

# TOWN OF FORT FRANCES

## Operations and Facilities Executive Committee

### AGENDA - April 21, 2021, 8:30 AM

#### MEETING - Civic Centre

Session #005

Join Microsoft Teams Meeting

+1 807 701 5975 Canada, Thunder Bay (Toll)

Conference ID: 480 611 727#

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<b>1. <u>Call to Order</u></b>	
<b>2. <u>Disclosure of pecuniary interest and the general nature thereof</u></b>	
<b>3. <u>Approval of Previous Committee Minutes</u></b>	
3.1 Minutes from the previous meeting on March 17, 2021.	3 - 4
<b>4. <u>Items Referred from Council</u></b>	
4.1 Request from Fort Frances Canadian Bass Championship	5 - 7
<b>5. <u>New Business</u></b>	
5.1 Request for Sewer Rooting Reimbursement - 271 Biddeson Avenue	8 - 12
5.2 Application to the Regional Air Transportation Initiative	13
5.3 Award of RFP 21-OF-05 - Development of a Municipality Wide Master Stormwater Management Plan	14 - 15
<b>6. <u>Information</u></b>	
6.1 2020 Performance Report for the Fort Frances Sewage Treatment Plant	16 - 45
6.2 Fort Frances Wastewater Treatment Facility March 2021 Monthly Report	46 - 53
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6.4 Sewer and Water Data for 2021 - updated April 14, 2021	58
6.5 Airport Statistics 2021 as of March 31, 2021	59 - 60
6.6 2021 Tonnage at the Landfill Site - updated April 19, 2021	61

7. **Adjourn / Next Meeting Date**

## TOWN OF FORT FRANCES

### MINUTES

SESSION NO. #004

March 17, 2021

A meeting of the Operations & Facilities Executive Committee of the Town of Fort Frances was held in the Committee Room and via Microsoft Teams (virtual meeting resources) on Wednesday March 17, 2021 from 8:30 a.m. to 9:44 a.m.

PRESENT: Chairperson R. Wiedenhoeft - Councillor, M. Behan - Councillor, J. McTaggart - Councillor, Mayor J. Caul (ex-officio)

ALSO PRESENT: T. Rob, Manager of Operations & Facilities, D. Brown, CAO, Adam Mitchel (8:30 a.m. to 9:29 a.m.) and Randy Thoms (8:30 a.m. to 9:44 a.m.)

### **1 Call to Order/Roll Call**

1.1 The meeting was called to order at 8:30 a.m.

### **2 Disclosure of pecuniary interest and the general nature thereof**

2.1 None

### **3 Approval of Previous Committee Minutes**

3.1 Minutes from the previous meeting on March 3, 2021 - the minutes were approved as amended.

### **4 Items Referred from Council**

4.1 Request for Donation of Rain Barrels - the administration report was approved as presented.

### **5 New Business**

5.1 Implementing Asset Management Policies - this item was tabled in order for some revisions to be made.

5.2 February 2021 Drinking Water Systems Monthly Summary - the February 2021 Summary was approved as presented.

5.3 Renewal of Bearskin Annual Lease - the administration report was approved as recommended.

- 5.4 Renewal of Northern Youth Programs Lease - the administration report was approved as presented.

## **6 Information**

- 6.1 Fort Frances Wastewater Treatment Facility - February 2021 Monthly Report - the report was received and will be forwarded on to Council as information only. No action required.
- 6.2 Operations and Facilities Division - Environmental Area - Operations Statistics - February 2021 - the Environmental Stats were received and will be forwarded on to Council as information only. No action required.
- 6.3 Water and Sewer Stats - the water and sewer stats were received and will be forwarded to Council as information only. No action required.
- 6.4 2021 Tonnage at Landfill Site - updated March 10, 2021- the landfill stats were received and will be forwarded on to Council as information only. No action required.
- 6.5 Sewer and Water Data for 2021 - updated March 10, 2021 - the Sewer and Water data were received and will be forwarded on to Council as information only. No action required.

## **7 Adjourn / Next Meeting Date**

- 7.1 The meeting adjourned at 9:44 a.m.

Next meeting April 7, 2021

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Executive Committee Chair

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T. Rob, Manager of Operations & Facilities

April 21, 2021

Report To: Mayor and Council

From: Travis Rob, Manager of Operations and Facilities

**RE: Request from Fort Frances Canadian Bass Championship**

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Typically, annually the Town receives a request from the Fort Frances Canadian Bass Championship committee to provide several in-kind services to assist in putting on the annual tournament.

In 2020 there was no tournament due to the impacts of COVID-19. In 2021 the committee is asking to use Shevlin Wood Yard for parking for participants for this year's tournament where there will be no tent, entertainment, or alcohol sales this year.

The Town opens Shevlin yard for overflow parking from the Sorting Gap Marina launch throughout the year. The staff from the Sorting Gap inspect the area used for parking regularly to ensure it is safe for the parked vehicles. In 2020 Makkinga Contracting utilized Shevlin Yard as a laydown site for the work that was undertaken along Scott Street. With the lion share of the work being completed in 2020, there will not be a need to stage a tremendous amount of materials or equipment on site for the work this year, so there should not be a major impact to their operations by the tournament use.

It is the recommendation of the Operations and Facilities Executive Committee to allow for the use of Shevlin Yard for parking of trucks and trailers relating to the 2021 Fort Frances Canadian Bass Championship.

Respectfully Submitted



Travis Rob, P.Eng

**Council approval of this report will agree with the recommendation of the Operations and Facilities Executive Committee to allow for the use of Shevlin Yard for parking of trucks and trailers relating to the 2021 Fort Frances Canadian Bass Championship.**

Manager of Operations and Facilities

2021April7 Request from FFCBC for use of Shevlin Yard.docx

April 19, 2021

Report To: Operations and Facilities Executive Committee

From: Michael Behan, Chair of Community Services Executive Committee

**RE: Fort Frances Canadian Bass Tournament Request**

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The Fort Frances Canadian Bass Tournament has requested the use of the Shevlin Woodyard as an area to park trucks and boat trailers during the 2021 Fort Frances Canadian Bass Tournament being held July 22-24, 2021. This is a request that has been made for several years and has been granted. This year they note that the tournament will not have the traditional tent/entertainment/food/alcohol available at the waterfront.

In 2020 the Woodyard was not utilized as overflow parking for the Sorting Gap Marina as the parking available to its users was sufficient. Allowing the anglers to use the woodyard for these dates should not impact operations at the Sorting Gap Marina.

**Recommendation**

The Community Services Executive Committee recommends to the Operations and Facilities Executive Committee to allow the parking of Trucks and Trailers during the tournament being held from July 22-24, 2021.

Respectfully Submitted,

Michael Behan,  
Chair of Community Services Executive Committee



March 3, 2021

Town of Fort Frances  
320 Portage Ave.  
Fort Frances, ON

To Whom It May Concern;

The Fort Frances Canadian Bass Championship's Tournament is scheduled to be held July 22<sup>nd</sup>, 23<sup>rd</sup> and the 24<sup>th</sup>, 2021.

We are requesting permission from the Town of Fort Frances to use the Shevlin Woodyard, as a parking area for the Fishermen, to park their trucks, boats and trailers.

There will be no Tent, no Entertainment, no Food and no Alcohol this year. All Boats will take off from the Sorting Gap and Weigh In at the Sorting Gap.

All COVID 19 protocols will be in place and Regulations adhered to at All times.

Thank you for your time and consideration to this matter.

Yours truly,

Wayne Allen  
CoChair FFCBC

April 21, 2021

Report To: Mayor and Council

From: Travis Rob, Manager of Operations and Facilities

**RE: Request for Sewer Rooting Reimbursement – 271 Biddeson Avenue**

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The Town has received a request from Mr. Cody Hunsperger at 271 Biddeson Avenue for reimbursement of sewer rooting that had been completed by JD Plumbing Solutions (Jamie Davis). The invoice was for \$427.00 + \$55.51 HST for a total of \$482.51. The work was performed on or about February 25, 2021. The invoice from Mr. Davis does not indicate the location of the blockage nor the cause of the blockage. The email from Mr. Hunsperger indicates the blockage was at 150 feet. Due to Covid-19 work restrictions, Town employees were not entering private buildings for work, including sewer rooting, however between February 16 and March 15 the area was in 'yellow' and in-house work was being completed.

Town Bylaw 06/16 speaks to sewer blockages, as follows:

2.19 Maintenance responsibility - service lateral - building sewer - charges When authorized by the property Owner the Town will perform maintenance work with respect to cleaning of the service lateral and/or building sewer only. The Owner or Authorized representative of the Owner shall give the Town written authorization to perform such work by executing the appropriate Work Requisition form. The charge for maintenance services shall be determined as follows:

a) A minimum service charge as outlined in the current Town's User Fee By-law will be charged to the Owner for maintenance services.

When the Town's employees perform sewer rooting services, the following charges may be incurred (all based on work being done during normal working hours):

- Minimum Charges (regardless of where the blockage is): \$26.50
- Minimum Charge if blockage is on owner's property or owner is at fault: \$117.40 per hour. (A typical sewer rooting is a one-hour charge).

The town does not charge HST on sewer rooting work.

The Town continues to adapt to the Covid-19 pandemic and imposes work restrictions to ensure the safety of Town employees. Not entering private buildings for sewer work was one of the restrictions implemented. However, this limitation is only imposed when the area is in 'Orange – Restrict' or worse colour codes. At the time of the plugged sewer the Town was doing in-house work.

The Town has been to this property, however only recently for plugged sewers and in February 25, 2021 the Town completed a CCTV inspection of the sewer service. The sanitary service is in very good condition, PVC on private property and Asbestos Cement on Town Property. The line runs a long distance to the main then drops straight down into the main. There is a slight low spot just before the 90-degree bend into the riser however the pipe is smooth and constructed appropriately. Given the extremely long run of this sewer, infrequent use may cause solids to build up creating a blockage which is likely the cause of the recent blockages.

It was the property owner's choice to call JD Plumbing to clear their sewer on February 25<sup>th</sup> and not as a result of COVID related work restrictions. It is my recommendation that we do not reimburse this sewer rooting request. A Google Street View picture is attached of the property.

It is the recommendation of the Operations and Facilities Executive Committee that the request for reimbursement for sewer rooting services 271 Biddeson Avenue be denied.



Respectfully Submitted

A handwritten signature in black ink, appearing to read 'Travis Rob', with a stylized flourish at the end.

Travis Rob, P.Eng

**Council approval of this report will agree with the recommendation of the Operations and Facilities Executive Committee that the request for reimbursement for sewer rooting services for 271 Biddeson be denied.**

Manager of Operations and Facilities

2021April21 Private Sewer Reimbursement 5.docx

## Travis Rob

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**From:** Lori Pattison  
**Sent:** Friday, April 9, 2021 8:58 AM  
**To:** Travis Rob  
**Subject:** FW: [External] Plumber bill 271 Biddeson  
**Attachments:** 20210331\_102237.jpg

Good morning Travis

I am forwarding this to you to start the process to see if he is eligible to get some of this bill paid – I talked to him this morning – he was told by his plumber to submit the bill to the town for payment – I think he is of the understanding that we will pay the whole bill for him.

Lori

**From:** Cody the man <codyhunsperger50@gmail.com>  
**Sent:** Friday, April 9, 2021 8:49 AM  
**To:** Lori Pattison <lpattison@fortfrances.ca>  
**Subject:** [External] Plumber bill 271 Biddeson

**[EXTERNAL]** Don't click links or attachments unless you recognize the sender and know the content is safe.  
You can forward suspicious messages to [support@fortfrances.ca](mailto:support@fortfrances.ca).

Sorry I forgot to add my phone number is. 1(807)275-7468

----- Forwarded message -----

**From:** **Cody the man** <[codyhunsperger50@gmail.com](mailto:codyhunsperger50@gmail.com)>  
**Date:** Wed, Mar 31, 2021, 10:22  
**Subject:** Plumber bill 271 Biddeson  
**To:** <[lpattison@fortfrances.ca](mailto:lpattison@fortfrances.ca)>

Hello.

My name is Cody Hunsperger,

I live at 271 Biddeson ave P9A 3L7

On February 25 2021 My main sewer was plugged.

I called JD plumbing solutions, and they had to power snake 150feet to unplug it.

After witch they got the town to sitck a camera down my pipes. The guys said my pipes looked really good and to send the bill to the town as there was a 90 degree bend that should be a 45 in the towns pipes. I hope this is the right person to email, or if you can point me in the right direction I would be grateful. Attached is a photo of the bill. Hope to hear from you soon to know if this is the right person.

Cody Hunsperger

# 2491570 Ontario Limited o/a JD Plumbing Solution INVOICE

RR#1 Site 105-7  
Fort Frances, Ontario P9A 3M2

Invoice No 2408  
Date 03/10/2021  
Ship Date  
Page 1  
Re. Order No

Sold to:  
Hunsberger, Cody  
271 Biddeson Ave  
Fort Frances, ON P9A 3L7

Ship to:  
Hunsberger, Cody  
271 Biddeson Ave  
Fort Frances, ON P9A 3L7

Business No.: 796804490

Item No.	Unit	Quantity	Description	Tax	Unit Price	Amount
			Feb 25/2021 Plugged main sewer			
1			wax bowl ring with sleeve	H	7.00	7.00
3			Labour - David	H	70.00	210.00
3			Labour - Mike	H	70.00	210.00
			Subtotal:			427.00
			H - HST 13%			55.51
			GST/HST			
Shipped By						Tracking Number:
Comment:						Balance Due Upon Receipt: Thank You for your Business. Email: JD.Plumbing@hotmail.com
Sold By:						
						Total Amount 482.51
						Amount Paid 0.00
						Amount Owling 482.51

Google Maps 271 Biddeson Ave



Image capture: Jun 2012 © 2021 Google

Fort Frances, Ontario

Google

Street View



April 21, 2021

Report To: Mayor and Council

From: Travis Rob, Manager of Operations and Facilities

**RE: Application to the Regional Air Transportation Initiative**

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Recently the Federal Government released a Regional Airport and air carrier support program to offset the impacts seen in the aviation sector from COVID-19 administered by FedNor. The program is geared toward regional or local airports or air carriers or businesses that are part of the regional air transportation activities.

The Town of Fort Frances' Municipal Airport has been impacted hard with the shutdown of the border as well as stoppages in the Bearskin traffic as a result of COVID-19 as we need to maintain staff to ensure safe access to the airport for medivac flights and other important flight activities. The Town has been advocating for support for small regional airports since the start of the COVID-19 Pandemic and this program supports those airports.

The current program will fund 100% of eligible operating costs like, wages, utilities, maintenance, PPE and cleaning supplies for a 12 month period between April 1, 2020 to March 31, 2022. With what the Town knows we feel that April 1, 2020 to March 31, 2021 were the worst for us as far as revenue loss and we are hopeful that the next 12 months will be a slow rebound in traffic. When looking at this 12 month period the Town's eligible expenses were calculated to be \$403,096. An application to the Regional Air Transportation Initiative has been submitted for the period of April 1, 2020 – March 31, 2021.

Respectfully Submitted



Travis Rob, P.Eng

<b>Council approval of this report is not required as it is provided for information purposes only.</b>
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Manager of Operations and Facilities

April 21, 2021

Report To: Mayor and Council

From: Travis Rob, Manager of Operations and Facilities

**RE: Award of RFP 21-OF-05 – Development of a Municipality Wide Master Stormwater Management Plan**

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Included in the 2021 Capital Budget were funds to complete a master stormwater management plan for the entirety of the Town of Fort Frances. On March 11, 2021 the Town advertised a Request for Proposals looking for an Engineering Firm to complete the modelling of the Town's stormwater system and develop a master stormwater management plan. Part of the work is to model the system behaviours during a 5, 25, 50, and 100 year storm event to determine where our system weaknesses are. From these models, firms will develop strategies for remediation and prioritize them to provide guidance to the town on how to become more resilient to severe storm events. One of the impacts of climate change is that higher intensity storms are becoming more frequent so these remediation activities will help the Town to become more prepared for the impacts of climate change. In addition to this, understanding the portion of the Town's systems that can handle certain storm events is a requirement of O.Reg. 588/17 Asset Management Planning for Municipal Infrastructure. The Master Stormwater Management Plan will also set out specific design requirements for new developments in the Town of Fort Frances and an investigation into funding models whereby stormwater can move away from a tax funded asset class to a user funded asset class.

