THE CORPORATION OF THE TOWNSHIP OF NORTH GLENGARRY

Committee of the Whole

Agenda

Wednesday, April 23, 2025, 3:00pm

Council Chambers

3720 County Road 34

Alexandria, On, K0C 1A0

1. CALL TO ORDER

2. DECLARATION OF PECUNIARY INTEREST THERE OF

3. ACCEPT THE AGENDA (Additions/Deletions)

4. DELEGATIONS

5. STAFF REPORTS

a. **Administration Departmen**t

i. AD 2025- 02: CAO/ Clerk's Department Work Plan

b. Community Services Department

i. CS 2025-07: Community Services 2025 Departmental Workplan Update

c. Treasury Department

TR 2025-08: First Quarter Variance Report

TR-2025-09 Finance Department 2025 Q1 Workplan Update

d. Planning/Building & By-law Enforcement Department

i. BP 2025-12: Work Plan 2025

f. **Public Works Department**

i. PW 2025-08: Drinking Water Systems 2024 Annual Review

ii. PW 2025-09: Wastewater Systems 2024 Review

iii. PW 2025-10: public Works Workplan Update Q1 2025

iv. PW 2025-11: Minimum Maintenance Standards

6. CONSENT AGENDA

South Nation Conservation board of directors annual General Meeting minutes – March 20, 2025

7. UNFINISHED BUSINESS

8. OTHER BUSINESS

9. MATTERS OF STANDING COMMITTEES

a. Raisin Region Conservation Authority update by Councillor Jacques Massie

b. Maxville Manor update by Councillor Gary Martin

c. Glengarry Pioneer Museum update by Councillor Gary Martin

d. Glengarry Archives update by Mayor Jamie MacDonald

e. Arts, Culture & Heritage update by Councillor Jeff Manley

f. County Council update by Deputy Mayor Carma Williams

g. Friends of the Trails update by Councillor Jeff Manley

h. Community Development Committee by update by Mayor Jamie MacDonald

i. Rural Affairs update by Councillor Brian Caddell

10. NOTICE OF MOTION

Next Committee of the Whole Meeting

Wednesday, July 23 2025, at 3:00 p.m in the Council Chambers, 3720 County Road 34, Alexandria On.

11. ADJOURNMENT

STAFF REPORT TO COMMITTEE OF THE WHOLE **Report No: AD-2025-02**

March 24, 2025

From: Sarah Huskinson, Chief Administrative Officer

RE: CAO/ Clerk's Department Work Plan

Recommended Motion:

THAT the Committee of the Whole receives Staff CAO/Clerk's Department Work Plan for information purposes only.

Background / Analysis:

The CAO and Clerk's Department will be reviewing and drafting several policies in 2025, many of which are overdue for approval and need to be up to date based on changes in legislation.

The CAO and Deputy Clerk meet with the SDG County and Lower Tier Clerks on a quarterly basis to discuss various policy changes, joint tenders/RFP's, and the upcoming 2026 Election. From these discussions, a sub-committee was formed to draft an RFP for Insurance Broker services, as this has not been done for many years. The draft RFP will come to Council in the next few months.

Work on the 2026 has already begun, with an election calendar being issued by AMCTO showing deadlines even in 2025. Elections Ontario has taken over the reigns from MPAC for the electors list and meetings with the lower tier Clerk's and EO have already begun. Access has been given to the Clerks and a review of electors will begun soon. A campaign is set for early 2026 for electors in North Glengarry to verify their address and ensure they are on the list.

The CAO's and Clerks for South Glengarry and North Glengarry have met on a few occasions to discuss joint projects, such as the Records Retention Policy and Archives Agreement, with support from Allan MacDonald.

The CAO continues to work on various Human Resources matters such as hiring and employee retention/engagement. The CUPE agreement expires in 2025, with negotiations beginning. Also, ongoing legal matters take time and resources to mitigate and manage.

Alternatives:

N/A

Financial Implications:

None

Attachments & Relevant Legislation:

2025 CAO/Clerk's Department Work Plan

Others Consulted:

Jena Doonan, Deputy Clerk

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Reviewed and Approved by:
Sarah Huskinson, CAO/Clerk

	Corporate Services Department Tasks	Deliverable	Involvement	2025				2026
				Q1	Q2	Q3	Q4	
Policies and Procedures	Personnel Policy	Approved Policy	SH (SMT)					
	Public Notice By-law	Approved By-law	SH, JD					
	Staff Code of Conduct	Approved Policy	SH (SMT)					
	Council Code of Conduct	Approved Policy	SH					
	Workplace Violence and Harassment	Approved Policy	SH (SMT)					
	Records Retention	Approved Policy	SH, JD					
Capital Budget	Computer Replacements	Purchases	SH, RE					
Other	Archives Agreement with South Glengarry	Signed agreement and by-law	SH (CAO SG)					
	CUPE Collective Agreement	Signed CA	SH, TW					
	2026 Elections		SH, JD					
	Ongoing Legal							
	Insurance Broker RFP		SH, JD,SDG					

STAFF REPORT TO THE COMMITTEE OF THE WHOLE **Report No: CS-2025-07**

April 23, 2025

From: Stephanie MacRae – Director of Community Services

RE: Community Services 2025 Departmental Workplan Update

Recommended Motion:

THAT the Committee of the Whole receives Staff Report CS-2025-07 for information purposes only.

Background / Analysis:

The attached workplan demonstrates the status and progress on various projects and initiatives undertaken by the Community Services Department. The following is a summary of these respective items.

ADMINISTRATION

Booking Software: Staff have been reviewing opportunities to make enhancements to the existing booking software. Staff have attended a training session with the software providers to look for ways to find efficiencies within the use of the software as it relates to program registrations, invoicing and its integration with the Township's finance system. For the spring 2025 programming, the Recreation Department was successful in offering online registration for 30 different programs, ranging from Aquafit classes, swimming lessons, yoga and running programs. Over the next few months, staff will continue to work with the booking software team to integrate the ability for the public to book facility rentals online.

Capital Projects: In 2025, the Community Services Department had three capital projects approved:

- **Maxville Library Lighting Project:** The project is currently being researched with a goal to begin the project in Q3, in consultation with library staff and the Fire Department.
- **Maxville Sign:** As presented to Council on April 14, 2025, this project is in its final stages, with a final design to be sent to Council for approval in the coming weeks. Project completion is expected by July 2025.
- **The North Glengarry Stage:** The stage has been ordered and is currently being constructed. It is expected to arrive by the end of May 2025.

Grant Applications: Staff have applied for the Ontario Trillium Foundation's Capital Grant Stream regarding the replacement of the tennis courts at Island Park. The results of the application are expected at the end of spring. Staff do not have any updates surrounding the status of the grant application for the Maxville Slab Replacement project.

Plans:

- **Economic Development Strategic Action Plan:** The Economic Development Officer will be aiming to have a draft of the Economic Development Strategic Action Plan prepared for the end of the second quarter. Its development will be based on available resources and data, including the North Glengarry Commercial Gap Analysis, consultations with community partners, as well as an external public consultation method.
- **Parks & Recreation Action Plan:** The Director of Community Services has been working on revisions to the existing Parks & Recreation Action Plan. A draft will be prepared for Council's approval by the end of the second quarter.

Staffing: Over the summer months, the Township will be bringing on a student as a Recreation & Special Events summer student, to assist with programs, community events, and some administrative functions for the department. Later this summer, the Director of Community Services will be conducting an analysis of staffing in the Recreation Department, inclusive of number of staff, type of position (i.e. seasonal, part-time, etc.), and current schedules to determine if a more efficient model can be recommended.

Tree Planting: The Raison Region Conservation Authority (RRCA) has been working closely with the Township of North Glengarry on tree planting efforts throughout the county. They will be hosting their annual tree giveaway on May 2, 2025, from 4-6pm at Island Park, where 1000 trees will be distributed to residents who requested a tree in advance. In addition, tree planting efforts will continue as part of a phase two initiative at the Township Office, for the project, "Trees for Tomorrow." This initiative is a partnership between us and Munroe and Morris Funeral Home. In addition to the initiatives above, the Township is also working closely with the RRCA and South Nation Conversation Authority to identify other areas for tree planting, inclusive of Dalkeith and Maxville.

COMMITTEE AND WORKING GROUP ACTIVITIES

Arts, Culture and Heritage Committee (ACHC):

- The ACHC has met twice so far in 2025.
- Major activities include the review and approval of the 2025 Community Grant Program applications, as well as a review and revision to the evaluation process through the development of a scoring grid.
- The committee continues to conduct research into properties eligible for heritage designation in 2025.

Community Development Committee:

- The CDC has met twice so far in 2025.

- The committee continues to actively discusses new and possible development opportunities across North Glengarry, along with other relevant economic development activities and initiatives.

Municipal Recreation Association Committee:

- The Municipal Recreation Association met on March 18th, 2025, and reviewed operating budgets, capital projects, insurance procedures, in addition to overall updates from each respective association.

EVENTS AND PROGRAMMING

Boys & Girls Club: The Boys & Girls Club Summer Camp will be returning to Alexandria this summer. Registration is currently open. As in past years, the Boys & Girls Club will use Island Park for their activities and will attend the HGMH pool and Tim Horton's Dome for day trip activities.

Canada Day: Fireworks for the 2024 Canada Day celebrations have been ordered, and celebration dates have been finalized for events within North Glengarry.

Meet me on Main Street: Planning for the 2025 Meet me on Main Street events are well underway. Staff have been scheduling meetings with the community hosts to finalize arrangements, including entertainment, food and drink vendors, and site planning.

HGMH Pool: This past winter and spring, the Township was able to expand its Aquafit program at the HGMH Pool with the addition of daytime programming on weekdays. These sessions have been well attended and well received by the participants. Staff will be looking to finalize the summer pool schedule in the summer weeks with the goal of expanding its daytime offerings.

FACILITIES

Maxville Sports Complex

- Ice resurfacer: New Engo Ice Resurfacer arrived in Maxville in early 2025. Since, then staff have received training on the use of the machine. The machine will be fully rolled out and used by staff for the Fall 2025 winter season.
- Ice removal to take place on April 28th, 2025.
- Staff will be reviewing the placement of the HVAC system in Maxville. It sits directly on the ground, which created snow and ice build up within the system this past winter, making it inoperable. To avoid this problem from recurring, staff will be investigating further to see if it would be feasible to raise the equipment or re-locate.
- Over the summer months, staff will be completing painting in the MSC Hall, as well as conducting field maintenance and yard work to enhance the conditions of the fields at MSC.
- Summer Events: Dog Show returning, Glengarry Sports Hall of Fame, in addition to usual events such as Maxville Fair and Glengarry Highland Games.

Glengarry Sports Palace

- Ice removal was completed as of April 15th.

- The exterior Michel Depratto Hall sign is to be installed this quarter. Repairs are needed to the structure, where water been infiltrating the existing sign. Once repairs are completed, new sign to be ordered and installed.
- Field maintenance: Over Q2, Staff will be conducting field maintenance on the field at the GSP. Due to large holes and poor field conditions, staff will be looking to repair the field over the next few months.

Island Park

- In 2024, the Community Services Department purchased multiple AEDs to be placed at various fields and outdoor recreation areas in North Glengarry. During the winter months, they were stored at Island Park and checked as required by Staff. This month, staff will be returning the AEDs to their locations at Island Park, Dunvegan, Maxville and Lochiel fields.
- Tennis Courts: As staff await the results of the Ontario Trillium Foundation grant, staff will be conducting interim repair efforts to the existing cracks to the surface through sanding and patching.
- Earlier in 2025, staff conducted a clean-up of the Sandfield Centre and completed required painting and some cosmetic enhancements to the kitchen area with the addition of a vinyl backsplash.
- Geese Mitigation Strategy: The annual geese mitigation strategy through the egg oiling practice as permitted under the Migratory Birds Convention Act will resume in the coming months to assist with limiting geese presence at Island Park.

Tim Horton's Dome

- Programming: Over the winter months, the Township continued to offer well-received programming, inclusive of the running program, women's volleyball and soccer clinic.
- The annual sprinkler system inspection will take place on May 6, 2025.

ECONOMIC DEVELOPMENT

Business e-Newsletter: In April, the Economic Development Department launched a new e-newsletter aimed at local businesses and organizations. The newsletter will be released on a monthly basis and will feature local development news, tourism highlights, grant opportunities, networking events, training events, and other news and resources for the local business community.

Community Improvement Plan & Regional Incentives Program: Two North Glengarry businesses were selected to receive funding as part of the Regional Incentives Program. The Economic Development Officer continues to receive applications for the Community Improvement Plan and has been highlighting success stories in the newly implemented e-newsletter to help promote the funding opportunity.

OEMC: The Economic Development Officer will be attending the Ontario East Municipal Conference as a guest speaker in the Fall. North Glengarry was selected to speak about its experience with designating heritage properties. Economic Development Officer, Ms. Ainsley Hunt, will be speaking about her experience with the successful 2024 designations, with the

support of Ms. Lindsay Parisien of the SDG Counties Planning and Economic Development Services.

Community Information Guide: The development of a North Glengarry Community Information Guide continues to be a priority for the department. Staff are continuing to compile information, with a goal to present a draft of the guide to Council at the beginning of Q3.

OTHER

Meetings & Training:

- The Economic Development Officer will be attending the Fundamentals of Community Economic Development course offered through the University of Waterloo in May.
- The Economic Development Officer continues to meet on a monthly basis with the SDG Economic Development Officers Working Group.
- Over the last few months, staff have attended meetings with the Maxville & District Chamber of Commerce, Vibrant Communities, ACCFutures, and also attended local events, such as the Cornwall & Area Job Fair, Cornwall & SDG Tourism Summit, as well as the International Women's Day event hosted by the Cornwall SDG Business Enterprise Centre and Cornwall and Area Chamber of Commerce.
- At the end of May, the new Community Services Administrative Assistant will be attending a conference hosted by the booking software used by the Township. The event will include training and networking opportunities.
- Recreation supervisors have renewed their membership with the Ontario Recreation Facilities Association (ORFA), giving them access to recreation news, training, resources and other relevant content.

Alternatives:

Option 1 – Recommended – That Council approves this resolution.

Or

Option 2 – Not recommended – That Council does not approve this resolution.

Financial Implications:

None.

Attachments & Relevant Legislation:

- Community Services Workplan 2025

Others Consulted:

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Reviewed and Approved by:
Sarah Huskinson, CAO/Clerk

	Community Services Department Tasks	Deliverable	Involvement	2025				2026	Progress
				Q1	Q2	Q3	Q4		
Plans	Parks & Recreation Action Plan	Approved Plan	SM, SH, Rec Dept.						Revised plan underway. Completion expected by end of Q2.
	Economic Development Strategic Action Plan	Approved Plan	Ec Dev, SM						Expected completion by end of Q2.
Capital Budget	LIB - Maxville Library Lighting	Purchase & installation	SM						Quotes to be obtained in Q3.
	MSC - Main Street Sign	Purchase & installation. Council Approval of Design.	SM						Final design being finalized. Installation expected July 2025.
	IP - Stage	Purchase	SM						Stage ordered. Expected delivery May 2025.
	Admin - Business and Community Awards Gala	Event	SM, EcDev, GL						Date to be finalized for Sept. 2025.
	Admin - Recreation Department Staffing Analysis	Completion of Analysis & Development of Recommendations	SM						To review current staffing allocation and schedules to determine if more effective models exist. Goal to reduce overtime while ensuring effective use of resources.
	Admin - Canada Day Activities	Events	SM, MRACs						Dates finalized for 2025 celebrations.
	Admin - Staff Regulatory Training	Training	Comm. Serv						Annual retraining to be completed by end of Q2.
	Admin - Review of Recreation Policies	Approval by Council	SM, GL						Review and present to Council for approval in Q2.
	Admin - Development of Facility Rental Resource Guide	Published document	GL, SM						To assist with informing public about available facility rentals and inclusions.
	Admin - Facility Rental Ability by Public Activation	Feature activated	GL, SM						To assist with automating facility booking process.
	Admin - Pre-programming of Booking System for Fall & Winter Activities	Completion of Programming	GL, Summer Student						To be completed by summer student Q3.
	Admin - Issue programming feedback survey	Development and promotion of survey	Summer Student, GL, SM, Comms Off.						To be completed by summer student Q3.
	EcDev - Meet me on Main Street events	Events	EcDev, SM						Planning underway. Events to occur Q3.
	EcDev - Community Grant Program Approvals	Approval by Council	EcDev, SM, ACHC						2025 Intake complete.
	EcDev - Community Grant Program Review & Scoring System Analysis	Approval by ACHC	EcDev, SM, ACHC						New streamlined scoring grid adopted by Arts, Culture and Heritage Committee.
	EcDev - Development of new business e-newsletter	Launch of newsletter	EcDev, SM						Launched Apr 2025.
	EcDev - Launch of 2025 Community Guide	Launch and promotion of guide	EcDev, SM						For completion in Q3.
	EcDev - Regional Incentives Program	Support to applicants	EcDev						Intake closed in Q1. Two recipients from North Glengarry.

Other	IP - Tennis Court Renewal (Dependant on OTF Funding)	Construction	SM, JD						If funding is received, project to initiate in Q3.
	IP - Geese Mitigation Program	Oiling Completion	JD						To occur in Q2.
	IP - Kitchen/Hall Clean-Up	Completion of clean-up.	JD, DV						Cosmetic enhancements made to kitchen & hall, inclusive of vinyl backsplash in kitchen and painting.
	GSP - New Generator Hook-Up	Installation	NH, SM						Generator in place. Final task to connect gas line to device.
	GSP - Field maintenance at GSP Soccer Field	Completion of maintenance	NH						To correct large holes and poor field conditions.
	GSP - Hall Painting	Completion of painting	NH						To freshen up appearance of Michel Depratto Hall.
	GSP - Dressing Room Painting	Completion of painting	NH						Planned for Q2.
	GSP - Hot Water Tank Replacement	Installation of replacement hot water tank	NH, SM						To replace end of life hot water tank.
	GSP - Michel Depratto Sign	Installation of Sign	SM, NH						Installation of new exterior Michel Depratto Sign
	Dome - Programming - Volleyball	Launch of Fall Programming	GL						Finalizing 24/25 league and evaluating for re-launch in Fall
	Dome - Programming - Running Program	Launch of Fall Programming	GL						Finalizing Spring session for re-launch in Fall
	Dome - Annual sprinkler systems and backflow preventers inspection	Completion of Inspection	JD, SM						Scheduled for May 2025.
	MSC - Hall Painting	Completion of painting	NH						To freshen up appearance of MSC Hall.
	MSC - Review of hall HVAC placement	Identify potential solutions to avoid winter snow covering issues	NH, SM						To occur in Q3 and evaluate other set-up options.
	MSC - Yard work and field enhancements	Completion of yard work.	NH						Clean-up fields and add infield material in Q2.

STAFF REPORT TO COMMITTEE OF THE WHOLE **Report No: TR-2025-08**

April 23, 2025

From: Zoe Bougie – Director of Finance/Treasurer

RE: 2025 First Quarter Variance Report

Recommended Motion:

THAT the Council of the Township of North Glengarry receives staff report TR-2025-08 First Quarter Variance Report for information purposes only.

Background / Analysis:
This report is being brought to Council to provide an update on the budget after the first quarter. Staff have analyzed the budget as of March 31, 2025, and have provided a detailed breakdown with comments (attached).

This exercise has allowed staff and management to review their budget and identify areas to monitor as well as budget line items that require review during the 2026 budget planning process. By reviewing the budget for each quarter, Directors and staff can reflect on expenditures and adjust their approach as needed when making financial decisions. It also allows staff to ensure that revenue and expenses are received and recorded to the proper general ledger accounts.

As of March 31, 2025, the budget variance is at 21% for the Township overall.

	2024	2025
Q1 Actuals	$2,000,649.01	$1,504,626.40
Budget	$6,851,142.00	$7,146,198.00
Variance	29%	21%

As this report only speaks to the first quarter of the fiscal year, there have not been many significant issues impacting the overall budget to date. For the most part, departments are operating within their allocated budgets, and most variances reported so far are relatively minor.

Trends:

Insurance:
The final quote for the 2025 insurance rates were received after the budget and therefore the budgeted amount was not sufficient to cover the actual. The total amount budgeted for insurance in 2025 was $463,767. The actual amount spent to date is $489,880.70. This does include an additional invoice for a reassessment to fleet that was not included in the quote and cannot be foreseen. Insurance for the Fire Department was also quoted separately from the original quote received from the insurance broker. The CAO/Clerk's department is preparing a joint tender/RFP for Insurance Broker services. This will help to establish a better pricing point for the 2026 budget.

Winter Maintenance
The 2024/2025 winter season brought significantly higher snowfall compared to recent winters, resulting in increased operational demands and associated costs. Frequent and intense snowfalls required more frequent snow removal services, extended staffing hours and additional contracted services to ensure safe and accessible infrastructure and facilities.

Top Variances by Department:

Administration:

As of March 31, 2025, the Administration Department has generated 21% of its projected revenue and spent 32% of its approved expenses. This includes the Office of the CAO, the Corporate Services Department and the Finance Department.

The top three categories in the Administration budget that are currently above the 25% variance threshold include Election Costs, Legal Fees, and Association and Membership Fees.

Account Name	Account Code	2025 Actuals	2025 Final Budget	Variance	Percentage
Administration - Election Costs	1-4-1200-3600	$1,984.32	$0.00	-$1,984.32	1984%
Administration - Legal Fees	1-4-1200-2210	$11,408.31	$16,000.00	$4,591.69	71%
Administration - Association and Membership Fees	1-4-1200-2410	$6,029.97	$9,000.00	$2,970.03	67%

Election Costs: Included in this line item are the costs to maintain the software needed for the upcoming election. At year end, this amount is offset by a transfer from the elections reserve.

Legal Fees: There has been an increase in legal fees, however several of the invoices received pertained to work performed in 2024.

Association and Membership Fees: Association and Memberships Fees are often purchased at the beginning of the year. There may be additional fees incurred in the future; however, this line item is anticipated to remain within budget.

Building, By-Law and Planning:

As of March 31, 2025, the Building, By-Law and Planning Department has generated 27% of its projected revenue and spent 22% of its approved expenses.

Within the Building, By-Law and Planning budget, the top three categories that have exceeded the 25% variance threshold are Building – Vehicle Maintenance, Planning – Conferences/Workshops/Training, and By-Law – Truck Expenses.

Account Name	Account Code	2025 Actuals	2025 Final Budget	Variance	Percentage
Building - Vehicle Maintenance	1-4-2100-2399	$7,201.63	$3,000.00	-$4,201.63	240%
Planning - Conferences/Workshops/Training	1-4-8000-2035	$1,322.88	$2,000.00	$677.12	66%
By-Law - Truck Expenses	1-4-2125-2399	$763.20	$1,500.00	$736.80	51%

Building – Vehicle Maintenance: The Chief Building Official's truck is past its useful life and required significant maintenance work to ensure it remains safe and operational. This was unexpected maintenance work that a new mechanic discovered when looking over the truck.

Planning – Conferences/Workshops/Training: Two staff members attended a conference in the first quarter. This line item is expected to remain on budget as there are no additional conferences planned for the year.

By-Law – Truck Expenses: The windshield in the By-Law Enforcement Officer's van developed a crack and had to be replaced for safety reasons. As the van is still relatively new, it is anticipated that this line item will remain within budget.

Community Services:

As of March 31, 2025, the Community Services Department has generated 35% of its projected revenue and spent 24% of its approved expenses. This includes the Maxville Sports Complex, Island Park, the Dome, the Glengarry Sports Palace, the Glengarry Memorial Hospital Pool, Economic Development, Community Development, the Municipal Recreation Associations and Contributions.

The top three categories in the Community Services budget that have exceeded the 25% variance threshold are Dome – Programming, HGMH – Booking Software, and Island Park – Computer Equipment and Supplies.

Account Name	Account Code	2025 Actuals	2025 Final Budget	Variance	Percentage
Dome - Programming	1-4-7300-7722	$400.00	$0.00	-$400.00	400%
HGMH - Booking Software	1-4-7600-2028	$1,740.04	$600.00	-$1,140.04	290%
Island Park - Computer Equipment and Supplies	1-4-7200-2130	$1,257.13	$750.00	-$507.13	168%

Dome – Programming: This expense is related to the Goalie Clinic that was hosted at the Dome in February. This expense was offset by the revenue generated and will be incorporated in the 2026 budget. Please note that although this is the highest variance by percentage for the Community Services department, the total overage is only $400.

HGMH – Booking Software: Though this specific line item is over budget, based on the total amount budgeted for the booking software, the booking software as a whole is only $40.00 over budget. There were also unexpected additional charges related to accepting online payments. The initial software fee is an annual expense, however there will be fees incurred twice a year. Due to the amount of transactions related to the Glengarry Memorial Hospital Pool, it was decided to split the cost of the booking software evenly to better reflect the actuals.

