

2018 Fort Frances Wastewater

Month	Sewage Flows Year 2018					Usage	Calculated	Sludge	Removal Efficiency	
	Avg. Day	Max Day	Total	Total	Total	% Plant	Volume	Bins	CBOD5 0.971615527	
	Flow	Flow	Treated	ByPass	Volume	Capacity	Hauled	Hauled	Suspended Solids 0.968367732	
	m3	m3	Volume ML	Volume ML	ML		M3		Total Phosphorus 0.943438914	
January	5458.1	5955	169201		169201	61%	128.9	13	The weekly samples from December 27 th arrived at the lab on December 31 st which exceeded the 48 hour hold time for e-coli testing but the delayed test results were within limits. Operations staff had tried to fly the samples to Thunder Bay but flights were cancelled due to snow storm and then the couriers had difficulty with weather and holiday schedules.	
February	5267.8	5685	147497		147497	59%	108.3	11		
March	5409.9	6024	167707		167707	60%	95.0	9		
April	5543.1	6269	166292		166292	62%	105.7	11		
May	6804.3	13977	210932		210932	76%	129.7	12		
June	6860.6	10382	205818	1410	205818	76%	125.3	13		
July	5918.2	8623	183465		183465	66%	124.7	12		
August	5068.6	6250	157126		157126	56%	118.6	12		
September	5652.2	8044	169565		169565	63%	106.5	10		
October	7725.6	9271	239494		239494	86%	99.6	11		
November	6691.5	7840	200745		200745	74%	110.1	12		
December	5460.1	5935	169263		169263	61%	90.7	9		
Sum				1410	2187105		1343.1	135		
Average	5988		182259		182259	67%	111.9	11.3		
Max		13977	239494		239494			13		
C of A	9000	18000								

Month	BOD5/CBOD5			Suspended Solids			Total Phosphorus			Nitrogen		E. Coli	pH	
	Avg. Raw	Avg. Eff.	Avg. Load	Avg. Raw	Avg. Eff.	Avg. Load	Avg. Raw	Avg. Eff.	Avg. Load	Avg. Raw	Avg. Eff.	Geo Mean	Monthly	Monthly
	BOD	CBOD	CBOD	S.S	S.S	S.S	T.P	T.P	T.P	TKN	Total N	Counts	Minimum	Maximum
	(mg/L)	(mg/L)	(kg/day)	(mg/L)	(mg/L)	(kg/day)	(mg/L)	(mg/L)	(kg/day)	(mg/L)	(mg/L)	/100ml		
January	102.6	3.3	18.1	155.8	6.4	34.8	2.64	0.22	1.19	19.4	8.1	69.5	7.3	7.9
February	112.0	2.5	13.0	157.2	6.2	32.5	2.82	0.17	0.87	21.8	11.1	14.1	7.1	7.8
March	104.5	3.1	16.7	156.5	7.6	41.4	2.73	0.16	0.86	19.1	12.6	14.1	6.9	7.5
April	103.6	5.1	28.1	167.2	5.9	32.7	2.79	0.16	0.86	19.3	13.1	32.8	7.0	7.7
May	79.8	2.6	15.9	154.9	8.2	56.3	2.50	0.20	1.36	17.2	10.9	67.7	7.3	7.8
June	64.3	3.0	22.3	138.8	6.5	46.5	2.02	0.14	0.97	14.6	8.7	21.7	7.3	7.9
July	84.4	2.0	11.1	150.2	2.8	17.1	2.34	0.08	0.46	17.7	8.3	7.3	7.4	7.8
August	113.0	2.0	10.6	181.2	3.0	15.6	2.98	0.16	0.81	22.0	9.06	16.4	7.3	8.0
September	112.8	2.3	13.2	174.0	3.7	20.4	3.27	0.13	0.74	21.5	7.62	6.7	7.6	7.9
October	76.8	2.0	15.3	125.9	2.5	20.3	1.84	0.12	0.90	15.0	6.94	10.0	7.6	8.0
November	81.8	2.0	13.3	141.4	2.8	19.1	2.48	0.10	0.68	18.2	8.9	11.9	7.2	8.0
December	95.3	2.2	11.6	152.6	3.1	16.6	2.53	0.11	0.60	20.3	9.9	10	6.9	7.3
Average	94.2	2.7	15.8	154.6	4.9	29.4	2.6	0.15	0.86	18.8	9.6	23.5	7.2	7.8
Max	113	5.1	28.1	181.2	8.2	56.3	3.3	0.22	1.36	22	13.1	69.5	7.6	8
C of A		25	225		25	225		1.0	9.0	200	6.0	200	6.0	9.5