

Extract From; "Floods in New Zealand 1920-53 : with notes on some earlier floods (1957) C.A Cowie, Wellington New Zealand, The Soil Conservation and Rivers Control Council (p 133-139)"

WELLINGTON

The Wellington district is a natural region embracing the catchments of the Hutt (250 square miles), Wainuiomata (48 square miles), and Orongorongo (41 square miles) Rivers, and several minor streams that flow into the sea. The district is bounded on the west and south by the sea; on the east by the Rimutaka Range and on the north by the catchments of the Hutt and Waikanae (60 square miles) Rivers. The region is the southern end of the axial greywacke mountain backbone of the North Island. Roughly parallel fault lines running from south-west to north-east, along which there has been extensive uplift and down-warping, give a characteristic topography. The topography is hilly to mountainous and steep slopes alternate with narrow valleys in general; but the Hutt and Wainuiomata valley bottoms are extensive, and slopes are more gentle on the western coastal strip.

The annual rainfall is well distributed and ranges from 48 in. in Wellington city to 74in. at Wainuiomata and over 100 in. in the mountainous regions. There is a liability of falls of over 10 in. in any month in Wellington. Intensities of rain are relatively low, 1 in. per hour being recorded in Wellington, but higher intensities have been recorded for very short periods. Half the rains result from southerlies, and one-third from northerlies. Rains are of sufficient intensity and duration to produce frequent flooding, and droughts are not common. The Hutt River drains the southern portion of the Tararua Range and the western slopes of the Rimutakas. In its upper reaches it is confined in a narrow valley but emerges on to a broader plain at Upper Hutt, thence through the Taita Gorge to Lower Hutt. In its lower reaches it is of a meandering character, and an extensive system of stop-banks has been constructed to contain it.

27 April 1920

Phenomenally heavy rain for several hours brought some minor flooding to Wellington city. In some city streets water backed up and large quantities of silt were deposited on the footpaths. Island Bay suffered severe damage where extensive flooding occurred. The lower-lying parts of Lower Hutt and Petone were also covered with water, and water entered several shops. The Hutt River rose only a few feet and no damage was reported.

4 July 1921

Phenomenally heavy rain brought the Hutt River into the highest flood since 1915. Some low-lying areas of the valley were flooded slightly, but no damage was reported.

4 August 1921

A severe electrical storm accompanied by torrential rain caused some slips to come down, but no serious damage was reported. A railway engine on the Johnsonville line was half buried by a slip which came down between Ngaio and Khandallah.

17 September 1921

A slight drizzle, which developed into a steady downpour, caused some local flooding in parts of the Hutt Valley and Wellington city, particularly at Miramar. In three days 5.16in. of rain fell, of which 3.78 in. fell in twenty-four hours. The Hutt River rose considerably, but no damage was reported except for slips which came down on some roads.

2 March 1922

Running high and bringing down much timber, the Hutt River rose 11 ft. above normal, and considerable damage was done to the River Board's protection works.

7 May 1923

A south-easterly gale, accompanied by heavy rain, brought flooding, but no serious damage resulted. At Eastbourne low-lying land was flooded when drains could not cope with the water. The Hutt River rose very high, but no damage was reported and no flooding occurred in the valley.

6 March 1924

Light rain which developed into a steady torrent caused some flooding in and around Wellington. In the city many streets were awash, but no premises were invaded. At Petone and Lower Hutt some shops were invaded and one street became impassable to traffic.

1 - 2 November 1924

Heavy rain in the Rimutaka and Mangaroa areas caused considerable damage to the railway. The rainfall at

the Summit was the heaviest known for years and was more in the form of a cloud-burst. The station yard was under water and filled with debris and several washouts on the line to Cross Creek carried away the line for considerable distances. Numerous slips also came down on the line. Roads in and around the Hutt Valley also suffered extensive damage.

