

### ARCHIVE: Harden Up Chronological History of Flooding 1857-2010

Extracted from The Bureau of Meteorology "Queensland Flood History" available at [http://www.bom.gov.au/hydro/flood/qld/fld\\_history/index.shtml](http://www.bom.gov.au/hydro/flood/qld/fld_history/index.shtml)

Date	Impact
19-20 March 1857	Great floods at Ipswich and Brisbane; river at Ipswich rose 45 feet, and at Brisbane 12 feet.
29 March - 1 April 1862	Heavy rain at Gladstone. The Calliope and Boyne Rivers rose exceedingly high and flooded a large portion of the district. Several farmers compelled to leave their head stations and seek shelter as best they could. Great numbers of sheep swept away, and a man lost his life whilst attempting to swim across a creek.
29 March - 1 April 1862	Maryborough: Very heavy rains in Wide Bay and Burnett districts. The Gayndah mail a week behind time in consequence of a flood in the Barambah.
29 March - 1 April 1862	Rockhampton: Heavy rain commenced on 29th and continued until the night of 31st, when the storm increased. On the morning of 1st April the river reached its highest level, not less than 20 feet above the highest spring tides.
16 January 1863	Heavy flood on the Fitzroy River.
17 February 1863	Great deal of damage done by floods; road to Ipswich impassable; Oxley Creek residents flooded out; hundreds of acres of land under water; machinery at the mill affected, work stopped; Frog's Hollow under water; telegraphic communication with Sydney interrupted. River 40 feet above ordinary level.
20-25 February 1863	One of the most disastrous floods ever experienced in the district occurred. On the night of the 20th a fearful storm caused much damage. The Condamine rose and flooded the flats; Rosenthal Creek in flood; wash-pools and bridges destroyed; 4 feet of water around telegraph posts at the Warwick Post Office.
27 February 1863	Great rain and wind storms. Burnett River in flood, 40 feet above ordinary level; highest flood in the district for six years. A number of sheep drowned; garden produce, domestic utensils, etc., washed away.
9 March 1863	It was reported that one of the up country stations lost 2,000 sheep, and several others lesser numbers during the late storm and flood.
17-19 March 1864	Flood and gale at Brisbane and Ipswich (from the Courier files, 19th to 22nd March, 1864): Very seldom indeed is the neighbourhood of Brisbane visited by a gale of wind of so lengthy a duration and of so violent a character as that which commenced on Thursday night last (17th March) and terminated on Saturday. It was throughout accompanied by heavy and continuous rains, which beat into the windows of the best-protected houses, and did a great deal of damage generally. Between the hours of 9 a.m. on Friday until 9 a.m. on Saturday no less than 6.72 inches of rain fell; and in such a manner as to defy every effort made to subvert its penetrating power. Out of doors umbrellas were useless, and indoors the rain made its way under eaves through crevices in shingles - in fact, it came in in every conceivable way. On Saturday night the river began to rise, and it was evident that a flood

	<p>was impending. The telegraph posts at the One-mile Creek Bridge, Ipswich, which had been raised 20 feet higher than they were at the flood of 1863, were swept away, although they had been let into the ground to a depth of 9 feet and supported by struts. The water at Brisbane rose throughout the whole of Sunday, and at 4 o'clock in the afternoon Albert-street, from Alice-street to Charlotte-street, was impassable, and many, of the residents of Frog's Hollow had to abandon their tenements. Raft's Wharf was 5 feet under water, as also were Harris's, Forrests', and Towns'. The water went up Russell-street as far as Mr. Kinchela's store. At the 3 miles scrub the water rose 25 feet above the ordinary level. At Milton much damage was done, and the whole of the cemeteries were under water.</p>
18-20 March 1864	<p>Terrific storm of wind and rain. The water rose rapidly and reached a height of 8 feet over the watermark of last year. Much damage to buildings, greatest flood in district since the first white settlement.</p>
23-30 March 1864	<p>A large amount of property has been destroyed at Oxley Creek by the late floods. All the farmers on the Brisbane side of the creek were compelled to leave their houses, and camp on the high ground in the neighbourhood of Cooper's Plains. On the opposite side very few were driven out. Mc'Donald's Hotel was submerged to the eaves, and a sheet of water extended from the new sawmills, situated near the junction of the creek with the river, to the high land at the back of Cooper's Plains, a distance of nearly 7 miles. River rose 18 feet above the level reached during the flood that occurred about a fortnight ago, and 10 feet above that of the flood of March, 1863.</p>
2 April 1864	<p>Two hundred teams stuck up on the road between Ipswich and Toowoomba. Highways throughout interior in impassable state after heavy rains; distressing accounts of destruction received from the northern and interior districts; several lives lost.</p>
1 February 1867	<p>The recent heavy rain caused floods on low and excavated land and basement floors of buildings in several portions of the town. Ipswich: At about 12.30 p.m. the Bremer River had risen 20 feet at the Ipswich wharfs, and was still rising; the One-mile Creek bridge at Little Ipswich was submerged; the railway at Walloon flooded, and traffic suspended. The embankments upon the line, 4 miles from Gatton, were washed away. A man and a team of horses were drowned while trying to cross the creek at Helidon.</p>
18 February 1868	<p>River 50 feet above ordinary level.</p>
10 April 1869	<p>One of the greatest floods experienced in the district swamped the water-course known as Canal Creek in less than two hours; much damage done.</p>
31 January 1870	<p>At midnight a disastrous flood, caused by the overflowing of Sandy Creek, suddenly swept on Clermont, carrying away houses, furniture and fences. In an hour there was nearly 5 feet of water over the town, and in some places the current flowed at the rate of 8 or 9 miles per hour. Some people took refuge in trees, and others on the tops of houses. By 9 a.m. the following day the water had, however, completely subsided. Nearly all the outbuildings in the town were swept away, and scarcely a rod of fencing left standing. The total amount of damage sustained was estimated at 10,000 pounds. Business was completely paralyzed. Five lives were lost at Peak Downs station and Capella, and four children were drowned at Lilyvale. On the Wolfgang Station from six to eight thousand sheep were lost; all the dams and miles of fencing were washed away. In all, fifteen lives were lost-six children, three women, and six men. The chief fall of rain was in the neighbourhood of Peak Range.</p>
15 July 1870	<p>Disastrous flood on the Flinders; all traffic stopped; one station lost 4,000 sheep.</p>
17-19 June 1873	<p>Heavy flood at Brisbane. At Ipswich one of the greatest floods experienced since 1864 occurred, and the Bremer rose 40 feet above ordinary level; eight persons and over 6,000 sheep drowned at Cecil Plains. Floods also general up country; great damage at places.</p>

4 March 1875	Reports from Maryborough and Rockhampton describe the late floods and the very critical positions from which many were rescued, also the drowning of two men in the Maryborough district. The water on the Dawson River rose 16 feet above the 1864 flood, the railway was submerged for miles and the loss of life in all parts of the colony was too great to particularise.
14 July 1876	Great rain, accompanied by thunderstorms, in the southern and western portions of the colony. Floods in many places unprecedented in height. Myall Creek bridge at Dalby almost destroyed, and part of the railway near Gowrie was swept away. Very heavy gale and high sea on the coast. Several lives lost in different places, also large numbers of stock and sheep.
12 January 1880	Heaviest flood on record in the Daintree River, the water rose 40 feet, washed bullocks and a large quantity of goods and produce into the ocean, and drowned some men.
31 January 1884	Heavy rain, which caused one of the heaviest floods known.
19-22 January 1887	Very heavy rain over Moreton and East Darling Downs divisions. Creeks in flood and low-lying ground submerged at Cryna (Beaudesert) and Fassifern. Goodna township flooded; houses under water. Quart Pot Creek, at Stanthorpe, at its highest level for past twelve years.
23 January 1887	Very high flood at Brisbane. Several lives lost by drowning and a great deal of property damaged.
22-28 February 1887	Town flooded.
27 February 1887	Heavy floods at Maryborough and Bundaberg.
14 March 1887	Severe flood at Roma.
11 January 1890	Great floods at Aramac.
10 June 1890	Heavy flood at Mount Irving, Jondaryan.
5 February 1891	Extensive floods on the central railway.
4 February 1893	Disastrous floods in the Brisbane and Mary Rivers; 8 feet of water in Edward-street at the Courier building. Numbers of houses at Ipswich, Brisbane, Gympie and Maryborough washed down the rivers. Seven men drowned through the flooding of the Eclipse Colliery at North Ipswich. Telegraphic and railway communication in the north and west interrupted.
6 February 1893	The lower part of South Brisbane completely submerged. The flood rose 23 feet 9 inches above the mean spring tides and 10 feet above the flood mark of 1890; north end of the Victoria bridge destroyed.
11 February 1893	Most severe flood ever experienced.
27 June 1894	Big flood, due to heavy rains during past week-, at Cunnamulla and on the Warrego. All billabongs about the township connected with the river flooded and traffic between the different parts of the town carried out by means of boats; schools surrounded by water; Chinamen's gardens flooded; river still rising. Water 1 foot below the level reached during the big flood of 1890.
3 March 1896	Great flood at Georgetown
18 March 1903	Heavy rains and floods at Camooweal and Urandangie.
12 March 1908	River in flood, 11 feet above summer level. Some country inundated. Roads on Queensland side impassable.
3 December 1909	Heavy rain; 575 points recorded during 24 hours previous to 9 am. Mulgrave River in flood; tramway bridge submerged; traffic beyond Mulgrave suspended. All creeks in district bankers; Barron and Stony Creek Falls in flood.
1-31 March 1910	As a result of the heavy rain that fell over the central and southern portions of the State during the greater part of the first three weeks of the month, stations situated on or in the neighbourhood of almost every river or stream south from latitude 20 deg. and east from longitude 142 deg., reported floods. In many instances the flooding was serious and attained record heights. Heavy losses occurred in stock; railway traffic was suspended; and

