TARANAKI REGIONAL COUNCIL MONTHLY RAINFALL AND RIVER REPORT FOR June 2021

Provisional Data Only Note: some sites record a number of parameters

Rainfall at 27 sites throughout the region Table 1:

	an at 27 sites thi ough		Monthly			Year to Date			
Station	Sub-region	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	Records Began	
Nth Egmont	Ntnl Park (North)	22	740.0	104	3019.5	97	43	Nov 1990	
Dawson Falls	Ntnl Park (South)	18	595.5	96	2884.5	105	49	Feb 1933	
Kahui Hut	Ntnl Park (West)	20	588.5	98	2431.5	101	46	Nov 2005	
Mangorei Upper	Near bushline	17	443.5	-	1904.5	-	-	Feb 2017	
Hillsborough		16	153.0	89	921.5	107	53	Feb 2012	
Brooklands	New Plymouth	16	145.0	92	799.8	100	50	Jan 1872	
Mangati	Bell Block	16	143.6	97	794.6	106	54	Oct 2012	
Weston's Farm	Motunui	15	139.4	83	783.0	103	49	Feb 1998	
Waiwhakaiho	Egmont Village	16	262.0	112	1232.0	114	52	Aug 1990	
Manganui	Everett Park	14	177.0	93	1021.5	109	50	Jan 1987	
Oxi' Ponds	Inglewood	16	227.5	99	1059.5	101	45	May 1999	
TRC	Stratford	12	196.5	101	910.0	101	46	Jul 1998	
Mangaehu	Toko (Huinga)	13	158.0	102	731.0	101	47	Jul 1998	
Kotare	Tongaporutu	13	145.0	76	892.5	96	41	Jan 1998	
Kaka Rd	Okoki	16	175.5	91	870.0	89	39	Aug 1990	
Pohokura Saddle	Pohokura	16	155.5	88	804	92	41	Aug 1990	
Stony	Mangatete Rd	18	212.0	116	1015.5	113	53	Dec 2003	
Kapoaiaia	Cape Egmont	16	23.8	87	773.6	116	56	Jan 1930	
Taungatara	Te Kiri	16	192.5	132	734.0	105	48	Dec 2004	
Kaupokonui	Manaia	11	119.5	100	525.5	98	46	Sep 1997	
Duffy's Farm	Whareroa	13	122.5	117	518.5	104	48	Feb 1993	
Bore 3	Patea	14	140.2	137	569.8	104	50	Feb 1994	
Omaru	Charlie's Clearing	19	163.0	92	700.5	86	40	Apr 2005	
Omahine	Moana Trig	14	162.5	92	663.5	81	38	Mar 2006	
Rimunui	Waitotara Valley	14	124.5	92	462.0	74	34	May 1993	
Ngutuwera	Waitotara	13	121.5	96	515.5	89	40	Apr 1998	
Waitotara	Coast	15	125.2	132	539.8	94	47	Sep 2015	



Table 2: River Flow at 9 sites throughout the region

		Recorded Flows (m3/sec)					
	Maxir	Maximum Minimum		Mean		Records	
River and Site	June 2021	June all previous years	June 2021	June all previous years	June 2021	June all previous years	Began
Waitara at Bertrand Rd	583.892	1669.863	14.142	6.702	70.603	75.021	Feb 1980
Manganui at Everett Park	356.868	827.732	5.945	3.819	30.332	24.071	Jun 1991
Waiwhakaiho at SH3	171.347	508.757	2.116	2.031	11.805	9.169	Feb 1980
Waiongana at SH3a	35.533	194.425	0.891	0.462	4.508	3.566	Apr 1980
Kapoaiaia at Lighthouse	30.964	64.610	0.526	0.317	2.455	1.439	Feb 1986
Waingongoro at Eltham Rd	41.365	123.651	1.383	0.515	3.499	4.045	Dec 1974
Punehu at Pihama*	24.465	59.020	0.462	0.312	1.904	1.621	Jan 1970
Tawhiti at Duffy's Farm	2.623	15.524	0.643	0.168	1.023	0.862	May 1985
Whenuakura at Nicholson Rd	92.208	491.490	2.662	2.098	11.326	12.724	Mar 1983