18 - 19 December 1924

Heavy rain over two days caused much inconvenience to all kinds of traffic about the city. At Pukerua Bay a slip came down on the railway line and derailed the engine of a goods train, the driver and fireman of which had a miraculous escape from injury. At Roseneath a house was shifted some yards from its foundations, the chimney crashing through the roof. At Eastbourne stormwater backed up on the roadways and ferry passengers had to paddle through the water to the wharf. The Hutt River rose rapidly, being within a few feet of the Lower Hutt Bridge, representing a rise of nearly 20 ft. A large amount of damage was done to roads throughout the Hutt County. In twenty-four hours 2.74 in. of rain was registered at Kelburn.

17 - 18 February 1925

Torrential rain accompanied by a gale force westerly wind caused extensive damage, particularly in the Hutt Valley, where fruit trees suffered. In three hours 1-01 in. of rain was recorded at Kelburn and 1.14in. in twenty-four hours.

15 October 1925

Heavy local rainfall caused many low-lying areas around Wellington to

become flooded. Parts of the Hutt Valley and Petone were flooded, but no houses were entered. Slips were numerous on roads, and train, tram, and road traffic were interrupted.

23 - 24 March 1926

Heavy rain in the Wellington district caused the Hutt River to rise in flood, it being 7 ft. above normal at the Hutt Bridge and rising this amount in one hour. Some damage was done to pile-driving gear at the new railway bridge. In Wellington some streets were flooded. In Lambton Quay the water reached to the fronts of premises from the Gear Company's shop to the corner of Bowen Street.

1 May 1926

A cloud-burst on the Rimutaka Range to the north of the Summit caused two extensive washouts on the railway line and train services were interrupted for a period of three days.

25 - 27 July 1926

Heavy rain caused river in the district to rise rapidly. The Hutt River rose over 8ft. above normal, and a large slip occurred in the Taita Gorge.

11 - 12 December 1926

Heavy rain accompanied by a fierce northerly gale brought into flood the Hutt River, which overflowed at Silverstream to block the road. Several golfers at the Heretaunga links were stranded and had to be rescued by boat.

16 April 1928

Exceptionally heavy rain which fell in Wellington city over a period of a few hours caused some minor flooding and slips. Local flooding also occurred in Lower Hutt. In five and a half hours 1.10 in. of rain was recorded at Kelburn.

1- 2 November 1928

Heavy rain caused some minor damage in and around Wellington. The Hutt railway between Ngauranga and Petone suffered damage when heavy seas broke over it. At Eastbourne the Muritai School was badly flooded. A large slip also occurred at the Kelburn Viaduct, blocking the tramline and stopping all traffic, and a series of smaller slips occurred around the city.

22 August 1929

Widespread damage was caused throughout Wellington district as a result of heavy rain. In Wellington city extensive flooding occurred at Miramar where some houses were invaded. Roads in the district were blocked by slips, and some serious damage was reported.

28 November 1929

Heavy rain, approaching cloud-burst intensity, brought the Hutt River into a high flood, and only an hour after the storm the river rose 13 ft. at Kerekere Stream.

26 - 27 November 1930

Following heavy rain in the Tararua Range, the Hutt River came down in the highest flood since 1913. At Silverstream water was over the road

to a depth of 3 ft. and golf courses were inundated. Damage, however, was very slight. The Otaki River was also at a high level and swept away three temporary bridges, flooded houses in the vicinity of the Otaki Railway Station, damaged the main road, and undermined the railway for some chains. Severe damage was also done to fencing.

2 - 4 April 1931

A northerly wind, approaching hurricane force in gusts and accompanied by heavy rain showers, swept over the Wellington district. At Kelburn 0.55 in. of rain was recorded in twenty-four hours, but the fall in the hills was much greater. The Hutt River came down in high flood and rose over 17 ft. at Lower Hutt, 2 ft. higher than the 1915 record and with a peak discharge of 59,000 cusecs. The lower reaches escaped serious flooding but at Silverstream the river burst its banks and flooded a large area. At Taita one or two homes were flooded, and at Manor Park Golf Club there was water 5 ft. deep in the club-house. Both the Manor Park Toll Bridge and the Haywards Suspension Bridge were swept away.