	the mail service was entirely disorganized.
6 January 1911	Floods in the Cairns and Townsville districts.
10-24 January 1911	Highest recorded flood at Floraville; country submerged for miles. Rivers and creeks overflowed; river still in flood.
1 March 1911	Floods at Mulgrave Central Mill, near Cairns. The month closed with every appearance of a record flood at Palmerville. Record flood over the whole country at Thornborough; much damage to mines and agriculture. River highest on record at Mareeba. Record flood since 1893 at Hebel.
1 April 1911	Record floods at Palmerville and Walsh River; big loss of stock. On the 1st, 2nd, and 3rd the Barron River was in flood at Kuranda; flood estimated to be the highest on record.
17 June 1912	Over 20,000 sheep, belonging to the Arcturus Downs station, were, it was reported, swept away and drowned during the recent flood in the Comet River.
29-31 January 1913	A terrific tropical disturbance struck the coast between Cooktown and Cardwell during evening of 29th; torrential rainfall; highest floods on record at Innisfail, Cairns, and various other places. At Innisfail, cane crops were covered and stock drowned; over 100 houses under water; telegraph lines submerged for miles. River in heavy flood at Ingham; water 25 feet over the bridge, all low-lying land submerged; all farms around Long Pocket and Hawkins Creek under water; numerous washaways on the railway line between Cardwell and Lucinda. At Cairns, Mulgrave River 20 feet over railway bridge; Barron River in flood; big flood in Freshwater District.
18 November 1914	Severe local flood Jundah district; railway damage and miles of fencing swept away.
1-4 February 1916	Local heavy flooding in many districts, especially between Townsville, Charters Towers and Bowen, in the Charleville, Longreach and Brisbane districts and on the Downs. Two girls drowned near Charters Towers.
20 July 1916	Warrego and other rivers west of Charleville flooded. Man drowned near Charleville.
26-30 December 1916	Heavy rainfall to Clermont, Sapphire town and Peak Downs. Rivers including the Mackenzie, Comet, Nogoia and Barcoo were all subject to flooding. There was widespread damage, destruction to property and loss of stock. The lower part of Clermont was submerged, which resulted in Clermont being rebuilt on higher ground. Highest floods on record in Theresa Creek, and the Comet, Nogoia and Mackenzie Rivers. Lower part of Clermont submerged on night of 28th; great destruction of property, heavy loss of stock, and 61 persons drowned. Considerable damage to property at Sapphire town. Extensive damage to railway lines in many localities. Barcoo and some south-western rivers again flooded. Floods in Eton-Mackay district.
1-4 January 1917	Severe flooding in north-eastern part of State. Unprecedented floods in Flinders River; great damage to property; enormous loss of stock and several persons drowned. Portion of Burdekin Railway Bridge washed away.
1-14 February 1917	Widespread and serious flooding in most of the inland rivers, especially in the south-west where some record levels reached. Considerable damage to railway lines, fences, &c. Several towns isolated. Burdekin River flooded.
22 November 1917	Local heavy floods in various parts of central and south-eastern districts, especially between Emerald and Clermont, where bridges and lines damaged. Two men drowned near Longreach.
19-22 January 1918	Disastrous and most severe flood on record at Mackay (associated with intense cyclone), where 24.70 inches rain fell in 24 hours. Twenty lives lost; enormous damage to property. All rivers between Townsville and Gladstone affected. Unprecedented floods in the Burdekin and Fitzroy Rivers. Highest flood on record at Rockhampton (31 ft 11 in); two or three lives lost. Man drowned at Townsville. Portion of Don River Bridge at Bowen washed away. High floods experienced in all tributaries of Fitzroy and Burdekin Rivers, especially the Dawson, Mackenzie, Comet and Nogoia Rivers.

6 December 1918	Severe local flood in Goomeri district; railway damaged, train derailed; stock drowned.
5-8 January 1919	Mary and Maroochy Rivers flooded. Man drowned at Kin Kin. Bridge washed away at St. Helens (Maryborough district).
8-9 December 1919	Flooding in Rosedale, Bundaberg, Maryborough and Blackall districts. Man drowned in Barcoo River near Tambo.
6-13 June 1921	Big floods in practically all south-west rivers A man drowned near Charleville, where water was the highest for 10 years. Many streams in other sub-tropical districts flooded. Water was just under one metre deep in the main street of Goondiwindi, where the level was the highest since 1890.
20-26 July 1921	Lower portions of Warwick and the eastern part of Roma were submerged. Several houses at Texas were washed away and two men drowned. Another man drowned at Inglewood. Heavy stock losses were reported from several districts, and damage to bridges, roads and crops was extensive.
1-18 February 1922	Parts of Rockhampton were submerged and streets in Longreach and Winton were inundated. A bridge was washed away at Saltern, thousands of sheep were lost, a man drowned near Winton and another at Corfield.
1-18 January 1925	Between 19th and 31st there were big floods in several south-western rivers and local flooding in parts of the south-eastern, central and north-western districts.
7-10 February 1926	From 7th to 10th there was flooding between Cardwell and Ayr and between Townsville and Charters Towers. A child drowned at Townsville.
16-31 December 1926	Serious flooding at the Mary River and tributaries, and the wharves and low lying parts of Maryborough submerged. Rail and road traffic disrupted, and crop and stock losses heavy. A man drowned at Kilkivan.
15-31 January 1927	From 15th to 31st practically all eastern rivers flooded, notably the <b>Tully, Herbert, Johnstone, Burdekin, Burnett</b> and <b>Mary</b> . Traffic was seriously disorganised, especially in the north, and several bridges were destroyed in the Cairns district. The township of Fossilbrook was washed away.
15 January 1927	Serious landslides occurred in parts of the South Coast districts, especially in the Blackall Range district. A house near Palmwoods was completely demolished. The Stanley and Upper Brisbane rivers flooded and many of the lower metropolitan suburbs were submerged. Low lying parts of Ipswich were under water and a man drowned near Mitchell.
1-13 February 1927	Widespread flooding occurred in the regions of Herbert, Johnstone, Burdekin, Tully and other north coast rivers. Several towns, including Halifax, Ingham, Innisfail and Tully, were partly submerged and hundreds of people were evacuated. Loss of life occurred at Ingham, Cardwell and Townsville. At least 39 people were drowned - 23 at Ingham, 15 at Cardwell and 1 at Townsville. At Tully, Cardwell and Charters Towers floods were reported to be the highest on record. Railway traffic north of Bowen was completely disorganised with considerable damage to lines, especially on the Etheridge branch. Many houses were washed away and losses of crops, property and stock were very considerable, particularly in the Herbert River district. At Ingham 2,500 cattle and 1,500 horses were drowned. Grain silos at Atherton, Kairi and Tolga were badly damaged and the sea wall at Cairns was broken in several places.
1-4 October 1927	From 1st to 4th there was heavy local flooding in south-eastern districts, including low lying parts of Brisbane suburbs. On 25th there was some flooding in the Warrego River and adjacent streams.
10 December 1927	The Nogoa, Belyando, Barcoo, Thomson, Diamantina, Ward, Bulloo, Paroo and Warrego rivers and their tributaries all flooded, and in many districts completely disorganised rail and road traffic. Mail services were suspended and supplies were short. Stock losses were reported and a man drowned in the Barcoo near Blackall, another in the Warrego near Charleville, one in Cornish Creek near Muttaborra, and another in the Thomson near Longreach.

