

TARANAKI REGIONAL COUNCIL MONTHLY RAINFALL AND RIVER REPORT FOR August 2021

Provisional Data Only

Note: some sites record a number of parameters

Table 1: Rainfall at 27 sites throughout the region



Station	Sub-region	Monthly			Year to Date			Records Began
		Number of rain days (>0.5mm)	Total Monthly Rainfall (mm)	% of Monthly Normal (%)	Total to date (mm)	% of Normal for year to date	% of average full calendar year	
Nth Egmont	Ntnl Park (North)	23	678.5	98	4572.5	102	65	Nov 1990
Dawson Falls	Ntnl Park (South)	24	696.0	115	4826.0	121	81	Feb 1933
Kahui Hut	Ntnl Park (West)	23	503.5	96	3583.0	103	68	Nov 2005
Mangorei Upper	Near bushline	21	374.0	-	2654.5	-	-	Feb 2017
Hillsborough		17	150.5	76	1214.0	97	69	Feb 2012
Brooklands	New Plymouth	19	127.6	74	1048.6	92	65	Jan 1872
Mangati	Bell Block	18	133.0	82	1043.2	99	70	Oct 2012
Weston's Farm	Motunui	17	136.8	93	1038.6	97	66	Feb 1998
Waiwhakaiho	Egmont Village	18	225.5	103	1697.0	111	72	Aug 1990
Manganui	Everett Park	15	201.0	106	1388.0	105	68	Jan 1987
Oxi' Ponds	Inglewood	16	185.5	87	1450.0	97	62	May 1999
TRC	Stratford	16	249.0	127	1459.0	112	74	Jul 1998
Mangaehu	Toko (Huinga)	15	167.0	109	1071.0	105	69	Jul 1998
Kotare	Tongaporutu	17	184.0	98	1243.0	94	58	Jan 1998
Kaka Rd	Okoki	17	238.5	121	1289.5	93	58	Aug 1990
Pohokura Saddle	Pohokura	15	186.5	98	1207.0	97	61	Aug 1990
Stony	Mangatete Rd	20	202.0	105	1415.5	109	73	Dec 2003
Kapoaiaia	Cape Egmont	19	146.8	110	1079.2	114	78	Jan 1930
Taungatara	Te Kiri	20	191.5	128	1115.0	110	73	Dec 2004
Kaupokonui	Manaia	18	129.0	121	757.5	99	66	Sep 1997
Duffy's Farm	Whareroa	16	131.0	138	753.0	107	69	Feb 1993
Bore 3	Patea	16	162.2	149	817.8	106	72	Feb 1994
Omaru	Charlie's Clearing	20	217.5	127	1130.0	97	65	Apr 2005
Omahine	Moana Trig	21	170.0	100	979.0	84	56	Mar 2006
Rimunui	Waitotara Valley	18	163.0	133	756.5	86	56	May 1993
Ngutuwera	Waitotara	16	139.0	125	753.0	92	59	Apr 1998
Waitotara	Coast	17	127.2	129	755.2	95	65	Sep 2015

Table 2: River Flow at 9 sites throughout the region

River and Site	Recorded Flows (m3/sec)							Records Began
	Maximum		Minimum		Mean			
	August 2021	August all previous years	August 2021	August all previous years	August 2021	August all previous years	% of normal	
Waitara at Bertrand Rd	418.222	1219.431	24.103	7.977	77.511	75.275	103	Feb 1980
Manganui at Everett Park	362.446	908.164	7.628	3.909	26.078	24.353	107	Jun 1991
Waiwhakaiho at SH3	188.783	402.747	2.743	1.850	9.748	9.115	107	Feb 1980
Waiongana at SH3a	49.850	119.982	1.185	0.425	3.512	3.446	102	Apr 1980
Kapoaiaia at Lighthouse	23.178	34.826	0.834	0.295	2.244	1.404	160	Feb 1986
Waingongoro at Eltham Rd	84.240	148.385	3.065	0.642	5.710	4.163	137	Dec 1974
Punehu at Pihama*	25.934	37.940	0.740	0.365	1.852	1.579	117	Jan 1970
Tawhiti at Duffy's Farm	2.662	16.298	0.633	0.281	1.147	1.265	91	May 1985
Whenuakura at Nicholson Rd	100.009	228.189	5.136	2.481	15.864	14.313	111	Mar 1983

