

## Numerical attribute states and NOF band per site, by FMU

### Upper Waikato River FMU

Site	Median Chlorophyll a (mg/m <sup>3</sup> )			Maximum Chlorophyll a (mg/m <sup>3</sup> )			Median Total Nitrogen (mg/m <sup>3</sup> )			Median Total Phosphorus (mg/m <sup>3</sup> )		
	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase
Waikato River Ohaaki Br	A		√	A	10		A		√	A		√
Waikato River Ohakuri Tailrace Br	A	2		A	10		A	160		B		√
Waikato River Whakamaru Tailrace	A	2		A	10		A	160		B		√
Waikato River Waipapa Tailrace	A	2		A	10		A	160		B	10	

Site	Median Nitrate (mg NO <sub>3</sub> -N/L)			95 <sup>th</sup> percentile Nitrate (mg NO <sub>3</sub> -N/L)			Median Ammonia (mg NH <sub>4</sub> -N/L)			Maximum Ammonia (mg NH <sub>4</sub> -N/L)			95 <sup>th</sup> percentile E. coli (E. coli/100mL)			Clarity (metres)		
	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	Band	Increase to	No decrease
Waikato River Ohaaki Br	A		√	A		√	A		√	A		√	A		√	A		√
Waikato River Ohakuri Tailrace Br	A		√	A		√	A		√	A		√	A		√	A		√
Waikato River Whakamaru Tailrace	A		√	A		√	A		√	A		√	A		√	A	3.0	
Waikato River Waipapa Tailrace	A		√	A		√	A		√	A		√	A		√	A	3.0	
Pueto Stm Broadlands Rd Br	A		√	A		√	A		√	A		√	A		√	A	3.0	
Torepatutahi Stm Vaile Rd Br	A		√	A		√	A		√	A		√	A		√	-	-	-
Waiotapu Stm Homestead Rd Br	A	1.0		A	1.5		A	0.03		A	0.05		B		√	-	-	-

Mangakara Stm (Reporoa) SH5	A	1.0		A	1.5		A		√	A	0.05		B	540		C	1.0	
Kawaunui Stm SH5 Br	B	2.4		A	1.5		A		√	A	0.05		B	540		B	1.6	
Waiotapu Stm Campbell Rd Br	A		√	A		√	B	0.24		A	0.05		A		√	B	1.6	
Otamakokore Stm Hossack Rd	A		√	A		√	A		√	A		√	B	540		B	1.6	
Whirinaki Stm Corbett Rd	A		√	A		√	A		√	A		√	A		√	A	1.0	
Tahunaatara Stm Ohakuri Rd	A		√	A		√	A		√	A		√	B	540		B	1.6	
Mangaharake ke Stm SH30 (Off Jct SH1)	A		√	A		√	A		√	A		√	B	540		B	1.6	
Waipapa Stm (Mokai) Tirohanga Rd Br	A	1.0		A		√	A		√	A		√	B	540		B	1.6	
Mangakino Stm Sandel Rd	A		√	A		√	A		√	A		√	A		√	A	3.0	
Whakauru Stm SH1 Br	A		√	A		√	A		√	A		√	B	540		C	1.0	
Mangamingi Stm Paraonui Rd Br	B	2.4		A	1.5		A	0.03		A	0.05		B	540		C	1.0	
Pokaiwhenua Stm Arapuni - Putaruru Rd	A	1.0		A	1.5		A		√	A		√	B	540		B	1.6	
Little Waipa Stm Arapuni - Putaruru R	A	1.0		A	1.5		A		√	A	0.05		B	540		B	1.6	