13-22 February 1928	<p>Heavy rain and subsequent flooding to south-east Queensland. Damage was wide spread and many towns were flooded, including Coolangatta, Tweed Heads, Bilinga and Killarney. Extensive damage was reported to buildings, houses, crops farms (notably dairy) and other infrastructure including roads, railways and bridges. Five individuals lost their lives, attributed to drowning from the flood onset. Between 13th and 22nd floods were fairly general and more serious over the eastern half of the sub-tropical zone. Practically all streams east from and including the Barcoo and Warrego rivers were affected. Widespread disorganisation of rail services and road traffic was reported from most parts. Primary industries were very seriously dislocated and considerable losses were sustained, particularly in the South Coast and Darling Downs districts. Heavy expenditure was necessary for reconstruction of roads and bridges in the Nambour district. There were high financial losses to dairy farmers in the Beaudesert district. Five drowning fatalities occurred, one each in the Gin Gin, Pittsworth, Charleville, Dalby and Gayndah districts.</p>
20-24 February 1929	<p>Central, northern and coastal towns throughout Queensland were subject to multiple tropical cyclones, resulting in heavy rain which caused widespread flooding. The towns of Townsville, Rockhampton, Mt Morgan, Cairns, Coolangatta, Mossman and Herbert were inundated. Widespread infrastructure damage was reported. Buildings and homes were badly damaged in south-east Queensland along with numerous farms, which sustained heavy losses to crops and livestock. Between 20th and 24th there were floods in the Burnett and Lower Fitzroy river districts. Rockhampton recorded a record rainfall of 775mm in 3 days. All traffic was dislocated for several days. Damage in the Monto district was very severe and low lying parts of Rockhampton were inundated. Considerable damage to roads and bridges at Rockhampton and Mt Morgan. Two men were drowned, one at Rockhampton and one at Gracemere.</p>
5-9 January 1930	<p>From 5th to 9th heavy flooding of practically all rivers between Townsville and Cooktown. Complete dislocation of rail and road traffic, causing serious delays to mail, and much loss of crops. Innisfail isolated and some wharves submerged. A man drowned in Liverpool Creek.</p>
20 January 1930	<p>A tropical cyclone brought about widespread rainfall to multiple regions in Queensland. Areas affected included Townsville, Cairns, Cloncurry, Mt Isa, Hughenden, Winton, Longreach, Aramac, Adavale and Charleville. Widespread damage was reported in the Mackay Region, where the low areas of town were completely submerged. Agricultural industries were also affected, many farmers lost live stock, including cattle and sheep. There were a number of fatalities associated with this disaster. Three railway passengers drowned whilst being ferried across the Burdekin River and further drowning fatalities occurred in the Warrego, Pioneer and Haughton rivers to bring the total death toll to six.</p>
2-8 February 1931	<p>Floods between Cairns and Ingham continued at the beginning of the month. From 2nd to 8th most coastal streams south from Townsville were affected. Only local flooding resulted from Townsville to Gladstone but the Burnett and all streams south from there had more serious flooding. All traffic was greatly disorganised and there were heavy losses caused by destruction of crops and drowning of stock. Streets of Bundaberg, Gympie and Maryborough were submerged.</p>
5 February 1931	<p>Brisbane floods. Most city wharves were submerged and water reached almost to Stanley Street, South Brisbane. More serious inundations occurred in parts of some suburbs, notably the Milton, Oxley, Rocklea, Fairfield and Sherwood districts. Two men drowned.</p>
16-24 January 1932	<p>From 16th to 24th serious flooding occurred in the coastal districts north from St Lawrence, particularly between Cairns and Townsville, and Ayr and Mackay. Rail bridge over the Elliot River destroyed. There were two drowning fatalities, a child at Innisfail, and a man at Gordonvale. Houses in low lying parts of Innisfail and Tully submerged</p>
15-18 February 1933	<p>From 15th to 18th severe flooding occurred over a large portion of the</p>

	tropical interior and in parts of the south-west. All transport services were disorganised for several days, especially between Hughenden and Cloncurry, and from Hughenden to Winton and Longreach. Walkers Creek, near Hughenden, reached its highest level for 27 years. Bridge between Cloncurry and Mt Isa was washed away. The township of Boulia was isolated, with low lying parts inundated from a flood reported to be the biggest in 30 years. Record flood heights were attained in the Paroo River and Kyabra Creek with severe damage to property in the Quilpie district.
1-31 January 1934	On 1st and 2nd the end of December floods between Cairns and Townsville continued and rivers on the western side of the Atherton Tableland were also affected. General rail and road interruptions over the greater part of the north coast area. A cyclone in this part of the State caused more serious floods after 22nd. There was almost complete cessation of rail traffic between Cairns and Cardwell during the last week of the month. Homes were vacated at Ingham, Bemerside, Innisfail and Tully. A man drowned in the Johnstone River near Innisfail. By 31st the floods extended to the Townsville and Bowen districts. Rail traffic was suspended across the Burdekin River bridge and a new weir on the Ross River near Townsville was extensively damaged.
28 February 1935	The end of February flooding on the north coast became more extensive and serious from 1st to 6th. Floods were severe in Innisfail and Tully districts. Most parts of Innisfail were submerged and many homes evacuated. Babinda and Mosman were also isolated. Rail traffic was completely dislocated.
14-20 February 1936	From 14th and 20th there was extensive flooding in coastal areas between Cooktown and Mackay. Some serious inundations occurred especially in the Innisfail district where considerable damage was reported to crops and roads, one casualty was reported. There were two people drowned at Townsville and transport services were disorganised. In the same period there was local flooding in parts of the north-west and south-west and wash-outs on the Hughenden-Winton line.
4-22 March 1936	From 4th to 22nd there was some heavy flooding between Cardwell and Mackay. The Burdekin River at Ayr and the Herbert River at Ingham several times submerged bridges. Some creeks in the Mackay district reached the highest level on record and low lying areas of Mackay were submerged and homes partly inundated. Portion of the Pioneer River bridge was washed away. The Ross River was in high flood, country near Townsville was inundated and Sarina was isolated.
17-20 March 1937	From 15th to 20th widespread flooding occurred over the southern parts of the State, particularly in all streams west from and including the Warrego River. There were serious inundations in many localities, heavy losses of sheep in the Goondiwindi district and destruction of crops in several areas. The hotel and shop at Apple Tree Creek in the Childers district was washed away. Low-lying parts of Brisbane, Ipswich, Maryborough, Gympie and Warwick were inundated. Gympie and Warwick were isolated and the Maryborough flood was the most severe for several years. Water was over one metre deep in the main streets of Thallon, and Dirranbandi was isolated. Floods in parts of the Boonah district were the highest for 35 years, at Brooweena the highest since 1893 and at Harrisville the highest since 1911.
23-27 May 1938	During the period 23rd to 27th there was widespread flooding in south-eastern districts, especially in coastal areas south from Maryborough. There were record inundations for this time of the year in the Landsborough district. Extensive damage was experienced to roads, bridges and crops. Kilcoy was isolated for a few days and low lying parts of Southport and Brisbane were submerged. Near Palmwoods a father and son drowned. There was local flooding westward to the Roma and Goondiwindi districts.
20-27 March 1939	From 20th to 27th fairly general and heavy flooding was experienced in the coastal area between Cooktown and Ingham and on the Atherton Tableland. Mossman, Ingham, Innisfail and a few other townships were isolated. The Endeavour and Annan rivers (Cooktown district) were the highest for 50

	years, and floods in the Mulgrave River the worst on record. The Barron River was in high flood and a man drowned at Innisfail. Complete dislocation of traffic between Ingham and Cooktown, and between Cairns and Herberton.
19 February 1940	Flooding in streams from north of Townsville to Rockhampton was mainly due to cyclone activity. At Sellheim the Burdekin River peaked on 19th (third highest on record ). In the tropical interior, under combined monsoonal plus cyclonic rains, extensive areas were inundated. Rail and other land traffic was held up for a few days at a time. Towns were isolated and Muttaborra had been without any communications for a fortnight at the end of the month.
5 April 1940	Heavy rain and caused widespread flooding to multiple areas along Queensland’s central coast. Towns affected included Townsville, St Lawrence, Bowen, Mt McConnell, Mirani, Home Hill and Ayr. Queensland infrastructure, which included roads, bridges and communication equipment, was badly damaged from the torrential rain and subsequent floods. Bowen recorded 356 mm in 18 hours. Three individuals lost their lives from the disaster and the damage bill was estimated around £1,000,000. Disastrous floods resulted in these districts, especially in the Home Hill - Ayr areas of the Burdekin River.
24 January 1941	Serious flooding and washaways to the north of Mackay caused the diversion to the western route of the Brisbane / Townsville train. The Charleville / Quilpie line was submerged in three places by the Paroo and Bulloo rivers. Road traffic was blocked west from Roma, and north and west from Rockhampton. During the last few days four lives were lost due to the flooding in the State.
18 February 1942	Flooding was experienced in streams south from Proserpine and at the end of the period much water was running down to the lower reaches of the Fitzroy system. Extensive damage and loss of life accompanied the flood rains in the Dawson and Callide rivers. Down the Burnett River heights approximating previous records in 1890 and 1893 were reached with disastrous effects at Bundaberg.
8-19 March 1945	Persistent and heavy local to stream flooding caused widespread damage especially in the first two weeks in coastal districts between Mackay and Cooktown and across the highlands to the eastern Carpentaria. Traffic delays were many. On 8th the Burdekin rail bridge suffered heavy damage. A goods train was washed away and two lives were lost. The Burdekin River at Sellheim peaked on 7th and 13th. On 14th the railway bridge was some 4 metres under water with the river still rising. On the Suttor River , Mt McConnel peaked on 15th and further north coast flood rains fell from 17th to 19th.
23 January 1947	Heavy to flood rain resulted from a cyclone which crossed the Queensland coast approximately 65 kilometres north of Brisbane and recurved over the south-east corner of the State during 23rd and 26th. Damage resulted from flooding and high winds. Two lives were lost in the floods. Serious soil erosion occurred and flood damage to roads, bridges, farm property, fencing and crops was extensive and costly.
22 June 1950	Rapid rises also occurred in the Mary, Pine, Brisbane and Logan rivers and in all these areas low level flooding, traffic and communication dislocation, damage to crops and property losses were extensive. Some hail damage was also reported and flooding on the southern Downs is reported to have caused considerable damage in the wheat fields. Estimated damage in south-eastern Queensland was reported at half a million pounds (subject to exchange rate and inflation) and two lives were lost.
25-29 November 1950	State wide stream rises were reported in the third week of the month resulting from the heavy widespread rains during this period. These rises were only moderate in the South Coast streams, Condamine and Macintyre river systems and the lower Burdekin River. In all other streams, particularly the Nogoia, Mackenzie, Dawson, Belyando, Warrego, Thomson and Barcoo

