

TARANAKI REGIONAL COUNCIL MONTHLY RAINFALL AND RIVER REPORT FOR March 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)	14	728.0	174	1223.5	100	17	Nov 1990
Dawson Falls	Ntnl Park (South)	15	567.0	153	1174.5	114	20	Feb 1933
Kahui Hut	Ntnl Park (West)	15	457.5	145	877.0	99	17	Nov 2005
Mangorei Upper	Near bushline	15	497.5	-	801.0	-	-	Feb 2017
Hillsborough		13	247.0	174	428.5	127	24	Feb 2012
Brooklands	New Plymouth	13	193.8	148	346.6	113	22	Jan 1872
Mangati	Bell Block	13	187.8	180	349.2	127	24	Oct 2012
Weston's Farm	Motunui	10	212.0	212	410.6	144	26	Feb 1998
Waiwhakaiho	Egmont Village	13	308.0	202	504.5	113	21	Aug 1990
Manganui	Everett Park	11	223.5	164	433.0	112	21	Jan 1987
Oxi' Ponds	Inglewood	12	223.0	154	401.5	96	17	May 1999
TRC	Stratford	11	201.5	161	397.5	118	20	Jul 1998
Mangaehu	Toko (Huinga)	11	181.0	180	338.0	119	22	Jul 1998
Kotare	Tongaporutu	13	218.0	188	457.0	121	21	Jan 1998
Kaka Rd	Okoki	12	217.0	162	403.5	98	18	Aug 1990
Pohokura Saddle	Pohokura	12	204.0	169	394.5	111	20	Aug 1990
Stony	Mangatete Rd	12	264.5	218	424.0	124	22	Dec 2003
Kapoaiaia	Cape Egmont	12	195.4	225	382.2	139	28	Jan 1930
Taungatara	Te Kiri	13	109.5	123	287.5	119	19	Dec 2004
Kaupokonui	Manaia	11	123.0	173	252.0	127	22	Sep 1997
Duffy's Farm	Whareroa	10	135.5	190	248.0	129	23	Feb 1993
Bore 3	Patea	12	123.6	178	279.8	143	24	Feb 1994
Omaru	Charlie's Clearing	11	151.0	129	336.5	108	19	Apr 2005
Omahine	Moana Trig	11	131.5	120	274.0	89	16	Mar 2006
Rimunui	Waitotara Valley	10	112.0	143	212.0	89	16	May 1993
Ngutuwera	Waitotara	7	108.0	137	237.5	101	18	Apr 1998
Waitotara	Coast	10	144.6	166	264.6	112	23	Sep 2015

Table 2: River Flow at 9 sites throughout the region

River and Site	Recorded Flows (m3/sec)							Records Began
	Maximum		Minimum		Mean			
	March 2021	March all previous years	March 2021	March all previous years	March 2021	March all previous years	% of normal	
Waitara at Bertrand Rd	273.436	2050.637	5.758	4.588	25.269	31.632	80	Feb 1980
Manganui at Everett Park	217.054	470.065	3.489	2.499	13.704	10.267	133	Jun 1991
Waiwhakaiho at SH3	214.806	517.160	1.752	1.479	9.153	5.671	161	Feb 1980
Waiongana at SH3a	35.364	221.268	0.421	0.253	1.943	1.577	123	Apr 1980
Kapoaiaia at Lighthouse	27.997	37.906	0.283	0.186	0.935	0.696	134	Feb 1986
Waiongoro at Eltham Rd	22.812	73.061	0.388	0.183	1.289	1.445	89	Dec 1974
Punehu at Pihama*	19.047	89.486	0.244	0.178	0.480	0.709	68	Jan 1970
Tawhiti at Duffy's Farm	4.587	7.719	0.401	0.075	0.588	0.359	164	May 1985
Whenuakura at Nicholson Rd	45.096	324.930	2.220	1.330	4.328	5.447	79	Mar 1983

