of the same year by a slightly smaller event, and again with lighter flooding in February and July 1859. The graphic accounts of the January flood do not include engineering comment, however, by comparing the description of the flood in the Taita area with those of the 1931 flood it is likely that the 1858 flood is the largest that has been witnessed, at least in pakeha recorded history.

As descriptions of the 1858 flood bring home the scale of a disaster that could still affect the Hutt Valley (should the embankments fail or be overtopped), the leader carried in the New Zealand Spectator not long after the flood is copied here as figure 9 overleaf. When thinking of a comparable event today it is worth remembering that intensive development on the river plains has increased the flood plain population from about 1,000 to 100,000. The original protection works funded by 1,000 ratepayers now form the basis of the current works downstream of Melling, protecting a population of about 60,000.

## The Industrialisation of Petone

From the mid-1870s development of the Petone and Lower Hutt areas followed different patterns, in part due to the more severe flooding which affected Lower Hutt, but principally due to industrial development on the Petone wastelands.

Through the employment offered by the Gear Meat Works, the New Zealand Railways workshops (originally located to house the special locomotives required to climb the Rimutaka Incline), the woollen mills, and service industries to these, Petone surged ahead.



**Plate 16: Petone in the 1880s, viewed from the Wainuiomata Hill Road.**

Source: Wellington Maritime Museum neg.

## THE FLOOD OF 1858

"The later rains have caused a very heavy flood at the Hutt which, we are sorry to learn, has occasioned very serious damage and loss to persons living in the district. It commenced raining on Sunday evening, and continued without intermission until the following evening. The river rose to a greater height than has been known before, the water entering many houses that have been above the level of previous floods. Immense trees were brought down by the flood and left in different parts of the road, which is broken up in several places, and has become quite impassable. Butler's house is entirely washed away, and the river has broken through still further in that direction. Corbett's—the Aglionby Arms—is rendered uninhabitable, the river having swept away half the house and made a fresh course for itself, so as to leave the remainder of the building standing as an island in the middle of the stream. Mr Corbett had incurred an expense of £100 the week previous driving pile sand forming a breastwork to protect the house against future freshes. With great difficulty he contrived to save the furniture from the upper rooms. The river had broken the bank away on both sides, which is now impassable; when the flood was at its height it was level with the floor of the bridge, many of the iron fastenings and cross sleepers of which had been carried away. Heavy losses have been incurred in the valley by the destruction of fences and other property, and the loss of sheep and other valuable animals which have been drowned by the flood. The damage to the road at Butler's and the parts adjacent caused by the previous flood has been further increased by that of Monday; very much of this, it is said, might have been prevented if timely precautions had been taken by the Provincial Government who never interfere in these matters until after the mischief is done.

To the above account of losses and destruction of property caused by the flood, we are concerned to add that news has this morning been brought of lamentable loss of life, the bodies of seven persons have been recovered, several other persons are reported to be missing. The unfortunate sufferers are, it is said, mostly newcomers who have recently settled in the district.

In our last we gave such details of the disastrous flood which had occurred in the Hutt as had reached us. We now furnish the following particulars which we believe may be relied on as being substantially correct. The number of bodies actually recovered at present is nine, namely, Mrs Hagan and infant, and Mrs Price; the other persons known to be missing are the husband of Mrs Stanway, and three more of his children, who were all seen to be washed away together. The particular locality where this awful loss of life occurred was nearby the 'Barley Mow Inn,' at the Upper Valley of the Hutt.

When the flood was at its height (about 1 a.m. Tuesday) the force of the water at this point is described by an eye-witness as being terrific. The water was seen rushing along like an immense wave, crashing and roaring, carrying everything before it: huge trees, portions of buildings, timber, furniture, and debris of every description, were borne away by the force of the current. To witness the havoc and destruction which the flood had caused is most painful and baffles all description. Many acres of land which only a few hours before to all appearances promised a plentiful crop, are now covered with sand and shingle, and not a particle of vegetation remains. The quantities of drift timber, in many instances large solid trees, which have been deposited by the flood, is perfectly incredible, and will take many months to remove. The unfortunate persons who have lost their lives by this sad calamity are mostly late arrivals in the country. Mrs Hagan (a daughter of Mr Dew, an old settler at the Hutt) was living in a small wooden building near the first gorge; Mrs Price and a man named Charles Hartley were also residing in the house. Upon seeing the waters rising so rapidly some fear was entertained for the safety of the building, and the survivor Hartley proposed to go for a rope to secure the house; when he left the water was up to the window, and the house was actually shaking. He almost lost his footing, and was swimming with the current for nearly half a mile, until he succeeded in getting up a tree, where he remained for 14 hours, until rescued by some passers-by on the following day. From the position which he occupied he could see everything around him; he states that he soon saw the house borne away with the current: the inmates Mrs Hagan (who was only confined that morning) and the nurse Mrs Price, were climbing on to the roof of the house; they passed close to where he was in the tree, and he describes the shrieks of the women as fearful; a minute after the house turned over, and nothing more was seen of them. The bodies were recovered

