Prescott Wastewater System

Waterworks # 110001122

Annual Report

Prepared For: Town of Prescott

Reporting Period of January 1st – December 31st 2024

Issued: March 11th, 2025

Revision: 1

Operating Authority:

OCWA

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

This report has been prepared to meet the requirements set out in:

Document	Document #	Issue Date	Issue Number
Facility ECA	6996-9ZYNWH	October 5, 2015	N/A
CLI ECA	161-W601	August 15, 2022	N/A

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1 Revision History

Date	Rev#	Revisions	Revised By
March 10, 2025	0	Annual Report Issued	Selena Shane, PCT
March 11, 2025	1	Annual Sludge Volume Comparison	Selena Shane, PCT

2 Operations and Compliance Reliability Indices

Compliance Event	Details
Ministry of Environment Inspections	There was no MECP inspection in 2024.
Ministry of Labour Inspections	There was no MOL inspection in 2024.
Non-Compliance	There were no non-compliances in 2024.
Community Complaints	There were no community complaints in 2024.
Spills	There were no spills in 2024.
Overflows	There were 2 overflow events in 2024 • Details referenced in the report
Bypass	There were no bypass events in 2024.

3 Process Description

Prescott's sewage collection system is a gravity fed collection system consisting of combined sanitary and storm sewers. Five pumping stations pump wastewater from the collection system to the wastewater treatment facility.

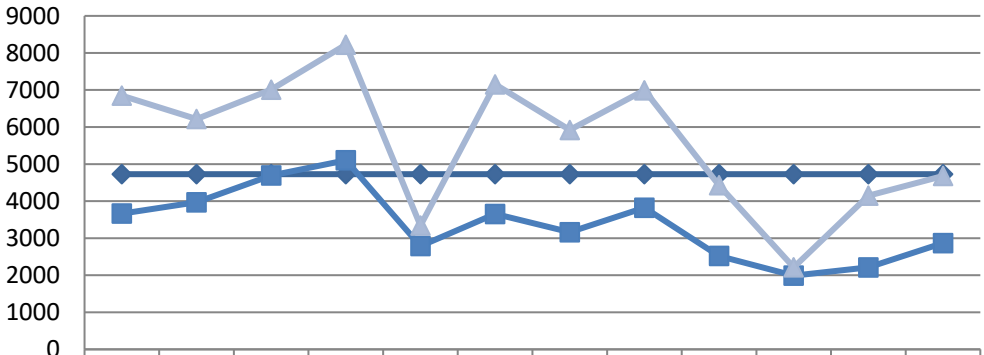
Prescott's wastewater treatment plant is a Class III treatment facility. Raw sewage is pumped to the facility from an onsite pumping station (SPS #6), which is equipped with an influent bar screen and three dry well pumps. Wastewater passes through the inlet headworks where solids are removed using a mechanical rotary screen and conveyor. Grit is then removed using two parallel vortex grit separators. Aluminum sulphate is injected downstream of the grit separators to assist in phosphorous removal. The wastewater then enters three parallel, continuous-flow Sequencing Batch Reactors (SBRs) which operate with automated cycles (air off, air on, settle, and decant). Each SBR is equipped with a fine bubble aeration system, submersible mixer, variable speed effluent decanter and sludge removal pump. Effluent decanted from the SBRs enters an equalization tank where a pinch valve acts to ensure consistent flow through the UV disinfection system. The UV disinfection system consists of one channel with two units, one duty and one standby. Following disinfection, the effluent passes through an outfall chamber where grey water is recovered for plant processes before discharging to the St. Lawrence River.

Activated sludge, which has been removed from the SBRs, is pumped to a two-stage aerobic digester equipped with a coarse bubble aeration system and manual decant arms. Activated sludge is stabilized (or digested) and dewatered, with the supernatant returning to the plant headworks. Digested sludge is then pumped to one of two large holding tanks, each equipped with a coarse bubble aeration system and manual decant arm, where further dewatering occurs. From the holding tanks, liquid sludge can be pumped to one of two large drying beds or hauled offsite for land application.

4 Treatment Flows

The hydraulic flows reaching the treatment facility in 2024 averaged 3,371 m3/day which represents 71% of the 4,728 m3/day design.

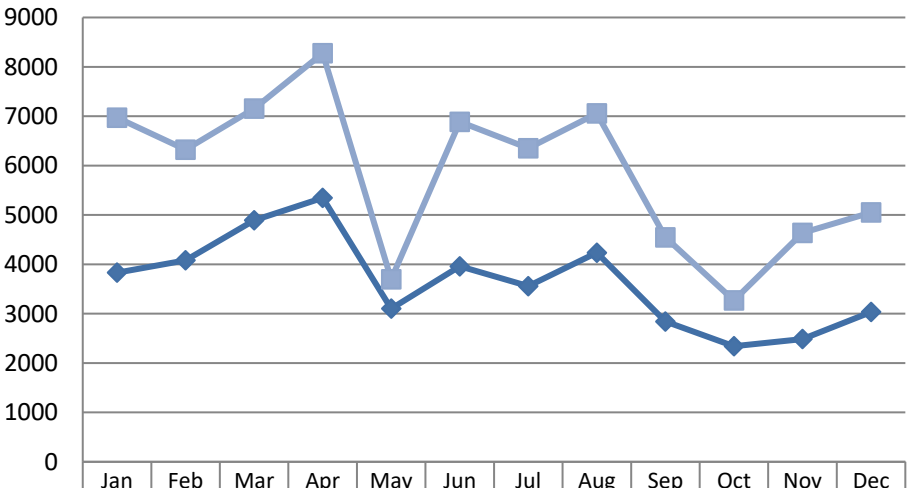
4.1 Raw Flow (m3/d)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plant Design Limit	4728	4728	4728	4728	4728	4728	4728	4728	4728	4728	4728	4728
Average Daily Flow	3665	3969	4693	5103	2788	3655	3163	3823	2522	1990	2212	2869
Maximum Daily Flow	6848	6218	7010	8223	3341	7153	5921	6992	4430	2214	4149	4679

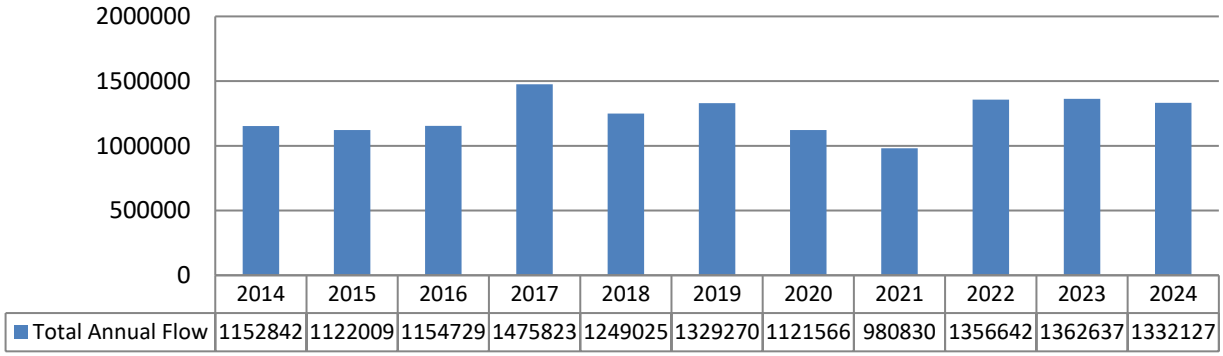
*The exceedances over the plant design limits are due to precipitation.

4.2 Effluent Flow (m3/d)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Daily Flow (m3/d)	3832	4082	4892	5346	3102	3959	3557	4235	2841	2341	2487	3035
Maximum Daily Flow (m3/d)	6970	6323	7154	8275	3697	6886	6352	7057	4547	3269	4637	5051

4.2.1 Annual Comparison (m3)



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total Annual Flow	1152842	1122009	1154729	1475823	1249025	1329270	1121566	980830	1356642	1362637	1332127

4.3 Imported Sewage

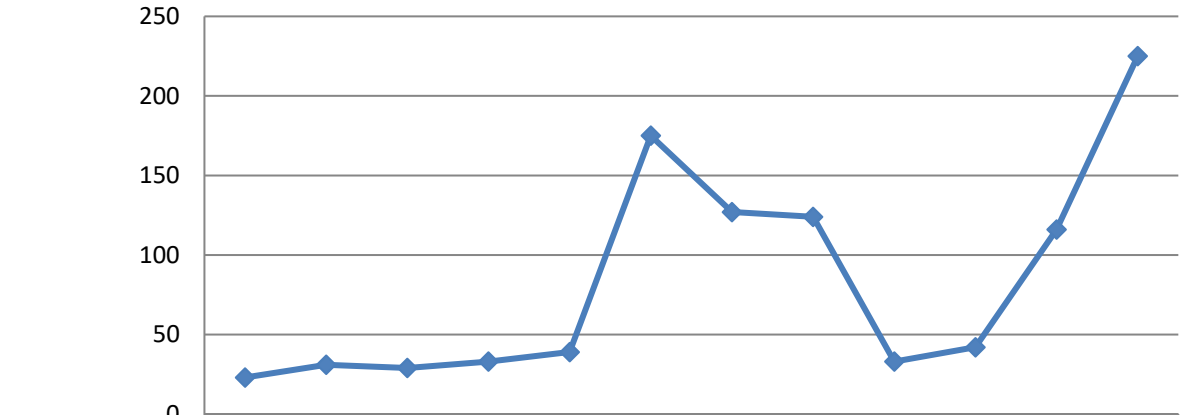
There is no imported sewage accepted at the treatment facility.

