

Table 1 - Biosolids Recipients

Non-Agricultural Source Materials Plan (NASM)	Address	Expiry Date
22853	Huffam Rd.	December 31, 2021
22855	Lake Rd.	December 31, 2021
22901	County Rd.8	December 31, 2021
23007	County Rd. 4	December 31, 2021
23047	Palace Rd.	December 31, 2021
23048	Multiple farms	December 31, 2021
23119	Hamilton Rd.	December 31, 2021
23425	Parry/Chambers Rd.	December 31, 2022
23525	County Rd. 8	December 31, 2022
23641	Hamilton Rd.	December 31, 2022
23950	County Rd. 8	December 31, 2023
24003	Hamilton Rd.	December 31, 2023
24091	Multiple farms	December 31, 2023
24326	Greater Napanee	December 31, 2024
24327	Greater Napanee	December 31, 2024

Table 2: Bypass Summary

Date	Location	Start Time	Duration	Volume (m3)	Reason
October 26th, 2021	Crerar Pumping Station	4:40	2 Hours and 20 Minutes	38	Equipment Malfunction

Table 3: Bypass Sampling Results

Location	E. Coli (CFU/100mL)	CBOD5 (mg/L)	Total Suspended Solids (mg/L)	Total Phosphorus (mg/L)
Crerar Pumping Station	180000	34.0	66	1.39

Bypass Results Interpretations

All bypass discharges have a high bacteria count due to the lack of disinfection. CBOD5, TP, and TSS results are typical raw sewage influent levels. Best efforts are made to capture the debris contained in any discharges to the lake. After each bypass event, shoreline inspections near discharge points are done to monitor any debris that may come ashore and clean-up is done if debris is found.

Table 4: Annual Effluent Concentrations

Effluent Parameter	Objective	2021 Results (Average)
CBOD5 (mg/L)	15	5.75
Total Suspended Solids (mg/L)	15	10.68

Table 5 - Final Effluent Results (Monthly Average)

Month	Total Chlorine (mg/L)	Total Phosphorus (mg/L)	Total Phosphorus Loading (kg/d)	E. Coli (CFU/100mL)	Acute Lethality (Pass or Fail)
January	0	0.57	15	10	N/A
February	0	0.77	18	28	PASS
March	0	0.68	21	90	N/A
April	0	0.64	17	11	N/A
May	0	0.45	12	144	N/A
June	0	0.96	26	82	N/A
July	0	0.61	19	154	PASS
August	0	0.96	24	29	N/A
September	0	1.30	30	40	PASS
October	0	0.95	25	22	N/A
November	0	0.77	22	83	N/A
December	0	0.81	24	54	N/A
Average	0	0.79	21	62	N/A

Table 6: Effluent Loading Limits

Effluent Parameter	Limit	Loading Limit from Effluent	Annual Average
CBOD5	25.0 mg/L	970 kg/day	155.19 kg/day
Total Suspended Solids	25.0 mg/L	970 kg/day	289.46 kg/day

Table 7 - Monthly Flows

Month	Rated Capacity (m3/day)	Average Flow (m3/day)	Approved Peak Flow (m3/day)	Peak Daily Flow (m3/day)
January	38,800	26,318	134,400	62,415
February	38,800	23,097	134,400	52,313
March	38,800	31,027	134,400	67,418
April	38,800	27,062	134,400	55,473
May	38,800	26,857	134,400	47,896
June	38,800	27,222	134,400	56,850
July	38,800	31,599	134,400	67,582
August	38,800	24,512	134,400	52,894
September	38,800	23,461	134,400	57,088
October	38,800	26,460	134,400	98,925
November	38,800	28,942	134,400	57,535
December	38,800	30,139	134,400	109,885
Average		27,225		65,523

Table 8 - Annual Plant Flows

Parameter	2015	2016	2017	2018	2019	2020	2021
Average (m3/day)	26147	26072	30042	28963	29251	27189	27225
Max (m3/day)	56583	67405	12186	94957	91976	82297	109885
Design (m3/day)	38800	38800	38800	38800	38800	38800	38800
Daily/Design (%)	67	67	77	75	75	70	70