Note: * = NIWA station

Table 3: River Temperature at 10 sites throughout the region

River	Monthly Temperatures (°C)						Records Began
	Maximum		Minimum		Mean		
	March 2021	March all previous years	March 2021	March all previous years	March 2021	March all previous years	
Patea (Skinner Rd)	19.44	20.17	11.39	9.80	14.89	15.50	Dec 2003
Waiongoro (Eltham)	19.35	22.20	11.39	10.47	14.84	15.96	Jan 2000
Kapuni	19.75	25.20	11.25	9.60	15.47	16.76	Apr 1999
Kaupokonui (Manaia)	21.82	26.17	11.61	10.18	16.53	17.46	Sep 1978
Kapoaiaia	21.53	25.45	13.31	10.77	17.08	17.77	Jun 1998
Timaru	19.12	21.12	12.18	11.12	15.19	16.11	Mar 2013
Waitara	22.64	24.90	15.16	12.40	17.95	18.26	May 1981
Mangaoraka	20.96	22.70	13.02	10.60	16.49	17.04	Dec 2003
Waiwhakaiho	17.20	20.47	11.14	8.40	14.10	14.68	Jul 1980
Waiongoro (Ohawe)	20.44	22.40	13.17	11.70	16.47	17.28	Dec 2003

Table 4: Air Temperature at 17 sites throughout the region

Site	Monthly Air Temperatures (°C)						Records Began
	Maximum		Minimum		Mean		
	March 2021	March all previous years	March 2021	March all previous years	March 2021	March all previous years	
North Egmont	19.48	22.37	5.40	4.16	11.57	12.58	Jul 2011
Dawson Falls	20.18	22.38	4.26	3.53	11.37	12.58	May 2015
Mangorei (Bushline)	20.16	23.89	8.25	8.01	14.85	15.22	Feb 2017
Brooklands (NP)	25.58	30.90	8.71	5.50	17.32	17.74	Jan 2012
Motunui	22.70	26.63	8.57	8.00	16.62	17.34	Aug 2016
Mangati (Bell Block)	23.39	28.22	8.01	4.78	17.08	17.52	Oct 2012
Hillsborough	23.26	27.93	7.65	5.84	16.10	17.37	Feb 2012
Inglewood	25.51	28.73	6.74	3.96	16.29	16.29	Jul 2011
Stratford	25.14	28.22	6.09	3.09	15.87	15.90	Sep 2011
Mangatete Rd (Okato)	23.91	26.82	8.13	6.49	15.79	17.32	Dec 2015
Cape Egmont	22.50	26.44	8.33	6.36	17.10	17.52	Feb 2012
Te Kiri	23.78	25.67	5.72	7.35	15.53	17.00	Mar 2015
Kaupokonui (Manaia)	25.87	27.30	3.98	3.77	16.10	17.18	Oct 2014
Patea	25.84	27.74	5.79	5.46	16.33	16.96	Sep 2011
Whareroa	24.79	27.69	<i>1.18</i>	0.61	15.19	16.30	Mar 2013
Ngutuwera	25.30	26.73	6.63	5.66	15.99	16.29	Dec 2017
Waitotara (Coast)	27.30	28.86	5.11	6.38	16.48	17.35	Sep 2015

Table 5: Soil Moisture at 11 sites throughout the region

Site	Soil Moisture Extremes (%)						Records Began
	Maximum		Minimum		Mean		
	March 2021	March all previous years	March 2021	March all previous years	March 2021	March all previous years	
Kotare (Tongaporutu)	50.52	57.52	21.31	16.10	33.89	30.29	Jan 2012
Kaka Rd (Okoki)	42.91	53.10	28.06	14.00	36.76	32.20	Dec 2003
Motunui	30.52	39.60	17.61	11.19	19.74	22.65	May 2008
Hillsborough	28.99	35.40	16.96	8.35	20.65	20.09	Mar 2012
Pohokura Saddle	52.50	59.64	29.35	13.80	38.27	29.97	Oct 2005
Kapoaiaia (Cape Egmont)	29.90	45.00	22.61	6.58	24.88	16.13	Oct 2004
Mangatete Rd (Okato)	25.23	28.55	6.19	4.32	11.86	10.73	Dec 2015
Te Kiri	27.53	55.00	17.48	10.10	20.72	23.70	Nov 2007
Kaupokonui (Manaia)	27.23	39.30	13.46	4.10	14.79	17.56	Oct 2004
Patea	31.42	41.27	24.57	9.88	25.74	20.46	Apr 2006
Rimunui (Waitotara Valley)	27.02	59.71	17.65	7.82	21.69	23.72	Nov 2005