5 Raw Sewage Quality

Results of raw sewage concentrations are available in the Facility Performance Assessment Report in Appendix A.

5.1 Influent Trending

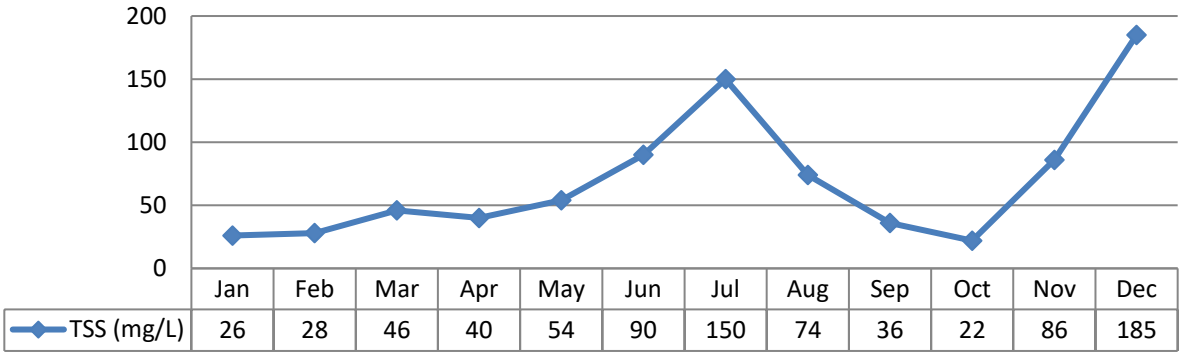
5.1.1 BOD (mg/L)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BOD (mg/L)	23	31	29	33	39	175	127	124	33	42	116	225

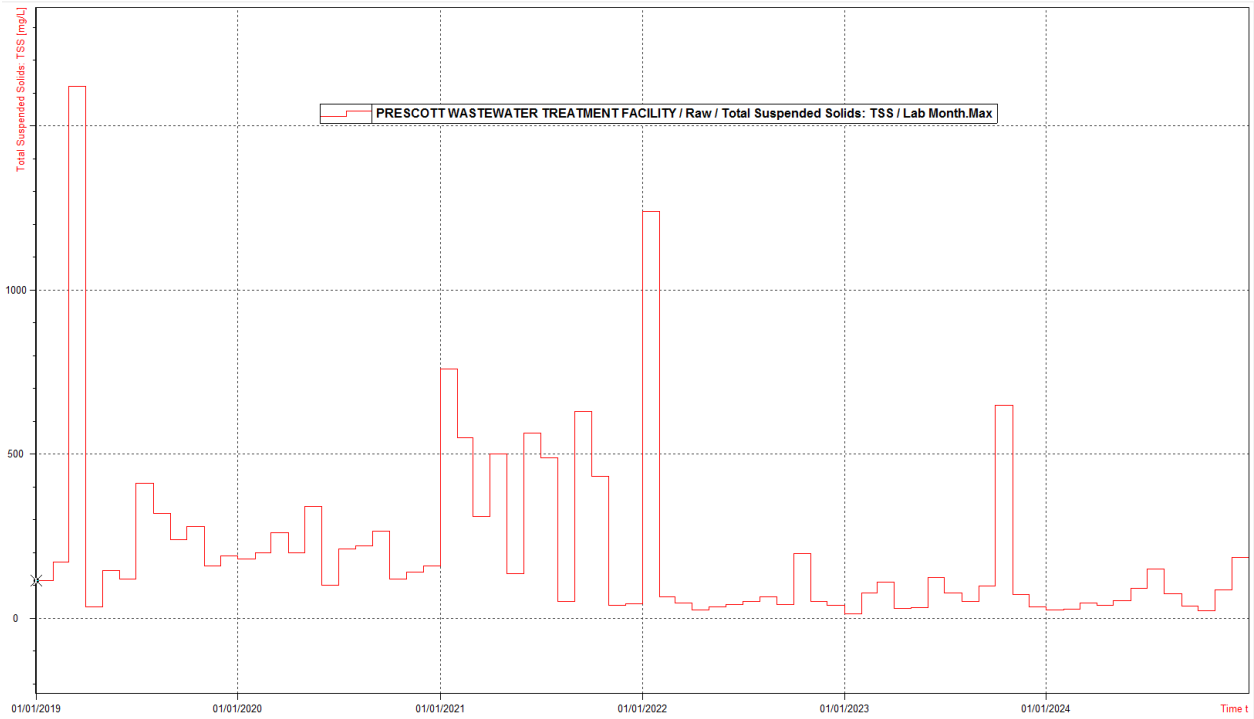
5.1.2 5-year Trend BOD5 (mg/L)

5.1.3 Total Suspended Solids (mg/L)

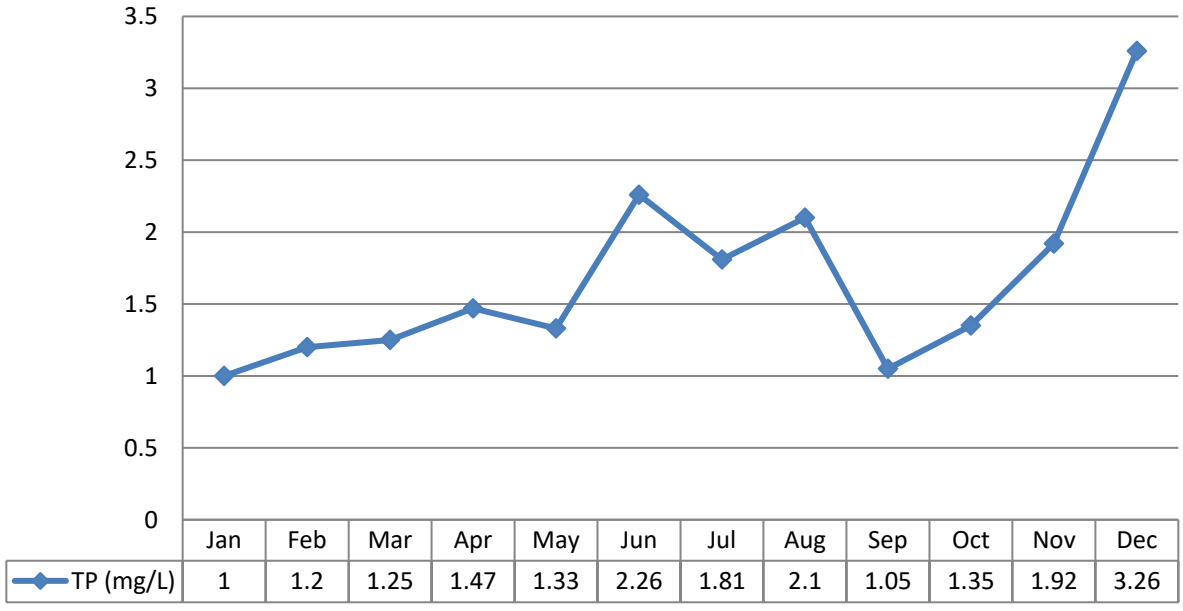


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TSS (mg/L)	26	28	46	40	54	90	150	74	36	22	86	185

5.1.4 5-year Total Suspended Solids (mg/L)