13 - 14 June 1931

Heavy rain in the hills brought down floods in the rivers of the district, the Hutt River reaching the level of the road at the Taita Gorge.

8 July 1931

Heavy and continuous rain in the city and suburban area caused a rapid rise in the Hutt River. Portions of the Manor Park and Shandon golf links became covered with water, and

several acres in Stokes Valley were also submerged. Slips occurred on roads, particularly in the Taita Gorge, and some local flooding occurred in Petone.

2 October 1931

Heavy rain, combined with a high tide, caused the Porirua Stream to back up, and flooding occurred around adjacent land. In Porirua streets were submerged and 3 in. of water covered the railway line. At Wellington 1.51 in. was recorded in the twenty-four hours.

25 February 1932

Heavy showers of rain in the city caused some minor flooding, but no serious damage was reported. A total of 0.73 in. was registered in twenty-four hours, and in one period of seven minutes 0.17 in. was recorded. Lambton Quay was submerged at several places and water entered the cellars of some premises. A slip occurred at Oriental Bay and minor damage was done to parked cars by the falling debris.

29 August 1932

Heavy rain, general throughout the southern part of the North Island, brought the Hutt River into high flood, the rise at the Hutt Bridge being 9 ft. 6 in. Low-lying areas around Taita were flooded and streets in Petone washed. Slips occurred on several roads, and the gale which accompanied the storm also contributed to the damage. At Kelburn 3.48 in. of rain was recorded in twenty-four hours.

4 May 1934

A phenomenal fall of heavy rain drenched Wellington City when a severe thunderstorm passed from north to south over the district. Lambton Quay between the Midland Hotel and the Government Buildings appeared a shallow lake. In half an hour 0.35 in. of rain was registered.

16 August 1934

One of the heaviest rainfalls in Wellington for some years, 0.86 in. in 80 minutes, caused some flooding, particularly in the lower parts of Newtown, where stormwater drains were overtaxed and water entered some houses. Several city streets were also flooded, but damage was only of a minor nature.

17 March 1935

Torrential rain fell in Wellington for two hours, causing some flooding of streets, especially in Courtenay Place, Willis Street and Lambton Quay, the water in Willis Street coming up to the doors of shops. The rainfall was very intense with 0.27 in. falling in two minutes, and 0.56 in. in ten minutes. Minor slips occurred in various cuttings and road surfaces were affected, but no serious damage was reported.

22 May 1935

Heavy rain, particularly in the Tararua Range, brought flooding to some areas in and around Wellington. The Hutt River rose 11 ft. above normal at Lower Hutt and flood waters were across the road at the Silverstream Bridge. The peak discharge was estimated at

30,000 cusecs. No serious damage was reported however.

28 – 29 October 1935

Heavy rain throughout the Wellington district brought rivers into high flood with some resultant damage. The Hutt River rose 13 ft. above normal at the Taita Gorge and overflowed its banks in the vicinity of Silverstream, blocking the highway. Throughout the Hutt Valley there was considerable surface water, and slips occurred on some roads.

1 – 2 February 1936, Cyclonic storm

Wellington's share of the disastrous storm affected shipping mainly. The inter-island express ferry *Rangatira* ran aground on Barrett Reef early on the morning of the 2nd, and though badly damaged made port successfully. The coastal steamer *John*, which was anchored in the stream, dragged her moorings and ran aground at Ngauranga. Considerable damage was done to property in Wellington and the suburbs, the wind playing havoc with gardens, fences and houses. The Hutt River rose rapidly, and the main road near Silverstream was impassable for a period. The rainfall for twenty hours was 4.42 in. and the total for the storm was 4.80 in. Damage to county roads was £11,780.

19 February 1936

A strong south wind, accompanied by heavy and continuous rain, swept Wellington, flooding streets and the low-lying residential area in the vicinity of the Basin Reserve. In the Adelaide Road area five houses were invaded to depths up to 2 ft. Some local flooding also occurred in the

business part of the city. For the twenty-four hour period 2.3 in. of rain was registered in Wellington.