	river systems, record or near record flood levels were reported. By the close of the month all these streams were still carrying heavy flood run-off. Low level flooding dislocation and property damage was extensive and some stock losses were reported, whilst it appears likely that one life was lost in the Nogoa River.
10-30 January 1951	Heavy rains from the end of the 1st week to the end of the 3rd week caused the first flood period. Record or near record flood levels were reported in all tropical coast streams and in the Burdekin and Fitzroy river systems. Traffic dislocation was extensive. All rail routes and major traffic arteries were cut and the Inkerman railway bridge over the Burdekin River was submerged for 3 weeks from 10th to 30th. Many homes in low lying areas had to be evacuated and food drops were necessary in the Muttaborra and Richmond areas.
15 January 1951	Flooding was most severe over the South Coast Moreton where 500 to 750mm seven day rainfall totals caused strong rises in the Mary and Brisbane river systems and in other smaller coastal streams. All transport services were disrupted and low level flooding caused considerable property damage and covered all roads from Brisbane to a depth of a metre or more. Many houses were evacuated particularly in the Maroochy River districts where flooding was very severe. One life was lost at Currumundi Lake near Caloundra.
22 January 1954	However major flooding occurred during the rain period which commenced with 125 to 250mm rains on 22nd. Severe flooding in the Isaacs River catchment made roads impassable and eighteen people were reported temporarily marooned near Sarina when the Prospect Creek bridge was well under water. Moderate flooding occurred also in the Dawson , Mackenzie and Pioneer rivers. The Dawson was well over the bridge at Taroom and the Mackenzie well over the bridge at Comet.
5 -30 February 1954	Sustained and extensive widespread flooding in all main river systems reached record or near record levels in the Burdekin, Fitzroy and southern interior streams. Dislocation of traffic routes was fairly general, food drops being necessary in the central interior. At least 10 people lost their lives and hundreds of families had to be evacuated, particularly in the Rockhampton and Mackay areas. Bridges were swept away at Mitchell, Beaudesert and Ravenswood. The Marion Weir collapsed and the Burdekin River was over the Inkerman Bridge from 5th Feb. to 3rd March
21 February 1955	The Central Coast flooding on 21st dislocated traffic and isolated towns. Moderate to heavy flooding was reported in all Fitzroy River tributaries, Riverslea peaking on 28th. Moderate flooding in the Burdekin River covered the Inkerman Bridge again on 23rd, the bridge remaining under water up to the end of the month, thus dislocating rail traffic to the north.
8 March 1955	The first cyclone of the month gave heavy rains over the central interior on 8th and 9th, the Burdekin catchment on 11th and some totals up to 300mm on the far north coast on 15th. These resulted in heavy flooding in the Fitzroy catchment with near record levels at Clive on 11th and Riverslea on 15th. The rains over the central interior brought moderate flooding in all south west rivers and serious flooding in the Thomson and upper Flinders rivers where near record levels were reached. Flooded streams were reported even in the far west of the State particularly in the Diamantina catchmen
27 March 1955	The second cyclone brought serious floods to the South Coast Moreton from 27th to 30th. Rainfalls of 250 to 500mm over the Mary Valley resulted in the worst floods experienced there this century. A peak at Gympie on 28th was the highest since 1898 , and flooded the main street of Gympie to a depth of some 3 metres. Houses were washed away, crops were severely damaged , and as yet the full damage has not been assessed. Peak heights at Tairo and Maryborough were the second highest on record . This was below the disastrous 1893 flood.
29 March 1955	Serious flooding was also reported in the upper Brisbane River, as well as

	<p>the small coastal streams north of Brisbane, namely the Pine and Maroochy rivers, as a result of 125 to 375mm rains on 27th. Flood heights in the Brisbane River were generally the highest since 1931, resulting in moderate flooding in the lower Brisbane catchment on 29th and 30th. One life was lost. The Port Office gauge at Brisbane peaked at 3am on 30th, resulting in flooding of some low lying suburbs. The western edge of the cyclonic rains caused sharp rises in the upper Condamine River.</p>
23-26 May 1955	<p>Widespread flooding occurred at the end of the month as a result of State wide unseasonable rains from 23rd to 26th, when a number of river systems reported record floods for May. All communications were disrupted, 13 airfields were closed, two lives were lost and stock losses were high, particularly along the Thomson River. Totals up to 800mm in 3 days were reported on parts of the central coast, mainly in the Pioneer River catchment, with extensive low level flooding necessitating the evacuation of a large number of homes.</p>
10 January 1956	<p>Near record flooding was also reported at Condamine, Texas and Surat with a large volume of water moving downstream into New South Wales. The most devastated area was in the Inglewood-Yelarbon region , where the multi-million dollar tobacco crop was almost completely destroyed and damage to homes was estimated at around half a million dollars in Inglewood alone [population 1100]. Traffic and communications were dislocated generally , bridges and railway lines washed away , and stock losses were heavy.</p>
25 February 1956	<p>Rapid serious flooding occurred on the South Coast hinterland between Brisbane and the N.S.W. border when a rain depression gave totals up to 400mm in border districts for the 18th and 19th. Landslides blocked roads and bridges were washed away, resulting in the worst damage this area has experienced since the February 1954 cyclone.</p>
6-14 March 1956	<p>The Townsville cyclone resulted in serious flooding in eastern Carpentaria on 6th and 7th, when the upper reaches of the Gilbert, Mitchell and Burdekin rivers rose rapidly to record levels. The Etheridge River at Georgetown rose 6 metres in 4 hours and the Burdekin River at Sellheim rose 11 metres overnight on 6th. Traffic dislocation was general and bridges were washed away. Large proportions of the population were evacuated from Georgetown and Gilberton , and 4 lives were lost. Flooding also occurred in the Herbert River , and the lower Burdekin River where the Inkerman rail bridge was submerged from 8th to 14th.</p>
31 December 1956	<p>The central and north-west interior rivers were also flooded. The Nogoia River peaked at Emerald on 25th. A railway washaway occurred near Alpha. The Fitzroy River was still carrying heavy flood run-off and was still delaying traffic at the end of the month. Riverslea peaked on 26th, fell till 20th and peaked again on 31st. Near Gayndah on 24th, a man was reported drowned in the flooded Burnett River.</p>
16-20 February 1958	<p>Heavy rainfall on the Central Coast from 16 to 20 February produced catastrophic flooding in multiple regions. The damage was centred near the Mackay region with the short coastal streams between Mackay and Bowen reporting record floods. At Finch Hatton, 865 mm of rain was reported in 24 hours while at Giru 1m of water flowed through the town. Record floods in the O'Connell River washed away both the Elaroo and Bloomsbury bridges. In northern parts of the Thomson River catchment, severe flooding was reported in the Torrens and Cornish creeks. The flood caused major damage to roads, railways and other infrastructure. The main northern railway line was washed away. Three lives were lost in the Mackay area, at least 20 homes and a hall were washed away, dozens of cars were overturned and filled with sand, and debris from wrecked buildings was scattered for about 1 kilometre. Many bridge, including the temporary rail bridge at Mirani, were washed away. Damage in Mackay will be extremely costly and considerable delay in the repair of roads, bridges and railway lines is anticipated. A hole 5 metre deep was gouged in one street, a 1 kilometre stretch of railway line washed away and the whole city covered under a blanket of mud.</p>

17-20 February 1959	Floods in the wake of the February cyclone caused widespread dislocation of road, rail and air traffic over a great part of the Central Coast, Highlands, South Coast and Darling Downs districts, mainly from 17th and 20th. Many bridges were washed away, stock were lost in some of the rapid headwaters flooding, and in a few instances towns were severely damaged. In the Pioneer River basin sharp flooding caused the evacuation of 200 people from Mackay and the loss of bridges at Finch Hatton and Mirani, with a peak at Mirani on 17th. A new bridge was swept away on the Duaringa - Springsure highway at Mimososa Creek. Two hundred sheep were lost in the severe flood on Capella Creek, and many Clermont families were evacuated when Sandy Creek became a 500 metre wide torrent after 275mm of rain within 12 hours in the surrounding area. Clermont was isolated in flooding which was described as the worst since the 1916 disaster. In the lower Fitzroy River, water entered low lying yards in parts of Rockhampton at the peak of the flood. Following 150 to 250mm rains, severe floods affected the headwaters region of the Condamine River and south western parts of the Brisbane catchment. Laidley experienced the worst flood in its history on 18th, when Laidley Creek was 2 kilometres wide and approximately 0.4 metres higher than the 1893 flood. Very rapid flooding inundated the main business centre and 50 shops had up to 2.5 metres of water in them, resulting in high cost damage to shop fittings and machinery. Only a few houses in the town were above the flood, more than 200 families were evacuated and 50 people rescued from roof tops. Following 235mm at the Head, [mostly overnight rain], the Condamine River reached a width of 3 kilometres at Killarney. Water reached a height of 3 metres in the business section of the town, the highest in memory. Two bridges were swept away and the total damage cost in the town was very high. Allora reported its biggest flood for 50 years, bridges were damaged, people evacuated from homes and kilometres of fencing washed away. The flood crest flattened as it moved down the Condamine and Balonne rivers, giving mostly moderate flooding. Peaks reported were Warwick on 18th, Tummaville on 20th, Ranges Bridge on 20th, St. George on 24th and Dirranbandi on 27th. Slight flooding with little damage was reported in the Macintyre, Moonie, Maranoa, and Warrego rivers at this time.
5 March 1959	Cairns experienced its worst local flooding for 25 years, with water flooding many shops and debris blocking the city water supply lines.
9-13 November 1959	General rains from 9th to 13th, with totals of 150 to 250mm in the southern Moreton district and 50 to 175mm on the Darling Downs, resulted in widespread flooding in south eastern districts. In most catchments flooding was slight, but a few areas of local severe flooding were reported. Road, rail and air traffic was disrupted and landslides were reported on the western highway to Toowoomba. It is anticipated that the Downs wheat and barley crops will be reduced by as much as 1.5 million bushells and overall crop losses will be very costly.
30 December 1960	In the Flinders River basin washways on the Townsville to Mt.Isa railway at several points, near Julia Creek and Richmond, held up traffic for several days. At Cloncurry 185mm of rain caused the most severe local flooding for 50 years in the township with water inundating the streets and entering business premises. Damage was also caused to the new bridge construction works. The Flinders River at Hulberts Bridge peaked by 30th, well over bridge height. The superstructure of a rail bridge south of Einasleigh was damaged when the Einasleigh River rose above flood level.
25 February 1961	Flash flooding in the Bundamba Creek at Booval on 25th swept a car off a culvert, killing two people.
6 October 1961	Heavy rainfall in the South Coast Curtis, particularly in the Kolan, Boyne and Calliope river catchments, produced rapid flooding on 7th and 8th. Many 24 hour totals to 0900 7th exceeded 250mm and totals up to 450mm were reported in the 24 hours from midnight 6th to midnight 7th. All coastal streams between Bundaberg and Gladstone were in high flood and considerable damage to roads and fences was reported, although stock and