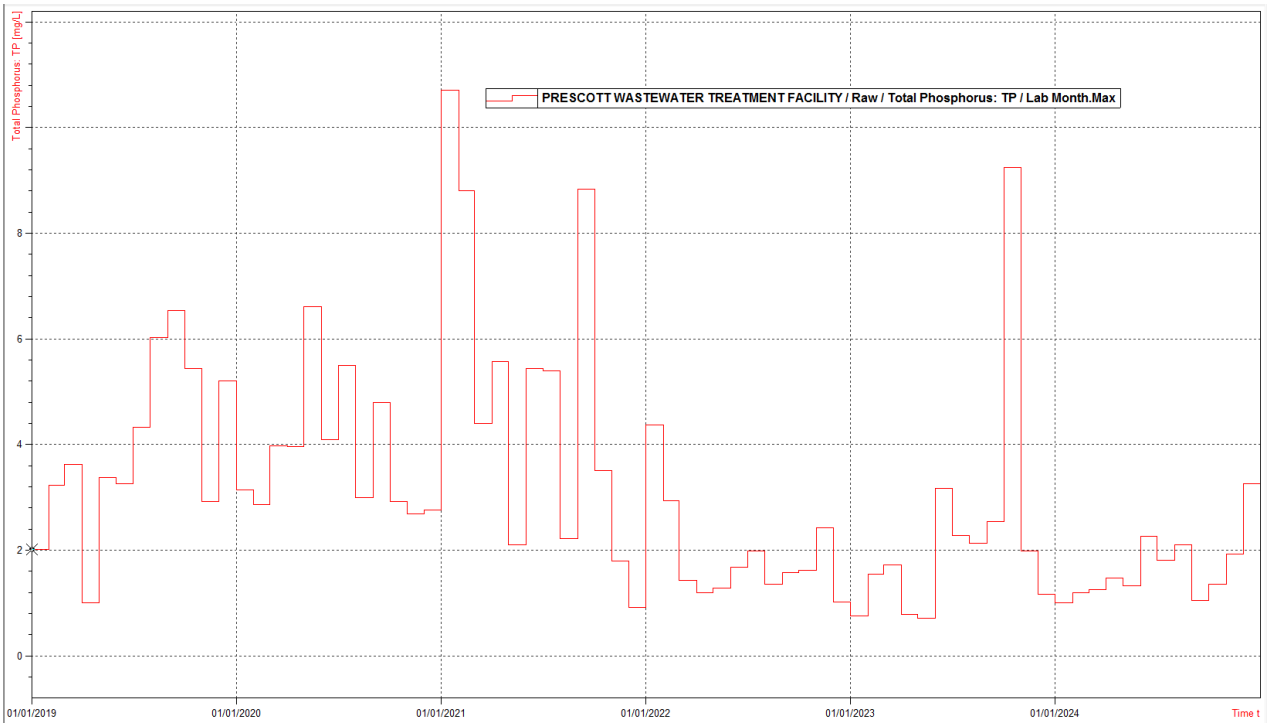


5.1.5 Total Phosphorus (mg/L)

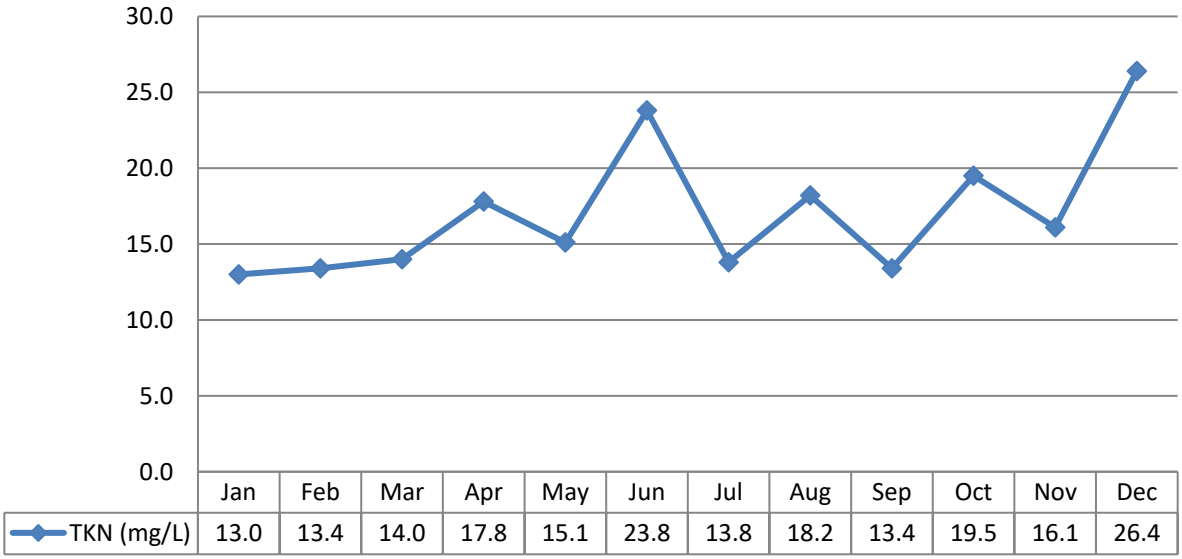


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TP (mg/L)	1	1.2	1.25	1.47	1.33	2.26	1.81	2.1	1.05	1.35	1.92	3.26

5.1.6 5-year Total Phosphorus (mg/L)

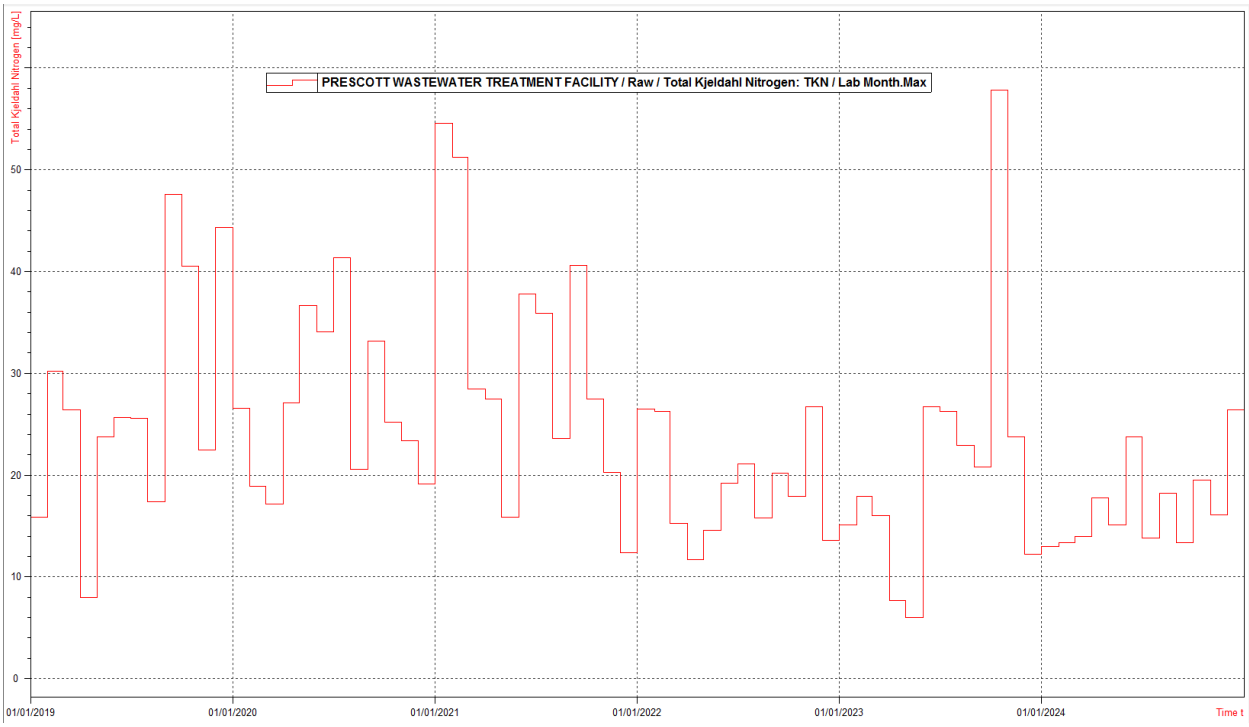


5.1.7 Total Kjeldahl Nitrogen (TKN) (mg/L)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TKN (mg/L)	13.0	13.4	14.0	17.8	15.1	23.8	13.8	18.2	13.4	19.5	16.1	26.4

5.1.8 5-year Total Kjeldahl Nitrogen (TKN)



5.2 Imported Waste Quality

There is no imported sewage accepted at the treatment facility.

5.3 Imported Waste Quality

There was no imported waste in 2024.

6 Effluent Quality

The monthly average concentrations of the carbonaceous biochemical oxygen demand (CBOD5), total suspended solids (TSS), total ammonia nitrogen (TAN), and total phosphorus (TP) remained below the effluent objectives and limits outlined in the facility's ECA during 2024. In addition, the effluent pH remained within the limits and objectives throughout the year. The geometric mean density of E. Coli in the effluent also remained within the ECA limit and objective in 2024.

