

## TARANAKI REGIONAL COUNCIL MONTHLY RAINFALL AND RIVER REPORT FOR October 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	681.0	87	5909.5	99	84	Nov 1990
Dawson Falls	Ntnl Park (South)	23	602.5	108	6209.5	122	105	Feb 1933
Kahui Hut	Ntnl Park (West)	26	471.5	92	4635.5	103	88	Nov 2005
Mangorei Upper	Near bushline	21	423.0	-	3347.5	-	-	Feb 2017
Hillsborough		19	172.5	128	1528.0	99	87	Feb 2012
Brooklands	New Plymouth	21	166.00	134	1347.4	97	84	Jan 1872
Mangati	Bell Block	19	136.2	139	1285.0	99	87	Oct 2012
Weston's Farm	Motunui	20	147.4	99	1319.2	98	83	Feb 1998
Waiwhakaiho	Egmont Village	19	290.0	122	2189.0	111	92	Aug 1990
Manganui	Everett Park	18	208.0	103	1769.5	103	86	Jan 1987
Oxi' Ponds	Inglewood	18	227.0	101	1867.0	96	80	May 1999
TRC	Stratford	18	214.0	107	1860.0	110	95	Jul 1998
Mangaehu	Toko (Huinga)	20	125.5	80	1334.0	101	86	Jul 1998
Kotare	Tongaporutu	22	216.0	96	1634.0	92	76	Jan 1998
Kaka Rd	Okoki	21	229.0	103	1709.0	95	77	Aug 1990
Pohokura Saddle	Pohokura	19	195.5	99	1605.0	98	81	Aug 1990
Stony	Mangatete Rd	20	195.5	110	1771.0	107	91	Dec 2003
Kapoaiaia	Cape Egmont	14	115.2	94	1303.4	110	94	Jan 1930
Taungatara	Te Kiri	19	126.5	88	1387.5	107	90	Dec 2004
Kaupokonui	Manaia	11	76.5	67	950.0	97	82	Sep 1997
Duffy's Farm	Whareroa	12	63.0	62	910.5	101	84	Feb 1993
Bore 3	Patea	14	86.2	77	1057.0	109	92	Feb 1994
Omaru	Charlie's Clearing	21	187.5	109	1519.0	101	87	Apr 2005
Omahine	Moana Trig	20	143.5	80	1273.0	85	73	Mar 2006
Rimunui	Waitotara Valley	16	140.0	107	1031.5	91	76	May 1993
Ngutuwera	Waitotara	15	97.5	72	1001.0	93	78	Apr 1998
Waitotara	Coast	12	54.4	62	962.6	98	83	Sep 2015

**Table 2: River Flow at 9 sites throughout the region**

River and Site	Recorded Flows (m3/sec)						Records Began
	Maximum		Minimum		Mean		
	October 2021	October all previous years	October 2021	October all previous years	October 2021	October all previous years	
Waitara at Bertrand Rd	473.024	1541.591	25.881	7.136	69.231	76.542	Feb 1980
Manganui at Everett Park	403.731	977.551	7.758	3.804	24.539	26.158	Jun 1991
Waiwhakaiho at SH3	248.059	407.311	2.931	1.939	10.662	10.216	Feb 1980
Waiongana at SH3a	73.794	131.982	1.169	0.537	3.552	3.641	Apr 1980
Kapoaiaia at Lighthouse	29.446	35.190	0.631	0.284	2.123	1.481	Feb 1986
Waiongoro at Eltham Rd	36.847	140.374	2.324	0.700	3.678	3.631	Dec 1974
Punehu at Pihama*	20.272	69.012	0.485	0.302	1.228	1.442	Jan 1970
Tawhiti at Duffy's Farm	0.997	18.320	0.238	0.206	0.323	1.002	May 1985
Whenuakura at Nicholson Rd	138.252	285.330	4.665	2.036	11.557	13.889	Mar 1983