Note: * = NIWA station

Table 3: River Temperature at 10 sites throughout the region

	Monthly Temperatures (°C)								
River	Maximum		Mini	mum	M	ean	Records		
	June 2021	June all previous years	June 2021	June all previous years	June 2021	June all previous years	Began		
Patea (Skinner Rd)	13.13	13.51	8.42	5.30	11.02	9.96	Dec 2003		
Waingongoro (Eltham)	12.54	13.40	7.72	5.30	10.63	10.12	Jan 2000		
Kapuni	12.88	14.40	6.44	4.50	10.46	9.81	Apr 1999		
Kaupokonui (Manaia)	13.15	14.90	6.40	4.20	10.57	9.95	Sep 1978		
Kapoaiaia	14.59	15.60	7.42	3.90	12.24	10.70	Jun 1998		
Timaru	13.63	12.94	8.20	7.15	11.71	10.66	Mar 2013		
Waitara	13.05	14.23	9.05	5.80	10.99	10.07	May 1981		
Mangaoraka	14.41	14.90	9.44	6.70	12.62	11.41	Dec 2003		
Waiwhakaiho	12.71	13.34	6.60	4.60	10.11	9.23	Jul 1980		
Waingongoro (Ohawe)	13.44	14.02	8.18	5.55	11.16	10.26	Dec 2003		

Table 4: Air Temperature at 17 sites throughout the region

l'able 4: Air	remperature	at 17 sites thi	roughout the	region					
	Monthly Air Temperatures (°C)								
Site	Max	imum	Mini	mum	М	ean	Records Began		
	June 2021	June all previous years	June 2021	June all previous years	June 2021	June all previous years			
North Egmont	14.98	15.53	-1.48	-0.99	6.95	8.65	Jul 2011		
Dawson Falls	13.15	14.70	-1.25	-0.63	7.11	5.71	May 2015		
Mangorei (Bushline)	16.58	17.03	1.99	1.53	10.65	8.88	Feb 2017		
Brooklands (NP)	21.60	20.33	1.63	0.74	12.27	11.42	Jan 2012		
Motunui	19.37	19.00	1.34	0.47	11.83	10.70	Aug 2016		
Mangati (Bell Block)	19.85	20.42	0.57	-0.47	12.20	11.52	Oct 2012		
Hillsborough	18.23	18.18	1.98	0.69	11.51	11.42	Feb 2012		
Inglewood	20.74	19.64	0.41	-1.34	11.75	9.48	Jul 2011		
Stratford	19.25	18.33	2.37	-1.42	11.01	9.36	Sep 2011		
Mangatete Rd (Okato)	19.64	19.51	1.82	2.23	11.71	11.15	Dec 2015		
Cape Egmont	18.65	19.69	3.76	1.14	13.12	12.03	Feb 2012		
Te Kiri	17.88	19.70	-0.03	1.03	11.43	10.72	Mar 2015		
Kaupokonui (Manaia)	20.19	19.60	1.30	0.18	11.81	11.07	Oct 2014		
Patea	18.33	20.72	2.31	0.38	11.97	14.35	Sep 2011		
Whareroa	18.73	19.26	-0.16	-2.08	10.85	10.09	Mar 2013		
Ngutuwera	18.52	17.37	2.92	-0.56	11.53	9.72	Dec 2017		
Waitotara (Coast)	18.47	19.61	2.99	1.16	12.04	10.79	Sep 2015		

Table 5: Soil Moisture at 11 sites throughout the region

011	Maximum		Min	imum	М	ean	Records
Site	June 2021	June all previous years	June 2021	June all previous years	June 2021	June all previous years	Began
Kotare (Tongaporutu)	51.82	58.51	37.57	34.00	41.95	41.65	Jan 2012
Kaka Rd (Okoki)	43.18	59.40	3.05	15.70	40.89	42.28	Dec 2003
Motunui	32.38	50.00	29.07	19.30	30.51	30.67	May 2008
Hillsborough	36.74	41.46	29.30	15.36	31.67	24.97	Mar 2012
Pohokura Saddle	53.10	59.07	42.12	28.60	46.17	42.39	Oct 2005
Kapoaiaia (Cape Egmont)	30.84	52.30	26.41	22.84	28.00	28.88	Oct 2004
Mangatete Rd (Okato)	31.41	34.42	17.19	10.50	20.73	17.51	Dec 2015
Te Kiri	41.59	59.80	28.24	21.36	31.47	39.34	Nov 2007
Kaupokonui (Manaia)	38.87	48.60	31.90	21.40	33.95	32.79	Oct 2004
Patea	38.36	42.40	27.49	16.92	29.48	27.60	Apr 2006
Rimunui (Waitotara Valley)	33.73	65.21	25.75	17.04	27.77	35.68	Nov 2005