On April 6 proposals were opened at 2:00pm at the Civic Centre with the public joining via Microsoft Teams, four proposals were received for consideration. JR Cousins Consultants of Winnipeg, KGS Group of Thunder Bay, Keewatin-Aski Ltd of Sioux Lookout and Computational Hydraulics International (CHI) partnering with TBT Engineering submitted proposals. The proposals were reviewed and scored using a review matrix by the Transportation Superintendent and Operations and Facilities Manager. All firms were to carry an allowance for \$10,000 to complete any on-site field work required to fulfill data gaps and improve the accuracy of the system model. This allowance will only be used if field work is required and is an upset limit of costs where firms outlined their per hour field work costs. An overview of the proposal costs including the field work allowance are outlined below:

<b>Firm</b>	<b>Proposal Cost (+ HST)</b>
JR Cousins Consultants	\$134,637.00
KGS Group	\$92,700.00
CHI & TBT Engineering	\$89,500.00
Keewatin-Aski Ltd.	\$67,120.00

CHI and TBT rated the highest for their proposal due in part to their robust modelling experience and additional modelling and training activities they will provide to the Town at no additional cost. Based on an award date of April 26, 2021 it is anticipated that the final plan will be complete in November 2021. The 2021 Capital Budget allocation for this work was \$100,000.00 so all but one of the proposals are within budget.

It is the recommendation of the Operations and Facilities Executive Committee to award RFP 21-OF-05 to Computational Hydraulics International partnered with TBT Engineering for the development of a municipal wide Master Stormwater Management Plan at a cost of \$89,500 plus the Town's portion of

HST and further that an authorizing by-law be prepared for Mayor and Clerk to execute the agreement on behalf of the corporation.

Respectfully Submitted

A handwritten signature in black ink, appearing to read 'Travis Rob', with a stylized flourish at the end.

Travis Rob, P.Eng

**Council approval of this report will agree with the recommendation of the Operations and Facilities Executive Committee to award RFP 21-OF-05 to Computational Hydraulics International partnered with TBT Engineering for the development of a municipal wide Master Stormwater Management Plan at a cost of \$89,500 plus the Town's portion of HST and further that an authorizing by-law be prepared for Mayor and Clerk to execute the agreement on behalf of the corporation.**

Manager of Operations and Facilities

2021April21 Award of RFP 21-OF-05 Master Stormwater Management.docx



March 25, 2021

Ministry of the Environment  
Thunder Bay Regional Office  
3rd Flr Suite 331B  
435 James St. South  
Thunder Bay ON  
P7E 6S7

Attention: Trina Rawn  
District Manager

**Re: 2020 Performance Report for Fort Frances Sewage Treatment Plant**

Attached is the 2020 Performance Report for the **Fort Frances Sewage Treatment Plant** located in the Town of Fort Frances. This report has been completed in accordance with Condition No. 10 (5) cited in *Amended Environmental Compliance Approval Number 6786-A44PWG* dated January 6 2016 and issued to the Town of Fort Frances.

This report was prepared by the Ontario Clean Water Agency on behalf of the Town of Fort Frances based on the information kept on record by OCWA at the Fort Frances Sewage Treatment Plant location; and the report covers the period from January 1 to December 31, 2020.

Should you have any questions or comments in regards to this annual report, please do not hesitate to contact David Hoffman at 807-854-7142.

Yours truly,



Jeff St Pierre  
North West Regional Hub Manager  
Ontario Clean Water Agency  
Northwestern Ontario Hub  
(705)943-5578

Copy to: Craig Miller– Fort Frances Environmental and Facilities Superintendent  
Operations Staff – Fort Frances Sewage Treatment Plant



# 2020 Annual Report

## Fort Frances

### Wastewater Treatment Plant

Prepared by the Ontario Clean Water Agency



**Ontario Clean Water Agency**  
**Agence Ontarienne Des Eaux**

**The Corporation of the Town of Fort Frances  
Wastewater Treatment Plant  
(Sewage Plant)  
2020 Annual Report**

## Introduction

In accordance with the Amended Environmental Compliance Approval Number 6786-A44PWG section 10(5), the Town of Fort Frances Wastewater Treatment Plant is required to prepare an annual performance report. The 2020 annual performance report summarizes important information regarding the treatment quality of the effluent wastewater, analytical test results, relevant activities and maintenance operations of the Works.

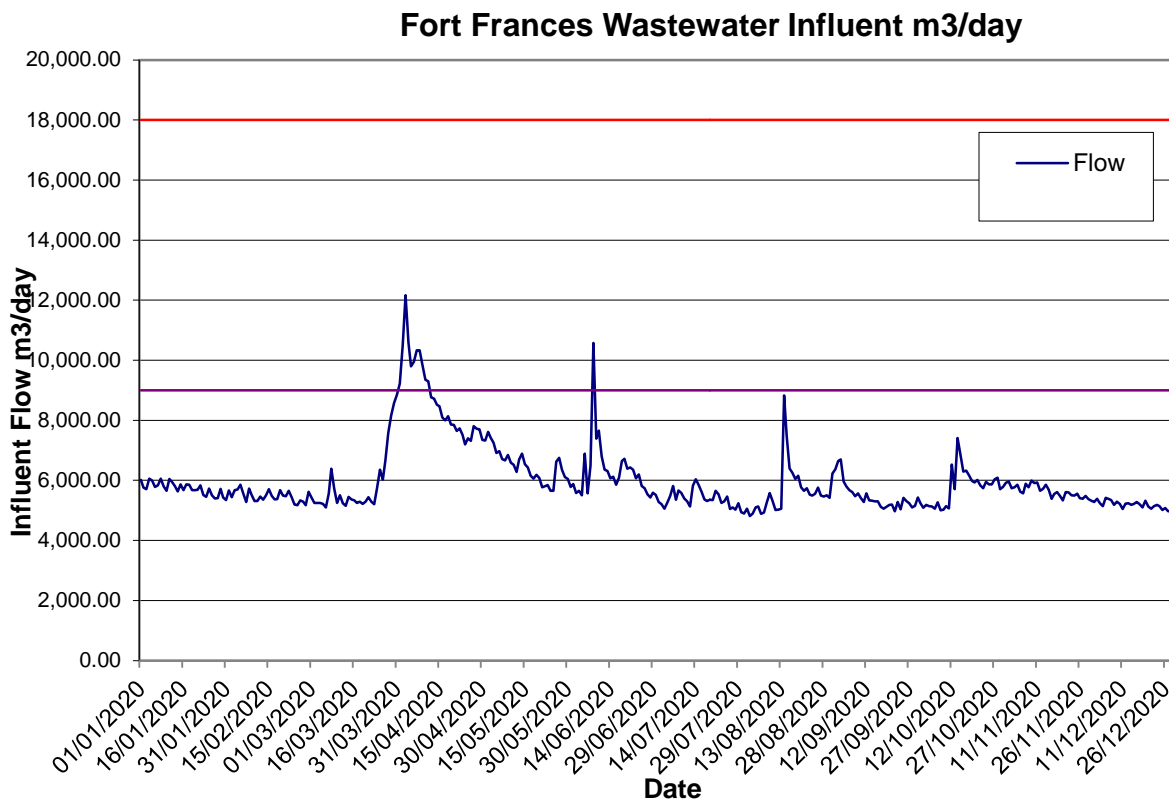
## Description of the Works

Capacity of Works	9000 m <sup>3</sup> /day (average flow) Peak 18000 m <sup>3</sup> /day
Service Area	Town of Fort Frances and Couchiching Reserve
Service Population	9000
Effluent Receiver	Rainy River
Major Process	Secondary treatment facility complete with a phosphorus removal system; ultra violet disinfection; aerobic sludge stabilization and dewatering

## 1. Summary and Comprehensive Interpretation of Data

<b>Flow Summary</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>5-yr avg.</b>
Avg. Day m <sup>3</sup> /day	6731	6476	5988	7860	5967	6604
Design m <sup>3</sup> /day	9000	9000	9000	9000	9000	9000
Utilization (Avg. Day/ Design)	75%	72%	67%	87%	66%	73 %
Max Day m <sup>3</sup> /day	18874	12238	13977	18190	12162	15088
Max Day Factor	2.8	1.9	2.3	2.3	2.0	2.3

The daily flow of influent into the Fort Frances Wastewater treatment plant is presented in the following graph.



The peak flow occurred on April 3 2020. The peak flow through the treatment plant was 12162 m<sup>3</sup>/day. The flow through the plant exceeded the design flow of 9000 m<sup>3</sup>/day on 11 days in April and one day in June.

The daily analytical and process data for the plant is attached as the Monthly Operations Summary. This data is summarized in the Annual Summary also attached to the report.

In the following table the Carbonaceous Biochemical Oxygen Demand, Suspended Solids and Total Phosphorus are compared to the Certificate of Approval effluent concentrations and loadings as specified in section 7.

Month	CBOD5		Suspended Solids		Total Phosphorus		E. Coli	pH	
	Avg. Eff.	Avg. Load	Avg. Eff.	Avg. Load	Avg. Eff.	Avg. Load	Geo Mean	Monthly	Monthly
	CBOD	CBOD	S.S	S.S	T.P	T.P	Counts	Minimum	Maximum
	(mg/L)	(kg/day)	(mg/L)	(kg/day)	(mg/L)	(kg/day)	/100ml		
January	2.9	16.4	4.9	28.2	0.14	0.82	44.6	6.3	6.6
February	9.0	15.9	5.0	27.2	0.12	0.67	22.1	6.4	7.5
March	2.6	16.2	5.3	31.4	0.11	0.68	33.1	7.0	7.6
April	2.9	24.2	5.1	45.8	0.11	0.96	49.0	7.0	7.4
May	2.2	14.2	3.9	25.2	0.10	0.63	14.1	7.0	7.3
June	2.3	13.7	3.8	23.7	0.13	0.81	15.2	6.9	7.2
July	2.1	11.5	2.6	14.1	0.11	0.61	10.0	6.9	7.1
August	2.0	11.4	2.5	14.2	0.17	0.96	11.5	6.7	7.1
September	2.0	10.6	2.1	11.6	0.17	0.96	10.0	6.7	7.1
October	2.1	11.6	2.3	13.4	0.13	0.75	15.7	6.6	7.0
November	2.0	11.3	3.3	18.4	0.16	0.91	33.8	6.6	7.1
December	2.2	11.2	2.4	12.4	0.08	0.40	10.0	6.6	7.1
Average	2.9	14.0	3.6	22.1	0.13	0.76	22.4	6.7	7.2
Max (Min)	9	24.2	5.3	45.8	0.17	0.96	49	(6.3)	7.6
C of A Limit	<25	<225	<25	<225	<1	<9	<200	>6.0	<9.5
C of A Obj.	<15		<15		<0.9		<150		

The Certificate of Approval Limits for CBOD5 and suspended solids are 25 mg/l with an objective target of 15 mg/l and loading limits of less than 225 kg/day. The levels for total phosphorus are less than 1 mg/l and a loading limit of 9 kg/day. In the reporting year 2020, CBOD<sub>5</sub>, suspended solids and total phosphorus concentration limits and loading limits met both the Certificate of Approval limits and the objectives.

The Certificate of Approval states the pH of the effluent shall be maintained between 6.0 and 9.5, inclusive, at all times. The pH during this period was a high of 7.6 and a low of 6.3. The pH met the requirements of the Certificate of Approval in 2020.

The Certificate of Approval also requires the E-coli results to be less than 200 organisms per 100 ml and an objective of less than 150 organisms per 100 ml as a monthly geometric mean density. The effluent met the objective and limit targets with a maximum monthly geometric mean density of 49 organisms per 100 ml.

## **2. Effluent Quality Assurance or Control Measures**

The effluent sample is a 24 hour composite sampled downstream of the UV disinfection system. The influent and effluent samplers are set to collect samples at a frequency of at the least one sample per hour interval.

The operators send weekly influent and effluent samples to ALS Laboratories in Thunder Bay. The effluent samples are analyzed for carbonaceous biochemical oxygen demand, total phosphorus, ammonia, total nitrogen, and nitrates. E-coli are sampled from the effluent only. The influent samples are tested for biochemical oxygen demand, total Kjeldahl nitrogen and total phosphorus. The digester contents are analyzed on an annual basis.

Suspended solids are sampled and tested in house on both influent and effluent and total phosphorus is tested on the effluent. The plant operators perform in-house laboratory testing for several other process parameters to monitor plant performance.

## **3. Maintenance**

The operators performed required routine maintenance through the 2020 period. Additional maintenance activities conducted during the year are as follows:

### **Treatment Plant:**

- Thawed alum line
- Replaced tubing influent auto sampler
- Repaired main gate
- Replaced belt head works air handler
- Replaced UV sensor bank B
- Replaced shear pins long collector 1
- Switch issues with WAS pump 1 and Grit pump 1 were resolved by Cannect Electric
- Cannect Electric replaced the board in air valve 1
- Replaced shear pin long collector 1
- Replaced belt on sludge room air handler
- Repaired PVC line for scum hose
- Replaced shear pins long collector 1
- Replaced ruptured polymer line and cleaned polymer injection check valve X 3
- Replaced the 6V battery in the Verbatim auto dialer
- Cycled power to the repeater radio at the water plant
- Replaced pump tubing on effluent automatic sampler
- Replaced battery on Yamaha generator
- Replaced pump tubing on influent automatic sampler
- Drained and inspected both clarifiers, removed one link each longitudinal chain

- Replaced outlet for the Fournier control panel UPS
- Cleaned polymer injection check valve
- Replaced bulbs UV bank 3 and cleaned sleeves
- TOFF IT replaced 5 UPS units at the wastewater plant
- The main building garage door opener was repaired.
- Lakeside Controls performed software upgrades to the DeltaV SCADA system and replaced one workstation computer and monitors.
- Blower 3 failed December 24th and blower 2 has been running on hand since. A replacement is on order.
- Air conditioning installation in the office and lunch room complete except for wiring.

### **Pump Stations:**

- Removed grease from Boundary Road wet well
- Replaced UPS units at White Pine and Boundary Road lift stations
- Asselin Transportation vacuum trucks removed debris from the Central Avenue lift station wet well for 2 days in June.
- Reset PLC and Milltronics controller at Church Street lift station
- Replaced battery Fifth Street genset
- Replaced the power supply White Pine PLC
- Central Avenue and Fifth Street wet wells were cleaned out by Asselin Transportation Nov
- Installed a new style seal water assembly on pump 1 at White Pine lift station
- Gensets were load tested.

## **4. Operational issues**

The Town of Fort Frances has accepted 327.4 m<sup>3</sup> of untested sewage from the New Gold mine site into the collection system in January and February 2020. The operators of the wastewater plant are not aware of when the addition sewage material is added to the town collection system. Additional testing of the sewage from the New Gold mine has been requested but the results of the testing have not been provided to the Fort Frances wastewater plant operators.

A new ECA was received from the MOE on January 6 2016 allowing for the installation of the new sludge dewatering equipment. The new equipment began processing sludge on September 19 2016. Optimization of the sludge dewatering process using the new equipment has been continuing in 2020.

A Fournier press technician recommended a water heater be installed for polymer dilution water and that the sludge be tested in colder weather for SVI and filaments that could potentially impede drainage. The on-demand water heater was installed in January 2019.

Ongoing pumping issues with the LMI polymer pumps made it necessary to delay trials of alternate polymer samples. A new progressive cavity polymer pump was installed in May 2019 and totes of polymer replaced the drums. The press achieved an average moisture content of 16.6% in the processed sludge for 2020.