Facility	Actuals	Budget
Maxville Sports Compelx	$1,709.95	$2,000.00
Island Park	$1,740.05	$2,000.00
Dome	$1,740.04	$2,000.00
Glengarry Sports Palace	$1,709.94	$2,000.00
Glengarry Memorial Hospital Pool	$1,740.04	$600.00
Total	**$8,640.02**	**$8,600.00**

Island Park – Computer Equipment and Supplies: A shared laptop was purchased for Island Park staff to replace the existing laptop that was at the end of its useful life. There are currently no other large computer related purchases anticipated for the remainder of 2025.

Council:

In 2025, the Council budget was developed based on the conferences that Council planned to attend during 2025. The Township will be reimbursed by the United Counties of SD&G for conference expenses for the Mayor and Deputy Mayor. Council has already attended two conferences resulting in a variance over the 25% threshold.

Fire:

As of March 31, 2025, the Fire Department has generated 27% of its projected revenue and spent 16% of its approved expenses. This includes the Community Emergency Management Coordinator budget.

Recognition, Furnace Oil/Propane and Tools/Equipment Replacement were the three highest variances within the Fire Department budget.

Account Name	Account Code	2025 Actuals	2025 Final Budget	Variance	Percentage
Fire - Recognition	1-4-2000-2305	$8,582.99	$4,000.00	-$4,582.99	215%
Fire - Furnace Oil/Propane	1-4-2000-2065	$6,646.10	$8,000.00	$1,353.90	83%
Fire - Tools/ Equipment Replacement	1-4-2000-2110	$9,472.93	$13,000.00	$3,527.07	73%

Recognition: The Fire Department recognition ceremony took place earlier in 2025. This event was originally intended to take place in 2024. There are no additional expenses anticipated for 2025.

Furnace Oil/Propane: The expense for oil and propane is currently higher than anticipated. This is primarily due to the winter temperatures which increase the heating demand. There have also been increases in the unit costs for oil and propane that have had an impact on the budget.

Tools/Equipment Replacement: Spending is not steady throughout the year for this category. Expenses are still expected to remain within budget.

Fleet and Machinery and Equipment:

The 2025 budget had two fleet items; an ice resurfacer for the Maxville Sports Complex and a pickup truck outfitted for the Fire Department. The ice resurfacer has been purchased as well as the pick up truck. The pick up truck must still be outfitted.

The Machinery & Equipment capital items are all still within the budgeted amounts. Many of these capital purchases have not yet begun.

Public Works:

As of March 31, 2025, the Public Works Department has generated 12% of its projected revenue and spent 14% of its approved expenses. This includes Roads, Waterworks, Landfill and Waste Management.

The following three categories have been identified as the top variances for the Public Works Department: R.A.R.E. – Benefits, Landfill – Recoverable Costs, and NGWT – Rent & Utilities.

Account Name	Account Code	2025 Actuals	2025 Final Budget	Variance	Percentage
RARE - Benefits	1-4-4030-1110	$10,185.63	$0.00	-$10,185.63	10186%
Landfill - Recoverable Costs	1-4-4020-7911	$6,671.85	$0.00	-$6,671.85	6672%
NGWT - Rent & Utilities	1-4-9300-2102	$4,922.06	$0.00	-$4,922.06	4922%

R.A.R.E. – Benefits: This cost relates to the final payment for benefits for R.A.R.E. employees for 2024, paid in 2025. There are no further costs associated with this.

Landfill – Recoverable Costs: As the name implies, the expenses in this category are recoverable. The full amount will be recovered once the project is complete.

NGWT – Rent & Utilities: This is the cost related to rent for the basement space at 90 Main Street South. This space is still in use by the Waterworks Department as a garage and storage. Originally, staff had anticipated being able to move out of this space sooner, however the busy winter season has kept staff occupied. The majority of the work required to move will be handled internally by staff, however during the earlier months, the manpower was not available. Staff hope to be fully moved by the third quarter.

Alternatives:
N/A

Financial Implications:
N/A

Attachments & Relevant Legislation:
2025Q1 Variance Report

Others Consulted:
Senior Management Team

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Reviewed and approved by:
Sarah Huskinson, CAO/Clerk

STAFF REPORT TO COMMITTEE OF THE WHOLE **Report No: TR-2025-09**

April 23, 2025

From: Zoe Bougie – Director of Finance/Treasurer

RE: Finance Department 2025 Q1 Workplan Update

Recommended Motion:

THAT the Council of the Township of North Glengarry receives report TR-2025-09 Finance Department 2025 Q1 Workplan Update for information purposes.

Background / Analysis:

The Finance Department has continued to focus on its core responsibilities, including accounts payable, accounts receivable, payroll and utility billing, to ensure the smooth and timely execution of these functions. In addition to managing day-to-day operations, staff have been actively involved in the year-end audit process, providing necessary documentation and support to facilitate a successful audit.

2025 Budget

The 2025 budget was passed on January 13, 2025. The first quarter variance report has been analyzed and presented to Council. Senior Management have reviewed their respective departments and provided comments and made any required changes regarding miscodes and reallocations of expenses and revenues.

2024 Audit

The year-end audit is currently underway. Staff have prepared the requested documents, and the auditors are completing their review. Staff are hopeful that the audit will be completed by the end of June, with the presentation to Council taking place in July or August depending on the auditors' availability.

Property Taxes

The next interim tax due date is April 30th, 2025. The first installment for final taxes is July 31st, 2025. Tax bills are normally mailed out in mid- to late-June. Staff are in the process of reviewing alternate measures to minimize the impact of another Canada Post Mail strike. The next possible date for a mail strike is May 22, 2025, which would directly impact the mailing of tax bills.

Tax Sales

The next tax sale is scheduled for June 11, 2025. Prior to this, final notices will be sent to the interested parties, and the property will be listed as per the Ontario Tax Sale Act. In the coming weeks, staff will be reviewing properties that are eligible for tax sales and preparing notices.

Payroll System Implementation

Staff continue to work on the implementation of a payroll solution through ADP. This program will allow greater automation and improved accuracy. It will reduce manual data entry, minimizing errors and enhance overall efficiency. Once fully implemented, staff will also have improved access to their payroll records.

2025 Asset Management Plan Update

As of July 1, 2025, Ontario municipalities must update their asset management plans as per Ontario Regulation 588/17. The purpose of this update is to build on the 2024 requirement and enhance long-term infrastructure planning and financial sustainability. The Township of North Glengarry included the 2024 requirements in the 2023 update so this will be the second revision to the existing policy. The key requirements for the 2025 Asset Management Plan Update include proposed levels of service, lifecycle management strategy and financial strategy. Staff are currently working on the update and once completed, will bring the Asset Management Plan to Council for approval before the deadline.

Water Financial Plan

Under Ontario Regulation 453/07, a six-year financial plan is required for licensing the drinking water system. Finance staff are currently working to compile the necessary information to update the existing plan. The Finance Department will work closely with the Director of Public Works, the Manager of Environmental Services and the Waterworks Compliance Officer to ensure that all information is accurate and

Alternatives:

N/A

Financial Implications:

N/A

Attachments & Relevant Legislation:

N/A

Others Consulted:

Finance Department Staff

_____

Reviewed and Approved by:
Sarah Huskinson, CAO/Clerk

	Treasury Department Tasks	Deliverable	Involvement	2025				2026
				Q1	Q2	Q3	Q4	
Policies and Procedures	Tangible Capital Asset Policy	Policy approved by Council	ZB					
	Asset Management (Levels of Service)	Policy approved by Council	ZB, JS					
	Water Relief Policy	Policy approved by Council	ZB. DS, TW					
Capital Budget	Long Term Financing for 2025 Capital Items	Receipt of financing	ZB					
Other	Payroll System Implementation	Implemented payroll system	ZB, Finance					
	Request for Proposal for Audit Services	Award of RFP	ZB, SH					
	Water Financial Plan	Plan approved by Council	ZB, Finance					
	First Quarter Variance Report	Report delivered to Council	ZB, SMT					
	2026 Budget Preparation	Approved budget	ZB, SMT					
	OCIF Annual Reporting	Completed report	ZB, TW					
	CCBF Annual Reporting	Completed report	ZB, TW					
	Annual Audit	Completed audit	ZB, Finance, Welch					
	Tax Sale	Completed tax sale	ZB, VT					

STAFF REPORT TO COUNCIL
Report No: BP-2025-12

April 23, 2025

From: Jacob Rheaume – Chief Building Official / Director of Building, By-law & Planning

RE: 2025 Work Plan - 1

Recommended Motion:

THAT the Council of the Township of North Glengarry receives Staff Report No. BP-2025-12 – the Director of Building, By-law & Planning 2022 Work Plan for information purposes only.

Background / Analysis:

The Building, By- Law & Planning Department is presenting the Council of the Township of North Glengarry with their work plan update for 2025.

BUILDING

Ontario Building Code

The Ministry of Municipal Affaires and Housing came out with a new 2024 Ontario Building Code. For North Glengarry, mostly minor changes for items like railings, guards within residential units, radon gas protection for residential units, etc. are to be taken into consideration. Some major changes were also included, such as the Farm Building Code that was incorporated as part of the Ontario Building Code now. Another major change is the incorporation of many aspects for "Secondary Dwelling Units" (SDUs) such as in-law suite or accessory apartments for which the changes also affect the Zoning By-law.

Building Permits

As of April 15, 2025, the Building Department issued 32 building permits. In comparison, as of April 15, 2024, the Building Department issued 38 permits.

The Administrative Assistant for Building & By-law is sending out letters to all the landowners of properties that still have outstanding building permits that were issued in 2020. All the landowners with outstanding building permits for the years prior, up to 2015 were also notified by mail before. The Department is trying to close as much as possible to avoid last minute inspections when properties are sold. This usually is frustrating for both the Department and the buyer/seller as sometimes work is required, and the deadline is close.

Large Projects

The 6-plex residential project on Bishop Street North received a building permit in April. The new 6-unit apartment building is replacing the old, abandoned building that was as such for years. All the units are facing Bishop Street North in a 2+2+2 setup. The foundation work has started

The apartment complex in Maxville in the old St-Bernard school is moving along. The exterior of the new part where the gym used to be is completely done, some interior work left to be done in some apartments. In total, 14 apartments are now being rented, creating a nice residential hub in Maxville.

The department has also issued the Maxville manor building permit. The permit was issued well in advance of work for financing purposes with the provincial government. Work should start later in the summer, or in the fall, with Phase 1 being mostly infrastructure work, such as the parking lot and underground services.

The department is also meeting with many developers for options regarding their properties for residential/commercial/industrial development.

BY-LAW ENFORCEMENT

Ongoing Complaints - Dogs

The By-law office is working on several files to achieve compliance with municipal By-laws in a timely manner and to avoid any additional costs. Dog control fines and complaints such as for dogs running loose and barking dogs are definitely on the rise. As discussed before with the Council, the department is evaluating the need for some help with mostly dog loose when the By-law Officer is not available. A new kennel will also be installed within the old RARE building.

By-law Set fines

The By-law department will focus more on implementing set-fines charges for existing By-laws such as the Animal Control By-law, Livestock/Pound keeper By-law, and the Civic Number By-law. The Animal Control By-law may be reviewed entirely to incorporate a section for prohibited animals and to review everything related to dogs as we now have a new system in

place for dog catching, now done “in-house”. The AMPS By-law is now in effect and is used often for enforcement.

Chip Stands By-law

Staff will be bringing some proposed changes to the “Chip Stand By-law” we currently have as the fees have not been revised for many years, and some details like where a chip stand may be located, and what it could sell are not clear. The main purposes of the By-law will remain the same, and the amount of permitted chip stands will not be amended. We are also seeing more “temporary” request such as the Beaver Tail trailer so that will be incorporated in the updates.

PLANNING

Subdivisions

The ALI subdivision was pre-approved by Council and has also been pre-approved by the Province. The owner has a total of 3 years to fulfill all the conditions for final approval which includes studies, deposits, etc. A security deposit is required for infrastructure work such as servicing and roads for the owner to be able to begin.

The LADOUCEUR subdivision is at an early stage of design. They have made a presentation to Council to discuss their project, and they are now in the process of applying for a Zoning By-law Amendment to change a few requirements that is not compliant with the existing Zoning designation that was passed for the IHA subdivision. The most controversial item being the higher buildings, which is proposed to be up to 10-storeys high.

The 2 potential locations for subdivisions in Maxville are at very early stage of pre-liminary designs.

Zoning By-law

The Township’s Zoning By-law also is due for a comprehensive review. Zoning information has been updated with the latest zoning by-law amendments and minor variances. The information is available online to the public through the SDG Counties Mapping tool. The next steps in the zoning by-law review include conducting site verifications to ensure compliance with zoning compared to actual on the ground uses. The schedules, definitions, general provisions, zone descriptions, administrative components will also be reviewed thoroughly to ensure the document is representative of the Township’s.

Severances

The SDG Counties Planning Department is processing the severance applications and are starting to catch up with the number of applications coming in. The Township is seeing many applications for severances since January 2025 mostly due to the change in the Official Plan date on which a lot is considered a “lot of record” that changed to January 2024. Any lot that is

considered large enough, with enough frontage, in Rural designation is now eligible for new lot creation regardless of previous consents. The Township of North Glengarry opted for a 2+1 consent application, meaning owners can apply for 2 new lots, and then potentially a third lot in the future.

The Township of North Glengarry already has 15 severance applications in process as of April 15, as compared to 22 for the entire year of 2024.

Ongoing Zoning By-law Amendments, Consent Applications, Minor Variances

The Planning Department is working on several files with applicants that will be forwarded to Council in due time. Many Planning Act applications are being submitted. We anticipate that these numbers will likely decrease in the near future as a potential delegation By-law will be proposed for the CAO to be able to expedite some paperwork mostly for Zoning By-law Amendments and Part-Lot Control Exemption. For example, Zoning Amendments that are required as a condition of approval of a provisional consent application that received no objections from the public and agencies during the required circulation period.

This will be explained in more detail soon.

Alternatives:
None.

Financial Implications:
No financial implications to the Township

Attachments & Relevant Legislation:
None.

Others consulted:
Todd McDonell, *By-law Enforcement Officer*

Reviewed and Approved by:
Sarah Huskinson, CAO/Clerk

	Corporate Services Department Tasks	Deliverable	Involvement	2025				2026
				Q1	Q2	Q3	Q4	
Policies and Procedures	Dog Control By-law	Approved By-law	JR, TM					
	Exotic Animals By-law	Approved By-law	JR, TM					
	Chip Stand By-law	Approved By-law	JR, TM					
	Zoning By-law	Approved By-law	JR, SDG					
Capital Budget	Building Department Truck	Purchase	JR, ZB					
	Kennel - RARE Building	Construction	TM, TW					
Other								

STAFF REPORT TO COMMITTEE OF THE WHOLE Report No: PW-2025-08

April 23, 2025

From: Angela Cullen, Water Works Compliance Coordinator

RE: Drinking Water Systems 2024 Annual Review

Recommended Motion:

THAT The Committee of the Whole receives report PW-2025-08 for information purposes only;

AND THAT The Committee of the Whole recommends for Council to authorize the

Background / Analysis:

Staff have prepared the annual summary reports for the Alexandria Drinking Water System and the Glen Robertson Drinking Water System, as per the requirements under Ontario Regulation 170/03. These reports have been submitted to the Ministry of the Environment, Conservation and Parks on February 28, 2025 and posted to the North Glengarry's website on March 19, 2025 for public access.

The prepared presentation is an overview of key elements within each report to ensure communication to the owner has been achieved. In addition to the report overview, an annual update on the Drinking Water Quality Management System status will also be presented.

Alternatives:

N/A

Financial Implications:

N/A

Attachments & Relevant Legislation:

- Alexandria Drinking Water System 2022 Annual and Summary Report
- Glen Robertson Drinking Water System 2022 Annual and Summary Report
- Drinking Water System 2024 Annual Review Presentation

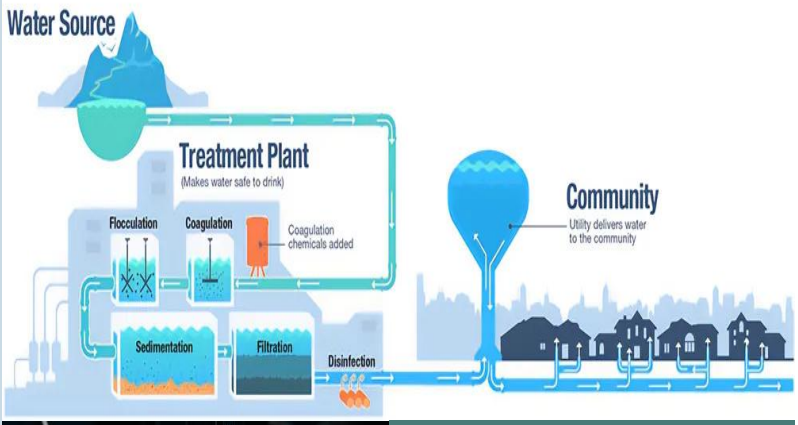
Others Consulted:

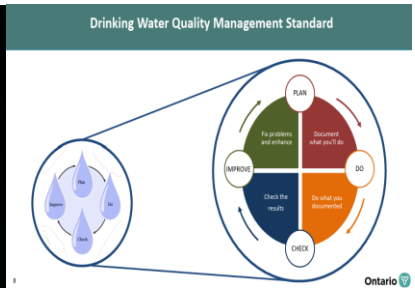
Dean MacDonald, Environmental Services Manager
Tim Wright, Director of Public Works

_____
Reviewed and Approved by:
Sarah Huskinson, CAO/Clerk

ANNUAL DRINKING WATER SYSTEMS REPORT TO COUNCIL

- 2024 Annual Summary Report Overview
  - Glen Robertson DWS
  - Alexandria DWS (including Maxville)
- Annual QMS Status Update





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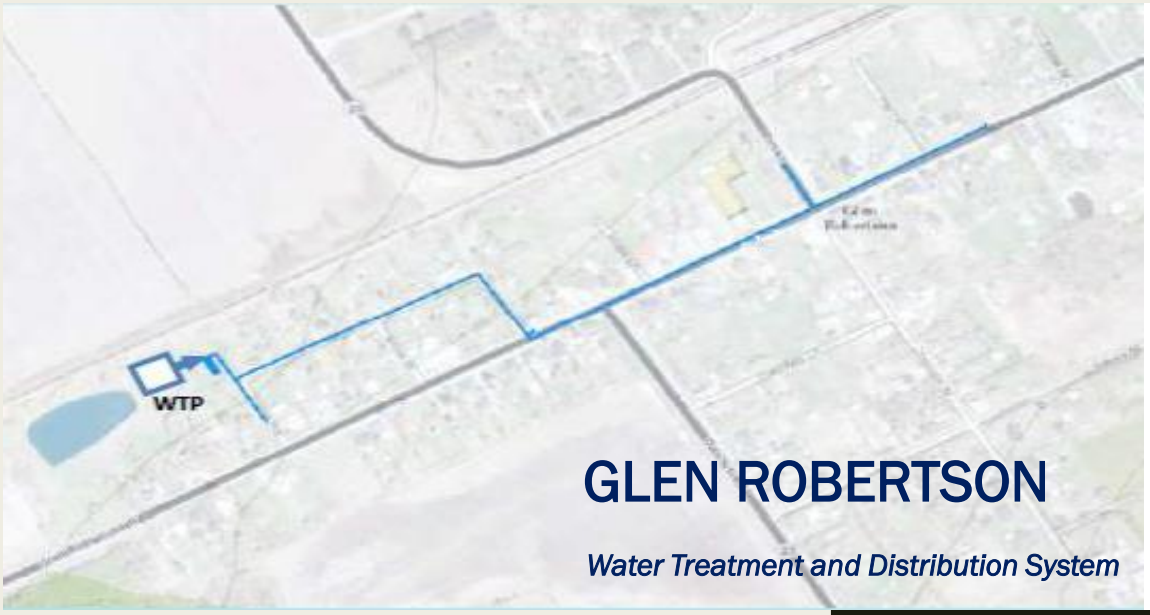


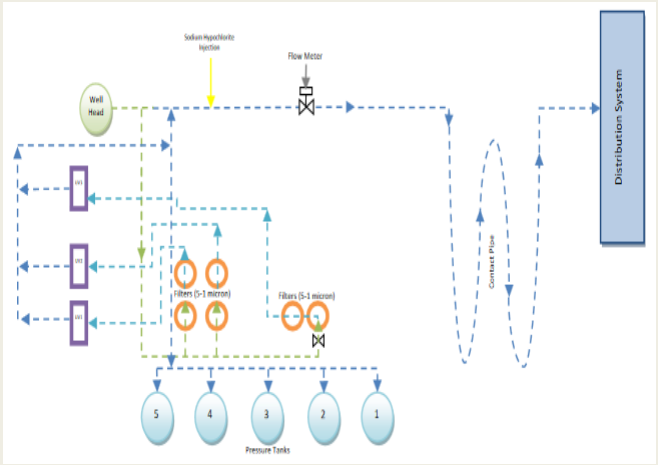
GLEN ROBERTSON

Water Treatment and Distribution System

2

Glen Robertson Drinking Water System

- Small Municipal Residential Drinking Water System
  - *Class 1 Treatment / Class 1 Distribution*
  - *Services appx 50 homes*
  - *GUDI Well System with UV and Chlorination*
  - *No water storage currently available*
  - *Currently Limited to no growth in this area*
- Permits/Licenses
  - *Municipal Drinking Water License 181-102*
    - Renewal Sept 2025 (expiry in Mar 2026)
    - Update to Financial Plan 181-301A (council approved prior to renewal)
    - No fee for renewal
  - *Municipal Water Work License*
  - *Permit to Take Water (valid until March 2035)*
    - No changes to conditions



3

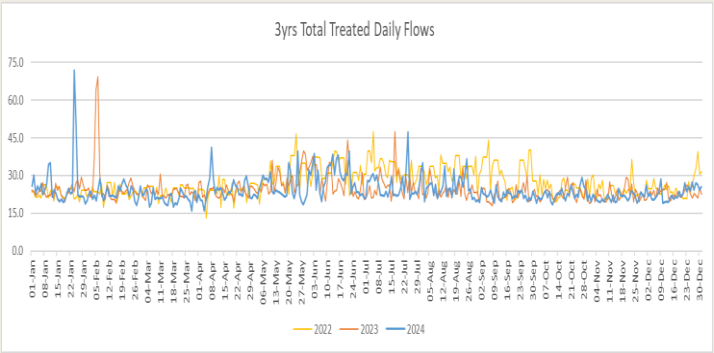
Flow Summary

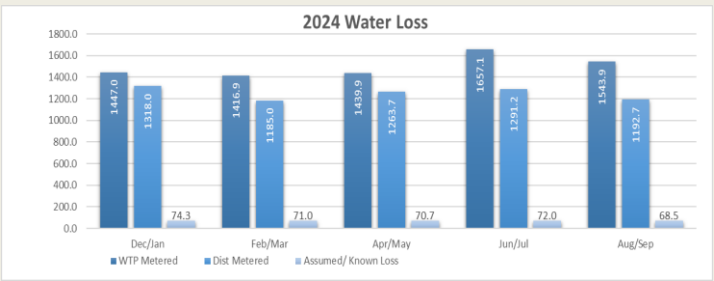
Water Usage Summary

- *Flows similar to previous years, no major changes to note*
- *No noted shortfalls from well*
- *Daily Allowable (PTTW) 224m³/day*
- *WTP Maximum Daily Flow: 71.7m³*
- *WTP Average Daily Flow: 24.1m³*
- *Current System Capacity: 10.8%*
  (decrease of 0.3% from previous year)

Water Loss

- *Water loss attributed to water leaks or taking in distribution before customer meters. It can also include faulty meters (caused by age, damage or tampering)*
- *Calculated loss is about 11.1%, so within the 5%-20% industry standard.*





4

Monitoring, Sampling and Analysis

OPERATIONAL MONITORING

ROUTINE SAMPLING

QUARTERLY SAMPLING

ANNUAL/ADDITIONAL SAMPLING

Raw & Treated Quality	No Adverse Samples		No Adverse Samples	Organic/Inorganic (3yrs)
Raw Water	**Raw Water**		**Treated Nitrate/Nitrite**	• Last sample 2024 • No issues noted • Next Sample 2027
• Values are similar to previous year, with minor fluctuations. • No concern for treatment processes.	• e. coli range • total coliform	0 - 0 0 - 3	• Sampling completed as required • results well below limits	**Lead Program (6mth + 3yrs)**

Treated Water	**Treated Water**		**Distribution THM**	• Bi-annual monitoring
				  • No quality changes noted
				• Next Sample 2026
				  • 2023 well below standard on last sampling