about a mile from the spot on Wednesday morning; the infant was found firmly locked in the dying grasp of its poor mother, the nurse was found close to her, the body was very much mangled. The bodies were removed to the house of Mr Dew, and an inquest held on them, when a verdict of accidentally drowned was returned. The husband of Mrs Hagan is absent in the country and of course, is ignorant of the desolation of his home. Mrs Price, who was much respected, and who arrived here by the *Ann Wilson*, leaves a family of young children behind her: her husband was absent from home at the time. The other family, Mr Stanway, wife and family were all seen together on the roof of their house; the water rose rapidly and submerged the whole of them, and they were seen to sink one after the other. The blacksmith Sollers with his wife and infant perished in a similar manner; they imagined themselves secure, but the house was borne away with the current, and he was heard by persons on the hills to say 'good-bye'. The bodies were found mostly together, one completely buried in the sand. A man and his wife living near to Mr Dew were saved after remaining on top of a building for many hours whilst nearly all around them was borne away. To give anything like a detailed account of the losses sustained by residents at the Hutt would be impossible; we may, however, state a few of the most important particulars of individual loss of which we have been informed:—Mr D. Riddiford has lost about 120 sheep; Mr Barton has also lost a large number of sheep; Mr Thomas Mason a number of cattle; Mr Arnott cattle and sheep; Mr John Leverton has lost entirely 50 acres of crops, and a large number of cattle; Mr C. Mabey lost a number of sheep, and also a large quantity of fenced and cropped land; Mr Buckridge, of the Albion Hotel, has had his crops destroyed and the river has taken a course completely through his property: at William Tandy's the river now runs through his ground and has destroyed a large amount of property; Mrs Speedy's land is completely cut up in all directions by the different channels the rain has made, in many cases large fissures 12 feet deep have been formed; Mr Still has lost a number of sheep, etc.; Mr John Russell 10 head of cattle; Mr Dew, an old settler, estimates his loss at not less than £500; a property which was worth many hundreds of pounds is now comparatively worthless, five acres of grassland have been completely swept away. A large number of men had volunteered to assist in removing a shingle bed which had been thrown up, and which prevents the river from taking its old channel, and nearly all the residents of the Hutt were endeavouring to contribute either in labour or otherwise to this object. The destruction of the roads between Poad's public house and the Taita is almost incredible, scarcely a vestige remains at some places of the original road: at one place (a bridge near M'Donald's creek) the river runs right through the road making it very dangerous for passengers at night; the banks descend abruptly to the depth of 15 feet; other dangerous places occur along the whole line of the road. The Waiwhetu and Second River Bridge have both been carried away. It is to be hoped that the Provincial authorities will lose no time in removing the large quantities of drift timber now lying on the roads, and in making it again passable.

A public meeting, called by notice posted in the most public places within the district, was held at the Hutt Mechanics' Institute last night (26 January 1858), to consider the best steps to be taken under the circumstances. About 200 people were present at one time during the evening. Mr Braithwaite was in the chair. Great regret was expressed at the non-attendance of any person to represent the Provincial Government. Mr Ludlam, as one of those who had signed the notice calling the meeting, opened the proceedings by explaining his objects in so doing. The following resolutions were unanimously carried, after considerable discussion, in which, besides the movers and seconders, Messrs Lynch, M'Hardie, M'Dowell, Corbett, W. Milne, Jillett, Renall, Bruce, and D. Hughey took part. The meeting ended at about eleven o'clock. Moved by Mr Ludlam, seconded by Mr Hart—That this meeting is of opinion that immediate and energetic action is required in order to repair the serious public damage done by the recent inundation of this valley, and in order to guard against the recurrence of the attendant calamities as far as human means can avail. Moved by Mr Wakefield, seconded by Mr Jillett—That the following gentlemen be requested to form a committee for the purpose of communicating with the Government on the subject, and of obtaining accurate information as to the causes of the damage and means of remedy and of collecting subscriptions towards the necessary expenses, viz., Messrs Ludlam, Hart, Corbett, Phillips, Wilcock, David Hughey, Lynch, Mason and Wakefield.

Moved by Mr Hart, seconded by Mr Riddiford:—That the Committee be requested to open a separate subscription list for the purpose of relieving serious cases of private distress among the sufferers by the recent inundation.

An inquest was duly held upon the bodies of the deceased and a verdict of accidentally drowned was returned in respect of each person."

Description of the flood carried in the "New Zealand Spectator" shortly afterward. National Library of New Zealand.

Figure 9: The 1858 "Great Flood"

Most of these industries occupied the less badly flooded perimeter" area of Petone, however, despite the appalling drainage problems within the residential area of Petone, the population increased from 7,500 in 1881 to 20,000 by 1886.

The industrial entrepreneurs were attracted to the advantages Petone offered with its rail link, cheap flat land, abundant fresh water, and in the case of The Gear, the absence of neighbours to offend. Petone became the nation's industrial showpiece, although slum housing blighted the Borough and left a legacy which still remains. It was not until the mid-1890s that steps were taken to drain the land, to prevent regular flooding, and to control housing standards.

## **Lower Hutt Borough**

In comparison to Petone the remainder of the Valley was an agricultural backwater. Lower Hutt was known mainly for its market gardens and recreational picnic areas. McNab's (Bellevue) and Mason's gardens were popular during the Victorian era when picnicking was fashionable. They provided an escape from the less attractive conditions of Wellington and Petone.