Table 6: Soil Temperature at 11 sites throughout the region

Site	Soil Temperature Extremes (%)						Records Began
	Maximum		Minimum		Mean		
	March 2021	March all previous years	March 2021	March all previous years	March 2021	March all previous years	
Kotare (Tongaporutu)	20.12	22.92	16.37	13.12	17.94	17.75	Jan 2012
Kaka Rd (Okoki)	20.16	22.40	17.09	12.10	18.18	18.01	Dec 2003
Motunui	19.15	20.83	15.58	14.60	17.08	17.68	May 2008
Hillsborough	20.53	22.26	15.93	15.11	17.91	18.62	Mar 2012
Pohokura Saddle	20.57	21.27	16.52	13.10	17.86	17.52	Oct 2005
Kapoaiaia (Cape Egmont)	22.98	24.46	17.44	13.90	19.61	19.03	Oct 2004
Mangatete Rd (Okato)	22.20	23.10	15.20	12.18	18.15	18.95	Dec 2015
Te Kiri	20.90	21.93	13.90	12.40	17.31	17.67	Nov 2007
Kaupokonui (Manaia)	22.10	23.90	16.80	14.40	19.13	18.31	Oct 2004
Patea	22.80	26.47	15.86	13.10	18.68	18.49	Apr 2006
Rimunui (Waitotara Valley)	23.34	25.20	16.82	14.10	19.69	20.01	Nov 2005

General Comments:

Rainfall for March ranged between 119% and 225% of normal with an average of 168% across all sites. This is largely due to the heavy rain that fell across the region over the last four days of the month, which resulted in the majority of sites receiving more than double the rainfall that fell in the first 27 days of March. Due to the wet end of the month, five sites recorded new maximum rainfall totals for March. These sites were Kahui Hut (457.5 mm), Hillsborough (247.0 mm), Bell Block (187.8 mm), Egmont Village (308.0 mm) and Okato (264.5 mm). Cape Egmont received 225% of normal rainfall with 195.4 mm. Te Maunga recorded between 145% and 174% of normal for the month.

Year to date rainfall is ranging between 89% and 144% of normal, with an average of 115% across all sites. Omahine at Moana Trig and Rimunui Station, in the Waitotara Valley, have recorded just 89% of normal rainfall to date with 274.0 mm and 212.0 mm respectively. Kahui Hut, Inglewood and Okoki at Kaka Rd have also received below normal to date, with 99%, 96% and 98% respectively.

River flows were mixed for the month. Four rivers recorded flows ranging from 68% and 89% below their March normal (Waitara River, Waingongoro Stream at Eltham, Punehu Stream and Whenuakura River). The remaining five rivers recorded flows ranging from 123% to 164% above their March normal (Manganui River, Waiwhakaiho River, the Waiongana Stream, the Kapoiaia Stream and the Tawhiti Stream).

Water temperatures were below normal throughout the region by between 0.31°C and 1.29°C. No new extremes were recorded.

Air temperatures for the region were all below normal for the month, with the average air temperature (excluding Te Maunga) being 16.27°C. This is 0.74°C cooler than the long term March average. Te Kiri and Waitotara at Coast recorded new March minimums with 5.72°C and 5.11°C respectively. The Waitotara at Coast site recorded the maximum air temperature for the region with 27.30°C, while Whareroa recorded the coolest with 1.18°C.

Soil moistures for the month were mixed with four sites (Motunui, Te Kiri, Manaia and Waitotara Valley) being below normal by between 2.03% and 2.98%, while the other seven sites of Kotare, Okoki, Hillsborough, Pohokura Saddle, Cape Egmont, Okato and Patea recording above normal by between 0.56% and 8.75%. Soil temperatures were also mixed with five sites (Motunui, Hillsborough, Okato, Te Kiri and Waitotara Valley) recording below normal by between 0.32°C and 0.80°C. The other six sites of Kotare, Okoki, Pohokura Saddle, Cape Egmont, Manaia and Patea recorded above normal by between 0.17°C and 0.82°C.