Upper Waikato River FMU – current state 2010-2014

Site	Median Chlorophyll a (mg/m3)	Maximum Chlorophyll a (mg/m3)	Median Total Nitrogen (mg/m3)	Median Total Phosphorus (mg/m3)	Median Nitrate (mg/l)	95th percentile Nitrate (mg/l)	Median ammonia (mg/l)	Maximum ammonia (mg/l)	95th percentile Ecoli (Ecoli/100 ml)	Clarity Median BlackDisk (m)
Waikato River Ohaaki Br	1.5	13	134	10	0.039	0.062	0.002	0.013	70	3.83
Waikato River Ohakuri Tailrace Br	3.2	11	211	17	0.084	0.172	0.003	0.017	15	3.44
Waikato River Whakamaru Tailrace	•	•	271	20	0.101	0.230	0.003	0.010	60	1.87
Waikato River Waipapa Tailrace	4.1	25	336	25	0.164	0.320	0.007	0.017	162	1.92
Pueto Stm Broadlands Rd Br			540	93	0.450	0.530	0.003	0.009	92	1.64
Torepatutahi Stm Vaile Rd Br			625	96	0.500	0.800	0.002	0.011	216	•
Waiotapu Stm Homestead Rd Br			1860	•	1.285	1.570	0.121	0.190	281	•
Mangakara Stm (Reporoa) SH5			1580	74	1.300	1.600	0.008	0.063	1700	0.86
Kawaunui Stm SH5 Br			2990	82	2.600	3.000	0.006	0.083	2535	1.35
Waiotapu Stm Campbell Rd Br			1955	73	0.915	1.100	0.297	0.345	18	1.17
Otamakokore Stm Hossack Rd			990	144	0.740	1.190	0.006	0.024	696	1.10
Whirinaki Stm Corbett Rd			810	63	0.770	0.870	0.002	0.012	98	2.70
Tahunaatara Stm Ohakuri Rd			780	45	0.555	0.830	0.003	0.015	810	1.27
Mangaharakeke Stm SH30 (Off Jct SH1)			685	48	0.525	0.750	0.003	0.015	700	1.02
Waipapa Stm (Mokai) Tirohanga Rd Br			1355	95	1.210	1.500	0.003	0.005	1215	1.13
Mangakino Stm Sandel Rd			760	47	0.650	0.860	0.003	0.012	251	1.62
Whakauru Stm SH1 Br			470	42	0.260	0.450	0.003	0.033	2280	0.79
Mangamingi Stm Paraonui Rd Br			3495	325	2.800	3.300	0.098	0.323	2330	0.82
Pokaiwhenua Stm Arapuni - Putaruru Rd			2010	106	1.755	2.100	0.002	0.020	1455	1.26
Little Waipa Stm Arapuni - Putaruru R			1780	68	1.580	2.100	0.002	0.089	1470	1.53

## Central Waikato River FMU

Site	Median Chlorophyll a (mg/m <sup>3</sup> )			Maximum Chlorophyll a (mg/m <sup>3</sup> )			Median Total Nitrogen (mg/m <sup>3</sup> )			Median Total Phosphorus (mg/m <sup>3</sup> )		
	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase
Waikato River Narrows Boat Ramp	B	5		A	10		B	350		B	20	
Waikato River Horotiu Br	B	5		A	10		B	350		B	20	

Site	Median Nitrate (mg NO <sub>3</sub> <sup>-</sup> /N/L)			95 <sup>th</sup> percentile Nitrate (mg NO <sub>3</sub> <sup>-</sup> /N/L)			Median Ammonia (mg NH <sub>4</sub> <sup>-</sup> /N/L)			Maximum Ammonia (mg NH <sub>4</sub> <sup>-</sup> /N/L)			95 <sup>th</sup> percentile E. coli (E. coli/100mL)			Clarity (metres)		
	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	Band	Increase to	No decrease
Waikato River Narrows Boat Ramp	A		√	A		√	A		√	A		√	A	260		B		√
Waikato River Horotiu Br	A		√	A		√	A		√	A		√	B	540		B	1.6	
Karapiro Stm Hickey Rd Bridge	A		√	A	1.5		A		√	A		√	B	540		C	1.0	
Mangawhero Stm Cambridge-Ohaupo Rd	A	1.0		A	1.5		A	0.03		A	0.05		B	540		C	1.0	
Mangaonua Stm Hoeka Rd	A	1.0		A	1.5		A	0.03		A	0.05		B	540		C	1.0	
Mangaone Stm Annebrooke Rd Br	B	2.4		A	1.5		A		√	A		√	B	540		C	1.0	
Mangakotukutuku Stm Peacockes Rd	A		√	A	1.5		A	0.03		A	0.05		B	540		C	1.0	
Waitawhiriwhiri Stm Edgumbe Street	A		√	A	1.5	√	B	0.24		A	0.05		B	540		C	1.0	
Kirikiroa Stm Tauhara Dr	A		√	A	1.5		A	0.03		A	0.05		B	540		C	1.0	