Note: * = NIWA station

Table 3: River Temperature at 10 sites throughout the region

River	Monthly Temperatures (°C)						Records Began
	Maximum		Minimum		Mean		
	August 2021	August all previous years	August 2021	August all previous years	August 2021	August all previous years	
Patea (Skinner Rd)	12.18	12.80	7.41	4.60	10.08	9.75	Dec 2003
Waingongoro (Eltham)	12.57	12.80	7.61	5.42	10.29	9.84	Jan 2000
Kapuni	13.19	14.70	6.94	5.10	10.34	9.86	Apr 1999
Kaupokonui (Manaia)	13.54	14.50	6.33	4.90	10.26	9.90	Sep 1978
Kapoaiaia	13.99	15.13	7.15	4.81	11.36	10.64	Jun 1998
Timaru	14.37	13.44	9.18	6.24	11.65	10.16	Mar 2013
Waitara	12.06	13.30	8.02	5.45	10.32	10.08	May 1981
Mangaoraka	13.99	14.70	8.12	7.00	11.49	11.29	Dec 2003
Waiwhakaiho	11.93	13.07	6.03	4.40	9.14	8.82	Jul 1980
Waingongoro (Ohawe)	12.98	14.93	7.99	6.60	10.92	10.83	Dec 2003

Table 4: Air Temperature at 17 sites throughout the region

Site	Monthly Air Temperatures (°C)						Records Began
	Maximum		Minimum		Mean		
	August 2021	August all previous years	August 2021	August all previous years	August 2021	August all previous years	
North Egmont	12.91	13.82	-0.96	-3.06	5.07	5.03	Jul 2011
Dawson Falls	13.50	13.10	-0.90	-2.03	5.37	5.11	May 2015
Mangorei (Bushline)	14.50	15.56	2.67	0.37	9.00	8.62	Feb 2017
Brooklands (NP)	19.83	20.40	1.63	1.07	11.06	11.05	Jan 2012
Motunui	16.04	17.72	1.02	1.39	10.70	10.84	Aug 2016
Mangati (Bell Block)	17.09	19.29	-0.69	1.09	11.01	11.23	Oct 2012
Hillsborough	16.66	18.28	0.98	2.08	10.08	10.92	Feb 2012
Inglewood	17.98	18.64	0.26	-1.85	10.48	9.24	Jul 2011
Stratford	18.13	19.86	0.60	-0.68	9.70	9.24	Sep 2011
Mangatete Rd (Okato)	17.92	17.95	2.76	0.69	10.29	10.43	Dec 2015
Cape Egmont	16.29	17.24	4.80	0.38	11.98	11.52	Feb 2012
Te Kiri	16.10	17.29	0.42	-0.20	10.26	10.05	Mar 2015
Kaupokonui (Manaia)	17.63	19.02	2.69	-1.58	10.96	10.63	Oct 2014
Patea	16.55	18.87	2.86	-0.29	10.83	10.49	Sep 2011
Whareroa	17.54	18.74	-0.34	-3.53	10.25	9.88	Mar 2013
Ngutuwera	15.58	17.66	0.85	-0.51	9.98	10.07	Dec 2017
Waitotara (Coast)	17.66	19.20	2.53	-0.16	10.76	10.63	Sep 2015

Table 5: Soil Moisture at 11 sites throughout the region

Site	Soil Moisture Extremes (%)						Records Began
	Maximum		Minimum		Mean		
	August 2021	August all previous years	August 2021	August all previous years	August 2021	August all previous years	
Kotare (Tongaporutu)	59.88	59.89	42.63	34.20	46.41	43.93	Jan 2012
Kaka Rd (Okoki)	44.35	58.90	40.96	27.90	42.80	44.61	Dec 2003
Motunui	32.61	46.38	29.94	25.10	31.04	32.24	May 2008
Hillsborough	36.90	39.93	30.89	23.89	32.90	30.47	Mar 2012
Pohokura Saddle	52.27	59.60	44.15	33.40	48.25	45.96	Oct 2005
Kapoaiaia (Cape Egmont)	29.93	58.30	26.74	21.59	28.07	29.76	Oct 2004
Mangatete Rd (Okato)	31.94	35.26	17.66	12.98	21.63	19.70	Dec 2015
Te Kiri	40.68	59.80	29.38	27.09	32.50	41.05	Nov 2007
Kaupokonui (Manaia)	38.49	52.84	32.99	21.20	34.55	34.67	Oct 2004
Patea	40.21	48.10	29.65	19.57	31.28	31.65	Apr 2006
Rimunui (Waitotara Valley)	32.97	59.53	26.45	17.91	28.36	34.77	Nov 2005