6.1 Effluent Quality Assurance and Control Measures Taken

This system is part of OCWA's Seaway Valley Cluster. The cluster is supported by the Eastern Regional Hub, and corporate resources. Operational Services are delivered by OCWA staff that live and work in the community. The systems are operated to meet compliance with applicable regulations. The system has comprehensive manuals detailing operations, maintenance, instrumentation, and emergency procedures. All procedures are treated as active documents and are updated as required. These documents are also part of OCWA's Quality & Environmental Management System.

The process is reviewed and maintained by certified operators. These operator's complete in-house

rounds and testing to monitor the process. All sampling and analysis follow approved methods and protocols for sampling, analysis and recording as specified in the Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works", the Ministry's publication, "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" and the publication, "Standard Methods for the Examination of Water and Wastewater".

All final effluent samples collected during the reporting period to meet legislated sampling requirements are submitted to Caduceon Kingston for analysis, with the exception of pH and temperature. Caduceon Kingston has been deemed accredited by the Canadian Association for Laboratory Accreditation (CALA), meeting strict provincial guidelines including an extensive quality assurance/quality control program. By choosing this laboratory, the Ontario Clean Water Agency is ensuring appropriate control measures are undertaken during sample analysis. The pH and temperature parameters are analyzed in the field at the time of sample collection by certified operators, to ensure accuracy and precision of the results obtained.

OCWA uses several computer systems which include:

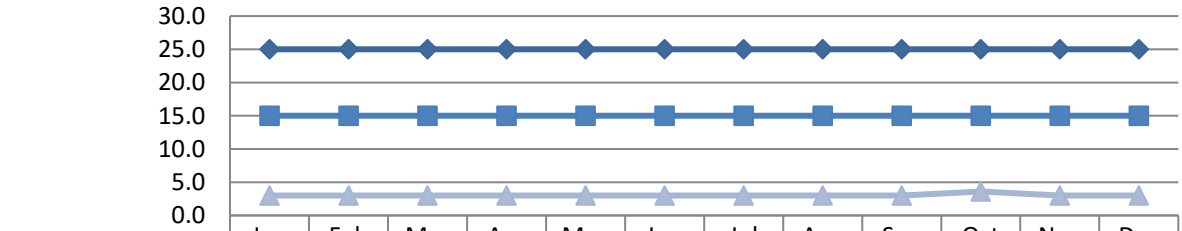
- Process Data Management (PDM)
  - This database program consolidates all operational data from a variety of sources including field data, online instrumentation, and electronic receipt of lab test results for reporting, tracking and analysis.
- Maximo – OCWA's Work Management System (WMS)
  - This program is used to track and schedule maintenance activities for all equipment in the system. It is also used to assign tasks for specific operational tasks.
- Wonderware (OUTPOST5)/SCADA
  - Wide-area SCADA system allows for process optimization and data logging, process trending, remote alarming.

The operations team also has access to a network of operational compliance and process specialists to assist for emerging process issues. This aids in establishing additional control measures to ensure a quality effluent product. Detailed individual sample results for both raw sewage and final effluent can be requested from the operating authority.

6.2 CBOD5 (mg/L)

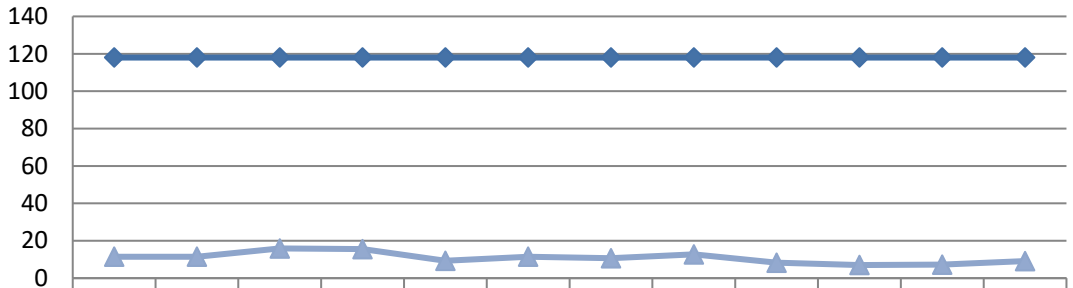
Compliance Limit and Objective for this parameter was met in 2024.

6.2.1 Concentration (mg/L)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ECA Limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
ECA Objective	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Average	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.6	3.0	3.0

6.2.2 Loading (kg/d)

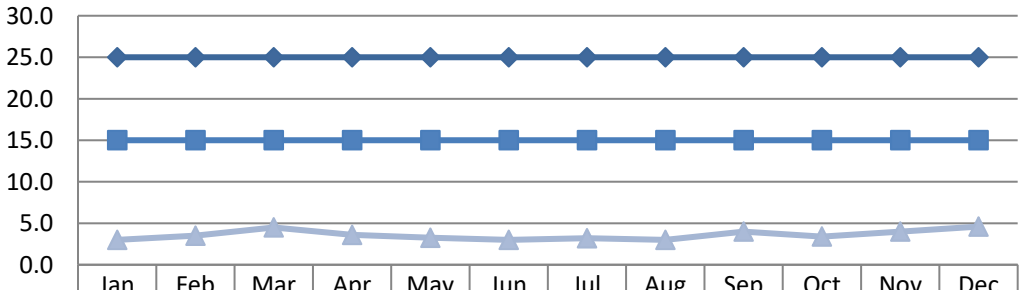


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ECA Limit	118	118	118	118	118	118	118	118	118	118	118	118
Average	11.49	11.46	15.90	15.52	9.31	11.49	10.67	12.70	8.25	7.02	7.22	9.11

6.3 Total Suspended Solids (mg/L)

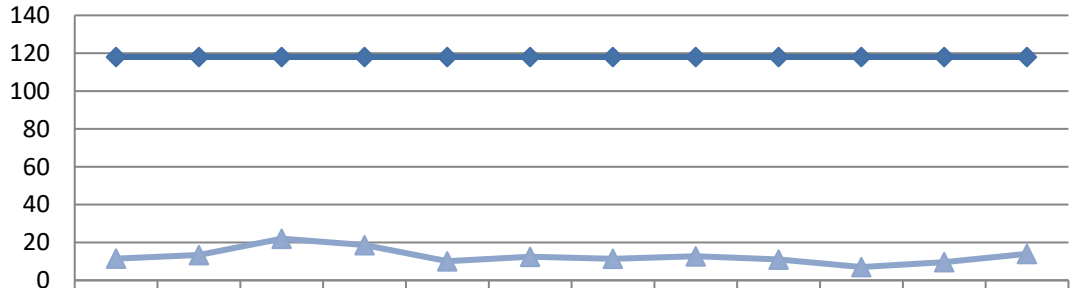
Compliance Limit and Objective for this parameter was met in 2024.

6.3.1 Concentration (mg/L)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ECA Limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
ECA Objective	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Average	3.0	3.5	4.5	3.6	3.3	3.0	3.2	3.0	4.0	3.4	4.0	4.6

6.3.2 Loading (kg/d)

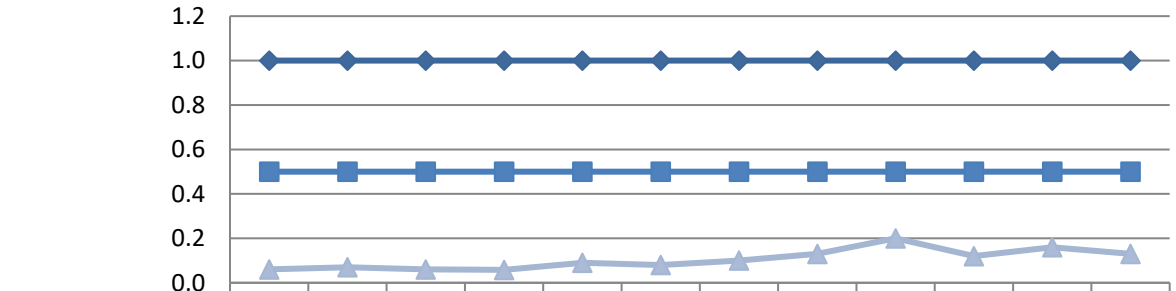


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ECA Limit	118	118	118	118	118	118	118	118	118	118	118	118
Average	11.5	13.4	22.0	18.6	10.1	12.5	11.4	12.7	11.0	7.0	9.6	14.0

6.4 Total Phosphorus (mg/L)

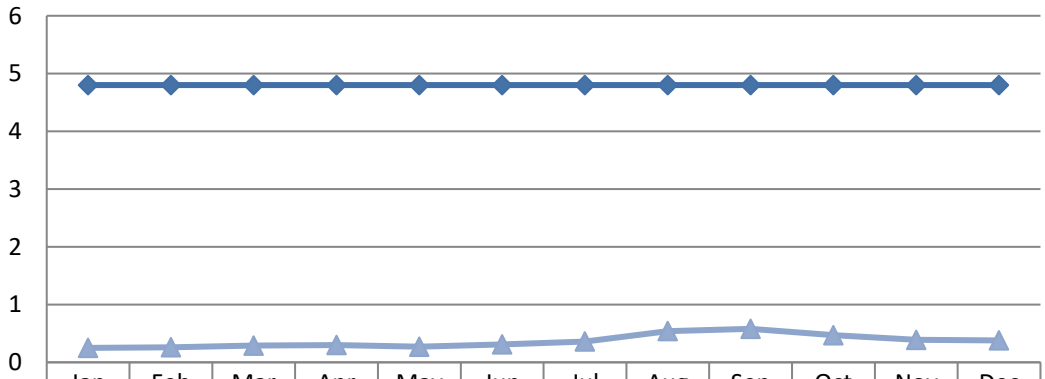
Compliance Limit and Objective for this parameter was met in 2024.