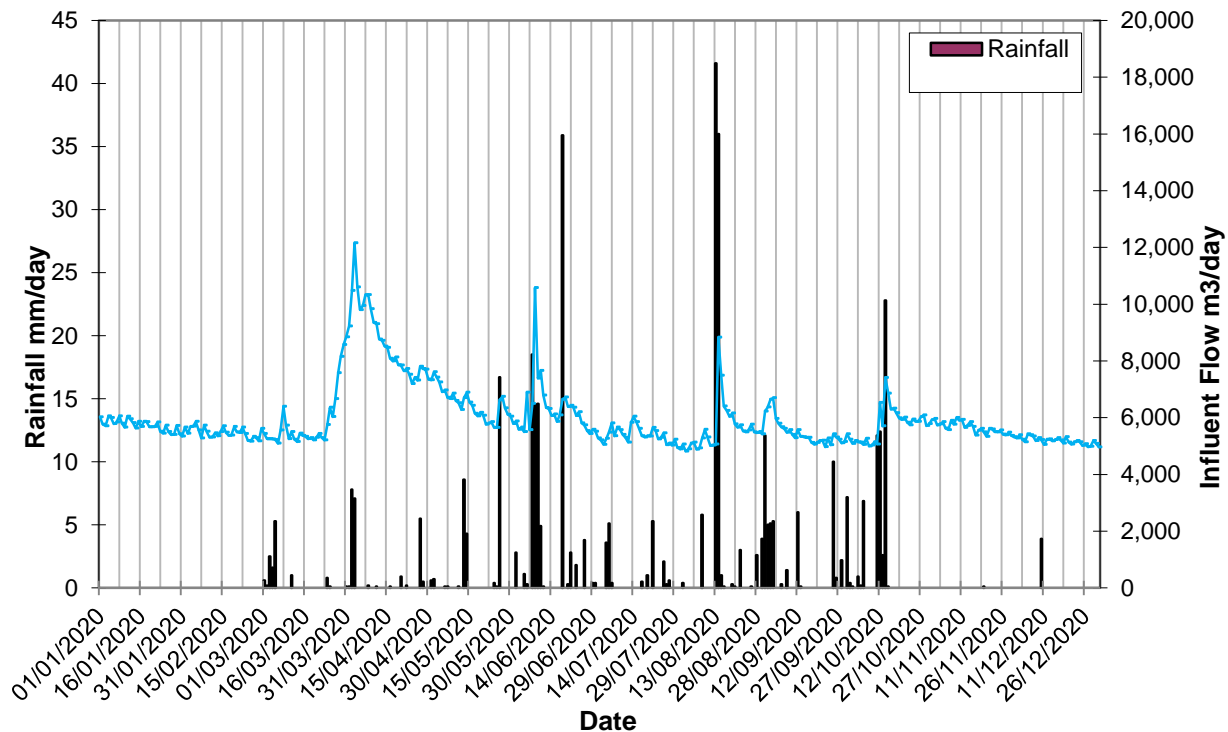
There were no reported bypasses during 2020.

There was no community complaints received during the period of this report.

A graph of the influent flows and rainfall as recorded at the Fort Frances Airport sourced from Environment Canada is included illustrating several rainfall events closely correlating to influent flow spikes. There were a number of rainfall data gaps in the Environment Canada database; these were supplemented by data from the International Falls Airport when available. The highest rainfall event occurred on July 17 2019 with a recorded rainfall amount of 44 mm. The flow at the sewage plant was 8213 m<sup>3</sup> on July 17 and 12069 m<sup>3</sup> on July 18 2019. The peak flow of 18190 m<sup>3</sup> was recorded on October 11 2019 with a rainfall of 9.7 mm. The rainfall in the town may have been higher than the recorded value as the airport is located outside of the town.

The flow to the treatment plant was above the rated capacity of 9000 m<sup>3</sup>/day for 12 days in 2020. The flow was over the rated capacity continuously for the first 11 days of April, and one day in June. The highest flow was April 3 with 12162 m<sup>3</sup>. The April flows were associated with the snow melt and moderate rainfall. The June flow was a two day rainfall event.

**Rainfall vs influent Flow 2020**



## 5. Sludge Generation and Disposal

A new Fournier Rotary Press was installed and in operation as of September 19 2016 decreasing the water content of the sludge for disposal at the landfill. The rotary press operated for 1446.9 hours in 2020.

### Sludge Volume Hauled in 2020

Month	Total Volume( m3)
January	113.2
February	108.2
March	117.1
April	149.3
May	124.4
June	131.0
July	110.5
August	89.9
September	114.8
October	105.8
November	152.5
December	123.9
<b>Total</b>	<b>1440.6</b>

There was 1440.6 m<sup>3</sup> of sludge generated and hauled in 2020 with an average of 120.05 m<sup>3</sup> per month. The sludge analytical sample results for 2020 are appended to this report.

The Town of Fort Frances installed a Fournier rotary press designed to dewater the sludge and allow for the hauled sludge to meet the MOE criteria for landfill disposal without further drying. The new equipment began processing sludge on September 19 2016. The sludge is being disposed of in the municipal landfill site.

A Fournier press technician recommended a water heater be installed for polymer dilution water and that the sludge be tested in colder weather for SVI and filaments that could potentially impede drainage. The on-demand water heater was installed in January 2019.

Ongoing pumping issues with the LMI polymer pumps made it necessary to delay trials of alternate polymer samples. A new progressive cavity polymer pump was installed in May 2019 and totes of polymer replaced the drums. The press achieved an average moisture content of 16.6% in the processed sludge for 2020.

The only anticipated potential changes to volumes of sludge hauled from the system are dependent on further optimization of the dewatering process.



## **6. Calibrations**

The owner shall maintain a continuous flow-measuring device to measure the flow rate within an accuracy of +/- 5% of actual rate of flow within the range of 10% to 100% of the full-scale reading of the measuring devices.

In 2020, calibration of the plant bypass weir was completed on July 26 2020 and effluent parshall flume was also completed on July 26 2020; results attached to this report. Both flow measuring devices passed the verification testing.

# **2020 Annual Summary Report**

2020 Fort Frances Wastewater

Month	Sewage Flows Year 2020					Usage	Calculated	Sludge	Removal Efficiency	
	Avg. Day	Max Day	Total	Total	Total	% Plant	Volume	Bins	CBOD5 0.968922715	
	Flow	Flow	Treated	ByPass	Volume	Capacity	Hauled	Hauled	Suspended Solids 0.977863182	
	m3	m3	Volume ML	Volume ML	ML		M3		Total Phosphorus 0.948726542	
January	5733.8	6060	177747		177747	64%	113.2	12		
February	5477.0	5861	158832		158832	61%	108.2	11		
March	5852.1	8845	181415		181415	65%	117.1	12		
April	8705.3	12162	261159		261159	97%	149.3	15		
May	6468.6	7612	200528		200528	72%	124.4	12		
June	6308.4	10580	189252		189252	70%	131.0	13		
July	5376.8	6039	166681		166681	60%	110.5	11		
August	5641.0	8831	174870		174870	63%	89.9	9		
September	5464.9	6696	163947		163947	61%	114.8	11		
October	5753.3	7408	178352		178352	64%	105.8	11		
November	5635.0	5997	169049		169049	63%	152.5	15		
December	5183.9	5424	160702		160702	58%	123.9	13		
Sum				0	2182534		1440.6	145		
Average	5967		181878		181878	61%	120.1	12.1		
Max		12162	261159		261159			15		
ECA	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 (mg/L)	CBOD (mg/L)	CBOD (kg/day)	S.S (mg/L)	S.S (mg/L)	S.S (kg/day)	T.P (mg/L)	T.P (mg/L)	T.P (kg/day)	TKN (mg/L)	Total N (mg/L)	Counts /100ml	Minimum	Maximum
January	92.6	2.9	16.4	167.8	4.9	28.2	2.59	0.14	0.82	16.2	12.5	44.6	6.3	6.6
February	112.0	9.0	15.9	163.1	5.0	27.2	3.38	0.12	0.67	16.4	13.0	22.1	6.4	7.5
March	99.2	2.6	16.2	149.8	5.3	31.4	2.68	0.11	0.68	21.9	12.4	33.1	7.0	7.6
April	69.8	2.9	24.2	106.4	5.1	45.8	1.88	0.11	0.96	14.5	10.1	49.0	7.0	7.4
May	75.8	2.2	14.2	133.1	3.9	25.2	1.90	0.10	0.63	16.2	12.3	14.1	7.0	7.3
June	79.6	2.3	13.7	154.9	3.8	23.7	1.59	0.13	0.81	17.5	12.5	15.2	6.9	7.2
July	86.3	2.1	11.5	182.9	2.6	14.1	2.34	0.11	0.61	19.3	8.1	10.0	6.9	7.1
August	82.4	2.0	11.4	186.8	2.5	14.2	2.46	0.17	0.96	17.3	6.8	11.5	6.7	7.1
September	99.3	2.0	10.6	171.5	2.1	11.6	2.61	0.17	0.96	18.4	7.4	10.0	6.7	7.1
October	90.8	2.1	11.6	163.9	2.3	13.4	2.50	0.13	0.75	19.7	7.4	15.7	6.6	7.0
November	92.6	2.0	11.3	183.0	3.3	18.4	2.89	0.16	0.91	19.1	8.6	33.8	6.6	7.1
December	123.3	2.2	11.2	188.3	2.4	12.4	3.02	0.08	0.40	19.7	8.4	10.0	6.6	7.1
Average	92.0	2.9	14.0	162.6	3.6	22.1	2.49	0.13	0.76	18.0	10.0	22.4	6.7	7.2
Max	123.3	9	24.2	188.3	5.3	45.8	3.38	0.17	0.96	21.9	13.0	49.0	7.0	7.6
ECA		25	225		25	225		1.0	9.0			200	6.0	9.5

# Monthly Operations Summary Report

Fort Frances Wastewater Treatment Plant  
Monthly Operations Summary

2020	Raw Sewage				Final Effluent												Bypass Volume (m3)
Day	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH	E. Coli. (ctu/100 mL)	
01/01/2020	6,019.00			203	6,019.00	94					0.11		2.4	9.5	6.3		
02/01/2020	5,764.00	82	1.32	169	5,764.00	90	2	6.76	0.212	5.09	0.1	2	4.4	10	6.6	160	
03/01/2020	5,707.00			193	5,707.00	90					0.18		2	10	6.6		
04/01/2020	6,055.00			167	6,055.00	96					0.14		4	9.5	6.6		
05/01/2020	5,994.00			180	5,994.00	95					0.13		5.2	9	6.5		
06/01/2020	5,785.00	92	3.03	170	5,785.00	92	3.6	3.53	0.258	4.37	0.11	6.4	4	9	6.5	220	
07/01/2020	5,839.00			172	5,839.00	92					0.11		4.4	9	6.5		
08/01/2020	6,060.00			158	6,060.00	100					0.2		8.8	9	6.5		
09/01/2020	5,802.00			157	5,802.00	93					0.08		1.6	9	6.5		
10/01/2020	5,657.00			168	5,657.00	95					0.1		2	9	6.6		
11/01/2020	6,049.00			151	6,049.00	97					0.13		4.4	9	6.6		
12/01/2020	5,951.00			168	5,951.00	96					0.13		4	9	6.5		
13/01/2020	5,815.00			141	5,815.00	94					0.1		4.4	9	6.5		
14/01/2020	5,630.00			155	5,630.00	90					0.12		9.2	9	6.5		
15/01/2020	5,868.00			147	5,868.00	99					0.16		4.8	9	6.5		
16/01/2020	5,680.00	98	2.93	144	5,680.00	93	2.9	7.11	0.177	4.58	0.17	5.9	8	8.5	6.5	10	
17/01/2020	5,864.00			206	5,864.00	95					0.12		3.6	9	6.5		
18/01/2020	5,855.00			164	5,855.00	93					0.4		3.6	8.5	6.4		
19/01/2020	5,676.00			166	5,676.00	92					0.14		3.8	8.5	6.5		
20/01/2020	5,673.00			175	5,673.00	92					0.12		6.4	8.5	6.4		
21/01/2020	5,686.00	94	2.81	183	5,686.00	91	2.9	5.86	0.167	4.62	0.13	5.6	5.6	8.5	6.4	10	
22/01/2020	5,837.00			176	5,837.00	102					0.18		6.4	8.5	6.5		
23/01/2020	5,512.00			163	5,512.00	90					0.19		6.8	8.5	6.5		
24/01/2020	5,448.00			181	5,448.00	89					0.15		5.2	8.5	6.5		
25/01/2020	5,725.00			163	5,725.00	94					0.13		6	8.5	6.5		
26/01/2020	5,503.00			195	5,503.00	88					0.15		5.6	8.5	6.5		
27/01/2020	5,397.00			151	5,397.00	86					0.08		4.4	9	6.4		
28/01/2020	5,405.00	97	2.85	162	5,405.00	86	3.1	2.5	0.129	4.75	0.13	3.6	3.2	9	6.5	50	
29/01/2020	5,720.00			212	5,720.00	101					0.19		8.8	8.5	6.5		
30/01/2020	5,427.00			141	5,427.00	89					0.13		4.8	8.5	6.4		
31/01/2020	5,344.00			121	5,344.00	88					0.12		4.8	8.5	6.5		
Total	177,747.00				177,747.00												0.00
Average	5,733.77	92.60	2.59	167.81	5,733.77	92.97	2.90	5.15	0.19	4.68	0.14	4.70	4.92	8.89	6.49	44.58	0.00
Minimum	5,344.00	82.00	1.32	121.00	5,344.00	86.00	2.00	2.50	0.13	4.37	0.08	2.00	1.60	8.50	6.30	10.00	0.00
Maximum	6,060.00	98.00	3.03	212.00	6,060.00	102.00	3.60	7.11	0.26	5.09	0.40	6.40	9.20	10.00	6.60	220.00	0.00
Count	31	5	5	31	31	31	5	5	5	5	31	5	31	31	31	5	0

**Fort Frances Wastewater Treatment Plant  
Monthly Operations Summary**

2020	Raw Sewage				Final Effluent												Bypass Volume (m3)
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH	E. Coli. (cfu/100 mL)	
01/02/2020	5,666.00			152	5,666.00	93					0.12		4	8.5	6.5		
02/02/2020	5,444.00			161	5,444.00	90					0.14		4.4	8.5	6.4		
03/02/2020	5,680.00			282	5,680.00	94					0.06		2.8	8.5	6.4		
04/02/2020	5,696.00	122	3.81	241	5,696.00	114	2.9	6.42	0.158	5.25	0.05	5.1	9.2	8.5	6.5	120	
05/02/2020	5,861.00			207	5,861.00	103					0.08		2.8	8	6.4		
06/02/2020	5,561.00			234	5,561.00	98					0.11		6.8	8	6.5		
07/02/2020	5,281.00			137	5,281.00	90					0.47		6	8	6.5		
08/02/2020	5,726.00			192	5,726.00	93					0.12		6	8	6.5		
09/02/2020	5,512.00			133	5,512.00	94					0.1		4.8	8	6.4		
10/02/2020	5,309.00			117	5,309.00	90					0.19		2.8	8	6.5		
11/02/2020	5,313.00	84	2.93	133	5,313.00	86	2.2	7.21	0.313	5.11	0.09	3.7	4.8	8	6.6	10	
12/02/2020	5,460.00			115	5,460.00	96					0.1		2	8	6.6		
13/02/2020	5,351.00			121	5,351.00	89					0.12		4	8	6.6		
14/02/2020	5,500.00			128	5,500.00	90					0.09		3.6	8	6.6		
15/02/2020	5,711.00			119	5,711.00	95					0.11		2.8	8	6.5		
16/02/2020	5,480.00			127	5,480.00	90					0.13		4	8	6.5		
17/02/2020	5,370.00	127	3.83	209	5,370.00	88	3.7	6.56	0.29	4.59	0.16	3.2	8	8	6.5		
18/02/2020	5,380.00			151	5,380.00	87					0.15		7.6	8	6.5	10	
19/02/2020	5,680.00			146	5,680.00	96					0.11		6.4	8	6.6		
20/02/2020	5,496.00			171	5,496.00	93					0.09		4	8	6.6		
21/02/2020	5,474.00			163	5,474.00	88					0.1		3.6	8	6.6		
22/02/2020	5,659.00			146	5,659.00	92					0.14		4.4	8	6.6		
23/02/2020	5,439.00			173	5,439.00	87					0.12		3.2	8	6.6		
24/02/2020	5,191.00			153	5,191.00	86					0.07		3.6	8	7		
25/02/2020	5,170.00	115	2.96	157	5,170.00	86	3	6.48	0.678	4.82	0.02	3.9	2.4	8	7.3	20	
26/02/2020	5,331.00			150	5,331.00	97					0.08		5.2	8	7.5		
27/02/2020	5,294.00			193	5,294.00	89					0.19		12	8	7.3		
28/02/2020	5,179.00			148	5,179.00	88					0.14		7.2	8	7.3		
29/02/2020	5,618.00			170	5,618.00	90					0.13		5.6	8	7.3		
Total	158,832.00				158,832.00												0.00
Average	5,476.97	112.00	3.38	163.07	5,476.97	92.14	2.95	6.67	0.36	4.94	0.12	3.98	4.97	8.07	6.68	22.13	0.00
Minimum	5,170.00	84.00	2.93	115.00	5,170.00	86.00	2.20	6.42	0.16	4.59	0.02	3.20	2.00	8.00	6.40	10.00	0.00
Maximum	5,861.00	127.00	3.83	282.00	5,861.00	114.00	3.70	7.21	0.68	5.25	0.47	5.10	12.00	8.50	7.50	120.00	0.00
Count	29	4	4	29	29	29	4	4	4	4	29	4	29	29	29	4	0

