



To: Mayor and Council
From: Jason Barlow, Manager of Water & Wastewater
Date: April 12th, 2024
Committee of the Whole Date: April 22nd, 2024
Title: 2024 Utilities Quarterly Report #1

☐ For Direction
☒ For Information
☐ For Adoption
☒ Attachment (5 pages)

Recommendation:

That Council of the Corporation of the Town of Smiths Falls receive the 2024 Utilities Quarterly Report #1 (January, February, March) #2024-045 for information.

Purpose:

The purpose of the attached report is to update the Owner (Mayor and Council), the Operating Authority (OA), Top Management (CAO) and the Public regarding Water and Wastewater Operations for the 1st quarter of 2024.

Background:

Council and staff received Standard of Care training in December 2022, which provided insight into the extensive amount of information that Council, Top Management and the public will receive on an annual basis via annual reports, for both Water and Wastewater operations.

In an effort to preface those annual reports with information provided throughout the calendar year, staff will provide quarterly reports for Council, Top Management and public review. These quarterly reports will not reduce the amount of information provided in the annual summary reports due to strict legislative requirements. The quarterly reports are meant to detail operational information for a three-month period that is pertinent for Council, Top Management and public awareness. This will afford a quarterly snapshot of how the Town's water and wastewater systems are performing.

Analysis and Options:

Information included in the attached report is gathered from the 1st quarter (January, February, March) 2024 operational data and information.

Budget/Financial Implications:

Information only – no financial implications at this time.

Link to Strategic Plan:

Not applicable

Existing Policy:

DWQMS – Communications with Owner, Top Management and the Public

Consultations: Director of Public Works & Utilities

Attachments:

Attachment 1 – 2024 Utilities Quarterly Report #1

Notes/Action (space for Council Member's notes):

Respectfully Submitted:

Approved for Agenda by CAO:

Original Copy Signed
Jason Barlow, C.Tech. CAPM.
Manager of Water and Wastewater

Original approved by
Malcolm Morris, CMO



SMITHS FALLS

RISE AT THE FALLS

2024 Utilities Quarterly Report #1

Smiths Falls Water Systems Totals:

	<u>January-March</u>	<u>YTD</u>
Average Daily Finished Water Flow:	3,365.4 m ³	3,365.4 m ³
Average FI2 Residual:	0.58 mg/l	0.58 mg/l
Average Distribution Free Cl ₂ Residual:	1.10 mg/l	1.10 mg/l
Average Distribution pH:	7.59	7.59

Table 1 - Total Finished Water Flow Monthly (m³)

	January	February	March	YTD
2024	106,251.7	99,221.8	101,082.1	306,555.6
2023	110,445.1	101,869.9	105,516.3	317,831.3
Difference	-4,193.4	-2,648.1	-4,434.2	-11,275.8

Table 2 - Non-Revenue Water (NRW)

	Total NRW	Accounted	Unaccounted	YTD Total NRW
Percentage	33.9%	11.2%	22.7%	33.9%
Cubic Metres	104,061	34,345	69,716	104,061

Table 3 - Daily Hydro usage (kWh)

	January	February	March	YTD (kWh/day)
2024	2,972	2,939	2,950 Est.	2,953
2023	2,788	2,928	2,864	2,860
Difference	184	11	86	93

Table 4 - Coagulant usage (L/day)

	January	February	March	YTD (Litres/day)
2024	460.5	345.5	430.1	412.0
2023	334.4	256.1	230.0	273.5
Difference	126.1	89.4	200.1	138.5

Table 5 - Total Trihalomethane (TTHM) (µg/L)

	January	February	March	Rolling Annual Average
2024	53	31	50	42.8
2023	58	47	50	74



Bacti Sampling:

- Treated water – 13 samples (13 YTD) - 0 -Total Coliform (TC) and 0 - E. coli (EC)
- Distribution - 78 samples (78 YTD) – 0 TC and 0 EC
- Distribution Water main Repairs/new installations/service repairs
–0 Samples (0 YTD)

Lead Sampling:

- 1 Finished Water (Plant Discharge) Sample (1 YTD)
- 1 Water Distribution (Hydrant/Flush Station) Sample (1 YTD)
- 1 Residential Samples Completed this Quarter (1 YTD)
- 0 Residential Location this quarter over the Maximum acceptable concentration (MAC) (0.01 mg/L) (0 locations YTD)

Water Treatment Plant - 43 Abbott St N:

- MESH – 385 Records of Preventative Maintenance (385 YTD)
- MESH – 7 Records of Corrective maintenance (7 YTD)
- 53 Filter backwash events (53 YTD)

Smiths Falls Distribution Subsystem:

- 2 Complaints – (2 YTD) Low water pressure (Leak found on Private side)
- 3 Watermain Repairs (Broadview, Thurber, and Tower) – (3 YTD) (Category 1)
- 3 Water Service repairs/replacements (Public) (3 YTD)
- 60 New water Service & Water Turn Off/On requests (166 YTD)
- 112 Meter Items (above monthly reads) (112 YTD)
 - Account Transfer reads – 37 (37 YTD)
 - New Meters – 43 (43 YTD)
 - Replacement Meters – 26 (26 YTD)
 - Re-Reads – 4 (4 YTD)
 - Seasonal – 2 (2 YTD)
- Utility Locates – 167 new Locate requests (167 YTD)
- 42 Water Valve Maintenance Activities completed (Vacuum/ Operating stiff Valves) (42YTD)
- 2 Hydrants flushed and annual maintenance completed (2 YTD)



Smiths Falls Wastewater Systems Totals:

Average Daily Final Effluent Flow: January-March YTD
8,130.5 m³/day 8,130.5 m³/day

By-Pass Event(s): 0 events this quarter (0 YTD)