27 July 1936

Heavy rain driven by a cold southerly wind caused some minor flooding in and around Wellington. In six hours 0.84 in. of rain was registered at Kelburn. The Hutt River rose slightly, and a number of slips came down on the road over the Rimutakas.

29 – 30 August 1936

A north-westerly gale, accompanied by heavy rain, caused some local flooding. The Hutt River overflowed on to the road at Silverstream, and numerous slips occurred on roads. At Paraparaumu the Auckland-Wellington express was derailed by a slip and five people were injured.

8 – 9 May 1937

Heavy rain in the Tararuas brought the Hutt River into high flood, reaching a peak level of 11 ft. above normal in three hours. Extensive flooding took place in the upper reaches in the vicinity of Silverstream and the Taita Gorge.

19 August 1938

Torrential rain in Wellington city, when 2 – 5 in. fell in as many hours, caused a large number of slips in the suburbs. At Lyall Bay torrents of stormwater rushed down the hillsides to invade several houses and render them temporarily uninhabitable. The Ngaio Gorge Road was blocked by slips, and city streets were affected.

12 December 1938

Heavy rain in the Tararuas caused a rapid rise in the Hutt River, the rise at the Lower Hutt Bridge being 11 ft., some 2 ft. lower than the flood of 1931. Parts of the Hutt Valley were inundated, several residents at Moonshine vacating their houses. At Porirua 3 ft. of water covered the station yard.

11 December 1939

The greatest flood within living memory swept the Hutt Valley, covering hundreds of acres, isolating houses, flooding and making roads impassable, destroying and damaging bridges, and drowning large numbers of stock. At Kelburn between 9am and 3 pm 2 – 6 in. of rain fell, between 3 pm and 8 pm another 1 – 6 in., and by 11 pm 5 in. had fallen in thirteen hours, being twice the average rainfall for the whole of December. The Hutt River rose all day from early morning, but increased rapidly from 5pm till 6.30pm when it reached its peak. From then until 4am on the 12th it fell 1 ft. and thereafter rapidly. There was a near tragedy on the Mangaroa Valley Road when a house was undermined and shifted 12 ft. off its foundations by a landslide. The suspension bridge at Maoribank, usually 20 ft. clear, was awash with waves. The flooding was so extensive that at one point at Silverstream the entire flat between the hills forming the valley was one vast sheet of turbulent water, fences and roads being invisible. A new tow land concrete bridge on the Wairarapa road at the foot of the Mangaroa Hill subsided in the centre through a pier being washed out, and the road was impassable at Silverstream and Te Marua. Several bridges were destroyed in the Mangaroa Valley, and other damage there was considerable. At the

peak of the flood the Hutt River rose 14 ft. above normal at the Lower Hutt Bridge to discharge 70,000 cusecs. Much damage was also done in Wellington city by slips and flooding. Gardens suffered from the high wind which accompanied the rain. The flood was 1 ft. 9 in. higher at Mabey Road and 3 in. higher at the Hutt Bridge than the 1931 flood. Other peak discharges were: Wainuiomata Stream 2,400 cusecs off 12.8 square miles, and the Karori Stream 630 cusecs off 1.25 square miles.

The Hutt River between 1902 and 1915 lowered its bed from Lower Hutt to the estuary some 2 ft. and between 1931 and 1939 a further 3 ft., a total of 8 ft. The flood level in 1915 was 13 in. higher than the flood of 1939 although the peak discharge in 1915 was only 46,000 cusecs. The causes of this gradual degradation are considered to be:

- (i) General improvement to the river channel and alignment.
- (ii) Shingle plant operations.
- (iii) Extensive dredging at the estuary.

26 December 1939

Heavy rain of a phenomenal nature caused flooding and serious damage to property. At Kelburn 4.48 in. of rain was recorded in twenty-four hours, and at Beacon Hill, Seatoun, 6.15 in. was recorded in the same period. Serious damage occurred at Lyall Bay when one house was destroyed and other properties were swept by flood water and slip debris. Island Bay also suffered by extensive inundation, some gardens being feet under water. At Karori a house which was shifted in the storm a fortnight before was moved a further 7 ft. The Hutt Valley suffered

no damage except for some slight surface flooding in Petone. This storm ended an exceptional month of rainfall in Wellington. On the 7th a little over 1 in. fell, and on the 26th 4.48 in., the month's total reaching the phenomenal figure of 15.21 in. against the average for December of 2.93.