**Fort Frances Wastewater Treatment Plant  
Monthly Operations Summary**

2020	Raw Sewage				Final Effluent												Bypass Volume (m3)
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH	E. Coli. (cfu/100 mL)	
01/03/2020	5,432.00			158	5,432.00	90					0.1		7.2	7.5	7.2		
02/03/2020	5,250.00			156	5,250.00	86					0.1		5.6	8	7.3		
03/03/2020	5,254.00	112	2.45	151	5,254.00	86	2	6.29	0.268	4.82	0.18	12.4	4.8	8	7.3	20	
04/03/2020	5,249.00			153	5,249.00	87					0.07		5.2	7.5	7.2		
05/03/2020	5,222.00			145	5,222.00	90					0.06		5.6	7.5	7.2		
06/03/2020	5,095.00			136	5,095.00	89					0.08		4.4	7.5	7.3		
07/03/2020	5,563.00			156	5,563.00	90					0.06		3.6	7.5	7.3		
08/03/2020	6,390.00			144	6,390.00	106					0.09		6	7.5	7.2		
09/03/2020	5,724.00	98	2.49	157	5,724.00	99	2	5.46	0.247	4.36	0.08	4	4	7.5	7.2		
10/03/2020	5,250.00			122	5,250.00	88					0.14		4.8	8	7.2	100	
11/03/2020	5,508.00			140	5,508.00	98					0.16		6.8	8	7.3		
12/03/2020	5,234.00			193	5,234.00	87					0.12		7.6	7.5	7.2		
13/03/2020	5,151.00			135	5,151.00	84					0.07		5.6	7.5	7.2		
14/03/2020	5,450.00			169	5,450.00	91					0.12		7.6	7.5	7		
15/03/2020	5,368.00			169	5,368.00	90					0.11		5.6	7.5	7.1		
16/03/2020	5,338.00			147	5,338.00	86					0.1		5.2	7.5	7.1		
17/03/2020	5,250.00	90	3.1	221	5,250.00	96	2.1	6.08	0.287	5.17	0.08	6.9	4.8	7.5	7	10	
18/03/2020	5,289.00			131	5,289.00	89					0.18		4.4	7.5	7.1		
19/03/2020	5,215.00			143	5,215.00	87					0.07		4	7.5	7.3		
20/03/2020	5,295.00			154	5,295.00	89					0.08		2.8	7.5	7		
21/03/2020	5,436.00			154	5,436.00	93					0.24		5.2	7.5	7.1		
22/03/2020	5,290.00			139	5,290.00	89					0.11		4	7.5	7.1		
23/03/2020	5,207.00			210	5,207.00	88					0.08		5.6	7.5	7.4		
24/03/2020	5,750.00	118		159	5,750.00	97	3.7	8.46	0.359	3.16	0.12	5.7	1.6	7.5	7.4	10	
25/03/2020	6,356.00			99	6,356.00	97					0.14		5.6	7.5	7.4		
26/03/2020	6,029.00			131	6,029.00	95					0.11		4	7.5	7.2		
27/03/2020	6,663.00			145	6,663.00	122					0.09		3.6	7.5	7.3		
28/03/2020	7,580.00			126	7,580.00	110					0.13		4.8	7.5	7.3		
29/03/2020	8,157.00			152	8,157.00	137					0.14		5.2	7.5	7.3		
30/03/2020	8,575.00	78		138	8,575.00	123	3.1	4.99	1.05	2.8	0.11	5.5	5.6	7	7.2		
31/03/2020	8,845.00			112	8,845.00	126					0.22		12	7	7.6	200	
Total	181,415.00				181,415.00												0.00
Average	5,852.10	99.20	2.68	149.84	5,852.10	96.29	2.58	6.26	0.44	4.06	0.11	6.90	5.25	7.53	7.23	33.14	0.00
Minimum	5,095.00	78.00	2.45	99.00	5,095.00	84.00	2.00	4.99	0.25	2.80	0.06	4.00	1.60	7.00	7.00	10.00	0.00
Maximum	8,845.00	118.00	3.10	221.00	8,845.00	137.00	3.70	8.46	1.05	5.17	0.24	12.40	12.00	8.00	7.60	200.00	0.00
Count	31	5	3	31	31	31	5	5	5	5	31	5	31	31	31	5	0

**Fort Frances Wastewater Treatment Plant  
Monthly Operations Summary**

2020	Raw Sewage				Final Effluent												Bypass Volume (m3)
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH	E. Coli. (cfu/100 mL)	
01/04/2020	9,227.00			96	9,227.00	125					0.18		10	7	7.4		
02/04/2020	10,481.00			86	10,481.00	155					0.16		10.4	7	7.1		
03/04/2020	12,162.00			74	12,162.00	170					0.15		7.6	7	7.2		
04/04/2020	10,600.00			78	10,600.00	145					0.16		7.2	7	7.3		
05/04/2020	9,801.00			90	9,801.00	135					0.17		7.6	7	7.3		
06/04/2020	9,944.00	45	1.11	70	9,944.00	135	3.1	2.1	0.629	4.47	0.15	7.3	10	7	7.3	60	
07/04/2020	10,329.00			97	10,329.00	138					0.08		3.6	7	7.4		
08/04/2020	10,330.00			101	10,330.00	139					0.11		4	7	7.3		
09/04/2020	9,829.00			89	9,829.00	135					0.1		4.8	7	7.3		
10/04/2020	9,352.00			96	9,352.00	130					0.08		2.4	7	7.3		
11/04/2020	9,300.00			91	9,300.00	131					0.09		3.6	7	7.4		
12/04/2020	8,765.00			103	8,765.00	124					0.14		5.6	7	7.4		
13/04/2020	8,719.00			185	8,719.00	126					0.07		2.8	7	7.2		
14/04/2020	8,520.00	84	2.71		8,520.00	121	2.4	4.62	0.669	3.02	0.05	3.2	3.6	7	7.1	20	
15/04/2020	8,468.00			116	8,468.00	131					0.14		6.4	7	7.2		
16/04/2020	8,090.00			119	8,090.00	119					0.09		4.4	7	7.3		
17/04/2020	7,995.00			113	7,995.00	117					0.11		4.4	7	7.2		
18/04/2020	8,135.00			85	8,135.00	148					0.14		8.4	7	7		
19/04/2020	7,857.00			111	7,857.00	116					0.08		5.2	7	7.1		
20/04/2020	7,848.00			117	7,848.00	113					0.12		5.2	7	7.1		
21/04/2020	7,650.00	66	1.67	118	7,650.00	113	3.5	4.44	0.546	4.61	0.08	5.2	2.4	7	7.1	40	
22/04/2020	7,729.00			121	7,729.00	112					0.1		4.4	7	7		
23/04/2020	7,523.00			99	7,523.00	110					0.07		3.6	7	7		
24/04/2020	7,197.00			106	7,197.00	106					0.11		5.2	7	7.1		
25/04/2020	7,406.00			132	7,406.00	112					0.08		2	7.5	7.1		
26/04/2020	7,318.00			107	7,318.00	108					0.06		2.8	7.5	7		
27/04/2020	7,809.00			118	7,809.00	115					0.07		2.4	7.5	7		
28/04/2020	7,724.00	84	2.03	118	7,724.00	113	2.4	4.15	0.479	3.82	0.18	2.4	4.4	7.5	7.2	120	
29/04/2020	7,702.00			144	7,702.00	113					0.05		6.4	7.5	7.1		
30/04/2020	7,349.00			104	7,349.00	108					0.07		2	7.5	7.1		
Total	261,159.00				261,159.00												0.00
Average	8,705.30	69.75	1.88	106.34	8,705.30	125.43	2.85	3.83	0.58	3.98	0.11	4.53	5.09	7.09	7.19	48.99	0.00
Minimum	7,197.00	45.00	1.11	70.00	7,197.00	106.00	2.40	2.10	0.48	3.02	0.05	2.40	2.00	7.00	7.00	20.00	0.00
Maximum	12,162.00	84.00	2.71	185.00	12,162.00	170.00	3.50	4.62	0.67	4.61	0.18	7.30	10.40	7.50	7.40	120.00	0.00
Count	30	4	4	29	30	30	4	4	4	4	30	4	30	29	30	4	0



**Fort Frances Wastewater Treatment Plant  
Monthly Operations Summary**

2020	Raw Sewage				Final Effluent											E. Coli. (cfu/100 mL)	Bypass Volume (m3)
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH		
01/05/2020	7,328.00			97	7,328.00	107					0.09		3.2	7.5	7.1		
02/05/2020	7,612.00			153	7,612.00	116					0.12		6.8	7.5	7		
03/05/2020	7,425.00			107	7,425.00	108					0.08		4.4	7.5	7.1		
04/05/2020	7,247.00			107	7,247.00	108					0.06		2.8	7.5	7.1		
05/05/2020	6,911.00	61	1.55	135	6,911.00	101	2.6	4.62	0.837	4.64	0.1	4.4	5.6	7.5	7.1	40	
06/05/2020	6,974.00			121	6,974.00	103					0.08		4	7.5	7.1		
07/05/2020	6,706.00			98	6,706.00	103					0.11		4.8	7.5	7.2		
08/05/2020	6,667.00			126	6,667.00	103					0.09		3.6	7.5	7.2		
09/05/2020	6,851.00			112	6,851.00	104					0.13		5.2	7.5	7.2		
10/05/2020	6,592.00			149	6,592.00	105					0.07		2.4	8	7.1		
11/05/2020	6,520.00			132	6,520.00	100					0.04		1.6	8	7.1		
12/05/2020	6,282.00	68	1.93	118	6,282.00	97	2.1	6.64	0.606	4.69	0.06	2	2	8.5	7.1	10	
13/05/2020	6,701.00			126	6,701.00	99					0.13		5.6	8.5	7.2		
14/05/2020	6,885.00			125	6,885.00	104					0.08		3.2	8.5	7.1		
15/05/2020	6,541.00			127	6,541.00	102					0.08		3.6	8.5	7		
16/05/2020	6,428.00			120	6,428.00	100					0.1		2.4	8.5	7.1		
17/05/2020	6,150.00			120	6,150.00	93					0.09		3.6	8.5	7.1		
18/05/2020	6,058.00			142	6,058.00	91					0.07		3.6	8.5	7.3		
19/05/2020	6,184.00	79	1.91	150	6,184.00	97	2	4.38	0.338	5.22	0.18	2	2	9	7	10	
20/05/2020	6,083.00			150	6,083.00	98					0.1		3.2	8.5	7		
21/05/2020	5,766.00			163	5,766.00	96					0.12		2.8	9	7		
22/05/2020	5,807.00			142	5,807.00	89					0.09		3.6	9	7		
23/05/2020	5,850.00			156	5,850.00	90					0.13		4	9.5	7.2		
24/05/2020	5,652.00			184	5,652.00	88					0.09		2	9.5	7.2		
25/05/2020	5,652.00			167	5,652.00	88					0.07		1.6	10	7.1		
26/05/2020	6,618.00	95	2.21	171	6,618.00	106	2	6.22	0.255	5.45	0.1	2.3	7.6	10	7	10	
27/05/2020	6,748.00			125	6,748.00	111					0.12		5.2	10	7.1		
28/05/2020	6,342.00			123	6,342.00	97					0.11		2	10	7		
29/05/2020	6,114.00			136	6,114.00	96					0.09		5.6	10	7.1		
30/05/2020	6,048.00			116	6,048.00	96					0.12		4.8	10.5	7.1		
31/05/2020	5,786.00			129	5,786.00	90					0.1		6.8	10.5	7		
Total	200,528.00				200,528.00												0.00
Average	6,468.65	75.75	1.90	133.13	6,468.65	99.55	2.18	5.47	0.51	5.00	0.10	2.68	3.86	8.66	7.10	14.14	0.00
Minimum	5,652.00	61.00	1.55	97.00	5,652.00	88.00	2.00	4.38	0.26	4.64	0.04	2.00	1.60	7.50	7.00	10.00	0.00
Maximum	7,612.00	95.00	2.21	184.00	7,612.00	116.00	2.60	6.64	0.84	5.45	0.18	4.40	7.60	10.50	7.30	40.00	0.00
Count	31	4	4	31	31	31	4	4	4	4	31	4	31	31	31	4	0

**Fort Frances Wastewater Treatment Plant  
Monthly Operations Summary**

2020	Raw Sewage				Final Effluent												E. Coli. (cfu/100 mL)	Bypass Volume (m3)
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH			
01/06/2020	5,879.00	62	1.86	132	5,879.00	95	2	5.55	0.327	6.45	0.09	3	1.6	10.5	6.9	20		
02/06/2020	5,584.00			141	5,584.00	88					0.07		1.2	10.5	7			
03/06/2020	5,658.00			146	5,658.00	94					0.05		2.4	10.5	7			
04/06/2020	5,503.00			136	5,503.00	89					0.07		3.6	10.5	7			
05/06/2020	6,891.00			153	6,891.00	87					0.09		3.2	10.5	7.1	10		
06/06/2020	5,570.00			165	5,570.00	90					0.06		2.4	10.5	7.1			
07/06/2020	6,495.00	101	0.03	207	6,495.00	124	2.6	2.2	0.01	0.02	0.08	4.6	2.8	11	7			
08/06/2020	10,580.00			135	10,580.00	126					0.06		2.4	11	7			
09/06/2020	7,392.00			140	7,392.00	109					0.1		2.4	11.5	7.2	10		
10/06/2020	7,660.00			168	7,660.00	116					0.16		6.8	11.5	7.1			
11/06/2020	6,794.00			86	6,794.00	101					0.12		8	11.5	7.2			
12/06/2020	6,354.00			136	6,354.00	98					0.11		4	11.5	7			
13/06/2020	6,315.00			146	6,315.00	101					0.13		4.4	11.5	7.1	10		
14/06/2020	6,069.00			122	6,069.00	96					0.09		1.6	12	7			
15/06/2020	6,123.00			157	6,123.00	99					0.27		3.6	12	7.1			
16/06/2020	5,861.00	78	2	146	5,861.00	92	2	4.31	0.49	6.24	0.14	3	2	12	7.1			
17/06/2020	6,092.00			180	6,092.00	101					0.17		1.6	12	7.1	10		
18/06/2020	6,647.00			166	6,647.00	104					0.12		3.6	12.5	7			
19/06/2020	6,718.00			173	6,718.00	103					0.19		4	12.5	7			
20/06/2020	6,386.00			201	6,386.00	96					0.11		3.2	12.5	7.1			
21/06/2020	6,427.00			167	6,427.00	97					0.11		1.2	13	7.1	10		
22/06/2020	6,361.00	85	2.02	182	6,361.00	97	2.7	2.68	0.36	7.06	0.13	5.2	6	13	7			
23/06/2020	6,069.00			182	6,069.00	99					0.14		6.8	13	7.1			
24/06/2020	6,197.00			152	6,197.00	100					0.31		7.6	13	7.2			
25/06/2020	5,811.00			152	5,811.00	95					0.2		6.4	13	7.1	40		
26/06/2020	5,736.00			147	5,736.00	94					0.16		6	13	7.1			
27/06/2020	5,540.00			139	5,540.00	89					0.15		3.2	13.5	7.1			
28/06/2020	5,434.00			153	5,434.00	86					0.14		3.6	13.5	7			
29/06/2020	5,586.00	72	2.03	159	5,586.00	91	2	2.02	1.09	7.55	0.14	5.2	2.4	13.5	6.9	40		
30/06/2020	5,520.00			177	5,520.00	94					0.13		4.4	14	7			
Total	189,252.00				189,252.00											0.00		
Average	6,308.40	79.60	1.59	154.87	6,308.40	98.37	2.26	3.35	0.46	5.46	0.13	4.20	3.75	12.02	7.06	15.16	0.00	
Minimum	5,434.00	62.00	0.03	86.00	5,434.00	86.00	2.00	2.02	0.01	0.02	0.05	3.00	1.20	10.50	6.90	10.00	0.00	
Maximum	10,580.00	101.00	2.03	207.00	10,580.00	126.00	2.70	5.55	1.09	7.55	0.31	5.20	8.00	14.00	7.20	40.00	0.00	
Count	30	5	5	30	30	30	5	5	5	5	30	5	30	30	30	5		