• Values are similar to previous year, with minor fluctuations. • No concern to meet compliance limits or quality degradation.	• e. coli range • total coliform • HPC	0 - 0 0 - 0 <2 - 6	• All samples well below limits • Rolling Average 17.5 (Jan-2025)	**Fluoride/Sodium (5yrs)**
Distribution	**Distribution**		**Distribution HAA**	• Last sample 2022 • Sodium Exceedance (historical) • Next Sample 2027
• Values are stable, as compared to previous years. • Minor fluctuations, but no concern for compliance limits	• e. coli range • total coliform • HPC	0 - 0 0 - 0 <2 - 2	• All samples non-detect • Rolling Average 5.5 (Jan 2025)	**Upcoming Changes** • no regulatory changes to note at this time

5

Significant Expenses

Meter Change Program

- meters have life expectancy is 15-20yrs based on metering accuracy.
- Replacement program started in 2023
  - Tendered/Contracted to 1 plumber
  - Reliant on residential scheduling with plumber
  - Appx. 95% complete to date

WTP Building Expansion

- RFP to be released by Director in the near future

Singer Valve Removal

- Eastern Welding contracted to remove unit and install new header piping
- Aquaholics used to maintain Dist supply and pressure
- Work completed over 8.5hrs

Operational Issues

Treatment Failures

- *UV Unit Failure*
  - All alarm point and auto-shut down well before compliance limit
  - All issues related to maintenance issues (repaired)
- $NaCl_2$ Pump/Injection
  - No dosing loss occurred, flushing was used periodically to increase residuals
  - *operation/dosing issues noted due to degassing in tanks and suction lines of pump*
  - working with supplier to resolve on-going issues

6

Internal Audit

- Completed by Ewen MacDonald (Oct)
- 2 Minor Non-Conformance
  - documentation currency
  - operator information currency
- 5 Opportunities for Improvement
  - QMS Policy communication to public (resolved)
  - Bylaw currency (deemed not relevant)
  - Communication to COA and Council (deemed sufficient)
  - Asset Management to tie into QMS structure (to be completed)
  - Inclusion of OFI during presentations (resolved)

Maintained System Accreditation

- Third-Party Surveillance Audit completed (Nov)
- 0 Minor Non-Conformance
- 1 Opportunities for Improvement
  - Update emergency management review to include MECP listing (to be updated)
- 1 Comment
  - to include exclusion rational in risk assessment (completed)
- System Accreditation maintained
- 3yr contract was just approved with external auditor
  - Reaccreditation audit to be completed in Nov

Compliance with MECP

- Annual Inspection (Aug)
  - 100% risk ranking
  - No Compliance Issues
  - No Best Management Practices
- 0 AWQI reports

Multi-Barrier Approach to Water Treatment and Distribution

- 36month Risk Assessment (Mar)
  - Completed Apr 2025
  - QMS OP Plan to be updated
- Annual Risk Review (Mar)
  - minor changes required to O&M Manual based on PTTW and MDWL update if changes present
- Timelines were not always adhered to during this period,
  - 2025 to get timelines back on track for greatest impact

Conformance-Compliance-Licenses-Permit-Approval-Orders

7

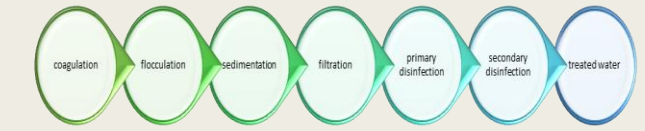
ALEXANDRIA

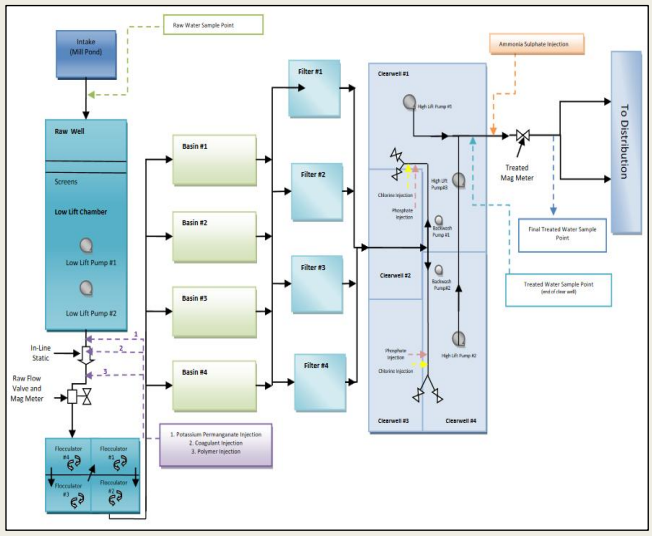
Water Treatment and Distribution Systems,

8

Alexandria Drinking Water System

- Large Municipal Residential Drinking Water System
  - *Class 3 Treatment / Class 2 Distribution*
  - *Services appr 1500 (Alx) & 400 (Max)*
  - *Surface Water (Coagulation/Flocculation/Sedimentation)*
  - *Corrosion Control/Chlorine Disinfection/Chloramination with Boosting*
  - *Water tower storage facilities (Alx & Max)*
  - *Minor growth, but limited by wastewater components*
    - Planned review of process to ensure treatment processes can support future growth
- Permits/Licenses
  - *Municipal Drinking Water License 181-102*
    - Renewal Sept 2025 (expiry in Mar 2026)
    - Update to Financial Plan 181-301A (council approved prior to renewal)
    - No fee for renewal
  - *Municipal Water Work License*
  - *Permit to Take Water (valid until May 2032)*





9

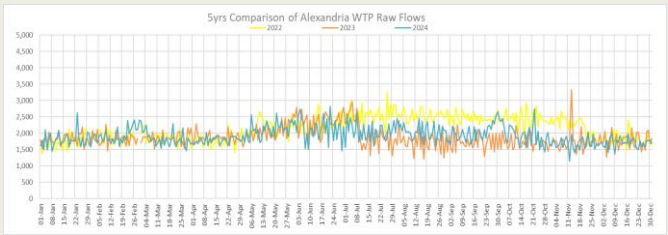
Flow Summary

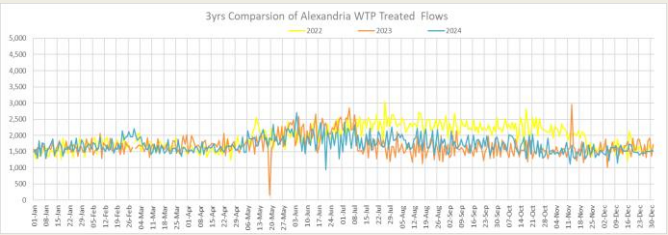
Water Usage Summary

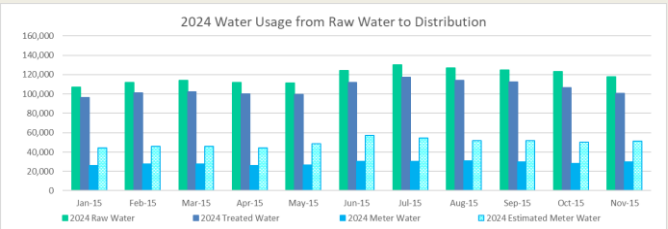
- *Daily Allowable Raw Water (PTTW 5,616 m^3/day)*
  - WTP Maximum Daily Raw Flow: 2,826m^3
  - WTP Average Daily Raw Flow: 1,920m^3
  - Current System Capacity: 34.2% *(increase of 0.9% from previous year)*
- *Daily Allowable Treated Water (MDWL: 8,014 m^3/day)*
  - WTP Maximum Daily Treated Flow: 2,699m^3
  - WTP Average Daily Raw Flow: 1,707m^3
  - Current System Capacity: 21.3% (increase of 0.2% from previous year)

Water Loss

- *Water loss attributed to water leaks in distribution before customer meters, hydrant usage with/without permission (no reported total) or faulty meters (caused by age, damage or tampering)*
- *Calculated loss is about 40% in Alx and 50%, in Max*
  - As per 2024 water audit
  - Alx has improved 11% form previous audit, Max is same
  - Looking into internal water taking processes to help determine if values are over inflated
  - Looking into verification of infrastructure







10

Sampling and Analysis


OPERATIONAL MONITORING


ROUTINE SAMPLING


QUARTERLY SAMPLING


ANNUAL/ADDITIONAL SAMPLING

Raw & Treated Quality	2 Adverse Sample		No Adverse Samples	Organic/Inorganic (1yrs)
Raw Water	**Raw Water**		**Treated Nitrate/Nitrite**	• Last sample 2024 • No issues noted • Next Sample 2025
• Values are similar to previous year, with minor fluctuations. • No concern for treatment processes.	• e. coli range • total coliform	0 - 161 0 – 1300	• within normal ranges • results well below limits	**Lead Program (6mth & 3yrs)**

Treated Water	**Treated Water**		**Distribution THM & HAA**	• Bi-annual monitoring
				  • No quality changes noted
				• Next Sample 2026
				  • 2023 well below standard on last sampling

• Values are similar to previous year, with minor fluctuations. • No concern to meet compliance limits or quality degradation.	• e. coli range • total coliform • HPC • 1 AWQI	0 - 0 0 - 0 < 2 - 2	• 1 elevated sample in Jul 2024 but all rolling averages within limits • THM Rolling Average 75.8 (Jan) • HAA Rolling Average 57.8 (Jan)	**Fluoride/Sodium (5yrs)**

• **Distribution**	• **Distribution**		• **Distribution NDMA**	• Last sample 2022
				  • No exceedance noted
				  • Some historical seasonal issues with sodium
				• Next Sample 2027

• Values are similar to previous year, with minor fluctuations noted with alkalinity. • No concern to meet compliance limits or quality degradation.	• e. coli range • total coliform • HPC • 1 AWQI	0 - 0 0 - 0 < 2 - 202	• All samples well below limit of 0.09 • Average 0.006µg/L	**Upcoming Changes** • No regulator changes to note

11

Significant Expenses

North Glengarry Master Plan

- Report for overall infrastructure planning
- A portion of Hydraulic Water modeling completed, but this in only a portion of the overall plan
- Director of Public Works currently working towards completion with EVB

Dominion St Water Main Replacement

- Replacement of existing 100mm cast iron pipe to 150mm PVC
- Dominion St between Gernish St and Lochiel St & Derby St between Main St and Dominion St
- Completed over 8 weeks in 3 phases

Bulk Fill Station Installation

- Removed existing hydrant to install bulk fill stn.
- Large commercial users to help reduce water taking form distribution and reduce truck filling at water treatment plant.

Locating and Correlating Equipment

- Replace older equipment
- Help operational staff locate infrastructure and possible leaks

Chlorine System Upgrade

- Replace older equipment, with defective components

Infrastructure Renewal

- Replace defective valves or hydrants
- To ensure infrastructure renewal is completed annually

12

Operational Issues

Coagulant Tank
- Sedimentation build-up in tank, reducing available volume and quality efficiencies.
- Isolation valves were found to be defective
  - All defects repaired and both tanks cleaned in early 2025

Backwash Process
- Filter 3 Surface Wash Issues.
  - Intermittent operational issues, caused by valve issue, as identified though manufacturer.
  - Reset faults and manually backwash filter as required until repaired.

Chlorinator Failure
- Chlorinator failure after full-maintenance.
  - unit replaced.

Low Lift Pump Issues
- LLP220 Flow issues identified
  - Trouble shooting cause, ruled out valve issues

Bst Stn Electrical Hydro Meter
- Internal arcing issues discovered during routine inspection
  - All components replaced

Treatment Process Failures
- Coagulant Dosing Issues
  - Process upset and dossing irregularities, once identified process evaluation and adjustments made.
  - Operational issue during maintenance, once discovered issues corrected and process restarted.
- Disinfection Loss
  - Caused by defect in injection line, once discovered section of line replaced
  - Process shut down for 19hrs, storage sufficient to maintain distribution.
- Boosting Chemical Dosing Loss
  - Injection line failure, line replaced, and pumps restored

Water Breaks
- Unplanned Work:
  - 6 water main breaks
  - 2 service line repairs

13

Internal Audit

- Completed by Ewen MacDonald (Oct)
- 2 Minor Non-Conformance
  - documentation currency
  - operator information currency
- 5 Opportunities for Improvement
  - QMS Policy communication to public (resolved)
  - Bylaw currency (deemed not relevant)
  - Communication to COA and Council (deemed sufficient)
  - Asset Management to tie into QMS structure (to be completed)
  - Inclusion of OFI during presentations (resolved)

Maintained System Accreditation

- Third-Party Surveillance Audit completed (Nov)
- 0 Minor Non-Conformance
- 1 Opportunities for Improvement
  - Update emergency management review to include MECP listing (to be updated)
- 1 Comment
  - to include exclusion rational in risk assessment (completed)
- System Accreditation maintained
- 3yr contract was just approved with external auditor
  - Reaccreditation audit to be completed in Nov

Compliance with MECP

- Annual Inspection (Aug)
  - 91.46% risk ranking
  - No non-compliances or recommendations
- 2 AWQI reports
  - AWQI: Low Distribution Residual Watermain
  - AWQI: Adverse Testing Results
- 2 Non-Compliance Issues
  - Low Distribution Residual not Reported as per requirement
  - Disinfection Procedure not followed during watermain replacement
- 2 Best Management Practices
  - Update DWSPI
  - Complete Form 2 for completed work

Multi-Barrier Approach to Water Treatment and Distribution

- 36month Risk Assessment
  - Scheduled Nov 2025
- Annual Risk Review
  - Scheduled Jul 2025
- Better integration of QMS into Management
- Timelines were not always adhered to during this period,
  - 2025 to get timelines back on track for greatest impact

Compliance-Licenses-Permit-Approval-Orders

14

Internal QMS Review Results

Review	Target Completion	Actual Completion	Conclusion
36mth Risk Assessment for Gln DWS	March	March 2025	• No major changes to system • Added SCADA element to system • Minor updates required internally
36mth Risk Assessment for Alx DWS	September	TBC	
Annual Emergency Tabletop (Coagulant Quality Issue)	February	April 2025	• Operational staff were able to identify issue and correct problem • Severity of event was dependant on dist storage and contractor availability • Documentation was reviewed and minor internal updates required
Infrastructure Maintenance, Rehabilitation and Renewal Review	June	July 2024	• Scheduled and forms are current, all equipment is accounted for and timelines for task completion have improved • Minor amount of follow-up required for equipment deficiencies • Minor amount of documentation follow-up delegated to staff
Provision of Infrastructure Review	August	November 2024	• No shortfalls, capacity issues or major changes to note in DWS • No major growth or expansion planned in next year but is expected in the next few years • Follow-up for externally auditing contract, 10yrs capital plan and asset indexing
Management Review	October	March 2025	• Timelines for reviews are outside of target • Treatment/Distribution systems are in place and operational with redundancies • Overall systems are in place, but some can be improved such as completion of follow-up items, communications and financial planning • Follow-up required for internal data collection and internal usage tracking • Alx Water Supply and Treatment studies to ensure long-tern sustainability • Water financial plan update for MDWL license renewal
Internal Audit	30-60 days prior to External Audit	TBC	• To reach out to auditor to schedule date now that external audit has been confirmed
External Audit	Oct 30/Nov 25	TBC	• Scheduling was confirmed on April 11

15

Thanks for your time and attention

16

The Township of North Glengarry

Glen Robertson Well Supply System

2024 Annual Summary Report

In compliance with O. Reg 170/03, section 11, and O. Reg 170/03 schedule 22

Contents

Section 1: Introduction

This report is an annual summary of water quantity, quality system information, system operations and major expenditures for the Glen Robertson Well Supply during the reporting period of January 1, 2024, to December 31, 2024. It was prepared in accordance with section 11 and schedule 22 of the of Ontario's Drinking Water Systems Regulation O. Regulation 170/03.

Section 2: Drinking Water System Overview

The Glen Robertson Drinking Water System is composed of a treatment facility and a distribution system all located within the hamlet of Glen Robertson. This drinking water system obtains groundwater as its source to supply the residents within the hamlet with safe and reliable drinking water. It is categorized as a small municipal residential drinking water system, through the Ministry of Environment, Conservation and Parks.

In 2010 the source water was deemed to be groundwater under the direct influence of surface water (GUDI), and upgrades were completed to strengthen treatment processes. In 2024, the drinking water system was re-categorized as per O. Reg 128/04 from a limited supply system to a water treatment subsystem class 1 and a water distribution class 1.

Section 3: Treatment Process and Equipment Description

Well Supply & Pumping Station

The groundwater source for the Glen Robertson Drinking Water System is a drilled well, situated within the water treatment building located at 3342 Irwin St. This well houses a submersible pump rated at 5.1L/sec (67 IGPM) and is connected to the internal piping system in order to transmit raw water through the treatment processes prior to distribution. All treatment and monitoring equipment is also stored within the single-story brick building. To ensure site security and to protect against vandalism the property is enclosed by a chain link fence and the building is equipped and monitored by an automated alarm system.

Treatment Equipment

The raw water is pumped from the well through 2 particulate filters, a 5-micron followed by a 1-micron, prior to entering the ultraviolet light (UV) disinfection system for primary disinfection. As per the DWWP Schedule A description, 2 UV units are deemed to operate in duty mode with 1 unit on stand-by. All the UV units are are equipped with auto-shut down in the event of operational issues or equipment failure, but waterworks staff must manually rotate duty operations between UV units thus ensuring proper operation prior to being placed in service.

The disinfected water is then dosed with sodium hypochlorite to complete the primary disinfection process and ensure secondary disinfection can be achieved. The sodium hypochlorite system utilizes two diaphragm metering pumps, piping and an injection point in the discharge pipe to apply the chemical based on water flow. The pumps have automatic switchover capabilities if a problem develops with the lead pump during operation.

Located outside the building but within the fenced property boundaries, is an underground contact piping loop that contains a flushing port and a sample line, which feeds the on-line analyzers located in the treatment building.

Monitoring Equipment

Three on-line free chlorine analyzers are used for regulatory and non-regulatory monitoring of the primary and secondary disinfection processes. One analyzer measures residual directly after sodium hypochlorite injection

point, one analyzer measures residuals at the end of the contact loop, as the treated water enters the distribution system, and one analyzer is in place in the distribution to ensure continuously monitor.

One flow meter is installed directly after the sodium hypochlorite injection on the piping leading to the contact chamber. This unit will record all flows leaving the treatment process and entering the distribution. There is no raw flow meter in this system due to limited access and minimal water taking prior to treatment.

One on-line turbidity analyzer measures the treated water as it leaves the contact chamber and enters the distribution system.

All the instrumentation and equipment described above is tied into the SCADA system which ensures system monitoring, process control and historical trending, however while remote monitoring is possible, there is limited remote control capabilities. The alarm setpoints are enabled through the SCADA system and transferred to an automated alarm/dialler system to alert the on-call operational staff member to any limit exceedances.

System Pressure Equipment

The well pump will start, run, or stop based on pressure limits set within the SCADA system, the system utilizes an automated gauge in the water plant prior to sodium hypochlorite injection to monitor the system pressure. The pre-existing manual pressure switch acts as a system back-up and is set to operate if the SCADA system malfunctions.

Pneumatic pressure tanks are in service to ensure the distribution pressure is maintained between pump cycles and alarms are enabled and in place through the SCADA system, as previously described.

Emergency Power

A natural gas generator, equipped with auto start, is used to provide power to the water treatment building in the event of a utility power outage. The generator is located outside the building, with the transfer switch located within the water treatment building.

Additional Equipment.

All piping, valves, controls, and appurtenances along with associated mechanical and electrical equipment not mentioned in the description but are utilized to make up the system.

Monitoring Wells

Two drilled monitoring wells are located within the fenced property where the treatment plant is located. One being located northeast of the building, and one located southwest of the building. These wells were utilized in the past for groundwater level monitoring, but no monitoring is being currently conducted.

Section 4: Flow Summary

In accordance with the Municipal Drinking Water License #181-102 and the Permit to Take Water (PTTW), the Glen Robertson Well Supply shall not be operated to exceed the maximum daily volume of water flowing from the well source or from the treatment process into the distribution system. Throughout this reporting period, the daily volumes recorded were well below the maximum allowable compliance limit of 224 m^3/day, as stipulated in both the license and permit listed above. In order to assess the drinking water system's capability to meet the existing demands and potential future development needs, a summary of the treated flow rates during this period was prepared and is presented in the chart below.

The 2024 average daily treated flow was calculated to be 24.1m^3 and the observed maximum daily flow was reported to be 71.7m^3. This represents 10.7% of the total plant rated capacity, please refer to the appendices for full 2024 annual data summary.

2024 Treated Flow Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Maximum Daily Flow (m^3)	71.7	28.9	25.1	41.1	39.7	39.7	47.2	36.7	26.0	29.3	25.0	28.7
Monthly Average Flow (m^3)	26.1	23.3	21.0	24.3	25.2	29.3	25.8	25.5	22.1	22.5	21.3	23.0
Monthly Average Daily Maximum Instantaneous Flow (L/s)	2.00	1.53	1.48	1.47	1.69	2.52	1.75	1.82	1.55	1.55	1.61	1.61
Rated Maximum Daily Treated Flow for the approved system										224 m^3/day		
Rated Maximum Instantaneous Treated Flow										2.6 L/s		

Section 5: Sampling and Laboratory Analysis Summary

The Township of North Glengarry uses Caduceon Laboratories as the primary provider for all sample analysis. Caduceon Laboratories is an accredited laboratory under the Ministry of the Environment, Conservation and Parks requirements. Refer to table below for all results as required.