The Lower Hutt township had been settled in an unfortunate position. Being further up the valley, and with the river at a level close to its eastern flood plain, Lower Hutt experienced floods as a destructive, life threatening force, the river at times occupying the entire valley floor. Old river courses became active, flowing through Alicetown to the Dead Arm, from Boulcott into Okoutu Stream (Black Creek or The Second River) and from Taita to the Waiwhetu (The Third River). The velocity of the flood waters crossing the plains would have been dangerously high: there are frequent reports of streets being left rutted and impassable after floods had subsided. Large numbers of stock were lost, fences were ruined and thousands of cubic metres of gravel were dumped onto good pasture some distance from the river. Paddocks belonging to riparian owners could disappear overnight. Mr Speedy, a farmer in the Avalon area, lost 90 acres in the 1858 flood.

## **The Upper Valley**

"The Upper Valley" was the general description given to the area north of Boulcott (the northern boundary of Lower Hutt Borough with Hutt County), which remained as remote forest and farm land until the 1900s. The reach from Boulcott to Silverstream was regarded as a natural extension of Lower Hutt and the need to control the river as far as the gorge was recognised from the time of the first Hutt River Board.

In Upper Hutt, north of Taita Gorge, river terraces tend to confine the river to the Western Hills, leaving the eastern side of the valley flood free. There are accounts of forestry workers being trapped in rising flood waters, and of stock losses and fence damage, but it was not until the 1940s that the pressure of development required the construction of publicly funded river control works.



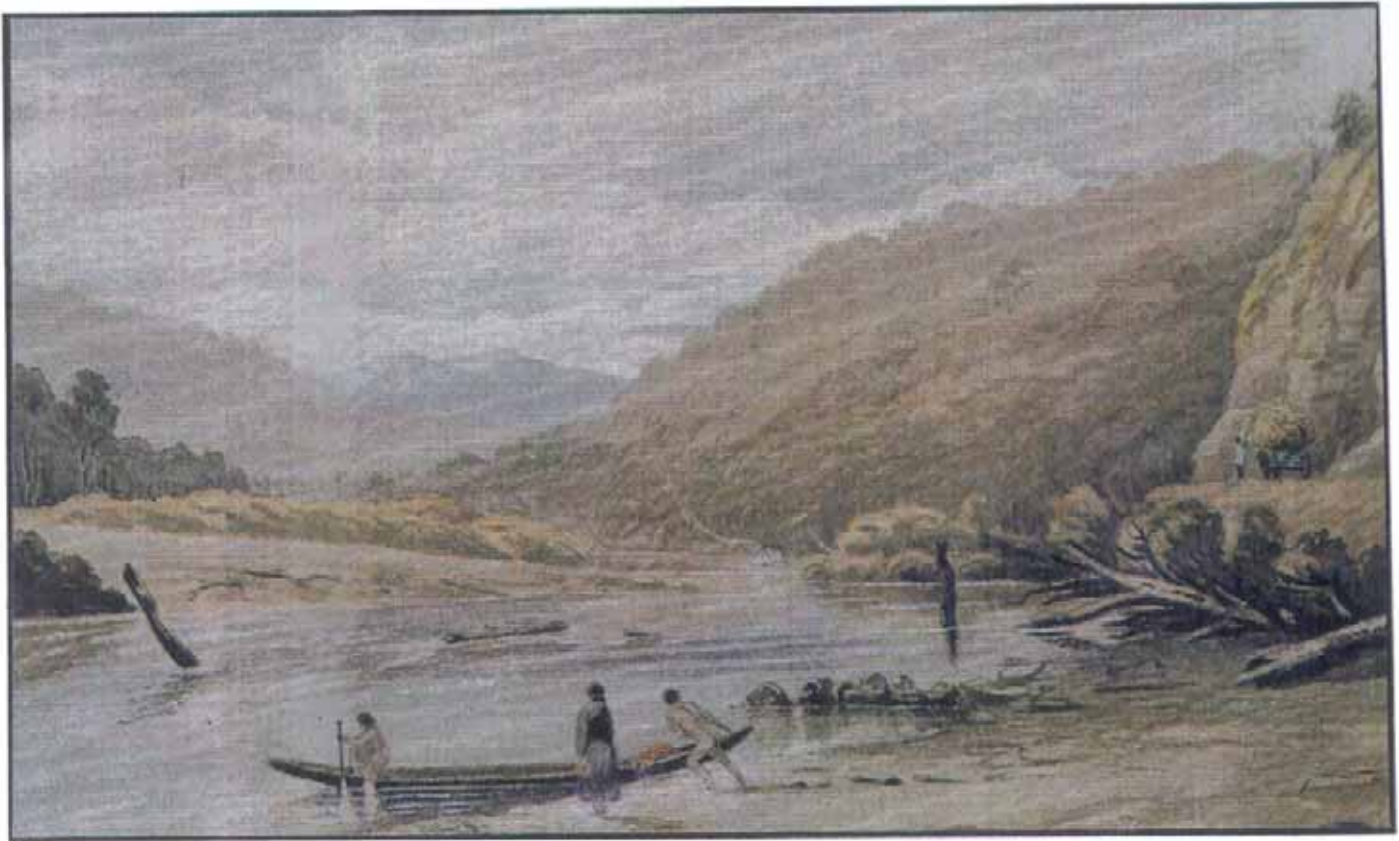
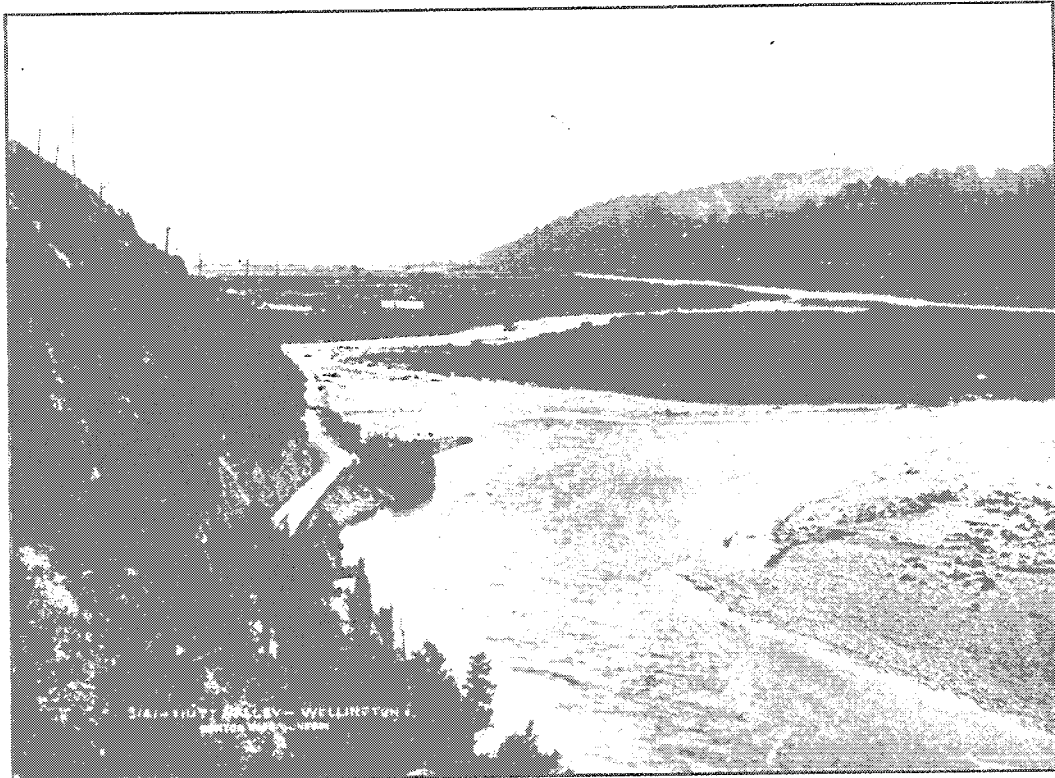