	crop losses were comparatively light. Traffic disabilities were general, particularly along the Bruce Highway which was cut at many places. About 200 motorists were stranded for varying periods.
21 November 1961	Rapid stream rises were reported in the Logan and Nerang catchments on 21st, following rainfalls of up to 125mm in two hours. The Pacific Highway was damaged and the traffic bridge across the Pimpama River at Ormeau flooded, with resulting traffic disruption. Many Southport shops and homes were inundated briefly by run-off from the heavy rain, and other resorts along the coast were also affected, but to a lesser extent. Many roads in the Springbrook-Beaudesert-Southport district were cut by local flash flooding. The Plunkett Bridge was submerged some 2 metres, stopping traffic on the Beaudesert to Tamborine highway.
13 March 1963	From 13th to 18th heavy rain in south-east districts produced 250mm totals with some totals up to 500mm. Local flooding and traffic disabilities were reported in the Mary and Brisbane rivers as well as the shorter Moreton streams. The Stanley River at Peachester reported peak flows as did the Brisbane River at Murrumba and Wivenhoe Bridge. In the Mary River catchment, water entered low lying parts of Gympie when the peak was recorded at midnight on 17th, and both Gympie and Kenilworth were isolated for a few days.
7-9 March 1964	Heavy rain, over the period 7th to 9th, falling on the upper reaches of the Condamine River, caused sharp rises in the upper tributaries and a moderate flood in the main river. In the Pittsworth district, paddocks were flooded and roads closed by falls of 175 to 200mm. As the flood wave moved downstream, large areas of low lying land were inundated and low level roads and bridges closed. Two families were evacuated near Cecil Plains. The flood peaked at Tummalville on 9th, at Eldnarvale on 15th and at St. George on 24th.
15 March 1967	The major feature of the months flooding was the record flooding in the Herbert River and associated far north coastal streams towards the middle of the month. Falls of up to 1300mm in 4 days in the Barron and Herbert districts produced the highest flood on record in the Herbert River, with widespread damage and loss of property. The Bureau's river height observer at Glen Eagle station was forced to evacuate his homestead shortly before it was washed away in a flood which reached the fantastic level of 6.85 metres above the previous record in 1927.
15 March 1967	At North Gairloch the river gauge was completely submerged on 14th , and at Long Pocket a record height was recorded at 1500 on 14th. The bridge at Long Pocket linking Abergowrie and Ingham was washed away after being almost 15metres under water , and the population of Abergowrie was isolated for weeks. Ingham itself was almost completely submerged in the flood-waters which were 17 kilometres wide at the peak. Road and rail traffic were brought to a stand-still, and Hinchinbrook Shire Council is reported to have estimated road and bridge damage alone at about \$7.5 million.
17 March 1967	Near record flooding was also reported in the Barron, Johnstone and Tully rivers. The Tinaroo Dam [ Barron ] and Koombaloo Dam [ Tully ] were both filled to over flowing by the heavy run-off, after being at low levels for the previous twelve months. The damage to sugar mill tramlines and bridges was severe, but a reliable estimate of crop losses is not available. Huge fields of sugar cane were washed out and in some places cane has been covered by 2 metres of silt. Cars were washed into raging flood-waters and costly farm machinery inundated. Thousands of people had the heart-breaking experience of flood damage due to knee deep water in their homes and when this receded , 300mm of mud. Some people were rescued from roof tops and there were many reports of bravery under very difficult conditions. Helicopters were used in some of the rescue work.
10 January 1968	The Mary River peaked at Gympie on 10th, and all coastal roads from Brisbane to the north of Bundaberg were impassable to traffic for a few days as the flood peak moved downstream. Many people in Gympie and other centres downstream were forced to evacuate their homes as flood waters

	approached , and at least one life was lost.
15-22 November 1969	Major flooding was experienced in the Moonie River and minor to moderate flooding occurred in the lower Balonne and Macintyre rivers on 15th to 22nd. Two lives were lost.
20 January 1970	Major flooding was experienced in the Don River at Bowen, and adjacent coastal creeks. Much damage to property, farm machinery, motor vehicles and cane crops was reported in the flood affected areas, and two lives were lost.
24 October 1970	On Saturday 24th there was flash flooding in the Brisbane City metropolitan area in Kedron Brook and Enoggera Creek resulting in damage to furniture and fittings in private homes. Several people were drowned.
2 April 1972	There was widespread traffic disruptions in the above catchments as Easter holiday traffic returned to Brisbane. On the night of Sunday 2nd to Monday 3rd, heavy rain in Brisbane City metropolitan creek catchments caused major flooding in suburban areas, resulting in much damage to property and household furniture.
15 March 1973	Towards the end of the month heavy rains, associated with the decay of Cyclone "Bella", fell over the catchments of the Nicholson and Gregory rivers causing major flooding. A high total of 475mm of rain in 24 hours was recorded at Westmoreland Station to the north of the Nicholson River. Further south, heavy rains up to 200mm in 4 days fell over catchment areas of the Georgina, Burke and Hamilton rivers, causing major flooding in these streams.
6-10 July 1973	During the period 6th to 10th, heavy rain in south-east Queensland caused moderate to major flooding to the coastal strip between Brisbane and Bundaberg. Several lives were lost. Minor flooding occurred in the Brisbane City metropolitan creeks, in particular Enoggera-Breakfast creeks and Kedron Brook, and also in the Nerang River.
24 January 1974	On 24 January 1974, torrential rain and record breaking floods were a direct result of Tropical Cyclone Wanda, which crossed north of Brisbane. Record flooding occurred in the Bulloo, Paroo, middle and lower reaches of the Flinders, Norman, Gilbert, Cooper, Diamantina, Georgina and Eyre rivers and creeks as well as Nerang, Brisbane City metropolitan, upper Brisbane, Bremer, Warrill and Logan rivers. By 29 January the Brisbane area had recorded 900 mm of rain. Brisbane also received 314 mm of rain in a 24 hour period surpassing the previous record established in 1931. Six thousand houses were inundated by flood waters, where fifty-six were either completely destroyed or deemed uninhabitable. Widespread damage to infrastructure including roads, railways and bridges as well as power lines, resulted in serious power failures throughout the affected regions. Business and industries sustained millions of dollars in losses due to the heavy deluge. The Insurance Council of Australia estimated the 1974 damage at \$68m, with the 2007 estimated repeated cost of \$2095m. Major flooding occurred in almost all areas of the State. Few areas had no flooding at all. One of these was the Dumaresq River upstream from Goondiwindi , where at one stage during the month , water was released for irrigation.
1 December 1975	Major flooding occurred in the Condamine River, where the highest levels were reported since 1956 at a number of stations. Major flooding also occurred in the Bulloo River where Quilpie was isolated for several days.
10 March 1977	Major flooding developed in most coastal streams on the North Tropical Coast and Ingham was seriously flooded. Considerable damage was reported in the Ingham and Tully areas. Coastal flooding and widespread traffic
10 January 1979	The persistence of tropical Cyclone "Peter", over and near Cape York Peninsula early in the month , brought heavy rains which resulted in major to moderate flooding in nearly all coastal streams from Tully to Cooktown. The major flood on the Barron River caused extensive , but mostly agricultural and road and bridge damage , around the Cairns area. These losses were exacerbated by extensive flooding of the Tully, Murray and