2024 Microbiological Testing Completed as per Schedule 11 of O. Reg 170/03					
Location	Number of Samples	Range of E. Coli or Fecal Results	Range of Total Coliform Results	Number of HPC Samples	Range of HPC Results
Raw	52	0 - 0	0 - 3	0	
Treated	53	0 - 0	0 - 0	53	< 2 - 6
Distribution	106	0 - 0	0 - 0	106	< 2 - 2

2024 Operational Testing as per Schedule 7of O. Reg 170/03		
Parameter	Number of Grab Samples	Range of Results unit of measure is mg/L unless otherwise indicated
Raw Turbidity	253	0.10 – 9.76 NTU
Treated Free Chlorine	Continuous	0.83 – 2.17
Distribution Free Chlorine	Continuous	0.56 – 2.98
Fluoride *(If DWS provides fluoridation)*	n/a	

Additional Sampling or Testing in Accordance with Municipal License Requirement or Order				
Date of Order or Approval Amendment	Parameter	Date Sampled	Result	Unit of Measure
n/a				

2024 Summary of Inorganic Chemical Parameters Tested as per Schedule 13 of O. Reg 170/03 *(1ug/L = 0.001mg/L; RAA=Rolling Annual Average)*					
Parameter	Sample Date	Standard (maximum concentration)	Result Value	Unit of Measure	Exceedance
Antimony	16-Sep-2024	0.006 mg/L	< 0.0001	mg/L	No
Arsenic	16-Sep-2024	0.01 mg/L	0.0001	mg/L	No
Barium	16-Sep-2024	1.0 mg/L	0.176	mg/L	No
Boron	16-Sep-2024	5.0 mg/L	0.027	mg/L	No
Cadmium	16-Sep-2024	0.005 mg/L	< 0.000015	mg/L	No
Chromium	16-Sep-2024	0.05 mg/L	< 0.0010	mg/L	No
Mercury	16-Sep-2024	0.001mg/L	< 0.00002	mg/L	No

2024 Summary of Inorganic Chemical Parameters Tested as per Schedule 13 of O. Reg 170/03 *(1ug/L = 0.001mg/L; RAA=Rolling Annual Average)*					
Parameter	Sample Date	Standard (maximum concentration)	Result Value	Unit of Measure	Exceedance
Selenium	16-Sep-2024	0.05 mg/L	< 0.001	mg/L	No
Uranium	16-Sep-2024	0.02 mg/L	0.00048	mg/L	No

2024 Summary of Organic Chemical Parameters Tested as per Schedule 13 of O. Reg 170/03 *(1ug/L = 0.001mg/L; RAA=Rolling Annual Average)*						
Parameter	Sample Date	Standard (maximum concentration)	Unit of Measure	Result Value	Unit of Measure	Exceedance
Alachlor	16-Sep-2024	0.005	mg/L	< 0.3	ug/L	No
Atrazine + N-dealkylated metabolites	16-Sep-2024	0.005	mg/L	< 0.5	ug/L	No
Azinphos-methyl	16-Sep-2024	0.02	mg/L	< 1	ug/L	No
Benzene	16-Sep-2024	0.001	mg/L	< 0.5	ug/L	No
Benzo(a)pyrene	16-Sep-2024	0.00001	mg/L	< 0.006	ug/L	No
Bromoxynil	16-Sep-2024	0.005	mg/L	< 0.5	ug/L	No
Carbaryl	16-Sep-2024	0.09	mg/L	< 3	ug/L	No
Carbofuran	16-Sep-2024	0.09	mg/L	< 1	ug/L	No
Carbon Tetrachloride	16-Sep-2024	0.002	mg/L	< 0.2	ug/L	No
Chlorpyrifos	16-Sep-2024	0.09	mg/L	< 0.5	ug/L	No
Diazinon	16-Sep-2024	0.02	mg/L	< 1	ug/L	No
Dicamba	16-Sep-2024	0.12	mg/L	< 1.0	ug/L	No
1,2-Dichlorobenzene	16-Sep-2024	0.2	mg/L	< 0.5	ug/L	No
1,4-Dichlorobenzene	16-Sep-2024	0.005	mg/L	<0.5	ug/L	No
1,2-Dichloroethane	16-Sep-2024	0.005	mg/L	< 0.5	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	16-Sep-2024	0.014	mg/L	< 0.5	ug/L	No
Dichloromethane	16-Sep-2024	0.05	mg/L	< 5	ug/L	No
2-4 Dichlorophenol	16-Sep-2024	0.9	mg/L	< 0.2	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	16-Sep-2024	0.1	mg/L	< 1.0	ug/L	No
Diclofop-methyl	16-Sep-2024	0.009	mg/L	< 0.9	ug/L	No
Dimethoate	16-Sep-2024	0.02	mg/L	< 1	ug/L	No
Diquat	16-Sep-2024	0.07	mg/L	< 5	ug/L	No
Diuron	16-Sep-2024	0.15	mg/L	< 5	ug/L	No
Glyphosate	16-Sep-2024	0.28	mg/L	< 25	ug/L	No
Malathion	16-Sep-2024	0.19	mg/L	< 5	ug/L	No
2-Methyl-4-Chlorophenoxyacetic (MCPA)	16-Sep-2024	0.1	mg/L	< 10	ug/L	No
Metolachlor	16-Sep-2024	0.05	mg/L	< 3	ug/L	No
Metribuzin	16-Sep-2024	0.08	mg/L	< 3	ug/L	No
Monochlorobenzene	01-Nov-2021	0.08	mg/L	< 0.5	ug/L	No
Paraquat	16-Sep-2024	0.01	mg/L	< 1	ug/L	No
Pentachlorophenol	16-Sep-2024	0.06	mg/L	< 0.2	ug/L	No
Phorate	16-Sep-2024	0.002	mg/L	< 0.3	ug/L	No

2024 Summary of Organic Chemical Parameters Tested as per Schedule 13 of O. Reg 170/03 (1ug/L = 0.001mg/L; RAA=Rolling Annual Average)						
Parameter	Sample Date	Standard (maximum concentration)	Unit of Measure	Result Value	Unit of Measure	Exceedance
Picloram	16-Sep-2024	0.19	mg/L	< 5.0	ug/L	No
Polychlorinated Biphenyls (PCB)	16-Sep-2024	0.003	mg/L	< 0.05	ug/L	No
Prometryne	16-Sep-2024	0.001	mg/L	< 0.1	ug/L	No
Simazine	16-Sep-2024	0.01	mg/L	< 0.5	ug/L	No
Terbufos	16-Sep-2024	0.001	mg/L	< 0.5	ug/L	No
Tetrachloroethylene	16-Sep-2024	0.01	mg/L	< 0.5	ug/L	No
2,3,4,6-Tetrachlorophenol	16-Sep-2024	0.1	mg/L	< 0.2	ug/L	No
Triallate	16-Sep-2024	0.23	mg/L	< 10	ug/L	No
Trichloroethylene	16-Sep-2024	0.005	mg/L	< 0.5	ug/L	No
2,4,6-Trichlorophenol	16-Sep-2024	0.005	mg/L	< 0.2	ug/L	No
Trifluralin	16-Sep-2024	0.045	mg/L	< 0.5	ug/L	No
Vinyl Chloride	16-Sep-2024	0.001	mg/L	< 0.2	ug/L	No

Inorganic or Organic Parameters that exceeded half the standard prescribed in Schedule 2 and 3 of O. Reg 169/03 (requiring increased monitoring for future sampling)			
Parameter	Result Value	Unit of Measure	Date of Sample
n/a			

2024 Summary of Additional Chemical Parameters Tested as per Schedule 13 of O. Reg 170/03 (1ug/L = 0.001mg/L; RAA=Rolling Annual Average)						
Parameter	Sample Date	Standard (maximum concentration)	Unit of Measure	Result Value	Unit of Measure	Exceedance
THM (RAA)	13-Jan-2025	0.100	mg/L	17.5	ug/L	No
Haloacetic Acid (RAA)	13-Jan-2025	0.08	mg/L	5.55	ug/L	No
Nitrate	13-Jan-2025	10.0	mg/L	0.44	mg/L	No
Nitrite	13-Jan-2025	1.0	mg/L	< 0.05	mg/L	No
Sodium	12-Sep-2022	20	mg/L	104	mg/L	Yes
Fluoride	12-Sep-2022	1.5	mg/L	< 0.1	mg/L	No

2024 Summary of Lead Testing as per Schedule 15.1 of O. Ref 170/03 (1ppm = 1mg/L)							
Location/ Type	Number of Samples	Range of Lead Results	Unit of Measure	Range of Alkalinity Results	Unit of Measure	Average pH	Exceedance
Residential Plumbing	0						
Non-Residential Plumbing	0						
Distribution	2			347 - 349	mg/L	7.04	No

Section 6: Significant Expenses Incurred

There were two capital works during the 2024 budgetary period. All significant expenses were regarding to maintenance or equipment replacement, as described below.

☐ Install required equipment.
☐ Repair required equipment.
☒ Replace required equipment.
☐ None during this period

Briefly Describe Incident and/or Expenses Incurred:

No.	Project Name	Description	Cost
1	Header Pipe Replacement and Singer Valve Removal	• Removal of the defective singer valve • Reconfiguration and installation of the header pipe.	$13,400

Section 7: Compliance with Licenses, Permits, Approvals and Orders

The operating authority strives to remain compliant with the Drinking Water Quality Management Standard 2.0, the Safe Drinking Water Act and all associated regulations, procedures or guidelines. This approach is utilized to maintain a multi-barrier water treatment approach to ensure safeguarding of the drinking water. The following table is a listing of all permits and or licenses that apply to this system:

Description	*Number*	*Issue*	*Issue Date*	*Expiry Date*
Municipal Drinking Water License	181-102	3	March 16, 2021	March 16, 2026
Water Works Permit	181-202	3	March 16, 2021	March 16, 2026
Permit to Take Water	3330-9UNQ2Q		March 20, 2015	March 16, 2025
Water Treatment Classification	10067		July 9, 2024	n/a
Water Distribution Classification	10068		July 9, 2024	n/a

The Glen Robertson Drinking Water System and Operating Authority currently upholds the accreditation certification by maintaining and promoting the current Quality Management System currently in place. The Operational Staff actively participates in all system auditing requirements, and the annual system inspections as conducted through the Ministry of the Environment. All conformance and compliance issues identified throughout these system reviews have been addressed and are in the process of being corrected.

During this period, all raw water flows were compliant with the permit to take water, and all flows were well within the rated capacity for the system, currently at 10.7% of the allowable limits.

All disinfection equipment was operated in such a manner that all license requirements were met at all times. The treatment system was always operated to ensure compliance with the Procedure for Disinfection of Drinking Water in Ontario.

All equipment was maintained as per operations manuals and/or calibrated annually by a certified technician.

Section 8: Non-Conformance and Non-Compliance with Licenses, Permits, Approvals and Orders

There were no instances of minor non-conformances identified during the annual external surveillance audit and no instances of non-compliance identified during the annual MECP system inspection. All documentation and operations were within all compliance and conformance limits.

Parameter	Regulatory Document	Requirement	Date of Correction
n/a			

There were no incidents that required reporting under O. Regulation 170/03. All license permit and/or approval requirements were met during this reporting period. Furthermore, there were no orders or additional requirements issued to this system.

2024 Reported Incident in accordance to subsection 18(1) or Schedule 16 of O. Reg 170/03					
Incident Date	*Parameter*	*Result*	*Unit of Measure*	*Corrective Action*	*Corrective Action Date*
n/a				•	

Section 9: Township of North Glengarry Endorsement of Summary Report

A copy of the report will be presented to all members of the municipal Council through the Public Works Committee meeting. The report was also made available to the public through the Township of North Glengarry website or upon request at the Main office, located at 3720 County Road 34, south of Alexandria.

This report has been endorsed by Tim Wright, Director of Public Works on behalf of Township of North Glengarry Council.

Section 10: Contact

All efforts have been made to provide accurate and up to date information in a relevant format. In the event that additional information is required please submit all verbal requests by phone at 613-525-3087; in writing by mail to 3720 County Road 34, RR2, Alexandria Ontario, K0C 1A0; or in writing by email to dean@northglengarry.ca.

Appendix A: Glen Robertson 2024 Daily Treated Flows (m^3)

	January	February	March	April	May	June	July	August	September	October	November	December
1	25.8	22.9	22.2	22.3	22.5	30.2	21.0	35.1	19.5	21.8	19.6	26.0
2	30.1	23.8	22.4	20.2	22.0	34.5	28.1	19.8	25.1	19.2	22.5	21.8
3	22.9	20.7	24.5	19.9	20.8	38.6	27.8	25.0	22.8	21.5	21.6	22.7
4	25.8	22.1	23.7	15.9	24.5	24.3	29.5	25.8	22.6	20.6	20.4	20.5
5	23.9	20.1	17.5	20.2	27.0	32.1	30.6	26.6	21.5	21.0	19.8	20.3
6	26.6	24.6	19.0	25.5	30.0	23.0	28.0	27.0	22.0	23.1	19.3	21.1
7	22.3	28.9	25.1	29.0	28.6	19.8	30.2	22.1	24.2	24.1	20.6	22.1
8	24.4	22.9	20.7	41.1	28.9	25.5	26.3	26.3	21.2	21.2	19.8	24.1
9	26.8	19.9	21.2	28.8	27.3	27.3	22.2	20.9	19.0	23.7	21.0	28.7
10	34.4	22.6	21.0	22.8	31.3	33.3	22.0	22.7	26.0	19.6	22.6	19.1
11	35.0	25.6	21.0	25.2	23.8	34.2	21.7	23.8	21.4	18.5	20.8	19.5
12	21.5	21.9	21.5	24.2	22.9	34.1	23.8	25.7	20.4	20.5	19.4	19.7
13	24.2	21.8	19.4	25.1	24.2	38.5	21.4	33.7	19.6	22.6	22.2	19.3
14	23.1	22.1	18.4	23.4	23.7	30.3	24.2	21.8	23.4	23.2	19.5	21.1
15	20.6	21.5	18.1	20.2	23.3	36.6	29.6	24.7	21.4	22.3	19.6	22.2
16	19.8	21.1	22.6	21.2	22.7	38.2	22.2	24.8	24.3	25.0	25.0	20.5
17	20.6	25.9	22.9	23.5	22.1	31.3	22.5	21.6	23.0	22.2	22.0	21.4
18	19.4	24.0	17.6	23.2	21.5	28.8	21.8	32.5	22.7	20.1	21.9	21.3
19	20.4	26.8	19.2	24.4	22.2	28.1	22.6	22.7	20.9	22.9	22.0	23.7
20	23.1	28.6	18.4	28.3	35.0	30.7	24.8	26.4	21.9	22.0	21.1	21.5
21	24.8	26.5	20.8	26.2	32.1	30.2	29.6	29.8	21.6	26.0	20.0	22.9
22	22.9	25.0	25.0	25.4	23.5	39.7	22.9	29.3	24.1	23.8	21.1	26.9
23	23.5	21.8	23.4	22.5	20.9	22.8	32.5	25.4	23.0	20.8	24.0	23.7
24	71.7	25.7	21.6	22.4	23.9	25.5	47.2	30.5	24.2	22.3	23.1	25.5
25	50.1	24.4	21.9	21.7	39.7	27.2	20.6	36.7	20.9	21.4	21.7	24.1
26	22.4	19.8	20.5	28.1	22.6	23.3	22.9	24.0	22.1	26.5	19.0	27.3
27	21.6	18.3	19.7	29.7	19.6	23.5	22.8	24.6	19.6	29.3	20.7	24.4
28	21.9	21.2	16.0	25.8	18.6	22.1	23.6	20.6	21.1	25.8	23.4	27.0
29	21.5	25.7	23.0	21.1	20.2	22.9	22.5	21.1	20.3	24.5	22.3	26.4
30	18.8		24.1	20.8	22.3	21.1	25.4	19.7	23.6	20.1	21.6	24.2
31	20.0		19.5		32.4		30.7	20.3		22.5		25.4

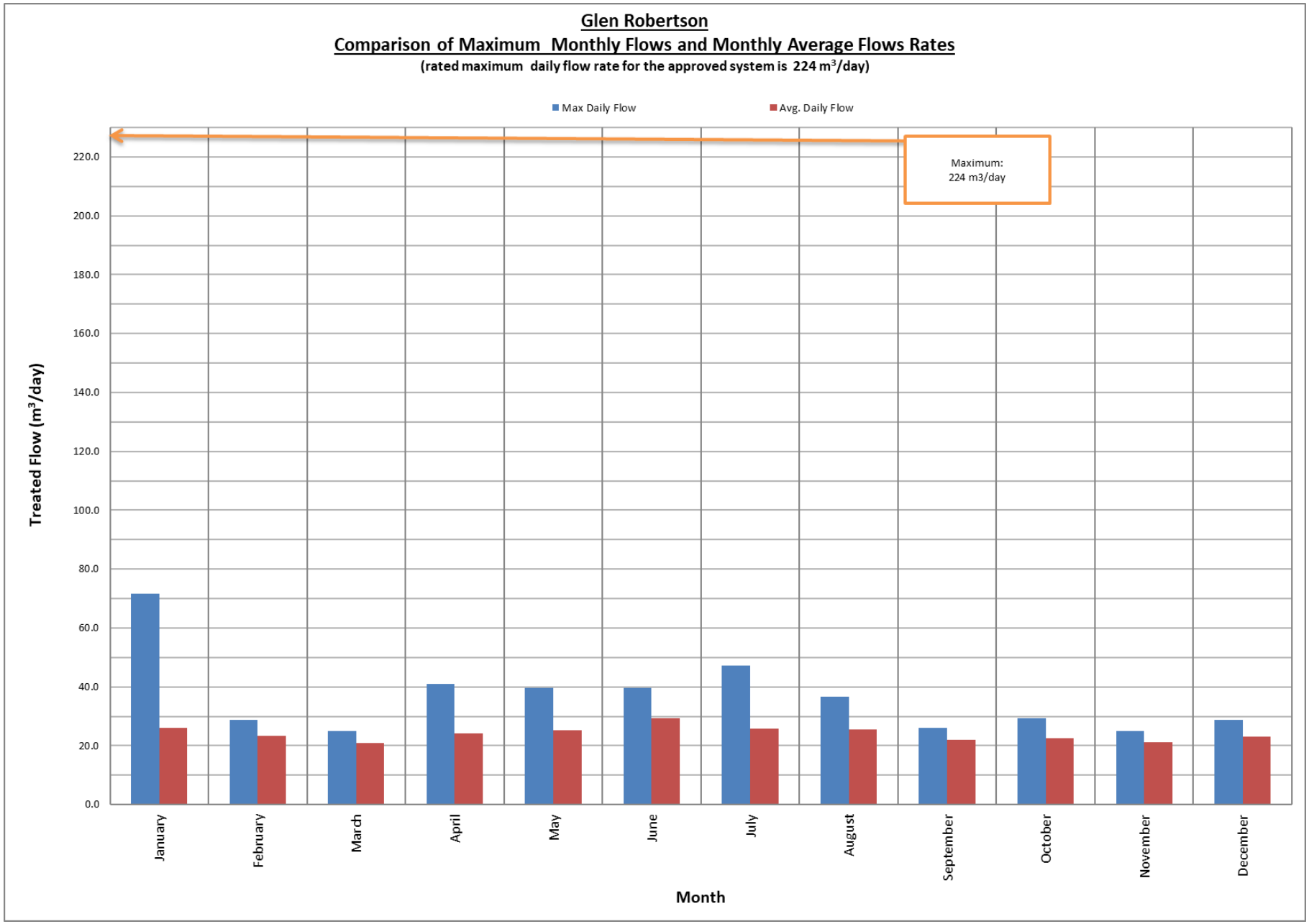
													Annual Treated Flows Summary
Minimum	18.8	18.3	16.0	15.9	18.6	19.8	20.6	19.7	19.0	18.5	19.0	19.1	15.9
Maximum	71.7	28.9	25.1	41.1	39.7	39.7	47.2	36.7	26.0	29.3	25.0	28.7	71.7
Average	26.1	23.3	21.0	24.3	25.2	29.3	25.8	25.5	22.1	22.5	21.3	23.0	24.1
Total	809.9	676.2	651.9	728.1	780.1	877.7	801.0	791.0	663.4	698.1	637.6	714.4	8829.4

Appendix B: Glen Robertson 2024 Treated Maximum Instantaneous Flows (L/s)

	January	February	March	April	May	June	July	August	September	October	November	December
1	0.30	0.27	0.26	0.26	0.26	0.35	0.24	0.41	0.23	0.25	0.23	0.30
2	0.35	0.28	0.26	0.23	0.25	0.40	0.33	0.23	0.29	0.22	0.26	0.25
3	0.27	0.24	0.28	0.23	0.24	0.45	0.32	0.29	0.26	0.25	0.25	0.26
4	0.30	0.26	0.27	0.18	0.28	0.28	0.34	0.30	0.26	0.24	0.24	0.24
5	0.28	0.23	0.20	0.23	0.31	0.37	0.35	0.31	0.25	0.24	0.23	0.23
6	0.31	0.28	0.22	0.30	0.35	0.27	0.32	0.31	0.25	0.27	0.22	0.24
7	0.26	0.33	0.29	0.34	0.33	0.23	0.35	0.26	0.28	0.00	0.24	0.26
8	0.28	0.27	0.24	0.48	0.33	0.30	0.30	0.30	0.25	0.25	0.23	0.28
9	0.31	0.23	0.25	0.33	0.32	0.32	0.26	0.24	0.22	0.27	0.24	0.33
10	0.40	0.26	0.24	0.26	0.36	0.39	0.00	0.26	0.30	0.23	0.26	0.22
11	0.41	0.30	0.24	0.29	0.28	0.40	0.25	0.28	0.25	0.21	0.24	0.23
12	0.25	0.25	0.25	0.28	0.27	0.39	0.28	0.30	0.24	0.24	0.22	0.23
13	0.28	0.25	0.22	0.29	0.28	0.45	0.25	0.39	0.23	0.26	0.26	0.22
14	0.27	0.26	0.21	0.27	0.27	0.35	0.28	0.25	0.27	0.27	0.23	0.24
15	0.24	0.25	0.21	0.23	0.27	0.42	0.34	0.29	0.25	0.26	0.23	0.26
16	0.23	0.24	0.26	0.25	0.26	0.44	0.26	0.29	0.28	0.29	0.29	0.24
17	0.24	0.30	0.27	0.27	0.26	0.36	0.26	0.25	0.27	0.26	0.25	0.25
18	0.22	0.28	0.20	0.27	0.25	0.33	0.25	0.38	0.26	0.23	0.25	0.25
19	0.24	0.31	0.22	0.28	0.26	0.33	0.26	0.26	0.24	0.27	0.25	0.27
20	0.27	0.33	0.21	0.33	0.41	0.36	0.29	0.31	0.25	0.25	0.24	0.25
21	0.29	0.31	0.24	0.30	0.37	0.35	0.34	0.34	0.25	0.30	0.23	0.27
22	0.27	0.29	0.29	0.29	0.27	0.46	0.27	0.34	0.28	0.28	0.24	0.31
23	0.27	0.25	0.27	0.26	0.24	0.26	0.38	0.29	0.27	0.24	0.28	0.27
24	0.83	0.30	0.25	0.26	0.28	0.30	0.55	0.35	0.28	0.26	0.27	0.30
25	0.58	0.28	0.25	0.25	0.46	0.31	0.24	0.42	0.24	0.25	0.25	0.28
26	0.26	0.23	0.24	0.33	0.26	0.27	0.27	0.28	0.26	0.31	0.22	0.32
27	0.25	0.21	0.23	0.34	0.23	0.27	0.26	0.28	0.23	0.34	0.24	0.28
28	0.25	0.25	0.19	0.30	0.22	0.26	0.27	0.24	0.24	0.30	0.27	0.31
29	0.25	0.30	0.27	0.24	0.23	0.27	0.26	0.24	0.23	0.28	0.26	0.31
30	0.22		0.28	0.24	0.26	0.24	0.29	0.23	0.27	0.23	0.25	0.28
31	0.23		0.23		0.38		0.36	0.23		0.26		0.29
Maximum	0.83	0.33	0.29	0.48	0.46	0.46	0.55	0.42	0.30	0.34	0.29	0.33
Average	0.30	0.27	0.24	0.28	0.29	0.34	0.29	0.30	0.26	0.25	0.25	0.27

Annual Treated Flows Summary
0.83
0.28

Appendix C: 2024 Comparative Monthly Treated Flows Rates



The Township of North Glengarry

Alexandria Drinking Water System

2024 Annual and Summary Report

In compliance with O. Reg 170/03, section 11 and O. Reg 170/03 schedule 22

Contents

Section 1: Introduction

This report is an annual summary of water quantity, quality system information, system operations and major expenditures for the Alexandria Water Treatment plant and distribution system during the reporting period of January 1, 2024, to December 31, 2024. It was prepared in accordance with section 11 and schedule 22 of the of Ontario's Drinking Water Systems Regulation O. Regulation 170/03.

Section 2: System Description

The Alexandria Drinking Water System is made up of a surface water treatment plant, two elevated storage towers, and two separate distribution systems connected by a transmission main and booster station. All components are located within the North Glengarry municipal boundary. The drinking water system is categorized as a large municipal residential system, with the water treatment plant rated as a class 3 facility and the distribution system rated as a class 2 system, through the Ministry of Environment, Conservation and Parks.

The water treatment plant is located within the town limits of Alexandria, adjacent to the Mill Pond, which is utilized as the source water to supply the residential and commercial users within Alexandria and Maxville with safe and reliable drinking water.

The distribution system is comprised of three major components, the Alexandria Distribution System, The Alexandria-Maxville Transmission Main/Booster Station and the Maxville Distribution System. Each distribution system is located within the individual town limits of Alexandria and Maxville, with the transmission main connecting the two. The booster station is utilized to monitor and increase the chloramine residuals, as well as to pump water to the Maxville Water Tower to supply the distribution system.

Throughout 2010-2011, upgrades were completed throughout the Alexandria Water Treatment Plant and the Alexandria Water Tower to strengthen the treatment and distribution processes. In 2020, the Alexandria-Maxville Transmission Main/Booster Station and the Maxville Distribution was placed into service as part of the Alexandria Drinking Water System.

Section 3: Process and Equipment Description

Raw Water Intake

The Mill Pond is part of Garry River system, which is monitored through the Raisin Region Conservation Authority and levels are controlled by dam systems to ensure levels will be sufficient to supply the raw water demands and to provide recreational water usage. The raw water is conveyed into the raw well through gravity and as such, the levels in the raw well are heavily influenced by water levels in the Mill Pond.

The raw water intake consists of a screened intake structure located in the Mill Pond approximately 425m southwest of the water treatment plant, positioned just after the river confluence area. The intake piping runs from the intake structure, east through the Island Park, then north on Park Avenue, before turning east again to enter the water plant. The influent flows are regulated through the Permit to Take Water, allowing for a maximum daily intake total of 5,616m^3. At any time if the flows are near the Permit

to Take Water (PTTW) restrictions, alarms will notify operational staff, who will respond and ensure the limits are not exceeded.

Low Lift Chamber/Raw Water Well

There are two course screens, located between the raw well and the low lift chamber to provide a coarse screening prior to pumping. The low lift pumps consist of two vertical turbine pumps, rated at 6,200m^3/day at 14.6m total dynamic head (TDH). Each pump is controlled through the SCADA system and runs based on process limits. A flow meter and electric valve are used to control the flows from the low lift pumps, into the flocculation tank, based on process limits through the SCADA system.

Potassium permanganate is typically added to the raw well only during cold water temperatures in order to oxidize manganese, which generally only increase under ice cover. The chemical addition is only applied when the water is below 13°C as required, based on treated and raw water monitoring. The application is not utilized above 13°C due to potential oxidation of harmful algae blooms which can occur in warmer water.

Coagulation/Flocculation/Sedimentation

Coagulant and polymer feed systems are in place at the water treatment plant to provide the initial sediment removal from the raw water. The coagulant feed enters the process just after the low lift pumps prior to an in-line static mixer and the polymer feed is located after mixer. The water then flows through a flow meter and past control valves before entering the first flocculation tank.