Central Waikato River FMU – current state 2010-2014

Site	Station	Median Chlorophyll a (mg/m3)	Maximum Chlorophyll a (mg/m3)	Median Total Nitrogen (mg/m3)	Median Total Phosphorus (mg/m3)	Median Nitrate (mg/l)	95th percentile Nitrate (mg/l)	Median ammonia (mg/l)	Maximum ammonia (mg/l)	95th percentile Ecoli (Ecoli/100ml)	Clarity Median BlackDisk (m)
Waikato River	Narrows Boat Ramp	5.5	23	410	28	0.235	0.500	0.009	0.018	340	1.68
Waikato River	Horotiu Br	6.2	23	441	36	0.260	0.530	0.007	0.029	800	1.35
Karapiro Stm	Hickey Rd Bridge			860	86	0.520	1.710	0.008	0.031	4960	0.93
Mangawhero Stm	Cambridge-Ohaupo Rd			2930	210	2.100	2.600	0.042	0.074	3185	0.25
Mangaonua Stm	Hoeka Rd			1905	54	1.505	1.920	0.037	0.052	7020	0.94
Mangaone Stm	Annebrooke Rd Br			3060	118	2.600	3.100	0.009	0.020	2220	0.97
Mangakotukutuku Stm	Peacocks Rd			1875	415	0.800	1.820	0.082	0.141	12600	0.41
Waitawhiriwhiri Stm	Edgecumbe Street			2110	91	0.880	1.240	0.258	0.347	6520	0.38
Kirikiroa Stm	Tauhara Dr			1490	63	0.815	1.580	0.103	0.198	2300	0.40

## Lower Waikato River FMU

Site	Median Chlorophyll a (mg/m <sup>3</sup> )			Maximum Chlorophyll a (mg/m <sup>3</sup> )			Median Total Nitrogen (mg/m <sup>3</sup> )			Median Total Phosphorus (mg/m <sup>3</sup> )		
	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase
Waikato River Huntly-Tainui Br	B	5		A	10		B	350		B	20	
Waikato River Mercer Br	B	5		B	25		B	350		B	20	
Waikato River Tuakau Br	B	5		B	25		B	350		B	20	

Site	Median Nitrate (mg NO <sub>3</sub> -N/L)			95 <sup>th</sup> percentile Nitrate (mg NO <sub>3</sub> -N/L)			Median Ammonia (mg NH <sub>4</sub> -N/L)			Maximum Ammonia (mg NH <sub>4</sub> -N/L)			95 <sup>th</sup> percentile E. coli (E. coli/100mL)			Clarity (metres)		
	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	Band	Increase to	No decrease
Waikato River Huntly-Tainui Br	A		√	A		√	A		√	A		√	B	540		C		1.0
Waikato River Mercer Br	A		√	A		√	A		√	A		√	B	540		-	-	-
Waikato River Tuakau Br	A		√	A		√	A		√	A		√	B	540		C		1.0
Komakorau Stm Henry Rd	A	1.0		B	3.5		B	0.24		B	0.40		B	540		C	1.0	
Mangawara Stm Rutherford Rd Br	A			A	1.5		A	0.03		A	0.05		B	540		C	1.0	
Awaroa Stm (Rotowaro) Sansons Br @ Rotowaro-Huntly Rd	A		√	A		√	A		√	A	0.05		B	540		C	1.0	
Matahuru Stm Waiterimu Road Below Confluence	A		√	A	1.5		A		√	A	0.05		B	540		C	1.0	
Whangape Stm Rangiriri-Glen Murray Rd	A		√	A		√	A		√	A	0.05		B	540		C	1.0	
Waerenga Stm	A		√	A		√	A		√	A		√	B	540		C	1.0	