6.4.1 Concentration (mg/L)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ECA Limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
ECA Objective	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Average	0.06	0.07	0.06	0.06	0.09	0.08	0.10	0.13	0.20	0.12	0.16	0.13

6.4.2 Loading (kg/d)

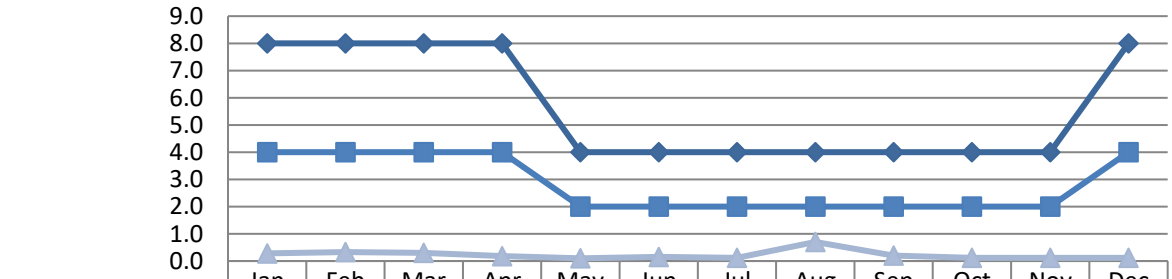


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ECA Limit	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Average	0.25	0.26	0.29	0.30	0.27	0.31	0.36	0.54	0.58	0.47	0.39	0.38

6.5 Total Ammonia Nitrogen (mg/L)

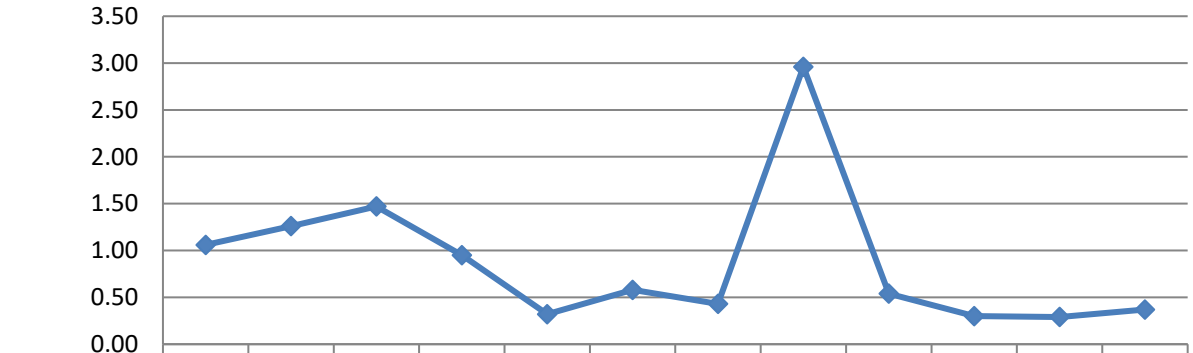
Compliance Limit and Objective for this parameter was met in 2024.

6.5.1 Concentration (mg/L)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ECA Limit	8.0	8.0	8.0	8.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	8.0
ECA Objective	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.0
Average	0.28	0.33	0.30	0.18	0.10	0.15	0.12	0.70	0.20	0.12	0.12	0.12

6.5.2 Loading (kg/d)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average	1.06	1.26	1.47	0.95	0.32	0.58	0.43	2.96	0.54	0.30	0.29	0.37

6.6 Acute Lethality

There was one (1) sample collected in 2024 and tested for acute lethality (Rainbow Trout and Daphnia Magna). This sampling is required both provincially and federally. Results are displayed as % mortality. An adverse result is a > 50% mortality rate.

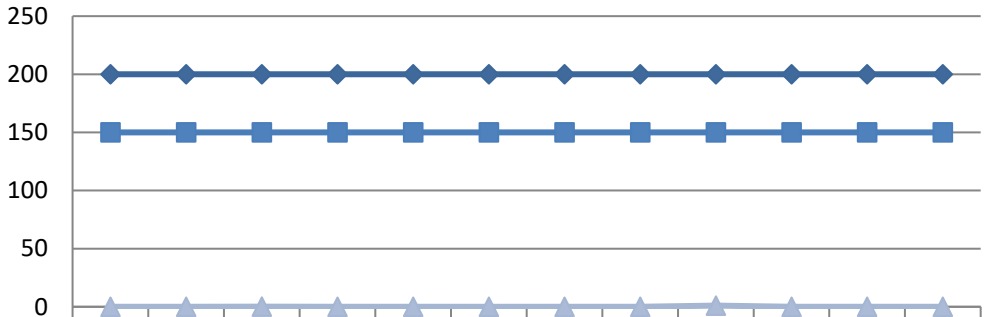
The Federal and Provincial limit for this parameter was met in 2024.

Date	Rainbow Trout	Daphnia Magna
July 04, 2024	0%	0%

6.7 E-coli (cfu/100mL)

Compliance Limit and Objective for this parameter was met in 2024.

6.7.1 Geometric Mean (cfu/100mL)

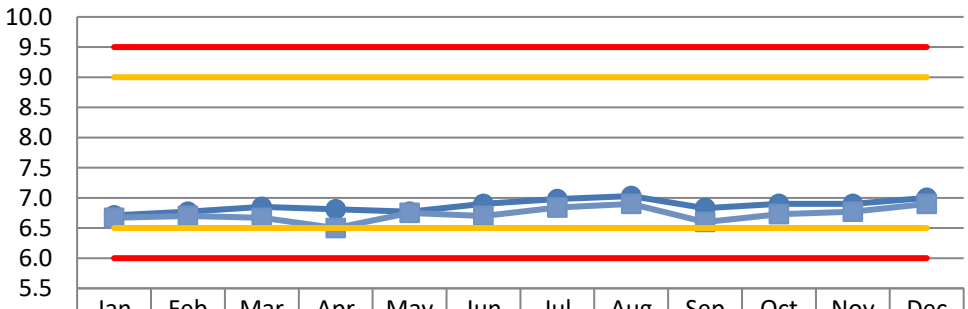


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ECA Limit	200	200	200	200	200	200	200	200	200	200	200	200
ECA Objective	150	150	150	150	150	150	150	150	150	150	150	150
Geometric Mean	0	0	0	0	0	0	0	0	1	0	0	0

6.8 pH

Compliance Limit range for this parameter is 6.0 – 9.5. The parameter was met in 2024. Each instance the pH is outside of that range is reported as a non-compliance.

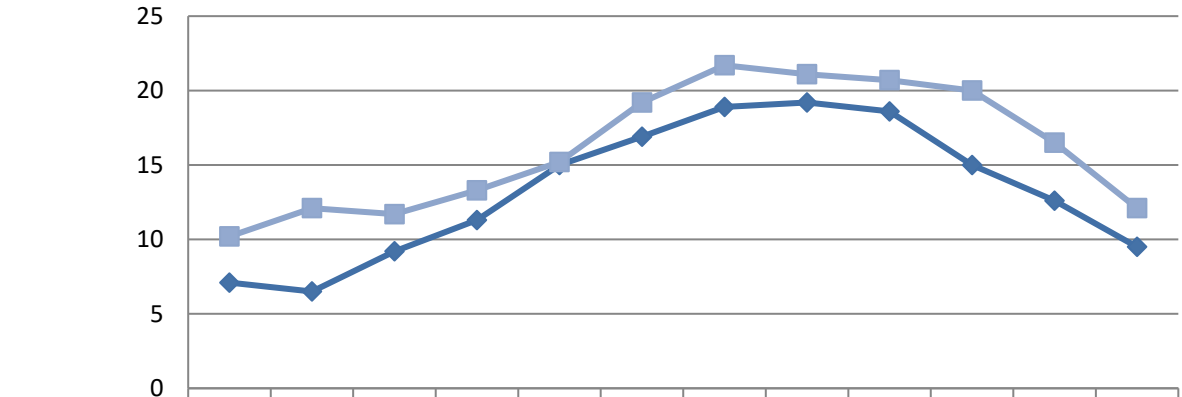
Compliance Objective range for this parameter is 6.5-9. The parameter was met in 2024.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ECA Limit Max	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
ECA Objective Max	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
pH max	6.71	6.77	6.85	6.81	6.77	6.90	6.98	7.03	6.83	6.90	6.90	7.00
pH min	6.67	6.70	6.67	6.50	6.75	6.70	6.84	6.90	6.60	6.73	6.77	6.90
ECA Objective Min	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
ECA Limit Min	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0

6.9 Temperature (°C)

There are no compliance limits or objectives defined for Effluent.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Minimum	7.1	6.5	9.2	11.3	15	16.9	18.9	19.2	18.6	15	12.6	9.5
Maximum	10.2	12.1	11.7	13.3	15.2	19.2	21.7	21.1	20.7	20	16.5	12.1

7 Operating Issues/Problems

There were no significant operating issues/problems to report on in 2024.