**Fort Frances Wastewater Treatment Plant  
Monthly Operations Summary**

2020	Raw Sewage				Final Effluent											E. Coli. (cfu/100 mL)	Bypass Volume (m3)	
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH			
01/07/2020	5,282.00			162	5,282.00	87					0.11		3.6	14	7.1	10	178.9	
02/07/2020	5,208.00			146	5,208.00	87					0.13		4.4	14	7.1			
03/07/2020	5,056.00			195	5,056.00	84					0.08		3.2	14	7			
04/07/2020	5,264.00			183	5,264.00	85					0.12		4	14	7			
05/07/2020	5,484.00			182	5,484.00	98					0.07		1.2	14.5	7.1			
06/07/2020	5,813.00	82	2.35	163	5,813.00	102	2	0.177	0.079	7.44	0.09	3	2.4	0.09	7.1			
07/07/2020	5,353.00			230	5,353.00	86					0.13			15	7			
08/07/2020	5,660.00			260	5,660.00	98					0.12		3.6	15	7			
09/07/2020	5,576.00			172	5,576.00	92					0.16		3.2	15	7			
10/07/2020	5,403.00			185	5,403.00	90					0.11		2.8	15	6.9			
11/07/2020	5,300.00			166	5,300.00	89					0.09		2.4	14.5	6.9	10		
12/07/2020	5,136.00			209	5,136.00	86					0.07		2	15	7			
13/07/2020	5,826.00	64	2.06	249	5,826.00	113	2.3	0.102	0.074	7.64	0.1	3	3.2	15	6.9			
14/07/2020	6,039.00			211	6,039.00	97					0.08		1.2	15	7			
15/07/2020	5,848.00			203	5,848.00	94					0.11		2	15	7			
16/07/2020	5,617.00			196	5,617.00	89					0.07		2.4	15	6.9			
17/07/2020	5,361.00			183	5,361.00	90					0.09		3.2	15	7			
18/07/2020	5,316.00			174	5,316.00	93					0.12		4	15.5	7			
19/07/2020	5,352.00			152	5,352.00	89					0.1		3.2	15.5	6.9			
20/07/2020	5,349.00	93	2.39	180	5,349.00	87	2	0.07	0.048	6.37	0.07	3	2	15.5	6.9			10
21/07/2020	5,649.00			167	5,649.00	96					0.1		2.4	15.5	7.1			
22/07/2020	5,540.00			145	5,540.00	95					0.1		2.8	15.5	6.8			
23/07/2020	5,247.00			148	5,247.00	89					0.15		2	15.5	6.9			
24/07/2020	5,302.00			165	5,302.00	89					0.16		1.6	15.5	7			
25/07/2020	5,459.00			102	5,459.00	90					0.15		2.4	16	6.9			
26/07/2020	5,046.00			172	5,046.00	100					0.22		1.2	16	7			
27/07/2020	5,102.00	106	2.57	202	5,102.00	86	2	0.047	0.027	5.48	0.16	3	1.2	16	6.9			
28/07/2020	5,024.00			189	5,024.00	85					0.13		3.2	16	6.9	10		
29/07/2020	5,233.00			206	5,233.00	88					0.09		2.4	16	7			
30/07/2020	4,944.00			191	4,944.00	86					0.14		2	16	7			
31/07/2020	4,892.00			182	4,892.00	81					0.11		3.6	16	6.9			
Total	166,681.00				166,681.00												178.90	
Average	5,376.81	86.25	2.34	182.90	5,376.81	91.00	2.08	0.10	0.06	6.73	0.11	3.00	2.63	14.70	6.97	10.00	0.00	
Minimum	4,892.00	64.00	2.06	102.00	4,892.00	81.00	2.00	0.05	0.03	5.48	0.07	3.00	1.20	0.09	6.80	10.00	178.90	
Maximum	6,039.00	106.00	2.57	260.00	6,039.00	113.00	2.30	0.18	0.08	7.64	0.22	3.00	4.40	16.00	7.10	10.00	178.90	
Count	31	4	4	31	31	31	4	4	4	4	31	4	30	31	31	4		

**Fort Frances Wastewater Treatment Plant  
Monthly Operations Summary**

2020	Raw Sewage				Final Effluent											E. Coli. (cfu/100 mL)	Bypass Volume (m3)
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH		
01/08/2020	5,061.00			216	5,061.00	87					0.11		3.2	16.5	7		
02/08/2020	4,817.00			193	4,817.00	81					0.09		2.8	16.5	7.1		
03/08/2020	4,893.00			182	4,893.00	83					0.07		1.6	16.5	7.1		
04/08/2020	5,095.00	90	2.77	173	5,095.00	83	2	0.037	0.032	5.17	0.1	3.3	2	17	7.1	10	
05/08/2020	5,132.00			203	5,132.00	90					0.26		4.8	16.5	6.9		
06/08/2020	4,883.00			203	4,883.00	81					0.18		2.4	16.5	6.9		
07/08/2020	4,928.00			188	4,928.00	81					0.26		2	16.5	6.8		
08/08/2020	5,275.00			216	5,275.00	91					0.23		3.2	16.5	6.7		
09/08/2020	5,580.00			170	5,580.00	96					0.24		2.4	16.5	6.9		
10/08/2020	5,311.00	79	2.2	200	5,311.00	88	2	0.125	0.053	5.66	0.21	3	2.8	16.5	6.9	10	
11/08/2020	5,018.00			187	5,018.00	86					0.19		4	16.5	7		
12/08/2020	5,028.00			192	5,028.00	90					0.22		3.6	16.5	6.9		
13/08/2020	5,059.00			339	5,059.00	88					0.27		2.4	16.5	6.9		
14/08/2020	8,831.00			230	8,831.00	164					0.21		2	16.5	7		
15/08/2020	7,486.00			206	7,486.00	122					0.19		3.6	16.5	6.9		
16/08/2020	6,401.00			187	6,401.00	96					0.22		3.2	17	6.9		
17/08/2020	6,253.00	83	2.22	193	6,253.00	105	2	0.036	0.05	3.99	0.24	3	2.8	17	7	10	
18/08/2020	6,044.00			152	6,044.00	96					0.11		2.8	17	7.1		
19/08/2020	6,153.00			167	6,153.00	101					0.17		3.2	17	6.8		
20/08/2020	5,770.00			147	5,770.00	94					0.12		2	17.5	7		
21/08/2020	5,659.00			151	5,659.00	89					0.16		1.2	17.5	7		
22/08/2020	5,736.00			154	5,736.00	89					0.16		2.4	17.5	6.8		
23/08/2020	5,528.00			130	5,528.00	88					0.14		1.6	17.5	7.1		
24/08/2020	5,496.00	67	2.28	152	5,496.00	94	2	0.051	0.047	4.6	0.12	3	0.08	17.5	7	20	
25/08/2020	5,554.00			171	5,554.00	89					0.1		1.2	17.5	7.1		
26/08/2020	5,763.00			182	5,763.00	90					0.12		1.6	17.5	7.1		
27/08/2020	5,497.00			177	5,497.00	93					0.11		2.8	17.5	7.1		
28/08/2020	5,464.00			173	5,464.00	91					0.14		3.6	17.5	7		
29/08/2020	5,505.00			192	5,505.00	90					0.16		4	17.5	7		
30/08/2020	5,423.00			172	5,423.00	91					0.18		1.6	17.5	7.1		
31/08/2020	6,227.00	93	2.83	192	6,227.00	111	2	0.063	0.068	4.54	0.16	3	1.6	17.5	7.1	10	
Total	174,870.00				174,870.00												0.00
Average	5,640.97	82.40	2.46	186.77	5,640.97	94.13	2.00	0.06	0.05	4.79	0.17	3.06	2.53	16.97	6.98	11.49	0.00
Minimum	4,817.00	67.00	2.20	130.00	4,817.00	81.00	2.00	0.04	0.03	3.99	0.07	3.00	0.08	16.50	6.70	10.00	0.00
Maximum	8,831.00	93.00	2.83	339.00	8,831.00	164.00	2.00	0.13	0.07	5.66	0.27	3.30	4.80	17.50	7.10	20.00	0.00
Count	31	5	5	31	31	31	5	5	5	5	31	5	31	31	31	5	0

**Fort Frances Wastewater Treatment Plant  
Monthly Operations Summary**

2020	Raw Sewage				Final Effluent												
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH	E. Coli. (cfu/100 mL)	Bypass Volume (m3)
01/09/2020	6,366.00			157	6,366.00	114					0.19		1.2	17.5	7.1		
02/09/2020	6,647.00			155	6,647.00	103					0.23		3.6	17.5	6.8		
03/09/2020	6,696.00			231	6,696.00	103					0.16		2.4	17	6.9		
04/09/2020	5,962.00			147	5,962.00	97					0.16		1.6	17	6.9		
05/09/2020	5,794.00			184	5,794.00	97					0.23		2	17	6.8		
06/09/2020	5,672.00			164	5,672.00	92					0.22		1.2	17	7		
07/09/2020	5,615.00			150	5,615.00	93					0.22		1.2	17	7		
08/09/2020	5,477.00	93	2.34	159	5,477.00	96	2	0.085	0.085	4.49	0.19	3	4.4	17	6.8	10	
09/09/2020	5,569.00			158	5,569.00	92					0.24		2.8	17	6.9		
10/09/2020	5,404.00			163	5,404.00	95					0.21		4	17	6.9		
11/09/2020	5,286.00			170	5,286.00	92					0.18		2	17	7		
12/09/2020	5,573.00			166	5,573.00	91					0.22		3.6	17	7		
13/09/2020	5,336.00			195	5,336.00	89					0.23		2.8	17	6.9		
14/09/2020	5,324.00	119	3.06	166	5,324.00	90	2	0.069	0.1	5.33	0.16	3	1.6	17	7.1	10	
15/09/2020	5,300.00			174	5,300.00	90					0.19		3.6	17	7.1		
16/09/2020	5,300.00			177	5,300.00	90					0.17		1.6	17	6.9		
17/09/2020	5,121.00			163	5,121.00	95					0.18		2	17	7		
18/09/2020	5,062.00			160	5,062.00	85					0.12		2.4	17	7		
19/09/2020	5,124.00			149	5,124.00	89					0.1		2	16.5	7		
20/09/2020	5,188.00			172	5,188.00	87					0.14		1.6	17	6.8		
21/09/2020	5,200.00	90	2.64	154	5,200.00	92	2	0.063	0.069	5.42	0.21	3	1.2	17	6.7	10	
22/09/2020	4,970.00			149	4,970.00	88					0.12		0.8	17	6.9		
23/09/2020	5,277.00			156	5,277.00	90					0.11		1.2	17	6.9		
24/09/2020	5,036.00			207	5,036.00	86					0.13		1.2	17	6.7		
25/09/2020	5,419.00			193	5,419.00	98					0.09		1.6	17	6.9		
26/09/2020	5,312.00			190	5,312.00	101					0.14		2.8	17	6.9		
27/09/2020	5,238.00			170	5,238.00	89					0.16		1.2	17	6.9		
28/09/2020	5,103.00	95	2.39	190	5,103.00	90	2	0.143	0.068	4.82	0.11	3	2.8	16.5	6.8	10	
29/09/2020	5,151.00			187	5,151.00	97					0.27		1.6	16.5	6.9		
30/09/2020	5,425.00			190	5,425.00	90					0.14		1.2	16.5	6.8		
Total	163,947.00				163,947.00												0.00
Average	5,464.90	99.25	2.61	171.53	5,464.90	93.37	2.00	0.09	0.08	5.02	0.17	3.00	2.11	16.97	6.91	10.00	0.00
Minimum	4,970.00	90.00	2.34	147.00	4,970.00	85.00	2.00	0.06	0.07	4.49	0.09	3.00	0.80	16.50	6.70	10.00	0.00
Maximum	6,696.00	119.00	3.06	231.00	6,696.00	114.00	2.00	0.14	0.10	5.42	0.27	3.00	4.40	17.50	7.10	10.00	0.00
Count	30	4	4	30	30	30	4	4	4	4	30	4	30	30	30	4	0

**Fort Frances Wastewater Treatment Plant  
Monthly Operations Summary**

2020	Raw Sewage				Final Effluent											E. Coli. (cfu/100 mL)	Bypass Volume (m3)
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH		
01/10/2020	5,236.00			217	5,236.00	90					0.07		0.8	16.5	6.7		
02/10/2020	5,087.00			170	5,087.00	84					0.12		2	16.5	6.7		
03/10/2020	5,185.00			164	5,185.00	89					0.14		2.8	16.5	6.6		
04/10/2020	5,143.00			186	5,143.00	86					0.12		2.4	16.5	6.9		
05/10/2020	5,127.00	104	2.49	190	5,127.00	88	2	0.174	0.062	5.28	0.1	3.3	2	16.5	6.7	10	
06/10/2020	5,052.00			170	5,052.00	86					0.08		1.2	16.5	6.9		
07/10/2020	5,270.00			183	5,270.00	93					0.11		1.6	16.5	6.9		
08/10/2020	5,001.00			176	5,001.00	89					0.13		2	16.5	7		
09/10/2020	5,026.00			164	5,026.00	85					0.1		1.2	16.5	7		
10/10/2020	5,144.00			181	5,144.00	86					0.08		2	16.5	6.9		
11/10/2020	5,066.00			203	5,066.00	86					0.12		2.4	16	7		
12/10/2020	6,526.00			244	6,526.00	101					0.1		0.8	16	7		
13/10/2020	5,704.00	95	2.45	152	5,704.00	96	2	0.308	0.089	4.17	0.09	3	1.6	16	6.8	20	
14/10/2020	7,408.00			147	7,408.00	126					0.24		5.2	15.5	6.7		
15/10/2020	6,862.00			119	6,862.00	102					0.18		1.2	15.5	6.9		
16/10/2020	6,293.00			136	6,293.00	99					0.16		2.8	15	6.7		
17/10/2020	6,330.00			194	6,330.00	103					0.17		2.8	15	6.8		
18/10/2020	6,165.00			178	6,165.00	96					0.16		1.6	15	6.9		
19/10/2020	5,984.00	64	2.39	151	5,984.00	99	2.2	0.163	0.076	5.47	0.11	3	2.8	15	6.8	30	
20/10/2020	5,928.00			42	5,928.00	99					0.11		1.2	15	6.8		
21/10/2020	6,016.00			162	6,016.00	97					0.13		1.6	15	6.8		
22/10/2020	5,832.00			141	5,832.00	95					0.1		3.6	15	7		
23/10/2020	5,744.00			164	5,744.00	90					0.08		3.2	14.5	7		
24/10/2020	5,947.00			172	5,947.00	95					0.06		1.2	14.5	6.9		
25/10/2020	5,865.00			208	5,865.00	94					0.12		2	14.5	6.9		
26/10/2020	5,869.00	100	2.66	148	5,869.00	98	2	0.276	0.112	6.19	0.15	3	1.2	14.5	7	10	
27/10/2020	6,033.00			173	6,033.00	97					0.17		6	14	6.8		
28/10/2020	6,093.00			127	6,093.00	97					0.23		5.6	14	6.8		
29/10/2020	5,712.00			137	5,712.00	89					0.15		2	14	6.9		
30/10/2020	5,782.00			128	5,782.00	93					0.12		2.4	14	7		
31/10/2020	5,922.00			155	5,922.00	104					0.18		1.6	13.5	6.8		
Total	178,352.00				178,352.00												0.00
Average	5,753.29	90.75	2.50	163.94	5,753.29	94.58	2.05	0.23	0.08	5.28	0.13	3.08	2.28	15.37	6.86	15.65	0.00
Minimum	5,001.00	64.00	2.39	42.00	5,001.00	84.00	2.00	0.16	0.06	4.17	0.06	3.00	0.80	13.50	6.60	10.00	0.00
Maximum	7,408.00	104.00	2.66	244.00	7,408.00	126.00	2.20	0.31	0.11	6.19	0.24	3.30	6.00	16.50	7.00	30.00	0.00
Count	31	4	4	31	31	31	4	4	4	4	31	4	31	31	31	4	0