Plate 17 is a water colour by C C Clarke painted in the early 1850s and probably portrays a scene set downstream of the confluence with Stokes Valley Stream. Refer Alexander Turnbull Library Art Room No. B30/1.

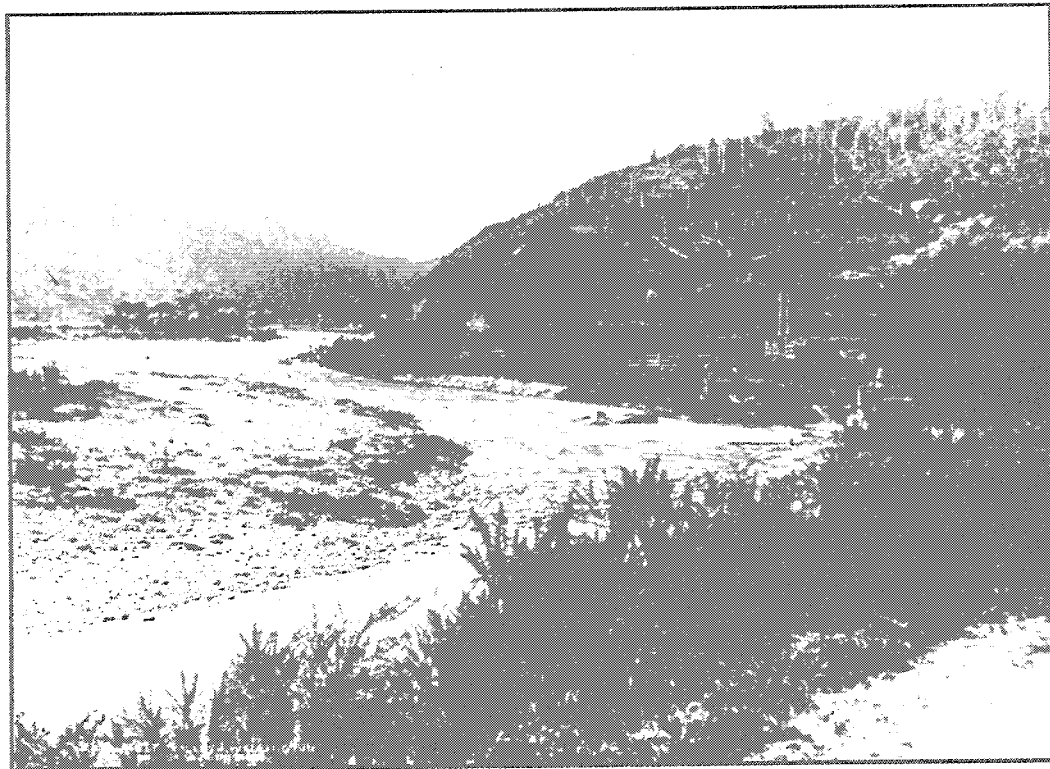
Plate 18, the lower print, is described as a "view looking towards Wellington, from the Hutt Road, at the gorge separating the lower from the upper district" and was painted by Samuel Brees circa 1845. Refer Alexander Turnbull Library Art Room No. B31/29. This impression may show the headwaters of the "Third River", now the Waiwhetu Stream (also referred to as the Taita Overflow) as a major branch of the River, although it may only be the temporary bifurcation shown in plate 19. Most evidence points to the Waiwhetu originating from a bend in the vicinity of the Taita Hotel (extension of section 910).