Table 6: Soil Temperature at 11 sites throughout the region

	Soil Temperature Extremes (%)							
011	Maximum		Min	imum	Mean		Records	
Site	June 2021	June all previous years	June 2021	June all previous years	June 2021	June all previous years	Began	
Kotare (Tongaporutu)	13.12	13.58	9.50	4.44	11.55	10.00	Jan 2012	
Kaka Rd (Okoki)	13.13	13.81	10.55	4.80	11.83	10.17	Dec 2003	
Motunui	13.86	14.23	8.25	5.30	11.68	10.67	May 2008	
Hillsborough	14.11	21.57	10.32	9.00	12.25	14.55	Mar 2012	
Pohokura Saddle	12.90	13.13	8.08	5.60	10.86	9.84	Oct 2005	
Kapoaiaia (Cape Egmont)	15.52	17.32	9.21	6.60	13.56	11.64	Oct 2004	
Mangatete Rd (Okato)	13.80	20.52	7.80	7.40	11.16	10.55	Dec 2015	
Te Kiri	14.10	14.10	8.10	5.60	11.70	10.62	Nov 2007	
Kaupokonui (Manaia)	13.60	13.80	10.30	5.30	11.99	10.60	Oct 2004	
Patea	13.88	13.83	8.24	5.20	11.79	10.51	Apr 2006	
Rimunui (Waitotara Valley)	13.51	14.80	8.64	6.50	11.53	10.56	Nov 2005	

General Comments:

Rainfall for June varied with totals ranging between 76% and 137%, with an average of 101%. Patea recorded 137% with 140.2 mm, while Kotare (Tongaporutu) recorded just 76% of normal for June with 145.0 mm. Te Maunga sites recorded near normal rainfall with totals between 96% and 104% of normal. The majority of the rainfall fell in the second half of the month, with unexpected snow falling down to levels as low as the Stratford and Midhirst areas on the 27th June.

Year to date rainfall is sitting between 74% and 116% of normal, with an average of 99%. Cape Egmont has recorded 116% of normal with 773.6 mm, while Rimunui Station has recorded just 74% for the year with 462.0 mm. We are now half way through the year and rainfall totals are ranging between 34% and 56% of normal for the full calendar year, with an average of 46%.

River flows were above normal for all sites by between 17% to 71% except for the Waitara River at Bertrand Rd, Waingongoro at Eltham and Whenuakura at Nicholson Rd which recorded 6% to 13% lower than normal.

Water temperatures were all above normal for the month by between 0.41°C and 1.54°C. The Timaru Stream recorded a new June maximum water temperature with 13.63°C, which was 0.69°C higher than the previous maximum.

The average air temperature for the region, excluding Te Maunga, for June was 11.71°C, which was 0.86°C warmer than the long term average. Eight sites recorded new June maximum air temperatures, these sites were: Brooklands (21.60°C), Motunui (19.37°C), Hillsborough (18.23°C), Inglewood (20.74°C), Stratford (19.25°C), Okato (19.64°C), Manaia (20.19°C) and Ngutuwera (18.52°C). Also North Egmont (-1.48°C), Dawson Falls (-1.25°C), Okato (1.82°C) and Te Kiri (-0.16°C) recorded new record minimums for the month of June. Brooklands Zoo recorded the warmest air temperature for the month with 21.60°C, while Whareroa recorded the coolest with -0.16°C.

Soil moisture was mixed for the month, with six sites (Kotare, Hillsborough, Pohokura Saddle, Okato, Manaia and Patea) recording above normal for the month by between 0.30% and 6.70%, while the remaining sites recorded below normal by between 0.16% and 7.91%.

Soil temperature was above normal for all sites by between 0.61°C and 1.92°C, except Hillsborough which had a mean soil temperature of 12.25°C, which was 2.20°C cooler than the long term June average. Patea recorded a new maximum soil temperature for June with 13.88°C, which was 0.05°C warmer than the previous June maximum.