**Fort Frances Wastewater Treatment Plant  
Monthly Operations Summary**

2020	Raw Sewage				Final Effluent												Bypass Volume (m3)
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH	E. Coli. (cfu/100 mL)	
01/11/2020	5,961.00			175	5,961.00	93					0.19		4	13.5	7		
02/11/2020	5,736.00	90	3.59	176	5,736.00	97	2	0.148	0.085	6.71	0.33	3	4.8	14	6.9	10	
03/11/2020	5,775.00			192	5,775.00	95					0.15		3.2	14	7		
04/11/2020	5,851.00			184	5,851.00	96					0.17		4	14	7		
05/11/2020	5,622.00			193	5,622.00	90					0.13		0.8	14	6.9		
06/11/2020	5,573.00			198	5,573.00	87					0.15		1.6	13.5	7		
07/11/2020	5,893.00			181	5,893.00	96					0.16		3.6	13.5	7		
08/11/2020	5,768.00			226	5,768.00	94					0.21		2	13.5	6.9		
09/11/2020	5,997.00	82	2.71	199	5,997.00	98	2	0.345	0.145	5.62	0.19	3	4	13.5	6.9	370	
10/11/2020	5,909.00			155	5,909.00	100					0.23		1.6	13.5	7		
11/11/2020	5,934.00			175	5,934.00	96					0.2		4.4	13	6.8		
12/11/2020	5,652.00			151	5,652.00	90					0.16		2	13	6.7		
13/11/2020	5,722.00			237	5,722.00	93					0.16		3.2	13	7		
14/11/2020	5,858.00			165	5,858.00	96					0.17		4.4	13	6.9		
15/11/2020	5,687.00			149	5,687.00	91					0.12		3.2	13	6.8		
16/11/2020	5,383.00	78	2.33	165	5,383.00	93	2	0.359	0.119	6.5	0.14	3	3.2	13	7.1	60	
17/11/2020	5,551.00			160	5,551.00	96					0.12		4.8	13	6.8		
18/11/2020	5,616.00			171	5,616.00	93					0.15		3.6	13	6.8		
19/11/2020	5,487.00			214	5,487.00	94					0.11		1.2	13	6.7		
20/11/2020	5,335.00			196	5,335.00	86					0.13		3.2	13	6.8		
21/11/2020	5,614.00			183	5,614.00	101					0.15		4	12.5	6.8		
22/11/2020	5,598.00			190	5,598.00	93					0.17		4.4	12.5	6.7		
23/11/2020	5,503.00	108	2.43	147	5,503.00	92	2.1	0.695	0.123	5.85	0.14	3	2.4	12.5	6.8	10	
24/11/2020	5,496.00			267	5,496.00	91					0.16		3.6	12.5	7		
25/11/2020	5,558.00			169	5,558.00	89					0.18		4.8	12.5	6.7		
26/11/2020	5,412.00			172	5,412.00	85					0.12		4.4	12.5	6.6		
27/11/2020	5,388.00			155	5,388.00	86					0.16		4	12.5	6.8		
28/11/2020	5,478.00			173	5,478.00	93					0.12		1.6	12.5	7		
29/11/2020	5,373.00			179	5,373.00	87					0.13		4	12.5	6.7		
30/11/2020	5,319.00	105	3.37	193	5,319.00	90	2	0.451	0.098	6.29	0.1	3.3	2	12.5	7	20	
Total	169,049.00				169,049.00												0.00
Average	5,634.97	92.60	2.89	183.00	5,634.97	92.70	2.02	0.40	0.11	6.19	0.16	3.06	3.27	13.07	6.87	33.84	0.00
Minimum	5,319.00	78.00	2.33	147.00	5,319.00	85.00	2.00	0.15	0.09	5.62	0.10	3.00	0.80	12.50	6.60	10.00	0.00
Maximum	5,997.00	108.00	3.59	267.00	5,997.00	101.00	2.10	0.70	0.15	6.71	0.33	3.30	4.80	14.00	7.10	370.00	0.00
Count	30	5	5	30	30	30	5	5	5	5	30	5	30	30	30	5	0

**Fort Frances Wastewater Treatment Plant  
Monthly Operations Summary**

2020	Raw Sewage				Final Effluent											E. Coli. (cfu/100 mL)	Bypass Volume (m3)
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH		
01/12/2020	5,278.00			193	5,278.00	88					0.1		1.6	12.5	6.7		
02/12/2020	5,388.00			186	5,388.00	90					0.12		2	12.5	6.7		
03/12/2020	5,238.00			196	5,238.00	88					0.1		2.8	12.5	6.6		
04/12/2020	5,146.00			182	5,146.00	82					0.13		3.6	12.5	6.6		
05/12/2020	5,424.00			175	5,424.00	93					0.09		1.6	12.5	6.6		
06/12/2020	5,386.00			191	5,386.00	87					0.14		2.8	12	6.7		
07/12/2020	5,345.00	131	3.45	219	5,345.00	91	2	1.66	0.278	4.16	0.11	4.8	1.6	12	6.7	10	
08/12/2020	5,182.00			186	5,182.00	88					0.11		5.2	12	6.9		
09/12/2020	5,289.00			181	5,289.00	91					0.12		3.6	12	6.8		
10/12/2020	5,220.00			181	5,220.00	85					0.11		2	12	6.8		
11/12/2020	5,049.00			174	5,049.00	83					0.11		2.8	11.5	6.8		
12/12/2020	5,232.00			169	5,232.00	93					0.1		2	11.5	6.7		
13/12/2020	5,243.00			179	5,243.00	85					0.08		1.6	11	7		
14/12/2020	5,180.00	92	2.72	206	5,180.00	86	2	0.634	0.121	6.4	0.08	4	2	11	7	10	
15/12/2020	5,219.00			171	5,219.00	93					0.05		1.6	11	6.9		
16/12/2020	5,285.00			170	5,285.00	89					0.05		3.2	11	6.9		
17/12/2020	5,210.00			192	5,210.00	87					0.02		2.4	11	7		
18/12/2020	5,100.00			187	5,100.00	87					0.04		2.8	11	7		
19/12/2020	5,325.00			177	5,325.00	92					0.06		3.2	10.5	7		
20/12/2020	5,135.00			260	5,135.00	86					0.06		2.4	10.5	7.1		
21/12/2020	5,062.00	135	3.41	257	5,062.00	88	2	0.687	0.168	6.21	0.11	3.1	6	11	7	10	
22/12/2020	5,142.00			162	5,142.00	89					0.06		1.6	10.5	6.7		
23/12/2020	5,186.00			160	5,186.00	85					0.11		3.2	10.5	6.7		
24/12/2020	5,143.00			200	5,143.00	87					0.06		1.2	10.5	6.7		
25/12/2020	5,018.00			153	5,018.00	83					0.04		1.2	10.5	6.8		
26/12/2020	5,077.00			173	5,077.00	89					0.03		2.8	10	6.7		
27/12/2020	4,970.00			216	4,970.00	84					0.05		2	10	6.9		
28/12/2020	4,985.00	135	2.49	226	4,985.00	84	2.7	0.868	0.151	6.09	0.03	4.2	1.2	10	6.8	10	
29/12/2020	5,190.00			189	5,190.00	86					0.05		1.2	10	6.6		
30/12/2020	5,088.00			157	5,088.00	84					0.01		1.2	10	6.7		
31/12/2020	4,967.00			168	4,967.00	84					0.03		1.6	10	6.7		
Total	160,702.00				160,702.00												0.00
Average	5,183.94	123.25	3.02	188.26	5,183.94	87.32	2.18	0.96	0.18	5.72	0.08	4.03	2.39	11.15	6.80	10.00	0.00
Minimum	4,967.00	92.00	2.49	153.00	4,967.00	82.00	2.00	0.63	0.12	4.16	0.01	3.10	1.20	10.00	6.60	10.00	0.00
Maximum	5,424.00	135.00	3.45	260.00	5,424.00	93.00	2.70	1.66	0.28	6.40	0.14	4.80	6.00	12.50	7.10	10.00	0.00
Count	31	4	4	31	31	31	4	4	4	4	31	4	31	31	31	4	0



# **Biosolids Quality Report**

Ontario Clean Water Agency  
Time Series Info Report

Report extracted 17/02/2021 14:09

From: 01/01/2020 to 31/12/2020

Facility Org Number: 1103  
Facility Works Number:  
Facility Name: FORT FRANCES WASTEWATER TREATMENT FACILITY  
Facility Owner: Municipality: The Corporation of the Town of Fort Frances  
Facility Classification: Class 3 Wastewater Treatment

	Biosolids / Arsenic: As - mg/l	Biosolids / Cadmium: - mg/l	Biosolids / Chromium: - mg/l	Biosolids / Cobalt: Co - mg/l	Biosolids / Copper: Cu - mg/l	Biosolids / Hauled Sludge Solids - %	Biosolids / Lead: Pb - mg/kg	Biosolids / Mercury: Hg - mg/l	Biosolids / Molybdenum: Mo - mg/l	Biosolids / Nickel: Ni - mg/l	Biosolids / Selenium: Se - mg/l	Biosolids / Zinc: Zn - mg/l
	Lab Month.Mean	Lab Month.Mean	Lab Month.Mean	Lab Month.Mean	Lab Month.Mean	IH Total	Lab Month.Mean	Lab Month.Mean	Lab Month.Max	Lab Month.Mean	Lab Month.Mean	Lab Month.Mean
01/2020						470.3						
02/2020						381.4						
03/2020						419.6						
04/2020						450.6						
05/2020						486.5						
06/2020						465.6						
07/2020						556.2						
08/2020						477.2						
09/2020	0.164	0.0115	0.36	<0.10	5.82	476.2	0.287	0.0113	0.1	0.27	0.076	7.54
10/2020						441						
11/2020						448.9						
12/2020						411.2						
Total						5484.7						
Avg	0.164	0.0115	0.36	<0.10	5.82		0.287	0.0113	0.1	0.27	0.076	7.54
Max												
Min												

## **Flow Meter Calibrations**

# Instrument Verification Report

Ontario Clean Water Agency, 200 McIlrvine Road, Fort Frances, ON

**Test Date:** July 26, 2020

**Device:** Miltronics OCM III 25C TS-2, Identifier # 120296126 HM

**For:** Plant Final Effluent flow as measured using a 12 inch Parshal flume

**Table 1: Verification Data for Miltronics OCM and Final Effluent Parshal Flume**

Measured Effluent Head (mm)	Indicated flow on OCM (L/s)	Calculated flow (L/s)	Percent error
195	55.8	56.7	1.6
260	82.6	89.3	-7.7
300	103.0	109.2	-5.7
395	162.7	165.9	-1.9
460	208.7	209.2	0.2

**Notes:** For the Parshal Flume: Flow rate,  $Q \text{ (ft}^3/\text{s)} = 3.95 * (\text{Head} / ((12) * (25.4)))^{1.522}$

Flow rate,  $Q \text{ (L/s)} = Q \text{ (ft}^3/\text{s)} * 28.31 \text{ (L/ft}^3)$

## Summary:

The error in indicated values for final effluent flow rate is within the range of +/- 10%.

The alarm condition for flow in excess of UV capability operated at 208 L/sec.



Geoff Pearce

July 26, 2020

O&M Team Lead

Ontario Clean Water Agency

# Instrument Verification Report

Ontario Clean Water Agency, 200 McIlrvine Road, Fort Frances, ON

**Test Date:** July 26, 2020

**Device:** Miltronics Multiranger Plus XPS 10, Identifier 04-235-96-432 MU

**For:** Plant influent Bypass Overflow Level, as measured in Manhole #8

## Detail:

- 1) Influent water level of 1.945 m was simulated with a fixture in manhole #8.  
The bypass warning alarm (high level) was activated.
- 2) Influent water level of 1.960 m was simulated with a fixture in manhole #8.  
The bypass high-high alarm was activated and a bypass flow value 10 L/sec was indicated.

## Summary:

The DeltaV alarms response for bypass high level and bypass high-high level were tested and they both functioned as required.



Geoff Pearce

July 26, 2020

Ontario Clean Water Agency

Fort Frances, Ontario



**Ontario Clean Water Agency**  
**Agence Ontarienne Des Eaux**

Fort Frances WPCP  
200 McIrvine Rd  
Fort Frances, Ontario  
P9A 3S3  
Tel: 807-274-3121  
Fax: 807-274-8381

April 14, 2021

Town of Fort Frances  
320 Portage Avenue  
Fort Frances Ontario  
P9A 3M5

Attention: Mr. Craig Miller  
Environmental Superintendent

Dear Craig:

**Re: Fort Frances Wastewater Treatment Facility  
March 2021 Monthly Report**

As per the operating agreement, the attached document is the March 2021 monthly report for the Fort Frances Wastewater Treatment Facility.

The report highlights the influent and effluent quality and the process parameters. Additionally, the routine operation and maintenance activities conducted by the operators are summarized.

If you have any questions regarding this report do not hesitate to contact Mr. Jeff St. Pierre, Regional Hub Manager.

Yours truly,

A handwritten signature in black ink, appearing to read 'Kelly G.D.'.

Kelly Cunningham  
Team Lead

For Jeff St. Pierre  
Regional Hub Manager

**The Corporation of the Town of Fort Frances  
Wastewater Treatment Plant  
(Sewage Plant)  
March 2021 Monthly Operations Report**

## **INTRODUCTION**

In accordance with the Agreement between the Ontario Clean Water Agency (Operating Authority) and the Town of Fort Frances, the Fort Frances Sewage Treatment Plant is required to prepare a monthly report. This document covers the reporting month of March 2021; the facility performance report summarizes important information regarding the quality of the effluent, wastewater, analytical test results, maintenance operations, and relevant activities of the WWTP.

## **DESCRIPTION OF WORKS**

Capacity of Works	9000 m <sup>3</sup> /day (average flow)
Service Area	Town of Fort Frances and Couchiching Reserve
Service Population	9000
Effluent Receiver	Rainy River
Major Process	Secondary treatment facility complete with a phosphorus removal system; ultra violet disinfection; aerobic sludge stabilization and dewatering

The Fort Frances Sewage Treatment Plant operates under *Environmental Compliance Approval Number 6786-A44PWG*. The ECA outlines the terms and conditions, and the report captures these terms and conditions in the following sections.

## **LABORATORY**

ALS Laboratory Group – Thunder Bay is contracted to conduct the required analytical tests of the influent (raw) and effluent samples; weekly requirement.