**Plate 19: Looking south from Taita Gorge in the 1880s showing the relative levels of the riverbed and flood plain.**

Source: Alexander Turnbull Library, Burton Bros, neg. GB3141



**Plate 20: Taita Gorge c. 1880s. Silverstream Rail Bridge in distance. The view shows river works constructed by the first Hutt River Board for Hutt County.**

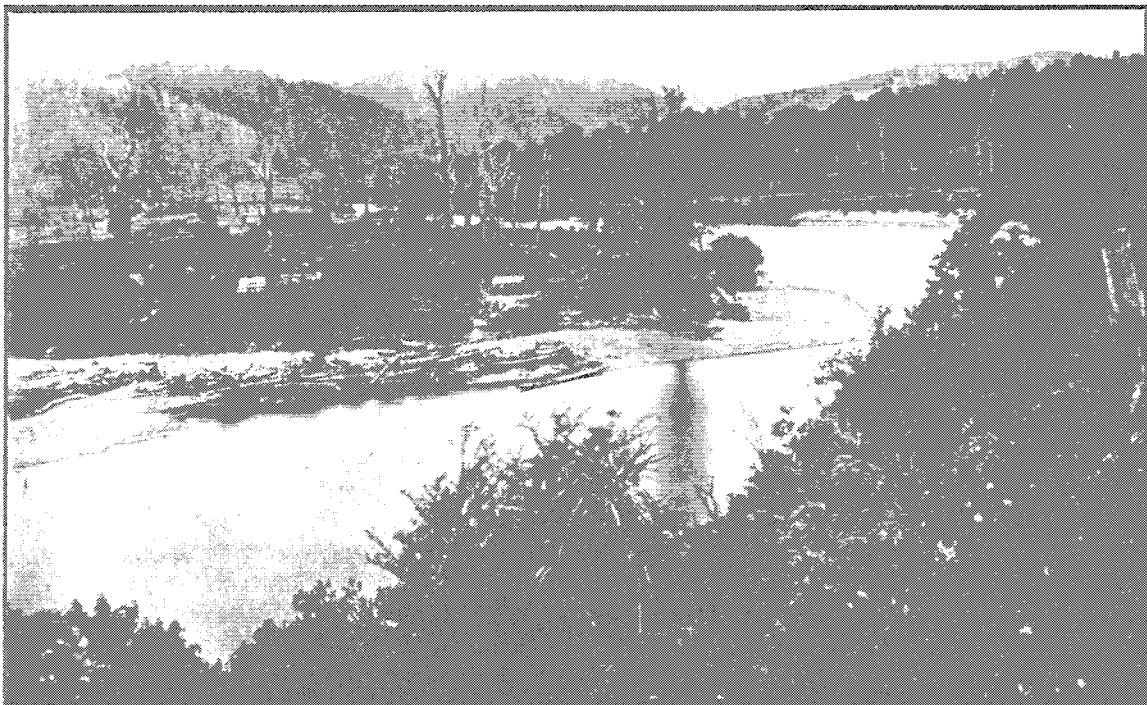
Source: Alexander Turnbull Library neg. GB3140





**Plate 21: Looking south from the "Fern Ground" (Maoribank), 1876.**

Source: Alexander Turnbull Library, James Bragge, neg F10845.



**Plate 22: View north from the "Fern Ground" (Maoribank), 1876.**

Source: Alexander Turnbull Library, James Bragge, neg F2660.



The pioneer families lived with the river [refer to the McCurdy Collection at the ATL] and constructed isolated works to protect their lands. There was no attempt by the community to manage the upper river until 1960 [refer to chapters 7 and 8]. The following pages contain a number of prints of the "The Upper Valley" (below the Taita Gorge), of the Gorge itself, and of Upper Hutt.