Table 6: Soil Temperature at 11 sites throughout the region

Site	Soil Temperature Extremes (%)						Records Began
	Maximum		Minimum		Mean		
	August 2021	August all previous years	August 2021	August all previous years	August 2021	August all previous years	
Kotare (Tongaporutu)	11.81	14.76	8.51	4.28	9.99	9.69	Jan 2012
Kaka Rd (Okoki)	11.83	13.60	9.03	5.00	10.40	9.83	Dec 2003
Motunui	12.39	13.10	7.70	6.70	10.27	10.25	May 2008
Hillsborough	13.16	13.60	9.17	7.33	10.95	10.76	Mar 2012
Pohokura Saddle	11.30	12.35	6.70	6.18	9.26	9.46	Oct 2005
Kapoaiaia (Cape Egmont)	15.99	14.20	8.82	7.30	12.19	11.23	Oct 2004
Mangatete Rd (Okato)	12.90	13.20	7.30	6.10	10.48	10.46	Dec 2015
Te Kiri	13.60	14.10	6.90	4.90	10.54	10.04	Nov 2007
Kaupokonui (Manaia)	13.30	13.50	9.60	6.70	11.46	10.30	Oct 2004
Patea	14.06	13.80	7.54	5.20	11.02	10.34	Apr 2006
Rimunui (Waitotara Valley)	13.43	15.70	7.55	5.69	10.44	10.74	Nov 2005

General Comments:

Rainfall for August ranged between 74% and 149% of normal, with an average of 110%. Patea recorded 162.2mm of rain which was 149% of normal, while Brooklands Zoo recorded just 74% of normal with 127.6mm. Twenty-two of the 27 sites where rainfall is measured, recorded near or above normal for the month. The sites that recorded below normal were: Inglewood (87%), Brooklands Zoo (74%), Hillsborough (76%), Bell Block (82%) and Motunui 93%.

Year to date rainfall is sitting between 84% and 121% of normal, with an average of 101%. Omahine at Moana Trig has recorded just 84% of normal to date with 979mm, while Dawson Falls has recorded 121% of normal to date with 4826mm and has already received 81% of its total average annual rainfall of 5928mm.

River flows were above normal for all sites by between 102 and 160% except the Tawhiti Stream at Duffys Farm (Whareroa). This site had a mean August flow of 1,147 L/s, which was 118 L/s lower than its long term August average.

Water temperatures were all above normal for the month by between 0.09°C and 1.49°C. The Timaru Stream at Tataraimaka recorded a new August maximum with 14.37°C. This was 0.93°C warmer than the previous August maximum.

The average air temperature, excluding Te Maunga, for the month was 10.60°C, which is 0.16°C warmer than the historical August average. Brooklands Zoo recorded the highest air temperature for the month with 19.88°C, while Bell Block recorded the lowest with -0.69°C. Dawson Falls recorded a new maximum air temperature for August with 13.50°C (previous maximum 13.10°C), while Hillsborough and Motunui recorded new minimum air temperatures with 0.98°C and 1.02°C respectively.

Seven of the 11 sites recorded below normal soil moisture for August by between 0.12% and 8.55%. The remaining four sites of Kotare (Tongaporutu), Hillsborough, Pohokura Saddle and Okato recorded above normal by between 1.93% and 2.48%.

Two new maximum soil temperatures were recorded for the month, which occurred at Cape Egmont (15.99°C) and Patea (14.06°C). All sites recorded above normal soil temperature by between 0.02°C and 1.16°C, except for Pohokura Saddle and Waitotara Valley, which recorded below normal by 0.20°C and 0.30°C respectively.

WINTER RAINFALL

Winter rainfall, consisting of the months June, July and August, ranged between 79% and 137% of normal, with an average of 103%. Dawson Falls recorded 137% of normal (2537mm), which was mainly due to the site recording twice its normal rainfall in July. At the other end Brooklands Zoo and Hillsborough have recorded just 79% of normal with 394mm and 446mm respectively. Eight sites recorded below normal for Winter, and these sites were: Hillsborough (79%), Brooklands Zoo (79%), Bell Block (87%), Motunui (84%), Everett Park (94%), Inglewood (92%), Kotare - Tongaporutu (85%) and Omahine (92%). Te Maunga sites recorded between 110% and 137% of normal for the Winter.