## MARCH 2021 EFFLUENT QUALITY

<i>Parameters</i>	<i>Monthly Actual Concentration mg/L</i>	<i>Compliance Criteria Concentration mg/L</i>	<i>Performance Objective Concentration mg/L</i>	<i>Monthly Actual Loading, kg/d</i>	<i>Compliance Criteria Loading kg/d</i>	<i>Performance Objective Loading kg/d</i>
CBOD <sub>5</sub>	3.4 mg/L	25 mg/L	15 mg/L	17.6 kg/d	225 kg/d	135 kg/d
Total Suspended Solids	3.6 mg/L	25 mg/L	15 mg/L	18.5 kg/d	225 kg/d	135 kg/d
Total Phosphorus	0.08 mg/L	1.0 mg/L	0.9 mg/L	0.40 kg/d	9 kg/d	8.1 kg/d
Total Nitrogen Nitrate Nitrogen	15.03 mg/L 4.74 mg/L					
Total Cl <sub>2</sub> Residual		<0.01 mg/L (when in use)				
E-Coli		12.5 count/100 ml (geometric mean )		200 count/100ml (geometric mean )		E-coli not to exceed 150 organisms/100ml (monthly geometric mean density)
pH				pH range 7.0 to 7.4; average pH was 7.2		
Temperature degrees C				Temperatures ranged from 8.0 to 9.0 C; average temperature of effluent was 8.8 C		

Compliance criteria are mandatory requirements of the ECA and performance objectives are a goal to be achieved using best reasonable efforts.

## WASTEWATER LIQUID PROCESS

The average daily flow for March was 5141.9 m<sup>3</sup>/day. This represents 57% of the design average flow. Total treated flow for the month was 159400 m<sup>3</sup>.

The Fort Frances WWTP met all effluent compliance criteria for the parameters listed above and additionally was well within the recommended more stringent monthly performance objectives as outlined in the Environmental Compliance Approval.



## **MAINTENANCE**

The operators performed the routine operations and maintenance at the treatment plant and pumping stations. The activities are highlighted as follows and a summary will be included:

### **Treatment Plant:**

- Alternated lead/lag pumps
- Adjusted fluidizing water to head cell and grit snail as needed
- Greased all blowers
- Regular cleaning of head works EW basket strainer
- Greased Grit Snail and lubricated drive chain
- Monthly inspection of spiral screen access hatch, removed wrapped debris
- Weekly manifold wash and restrictor cleaning on the Fournier press
- Drained and inspected teacup
- Replaced portable heater in digester doghouse
- Installed new UV sensors banks 1 and 2
- Repaired floor drain under sludge bin

### **Pump Stations:**

- Ran gensets
- Changed seal water strainers
- Replaced Central Avenue lift station pumps 2 and 3 seal water assemblies with new style
- Pulled and cleaned pump 1 at Central Avenue lift station
- Changed UPS units at Central Avenue and Fifth Street lift stations

## **PROCESS AND OPTIMIZATION ISSUES**

### **SLUDGE SUMMARY**

Dennis Robinson Limited hauled a calculated total of 145.6 m<sup>3</sup> (14 bins) of thickened digested sludge to the Town of Fort Frances landfill site. The hauled sludge averaged 15.2 % TS for the month but slump test results from the landfill site have not been provided.

The Fournier press ran for 106 hours in the past month.

### **COMPLAINTS**

There were no complaints during the report period.

## **BYPASS/OVERFLOW REPORT(S)**

There were no bypass events in the reporting period.

## **COMMENTS**

Plant power consumption for the month was 470 (x 180 multiplier) kWh.  
The Fournier press has been operated 368.6 hours in 2021.  
Grit pump 2 developed a leak in the casing and requires replacement or repair.

## **REPORTS**

ALS – Environmental Analytical Reports (on-file at plant)  
Fort Frances WPCP Equipment Run Time Report (on-file at plant)  
Bypass Report (on-file at plant as per occurrence)  
Incident Report (on-file at plant as per occurrence)

2021 Fort Frances Wastewater

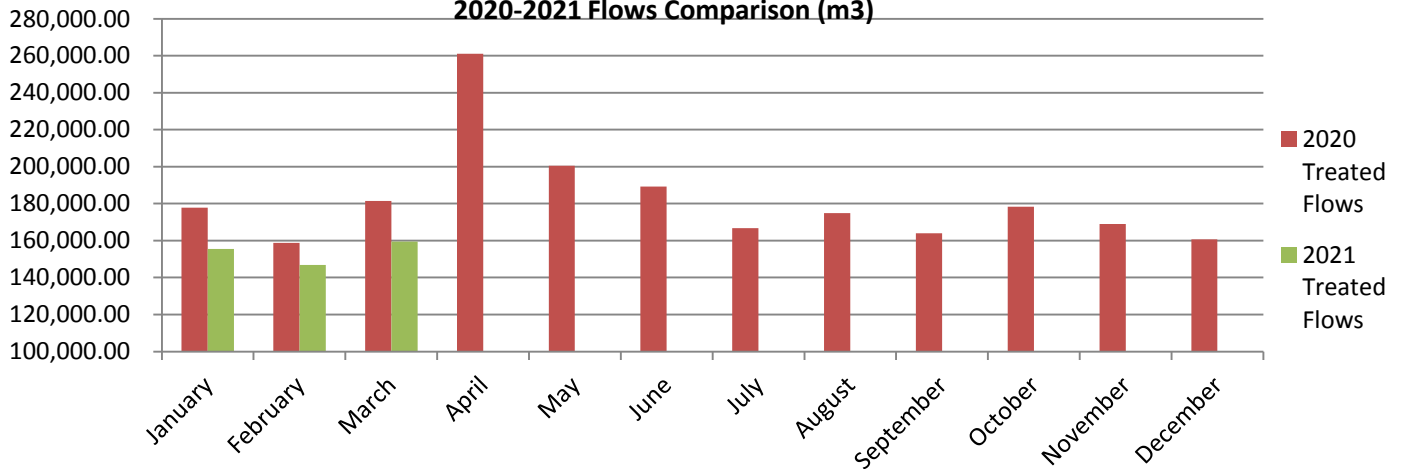
Month	Sewage Flows Year 2020					Usage	Calculated	Sludge	Removal Efficiency	
	Avg. Day	Max Day	Total	Total	Total	% Plant	Volume	Bins	CBOD5 0.973903509	
	Flow	Flow	Treated	ByPass	Volume	Capacity	Hauled	Hauled	Suspended Solids 0.983793411	
	m3	m3	Volume ML	Volume ML	ML		M3		Total Phosphorus 0.971674877	
January	5015.0	5375	155465		155465	56%	134.4	13		
February	5244.0	5551	146883		146883	58%	116.6	11		
March	5141.9	5653	159400		159400	57%	145.6	14		
April						0%				
May						0%				
June						0%				
July						0%				
August						0%				
September						0%				
October						0%				
November						0%				
December						0%				
Sum				0	461748		396.6	38		
Average	5134		153916		153916	57%	132.2	12.7		
Max		5653	159400		159400			14		
ECA	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 (mg/L)	CBOD (mg/L)	CBOD (kg/day)	S.S (mg/L)	S.S (mg/L)	S.S (kg/day)	T.P (mg/L)	T.P (mg/L)	T.P (kg/day)	TKN (mg/L)	Total N (mg/L)	Counts /100ml	Minimum	Maximum
January	123.8	2.2	11.1	196.5	2.5	12.7	2.99	0.07	0.33	26.2	11.8	10.0	6.6	7.0
February	91.0	2.7	14.3	185.9	3.0	15.9	2.79	0.08	0.41	22.7	15.1	10.0	6.6	7.1
March	104.4	3.4	17.6	179.1	3.6	18.5	2.34	0.08	0.40	18.6	15.0	12.5	7.0	7.4
April														
May														
June														
July														
August														
September														
October														
November														
December														
Average	106.4	2.8	14.3	187.2	3.0	15.7	2.71	0.08	0.38	22.5	14.0	10.8	6.7	7.2
Max	123.8	3.4	17.6	196.5	3.6	18.5	2.99	0.08	0.41	26.2	15.1	12.5	7.0	7.4
ECA		25	225		25	225		1.0	9.0			200	6.0	9.5

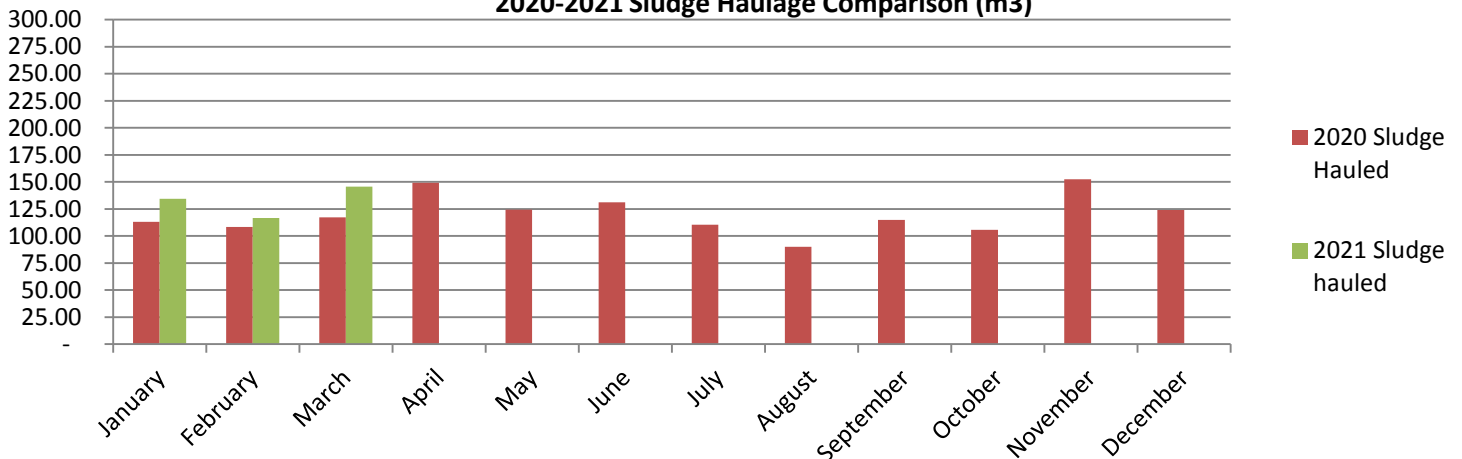
### 2020-2021 Comparison Chart

Month	2020 Treated Sewage	2021 Treated Sewage	% Variance 2020 to 2021	2020 Hauled Sludge	2021 Hauled Sludge	% Variance 2020 to 2021
	m3	m3	m3	m3 (calculated)	m3 (calculated)	m3
January	177,747.00	155,465.00	-14%	113.20	134.40	19%
February	158,832.00	146,883.00	-8%	108.20	116.60	8%
March	181,415.00	159,400.00	-14%	117.10	145.60	24%
April	261,159.00		#DIV/0!	149.30		-100%
May	200,528.00		#DIV/0!	124.40		-100%
June	189,252.00		#DIV/0!	131.00		-100%
July	166,681.00		#DIV/0!	110.50		-100%
August	174,870.00		#DIV/0!	89.90		-100%
September	163,947.00		#DIV/0!	114.80		-100%
October	178,352.00		#DIV/0!	105.80		-100%
November	169,049.00		#DIV/0!	152.50		-100%
December	160,702.00		#DIV/0!	123.90		-100%
<b>Totals</b>	<b>2,182,534.00</b>	<b>461,748.00</b>	<b>-373%</b>	<b>1,440.60</b>	<b>396.60</b>	<b>-72%</b>

2020-2021 Flows Comparison (m3)



2020-2021 Sludge Haulage Comparison (m3)



Workorder Summary Report

Report Start Date: Mar 1, 2021 12:00 AM

Report End Date: Mar 31, 2021 11:59 PM

Location: 1103\*

Work Order Type: ADMIN,CALL,CAP,CORR,EMER,OPER,PM

Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
<a href="#">2174872</a>	0000227360	MOTOR PUMP DIGESTER SLUDGE #1	1103, Fort Frances WPCP, Process, Sludge Treatment & Handling, Sludge Digestion	CALL	Refurbish/ Replace/Repair	0		Digester heater failure 1103	COMP		3/12/21 02:39 AM	3/12/21 02:43 AM	Digester Low Temp Alarm -I arrived onsite to find that the heater had failed in the small doghouse so I replaced it with a new heater and monitored .
<a href="#">2178232</a>	0000227360	MOTOR PUMP DIGESTER SLUDGE #1	1103, Fort Frances WPCP, Process, Sludge Treatment & Handling, Sludge Digestion	CALL	Refurbish/ Replace/Repair	0		Digester Heater Failure 1103	COMP		3/31/21 08:55 AM	3/31/21 09:00 AM	Digester Heater Failure -I found the wall heater to have failed so I replaced the portable heater with a new one and will call an electrician to repair or replace wall unit.
<a href="#">2169592</a>	0000227376	PANEL ALARM/ DIALER	1103, Fort Frances WPCP, Process, Process Control & Monitoring	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 1103	COMP	3/1/21 12:00 AM	3/27/21 11:00 AM	3/27/21 12:00 PM	Monthly Dialer -We test daily.
<a href="#">2169596</a>			1103, Fort Frances WPCP	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Gensets Inspection/ Functional Tests (1m) 1103	COMP	3/1/21 12:00 AM	3/1/21 09:15 AM	3/1/21 11:15 AM	Monthly Genset -Ran all gensets 1 hour under load.
<a href="#">2169612</a>			1103, Fort Frances WPCP	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 1103	COMP	3/1/21 12:00 AM	3/28/21 07:30 AM	3/28/21 08:30 AM	Monthly H&S -No issues .
<a href="#">2169623</a>			1103, Fort Frances WPCP	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 1103	COMP	3/1/21 12:00 AM	4/5/21 07:19 AM	4/5/21 07:19 AM	
<a href="#">2169968</a>			1103, Fort Frances WPCP	PM	Inspection	1	MONTHS	Blowers/Motors Inspection/Service (1m/3m) 1103	COMP	3/1/21 12:00 AM	3/27/21 09:00 AM	3/27/21 10:00 AM	Blower Maint. -I greased blowers 5,4 and 2
<a href="#">2169978</a>	0000246402	CENTRIFUGE GS2-2-1 TEACUP/ GRIT SNAIL	1103, Fort Frances WPCP, Process, Primary Treatment, Primary Sludge Degritting	PM	Inspection	1	MONTHS	Teacup Centrifuge Inspection/ Service (1m/3m/1y) 1103	COMP	3/1/21 12:00 AM	3/24/21 02:14 PM	3/24/21 02:14 PM	Teacup Centrifuge Inspection/ Service (1m/3m/1y) 1103 -Drained and inspected teacup, no debris. Lubricated chain and greased bearings on snail. Drained and hosed snail and brought back on line. KC
<a href="#">2169995</a>			1103, Fort Frances WPCP	PM	Refurbish/ Replace/Repair	3	MONTHS	Clarifiers Inspection/Service (3m) 1103	COMP	3/1/21 12:00 AM	4/5/21 07:33 AM	4/5/21 07:33 AM	Clarifiers Inspection/Service (3m) 1103 -Greased both clarifier drives. Running smooth and quiet. KC

**OPERATIONS AND FACILITIES DIVISION - PUBLIC WORKS AREA**  
**OPERATIONS STATISTICS**  
**February 2021**

**STAFFING**

The following table is a breakdown of lost man shifts during the month:

	<b>2020</b>	<b>2021</b>
WSIB	20.00	0.00
WI/LTD	18.00	19.00
SICK DAYS	13.19	2.75
COMPASSIONATE LEAVE	0.00	0.00
FLOATERS	7.00	5.00
VACATION	15.50	14.50
BANKED TIME USED	5.00	6.25
OFF	0.00	0.00
STATUTORY HOLIDAYS	27.00	30.00
<b>TOTAL</b>	<b>105.69</b>	<b>77.50</b>

**OVERTIME HOURS**

Equivalent Straight Time Hours:

	<b>2020</b>	<b>2021</b>	<b>2020</b>	<b>2021</b>
	<b>Feb</b>	<b>Feb</b>	<b>Year To</b>	<b>Year To</b>
			<b>Date</b>	<b>Date</b>
ADMINISTRATION	0.00	0.00	0.00	0.00
TRAVEL	0.00	0.00	2.50	0.00
ENGINEERING	0.00	0.00	0.00	0.00
INTERDEPARTMENTAL	0.00	0.00	4.00	4.00
PRIVATE WORK	0.00	20.00	0.00	21.50
RECYCLE/GARBAGE	5.50	1.50	11.50	1.50
ROADS	0.75	3.00	214.75	127.00
SEWER COLLECTION	8.00	12.00	37.25	12.00
SIDEWALKS	0.00	0.00	57.00	0.00
STORES	0.00	0.00	30.50	37.00
VEHICLE & EQUIPMENT	24.00	0.00	24.00	0.00
WATER TREATMENT PLANT	23.50	32.50	37.50	64.50
WATER DISTRIBUTION	5.50	84.75	37.75	93.00
WATER TOWER	0.00	0.00	0.00	0.00
<b>TOTAL</b>	<b>67.25</b>	<b>153.75</b>	<b>456.75</b>	<b>360.50</b>

# **TRANSPORTATION REPORT**

## **February 2021**

### **ROADS:**

#### **Storm Water Management – Urban:**

#### **Storm Water Management - Rural:**

#### **Hard Top Maintenance:**

- Levelled utility cuts – twice weekly
- Pothole patching as required

#### **Loose Top Maintenance:**

#### **Roadside Maintenance:**

#### **Winter Control:**

- Two (2) events – February 1<sup>st</sup> and 4<sup>th</sup>
- Plowed all roadways and lanes as required
- Sanded/salted roads as required
- Plowed downtown parking lots
- Removed snow in the downtown area twice
- Removed snow from the Water Treatment parking lot and Water Tower parking lot
- Removed snow from public works parking lots and piles in the North Yard
- Removed snow from intersections and lane piles
- Removed snow from the boulevards along the 600, 700, 800 and 900 blocks of Second Street East
- Removed snow from boulevards along the 1000, 1100 and 1200 blocks of Second Street East
- Removed snow from the boulevards along the 400, 500, 600 and 700 blocks of Church Street
- Removed ice and snow away from catchbasins to get water moving
- Removed snow from the 400 and 500 blocks of Second Street East
- Removed snow from the 600 block of Victoria Avenue
- Removed snow from the 300 block of First Street East
- Pushed up snow at the snow dumps daily.