## First Attempts at Control

The 1860s appear to have produced few large floods, although the regular winter floods continued. In March 1871 a flood caused a log jam on the Hutt Bridge, isolating the Aglionby Arms Hotel situated to the southwest. The flood swept away part of the bridge and during the construction of its replacement (the Fourth Hutt Bridge) three heavy floods swept away materials, equipment and construction plant. As part of the bridge construction contract, the builder erected five shingle filled timber groynes, but within months these had shifted out of position and required repair.

Throughout the 1870s the frequent flooding was of serious concern to residents. After two "old man" floods inundated the valley in 1878 the first Hutt River Board was formed on 12 November 1879. This Board is recorded as ineffectual, although it carried out work which reduced the frequent damage caused to the Hutt Bridge and its approaches. It was founded at the start of the great 1880s depression and had little power to raise money other than by rating, a difficult task from absentee landlords. From the Board minutes it appears it also lacked a mandate from resident owners to engage in substantial works. Directing public concern to the support of public works was not easy, despite tragic events such as the flood of March 1880 when a child was swept to his death in a heavy flood that spilled out over many fields. A mix of poverty, lack of political power, and settler individualism, led to an apathy for public affairs. The Hutt River Board was only one of many authorities hampered by lack of financial and ratepayer support, even when the benefits to be gained from modest expenditure were obviously high. Petone Borough ratepayers, for example, repeatedly failed to support loan polls to relieve the severe annual flooding of the Borough.

Spring rains of 1887 brought a large flood, and another occurred in 1893, large enough to make it difficult for Hutt residents to commute to Wellington. This flood inundated all but the few Petone Borough properties on high ground. The property of Petone Mayor R C Kirk flooded to the height of the boundary fence and it was he who pressed the Council "for security in the shape of a stopbank." In August of the same year the lower valley was again "a desolate scene with vast sheets of water covering paddock after paddock." From *Petone: A History*, Susan Butterworth.

Efforts were made by Petone to combine with Lower Hutt Borough in the construction of an embankment to protect Petone and the Lower Hutt suburb of Alicetown (at this time as many Lower Hutt ratepayers lived on the western bank as did on the eastern bank). The political will and financial backing could not be found within Lower Hutt to support the proposals and in 1893 Petone proceeded to protect its own territory. The reasons behind Petone's unilateral action are not clear but it may have been because Petone was not prepared to be involved in flood control works on the eastern bank which might have led to higher flood levels in Petone. Lower Hutt Borough politics may not have been able to support a project that would only benefit western bank

ratepayers. Possibly the politics of land ownership and class prejudice (Petone was seen as a lower class area by Lower Hutt) led to the Borough separatism, as occurred with the 1905 replacement of the Fourth Hutt Bridge and other proposed joint venture projects.

Although the "Petone" stopbank, built in 1894, was not the first river control work in the valley, nonetheless it must have demonstrated how easy it was to obtain some relief from the flooding nuisance. There is little detail on the construction and funding of this bank which ran from the Hutt Road/Wakefield Street intersection to skirt the Recreation Ground and then to tie in with the old foreshore sand and gravel bank at Kensington Street (see figure 10, p. 43).

A number of river control works were carried out during this period, mainly associated with the development of the valley's transport infrastructure, the closure of old river channels, or the protection of isolated assets [refer Archive Table 4, p. 44]. Most of the works were minor, isolated works and did not conform to a comprehensive scheme or concept of river management. For example, in 1895 the Lower Hutt Borough Council erected breakwaters to protect school property (below the Hutt Bridge) from heavy erosion.

In February 1896 the stability of the Hutt Bridge was again threatened by the immense amount of timber brought down by flood waters. The 1896 flood was the first to follow construction of the Petone Stopbank. Alicetown is reported to have suffered as a result of the embankment. During this and subsequent floods:

*.... Alicetown residents, armed with picks and shovels, attempted to break down the bank so that the water could take its old course through Petone. To combat this Petone organised a patrol, and when a flood was signalled by the ringing of a bell, the patrol took up its duties of doing sentry-go along the length of the bank. Sentry boxes were erected for their protection. from Petone: A History, Susan Butterworth, p. 127, from Petone's First Hundred Years, W B Nicholson ed., 1940.*

In 1898 two great floods filled the entire valley floor. The larger, on 17 June, was described as the greatest flood for 40 years. Water was knee deep in the town and trapped dancers at the Oddfellows Hall, forcing them to spend the evening on the stage. A great deal of damage was done in Lower Hutt's renowned McNab's Gardens (later Bellevue) flooding the house and covering the gardens with a sea of mud. At the peak the waters were 9 inches below the decking of the Fourth Hutt Bridge. The 1898 flood has been captured on a panorama of Alicetown and Lower Hutt, and is reproduced as plate 26 (p. 45). To the left of the photograph and in the far distance can be seen the "Boulcott Overflow" in heavy flood. In the centre right is the high land to which the original Cornish settlers moved after the flooding in the early 1840s (Cornish Row). In the centre is Railway Avenue. The Fourth Hutt Bridge is obscured by the trees surrounding the cemetery at the corner of Bridge and Marsden Streets.

Following a repeat flood in November, with dancers again being trapped in the Oddfellows Hall, (plate 25, p. 44) a new River Board was elected, replacing the first Hutt River Board which had not met since 1881.