7.1 Effluent Quality Non-Compliance Summary

Date	Exceedance of	Objective	Value	Corrective Action
There were no effluent non-compliances in 2024.				

7.2 Summary of Abnormal Sewage Discharge Events

Abnormal Discharge Events include Bypass', Overflows, Diversions and Spills of Sewage. Summary Details are included in Appendix B.

7.3 Spills (Other than Sewage)

Date	Location	Details	Volume (m3)	Start Date and Time	End Date and Time
There were no spills (other than sewage) to report on in 2024.					

8 Maintenance

Routine planned maintenance activities are scheduled in WMS and include:

- Inspect, adjust and calibrate process control equipment to ensure proper operation of water distribution systems, pumps, chemical feeders, and all other equipment installed at the facilities.
- Carry out a routine maintenance program including greasing and oiling as specified in the

lubrication schedule.
- Perform day-to-day maintenance duties to equipment including checking machinery and electrical equipment when required.
- Maintain an equipment inventory
- Maintain accurate records of work conducted, activities, and achievements.

Planned maintenance activities are communicated to the person responsible for completing the task through the issuance of WMS work orders. Work orders are automatically generated on a schedule as determined based on manufacturer's recommendations and site specific operational and maintenance needs and are assigned directly to the appropriate operations personnel. This schedule is set up by the designated WMS Primary. Work orders are completed and electronically entered into WMS by the person responsible for completing the task.

Unplanned maintenance is conducted as required.

8.1 Normal Maintenance and Repairs

Work Order	Details
3761869	SBR 2 drain and clean repair inspect, ladder install
3761879	Drying beds clean out
3761879	Sludge tank 1 new ladder, shaft, pedestal installed
3761880	New level metre SBR 2
3761882	HVAC new heat exchanger office building
3761884	SCADA maintenance
4332314	New decant arm assembly SBR 3
3761898	UV parts maintenance
3761899	New DO probe caps calibration bags
3761901	New SC 1000 DO controller
3761902	Supernatant valve digester tank
3761904	Back flow preventer maintenance
3761905	Driveway repair
3761906	Generator maintenance
3761907	Sludge loading flow metre replacement
3761909	Level metre SBR 3

8.2 Major Maintenance

Work Order	Details
3761911	Rebuilt and installed pump 3 SPS 5
3761912	Rebuilt and installed pump 2 SPS 6
3761915	Installed VFD pump 2 SPS 3
3761917	New water pump, thermostat, temperature sensor for the generator at SPS 3

8.3 Emergency Maintenance and Repairs

Work Order	Details
3761870	Auger monster repair

8.4 Flow Meter Calibrations and Maintenance

Location	Date of Calibration	Additional Maintenance
FIT-103 Sludge Loading Flow	April 03, 2024	None
FIT-102 Supernatant Flow	April 03, 2024	None
FIT-101 RAS/WAS Flow	April 03, 2024	None
FIT-104 Sewage Influent Flow	April 03, 2024	None
FIT-301 Plant Effluent Flow	April 03, 2024	None
FIT-701 SPS #5 Flow	April 03, 2024	None
FIT-01 SPS #3 Flow	April 27, 2024	None
FIT-01 SPS #4 Flow	April 27, 2024	None

8.5 Authorized Alterations in Collection System

Work Order	Details	Significant Drinking Water Threat (Y/N)
There were no alterations to the collection system made in 2024.		

8.6 Notice of Modifications

Date	Process	Modification	Status
There were no modifications to the collection system made in 2024.			

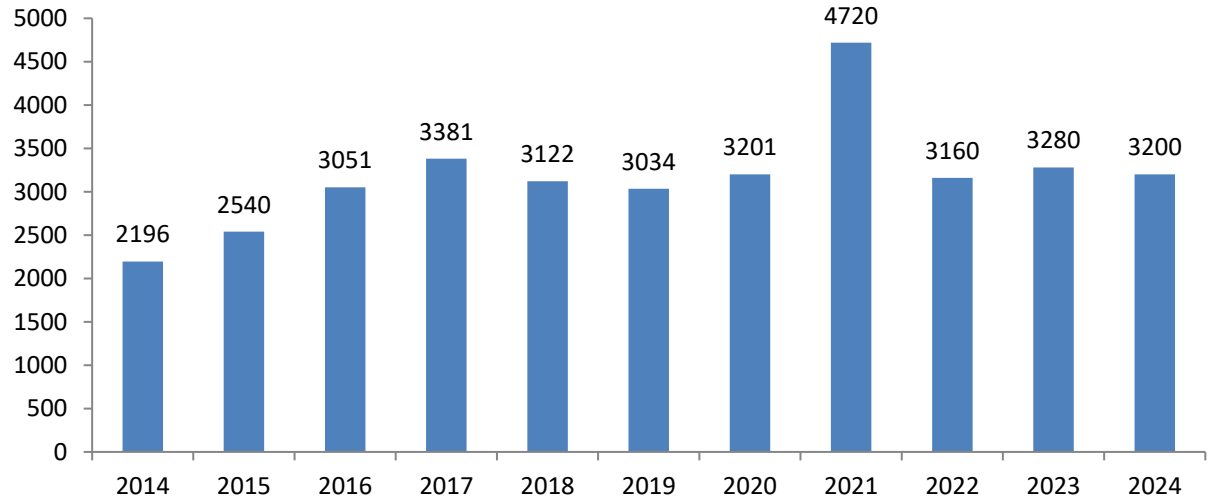
9 Sludge Generation

9.1 Sludge Disposal Summary

Date	Disposal Location	Approval #	Volume (m3)
05/13/24	South Dundas, Matilda, Concession 6, Lot 32	ECA# H480300	400
05/14/24	South Dundas, Matilda, Concession 6, Lot 32	ECA# H480300	520
05/15/24	South Dundas, Matilda, Concession 6, Lot 32	ECA# H480300	480
05/16/24	South Dundas, Matilda, Concession 6, Lot 32	ECA# H480300	480
05/17/24	South Dundas, Matilda, Concession 6, Lot 32	ECA# H480300	120
10/08/24	South Dundas, Matilda, Concession 6, Lot 32	ECA# H480300	480
10/09/24	South Dundas, Matilda, Concession 6, Lot 32	ECA# H480300	400
10/10/24	South Dundas, Matilda, Concession 6, Lot 32	ECA# H480300	320

In 2024, a total of 3,200 m3 of liquid bio-solids was hauled offsite by GFL and was utilized as soil conditioner. Of this, 2360 m3 was hauled to May (NASM Submission ID #22445), and the remaining 1200 m3 was hauled in October (NASM Submission ID #24908). It is anticipated that approximately the same volume of sludge will be generated in 2025.

9.2 Annual Comparison (m3/year)



It is anticipated that sludge volumes will remain similar to the 2024 volumes.

9.3 Sludge Quality

Sludge quality reports are available in Appendix C

10 Summary of Complaints

Location	Date	Nature of Complaint	Actions Taken
There were no complaints to report in 2024.			