Flows are directed through four flocculation tanks before heading to the sedimentation process. Each tank is equipped with an agitator for slow and gentle mixing and level monitoring equipment is located at the outlet of tank 2 and tank 4, which are used to control flows from the low lift pumps and monitor settling basin levels.

Process water from the flocculation tanks is directed into four separate settling basins via a common header channel, these basins are utilized to reduce the flow velocity and allow the flocculant and sediment to fall out of suspension. These basins contain a baffle wall and conventional tube settlers to aid in flocculant and sediment removal. Each basin is also equipped with sludge removal equipment which is through the SCADA process setpoint.

Filtration

The filtration process consists of four filters operating in parallel, and each filter is composed of GAC, silicate sand, an underdrain system and backwash equipment. The filters run based on demand through the SCADA process setpoints. All filters also contain monitoring equipped to monitor media pressure loss, effluent turbidity and water levels. Effluent flow from filters is directed to the clearwell for disinfection through a main header pipe.

The backwash system is used to clean the filter media as required through the SCADA program trigger points, which would initiate an automatic backwash process. These points including time in operation, effluent turbidity levels, and filter media pressure loss. All backwash effluent water is directed to the sludge holding tank and then directed to the sanitary sewer system.

Disinfection

Chlorine gas is used as the only disinfectant in the water treatment process and is injected into the header pipe from the filters prior to entering the clearwell. The clearwell is divided into two wells (east

and west), with each well divided into smaller sections, which are labelled 1-4. The wells are interconnected through piping or sluice gate opening.

Influent water typically enters clearwell 4 and travels towards clearwell 1, which allows for the appropriate contact time for disinfection requirements. After disinfection is achieved, the water is pumped into the distribution and ammonia sulfate is added to the chlorinated water to create a combined chlorine residual. The treated water is then metered, and chlorine residual are verified as it enters the distribution.

Distribution

The Alexandria distribution system is categorized as a class 2 distribution system. It is comprised of distribution piping in within Alexandria and Maxville. The section within Alexandria contains 28.2kms of water mains of varying sizes, a 3,000m^3 capacity elevated storage tank, located in the northwest section of Alexandria, 145 fire hydrants and approximately 1,500 service connections. The Maxville distribution system is made up of 10.2kms of water mains, a 1,500m^3 capacity elevated storage tank, located on the southern boundary of Maxville, 82 fire hydrants and approximately 450 service connections. The two elevated storage are utilized for pressure monitoring, water storage, water supply and are both equipped with flow metering and residual monitoring equipment.

A 20.4 kms transmission main ties the 2 distribution systems together. The transmission main contains 17 fires hydrants, 32 air relief valves and a booster station, which is used to supply water to the Maxville Water Tower and to boost chloramine residuals.

Automated Monitoring and Control

A fully automated SCADA system was installed in 2011 and in 2020 it the system was upgraded and expanded to include the Maxville Booster Station and Maxville Water Tower. This system is capable of monitoring, controlling, and recording all the plant processes and data, such as flows, filter backwash, chemical dosing and parameter monitoring. The system is also fully alarmed with multiple alarm set points, so that if any parameter is exceeded an alarm will be triggered on the SCADA desktop and through the auto dialer system. The on-call operator is then notified by the monitoring centre, which operates 24 hours a day, 365 days a year.

Emergency Power

Multiple generators are in place at key locations throughout the drinking water system to ensure treatment operations are always sustained and system monitoring is maintained. All units are equipped with automatic transfer switch for power transfer during the event of utility power fail. Most generators are capable to sustain the systems for a minimum of 24hrs, allowing time for operational staff and management to assess the magnitude of the outage and make arrangement to sustain the systems if required.

Additional Equipment.

All piping, valves, controls, and appurtenances along with associated mechanical and electrical equipment not mentioned in the description but are utilized to make up the system.

Section 4: Flow Summary

In order to assess the rated capacity of the WTP in terms of meeting existing and planned uses of the system, a summary of the treated flow rates of water supplied during this period covered by this report was prepared and is presented below. In accordance with License #181-101, the Alexandria Drinking Water System was not operated to exceed the rated capacities of the treatment system. The permit to take water allows for a maximum daily raw flow of 5,616 m^3/day and the water works license allows for a maximum treated water flow of 8,014m^3.

The average treated daily flow for 2024 is calculated to be 1,707m^3 and the maximum treated daily flow for the year was reported to be 2,699m^3. This represents 21.3% of the total plant rated capacity. Refer to the appendices for full 2024 data summary

2024 Treated Flow Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Maximum Daily Flow (m^3)	1,915	2,144	1,993	1,814	2,341	2,699	2,412	2,228	2,129	2,042	1,782	1,769
Monthly Average Flow (m^3)	1,610	1,733	1,630	1,593	1,882	1,925	1,871	1,833	1,733	1,663	1,481	1,514
Monthly Average Daily Maximum Instantaneous Flow (m^3/sec)	0.041	0.041	0.041	0.041	0.041	0.042	0.042	0.041	0.041	0.041	0.042	0.041
Rated Maximum Daily Flow for the approved system											8014 m^3/day	
Rated Maximum Instantaneous Flow											0.093 L/s	

Section 5: Sampling and Laboratory Analysis Summary

The Township of North Glengarry uses Caduceon Laboratories as the primary provider for all sample analysis. Caduceon Laboratories is an accredited laboratory under the Ministry of the Environment, Conservation and Parks requirements. Refer to table below for all results as required.

2024 Microbiological Testing Completed as per Schedule 10 of O. Reg 170/03					
Location	Number of Samples	Range of E. Coli or Fecal Results	Range of Total Coliform Results	Number of HPC Samples	Range of HPC Results
Raw Water	55	0 - 161	0 - 130	0	
Treated Water	54	0 - 0	0 - 0	54	< 2 - 52
Distribution Water	230	0 - 0	0 - 0	210	< 2 - 202

2024 Operational Testing as per Schedule 7 of O. Reg 170/03		
Parameter	Number of Grab Samples	Range of Results unit of measure is mg/L unless otherwise indicated
Raw Turbidity	249	0.48 – 5.97 NTU
Free Chlorine	Continuous	1.00 – 3.63
Distribution Combined Chlorine	Continuous	0.58 – 2.51
Fluoride *(if DWS provides fluoridation)*	n/a	

Additional Sampling or Testing in Accordance with Municipal License Requirement or Order				
Date of Order or Approval Amendment	Parameter	Date Sampled	Result	Unit of Measure
March 16, 2021	NDMA	15-Jan-2024	0.0040	µg/L
		15-Apr-2024	0.0062	µg/L
		22-Jul-2024	0.0050	µg/L
		15-Oct-2024	0.0077	µg/L

2024 Summary of Inorganic Chemical Parameters Tested as per Schedule 13 of O. Reg 170/03 *(1ug/L = 0.001mg/L; RAA=Rolling Annual Average)*					
Parameter	Sample Date	Standard (maximum concentration)	Result Value	Unit of Measure	Exceedance
Antimony	19-Sep-2024	0.006 mg/L	< 0.0001	mg/L	No
Arsenic	19-Sep-2024	0.01 mg/L	0.0002	mg/L	No
Barium	19-Sep-2024	1.0 mg/L	0.014	mg/L	No
Boron	19-Sep-2024	5.0 mg/L	0.007	mg/L	No
Cadmium	19-Sep-2024	0.005 mg/L	< 0.000015	mg/L	No
Chromium	19-Sep-2024	0.05 mg/L	< 0.0010	mg/L	No
Mercury	19-Sep-2024	0.001mg/L	< 0.00002	mg/L	No
Selenium	19-Sep-2024	0.01 mg/L	< 0.001	mg/L	No
Uranium	19-Sep-2024	0.02 mg/L	< 0.00005	mg/L	No

2024 Summary of Organic Chemical Parameters Tested as per Schedule 13 of O. Reg 170/03 *(1ug/L = 0.001mg/L; RAA=Rolling Annual Average)*					
Parameter	Sample Date	Standard (maximum concentration)	Result Value	Unit of Measure	Exceedance
Alachlor	19-Sep-2024	0.005 mg/L	< 0.3	µg/L	No
Atrazine + N-dealkylated metobolites	19-Sep-2024	0.005 mg/L	< 0.5	µg/L	No
Azinphos-methyl	19-Sep-2024	0.02 mg/L	< 1	µg/L	No
Benzene	19-Sep-2024	0.001 mg/L	< 0.5	µg/L	No
Benzo(a)pyrene	19-Sep-2024	0.00001 mg/L	< 0.006	µg/L	No
Bromoxynil	19-Sep-2024	0.005 mg/L	< 0.5	µg/L	No
Carbaryl	19-Sep-2024	0.09 mg/L	< 3	µg/L	No
Carbofuran	19-Sep-2024	0.09 mg/L	< 1	µg/L	No

2024 Summary of Organic Chemical Parameters Tested as per Schedule 13 of O. Reg 170/03 *(1ug/L = 0.001mg/L; RAA=Rolling Annual Average)*					
Parameter	Sample Date	Standard (maximum concentration)	Result Value	Unit of Measure	Exceedance
Carbon Tetrachloride	19-Sep-2024	0.002 mg/L	< 0.2	µg/L	No
Chlorpyrifos	19-Sep-2024	0.09 mg/L	< 0.5	µg/L	No
Diazinon	19-Sep-2024	0.02 mg/L	< 1	µg/L	No
Dicamba	19-Sep-2024	0.12 mg/L	< 1.0	µg/L	No
1,2-Dichlorobenzene	19-Sep-2024	0.2 mg/L	< 0.5	µg/L	No
1,4-Dichlorobenzene	19-Sep-2024	0.005 mg/L	< 0.5	µg/L	No
1,2-Dichloroethane	19-Sep-2024	0.005 mg/L	< 0.5	µg/L	No
1,1-Dichloroethylene (vinylidene chloride)	19-Sep-2024	0.014 mg/L	< 0.5	µg/L	No
Dichloromethane	19-Sep-2024	0.05 mg/L	< 5	µg/L	No
2-4 Dichlorophenol		0.9 mg/L	< 0.2	µg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	19-Sep-2024	0.1 mg/L	< 1.0	µg/L	No
Diclofop-methyl	19-Sep-2024	0.009 mg/L	< 0.9	µg/L	No
Dimethoate	19-Sep-2024	0.02 mg/L	< 1	µg/L	No
Diquat	19-Sep-2024	0.07 mg/L	< 5	µg/L	No
Diuron	19-Sep-2024	0.15 mg/L	< 5	µg/L	No
Glyphosate	19-Sep-2024	0.28 mg/L	< 25	ug/L	No
Malathion	19-Sep-2024	0.19 mg/L	< 5	ug/L	No
2 Methyl-4 Chlorophenoxyacetic (MCPA)	19-Sep-2024	0.1 mg/L	< 10	ug/L	No
Metolachlor	19-Sep-2024	0.05 mg/L	< 3	ug/L	No
Metribuzin	19-Sep-2024	0.08 mg/L	< 3	ug/L	No
Monochlorobenzene	26-Sep-2023	0.08 mg/L	< 0.5	ug/L	No
Paraquat	19-Sep-2024	0.01 mg/L	< 1	ug/L	No
Pentachlorophenol	19-Sep-2024	0.06mg/L	< 0.2	ug/L	No
Phorate	19-Sep-2024	0.002 mg/L	< 0.3	ug/L	No
Picloram	19-Sep-2024	0.19 mg/L	< 5.0	ug/L	No
Polychlorinated Biphenyls (PCB)	19-Sep-2024	0.003 mg/L	< 0.05	ug/L	No
Prometryne	19-Sep-2024	0.001 mg/L	< 0.1	ug/L	No
Simazine	19-Sep-2024	0.01 mg/L	< 0.5	ug/L	No
Terbufos	19-Sep-2024	0.001 mg/L	< 0.5	ug/L	No
Tetrachloroethylene	19-Sep-2024	0.03 mg/L	< 0.5	ug/L	No
2,3,4,6-Tetrachlorophenol	19-Sep-2024	0.1 mg/L	< 0.2	ug/L	No
Triallate	19-Sep-2024	0.23 mg/L	< 10	ug/L	No
Trichloroethylene	19-Sep-2024	0.005 mg/L	< 0.5	ug/L	No
2,4,6-Trichlorophenol	19-Sep-2024	0.005 mg/L	< 0.2	ug/L	No
Trifluralin	19-Sep-2024	0.045 mg/L	< 0.5	ug/L	No
Vinyl Chloride	19-Sep-2024	0.002 mg/L	< 0.2	ug/L	No

Inorganic or Organic Parameters that exceeded half the standard prescribed in Schedule 2 and 3 of O. Reg 169/03 *(requiring increased monitoring for future sampling)*			
Parameter	Result Value	Unit of Measure	Date of Sample
n/a			

2024 Summary of Additional Chemical Parameters Tested as per Schedule 13 of O. Reg 170/03 *(1ug/L = 0.001mg/L; RAA=Rolling Annual Average)*					
Parameter	Sample Date	Standard (maximum concentration)	Result Value	Unit of Measure	Exceedance
THM (RAA)	13-Jan-2025	0.100 mg/L	75	ug/L	No
Haloacetic Acid (RAA)	13-Jan-2025	0.08 mg/L	51.7	ug/L	No
Nitrate	13-Jan-2025	10.0 mg/L	0.06	mg/L	No
Nitrite	13-Jan-2025	1.0 mg/L	< 0.05	mg/L	No
Sodium	12-Jan-2022	20 mg/L	12.9	mg/L	Yes
Fluoride	12-Sep-2022	1.5 mg/L	< 0.1	mg/L	No

2024 Summary of Lead Testing as per Schedule 15.1 of O. Ref 170/03 *(1ppm = 1mg/L)*							
Location/ Type	Number of Samples	Range of Lead Results	Unit of Measure	Range of Alkalinity Results	Unit of Measure	Average pH	Exceedance
Residential Plumbing	0						
Non-Residential Plumbing	0						
Distribution	3			77 - 102	mg/L	6.73	No

Section 6: Significant Expenses Incurred

There were 6 capital works projects during the 2024 budgetary period. All significant expenses were regarding maintenance or equipment replacement, as described below.

Significant expenses included,

- ☒ Install required equipment
- ☒ Repair required equipment
- ☒ Replace required equipment
- ☐ None during this period

Briefly Describe Incident and/or Expenses Incurred:

No.	Project Name	Description	Cost
1	Dominion St Water Main Replacement	• Replace the existing 100mm cast iron main with 150mm PVC • work completed on Dominion St South and Derby St East to improve flows and water quality • work completed over 8 weeks	$ 729,579
2	Bulk Fill Station	• Install bulk fill station for tankers or large tanks	$ 98,131
3	Locating and	• replace equipment with newer technology	$ 27,271

No.	Project Name	Description	Cost
	Correlator Equipment	• improve locating leaks in system to help reduce water loss	
4	Chlorine System Upgrades	• Replace defective chlorinators and switch over equipment	$ 22,901
5	Valve and Hydrant Proactive Replacement	• Annual budget item to ensure infrastructure renewal is on-going throughout the distribution system.	$ 17639.00

Section 7: Compliance with Licenses, Permits, Approvals and Orders

The operating authority strives to remain compliant with the Drinking Water Quality Management Standard 2.0, the Safe Drinking Water Act and all associated procedures or a guideline. This approach is utilized for creating a multi-barrier approach to ensure safe drinking water. The following table is a listing of all permits and or licenses that apply to this system:

Description	Number	Version	Issue Date	Expiry Date
Water Works License	181-101	3	March 16, 2021	March 16, 2026
Water Works Permit	181-201	4	March 16, 2021	March 16, 2026
Permit to Take Water	2285-CEDRDN		May 26, 2022	May 14, 2032
Water Treatment Classification	1463		October 28, 2005	n/a
Water Distribution Classification	2007		April 8, 2023	n/a

The Alexandria Drinking Water System and Operating Authority currently upholds the accreditation certification by maintaining and promoting the current Quality Management System currently in place. The Operational Staff actively participates in all system auditing requirements, and the annual system inspections as conducted through the Ministry of the Environment. All conformance and compliance issues identified throughout these system reviews have been addressed and are in the process of being corrected.

During this period, all raw water flows were compliant with all permits to take water and are currently at 34.2% of the allowable limit. All treated flows were well within the rated capacity for the system and as previously stated the system is currently only at 21.3% of the rated capacity.

All disinfection equipment was operated in such a manner that all license requirements were met at all times. The treatment system was operated at all times to ensure compliance with the Procedure for Disinfection of Drinking Water in Ontario.

All equipment was maintained as per operations manuals and/or calibrated annually by a certified technician

Section 8: Non-Compliance with Licenses, Permits, Approvals and Orders

There were 2 instances of minor non-conformances in regard to documentation currency noted during the annual internal audit during this report period. All documentation was updated as per requirements and all corrective actions were closed. There were no non-conformances noted during the annual external audit.

Parameter	Regulatory Document	Requirement	Date of Correction
Documentation Currency	-The DWQMS Operational Plan, section 2 QMS System Policy	-ensure open communication through various levels from the consumer to the owner concerning matters of drinking water quality -communication board for operational staff was not up to date	31-Oct-2024
Documentation Currency	-The QMS Operational Plan, section 18 Emergency Management	-QMS SYS-T13 was not updated to reflect staffing changes	30-Oct-2024

There was 1 instance of non-compliance reported in association to regulatory sampling during this period. Sampling results indicated that samples were mislabelled. All corrective actions were followed as advised through the MECP and the EOHU.

2024 Reported Incident in accordance to subsection 18(1) of the Safe Drinking Water Act or Schedule 16 of O. Reg 170/03					
Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
31-Jan-2024	E.coli & Total Coliform	Overgrown	CFU/100mL	• Increase chlorine dosage • Resample January 31 • Resample February 1	02-Feb-2024

Section 9: Township of North Glengarry Endorsement of Summary Report

A copy of the report will be presented to all members of the municipal council through the Public Works Committee. The report was also made available to the public through the Township of North Glengarry website or upon individual request at the Main office, located at 3720 County Road 34, south of Alexandria.

This report has been endorsed by Tim Wright, Director of Public Works on behalf of Township of North Glengarry Council.

Section 10: Contact

All efforts have been made to provide accurate and up to date information in a relevant format. In the event that additional information is required please submit all verbal requests by phone at 613-525-3087; in writing by mail to 3720 County Road 34, RR2, Alexandria Ontario, K0C 1A0; or in writing by email to enviro@northglengarry.ca

Appendix A: Alexandria 2024 Daily Treated Flows (m^3/day)

	January	February	March	April	May	June	July	August	September	October	November	December
1	1,495	1,642	1,993	1,508	1,698	2,206	1,484	1,863	1,415	1,734	1,421	1,505
2	1,575	1,727	1,856	1,534	1,584	1,955	2,412	1,954	1,474	1,512	1,532	1,401
3	1,294	1,720	1,920	1,555	1,960	2,235	1,703	2,048	2,129	1,754	1,430	1,433
4	1,831	1,583	1,952	1,458	1,480	2,699	2,217	1,927	1,705	1,799	1,466	1,602
5	1,360	1,766	1,703	1,652	1,495	2,038	2,125	2,031	1,803	1,566	1,468	1,288
6	1,772	1,737	1,772	1,637	2,141	1,973	1,591	1,869	1,598	1,527	1,443	1,650
7	1,726	1,545	1,591	1,543	1,905	1,514	2,010	1,849	1,630	2,018	1,615	1,691
8	1,295	1,592	1,553	1,456	1,893	1,943	2,324	1,582	1,717	1,998	1,415	1,535
9	1,582	1,946	1,730	1,814	1,890	1,432	1,680	1,781	1,878	1,974	1,567	1,250
10	1,630	1,569	1,430	1,408	1,938	1,985	2,015	1,568	1,697	1,877	1,779	1,585
11	1,725	1,615	1,482	1,618	1,682	1,909	1,588	1,636	1,635	1,647	1,496	1,508
12	1,888	1,499	1,729	1,589	1,680	1,685	1,913	1,884	1,818	1,489	1,122	1,645
13	1,409	1,697	1,459	1,648	1,946	2,193	1,536	1,911	2,009	1,430	1,707	1,620
14	1,514	1,538	1,695	1,604	1,992	2,122	1,673	2,228	1,449	1,693	1,332	1,557
15	1,549	1,572	1,436	1,656	2,178	1,535	2,041	1,653	1,663	1,779	1,273	1,495
16	1,790	1,897	1,677	1,743	1,876	1,883	1,706	2,126	2,006	1,948	1,481	1,488
17	1,686	1,450	1,595	1,493	1,934	2,109	2,216	1,535	1,585	1,271	1,488	1,769
18	1,358	1,617	1,448	1,505	1,653	2,393	1,540	1,982	1,853	1,680	1,372	1,594
19	1,590	1,566	1,534	1,588	1,927	1,744	1,899	2,195	1,871	2,006	1,579	1,581
20	1,571	1,731	1,876	1,658	1,848	2,335	1,695	1,612	1,800	1,423	1,782	1,469
21	1,654	1,561	1,439	1,564	2,341	941	1,725	1,628	1,601	2,042	1,280	1,528
22	1,573	2,144	1,452	1,471	1,822	2,119	2,117	1,780	1,916	1,485	1,385	1,464
23	1,839	1,860	1,598	1,623	1,962	1,931	2,005	2,156	1,669	1,461	1,699	1,319
24	1,509	1,939	1,609	1,670	1,708	1,580	1,709	1,403	1,988	1,840	1,417	1,569
25	1,621	1,975	1,493	1,674	1,802	2,094	1,641	1,760	1,671	1,337	1,477	1,368
26	1,915	2,110	1,879	1,644	1,879	1,687	1,691	2,181	1,379	1,732	1,724	1,495
27	1,508	1,960	1,523	1,724	1,987	2,080	2,144	1,496	1,631	1,309	1,314	1,468
28	1,550	1,959	1,352	1,646	1,686	2,122	1,579	1,903	1,556	1,347	1,436	1,505
29	1,867	2,208	1,634	1,544	2,175	1,277	1,905	1,760	1,881	1,513	1,386	1,466
30	1,763		1,602	1,561	2,210	2,026	2,256	1,893	1,958	1,911	1,538	1,557
31	1,476		1,517		2,081		1,854	1,632		1,444		1,520
Minimum	1,294	1,450	1,352	1,408	1,480	941	1,484	1,403	1,379	1,271	1,122	1,250
Average	1,610	1,733	1,630	1,593	1,882	1,925	1,871	1,833	1,733	1,663	1,481	1,514
Maximum	1,915	2,144	1,993	1,814	2,341	2,699	2,412	2,228	2,129	2,042	1,782	1,769
Total	49,914	48,517	50,528	47,787	58,355	57,746	57,991	56,825	51,987	51,544	44,424	46,925

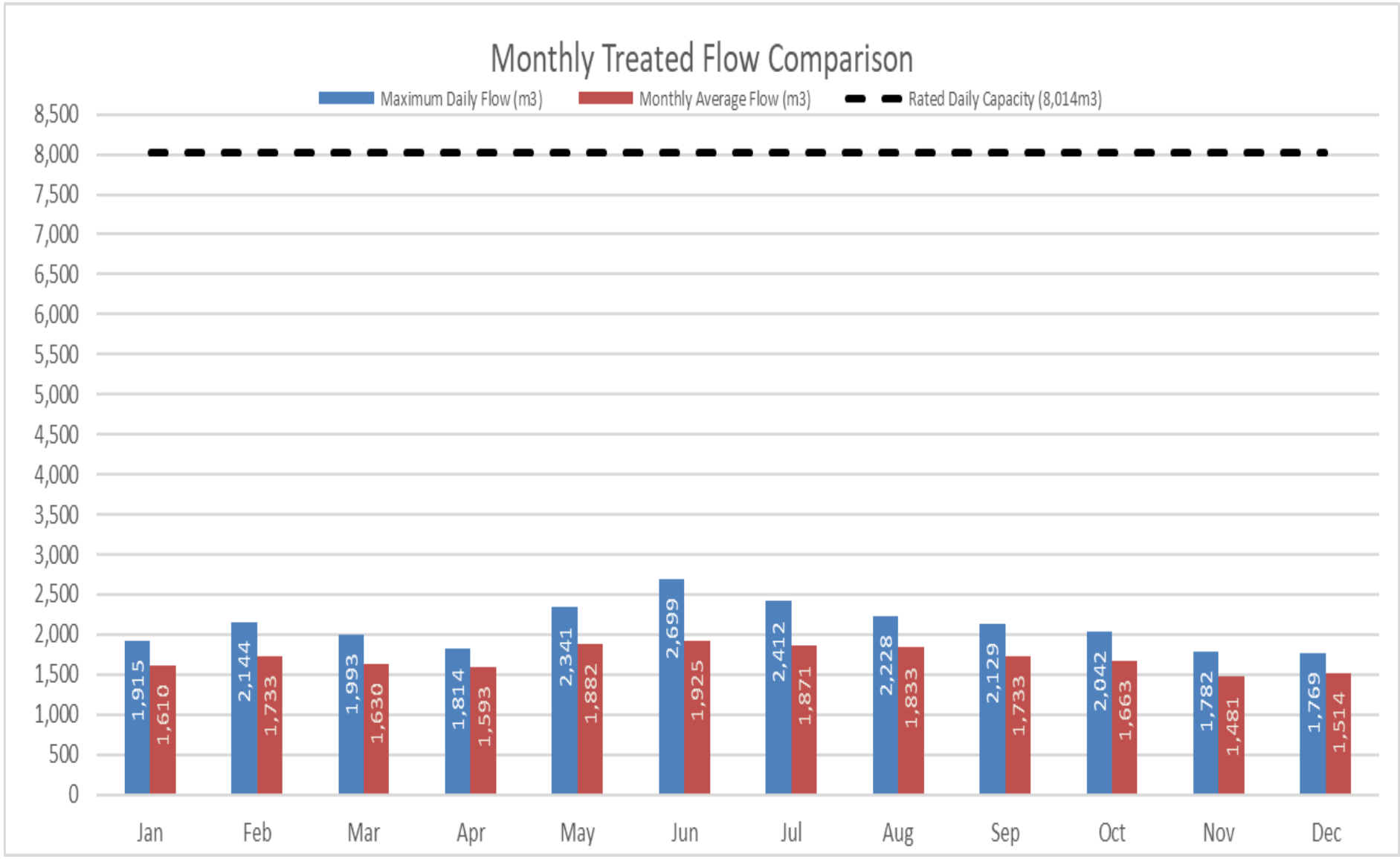
Annual Flows Summary
941
1,707
2,699
624,753