Within 8 years the new Board commissioned works which effectively freed the lower valley from flooding.

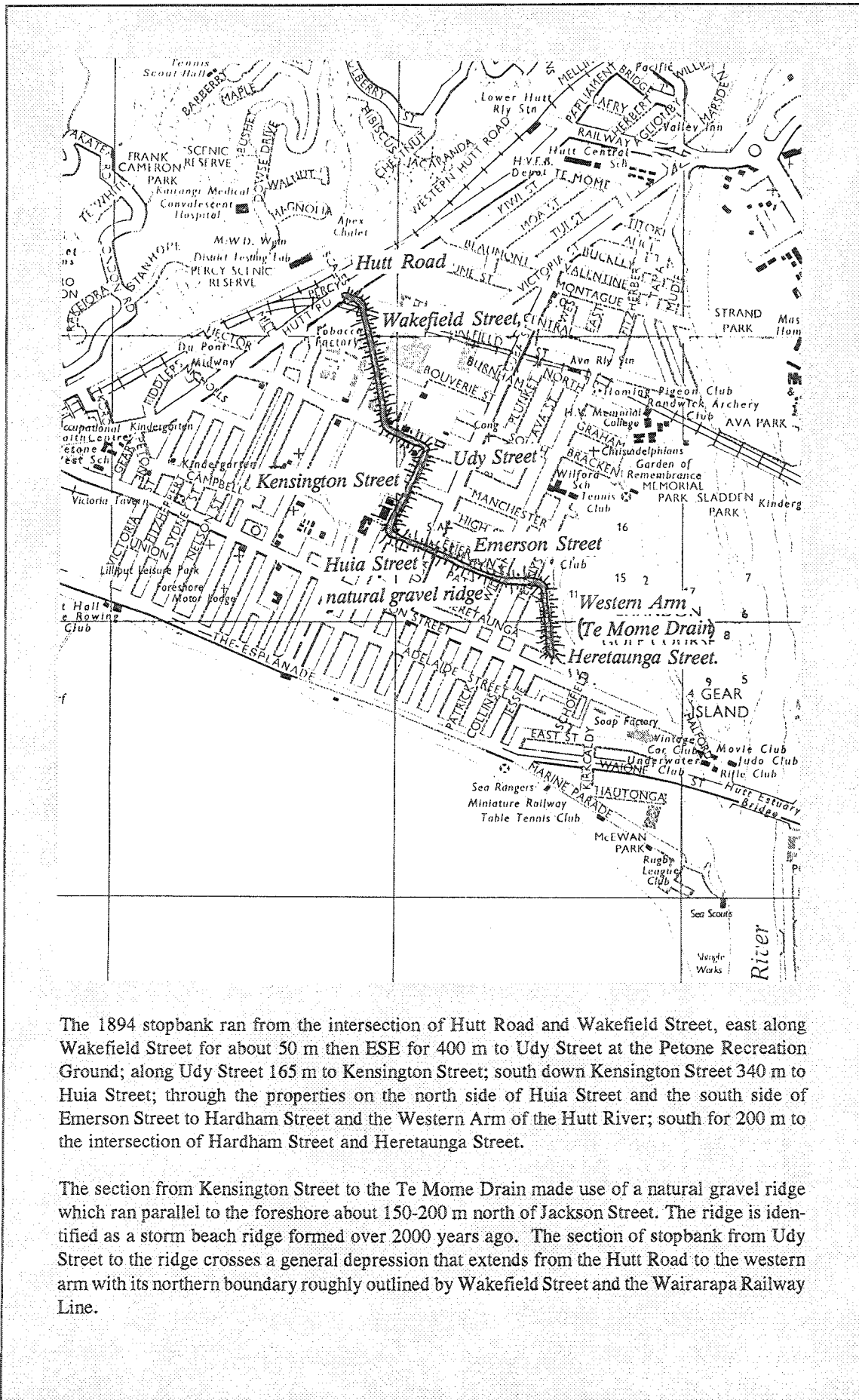
Plate 25 shows the flood waters receding after the 1904 flood, a relatively small event probably a quarter of the volume of the 1898 floods. By 1904 the stopbank construction on the eastern bank was largely complete, however, a portion of the works had been postponed pending the construction of the replacement Hutt Bridge. In the previous "old man" floods High Street had been submerged by up to 1.2 m and was left rutted and scoured.



**Plate 23: Floating Boom Groyne, Lower Hutt, c. 1870s.** Source: Alexander Turnbull Library, Davis col., neg. F52877.



**Plate 24: Fourth Hutt Bridge c. 1880s showing timber groynes (see also plate 15).** Source: Alexander Turnbull Library, Davis col., neg. F52879.



The 1894 stopbank ran from the intersection of Hutt Road and Wakefield Street, east along Wakefield Street for about 50 m then ESE for 400 m to Udy Street at the Petone Recreation Ground; along Udy Street 165 m to Kensington Street; south down Kensington Street 340 m to Huia Street; through the properties on the north side of Huia Street and the south side of Emerson Street to Hardham Street and the Western Arm of the Hutt River; south for 200 m to the intersection of Hardham Street and Heretaunga Street.

