

2019 Fort Frances Wastewater

| Month | Sewage Flows Year 2019 | | | | | Usage | | Calculated | | Sludge | | Removal Efficiency | | |
|-----------|------------------------|--------------|---------------|--------------|--------------|------------------|---------------|-------------|-------|------------------|------------------|--------------------|-------------|-------------|
| | Avg. Day Flow | Max Day Flow | Total Treated | Total ByPass | Total Volume | % Plant Capacity | Volume Hauled | Bins Hauled | CBOD5 | Suspended Solids | Total Phosphorus | 0.968073105 | 0.968773327 | 0.943577005 |
| | m3 | m3 | Volume ML | Volume ML | ML | | M3 | | | | | | | |
| | | | | | | | | | | | | | | |
| January | 5536.2 | 5933 | 171621 | | 171621 | 62% | 136.0 | | 14 | | | | | |
| February | 5561.0 | 6023 | 155707 | | 155707 | 62% | 106.7 | | 12 | | | | | |
| March | 6180.7 | 8247 | 191603 | | 191603 | 69% | 109.2 | | 10 | | | | | |
| April | 8390.4 | 9966 | 251711 | | 251711 | 93% | 121.6 | | 13 | | | | | |
| May | 8244.3 | 10890 | 255574 | | 255574 | 92% | 135.0 | | 14 | | | | | |
| June | 7766.7 | 11807 | 233001 | | 233001 | 86% | 132.6 | | 13 | | | | | |
| July | 6850.0 | 12069 | 212351 | 178.9 | 212529.9 | 76% | 97.7 | | 9 | | | | | |
| August | 6347.5 | 8974 | 196772 | | 196772 | 71% | 136.0 | | 14 | | | | | |
| September | 10530.6 | 17630 | 315918 | | 315918 | 117% | 83.1 | | 9 | | | | | |
| October | 14228.3 | 18190 | 441076 | | 441076 | 158% | 111.1 | | 11 | | | | | |
| November | 8169.9 | 10192 | 245097 | | 245097 | 91% | 105.7 | | 12 | | | | | |
| December | 6420.9 | 7029 | 199047 | | 199047 | 71% | 104.5 | | 9 | | | | | |
| Sum | | | | 178.9 | 2869656.9 | | 1379.2 | | 140 | | | | | |
| Average | 7852 | | 239123 | | 239138 | 87% | 114.9 | | 11.7 | | | | | |
| Max | | 18190 | 441076 | | 441076 | | | | 14 | | | | | |
| ECA | 9000 | 18000 | | | | | | | | | | | | |

| Month | BOD5/CBOD5 | | | | | | Suspended Solids | | | | | | Total Phosphorus | | | | | | Nitrogen | | | | E. Coli | | pH | |
|-----------|--------------|----------------|----------------|--------------|---------------|---------------|------------------|---------------|---------------|--------------|---------------|---------------|------------------|-------------------|-------------------|------------------------|-----------------|-----------------|----------|--|--|--|---------|--|----|--|
| | Avg. Raw BOD | Avg. Eff. CBOD | Avg. Load CBOD | Avg. Raw S.S | Avg. Eff. S.S | Avg. Load S.S | Avg. Raw T.P | Avg. Eff. T.P | Avg. Load T.P | Avg. Raw TKN | Avg. Eff. TKN | Avg. Load TKN | Avg. Raw Total N | Avg. Eff. Total N | Avg. Load Total N | Geo Mean Counts /100ml | Monthly Minimum | Monthly Maximum | | | | | | | | |
| | (mg/L) | (mg/L) | (kg/day) | (mg/L) | (mg/L) | (kg/day) | (mg/L) | (mg/L) | (kg/day) | (mg/L) | (mg/L) | (kg/day) | (mg/L) | (mg/L) | (kg/day) | | | | | | | | | | | |
| January | 110.2 | 2.1 | 11.5 | 160.1 | 3.9 | 21.4 | 2.52 | 0.12 | 0.69 | 20.9 | 8.8 | 11.5 | 6.7 | 7.2 | | | | | | | | | | | | |
| February | 103.8 | 2.1 | 11.7 | 152.9 | 3.3 | 18.2 | 3.61 | 0.12 | 0.67 | 19.3 | 9.9 | 16.8 | 6.8 | 7.1 | | | | | | | | | | | | |
| March | 84.0 | 2.5 | 15.0 | 142.8 | 5.5 | 36.0 | 2.30 | 0.12 | 0.82 | 18.2 | 11.1 | 16.8 | 6.7 | 7.0 | | | | | | | | | | | | |
| April | 67.6 | 3.4 | 29.4 | 117.6 | 6.0 | 50.1 | 1.72 | 0.12 | 1.02 | 12.9 | 9.9 | 34.4 | 6.6 | 7 | | | | | | | | | | | | |
| May | 61.5 | 2.6 | 20.8 | 120.7 | 5.0 | 41.8 | 1.60 | 0.11 | 0.91 | 12.6 | 9.5 | 40.5 | 6.7 | 7.1 | | | | | | | | | | | | |
| June | 62.0 | 2.6 | 20.3 | 129.9 | 4.3 | 33.6 | 1.77 | 0.11 | 0.88 | 12.6 | 9.7 | 58.0 | 6.8 | 7.1 | | | | | | | | | | | | |
| July | 82.2 | 2.1 | 13.8 | 145.6 | 4.3 | 29.9 | 2.48 | 0.15 | 1.06 | 16.8 | 7.7 | 10.0 | 6.6 | 7.0 | | | | | | | | | | | | |
| August | 86.5 | 2.0 | 12.0 | 160.0 | 3.6 | 22.8 | 2.31 | 0.16 | 0.99 | 17.3 | 7.9 | 13.2 | 6.6 | 6.8 | | | | | | | | | | | | |
| September | 53.9 | 2.0 | 19.9 | 118.0 | 3.1 | 34.7 | 1.70 | 0.13 | 1.35 | 13.5 | 6.1 | 39.0 | 6.6 | 6.9 | | | | | | | | | | | | |
| October | 31.7 | 2.1 | 27.0 | 74.5 | 4.0 | 58.3 | 4.00 | 0.17 | 2.37 | 7.2 | 5.7 | 185.4 | 6.3 | 6.8 | | | | | | | | | | | | |
| November | 58.0 | 2.4 | 19.2 | 118.2 | 3.5 | 28.1 | 1.87 | 0.16 | 1.30 | 11.2 | 6.6 | 22.1 | 6.3 | 6.6 | | | | | | | | | | | | |
| December | 85.0 | 2.4 | 15.2 | 167.3 | 3.7 | 23.9 | 2.30 | 0.12 | 0.77 | 15.6 | 8.2 | 187.8 | 6.2 | 6.6 | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Average | 73.9 | 2.4 | 18.0 | 134.0 | 4.2 | 33.2 | 2.3 | 0.13 | 1.07 | 14.8 | 8.4 | 53.0 | 6.6 | 6.9 | | | | | | | | | | | | |
| Max | 110.2 | 3.4 | 29.4 | 167.3 | 6 | 58.3 | 4.0 | 0.17 | 2.37 | 20.9 | 11.1 | 187.8 | 6.8 | 7.2 | | | | | | | | | | | | |
| ECA | | 25 | 225 | | 25 | 225 | | 1.0 | 9.0 | | | 200 | 6.0 | 9.5 | | | | | | | | | | | | |