Appendix B: Alexandria 2024 Maximum Instantaneous Treated Flows (m^3/sec)

	January	February	March	April	May	June	July	August	September	October	November	December
1	0.041	0.041	0.041	0.041	0.041	0.040	0.041	0.041	0.041	0.041	0.041	0.041
2	0.041	0.041	0.041	0.042	0.041	0.041	0.043	0.041	0.042	0.041	0.041	0.041
3	0.041	0.041	0.041	0.041	0.042	0.041	0.041	0.041	0.041	0.041	0.041	0.041
4	0.042	0.041	0.042	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041
5	0.042	0.041	0.044	0.041	0.041	0.041	0.043	0.041	0.041	0.041	0.042	0.041
6	0.041	0.041	0.041	0.042	0.044	0.042	0.041	0.041	0.042	0.041	0.041	0.041
7	0.041	0.042	0.041	0.041	0.045	0.042	0.041	0.041	0.041	0.042	0.041	0.041
8	0.041	0.041	0.042	0.041	0.043	0.042	0.041	0.041	0.042	0.042	0.041	0.041
9	0.041	0.041	0.041	0.041	0.042	0.041	0.043	0.041	0.041	0.041	0.041	0.041
10	0.041	0.041	0.041	0.042	0.043	0.041	0.041	0.041	0.041	0.041	0.042	0.041
11	0.041	0.041	0.041	0.041	0.041	0.043	0.041	0.041	0.041	0.041	0.041	0.041
12	0.041	0.042	0.041	0.042	0.041	0.042	0.041	0.041	0.041	0.041	0.041	0.041
13	0.041	0.042	0.041	0.041	0.042	0.046	0.041	0.042	0.042	0.042	0.041	0.041
14	0.041	0.041	0.041	0.042	0.042	0.041	0.041	0.041	0.041	0.041	0.041	0.041
15	0.041	0.041	0.041	0.041	0.043	0.041	0.041	0.041	0.041	0.041	0.042	0.041
16	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.042	0.041	0.041	0.041	0.041
17	0.041	0.042	0.041	0.041	0.041	0.043	0.041	0.041	0.041	0.041	0.041	0.041
18	0.041	0.041	0.041	0.041	0.041	0.041	0.042	0.041	0.042	0.041	0.041	0.041
19	0.041	0.042	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.040	0.041
20	0.040	0.042	0.041	0.041	0.041	0.041	0.042	0.041	0.042	0.041	0.042	0.041
21	0.041	0.042	0.041	0.042	0.041	0.042	0.041	0.041	0.041	0.042	0.041	0.041
22	0.041	0.041	0.041	0.042	0.042	0.062	0.044	0.041	0.042	0.041	0.041	0.041
23	0.041	0.042	0.041	0.042	0.041	0.041	0.041	0.041	0.041	0.041	0.040	0.041
24	0.041	0.042	0.041	0.042	0.041	0.042	0.042	0.041	0.043	0.041	0.041	0.043
25	0.041	0.042	0.041	0.042	0.041	0.042	0.041	0.041	0.041	0.041	0.041	0.041
26	0.041	0.042	0.043	0.041	0.041	0.041	0.041	0.041	0.042	0.041	0.061	0.041
27	0.041	0.042	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041
28	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.042
29	0.041		0.041	0.041	0.041	0.042	0.042	0.042	0.041	0.040	0.041	0.041
30	0.041		0.041	0.042	0.041	0.041	0.045	0.041	0.041	0.041	0.041	0.042
31	0.041		0.041		0.037		0.041	0.041		0.041		0.041
Minimum	0.040	0.041	0.041	0.041	0.037	0.040	0.041	0.041	0.041	0.040	0.040	0.041
Average	0.041	0.041	0.041	0.041	0.041	0.042	0.042	0.041	0.041	0.041	0.042	0.041
Maximum	0.042	0.042	0.044	0.042	0.045	0.062	0.045	0.042	0.043	0.042	0.061	0.043

Annual Flows Summary
0.037
0.041
0.062

Appendix C: Comparison of Average and Maximum Monthly Treated Flow Rates



STAFF REPORT TO COMMITTEE OF THE WHOLE Report No: PW-2025-09

April 23, 2025

From: Angela Cullen, Water Works Compliance Coordinator

RE: Wastewater Systems 2024 Annual Review

Recommended Motion:

THAT The Committee of the Whole receives report PW-2025-09 for information purposes only;

AND THAT The Committee of the Whole recommends for Council to authorize the

Background / Analysis:

Staff have prepared the annual reports for the Alexandria Wastewater System and the Maxville Wastewater System, as per the requirements within the Environmental Compliance Approvals for both the collection systems and treatment systems. These reports have been submitted to the Ministry of The Environment, Conservation and Parks on March 27, 2025 and posted to the North Glengarry's website for public access on March 19, 2025.

The prepared presentation is an overview of key elements within each report to ensure communication to the owner has been achieved.

Alternatives:

N/A

Financial Implications:

N/A

Attachments & Relevant Legislation:

- Alexandria Wastewater System 2024 Annual Summary Report
- Maxville Wastewater System 2024 Annual Summary Report
- Annual Wastewater Systems Annual Report to Council

Others Consulted:

Dean MacDonald, Environmental Services Manager
Tim Wright, Director of Public Works

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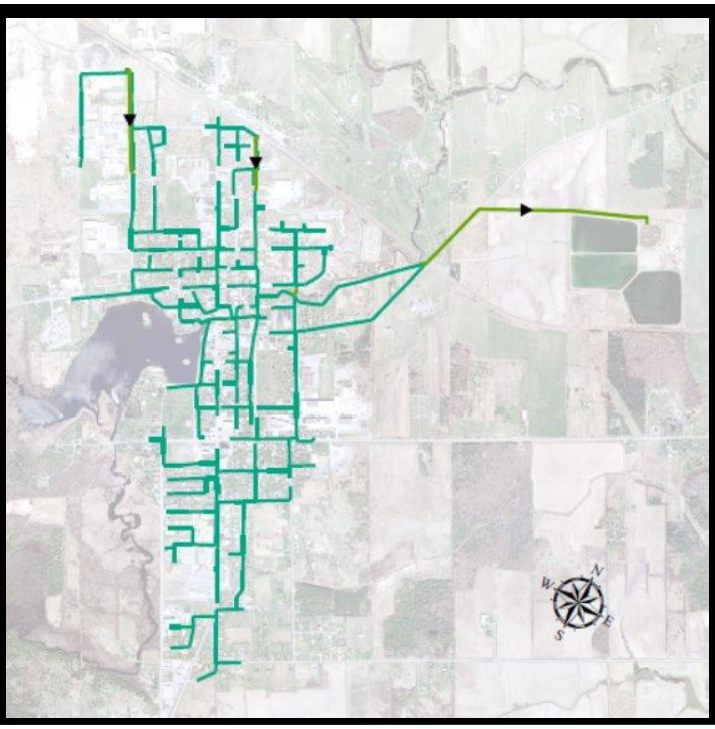
Reviewed and Approved by:
Sarah Huskinson, CAO/Clerk

ANNUAL WASTEWATER SYSTEMS REPORT TO COUNCIL

- Alexandria WWS
- Maxville WWS

1



ALEXANDRIA

- Wastewater Collection
- Wastewater Treatment System

2

ALEXANDRIA WASTEWATER SYSTEM

System Rating

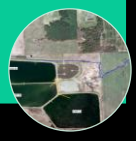
- Wastewater Collection
  - CIL-ECA 181-W601 (exp Mar 2027)
  - Class 2 Separate Sewer System
  - Receiving Leachate hauled Alx Landfill
- Wastewater Treatment
  - ECA 9873-BQ6LTR (valid until 2026) Conditional on Construction
  - Class 2 Continuous Discharge
  - Under Fisheries Act Directive (2019) which requires action to be taken to prevent reoccurrence of adverse conditions

Collection System

- 25kms of collection piping and force mains
- 1585 service connections
- 3 sanitary lift stations
  - Leroux LS
  - Bishop LS
  - Sandfield LS
- 1 Pumping Station (MPS)

Treatment Lagoons

- **Influent Piping / Aeration Cell**
  - Chemical treatment for phosphorus at outfall chamber
- **3 Facultative Treatment Cells**
  - Run in series only
- **Disinfection / Dichlorination Chamber**
  - Sodium Hypochlorite used for disinfectant
  - Sodium Bisulfate used for dechlor agent
- **Discharge to Drainage Ditch prior to entering Delisle River**



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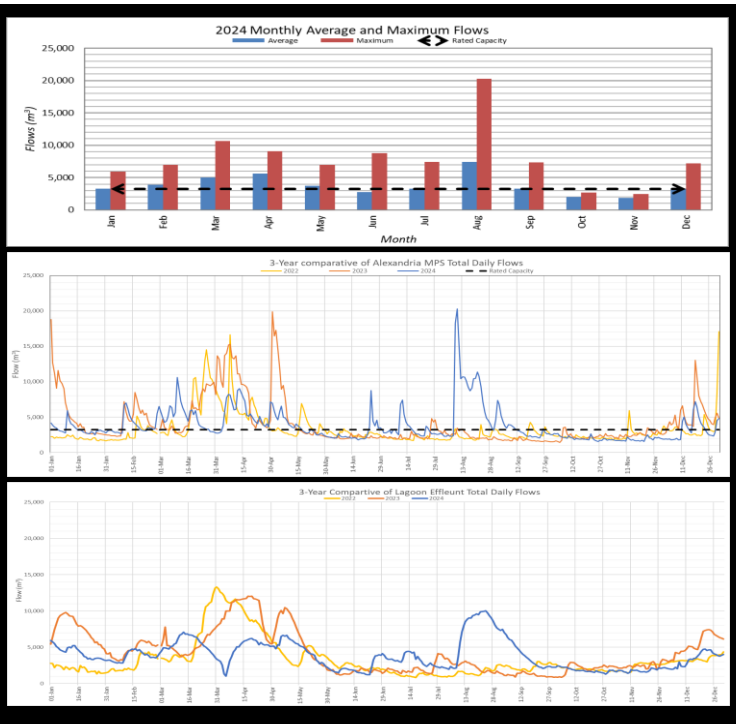


FLOW SUMMARY

Raw Influent Sewage

- Metered Volume: 1,391,607m³
  - Includes 779m³ of leachate (hauled between April 17-25)
  - Capacity Rating: 3237 m³/day
  - Currently at 117% of the rated system capacity

Maximum Daily Flow	20,271m³/day
Average Daily Flow	3,798m³/day

- Flow decreased 8% from 2023 but still exceeded the rated capacity of system.
  - Increased flows observed during spring thaw (April) and following rainfall events in (May, June and July)
  - Significant increased flows were observed in August following a major rainfall event
- 3 Overflow events in collection system on Aug 9th
  - Caused by significant rainfall event for a total of 17.92hrs
  - Occurred at MH120, MH150, MH160, MH170 and MPS

Treated Wastewater Effluent

- Metered Volume: 1,415,106m³
- No issues noted with flow during this time, no treatment bypasses or overflows from the lagoon system

4

SAMPLING AND ANALYSIS

Month	$CBOD_5$ (mg/L)	Total Suspended Solids (mg/L)	Total Phosphorous (mg/L)	Total Chlorine Residual (mg/L)	pH (Min)	pH (Max)	E. Coli (geometric mean density) (organisms/100 mL)	Acute Lethality % mortality	
Concentration Limits	*30*	*40*	*0.5 mg/L*	*0.2 mg/L*	*6.0*	*9.5*	*< 200*	*50 % mortality*	
Concentration Objective	*25*	*25*	*0.4 mg/L*	*non-detect*	*6.5*	*8.5*	*< 150*	*T*	*D*
January	4.3	5.0	0.1	0.00	7.2	8.1	1.0	10	0
February	8.0	8.3	0.2	0.00	7.3	8.2	1.0		
March	6.0	6.5	0.2	0.00	8.0	8.2	7.0		
April	3.0	3.8	0.2	0.00	6.9	8.3	1.0	0	0
May	3.0	3.5	0.2	0.00	7.4	7.9	1.0		
June	3.0	3.3	0.1	0.00	7.4	9.1	1.4		
July	3.0	4.0	0.1	0.00	7.5	8.1	1.7	0	20
August	3.0	3.5	0.1	0.00	7.5	7.7	1.2		
September	3.0	3.2	0.1	0.00	6.2	8.9	1.0		
October	3.0	3.0	0.1	0.00	7.1	8.5	1.0	0	0
November	3.0	3.3	0.1	0.00	7.4	7.8	1.0		
December	3.6	4.0	0.1	0.00	7.2	8.0	1.0		
Annual Average	**3.8**	**4.2**	**0.13**	**0.00**	**7.73**		**1.2**	**n/r**	

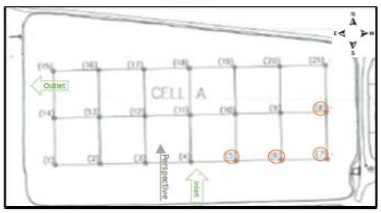
- All results were within provincial and federal annual compliance limits
- All quarterly sampling was completed as required and no adverse results were observed
- Annual monitoring well sampling was completed in March
  - All results are comparable to previous findings
  - Noted increase in upstream nitrate and TKN
  - Ammonia has not been tested since 2017

5

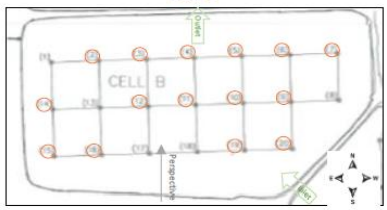
TREATEMENT CELL SLUDGE VOLUME MONITORING

Cell A	Cell B	Cell C
• Last depth reading: October 11, 2024	• Last depth reading: October 11, 2024	• Last depth reading: October 11, 2024
• Cell volume calculated to be 46.9%	• Cell volume calculated to be 85.1%	• Cell volume calculated to be 82.7%
• Cell sludge volume decreased by 5.6% from fall 2023 values	• Cell sludge volume increased by 0.1% from fall 2023 values	• Cell sludge volume decreased 4.1% from fall 2023 values
• 4 locations exceeded trigger levels	• 16 locations exceeded trigger levels	• 21 locations exceeded trigger levels
• Highest volumes located in south-west end of cell	• Highest volume located in north-east corner of cell	• Highest volume located in north-west corner of cell

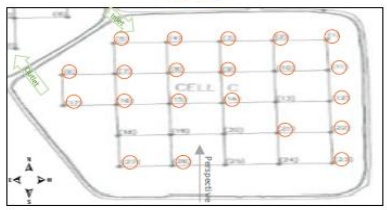
CELL A

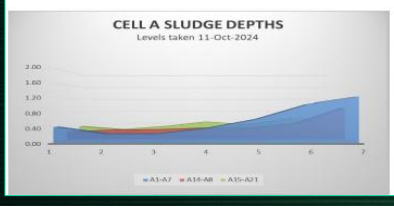


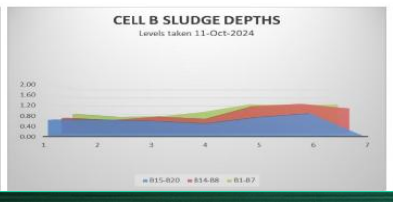
CELL B

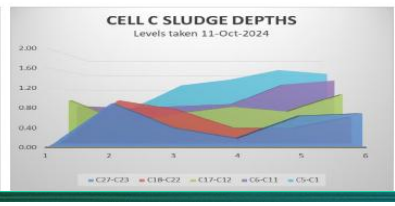


CELL C









6

Operational Issues

Collection System	Pump Issues	Replace defective pump due to wear and tear
		Hydro One adjusted service line voltage due to equipment operation
	Float Issues	Defective equipment cleaned, replaced or adjusted as required
	Alarm Panel Issues	Minor repairs completed to restore operations
Treatment System	Aerator Failure	Replaced damaged parts and motor to restore operations
		Unit failed again in December, no action to date
	Chemical Pump Issues	Replace defective parts and repair pump as required, back-up pump used to maintain dosing
	Hydro Servicing Damage	Service damaged by operational staff, Hydro One replaced damaged pole and wiring
	Alum Building Sump Pump Failure	Replaced defective parts and adjust float as required

7

SLUDGE REMOVAL PROJECT

- Bishop Water contracted through a multiple-phase contract to remove and process sludge into Geotubes for treatment and dewatering.
- Geotubes installed in 2021, after being relocated to new area on the Lagoon property after decommissioning the pre-existing tubes.
  - Bishop Water Technicians were on-site form May 1-17 and removed a total volume of 2,719.62m^3 from Cell B
  - Due to insufficient capacities in existing Geotubes, 3 additional units were installed for this phase of the project on top of the existing units
  - All water from geotubes was returned into the lagoons for treatment

Bishop Water 2024 Work Summary Report

Week	BDT	Volume Pumped	Total Polymer Usage	Average Polymer Dosage
		m^3	L	kg/BDT
2024	109.36	2,719.62	1,312.79	2.27
2022	88.48	7,763.69	495.78	5.06

BDT: bone dry ton

Figure 1. Dredge in Cell B.

Figure 2. View of the Geotube units in the dewatering cell on 2024-05-07.

8

Additional Items

EOS 2000

- System is no longer in use after significant water damage and not placed back in service due to limited sludge depletion/management during operations

System Alterations

- Proactive manhole replacement completed as a part of the watermain replacement project on Dominion St South and Derby St East
- Pump panel replacement at Leroux Lift Station due to electrical issues

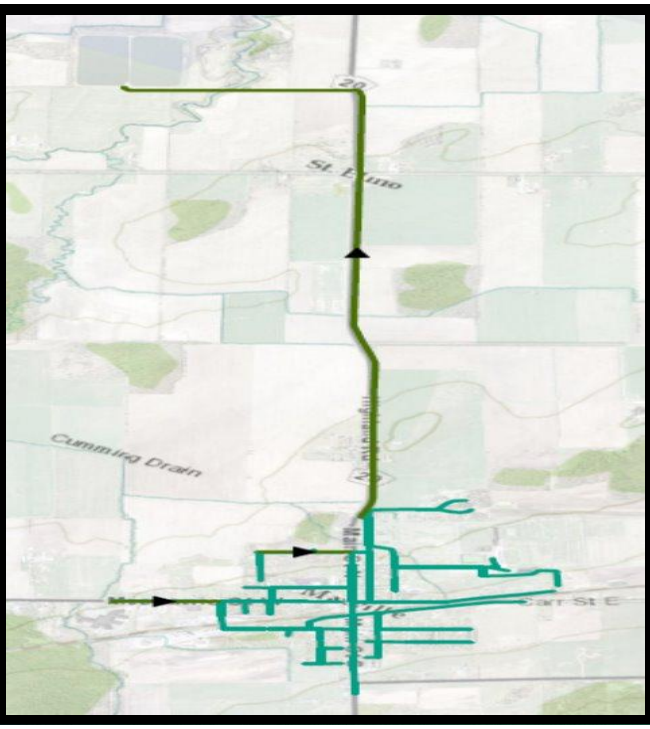
Infiltration and Inflow Reduction Work

- CCTV of whole system completed to identify areas of concern or damage
- Repair work such as pipe lining, service grouting or pipe section replacement were completed identified areas of concern
- MH170 sluice gate found to be leaking when submerged during high river flows, seal was replaced to prevent surface water entry into collection system

Proposed Construction of at Alexandria Lagoons

- Due to condition in current ECA
- To date no construction or tenders for work have been released
- Environmental Services Director and EVB are working on various components to be able to release tender(s) for construction
  - ➢Twp received the Housing-Enabled Water System Fund Grant to aid in eligible costs for the expansion

9



MAXVILLE

- Wastewater Collection
- Wastewater Treatment System

10

MAXVILLE WASTEWATER SYSTEM

- Wastewater Collection
  - CIL-ECA 181-W601 (exp Mar 2027)
  - Class 2 Separate Sewer System
- Wastewater Treatment
  - Class 1 Seasonal Discharge Wastewater System
  - ECA 5368-8PPQA2 (valid until amended or revoked)

System Rating

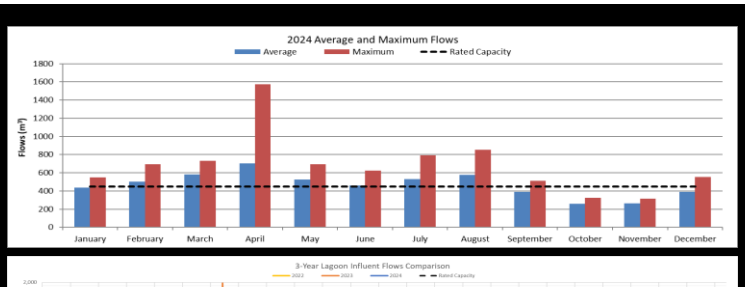
- **13kms of collection piping and force mains**
- **450 service connections**
- 1 sanitary lift station
  - Manor LS
- 1 Pumping Station (MPS)

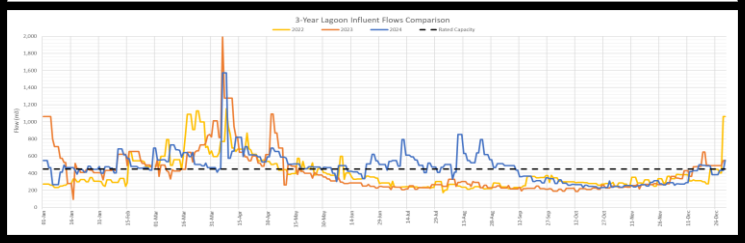
Collection System

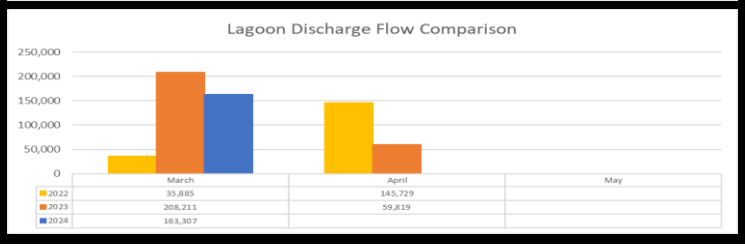
- Influent
  - Chemical treatment for phosphorus
- 2 Facultative Treatment Cells
  - run in parallel
  - influent switch over annually
- Seasonal Discharge to coincide with Scotch River Peak Flows

Treatment Lagoons

11







FLOW SUMMARY

Raw Influent Sewage

- Metered Volume: 171,220m^3
  - Capacity Rating: 450 m^3/day
  - Currently at 104% of the rated system capacity

Maximum Daily Flow	1.572m^3/day
Average Daily Flow	468m^3/day

- Flow are slightly increased from year to year since 2018
  - Higher than normal follows noted between June-September
  - High flows noted during spring melt
- No bypass event noted during this reporting season

Treated Wastewater Effluent

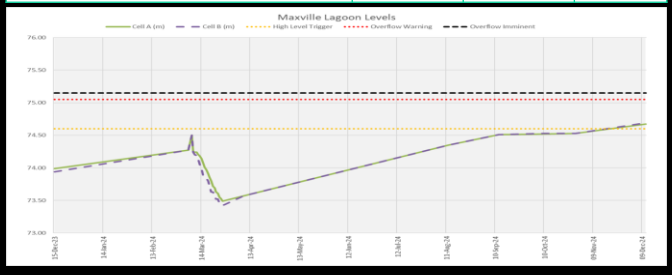
- Metered Volume: 163,307m^3
- Spring Discharge completed over 20-day period between March 8th -27th
- TSS exceeded the federal limit, but not provincial limits.