The section from Kensington Street to the Te Mome Drain made use of a natural gravel ridge which ran parallel to the foreshore about 150-200 m north of Jackson Street. The ridge is identified as a storm beach ridge formed over 2000 years ago. The section of stopbank from Udy Street to the ridge crosses a general depression that extends from the Hutt Road to the western arm with its northern boundary roughly outlined by Wakefield Street and the Wairarapa Railway Line.

**Figure 10: 1894 Petone Stopbank**



**Plate 25: High Street, Lower Hutt, 1904.** Source: From a "newspaper cutting", neg. held by the War Memorial Library, Hutt City.

### River Works 1840 to 1900

(Abbreviations refer to Archive Table 2, p. 7)

B1: 1851: HRBSSP21: 250-330

Plan showing old course of river at Alicetown.

B2: 1874-75: OAV

Construction of the Western Railway, Melling to Silverstream: the contractor found that there was little flat land between the river and the hills. Fill disappeared with frightening speed. Where it was impossible to use fill concrete walls were erected and the river was diverted with several thousand sand bags.

B3: 12 Sep 1879: HRBminutes

Hutt Bridge protective works. Four separate contracts let during September & October, for £311, to protect the Hutt Bridge.

B4: 18 Feb 1880: HRBminutes

Tenders called to extend the "floating dam" above the Hutt Bridge; (to control floating debris).

B5: 3 Mar 1880: HRBminutes: 840

Breakwater constructed at "Taita", value £79. Additional £21 paid to contractor for the construction of a floating dam at Clay Point - Mason's property, Taita (Tennyson Ave/Mabey Road area).

B6: 2 Mar 1881: HRBminutes: 1200-1240

Bank protection Taita Gorge, value £20.

B7: 2 Apr 1881: HRBminutes

Hutt Bridge protective works - Engineer instructed to lower logs in floating dam.

B8: by 1890: OAV

Milling of timber moved from the valley to the hills. The river deposited vast quantities of soil and shingle along the lower banks and the mouth.

### Archive Table 4: River Works 1840 to 1900.



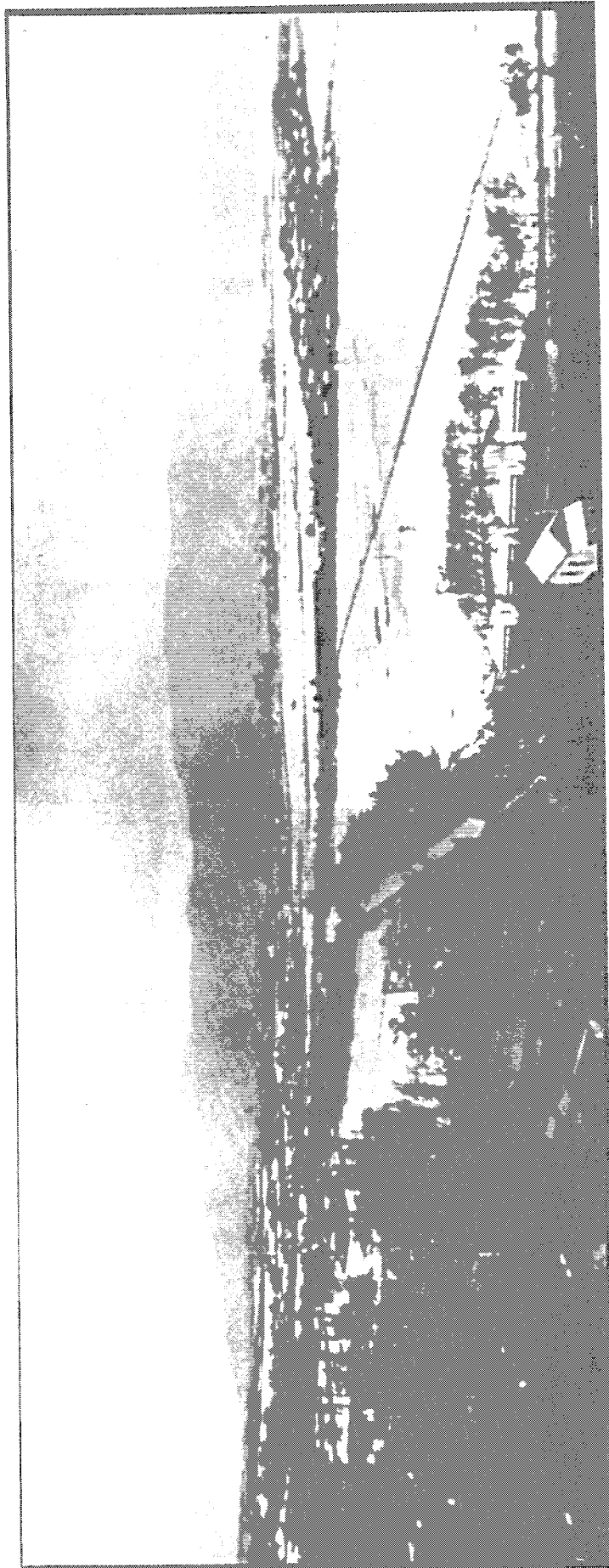


Plate 26: 1898 Flood, Lower Hutt. Source: Lower Hutt Memorial Library