Appendix A – Performance Assessment Reports

ONTARIO CLEAN WATER AGENCY
PERFORMANCE ASSESSMENT REPORT

OWNER:	TOWN OF PRESCOTT	**YEAR:**	2024
PROJECT:	PRESCOTT WWTP	**WATER COURSE:**	ST. LAWRENCE
WORKS NUM.:	110001122	**DESIGN CAPACITY:**	4,728 m^3/d
DESCRIPTION:	THREE SEQUENTIAL BATCH REACTORS AND AEROBIC SLUDGE DIGESTION		

MONTH	RAW			TREATED			RAW				SLUDGE		
	Total Flow m^3	Avg Day Flow m^3	Max Day Flow m^3/d	Effluent Flow m^3	Effluent Avg Flow m3	Effluent Max Flow m^3/d	Avg Raw BOD (mg/L)	Avg Raw TSS (mg/L)	Avg Raw PHOS. (mg/L)	Avg. Raw TKN (mg/L)	Sludge to Drying Beds m^3	Liquid Sludge Hauled m^3	Dry Sludge Hauled m^3
JAN	113,610	3,665	6,848	118,778	3832	6,970	23	26	1.00	13.0	110.1	0	0
FEB	115,111	3,969	6,218	118,384	4082	6,323	31	28	1.20	13.4	204.2	0	0
MAR	145,497	4,693	7,010	151,653	4892	7,154	29	46	1.25	14.0	172.6	0	0
APR	153,088	5,103	8,223	160,386	5346	8,275	33	40	1.47	17.8	190.0	0	0
MAY	86,427	2,788	3,341	96,159	3102	3,697	39	54	1.33	15.1	209.3	2000	0
JUN	109,659	3,655	7,153	118,770	3959	6,886	175	90	2.26	23.8	139.1	0	0
JUL	98,051	3,163	5,921	110,255	3557	6,352	127	150	1.81	13.8	152	0	0
AUG	118,528	3,823	6,992	131,273	4235	7,057	124	74	2.10	18.2	0	0	0
SEPT	75,669	2,522	4,430	85,216	2841	4,547	33	36	1.05	13.4	0	0	0
OCT	61,700	1,990	2,214	72,558	2341	3,269	42	22	1.35	19.5	0	1200	116
NOV	66,370	2,212	4,149	74,610	2487	4,637	116	86	1.92	16.1	0	0	0
DEC	88,940	2,869	4,679	94,086	3,035	5,051	225	185	3.26	26.4	0	0	0
TOTAL	1,232,650			1,332,127							1177.0	3200	116
AVG		3,371			3,642		83	70	1.67	17			
MAX			8,223			8,275							
CRITERIA		**4,728**	**16,000**										
COMPLIANCE		**YES**	**YES**										

Comments: Average raw BOD, TP and TSS based on 24hr composite sample results

2024 - PRESCOTT WWTP EFFLUENT SAMPLING MONTHLY AVERAGES

MONTH	DATE	$CBOD_5$ (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	E. Coli (CFU/100ml)
January	02-Jan-23	< 3	< 3	0.05	0.07	0
	09-Jan-23	< 3	< 3	0.09	0.46	0
	15-Jan-23	< 3	< 3	0.05	0.06	119
	23-Jan-23	< 3	3	0.08	0.42	0
	30-Jan-23	< 3	< 3	0.05	0.37	8
	Monthly Average	3	3	0.06	0.28	0
	Compliant?	YES	YES	YES	YES	YES
February	06-Feb-23	< 3	< 3	0.06	0.39	14
	13-Feb-23	< 3	3	0.09	0.34	2
	20-Feb-23	< 3	5	0.05	0.09	0
	27-Feb-23	< 3	< 3	0.07	0.5	0
	Monthly Average	3.0	3.5	0.07	0.33	0
	Compliant?	YES	YES	YES	YES	YES
March	05-Mar-23	4	3	0.06	0.12	1
	12-Mar-23	< 3	6	0.04	0.14	0
	19-Mar-23	< 3	< 3	0.06	0.22	0
	26-Mar-23	3	6	0.08	0.72	1
	Monthly Average	3.3	4.5	0.06	0.30	0
	Compliant?	YES	YES	YES	YES	YES
April	02-Apr-23	< 3	3	0.08	0.12	0
	09-Apr-23	< 3	4	0.06	0.45	1
	16-Apr-23	< 3	< 3	0.03	0.09	0
	23-Apr-23	< 3	< 3	0.05	0.06	1
	30-Apr-23	< 3	5	0.07	0.2	0
	Monthly Average	3	3.6	0.058	0.18	0
	Compliant?	YES	YES	YES	YES	YES
May	07-May-24	< 3	< 3	0.06	0.11	0
	14-May-24	< 3	4	0.08	0.08	0
	21-May-24	< 3	< 3	0.08	0.12	0
	28-May-24	< 3	< 3	0.13	0.1	0
	Monthly Average	3	3.25	0.09	0.10	0
	Compliant?	YES	YES	YES	YES	YES
June	04-Jun-24	< 3	< 3	0.12	0.27	0
	11-Jun-24	< 3	< 3	< 0.01	0.11	5
	18-Jun-24	< 3	4	0.1	0.13	0
	25-Jun-24	< 3	3	0.09	0.1	1
	Monthly Average	3	3	0.08	0.15	0.01
	Compliant?	YES	YES	YES	YES	YES

2024 - PRESCOTT WWTP EFFLUENT SAMPLING MONTHLY AVERAGES

MONTH	DATE	$CBOD_5$ (mg/L)		TSS (mg/L)		TP (mg/L)	NH_3 (mg/L)	E. Coli (CFU/100ml)
July	02-Jul-24	<	3		3	0.1	0.15	1
	09-Jul-24	<	3		3	0.12	0.1	0
	16-Jul-24	<	3		4	0.11	0.18	4
	23-Jul-24	<	3	<	3	0.10	0.08	0
	30-Jul-24	<	3		3	0.08	0.1	0
	Monthly Average		3		3.2	0.10	0.12	0
	Compliant?		YES		YES	YES	YES	YES
August	06-Aug-24	<	3		3	0.13	0.19	0
	13-Aug-24		3		3	0.23	1.28	8
	20-Aug-24	<	3	<	3	0.08	0.97	11
	27-Aug-24	<	3		3	0.07	0.36	2
	Monthly Average		3		3.00	0.13	0.70	0
	Compliant?		YES		YES	YES	YES	YES
September	03-Sep-24	<	3		5	0.07	0.13	1
	10-Sep-24	<	3		4	0.15	0.17	1
	17-Sep-24	<	3		4	0.22	0.26	1
	24-Sep-24	<	3		3	0.41	0.22	1
	Monthly Average		3		4	0.21	0.20	1
	Compliant?		YES		YES	YES	YES	YES
October	01-Oct-24	<	3	<	3	0.14	0.09	0
	08-Oct-24	<	3		3	0.07	0.13	0
	15-Oct-24	<	3		3	0.1	0.12	1
	22-Oct-24	<	3	<	3	0.14	0.11	0
	29-Oct-24	<	3		5	0.15	0.14	0
	Monthly Average		3.0		3.4	0.12	0.12	0
	Compliant?		YES		YES	YES	YES	YES
November	05-Nov-24	<	3		4	0.13	0.11	0
	12-Nov-24	<	3		6	0.13	0.1	2
	19-Nov-24	<	3	<	3	0.2	0.13	1
	26-Nov-24	<	3	<	3	0.18	0.14	1
	Monthly Average		3		4	0.16	0.12	0
	Compliant?		YES		YES	YES	YES	YES
December	03-Dec-24	<	3	<	3	0.18	0.11	0
	10-Dec-24	<	3		6	0.18	0.1	0
	17-Dec-24	<	3		3	0.13	0.13	0
	24-Dec-24	<	3		6	0.08	0.12	0
	31-Dec-24	<	3		5	0.06	0.15	0
	Monthly Average		3.0		4.6	0.13	0.12	0
	Compliant?		YES		YES	YES	YES	YES

Appendix B – Details of Abnormal Sewage Discharge Events

Facility Bypass

Date	Location	Details	Volume (m3)	Start Time	End Time	Duration (h)	Discharge Receiver	Disinfection Provided
There was no facility bypass to report in 2024.								

Facility Overflow

Date	Location	Details	Volume (m3)	Start Time	End Time	Duration (h)	Discharge Receiver	Disinfection Provided
There was no facility overflow to report in 2024.								

Collection Overflow

Date	Location	Details	Volume (m3)	Start Time	End Time	Duration (h)	Discharge Receiver	Disinfection Provided
07/24/25	SPS # 3 (Coast Guard) Bypass Weir BW-1	Collection system overflow due to heavy rains.	72.942	18:00	18:50	50 min	St. Lawrence River	Stabilized chlorine pucks
07/24/25	SPS #4 (Corner of East and King St) Bypass Weir BW-3	Collection system overflow due to heavy rains.	36.054	18:05	18:40	35 min	St. Lawrence River	Stabilized chlorine pucks

Spills of Sewage

Date	Location	Details	Volume (m3)	Start Time	End Time	Duration (h)	Discharge Receiver	Disinfection Provided
There were no spills of sewage to report in 2024.								