	Herbert rivers about the same time.
12-17 March 1979	Major flood occurred in the lower Burdekin River from about 12th to 17th. It was during this period when a recently completed river levee on the Burdekin River was damaged. Preliminary estimates put this damage at about \$1 million.
1 February 1981	Flooding and stormy conditions in the wake of an ex-tropical cyclonic depression resulted in heavy damage in the Dalby township and surrounding area. Heavy rainfall over the Myall creek catchment created serious flooding for the town of Dalby. Myall Creek has a record of the floods dating back to 1908. The data showed that nine major floods have occurred since this time, the highest being the February 1981 flood, which rose to a height of 4.5 m. Approximately 2000 homes were inundated with water and there was considerable damage to the grain growing districts. The Insurance Council of Australia estimated the 1981 damage at \$20m, with the 2007 estimated repeated cost of \$200m. There was considerable soil erosion to the grain growing districts. One man was drowned whilst crossing the flooded Wallan Creek north of Miles. Chinchilla also suffered major flooding from Charley's Creek. However damage there was much less severe. The major flooding also extended to property along the course of the Balonne River as the heavy rainfall drained into New South Wales over the following 3 weeks.
21 May 1981	Local flooding occurred to most streams from Rockhampton to Proserpine during 21st and 22nd. Two boys drowned near Rockhampton and one near fatality occurred at Proserpine when motor vehicles were washed off flooded creek crossings. In the inland, especially over the west and southwest, road traffic was delayed for several days till roads dried out and stream levels fell.
17 April 1982	Flooding in the Tully and Herbert rivers on 17th with a final flood warning issued for the Tully River during the morning of 8th. One farmer drowned during the night of 16th. Damage to crops is estimated at \$7 million.
24 November 1985	Heavy rains on the Central Coast closed the main coastal highway 10km south of Sarina on the 24th. A boy drowned in a flooded drain at Gartgett , (50km west of Mackay) during the afternoon of the 25th.
12 February 1988	A severe thunderstorm over Cooyar Creek catchment on the evening of Friday 12th caused the highest flood since European settlement in the township of Cooyar. Several houses and buildings were washed away and two lives were lost. As a result of the storm rains over the Darling Downs near Cooyar on the 11th and 12th, moderate flooding occurred in Myall and Oakey creeks.
1 March 1988	Major flooding extended along the lower Mackenzie and Fitzroy rivers early in the month as a result of heavy rainfalls associated with Cyclone "Charlie". The Fitzroy at Rockhampton peaked at 8.4m on the 11th with extensive inundation of low lying areas of the city.
18 December 1988	Flash flooding in Gladstone on the morning of the 18th caused \$1 million damage to shops after heavy overnight rain.
4 February 1989	Widespread moderate with local heavy rain till 0900 on 4th in the Central Coast area produced minor to moderate flooding in the Pioneer River. More extensive falls in the Central Lowlands caused significant stream rises in the Thomson and Barcoo rivers the same day, increasing to minor to moderate flooding the next day with traffic disabilities, increasing to major flooding on the 9th. Local flooding in the Winton area stranded 24 people, roads were also closed in the northwest of the State and in the Carnarvon National Park area. Thousands of sheep, shorn and unshorn, drowned in floodwaters in the Longreach area, whilst sheltering from cold and windy conditions.
25 April 1989	During the month of April 1989, heavy rains inundated southern Queensland and northern New South Wales. The Mary River peaked at 2100 hours on 26 April, recording a height of 19 m, short of the 25 m record established in 1893. Several deaths were recorded during this period. One person drowned at a creek crossing on the Gold Coast; another person drowned in Enoggera Creek and another was electrocuted on the Sunshine Coast. Severe local

	flooding also occurred in the Brisbane metropolitan area overnight on Tuesday 25th.
3 February 1990	Tropical Cyclone Nancy crossed the coast in New South Wales at Byron Bay and moved seawards which brought about high winds and heavy rainfall. Subsequent flooding affected rivers in the central and south east regions including the Albert, Nerang, Logan, Paroo, Bulloo and Mary. Reports stipulated some areas received 530 mm of rain over a 24 hour period. Extensive damage to infrastructure included houses, roads and buildings as a result of cyclonic winds that recorded wind gusts of up to 60 -70 knots. However the major impact came from floods created by the extreme weather, which killed six people; five from New South Wales and one from Queensland. The Insurance Council of Australia estimated the 1990 damage at \$33m, with the 2007 estimated repeated cost of \$330m.
18 April 1990	In the 3 day period between 18 April and 21 April 1990, up to 150 mm of rain fell in large areas of Central Queensland. Some isolated areas recorded up to 350 mm. Major flooding developed on the Warrego River, Maranoa River as well as other inland systems. On 21 April, the Warrego River peaked at 8.5 m. Over 2000 residents were evacuated (mainly by military helicopters) to the higher, local airport. The Insurance Council of Australia estimated the 1990 damage at \$30m, with the 2007 estimated repeated cost of \$163m.
7 January 1991	Extensive flooding occurred in coastal and inland areas during January. the Fitzroy River at Rockhampton peaked at 9.15 metres on Monday 7th, then fell slightly before rising to a second peak of 9.30 metres on Saturday 12th, the third highest flood on record since readings began in about 1860. Extensive damage was associated with the flooding. Approximately 300 houses were flooded above ground level, and about 50 houses above floor level. Road and rail links were completely cut and the airport closed to fixed wing aircraft. Four deaths were attributed to the flooding. One man drowned while swimming in the swollen Fitzroy River on 28th December 1990, and three men drowned after their boat overturned in floodwaters on 9th January 1991. Extensive losses and damage was incurred by the rural sector. The total damage bill for the Rockhampton flood has been estimated at more than \$10 million.
15 January 1991	Widespread heavy rain over most of Queensland during mid to late January caused flooding to develop in many other areas of the State. Major flooding developed in the Gulf area including the Flinders, Cloncurry and Norman rivers, causing extensive stock losses. Many towns and communities remained isolated and food and fodder re-supply operations were carried out throughout January.
7 February 1991	On 7 February near Boonah south-west of Brisbane, 3 people drowned at a flooded road crossing. The flash flood affected the Logan system and Warrill Creek catchments, where up to 250 mm of rain fell in 6 hours. Extensive damage occurred to rural properties, fencing and crops in the Boonah, Rathdowney and Kalbar areas and a school at Kooralbyn was destroyed. Flooding subsequently developed in the Logan River and record flood levels were recorded at several locations. Flooding of low lying properties, roads and bridges accompanied the flood peak. Several houses were flooded in the suburbs of Logan City in the Waterford area during the weekend of 9th and 10th. Analysis of the rainfalls recorded during the storm has shown that rainfall intensifies exceeded 1 in 100 year average recurrence intervals at some locations.
16 February 1991	Two thirds of the town was inundated, with water up to 5 metres deep in low lying areas. The main street of Ingham had water up to 2 metres deep. More than 150 people were evacuated from their homes. Extensive damage was caused to road and rail infrastructure with the damage bill likely to exceed several million dollars.
22 February 1992	The heavy rainfalls continued in the Mary system and along the Sunshine Coast for the next 36 hours and resulted in major flooding of urban areas and extensive flooding of rural areas. Rainfall totals in the 48 hours to 0900

	<p>on Saturday 22nd ranged from 150mm in the lower reaches of the system to over 700mm in the upper reaches above Gympie. A major flood peak of 21.44 metres at Gympie on Saturday night 22nd resulted in extensive inundation of the commercial area of the city and flood damages estimated at several million dollars. Further downstream at Maryborough, the river reached a major flood peak of 9.50 metres on Monday afternoon. Over 100 commercial and residential premises were inundated by floodwaters.</p>
6 March 1992	<p>Minor to moderate flooding in the Burnett River and major flooding in the Kolan River caused Bundaberg and the Town of 1770 to be isolated. Power disruptions, traffic disabilities and evacuations of low lying areas continued throughout 16th and 17th . Flooding in the Cherwell River resulted in 100 people being evacuated and relocated.</p>
15 February 1993	<p>Burketown and Doomadgee were isolated by floodwaters, and food drops were required to isolated properties</p>
1 January 1996	<p>The flooding in the Condamine-Balonne system was the highest since 1988 with areas between Condamine Town and the NSW border remaining above major flood level for nearly two weeks. In the Balonne River, flood levels were the highest on record at Warkon and Surat and the highest since 1990 at St George. There were few reports of houses being inundated but many towns and properties were isolated for nearly two weeks because of the extensive flooding of roads and bridges.</p>
6 May 1996	<p>The Killarney flood peak of 6.15 metres on Monday 6th was similar to the February 1976 level. The river broke its banks at Killarney and inundated the main street with water up to 1 metre deep. Several businesses suffered flood damage. In the first week of May, widespread flooding and heavy rainfall were reported in south-east Queensland and northern New South Wales. A tidal surge created by a low pressure system caused above average tidal conditions. In addition, Brisbane water catchment areas recorded up to 1000 mm. The worst affected area of Brisbane was the metropolitan area and the Darling Downs region. Furthermore, the extreme weather conditions also affected the Lockyer creek, Bremer and Logan rivers. Both states reported extensive damage to farming areas. Vegetable and cotton crops were seriously affected; many completely destroyed. The Insurance Council of Australia estimated the 1996 damage at \$55m, with the 2007 estimated repeated cost of \$80m.</p>
6 May 1996	<p>Downstream at Lyons Bridge the flood peaked at 16.44 metres at 0900 on Sunday 5th. This was 0.10 metres below the peak of the January 1974 flood. Flooding in the Lockyer Creek catchment caused extensive crop damage. Evacuations were carried out around Laidley and in the Glenore Grove area. The Warrego Highway was cut near Glenore Grove. Numerous other roads were cut during this flood event isolating farm communities. In the first week of May, widespread flooding and heavy rainfall were reported in south-east Queensland and northern New South Wales. A tidal surge created by a low pressure system caused above average tidal conditions. In addition, Brisbane water catchment areas recorded up to 1000 mm. The worst affected area of Brisbane was the metropolitan area and the Darling Downs region. Furthermore, the extreme weather conditions also affected the Lockyer creek, Bremer and Logan rivers. Both states reported extensive damage to farming areas. Vegetable and cotton crops were seriously affected; many completely destroyed. The Insurance Council of Australia estimated the 1996 damage at \$55m, with the 2007 estimated repeated cost of \$80m.</p>
1 February 1997	<p>Flooding in these rivers and streams commenced at the beginning of February with the onset of the heavy rain and was continued to the end of the month. Major flooding occurred in the Maranoa and Wallam and Mungallala during two periods, one at the start of the month and the other towards the middle of the month. Houses in the township of Bollon were affected during this period. Flood caused the isolation of towns and rural properties and cut roads, resulting in significant damage.</p>
10 February 1997	<p>The Warrego River reached 7.4 metres at Charleville, the second highest</p>