25 – 26 January 1940

This storm, in the nature of a cloud-burst, was centred mainly along the west of the Hutt Road and spread to the lower part of the Hutt Valley. In Wellington the fall was not as heavy, though in the twenty-four hour period 2.64 in. was recorded at Kelburn, most of it falling in twelve hours. The municipal abattoirs at Ngauranga were flooded to varying depths from 3 to 6 ft. and stock had to be rescued hurriedly. Along the Hutt Road the rain brought down masses of soil and rock, which spread across the surface of the road. Parts of the railway between Petone and Kaiwharawhara were flooded. At Porirua the incoming tide banked up the flood waters, with the result that the Porirua railway yard was submerged to a maximum depth of 3 ft. and trains were delayed for varying periods. No damage was done in Wellington apart from a few minor slips and some surface flooding.

13 February 1940

Heavy rain in the ranges flooded the Hutt River and brought down slips in the Hutt Valley. At the intake of the Wellington water supply at Orongorongo 7 in. of rain was recorded in twenty-four hours. The Hutt river rose 13 ft. above normal at the Lower Hutt Bridge, but no serious damage was done apart from a large slip at Belmont.

16 August 1941

Heavy rain and snow in the province brought down a number of slips, mostly of a minor nature, in and around Wellington. The Hutt River rose 4 ft. above normal at the Lower Hutt Bridge but caused no flooding, although some surface water lay about the Hutt Valley.

2 October 1941

A northerly storm, accompanied by heavy rain, caused extensive flooding in Wellington and the Hutt Valley. At Wellington 1 in. was registered in three hours, and 1.8 in. in five hours. In the first twenty-four hours of the storm 1.68 in. of rain was recorded and 4.15 in. in the succeeding twenty-four hours. In fifty nine hours a total of 6.63 in. was recorded. In February 1911 Wellington had 6.32 in. of rain in twenty-four hours and that has never since been exceeded. Other twenty-four hour totals included 3.90 in. at Lower Hutt, 3.64 in. at Seatoun, and 4.68 in. at Wainuiomata. Damage occurred in every suburb, in the Hutt Valley, and as far as Paekakariki. Slips were numerous and widespread, and caused damage to private homes as well interrupting train and tram services. The damage to the City Council was of the order of £15,000, and total damage was estimated at £100,000. Surface flooding occurred at Island Bay and Karori, and many large slips came down at Wadestown. The Hutt River rose 10 ft. above normal but caused no serious damage. Slips occurred on roads in the valley, dislocating traffic, and much surface flooding inundated streets. The railway was effectively blocked by a large slip at Pukerua Bay, necessitating a diversion by way of the Wairarapa. Peak discharges were as follows:

Ngauranga 1,000 cusecs off 3.7 square miles, Kaiwharawhara 1,780 cusecs off 6.5 square miles.

9 October 1941

Further heavy rain brought more flood troubles to the Wellington district. Serious slips occurred on the coast road at Paekakariki and in the Taita Gorge. In the city itself no major damage was done though several slips occurred. The Hutt River rose rapidly to a level of 8 ft. above normal but subsided quickly. At Kelburn 1.49 in. of rain was registered in twenty-four hours.

13 – 14 July 1942

Coming from an almost due south direction, a heavy rainstorm caused flooding in and around Wellington. In twenty-four hours 2.89 in. was recorded and 4.01 in. was recorded in thirty-six hours. In Wellington the chief damage was caused by slips and water entering premises damaged by the earthquake. The Hutt River rose 9 ft. 6 in. above normal at the Hutt Bridge, and 15 in. of water covered the road at Silverstream. Much surface flooding occurred in the Hutt Valley, but no damage was done.