**Traffic Operations:**

- Repaired and replaced signs as required

**Regular Maintenance:**

- Garbage pickup - Tuesday and Friday - Downtown and Public Works Shop
- Assisted Engineering with locates and CCTV inspections.
- Assisted with tasks at Civic Centre as required.
- Maintenance checks at the Civic Centre as required
- Repaired deficiencies found in Routine Road Patrols

**Buildings and Grounds:**

- Cleaned Shop as required
- Cleaned vehicles and equipment as required
- Plowed snow in all yards as required

**Private Work:****Sidewalks – Winter:**

- Cleaned snow and ice from Civic Centre sidewalks and applied ice melt as required.
- Cleaned snow from Underpass sidewalks and Downtown corners and applied ice melt or sand/salt as required.
- Plowed all sidewalks as required
- Sanded all sidewalks as required

**Sidewalks – Summer:****Vehicles and Equipment:**

- Preventative Maintenance – pre-trip inspections 5:30 – 7:30 am Monday to Friday
- Regular scheduled maintenance of all vehicles and equipment
- Maintenance and repairs, Fire Department, Water Treatment Plant, Memorial Sports Centre, Day Care, Handi-Van, Airport and Civic Centre Vehicles as required

**Public Relations:**



**Sewer and Water:**

- Provided labour and equipment for Water Distribution and Sewer Collection repairs and maintenance.
- Handed out “Water Turn Off Advisories”, “Drinking Water Advisories” and “Lifting of Drinking Water Advisories” when required
- Issued “Delinquent Account Notices” and turned off water for non-compliance as required.
- Removed snow from around all fire hydrants.
- Cleared ice and snow from the water break at the 400 block of Victoria Avenue on February 8<sup>th</sup> and 9<sup>th</sup>.

**Interdepartmental:**

- Moved some furniture at the Civic Centre on February 26<sup>th</sup>.

**Recycling:**

- Emptied glass recycling bin as required
- Pushed up piles in recycling building as required
- Loaded Commercial Recycling Bin as required
- Cleaned up recycling yard

**Training:**

- Provided training to Jeff Bragg and Walter Slusarchuk on both sidewalk plows on February 8<sup>th</sup> and 9<sup>th</sup>.
- Provided training to Ken McCormick on both sidewalk plows on February 18<sup>th</sup>

**Health & Safety:**

- Covid cleaning – assigned a worker to clean all regularly touched areas in the public works building twice daily.
- A workplace Health and Safety Inspection was done on February 19<sup>th</sup>.
- A Health and Safety Tailgate Meeting was held on February 24<sup>th</sup> to discuss new Covid updates.

Milt Strachan,  
Superintendent of Transportation

Sewer & Water Data for 2021

up-dated April 14, 2021

Month	Days per month	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021-2020	2021-2020	2021	2021	Monthly
		Total	daily	Couch.	Couch.	Couch.	Total	daily	Couch.	Couch.	Couch.	Diff	Diff	Difference	Infiltration	Infiltration
		Sewage	Sewage	Sewage	Sewage	Sewage	Treated	Treated	2 Water	2 Water	Water	Treated	Wastewater	STP-WTP	daily average	US Gallons
		STP	STP	Meters	Meters	%	WTP	WTP	Meters	Meters	%	WTP	STP			
		cu. meters	cu. meters	cu. meters	cu. meters		cu. meters	cu. meters	cu. meters	cu. meters						
		monthly	daily	monthly	daily		monthly	daily	monthly	daily						
January	31	155465	5015.00	10364	334.32	6.67%	105360	3398.7	9082	293.0	8.62%	-3360.0	-22282.0	50105.0	1616.3	13,236,338
February	28	146883	5245.82	8881	317.18	6.05%	103890	3710.4	9082	324.4	8.74%	1990.0	-11949.0	42993.0	1535.5	11,357,547
March	31	159400	5141.94	10550	340.32	6.62%	109120	3520.0		0.0	0.00%	3820.0	-22015.0	50280.0	1621.9	13,282,568
April	30		0.00		0.00	#DIV/0!		0.0		0.0	#DIV/0!	-96350.0	-261159.0	0.0	0.0	-
May	31		0.00		0.00	#DIV/0!		0.0		0.0	#DIV/0!	-111690.0	-200528.0	0.0	0.0	-
June	30		0.00		0.00	#DIV/0!		0.0		0.0	#DIV/0!	-115660.0	-189252.0	0.0	0.0	-
July	31		0.00		0.00	#DIV/0!		0.0		0.0	#DIV/0!	-139030.0	-166681.0	0.0	0.0	-
August	31		0.00		0.00	#DIV/0!		0.0		0.0	#DIV/0!	-127750.0	-174870.0	0.0	0.0	-
September	30		0.00		0.00	#DIV/0!		0.0		0.0	#DIV/0!	-107690.0	-163947.0	0.0	0.0	-
October	31		0.00		0.00	#DIV/0!		0.0		0.0	#DIV/0!	-102590.0	-178352.0	0.0	0.0	-
November	30		0.00		0.00	#DIV/0!		0.0		0.0	#DIV/0!	-98680.0	-169049.0	0.0	0.0	-
December	31		0.00		0.00	#DIV/0!		0.0		0.0	#DIV/0!	-104350	-160702.0	0.0	0.0	-
Total	365	461748		29795			318370.0		18164.0			-1001340.0	-1720786.0	143378.0	392.8	37,876,453
Monthly Average		153916.0	5134.3	9931.7	330.6		106123.3	3543.0	9082.0	205.8	0.1	816.7	-18748.7	47792.7	1591.2	12625484.3

**Aircraft Landings 2021**  
As of March 31, 2021

Month	Bearskin Flights			Bearskin Passengers			Air Bravo Passengers			Government			Private			Med-I-vacs			International			Commercial			Totals			Variance
	2021	2020	2019	2021	2020	2019	2021	2020	2019	2021	2020	2019	2021	2020	2019	2021	2020	2019	2021	2020	2019	2021	2020	2019	2021	2020	2019	2021-2020
January	4	56	54	9	140	160	0	8	8	0	2	0	2	15	4	36	50	60	0	0	0	0	45	42	42	168	160	-126
February	0	64	56	0	149	197	0	12	15	4	3	13	8	6	1	58	36	43	0	1	0	0	38	38	70	148	151	-78
March	0	41	61	0	99	160	0	0	11	20	1	13	8	10	10	57	39	52	0	6	2	0	0	42	85	97	180	-12
1/4 Total	4	161	171	9	388	517	0	20	34	24	6	26	18	31	15	151	125	155	0	7	2	0	83	122	197	413	491	-216
April		1	59		0	197		0	7		2	5		10	9		30	57		1	3		0	40	0	44	173	-44
May		0	67		0	196		0	5		3	14		20	19		40	63		0	25		0	43	0	63	231	-63
June		0	61		0	208		0	9		0	13		21	48		53	57		0	81		0	39	0	74	299	-74
1/2 Total	4	162	358	9	388	1118	0	20	55	24	11	58	18	82	91	151	248	332	0	8	111	0	83	244	197	594	1194	-397
July		0	61		0	173		0	10		2	4		44	28		35	54		0	69		0	42	0	81	258	-81
August		0	69		0	236		0	5		0	10		31	33		38	57		0	64		0	40	0	69	273	-69
September		11	62		17	180		0	12		1	8		27	14		61	52		2	46		0	34	0	102	216	-102
3/4 Total	4	173	550	9	405	1707	0	20	82	24	14	80	18	184	166	151	382	495	0	10	290	0	83	360	197	846	1941	-649
October		16	66		30	219		0	13		5	5		9	22		59	57		0	8		0	44	0	89	202	-89
November		15	61		46	180		0	17		3	0		14	6		45	56		0	1		0	37	0	77	161	-77
December		12	47		15	111		0	13		6	0		4	13		54	43		0	3		0	38	0	76	144	-76
Total	4	216	724	9	496	2217	0	20	125	24	28	85	18	211	207	151	540	651	0	10	302	0	83	479	197	1088	2448	-891

Fort Frances Airport - Page 2/2 - Fuel Sales - March 31, 2021																				
Fuel Sales Recap - 2021									2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	10 year	Variance
Month	100LL		Jet Trk		Jet Cab		Month	Year	per	per	per	per	per	per	per	per	per	per	Average	2021-2020
	Liters	Total	Liters	Total	Liters	Total	Total	Total	month	month	month	month	month	month	month	month	month	month	2021 to 2012	per month
January	725	725	4,058	4,058		0	4,783	4,783	4,783	7,962	8,050	16,597	25,675	7,528	8,692	11,543	7,216	10,252	11,502	-3,179
February	1,023	1,748	6,424	10,482		0	7,447	12,230	7,447	5,077	7,991	16,286	12,503	11,904	11,231	12,304	6,197	6,918	10,046	2,370
March	1,107	2,855	15,715	26,197		0	16,822	29,052	16,822	6,473	13,716	8,798	21,928	13,255	17,795	10,508	12,077	9,329	12,764	10,349
April		2,855		26,197		0	0	29,052	0	1,459	13,010	10,398	13,102	8,592	13,219	8,377	4,453	8,251	8,985	-1,459
May		2,855		26,197		0	0	29,052	0	11,685	18,667	24,839	21,362	24,681	16,161	29,753	18,350	21,891	20,821	-11,685
June		2,855		26,197		0	0	29,052	0	8,082	31,063	27,380	27,380	26,015	45,698	30,789	22,786	23,537	26,970	-8,082
July		2,855		26,197		0	0	29,052	0	11,116	17,146	23,461	24,642	29,002	28,150	14,441	19,232	32,650	22,204	-11,116
August		2,855		26,197		0	0	29,052	0	7,530	17,024	30,430	23,029	21,119	36,638	20,450	20,075	30,783	23,009	-7,530
September		2,855		26,197		0	0	29,052	0	14,689	16,543	25,191	13,489	21,325	24,238	21,837	18,005	19,431	19,416	-14,689
October		2,855		26,197		0	0	29,052	0	4,307	9,076	10,769	16,604	30,655	8,216	15,472	13,109	11,325	13,281	-4,307
November		2,855		26,197		0	0	29,052	0	13,333	2,202	10,748	9,924	22,349	11,616	7,238	6,398	8,170	10,220	-13,333
December		2,855		26,197		0	0	29,052	0	5,333	5,852	13,243	6,560	13,797	7,502	6,540	2,028	8,179	7,715	-5,333
Total	2,855		26,197		0		29,052		29,052	97,046	160,340	219,140	216,198	230,222	229,246	189,561	149,926	190,716	186,933	-67,994

Lowest month in last 9 years  
Highest month in last 9 years  
Highest month  
Lowest month

2021 - Tonnage at Landfill Site - Updated April 19, 2021

2021 - Tonnage at Landfill Site - Updated April 19, 2021								2020			2021				
MONTH	Residential Waste (tonne)	Res (%)	ICI Waste (tonne)	ICI (%)	Non Community Waste (tonne)	Non Community Waste (%)	Covering Material (tonne)	2020 Total Tonne	Average last 10 years Total Tonne 2011 to 2020	2021 Total Tonne	Total Fees	Average last 10 years Fees 2011 to 2020	Total Fees	2020-2019 Tonnes	2020-2019 Fees
JAN	229.16	49.9%	221.64	48.264%	8.42	1.8%	0.00	430.73	421.97	459.22	\$ 27,424.15	\$ 22,810.82	\$ 25,366.15	28.49	-\$ 2,058.00
FEB	139.10	35.7%	242.80	62.338%	7.59	1.9%	163.96	395.65	344.29	389.49	\$ 23,407.65	\$ 17,034.00	\$ 24,123.20	-6.16	\$ 715.55
MAR	251.88	25.0%	678.41	67.390%	76.40	7.6%	0.00	443.95	424.03	1006.69	\$ 29,051.15	\$ 23,642.71	\$ 38,708.95	562.74	\$ 9,657.80
APRIL		#DIV/0!		#DIV/0!		#DIV/0!		611.34	573.51	0	\$ 42,244.30	\$ 32,712.97		-611.34	-\$ 42,244.30
MAY		#DIV/0!		#DIV/0!		#DIV/0!		777.33	740.72	0	\$ 50,040.01	\$ 39,340.52		-777.33	-\$ 50,040.01
JUNE		#DIV/0!		#DIV/0!		#DIV/0!		600.08	818.98	0	\$ 50,850.20	\$ 39,940.83		-600.08	-\$ 50,850.20
JULY		#DIV/0!		#DIV/0!		#DIV/0!		670.42	607.43	0	\$ 49,691.30	\$ 36,877.55		-670.42	-\$ 49,691.30
AUG		#DIV/0!		#DIV/0!		#DIV/0!		770.21	700.85	0	\$ 55,399.40	\$ 37,960.82		-770.21	-\$ 55,399.40
SEPT		#DIV/0!		#DIV/0!		#DIV/0!		862.70	684.18	0	\$ 53,936.60	\$ 38,481.31		-862.70	-\$ 53,936.60
OCT		#DIV/0!		#DIV/0!		#DIV/0!		725.18	842.38	0	\$ 49,042.25	\$ 43,709.40		-725.18	-\$ 49,042.25
NOV		#DIV/0!		#DIV/0!		#DIV/0!		591.91	574.84	0	\$ 36,599.30	\$ 30,714.80		-591.91	-\$ 36,599.30
DEC		#DIV/0!		#DIV/0!		#DIV/0!		553.52	438.58	0	\$ 29,234.45	\$ 22,463.35		-553.52	-\$ 29,234.45
Average per monthly	206.71	43%	380.95	55%	30.80	2%	54.65	619.42	597.65	154.62	\$ 41,410.06	\$ 32,140.76	\$ 29,399.43	-26.27	-\$ 134,819.16
Total	620.14		1142.85		92.41		163.96	7433.01	7171.74	1855.40	\$ 496,920.76	\$ 385,689.08	\$ 88,198.30	-5577.61	-\$ 408,722.46
											\$ 460,321.46	Actual	\$ 88,198.30		
Town of Fort Frances Tonnage	1762.99														
											\$ 414,194.00	Budget	\$ 440,000.00		
Total Tonnage	1855.40														
											\$ 496,920.76	Forecasted	\$ 352,793.20		
Residential Tonnage	620.14	33.42%													
ICI Tonnage	1142.85	61.60%													
Coverage material	163.96														