12

SAMPLING AND ANALYSIS

Parameters	$CBOD_5$ (mg/L)	Total Suspended Solids (mg/L)	Total Phosphorous (mg/L)	pH	Acute Lethality % mortality
Concentration Limits	*30*	*30*	*1*	*6.0 - 9.5*	*50 % mortality*
Concentration Objective	*25*	*25*			*T*
8-Mar-2024	10	46	0.60	7.22	
12-Mar-2024	8	20	0.42	7.16	
13-Mar-2024				7.27	40
19-Mar-2024	8	21	0.34	7.65	
27-Mar-2024	3	23	0.50	7.11	
Annual Average	**7.3**	**27.5**	**0.47**	**6.61-8.66**	**n/r**

Effluent Parameter	$CBOD_5$	TSS	TP
Provincial Average Waste Loading Limits (kgs)	4932	4932	164
2022 Maxville Average Waste Loading (kgs)	1183.98	4490.9	75.94



- Annual Spring Discharge Monitoring
  - Both cells were discharged, and water was blended before final discharge outfall
  - Samples were taken 5 times from discharge outfall to ensure we met sampling requirements in ECA and WSER Federal Regulation
  - Only exceedance was TSS federal regulation limit, caused by 1 elevated sample
  - Cell level discrepancy noted due to minor blockage in equalization piping
- Groundwater Monitoring
  - Completed by JP2G Consultants in association with Greer Galloway Group
    - includes groundwater sampling: May and October
    - includes surface water sampling: May, August and October
  - Results indicate there is minor impact on groundwater, however results are well below limits and no potable wells within immediate area downstream.
  - Results also indicated there was no observed impact on surface water.

13

Operational Issues

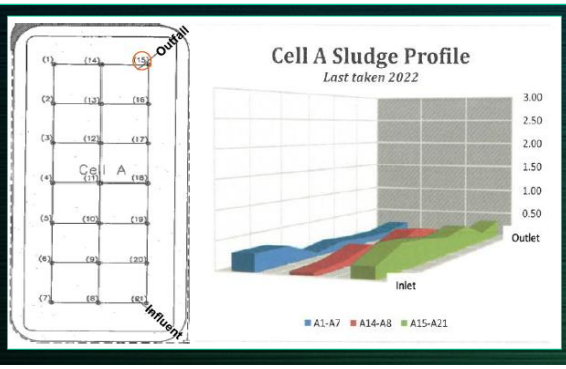
Collection System	Pump Operation Issues	Removed debris form pump and return to service
		Pump replacement due to on-going electrical issues
	Well Sensor	Sensor cleaned and moved to restore operations
	Bell Utility Service	Line damaged, Bell technician repaired issues
Treatment System	Cell Level Monitoring	Interconnecting pipe cleaned to remove blockage
	Influent Structure	Noted obstruction during inspection, used flushing truck to clean and remove blockage

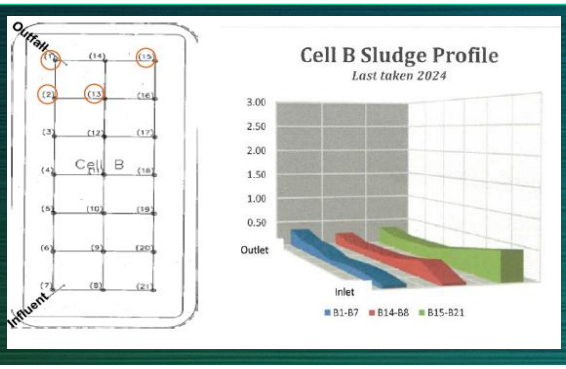
14

TREATEMENT CELL SLUDGE VOLUME MONITORING

Cell A	Cell B

• Sludge depth completed on November 11, 2022
• Unable to measure due to excessive vegetation growth
• Values below are from 2022
  • Cell A was at 41% of allowable volume
  • Outfall level warning indicates sludge may need to be dispersed from this area
	• Sludge depth completed on October 18, 2024
	• Currently Cell A is at 39% of allowable volume, which is a 18% decrease from 2023
	• Outfall level warning were triggers at 4 locations, indicating that sludge dispersion may be needed from this area





15

Additional Items

EOS 2000

- System is no longer in use after significant water damage and not placed back in service due to limited sludge depletion/management during operations

System Alterations

- Control panel for Manor Lift Station replaced with PLC and upgraded and integrated into SCADA system due to age and incompatibility to equipment. System placed into service in October 2024
- Manor Lift Station Pump replaced due to on-going electrical issues; pump was only installed in October due to compatibility issues with previous panel

Infiltration and Inflow Reduction Work

- Monitoring work continued by EVB to complete sewer hydraulic model

16

Thank you for your time and attention

17

Township of North Glengarry
Alexandria Wastewater System
2024 Annual Report

Contents

A. System Overview

Summary of all system components and designations.

The Alexandria wastewater system is owned and operated by the Corporation of the Township of North Glengarry. The sewage system is comprised of a class 2 wastewater collection system and a class 2 continuous discharge treatment facility. It was originally constructed in the late 1960's with various upgrades throughout the years to improve capacity and treatment as the system expanded to meet the population growth.

The wastewater systems now operate under 2 Environmental Compliance Approvals (ECA). ECA 181-W601, issued in October 2023 for all municipal sewage collection systems located within the North Glengarry Township boundaries and ECA 9873-BQ6LTR, issued in 2021 for the Alexandria Sewage Works.

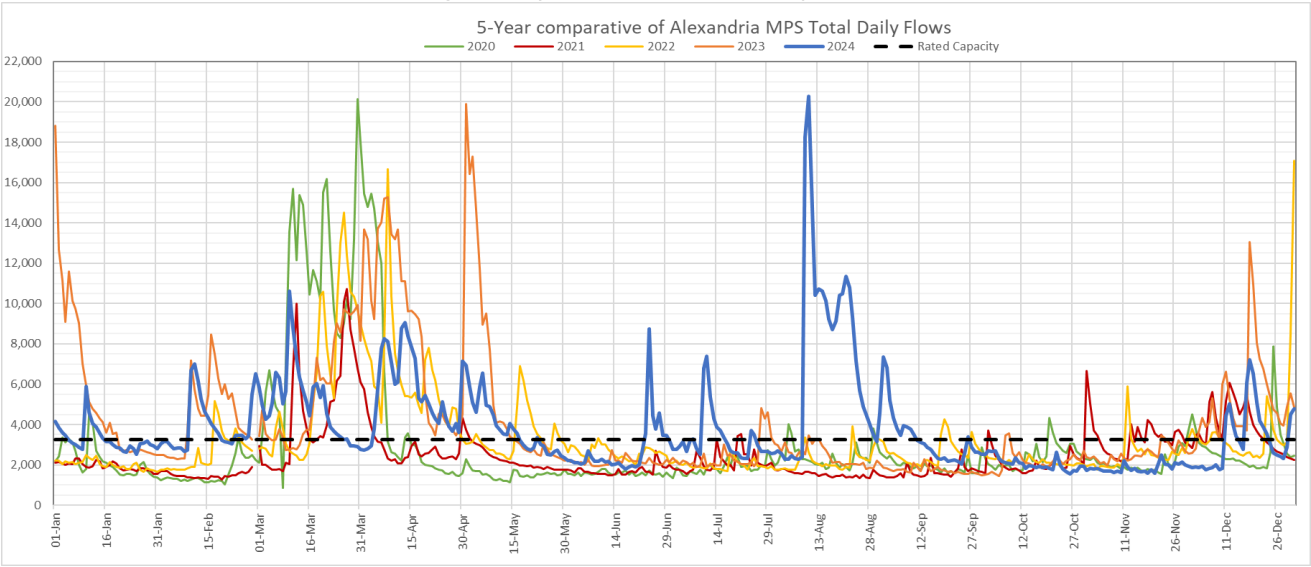
The collection system is comprised of approximately 25.0kms of sanitary sewage collection piping and force mains of various sizes, with approximately 1585 service connections, three sanitary lift stations and one main pumping station. The treatment system is a conventional facultative lagoon system comprised of an aeration cell, coagulant addition for phosphorous removal, three treatment cells, that run-in series, and a disinfection and de-chlorination chamber. The wastewater is aerated before entering the first treatment cell, where it is treated through natural biological means. When the wastewater leaves the third treatment cell it is disinfected with sodium hypochlorite then dechlorinated with sodium bisulfate prior to discharge into the unnamed drain, which flows north-east prior to entering the Delisle River.

B. Performance Assessment

Summary and interpretation of all influent and imported sewage, monitoring data, and a comparison to the effluent limits outlined in condition 7, including an overview of success and adequacy of works.

During the 2024 calendar year 1,391,607 m^3 of raw untreated sewage was directed towards the Alexandria Lagoon Treatment Facility, based on the metered effluent flows from the main pumping station. This raw sewage is mainly comprised of residential and commercial waste from the town of Alexandria, as well as septage from the seasonal RV dumping station, and 779m^3 of leachate from the Alexandria Waste Disposal Site. There were no noted incidents of surface water from the Garry River system entering the wet well of the main station during this reporting period. Flow trending throughout 2024 was observed to be 8% lower than the previous year's total flow, but the overall daily average flow did exceed the rated capacity for the site, see Figure 1 below.

Figure 1: 5-yr Main Station Flow Comparison



The RV dumping station is located upstream from a sewage lift station on the northwest side of Alexandria. It is only in service between May 15 and October 15 annually and is comprised of a concrete dump area as well as access to wash water, if required. The landfill leachate was deposited upstream from the Main Pumping Station between April 11-April 25. Quality monitoring of the leachate started in 2021, and sampling is completed on raw leachate during hauling, as per the frequencies set out in the ECA. Results from 2021 through 2023 indicated little change to the leachate strength during the spring program, see Table 1 below for all results.

Table 1: 5-year Imported Leachate Result Comparison (Schedule D):

Parameter	Imported Sewage Annual Average Concentration				
	2020	2021	2022	2023	2024
BOD_5	No Sampling	3 mg/L	3 mg/L	No Hauling	4 mg/L
TSS	No Sampling	3 mg/L	5 mg/L	No Hauling	4 mg/L
TP	No Sampling	0.08 mg/L	0.02 mg/L	No Hauling	0.03 mg/L
TKN	No Sampling	11.6 mg/L	16.6 mg/L	No Hauling	21.2 mg/L
Boron	No Sampling	0.825 mg/L	0.837 mg/L	No Hauling	0.383 mg/L
Cobalt	No Sampling	0.005 mg/L	0.0006 mg/L	No Hauling	0.0007 mg/L
Magnesium	No Sampling	16.8 mg/L	17.2 mg/L	No Hauling	13.3 mg/L
Manganese	No Sampling	0.058 mg/L	0.069 mg/L	No Hauling	0.115 mg/L
Potassium	No Sampling	20.7 mg/L	18.7 mg/L	No Hauling	12.4 mg/L
Strontium	No Sampling	0.740 mg/L	0.773 mg/L	No Hauling	0.817 mg/L
Bis (2-ethylhexyl) Phthalate	No Sampling	< 5 µg/L	5 µg/L	No Hauling	< 5 µg/L

i. Raw Influent Sewage

The influent sewage was sampled on a monthly basis and when compared to previous years, the influent sewage strength is comparable, which indicates no significant changes or abnormal discharges into the collection system.

Table 2: 5-year Influent Sewage Sampling Result Comparison (Schedule D):

Parameters	Influent Sewage Annual Average Concentration				
	2020	2021	2022	2023	2024
BOD_5	160 mg/L	116 mg/L	108 mg/L	90 mg/L	93.5 mg/L
TSS	300 mg/L	269 mg/L	306 mg/L	209 mg/L	169 mg/L
TP	3.33 mg/L	3.25 mg/L	3.11 mg/L	2.70 mg/L	2.61 mg/L
TKN	20.80 mg/L	20.65 mg/L	20.76 mg/L	16.94 mg/L	18.98 mg/L

ii. Aeration Outfall

The aeration outfall was sampled weekly and monthly, as per the minimum requirements per parameter. When the results were compared to previous years, apart from 2023, which indicates no significant changes or treatment shortfalls.

Table 3: 5-year Aerated Cell Effluent Sampling Result Comparison (Schedule D):

Effluent Parameter	Aerated Cell Annual Average Concentration				
	2020	2021	2022	2023	2024
$CBOD_5$	21 mg/L	16 mg/L	15 mg/L	15 mg/L	12 mg/L
TSS	70 mg/L	83 mg/L	117 mg/L	92 mg/L	81 mg/L
TP	1.36 mg/L	1.64 mg/L	2.41 mg/L	2.13 mg/L	1.84 mg/L
Total Ammonia (N)	9.73 mg/L	8.53 mg/L	8.62 mg/L	4.91 mg/L	7.00 mg/L

Effluent Parameter	Aerated Cell Annual Average Concentration				
	2020	2021	2022	2023	2024
Nitrite	0.26 mg/L	0.65 mg/L	0.98 mg/L	1.11 mg/L	0.50 mg/L
Nitrate	1.97 mg/L	4.02 mg/L	2.49 mg/L	4.19 mg/L	3.03 mg/L
pH	7.59	7.56	7.66	7.57	7.64
Temperature	11.6℃	12.7℃	11.5℃	12.5℃	13.4℃

iii. Discharge Effluent

The final effluent discharge was sampled and tested on a weekly frequency, as per the ECA minimum requirements. Overall, the system operated very well throughout 2024 and all calculated annual averages were found to be well below all Provincial ECA Design Objectives, Effluent Compliance Limits and Federal Wastewater Systems Effluent Limits. As an effort to review the characteristic and historical trending of sewage concentration and treatment efficiency, 5-year sampling comparisons were tabulated below and when compared, treatment efficiencies have slowly improved over time. Please refer to section H and Appendix A for further discussion on 2024 results.

Table 4: 5-year Final Effluent Sampling Sewage Comparison (Schedule D):

Effluent Parameter	Lagoon Effluent Annual Average Concentration				
	2020	2021	2022	2023	2024
$CBOD_5$	7.2 mg/L	3.3 mg/L	3.7 mg/L	3.8 mg/L	3.8 mg/L
TSS	9.9 mg/L	4.7 mg/L	6.5 mg/L	6.0 mg/L	4.2 mg/L
TP	0.22 mg/L	0.15 mg/L	0.19 mg/L	0.14 mg/L	0.13 mg/L
Total Ammonia (N)	6.39 mg/L	4.83 mg/L	4.79 mg/L	2.91 mg/L	3.7 mg/L
TKN	8.84 mg/L	7.15 mg/L	7.34 mg/L	4.73 mg/L	5.01 mg/L
Nitrite	0.13 mg/L	0.12 mg/L	0.15 mg/L	0.06 mg/L	0.09 mg/L
Nitrate	0.67 mg/L	0.45 mg/L	0.29 mg/L	0.43 mg/L	0.54 mg/L
E. Coli *(geometric mean density)*	0 cfu/100mL	1.3 cfu/100mL	2.0 cfu/100mL	2.0 cfu/100mL	1.0 cfu/100mL
Total Chlorine Residual	0.01 mg/L	0.00 mg/L	0.00 mg/L	0.00 mg/L	0.00 mg/L
Dissolved Oxygen	7.95 mg/L	9.16 mg/L	8.15 mg/L	8.58 mg/L	8.15 mg/L
pH	7.49	7.80	7.64	7.62	7.74
Temperature	9.5℃	11.4℃	12.6℃	11.3℃	12.6℃
Un-ionized Ammonia	0.25 mg/L	0.07 mg/L	0.05 mg/L	0.06 mg/L	0.04 mg/L

C. Groundwater Monitoring

Summary and interpretation of all ground water monitoring data

A groundwater monitoring plan was prepared in 2012 by McIntosh Perry and submitted to the MECP. Based on the site elevations and site monitoring it was determined that the groundwater flow is north-east through the site and as such two monitoring wells installed and developed on March 5, 2013, one upgradient (Well 1) and one downgradient (Well 2). Background sampling was completed by Waterworks staff on March 6, 2013 and are currently used to compare current sampling to determine potential impacts.

Operational staff sampled both wells on March 12 and it was found that the results were similar to previous findings, which furthers the belief that there are limited to no major impacts to the downstream areas. There was a noted increase in upstream nitrate and TKN, but no other parameters were elevated. It should be noted the total ammonia was inadvertently left off sampling request, but historically the downstream samples have been gradually increasing since 2017. Please refer to Table 5 below for summary and Appendix D for full summary of results.

Figure 2: Groundwater Wells Locations and Site Layout

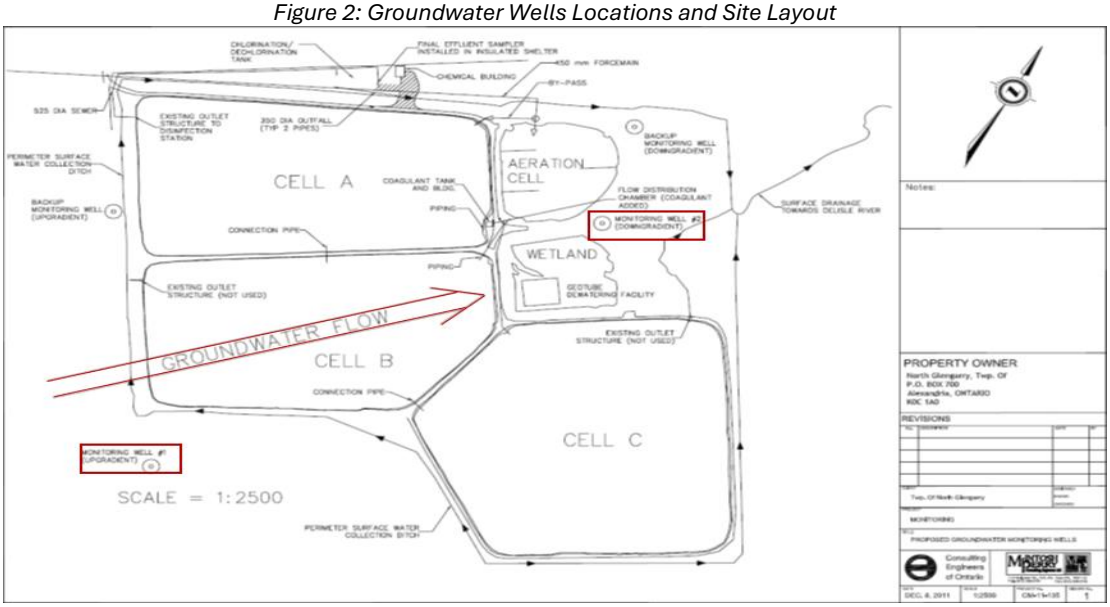


Table 5: Groundwater Monitoring Well Sampling Program:

Parameter	Monitoring Well #1		Monitoring Well #2	
	Background results (March 6, 2013)	2024 Sampling Results (March 12, 2024)	Background results (March 6, 2013)	2024 Sampling Results (March 12, 2024)
TOC	8 mg/L	8.8 mg/L	15.2 mg/L	5.9 mg/L
TP	3.8 mg/L	1.4 mg/L	0.47 mg/L	0.21 mg/L
TKN	0.83 mg/L	2.00 mg/L	1.12 mg/L	0.60 mg/L
Total Ammonia (N)	< 0.01 mg/L	n/a	0.22 mg/L	n/a
Nitrite	< 0.1 mg/L	< 0.05 mg/L	0.5 mg/L	< 0.05 mg/L
Nitrate	< 0.1 mg/L	1.22 mg/L	<0.1 mg/L	0.37 mg/L
E. coli	<2 cfu/100 mL	0 /100 mL	<2 cfu/100 mL	0/100 mL

D. Operational Problems

Description of any operating problems encountered, and corrective actions taken.

Collection System:

- Float issues that cause pump cycle issues.
  - Replace defective float to return to normal operations.
  - Clean or adjust floats as required.
- Pump operation issues or failures.
  - Reset, reverse, or pull pump to remove debris from impeller and restore operations.
  - Replace defective pump with new unit, due to impeller issues.
  - Replace defective pump panel contactors.
  - Hydro One adjusted utility line connections due to on-going electrical issues.
- Alarm panel failure to communicate.
  - Replaced defective fuse to restore power to electrical outlet.

Treatment System:

- Aerator Failure
  - Replaced defective coupler and restore operations.
  - Replace defective motor and repair to wiring short.

- Reversed rotation to remove debris from impellers.
- Unit failed due to defective gearbox.

- Chemical dosage pump issue or loss of dosing.
  - Chemical leak from dosing pump.
    - switch over to back-up pump to maintain operations.
    - pump removed and repaired before reinstallation and placed back into service.
  - Electrical failure due to pump being submerged.
    - Remove defective pump and replace it with spare unit.
- Unplanned utility power failure
  - Hydro One repaired replaced the damaged hydro pole to restore utility power.
    - generator installed to maintain chemical dosing operations until repairs are completed.
  - Transformers were replaced due to imminent upgrades.
    - generator installed to maintain chemical dosing operations until repairs are completed.
- Coagulant building sump pump replacement due to intermittent building flooding.
  - foot valve found to be defective causing groundwater backup
  - adjust float, replace foot valve and fix piping.

E. Maintenance

Summary of all maintenance carried out on any structure, equipment, apparatus, mechanism, or thing forming part of the works.

Collection System:

- Preventative Maintenance Program.
  - schedule and forms at all stations, as required.
  - tasks completed as scheduled.
- Monthly pest control at various sites.
- Bi-annual calibration of all gas monitoring equipment.
- Hydro meter replaced by Hydro One
- Annual level monitoring and flow measurement calibrations.

Treatment System:

- Preventative Maintenance program
  - schedule and forms at all stations, as required.
  - tasks completed as scheduled.
- Monthly pest control.
- Annual analyzers, level monitoring and flow measurement calibrations.

F. Effluent Quality Control and Assurance

Summary of any effluent quality assurance or control measures undertaken in the reporting period.

All parameter sampling was performed within provincial and federal guidelines by licensed operational staff, as per internal SOP. Staff are internally trained to ensure techniques and procedures are followed and testing is performed.

Effluent quality control and assurance measures were undertaken by the accredited certified laboratories, Caduceon Environmental and AGAT, who are contracted to complete all sample analysis for the Township of North Glengarry.

G. Flow Measurement and Equipment Calibration

Summary of the calibration and maintenance carried out on all effluent monitoring equipment.

Annual calibrations on the detection units (pumping station level indicators and chemical tank level indicators), and flow sensing devices (magmeter, miltronics, etc.) were completed by St- Laurent Instrumentation between November 2024. All handheld and benchtop analyzers were calibrated by ClearTech in July 2024. No issues were noted in regard to the operation of the equipment.

H. Effluent Objectives

Description of effort made, and results achieved in meeting the effluent objectives of condition 6.

The wastewater sewage works ECA is conditional on proposed system upgrades and contains descriptions and provisions for existing and post-construction works. At this time, no construction has been started or completed, so the effluent design objectives and limits have not transitioned from the "prior to completion of construction" values found in schedule B and Schedule C.

Monthly discharge effluent monitoring showed that the effluent design objectives and limits were met and greatly exceeded during this reporting period. Table 6 shows a monthly summary of these parameters. Please refer to Appendix A for a full summary of flows, sampling quality analysis for the Alexandria Sewage Treatment Works. All municipal utility monitoring program reports were sent to the environmental monitoring and reporting branch of the Ministry of the Environment electronically for each month.

Table 6: Monthly Average Final Effluent Sampling Summary

	$CBOD_5$ (mg/L)	TSS (mg/L)	TP (mg/L)	Total Chlorine Residual (mg/L)	pH		E. Coli *(geometric mean density)* (organisms/100 mL)
					Min	*Max*	
Concentration Limits	*30*	*40*	*0.5 mg/L*	*0.02 mg/L*	*6.0*	*9.5*	*< 200*
Concentration Objective	*25*	*25*	*0.4 mg/L*	*non-detect*	*6.5*	*8.5*	*< 150*
January	4.3	5.0	0.1	0.00	7.2	8.1	1.0
February	8.0	8.3	0.2	0.00	7.3	8.2	1.0
March	6.0	6.5	0.2	0.00	8.0	8.2	7.0
April	3.0	3.8	0.2	0.00	6.9	8.3	1.0
May	3.0	3.5	0.2	0.00	7.4	7.9	1.0
June	3.0	3.3	0.1	0.00	7.4	9.1	1.4
July	3.0	4.0	0.1	0.00	7.5	8.1	1.7
August	3.0	3.5	0.1	0.00	7.5	7.7	1.2
September	3.0	3.2	0.1	0.00	6.2	8.9	1.0
October	3.0	3.0	0.1	0.00	7.4	8.5	1.0
November	3.0	3.3	0.1	0.00	7.4	7.8	1.0
December	3.6	4.0	0.1	0.00	7.2	8.0	1.0

Quarterly monitoring included acute lethality for rainbow trout and daphnia, as per Federal WSER and Provincial ECA requirements. All samples were found to not be acutely lethal, and no additional sampling was required during this reporting period.