	flood on record and 1.15 metres lower than the record level of April 1990. Hundreds of people were evacuated and some 50 to 60 houses and business premises inundated.
15 March 1997	In mid-March, the flood levels reached in the township of Roma were the highest for about 50 years resulting in extensive inundation of the town.
10 January 1998	Tropical Cyclone Sid brought about heavy rain and wide spread flooding to multiple areas in the northern regions of Queensland, particularly between Cairns and Townsville. Townsville recorded 549 mm of rain in a 24 hour period and as a result 50 per cent of the town lost their power supply. Other major areas affected included Blue Water Creek, Black River, Rollingstone, Paluma, Ingham, Halifax and Charters Towers. The heavy deluge brought about extensive damage throughout the affected regions. Infrastructure including roads, highways, bridges, railways and power lines were badly disrupted. Furthermore the flash flood inundated multiple buildings and houses along with wide spread damage to both agriculture and horticulture industries. The flood waters ruined crops particularly the cane growers. As a result there was a major damage bill associated with this event. The Insurance Council of Australia estimated the 1998 damage at \$71m, with the 2007 estimated repeated cost of \$154m. Bluewater Creek and Black River responded very quickly to the torrential rainfall which commenced on the afternoon and evening of Saturday 10th. Flash flooding occurred in Townsville and the surrounds, with levels metres higher than previously recorded. Major flooding resulted in large areas of the city. Thuringowa was inundated with significant damage to houses and businesses. Due to the mitigating effect of the Ross River dam, flood levels in the Ross River below the Dam peaked some 48 hours after the heavy rainfall.
30 July 1998	Moderate to major flooding occurred in Macintyre Brook, Dumaresq and Macintyre rivers, with a flood peak of 10.47 metres occurring at Goondiwindi on the evening of the 30th. This flood is the third highest recorded flood. Major flooding was predicted to develop between Goondiwindi and Riverview during August. Minor flooding occurred in the Weir and Moonee rivers.
8 February 1999	Renewed heavy rainfall on the 8th resulted in rapid rises with moderate to major flooding in most streams from Kenilworth to Gympie, with a peak of 21.95 metres reached at Gympie on the morning of the 10th causing major flooding. This was the highest flood since January 1898.
17 February 2000	Major flooding resulted in inundation of the township of Giru on two occasions with minor flooding continuing for long periods throughout the month. Queensland's far north endured saturating rains, cutting major transport lines and flooding isolated towns, leaving motorists and tourists stranded north of Ingham. Cairns opened a disaster co-ordination centre after a record 208 mm deluge which turned suburban streets into creeks and shopping centre car parks into miniature lakes. More than 3000 sandbags were distributed to Cairns residents who fought to keep rising flood waters from their front doors and 10,000 residents experienced blackouts. Apart from floods along the Barwon, Tully and Herbert Rivers, others to flood included Burdekin, Bulloo, Flinders, Thompson, Paroo, Diamantina, Georgina, Barcoo rivers and Cooper Creek. Almost a third of Queensland was declared a natural disaster area by the State Government in the wake of the extensive flooding throughout northern, central and western Queensland. There were wide spread damage to plantations crops and infrastructure which resulted in several large damage estimates. This included \$70m to cane and banana industries compiled with \$50m to existing infrastructure. The Insurance Council of Australia estimated the 2000 damage at \$11m, with the 2007 estimated repeated cost of \$21m.
3 April 2000	Widespread heavy rainfall on 3rd April following ex tropical cyclone Tessi, caused rapid river rises throughout the Haughton River catchment. Minor to moderate flooding occurred in the upstream reaches, with river levels downstream at Giru reaching 2.85 metres on 4th April causing major flooding.
19 November 2000	Moderate to major flooding commenced in the Bulloo River about 19

	<p>November and continued until the end of the month. Major flooding occurred at Quilpie which was isolated for about 2 weeks with moderate flooding at most other locations in the catchment. The main flood waters did not reach Thargomindah until the last week in November.</p>
<p>9 March 2001</p>	<p>On the afternoon of 9 March 2001, very heavy rainfall caused flash flooding from the Gold Coast to the Sunshine Coast with reports of 200 to 300 mm in a 2 to 3 hour period. Heaviest rainfalls were reported in the Beenleigh-Logan area and the southern suburbs of Brisbane where severe local flooding occurred which caused major traffic disruptions, damages to cars and houses. One person, a passenger in a vehicle swept from a causeway, was drowned near Lawnton. During the period 9 – 11 March 2001, thunderstorm activity brought intense rainfall to the Queensland Southeast Coast district. Subsequent flash flooding affected the Gold Coast and Logan City, with heavy rain falling over Brisbane City producing areas of flash flooding, particularly across southern suburbs but also in the east and north. Intense rainfall was observed across the district for duration of approximately 6 hours. Gold Coast and Logan City: A person drowned during the early morning hours of 11 March, when the vehicle in which they were passenger was swept off a road near Logan. Many homes and businesses were damaged by flash flooding. Flooding at Beenleigh also led to 4 houses being inundated with sewage. Brisbane City: A person was confirmed drowned, after being swept away by flood waters on the evening of 9 March, when vehicle in which they were passenger was washed off a road at Lawnton (in Brisbane’s north). The damage inventory included hundreds of cars, many shops and offices, and up to 600 homes. Stones Corner, a suburb in inner-eastern Brisbane, was one of the worst hit areas. Metre-deep flooding entered East’s League’s Club, forcing 50 patrons to be evacuated. About 30 cars were submerged in the club car park. Many houses throughout Brisbane’s southern suburbs were also flooded. Over 100 homes were inundated in Wishart (southern suburb). Heavy rain downed powerlines at Annerley, Woolloongabba, Greenslopes and Holland Park. A block of flats at Greenslopes had the roof torn off. Cars that were stalled on flooded roads caused peak-hour traffic chaos. Many cars that had been left in flooded streets floated away. A car dealership in Salisbury reported damage to about 50 vehicles. Three flights were diverted from Brisbane Airport to the Amberley RAAF Base after lights along the Brisbane runway went out (due to lightning). A house boat, moored on Norman Creek in eastern Brisbane, was damaged. The northern suburbs of McDowall, Windsor, Ferny Hills, Arana Hills and Everton Hills also recorded severe water damage. In the northern suburb of Aspley 6 new cars were swept from the yard of a car dealership and into Cabbage Tree Creek and another 80 new vehicles were damaged. Flash flooding caused problems in Everton Hills near Kedron Brook. Sunshine Coast: A person was rescued from a vehicle that was washed into a waterway. Shops in the main street of Beerwah were flooded, trees came down on powerlines and cars were swept away. Numerous traffic accidents were reported. Flash flooding was also reported near Sunrise Beach, and at Noosaville, Nambour, Eumundi and Hunchy. Powerlines were brought down at Nambour. Two homes were evacuated when it was believed that the roofs could be blown off. Rainfall recorded during the flash flooding: (1) On the Gold Coast centred around Carrara a total of 176 mm (2) At Beenleigh where 317 mm was recorded at the Bowling Club (3) In the northern suburbs of Brisbane where 187mm was recorded at Everton Hills (4) Approximately 200 mm between Landsbrough and Nambour, (5) An area up to 230 mm centred between Ball Lookout and Cooroy. Insurance Council of Australia estimated the 2001 damage at \$37m, with the 2007 estimated repeated cost of \$63m.</p>
<p>14 January 2004</p>	<p>In the Thomson River, river levels commenced to rise on Wednesday 14th from Muttaborra to Jundah. Moderate flooding developed in the Thomson River with the main floodwaters arriving in Longreach on Sunday 18th January. Downstream of Longreach, heavy local rain caused major flooding to develop at Jundah also on Sunday 18th January.</p>