5 – 6 September 1943

Heavy rain in the Wellington province caused rivers to rise, and some street flooding occurred at Lower Hutt. Slips occurred on several roads, but generally damage was of a slight nature. At Kelburn only a 1.17 in. of rain was registered in twenty-four hours, but in the same period 7.06 in.

was recorded at Wainuiomata, 4.69 in. at Lower Hutt, and 3.05 in. at Paraparaumu.

13 – 14 October 1943

Following a very wet period, heavy rain fell around Wellington and caused some local flooding. At Kelburn 2.17 in. of rain was recorded in twenty-four hours. Serious damage occurred in and around Wellington when numerous slips came down. Serious flooding on the Hutt road caused inconvenience to traffic, and local flooding in the Hutt Valley was much in evidence. The Hutt River was only slightly affected by the rain.

15 February 1944

Overnight rainfall, which in some districts was torrential, brought minor flooding to several areas, but no serious damage was reported. At Kelburn 1.59 in. of rain fell in twenty-four hours. The Hutt River rose 10 ft. above normal, but caused no alarm. Railway services were affected slightly by damage to the track in a few places.

9 May 1946

With more than 3 in. of rain in twenty-four hours, there was considerable flooding in housing areas in the Hutt Valley. Houses in Heretaunga Square to the east of the railway line near Trentham Camp were isolated, and several houses in Riverside Drive, Woburn, were evacuated by their occupants when waters from the Waiwhetu Stream broke its banks and several hundred yards of road and footpath were flooded. Other parts of the valley were also flooded, but on a less serious scale. The Hutt River rose 8 ft. above normal at Lower Hutt. In twenty-four hours 3.00 in. of rain was

recorded at Lower Hutt, 4.20 in. at Wainuiomata, 2.14 in. at Paraparaumu, and 2.83 in. at Kelburn.

15 – 16 February 1947

A cyclonic storm from the south brought high winds and heavy rain to the Cook Strait area. At Wellington 4.05 in. of rain was recorded in twenty-four hours and at Lower Hutt 7.2 in. fell in the same period. Many slips occurred on roads, especially in the Hutt Valley, and the Wellington-Hutt railway was washed out near Petone. The high winds also contributed to the damage particularly to telephone and power lines and trees, and many buildings suffered. At Kelburn gusts of over 70 mph were common, but at Ohakea a gust of 93 mph was registered. The inter-island ferry *Rangatira* took two and a half hours to berth at Wellington, but the *Hinemoa* at Lyttelton fared even worse, being eight hours late and berthing at 2.40pm.

19 June 1947

The highest tide for many years was recorded at Wellington when at 4.36pm a level of 5 ft. 11 in. was marked at the office of the Wellington Harbour Board. A normal spring tide would have been about 4 ft. 6 in. Water seeped through into basements of many buildings on the waterfront and waves were breaking over the Hutt-Eastbourne road at high tide. At 6.50pm on the following day, 20 June, a tide of 6 ft. was recorded, this being the highest ever at Wellington, the previous highest being 5 ft. 11 in. on 10 June 1910.

24 June 1947

Heavy rain, particularly in the Hutt Valley, caused damage and minor flooding. The Hutt River reached a maximum level of 12 ft. 2 in., or 9 ft. above normal, at the Melling Bridge. The road through the Taita Gorge was flooded to a depth of 2 ft., and at Moera the roads were covered to a depth of 1 ft. at the crown. At Petone minor flooding occurred and the Hutt River was 10 ft. 3 in. above normal at the Hutt Bridge. At Wellington little or no damage was done. Peak discharges were as follows:

	Gauging Station	Peak Discharge (Cusecs)	Catchment Area (Square Miles)	Peak Runoff (Inches per hour)
Hutt	Maoribank	31,000	165	0.29
Orongorongo	Waterworks	4,020	14	0.45
Wainuiomata	Waterworks	3,424	10.75	0.50
Porirua Stream	Huanui Street	2,100	15.5	0.21

27 - 29 June 1947

Damage due to heavy rain was mainly confined to the Hutt Valley, where four main roads were blocked by slips. Petone suffered minor flooding, and parts of Lower Hutt were flooded around the Waiwhetu Stream. At Wainuiomata 10.28 in. of rain fell in twenty-four hours.