Note: \* = NIWA station

**Table 3: River Temperature at 10 sites throughout the region**

River	Monthly Temperatures (°C)						Records Began
	Maximum		Minimum		Mean		
	October 2021	October all previous years	October 2021	October all previous years	October 2021	October all previous years	
Patea (Skinner Rd)	15.57	17.70	9.18	7.57	12.66	12.15	Dec 2003
Waiongoro (Eltham)	16.55	18.25	9.10	7.20	12.76	12.36	Jan 2000
Kapuni	18.88	21.30	8.69	6.80	13.41	12.68	Apr 1999
Kaupokonui (Manaia)	20.59	22.86	9.03	4.95	14.31	13.57	Sep 1978
Kapoaiaia	18.89	21.83	10.38	6.40	14.71	14.07	Jun 1998
Timaru	14.02	18.49	8.88	8.04	11.85	12.50	Mar 2013
Waitara	16.55	19.30	11.21	8.85	14.11	13.81	May 1981
Mangaoraka	17.16	19.49	10.75	8.30	14.22	13.58	Dec 2003
Waiwhakaiho	15.21	19.30	7.97	5.60	11.73	11.48	Jul 1980
Waiongoro (Ohawe)	18.06	18.75	11.02	8.20	14.31	13.54	Dec 2003

**Table 4: Air Temperature at 17 sites throughout the region**

Site	Monthly Air Temperatures (°C)						Records Began
	Maximum		Minimum		Mean		
	October 2021	October all previous years	October 2021	October all previous years	October 2021	October all previous years	
North Egmont	16.23	19.85	0.70	-1.14	8.39	7.86	Jul 2011
Dawson Falls	17.78	21.21	0.56	-0.57	8.91	8.19	May 2015
Mangorei (Bushline)	17.33	18.72	3.74	1.21	11.65	10.58	Feb 2017
Brooklands (NP)	22.10	24.61	4.34	3.09	14.34	13.61	Jan 2012
Motunui	19.47	21.00	3.48	1.74	13.70	13.13	Aug 2016
Mangati (Bell Block)	19.99	21.95	3.78	1.70	14.05	13.41	Oct 2012
Hillsborough	19.93	21.85	3.23	2.63	13.30	12.75	Feb 2012
Inglewood	23.39	23.72	2.08	-0.52	14.47	12.08	Jul 2011
Stratford	21.98	23.54	3.06	1.76	13.29	11.62	Sep 2011
Mangatete Rd (Okato)	21.92	20.72	5.75	3.04	13.20	12.70	Dec 2015
Cape Egmont	18.91	19.82	6.43	3.67	14.41	13.70	Feb 2012
Te Kiri	20.42	19.89	4.85	2.79	13.32	12.44	Mar 2015
Kaupokonui (Manaia)	21.53	22.02	4.97	0.81	14.21	13.20	Oct 2014
Patea	20.96	21.75	5.10	3.03	13.82	13.06	Sep 2011
Whareroa	21.78	21.97	1.42	-0.65	13.77	12.90	Mar 2013
Ngutuwera	21.86	22.54	5.46	2.99	13.38	12.51	Dec 2017
Waitotara (Coast)	22.31	23.17	5.43	2.61	14.19	13.19	Sep 2015

**Table 5: Soil Moisture at 11 sites throughout the region**

Site	Soil Moisture Extremes (%)						Records Began
	Maximum		Minimum		Mean		
	October 2021	October all previous years	October 2021	October all previous years	October 2021	October all previous years	
Kotare (Tongaporutu)	58.54	59.26	41.22	33.40	45.83	41.93	Jan 2012
Kaka Rd (Okoki)	46.06	59.10	40.32	28.70	42.72	43.63	Dec 2003
Motunui	31.68	41.69	28.99	22.28	30.51	31.37	May 2008
Hillsborough	31.44	37.78	26.80	22.95	28.82	29.71	Mar 2012
Pohokura Saddle	52.95	59.15	43.63	23.80	47.45	43.89	Oct 2005
Kapoaiaia (Cape Egmont)	27.09	52.80	24.15	16.85	25.60	27.53	Oct 2004
Mangatete Rd (Okato)	30.75	33.02	16.63	12.02	20.37	18.37	Dec 2015
Te Kiri	39.91	59.80	28.37	27.42	31.26	39.08	Nov 2007
Kaupokonui (Manaia)	37.24	46.90	31.95	19.90	33.50	31.45	Oct 2004
Patea	34.50	51.90	27.09	15.91	29.27	29.24	Apr 2006
Rimunui (Waitotara Valley)	31.33	59.33	24.18	17.80	26.66	33.18	Nov 2005