Collection System Monitoring Data

Event Date	Event Location	Volume (m3)	Parameter	mg/L	Source Loading	Any Adverse Impacts & Corrective Actions
July 24, 2024	SPS # 3 (Coast Guard) Bypass Weir BW-1	72.942	Total Suspended Solids	142	10.36 kg	None.
			Total Phosphorus	3.61	0.263 kg	
			BOD5	132	9.64 kg	
			Total Kjeldahl Nitrogen	30.8	2.25 kg	
			E.Coli	8700000		
			pH @ 25°C	7.62		

Event Date	Event Location	Volume (m3)	Parameter	mg/L	Source Loading	Any Adverse Impacts & Corrective Actions
July 24, 2024	SPS #4 (Corner of East and King St) Bypass Weir BW-3	36.054	Total Suspended Solids	235	8.47 kg	None.
			Total Phosphorus	2.06	0.074 kg	
			BOD5	148	5.33 kg	
			Total Kjeldahl Nitrogen	13.3	0.48 kg	
			E.Coli	860000		
			pH @ 25°C	7.46		

Appendix C - Biosolids Quality Report

2024- PRESCOTT WWTP MONTHLY AEROBIC BIOSOLIDS CONCENTRATION RATIO

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Ammonia	3	36.5	18	8.5	5	1	2.5	2.5	1	1	1.0	2.0
Nitrate	29	1	28	71	46	11	20.75	2.05	48.25	72.20	43.25	55
Ammonia + Nitrate	30	37.3	46.4	79.8	51.3	12.4	23.25	4.55	49.25	73	44.3	57.0
Total Phosphorus	349	741	845	609	715	993.5	726.5	353.5	468	590	547	465.5
Total Solids	9220	23300	18350	19000	18750	26450.0	18300	11935	13150	11300	11575	7780
Aluminum	454	9802	628	688	908	1350.0	970	576	700.5	944	801	795
Arsenic	0.10	0.20	0.10	0.10	0.15	0.25	0.15	0.1	0.1	0.15	0.1	0.1
Cadmium	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.165	0.03
Chromium	0.33	0.73	0.71	0.65	0.62	0.99	0.645	0.345	0.42	0.62	0.485	0.49
Cobalt	0.04	0.06	0.07	0.05	0.04	0.07	0.045	0.03	0.035	0.04	0.03	0.04
Copper	4.18	8.55	6.45	6.59	7.58	11.85	7.75	4.58	5.44	8	6.645	6.425
Lead	0.25	0.55	0.40	0.40	0.45	0.80	0.5	0.3	0.35	0.60	0.45	0.45
Mercury	0.00	0.01	0.00	0.00	0.01	0.00	0.0045	0.0035	0.005	0.00	0.006	0.005
Molybdenum	0.18	0.27	0.22	0.20	0.20	0.31	0.215	0.18	0.18	0.22	0.18	0.195
Nickel	0.24	0.50	0.48	0.47	0.48	0.75	0.51	0.3	0.36	0.52	0.4	0.455
Selenium	0.10	0.15	0.10	0.10	0.10	0.15	0.15	0.1	0.1	0.10	0.1	0.1
Zinc	5.51	10.45	9.28	7.90	9.05	13.80	9.4	5.74	7.06	10.5	8.68	9.05

Metals ratio = mg metals/kg solids

	Metal/Solids Ratio (Sludge)												
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Limit
Arsenic	10.85	8.58	5.45	5.26	8.00	9.45	8.20	8.38	7.60	13.27	8.64	12.85	**170**
Cadmium	3.25	1.29	1.63	1.58	1.60	1.13	1.64	2.51	2.28	2.65	14.25	3.86	**34**
Chromium	35.2	31.3	38.7	33.9	33.1	37.4	35.2	28.9	31.9	54.87	41.90	62.98	**2800**
Cobalt	4.34	2.36	3.54	2.63	1.87	2.65	2.46	2.51	2.66	3.54	2.59	5.14	**340**
Copper	453	367	351	347	404	448	423	384	414	714.16	574.08	825.84	**1700**
Lead	27.11	23.61	21.80	21.05	24.00	30.25	27.32	25.14	26.62	53.10	38.88	57.84	**1100**
Mercury	0.27	0.21	0.25	0.24	0.32	0.15	0.25	0.29	0.38	0.31	0.52	0.64	**11**
Molybdenum	19.52	11.37	11.72	10.53	10.67	11.53	11.75	15.08	13.69	19.03	15.55	25.06	**94**
Nickel	26.03	21.24	25.89	24.74	25.60	28.36	27.87	25.14	27.38	46.02	34.56	58.48	**420**
Selenium	10.85	6.44	5.45	5.26	5.33	5.67	8.20	8.38	7.60	8.85	8.64	12.85	**34**
Zinc	598	448	505	416	483	522	514	481	537	926.55	749.89	1163.24	**4200**

Sludge is Acceptable	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE

SOME ANALYSIS RESULTS EXPRESSED AS "<" (LESS THAN);HOWEVER, IN ORDER TO COMPLETE THE CALCULATION, ONLY THE NUMERIC VALUE WAS USED; THEREFORE THE AVG. CONC. IS GREATER THAN ACTUAL.

Appendix D - ECA Annual Report Requirements

Facility ECA # 6996-9ZYNWH Section 10(6)	**Section in Report**
a) Summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in condition 7, including an overview of the success and adequacy of the Works	Section 6 – Effluent Quality
b) Description of any operating problems encountered and corrective actions taken	Section 8 – Operating Problems/Issues
c) Summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works	Section 9 – Maintenance
d) Summary of any effluent quality assurance or control measures undertaken in the reporting period	Section 6 – Effluent Quality
e) Summary of the calibration and maintenance carried out on all effluent monitoring equipment	Section 9.3 – Flow Meter Calibrations
f) Description of efforts made and results achieved in meeting the Effluent Objectives of Condition 6	Section 8 – Operating Problems/Issues
g) Tabulation of the volume of sludge generated in the reporting period, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations where the sludge was disposed	Section 10 – Sludge Generation
h) Summary of any complaints received during the reporting period and any steps taken to address the complaints	Section 11 – Summary of Complaints
i) Summary of all By-pass, spill or abnormal discharge events	Appendix D, Section 8 – Operating Problems/Issues
j) Copy of all Notice of Modifications submitted to the Water Supervisor as a result of Schedule B, Section 1, with a status report on the implementation of each modification	Section 9 – Maintenance
k) Report summarizing all modifications completed as a result of Schedule B, Section 3	Section 9 - Maintenance
l) Any other information the Water Supervisor requires from time to time	N/A

Collection ECA # 161-W601 Schedule E	
4.6.3 If applicable, includes a summary of all required monitoring data along with an interpretation of the data and any conclusion drawn from the data evaluation about the need for future modifications to the Authorized System or system operations.	Operating Issues and Problems
4.6.4 Includes a summary of any operating problems encountered and corrective actions taken.	Operating Issues and Problems
4.6.5 Includes a summary of all calibration, maintenance, and repairs carried out on any major structure, Equipment, apparatus, mechanism, or thing forming part of the Municipal Sewage Collection System.	Maintenance
4.6.6 Includes a summary of any complaints related to the Sewage Works received during the reporting period and any steps taken to address the complaints.	Summary of Complaints
4.6.7 Includes a summary of all Alterations to the Authorized System within the reporting period that are authorized by this Approval including a list of Alterations that pose a Significant Drinking Water Threat.	Maintenance
4.6.8 Includes a summary of all Collection System Overflow(s) and Spill(s) of Sewage, including: a) Dates;	Operating Issues and Problems Appendix B

Collection ECA # 161-W601 **Schedule E**	
b) Volumes and durations; c) If applicable, loadings for total suspended solids, BOD, total phosphorus, and total Kjeldahl nitrogen, and sampling results for E.coli; d) Disinfection, if any; and e) Any adverse impact(s) and any corrective actions, if applicable.	
4.6.9 Includes a summary of efforts made to reduce Collection System Overflows, Spills, STP Overflows, and/or STP Bypasses, including the following items, as applicable: a) A description of projects undertaken and completed in the Authorized System that result in overall overflow reduction or elimination including expenditures and proposed projects to eliminate overflows with estimated budget forecast for the year following that for which the report is submitted. b) Details of the establishment and maintenance of a PPCP, including a summary of project progresses compared to the PPCP's timelines. c) An assessment of the effectiveness of each action taken. d) An assessment of the ability to meet Procedure F-5-1 or Procedure F-5-5 objectives (as applicable) and if able to meet the objectives, an overview of next steps and estimated timelines to meet the objectives. e) Public reporting approach including proactive efforts.	Maintenance Operating Issues and Problems