Old Mill (CSO) Overflow Event(s): 0 Events this quarter (0 YTD)

Table 6 - Total Final Effluent Flow Monthly (m³)

	January	February	March	YTD
2024	215,335	240,378	284,162	739,875
2023	333,511	274,603	319,719	927,832
Difference	-118,176	-34,225	-35,557	-187,957

Table 7 - Total Final Effluent Flow Monthly

	January	February	March	ECA Limits
Ammonia	0.032	0.038	0.031	2.6(June 1- Aug 31) 14.0(Sept 1- May31)
CBOD-5	3.0	3.0	3.0	15.0 mg/l
Suspended Solids	0.80	1.10	1.15	15.0 mg/l
pH	7.51	7.66	7.55	> 6.0 and < 9.5
Total Phosphorus	0.05	0.06	0.08	0.30 mg/l
E. Coli	1.15	1.00	1.00	200

		<u>January - March</u>	<u>YTD</u>
WPCP Solids Handling/Pellets:	Production Time (hrs)	773	773
	Total Sludge Processed	4,756 m ³	4,756 m ³
	Total Sludge (Processed by others)	596.46 m ³	596.46 m ³
	# Pellet Bags Produced	106 bags	106 bags
	Pellet weight (~90% solids)	68,041.1 kg	68,041.1 kg
	Cake weight (~20% solids)	39,280 kg	39,280 kg

Table 8 - Daily Hydro usage (kWh)

	January	February	March	YTD (average/day)
2024	7,189	7,475	7,000 Est	7,221
2023	6,281	7,562	6,700	6,848
Difference	+908	-87	300	373

Wastewater Treatment Plant – 180 Queen St.:

- MESH – 176 Records of Preventative Maintenance (176 YTD)
- MESH – 5 Records of Corrective maintenance (5 YTD)
- 2023 Capital Screen Project Delayed due to Grit cleaning channels/Bypass pumping.

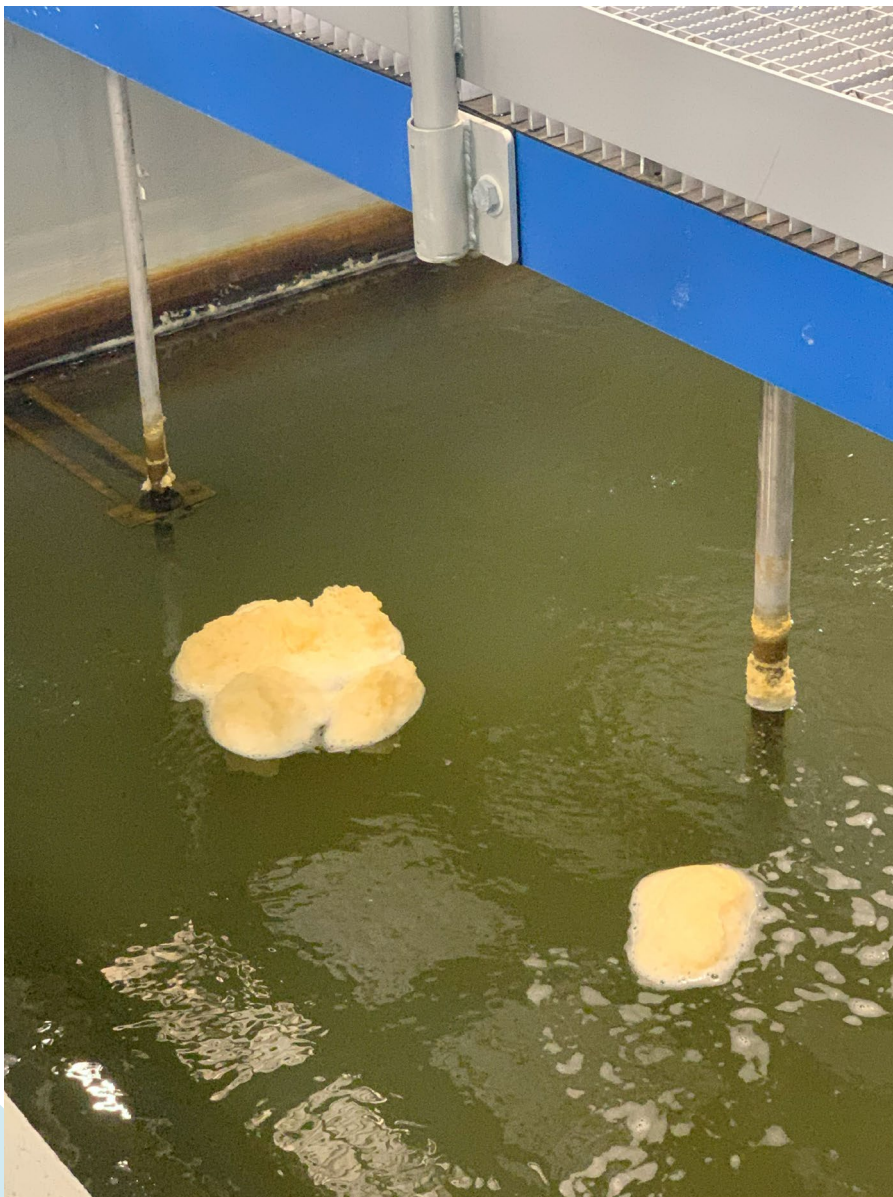


- 10 Wastewater Complaints – smell/odour complaint / Sewer Backup (10 TYD)

Prepared by: Jason Barlow
Manager Water & Wastewater

Water Systems Pictures

WTP (Poor Raw Water Quality)





WD – Water Tower Leak and Main Break Repair



Wastewater Systems Pictures

WPCP – Pelletizer Blockages