SH2 Maramarua																	
Whangamarino River Jefferies Rd Br	A		√	A	1.5		A		√	A	0.05		B	540		C	1.0
Mangatangi River SH2 Maramarua	A		√	A		√	A		√	A		√	B	540		C	1.0
Mangatawhiri River Lyons Rd At Buckingham Br	A		√	A		√	A		√	A		√	B	540		B	
Whangamarino River Island Block Rd	A		√	A		√	A		√	A	0.05		B	540		C	1.0
Whakapipi Stm SH22 Br	B	2.4		B	3.5		A		√	A	0.05		B	540		C	
Ohaeroa Stm SH22 Br	A	1.0		A	1.5		A		√	A		√	B	540		C	1.0
Opuatia Stm Ponganui Rd	A		√	A		√	A		√	A		√	B	540		C	1.0
Awaroa River (Waiuku) Otaua Rd Br opp Moseley Rd	A	1.0		A	1.5		A		√	A	0.05		B	540		C	1.0

### Lower Waikato River FMU - current state 2010-2014

Site	Station	Median Chlorophyll a (mg/m3)	Maximum Chlorophyll a (mg/m3)	Median Total Nitrogen (mg/m3)	Median Total Phosphorus (mg/m3)	Median Nitrate (mg/l)	95th percentile Nitrate (mg/l)	Median ammonia (mg/l)	Maximum ammonia (mg/l)	95th percentile Ecoli (Ecoli/100ml)	Clarity Median BlackDisk (m)
Waikato River	Huntly-Tainui Br	6	19	585	45	0.365	0.900	0.005	0.015	2100	0.87
Waikato River	Mercer Br	10.5	30	662	52	0.365	0.870	0.003	0.010	1600	•
Waikato River	Tuakau Br	12	38	595	53	0.325	0.880	0.003	0.008	1700	0.61
Komakorau Stm	Henry Rd			2900	90	1.310	4.500	0.251	0.421	3800	0.17
Mangawara Stm	Rutherford Rd Br			1890	210	0.765	2.900	0.111	0.185	5445	0.25
Awaroa Stm (Rotowaro)	Sansons Br @ Rotowaro-Huntly Rd			990	12	0.700	1.190	0.021	0.093	1940	0.81

Matahuru Stm	Waiterimu Road Below Confluence		1310	98	0.715	1.710	0.016	0.060	6770	0.31
Whangape Stm	Rangiriri-Glen Murray Rd		2116	122	0.004	0.690	0.006	0.143	589	0.17
Waerenga Stm	Taniwha Rd		1115	46	0.820	1.410	0.005	0.022	5605	0.84
Whangamarino River	Jefferies Rd Br		1085	89	0.625	1.880	0.011	0.055	5175	0.51
Mangatangi River	SH2 Maramarua		493	72	0.110	1.120	0.005	0.038	6125	0.54
Mangatawhiri River	Lyons Rd At Buckingham Br		181	23	0.013	0.370	0.003	0.011	5615	1.63
Whangamarino River	Island Block Rd		1831	152	0.075	0.700	0.012	0.158	668	0.20
Whakapipi Stm	SH22 Br		3875	51	3.500	5.300	0.006	0.084	1910	1.10
Ohaeroa Stm	SH22 Br		1825	26	1.525	1.840	0.003	0.015	5125	0.81
Opuatia Stm	Ponganui Rd		1070	31	0.740	1.060	0.005	0.016	3160	0.53
Awaroa River (Waiuku)	Otaua Rd Br opp Moseley Rd		2095	47	1.410	2.400	0.021	0.144	1070	0.37