**Table 6: Soil Temperature at 11 sites throughout the region**

Site	Soil Temperature Extremes (%)						Records Began
	Maximum		Minimum		Mean		
	October 2021	October all previous years	October 2021	October all previous years	October 2021	October all previous years	
Kotare (Tongaporutu)	17.18	19.16	10.90	8.12	14.42	13.16	Jan 2012
Kaka Rd (Okoki)	16.61	19.30	11.91	8.00	14.51	13.45	Dec 2003
Motunui	17.75	17.53	10.08	8.60	14.34	13.09	May 2008
Hillsborough	16.82	17.36	11.41	10.61	14.37	14.03	Mar 2012
Pohokura Saddle	16.12	16.51	9.61	7.50	13.27	12.81	Oct 2005
Kapoaiaia (Cape Egmont)	20.20	19.54	12.79	8.70	16.96	14.35	Oct 2004
Mangatete Rd (Okato)	18.00	18.20	11.40	9.40	14.99	14.17	Dec 2015
Te Kiri	18.50	19.60	11.30	6.70	14.76	13.20	Nov 2007
Kaupokonui (Manaia)	18.90	19.50	13.30	9.10	16.09	13.93	Oct 2004
Patea	20.99	21.10	11.14	7.70	16.56	14.16	Apr 2006
Rimunui (Waitotara Valley)	21.33	22.90	13.20	10.70	17.53	16.42	Nov 2005

**General Comments:**

Rainfall for October was mixed with rainfall ranging between 62% and 139% of normal, with an average of 97%. Bell Block recorded 139% of its normal October rainfall with 136.2 mm, while Whareroa and Waitotara Coast recorded just 62% of their normal October rainfall with 63.0 mm and 54.4 mm respectively. Te Maunga recorded between 87% and 108% of normal for the month, with rainfall ranging between 471.5 mm and 681.0 mm.

Year to date rainfall is between 85% and 122%, with an average of 101%. Dawson Falls has recorded 122% of normal to date with 6209.5 mm, which is 105% if its normal annual rainfall. At the other extreme, Omahine at Moana Trig has recorded just 85% of normal to date, with 1273.0 mm. There are just four sites that have recorded below 95% of their normal rainfall to date and these sites are: Tongaporutu (92%), Omahine at Moana Trig (85%), Waitotara Valley (91%) and Ngutuwaera (93%).

River flows were mixed for the month, with just three sites (Waiwhakaiho River, Kapoiaia Stream and Waingongoro River) recording above normal flows for the month, the remaining six sites, all recorded below normal mean October flows.

Water temperatures were above normal by between 0.25°C and 0.77°C for all sites except the Timaru Stream. The Timaru Stream had a mean October water temperature of 11.85°C, which was 0.65°C cooler than the long term average.

The average air temperature for the month, excluding Te Maunga, was 13.82°C, which was 0.94°C warmer than the long term October average. Inglewood recorded the maximum air temperature for the month with 23.39°C, while Whareroa recorded the coolest with 1.42°C. Okato and Te Kiri recorded new October maximums with 21.92°C and 20.42°C respectively.

Soil moisture for the month was mixed with Tongaporutu, Pohokura Saddle, Okato, Manaia and Patea recording above normal by between 0.03% and 3.90%. The remaining six sites of, Okoki, Motunui, Hillsborough, Cape Egmont, Te Kiri and Waitotara Valley recorded below normal by between 0.86% and 7.82%. Soil temperatures were above normal for all sites, with an average soil temperature for the region of 15.25°C. This was 1.36°C warmer than the long term October average of 13.89°C.