20 March 2006	Major flooding occurred in the Mulgrave River during the day in the Peets Bridge to Gordonvale area, with the river level at Gordonvale peaking at 15.2m, 1 metre over the Bruce Highway bridge.
29 January 2007	Widespread heavy rainfall along the coast at the end of January resulted in major flooding quickly developing in the Don River, and flood warnings recommenced on 1st February. The heaviest rainfall was recorded in the 12 hours to 9pm on 1st February with between 120 and 190 mm, and a maximum hourly rainfall of 48 mm was recorded at 4pm at Mt. Dangar.
23 August 2007	Intense rainfall occurred on the Sunshine Coast overnight on the 23rd August in association with an upper trough system and an east coast low (ECL). The rainfall caused flash flooding in most of the smaller coastal streams from Brisbane to Noosa during the night of the 23rd and then led to riverine flooding in the Noosa, Mary, Maroochy and Mooloolah Rivers from the 24th to 27th.
30 November 2007	By the 30th major flooding was occurring on the Paroo River between Humeburn and Eulo and extending downstream toward Caiwarro and Hungerford. The Paroo River at Eulo peaked early the next morning around 5 metres, just below the level of the January 2004 flood which reached 5.15 metres.
8 January 2008	The light to moderate rainfall over Southeast Queensland during early January intensified overnight on 4th of January producing flash flooding on the Nerang and Coomera Rivers and Gold Coast Creeks, and the Logan/Albert Rivers with moderate to major flooding which lasted only 1-3 days. The rapid river rises washed away some sections of roadway creek crossings and bridges within the Boonah and Beaudesert Shire Councils, and Emergency Services were kept very busy with swift water rescues and dealing with vehicles caught in flooded crossings. Torrential rain and gale force winds caused wide-spread damage to the regions around south-east Queensland. The heavy rainfall was a direct result of a low pressure system that persisted over the coral sea. Furthermore, the system then combined with an upper low to produce the heavy deluge. Towns affected included Boonah, Brisbane City, Clifton, Cooloola, Logan, Gold Coast City, Stanthorpe and Warwick. There was widespread damage to local infrastructure including bridges, roads and railways. State Emergency Services engaged the help of Queensland Rail and Emergency Management Queensland to assist those affected by the floods. This included opening up extra rail services and the deployment of a helicopter to support the recovery effort.
20 January 2008	Emergency Services evacuated many houses in and around the city of Emerald on about the 20th of January as floodwaters from the Nogoa River surrounded and isolated the city
15 February 2008	A monsoon low in combination with a high pressure ridge brought about heavy rain and flash floods to the Mackay region and surrounding areas. Approximately 4000 homes were inundated by the flood waters, some stations recording up to 600mm in 6 hours. The Mackay airport was closed due to water and debris on the runways. The local road network was severely damaged, schools were shut, mobile and land line communications were disrupted and more than 6200 homes lost power in the deluge. The northward movement of the rainfall during the day of the 15th of February brought about intense rainfalls in the Townsville region that night. Major wind damage was sustained to marine craft in the Airlie Beach area just north of Mackay.
16 February 2008	This rainfall caused major flooding across the coastal basins of the Haughton River, Burdekin River, and the Don River. Rainfall from the low pressure system extended further southward to the Fitzroy River where 24-hour rainfalls of between 50mm to 150mm were recorded, resulting in major flooding that peaked at Rockhampton a week later on the 25th of February.
19 November 2008	Intense rainfall occurred overnight on Wednesday 19th November across South East Queensland, particularly in the Ipswich and Lockyer Valley area. This caused local flash flooding overnight with riverine flooding occurring in

	<p>the Bremer River, the Lockyer, Laidley and Warrill Creeks on Thursday the 20th of November. Major flood levels were reached in the Bremer River and in the Lockyer, Ipswich and Northern Brisbane Creeks. Between 16 and 22 November 2008, heavy rain and subsequent floods affected the Brisbane region and surrounding areas. A surface trough developed through inland Queensland and combined with an upper level trough system to deliver severe thunderstorms and flood rainfall across parts of south-east Queensland. The system affected multiple towns including Ipswich, Lockyer Valley, Bundamba, Tallagalla, Forest Hill and Ebbe Vale. The heavy deluge produced significant rainfall over the catchment areas, which resulted in rapid river rises and floods. There was widespread damage to infrastructure including roads, railway lines and bridges as well as buildings and houses. Furthermore many vehicles were damaged due to the rapid rise in rivers and creeks. One individual died when the car she was travelling in was swept away by floodwaters at a crossing on Laidley Creek at Forest Hill near Gatton. The Insurance Council of Australia estimated that the damage bill for this disaster to be approximately \$309m.</p>
12 January 2009	<p>Heavy rainfall event coincided with king tides along the coast and led to major flooding in the Tully River and the inundation of houses at Cairns and Townsville. Heavy rainfall associated with Ex Tropical Cyclone Charlotte fell along regions in northern Queensland. Subsequent flood warnings were issued for rivers situated along the coast from Cairns to Mackay. Major rivers affected included the Mulgrave, Russell, Haughton and Don. Cairns Airport received 189 mm of rain over a 3 hour period, with many coastal areas receiving in excess of 300 mm over 24 hours. The heavy deluge brought about widespread damage to the affected regions; infrastructure, houses and buildings were all damaged. The Insurance Council of Australia estimated the January flood of 2009 damage at \$19m. This is the combined total for Tropical Cyclone Charlotte and Tropical Cyclone Ellie.</p>
1 May 2009	<p>Major flooding was recorded in the Mooloolah River with minor flooding experienced elsewhere on the Sunshine Coast and adjacent Mary River tributaries. Moderate to major flooding also occurred in Burpengary Creek in the Pine Rivers basin near Caboolture, with North Pine Dam quickly exceeding the full supply level. Significant flash flooding was recorded throughout the Brisbane suburbs, with moderate to major flooding occurring in Purga, Bundamba, Woogaroo, Moggill and Breakfast Creeks.</p>
1 January 2010	<p>Heavy rainfall during the first week of January in the headwaters of the Langlo and Ward Rivers produced a major flood peak at Warilda during the morning of the 7th of January.</p>
2 February 2010	<p>Rainfall associated with the monsoon trough produced major flooding at Mimdale and cut the Essendean Bridge for a number of days</p>
3 February 2010	<p>Moderate to heavy rainfall from Ex-Tropical Cyclone Olga in early February lead to a major flood at Quilpie, with moderate flooding further downstream between Autumnvale and Thargomindah.</p>
3 March 2010	<p>In the last week of February through to the first week of March 2010 Queensland, Central Australia and Northern New South Wales experienced unprecedented rainfall and serious flooding in several regions. Queensland recorded highest state wide average rainfall on 2 March, with 31.74 mm, exceeding the previous record of 31.49 mm established on 21 May 1981. As a result the heavy deluge brought about widespread flooding to numerous rivers including Paroo, Moonie, Balonne, Dawson, Theodore, Moura, Maranoa, Warrego, Diamantina, Bulloo, Condamine, Weir, Mary, Burnett, and Comet. This had devastating impact on infrastructure including roads, railways and bridges, as well as agriculture and horticulture industries including farms, crops and live stock. The Insurance Council of Australia Estimated that the February/March floods of 2010 cost approximately \$46.7m. Record flood heights were recorded in a number of towns in the affected areas including on the ParooRiver at Eulo, in Bradley’s Gully at Charleville, on Wallam Creek at Bollon, on Bungil Creek at Roma, on the Moonie River at Nindigully and Thallon and on the Balonne River at St.</p>

	George, Surat, Dirranbandi and Hebel. The Dawson River at Theodore and Moura reached its highest levels since 1956, with the Maranoa River at Mitchell and the Warrego River at Cunnamulla both reaching their highest levels since 1990.
18 March 2010	Heavy rainfall that was recorded throughout the Bulloo River catchment produced widespread major flooding and in some areas record major flooding. River heights at Quilpie and Thargomindah both recorded their highest levels since January 1974 with the gauging station at Autumnvale recording its highest level on record. Flood warnings that began on the 1st of March continued until the 18th of March.
4 March 2010	Heavy rainfall was recorded in the Burnett River during the first week of March. Rainfall in the Auburn River during the 4th of March produced the largest flooding in the area since 1971.
11 October 2010	Flash flooding was also recorded in some of the northern suburbs of Brisbane including Strathpine, Zillmere, Wooloowin and Deagon, causing traffic disruptions and some inundation of residential areas. Flood warnings that began on the 11th of October continued until the 19th.
26 October 2010	Heavy rainfall was recorded in the 24 hours to 9am on the 8th of October along the Barcoo River catchment. Moderate flooding was recorded between Blackall and Glenlock with major flooding at Retreat. Minor flooding was recorded on the Thomson River between Camoola Park and Jundah with a moderate flood peak recorded on Cooper Creek at Windorah. Flood warnings that began in September continued until the 26th of October.
30 November 2010	In late November 2010, rain began to cause extensive flooding to 75 per cent of the state of Queensland, which was subsequently declared a disaster zone. Floodwaters claimed the lives of 35 people with 7 people still missing as of 17 February 2011. On 25 December 2010, Cyclone Tasha crossed the northern Queensland coast and brought disaster to every river system south of the Tropic of Capricorn and as far west as Longreach and Charleville. The flooding engulfed Alpha, Jericho, Chinchilla, Dalby, Theodore, Warwick, Bundaberg, Gayndah, Munduberra, Emerald, Rockhampton, Condamine and St George. The Condamine River, the Balonne River, the Burnett River, the Comet River, the Dawson River and the Nagoa River reached flood peaks never before recorded. On 10 January 2011, a wall of water swept through Toowoomba, then travelled west, flooding Oakey, Dalby, Chinchilla and Condamine for a second time, causing flooding through the Lockyer Valley, including Murphy’s Creek, Postman’s Ridge, Helidon, Grantham, Laidley, Lowood, Fernvale and Forrest Hill. The floodwaters affected Bremer, Lockyer and Brisbane River systems, reaching heights that engulfed Ipswich, Goodna, Gailes, Karalee and suburbs of Brisbane. During this period approximately 3572 businesses were inundated. There were 5900 people evacuated from 3600 homes, approximately \$4b in commercial losses across mining, agriculture and tourism sectors, and 19,000 km of roads were damaged. Three major ports were significantly affected. More than 28 per cent of the Queensland rail network was left twisted and displaced. An estimated 28,000 homes may need to be rebuilt while vast numbers of dwellings require extensive repairs. The judicial inquiry into Queensland's floods will sit for the first time on 10 February 2011 with an interim report in August and a final report in 12 months.