17 October 1947

Following a heavy fall of rain in which 0.60 in. fell in nine hours in Wellington, the Hutt River rose 9 ft. at Taita and flood waters crossed the road at the Silverstream Hospital. Other parts of the valley were lightly flooded, but no serious damage was reported.

23 - 24 May 1948

Rain, principally from a northerly storm, brought the Hutt River into high flood, being 13 ft. above normal at the Lower Hutt Bridge (14 ft. December 1939). The Taita Gorge Road was blocked at the Silverstream Railway Bridge, and a shingle plant was undermined and collapsed into the flooded river. Parts of the Hutt Valley were inundated and some families abandoned their homes. The peak discharge of the Hutt River at Maoribank was 43,700 cusecs. At Trentham 2.07 in. of rain fell in twenty-four hours, and 2.07 in. fell at Kelburn.

28 July 1948

Apart from extensive surface flooding in both Lower Hutt and Petone no damage was reported after heavy overnight rain. The Hutt River rose slightly above normal but no damage was caused to river works. At Kelburn 0.71 in. of rain fell in twenty-four hours, the seventeenth consecutive day of rain.

27 July 1949

Heavy rain in the Wellington and Hutt Valley area brought minor flooding to some areas, but no serious damage was reported. The Hutt river rose 8 ft. but fell quickly. At Lower Hutt 2.3 in. of rain fell in twenty-four hours.

5 March 1950

With a fall of 2.13 in. in twenty-four hours, Wellington experienced some minor flooding. Several streets were inundated, and slips and minor subsidence's occurred on many roads. The high wind which accompanied the

storm also contributed somewhat to the damage.

15 – 16 July 1950

Torrential rain and wind in gusts of 70 mph caused widespread minor damage in Wellington city and suburbs. In twenty-four hours 3.25 in. of rain was recorded at Kelburn, and at Wainuiomata 1.8 in. fell in two hours and 6.27 in. in twenty-four hours. The worst flooding occurred at Newtown where a wide area was inundated through a stormwater drain being under repair. Heavy seas also caused damage around the harbour, particularly to the Eastbourne foreshore.

24 July 1951

Heavy rain caused minor flooding in Tawa Flat, and water rose to floor level in some creek side properties. In the Hutt Valley some minor slips occurred in the Taita Gorge. At Trentham 2.41 in. of rain fell in forty-eight hours.

26 October 1951

Heavy rain in the upper catchment brought the Hutt River into high flooding rising 8 ft. 6 in. above normal and discharging 38,800 cusecs at Maoribank. Flood waters covered the Taita Gorge Road to a depth of up to 3 ft., and golf courses in the district were submerged.

1 November 1951

Torrential rain which swept over Wellington caused slips and flooding in many parts of the district and at times disrupted traffic. In nine hours 1.5 in. fell in showers which were almost

deluge. The Hutt River rose 8 ft. but there was no flooding.

8 November 1952

Torrential rain brought a rise in the Hutt River and extensive flooding occurred at Upper Hutt. At the Summit on the Rimutakas 3.86 in. of rain was recorded in twenty-four hours. Two creeks overflowed their banks at Upper Hutt and flooded gardens and property to a depth of 2 ft., and two homes were invaded. The Hutt River rose 7.5 ft. in eight hours, but caused no flooding.

27 November 1952

Southerly gales with gusts up to 79 mph in parts of Wellington and accompanied by steady driving rain caused widespread surface flooding in parts of the Hutt Valley. At Kelburn 0.93 in. of rain fell in twenty-four hours. The Hutt River rose only 2 ft. above normal and caused no alarm.

12 March 1953

A short storm of four hours, during which time 1.28 in. of rain fell at Kelburn, brought some local flooding to several parts of Wellington and the Hutt Valley. The most serious flooding occurred at Seatoun Road, Kilbirnie, and in parts of Lambton Quay. Parts of Petone, Lower Hutt and Upper Hutt were inundated, but no damage was reported.