DRAFT - data being checked



# Waipa River FMU

Site	Median Nitrate (mg NO <sub>3</sub> -N/L)			95 <sup>th</sup> percentile Nitrate (mg NO <sub>3</sub> -N/L)			Median Ammonia (mg NH <sub>4</sub> -N/L)			Maximum Ammonia (mg NH <sub>4</sub> -N/L)			95 <sup>th</sup> percentile E. coli (E. coli/100mL)			Clarity (metres)		
	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	NOF Band	Decrease to	No increase	Band	Increase to	No decrease
Waipa River Mangaokewa Rd	A		√	A		√	A		√	A		√	B	540		B	1.6	
Waipa River Otewa	A		√	A		√	A		√	A		√	B	540		B		√
Waipa River SH3 Otorohanga	A		√	A		√	A		√	A		√	B	540		B	1.6	
Waipa River Pirongia-Ngutunui Rd Br	A		√	A		√	A		√	A		√	B	540		C	1.0	
Waipa River Whatawhata Bridge	A		√	A		√	A		√	A		√	B	540		C	1.0	
Ohote Stm Whatawhata/Horotiu Rd	A		√	A		√	A		√	A	0.03		B	540		C	1.0	
Kaniwhaniwha Stm Wright Rd	A		√	A		√	A		√	A		√	B	540		C	1.0	
Mangapiko Bowman Rd Stm	A	1.0		A	1.5		A		√	A	0.03		B	540		C	1.0	
Mangaohoi Stm South Branch Maru Rd	A		√	A		√	A		√	A		√	B	540		B	1.6	
Mangauika Stm Te Awamutu Borough W/S Intake	A		√	A		√	A		√	A		√	B	540		A		√
Puniu River Bartons Corner Rd Br	A		√	A		√	A		√	A		√	B	540		C	1.0	
Mangatutu	A		√	A		√	A		√	A		√	B	540		B	1.6	

Stm Walker Rd Br																		
Waitomo Stm SH31 Otorohanga	A		√	A		√	A		√	A		√	B	540		C	1.0	
Mangapu River Otorohanga	A		√	A		√	A		√	A		0.03	B	540		C	1.0	
Waitomo Stm Tumutumu Rd	A		√	A		√	A		√	A		√	B	540		B	1.6	
Mangaokewa Stm Lawrence Street Br	A		√	A		√	A		√	A		√	B	540		B	1.6	

### Waipa River FMU current state 2010-2014

Site	Station	Median Chlorophyll a (mg/m3)	Maximum Chlorophyll a (mg/m3)	Median Total Nitrogen (mg/m3)	Median Total Phosphorus (mg/m3)	Median Nitrate (mg/l)	95th percentile Nitrate (mg/l)	Median ammonia (mg/l)	Maximum ammonia (mg/l)	95th percentile Ecoli (Ecoli/100ml)	Clarity Median BlackDisk (m)
Waipa River	Mangaokewa Rd			85	16	0.380	0.600	0.003	0.017	2625	1.51
Waipa River	Otewa			366	20	0.228	0.502	0.003	0.008	2203	2.13
Waipa River	SH3 Otorohanga			600	23	0.370	1.050	0.004	0.020	3595	1.11
Waipa River	Pirongia-Ngutunui Rd Br			860	49	0.565	1.270	0.008	0.023	4875	0.63
Waipa River	Whatawhata Bridge			911	71	0.673	1.319	0.009	0.026	4003	0.59
Ohote Stm	Whatawhata/Horotiu Rd			1320	76	0.495	1.370	0.023	0.053	2320	0.55
Kaniwhaniwha Stm	Wright Rd			590	29	0.350	0.890	0.007	0.022	2070	0.87
Mangapiko Stm	Bowman Rd			2095	240	1.410	2.600	0.022	0.079	7800	0.60
Mangaohoi Stm	South Branch Maru Rd			365	53	0.230	0.390	0.003	0.008	987	1.56
Mangauika Stm	Te Awamutu Borough W/S Intake			275	8	0.210	0.280	0.002	0.003	1060	3.33
Puniu River	Bartons Corner Rd Br			910	48	0.650	1.280	0.007	0.029	3040	0.94
Mangatutu Stm	Walker Rd Br			510	20	0.380	0.880	0.003	0.012	760	1.53
Waitomo Stm	SH31 Otorohanga			755	31	0.520	0.830	0.008	0.025	1555	0.59
Mangapu River	Otorohanga			1235	60	0.860	1.360	0.015	0.058	4700	0.61
Waitomo Stm	Tumutumu Rd			765	22	0.630	0.800	0.004	0.013	2430	1.00
Mangaokewa Stm	Lawrence Street Br			780	36	0.530	0.980	0.004	0.013	6855	1.41