Table 7: Acute Lethality Testing Summary

Date	Rainbow Trout Lethality Result (%)	Comment	Daphnia Lethality Result (%)	Comment
17-Jan-2024	10	Pass	0	Pass
29-Apr-2024	0	Pass	0	Pass
23-Jul-2024	0	Pass	20	Pass
23-Oct-2024	0	Pass	0	Pass

Additional quarterly monitoring has been undertaken by the Water Works Department since 2019, due to previous adverse results consistently noted under ice cover. In response to this event, a technical memo was prepared by McIntosh Perry in consultations with Wood Environment & Infrastructure Solutions and sent to Environment Canada in June. The recommended actions included continued testing for lethality, metals, inorganic and VOC sampling quarterly until upgrades are completed and commissioned.

The summary in Table 8 below lists all results that exceeded the Provincial Water Quality Objectives. As per the technical memo, the parameters listed do not appear to cause lethality, as most results were lower than 2019 values and lethality was not observed during the testing periods. It is believed that treatment short-circuiting occurred through the aeration chamber and intermittent aerator failures attributed to the previous exceedances. Measures have been put into place to prevent the short circuiting until repairs can be completed.

Table 8: Additional Metal, Inorganic and VOC Elevated Results

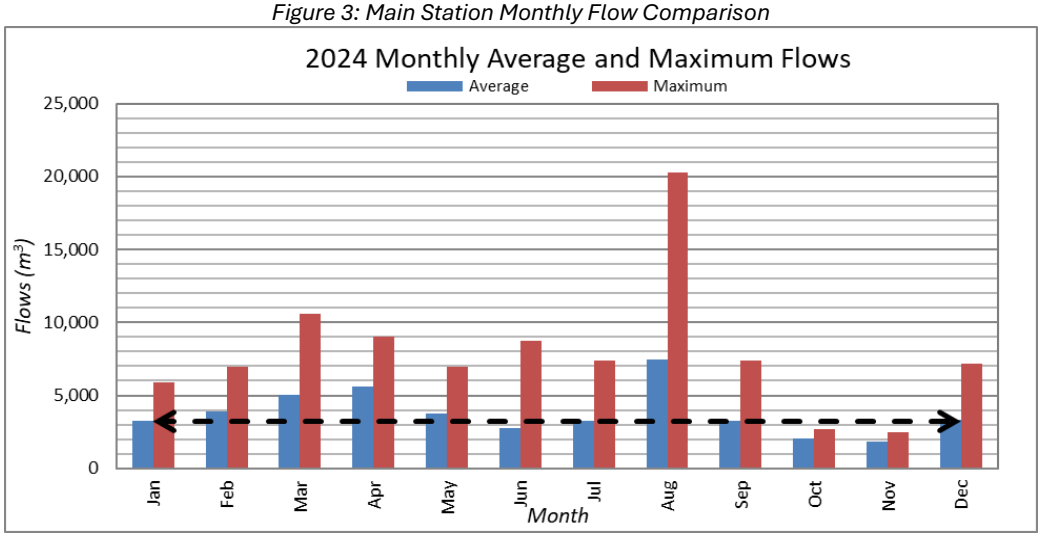
Parameter	Last Adverse		Full Annual Result (mg/L)				
	Date	Result	PWQO Standard	Q1	Q2	Q3	Q4
Un-Ionized Ammonia (mg/L)	23-Oct-2024	**0.0313**	0.02	0.0156	**0.0750**	0.00308	**0.0313**
Total Copper (mg/L)	23-Jul-2024	**0.008**	0.005 mg/L	0.003	0.003	**0.008**	< 0.002
Total Cadmium	29-Apr-2024	**0.0003**	0.0002	< 0.0001	**0.0003**	< 0.0001	< 0.0001
Toluene (µg/L)	28-Oct-2022	**2.01**	0.8	0.30	< 0.20	< 0.20	< 0.20
Total Silver (mg/L)	19-Jan-2022	**0.0002**	0.0001 mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Total Zinc (mg/L)	19-Jan-2022	**0.050**	0.03 mg/L	0.029	< 0.020	< 0.020	< 0.020
Total Cobalt (mg/L)	17-Mar-2021	**0.0014**	0.0009 mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Total Phosphorus (mg/L)	04-Mar-2020	**0.31**	*	0.08	0.14	0.28	0.12
Dissolved Aluminum (mg/L)	22-Apr-2020	**0.078**	0.075 mg/L	0.038	0.025	0.07	0.101

*Interim standard at this time, evidence is insufficient to develop a firm objective general guideline established

There were no reports made in regard to floating or settleable solids or that the wastewater contained oil or any other substance that created a visible film, sheen, foam, or discolouration to the receiving waters.

Annual flow summaries indicate a calculated average daily flow of 3,798m^3/day, which represents 117% of the total rated capacity for this facility, which is out of compliance. The flows have decreased 8% from the previous year, which is the first decreasing in the last 4 years, despite continued efforts to reduce infiltration and inflow. The observed maximum daily flow for the year was reported to be 20,271m^3/day, which was reported in August following a major rain event. Other impacting factors to flows were Spring Peak Melt (April), and seven significant rain events that exceeded a daily total of 25mm in May, Jun (x3), Jul (x2), and Aug. Please refer to figure 2 below and to Appendix A for a full summary of flows for the Alexandria Sewage Treatment Works.

Figure 3: Main Station Monthly Flow Comparison



I. Lagoon Cell Sludge Accumulation

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 summary of the locations to where the sludge was disposed.

A sludge management plan was created by McIntosh Perry and put into place in 2008. As part of monitoring methods, it is recommended sludge levels are to be collected annually by staff. The levels in all 3 cells were measured on October 11, 2024. Based on recorded values, the sludge levels have decreased 5.6% in cell A and 4.1% in cell C, but increased 0.1% in Cell B. The warning triggers for total sludge volume have been exceeded in Cell B and C, which is consistent with previous years observations.

Efforts to reduce sludge levels in Cell B were restarted in 2021 by Bishop Water, who were contracted for a multi-year Geotube® project, during this reporting period Bishop Water technicians were on-site from May 1 through May 17. Due to insufficient capacity in the original Geotube® units, three additional Geotube® units were installed to ensure needs were met during this phase of the project. Desludging Cell B was completed over six days and the total amount of solids removed was calculated to be 2,247.60m^3. Minimal amounts of dewatering were observed from the Geotube® units after the desludging period between May and October, nonetheless the water collected from the trench was recycled back into lagoon at Cell B via a small sump pump. The dewatering effluent quality was not analyzed nor was the pumped volume tracked.

Figure 4: Site Layout from Bishop Water Final Report
(Figure does not show second layer of Geotube® units as it would cover the same footprint as the base layer)

Table 9: Desludging Operation Summary

Week	BDT	Volume Pumped	Total Polymer Usage	Average Polymer Dosage
		m^3	L	kg/BDT
2024 Total	**109.36**	**2,719.62**	**1,312.79**	**2.27**
2022 Total	88.48	3,763.69	495.78	5.06

J. Complaints

Summary of any complaints received during the reporting period and any steps taken to address the complaints.

There were only about a dozen received complaints from homeowners, the majority of these complaints were in regard to sewer lateral back-up. In half the complaints, the issues were on the homeowner's side resulting in private contracted services for repair. The other half of the issues noted within municipal boundaries were caused by sewer main or lateral blockage and all issues were repaired by Water Works Staff in a timely manner and servicing was restored.

K. Bypass, Overflow, Spill, Abnormal Discharge Events

Summary of all bypasses, spills, or abnormal discharge events.

There were three primary overflow events reported during 2024. All events were observed on August 9 in the wastewater collection system at an identified overflow point or from a manhole just upstream from the trunk sewer main. The overflows coincided with a significant rain event and equipment failures. The overflows were reported to the EOHU and SAC, and samples were collected as per requirements and reports were submitted as required. The total annual volume for overflows was estimated to be 6,027.5m^3, with 4,821.5m^3 being metered and 1,206m^3 estimated. A summary of the report submission can be found on table below, please refer to Appendix C for an overflow breakdown and report.

Table 10: Collection System Overflow Report Submission Summary

# Event	Date	Reported to	Reference Number	Location
1	09-August-2024	☒ Ministry of Health ☒ Spills Action Center	1-9Q450P	Alexandria Main Pumping Station
2	09-August-2024	☒ Ministry of Health ☒ Spills Action Center	1-9QLSPY	MH-150 / MH-160 / MH-170
3	09-August-2024	☒ Ministry of Health ☒ Spills Action Center	1-9QMMN3	MH-120

Quarterly reports for bypasses and overflows are now required to be submitted to Ministry of the Environment inspector as per the ECA for the Wastewater Treatment Facility. No observances of bypass or overflow were observed during this period.

Table 11: Quarterly Bypass and Overflow Report from Alexandria Sewage Works

Quarter	Month	Year	By-Pass Occur	Overflow Occur	Submitted to MECP	Report Name
1	January-March	2024	N	N	15-Apr-2024	2024-ALX WWS-Bypass and Overflow_ Q1
2	April-June	2024	N	N	23-Jul-2024	2024-ALX WWS-Bypass and Overflow_ Q2
3	July- September	2024	N	N	12-Feb-2025	2024-ALX WWS-Bypass and Overflow_ Q3
4	October- December	2024	N	N	12-Feb-2025	2024-ALX WWS-Bypass and Overflow_ Q4

L. Other Items

Any other information the District Manager requires from time to time.

i. Additional Equipment Summary: EOS 2000

The date of installation and removal of the EOS-2000 unit within each unit

The EOS unit was not installed into the lagoon cells during this reporting period. No additional monitoring in regard to operations was completed.

ii. Authorized System Alterations Summary

A summary of all alterations within the reporting period as authorized by the ECA, including all alterations that pose a significant drinking water threat.

As per ECA 181-W601 schedule D, section 6.2.7 the proactive replacement of 3 manholes and associated inlet/outlet piping on Dominion St South and Derby St East were completed in June 2024. This work was completed in conjunction with the watermain replacement project, and each manhole was brought up to internal standards.

Work completed as repair/maintenance included multiple replacement of pump panel components due to electrical issues at the Leroux lift station, replacement of various floats used for station control at the Leroux lift station, and the replacement of a sewage pump at the Main Pumping Station due to damage impeller.

i. Collection System Inspection, Repair and Remediation to Reduce System Overflows

A summary of all works completed within the reporting period as authorized by the ECA, including all projects undertaken, PPCP updates and an assessment of the effectiveness of these actions.

Work to reduce infiltration and inflow was continued throughout this period. All of the Alexandria collection system was inspected through CCTV to identify system conditions and areas of inflow and infiltration. Through this inspection various areas of concern were identified such as damaged piping and defective lateral connections in areas of high groundwater. These issues were repaired through lining or replacement of main sections and grouting around laterals to prevent further inflow. It was also identified that the sanitary sewer overflow point MH-0170 sluice gate allowed surface water inflow when levels were above the sluice gate, which prompted repairs.

ii. Proposed Construction of Works Status Update

A summary of any changes or update to the schedule for the completion of the construction and commissioning operation of major process(es) / equipment groups in the Proposed Works.

Proposed works were anticipated to be constructed and commissioned within 5 years of the issuance of the current ECA, dated February 2021. To date no construction or tenders for work have begun, but the Housing-Enabled Water Systems Fund grant was obtained by the Township to aid in the eligible costs for the expansion of the Alexandria Lagoons.

As per the ECA conditions, notification to the District Manager must be completed on project start-up, commissioning and final completion. If the proposed work is delayed beyond the ECA expiry, notice must be provided no later than 6 months before expiry to the District Manager for approval amendment, with rational for delay and any proposed design changes.

iii. Sampling Scheduling Summary and Deviations

A summary of any deviation from the monitoring schedule and reasons for the current reporting year and proposed future scheduling.

An internal weekly sampling schedule with sign-off is used to communicate all operational staff sampling requirements and timelines. All sampling requirements are reviewed annually to ensure scheduling is up to date and in-line with provincial and federal requirements.

As per the ECA requirement, the sampling date was rotated from Tuesday to Monday during the 2024 reporting period. Sampling dates were shifted 8 times due to statutory holidays and in each instance the

samples were taken on the next day, typically on a Tuesday and once on a Wednesday. The 2025 sampling period, the sampling date was shifted from Monday to Wednesday. This date was selected in coordination with lab sample submission timelines and sample date rotation from previous year sampling date as per ECA requirements.

NORTH GLENGARRY WATER WORKS

WASTEWATER TREATMENT WORKS PERFORMANCE RESULTS

Municipality: *North Glengarry* **Year:** *2024*

Project: *Alexandria STP* **Receiving Stream:** *Delisle River*

Description: *1 Pumping Station, 1 Aerated Cell, 3 Facultative Cells* **Design Capacity:** *3,237 m^3/day*

Continuous Discharge with Phosphorous Removal

MONTH	Flows			Biochemical O_2 Demand			Suspended Solids			Phosphorus		
	Total Flows (m^3)	Average Daily Flow (m^3)	Maximum Daily Flow (m^3)	Average Raw $CBOD_5$ (mg/L)	Average Effluent $CBOD_5$ (mg/L)	Percent Removal (%)	Average Raw SS (mg/L)	Average Effluent SS (mg/L)	Percent Removal (%)	Average Raw TP (mg/L)	Average Effluent TP (mg/L)	Percent Removal (%)
Jan	101,902	3,287	5,909	83.0	4.3	94.8	132.0	5.0	96.2	4.65	0.11	97.7
Feb	113,273	3,906	6,995	31.0	8.0	74.2	106.0	8.3	92.2	1.12	0.20	82.4
Mar	156,619	5,052	10,623	89.0	6.0	93.3	226.0	6.5	97.1	1.99	0.17	91.3
Apr	168,382	5,613	9,050	71.0	3.0	95.8	154.0	3.8	97.5	1.73	0.19	89.0
May	116,503	3,758	6,937	48.0	3.0	93.8	39.0	3.5	91.0	1.04	0.16	84.4
Jun	82,073	2,736	8,748	140.0	3.0	97.9	310.0	3.3	99.0	3.66	0.09	97.5
Jul	102,103	3,294	7,402	37.0	3.0	91.9	34.0	4.0	88.2	1.15	0.10	91.1
Aug	231,317	7,462	20,271	22.0	3.0	86.4	17.0	3.5	79.4	0.47	0.11	76.1
Sep	98,022	3,267	7,362	159.0	3.0	98.1	370.0	3.2	99.1	3.62	0.10	97.2
Oct	63,243	2,040	2,689	223.5	3.0	98.7	347.5	3.0	99.1	5.92	0.09	98.5
Nov	55,370	1,846	2,488	38.0	3.0	92.1	57.0	3.3	94.3	1.44	0.10	93.1
Dec	102,801	3,316	7,201	51.0	3.6	92.9	56.0	4.0	92.9	1.21	0.15	87.8
Total	**1,391,607**											
Average		**3,798**		**82.7**	**3.8**	**92**	**154.0**	**4.3**	**94**	**2.33**	**0.13**	**90**
Minimum												
Maximum			**20,271**									
Criteria		***3,237***			***30***			***40***			***0.50***	

NORTH GLENGARRY WATER WORKS

WASTEWATER TREATMENT PERFORMANCE RESULTS

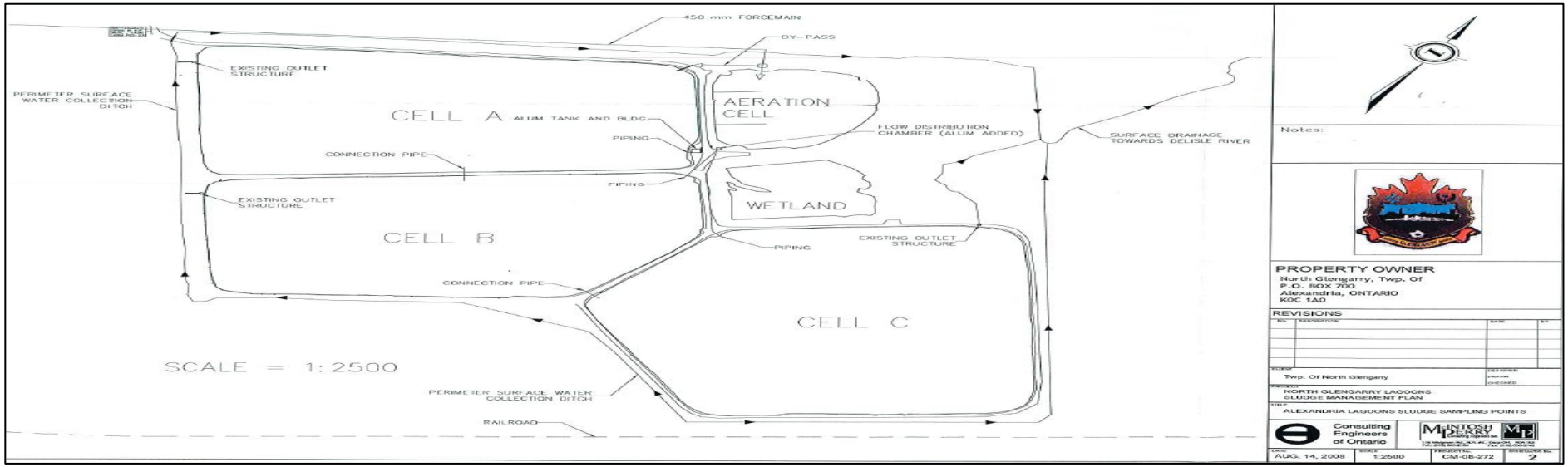
2024

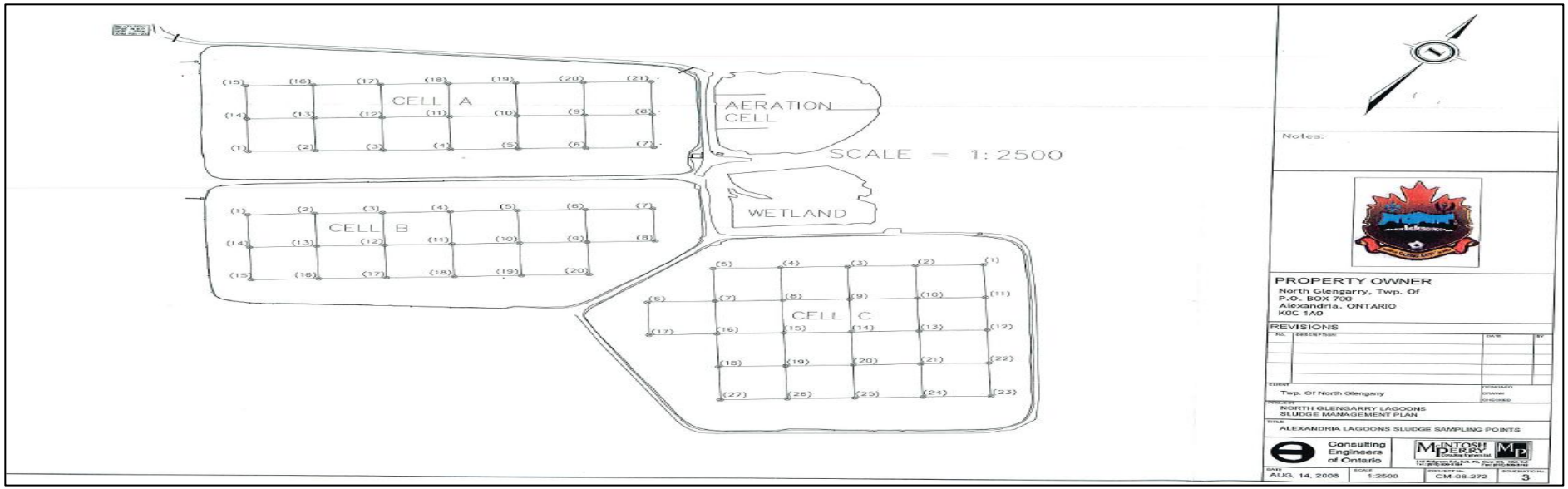
MONTH	Ammonia			TKN			Nitrite			Nitrate		
	Average Raw Ammonia (mg/L)	Average Effluent Ammonia (mg/L)	Percent Removal (%)	Average Raw TKN (mg/L)	Average Effluent TKN (mg/L)	Percent Removal (%)	Average Raw Nitrite (mg/L)	Average Effluent Nitrite (mg/L)	Percent Removal (%)	Average Raw Nitrate (mg/L)	Average Effluent Nitrate (mg/L)	Percent Removal (%)
Jan	n/a	5.75		33.00	7.50	77.3	n/a	0.05		n/a	1.1	n/a
Feb	n/a	7.64		8.00	10.70	-33.8	n/a	0.08		n/a	0.6	n/a
Mar	n/a	5.78		9.90	8.43	14.9	n/a	0.06		n/a	0.7	n/a
Apr	n/a	6.38		9.80	7.68	21.6	n/a	0.05		n/a	0.4	n/a
May	n/a	5.57		11.60	5.18	55.4	n/a	0.21		n/a	0.5	n/a
Jun	n/a	0.28		23.20	1.23	94.7	n/a	0.13		n/a	0.4	n/a
Jul	n/a	0.52		12.60	2.10	83.3	n/a	0.19		n/a	0.5	n/a
Aug	n/a	0.67		4.90	1.98	59.7	n/a	0.06		n/a	0.2	n/a
Sep	n/a	0.62		17.80	1.34	92.5	n/a	0.07		n/a	0.3	n/a
Oct	n/a	0.66		38.10	1.45	96.2	n/a	0.05		n/a	0.4	n/a
Nov	n/a	2.34		20.80	3.13	85.0	n/a	0.10		n/a	0.6	n/a
Dec	n/a	7.15		19.00	8.30	56.3	n/a	0.05		n/a	0.8	n/a
Total												
Average		3.61		17.39	4.92	59		0.09			0.52	
Minimum												
Maximum												
Criteria												

NORTH GLENGARRY WATER WORKS
WASTEWATER TREATMENT PERFORMANCE RESULTS
2024

MONTH	Hydrogen Sulphide			E. coli			pH			Temp	Cl_2
	Average Raw H_2S (mg/L)	Average Effluent H_2S (mg/L)	Percent Removal (%)	Average Raw E. coli (cts/100ml)	Average Effluent E. coli (cts/100ml)	Percent Removal (%)	Minimum Effluent pH	Average Effluent pH	Maximum Effluent pH	Average Effluent Temp (°C)	Average Effluent Cl_2 (mg/L)
Jan	n/a	n/a		n/a	1.00		7.18	7.50	8.07	3.53	0.00
Feb	n/a	n/a		n/a	1.00		7.29	7.60	8.22	6.48	0.00
Mar	n/a	n/a		n/a	7.01		7.99	8.09	8.20	5.45	0.00
Apr	n/a	n/a		n/a	1.00		6.93	7.89	8.32	10.43	0.00
May	n/a	n/a		n/a	1.00		7.41	7.63	7.88	19.53	0.00
Jun	n/a	n/a		n/a	1.41		7.38	8.54	9.06	20.95	0.00
Jul	n/a	n/a		n/a	1.70		7.49	7.75	8.07	21.17	0.00
Aug	n/a	n/a		n/a	1.19		7.46	7.55	7.66	22.63	0.00
Sep	n/a	n/a		n/a	1.00		6.23	7.44	8.87	20.00	0.00
Oct	n/a	n/a		n/a	1.00		7.10	7.70	8.54	12.22	0.00
Nov	n/a	n/a		n/a	1.00		7.44	7.58	7.75	7.65	0.00
Dec	n/a	n/a		n/a	1.00		7.19	7.60	8.00	3.56	0.00
Total											
Average					1.3			7.62		13.06	0.00
Minimum							6.23				
Maximum					7.0				8.68	26.80	0.00
Criteria					***200***		***6.0***	***6.5 - 8.5***	***9.5***		***0.02***

Sludge Monitoring Points Identification





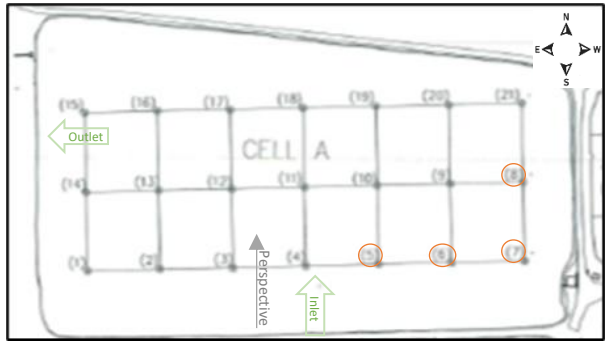
Sludge Sampling Point Volume Index

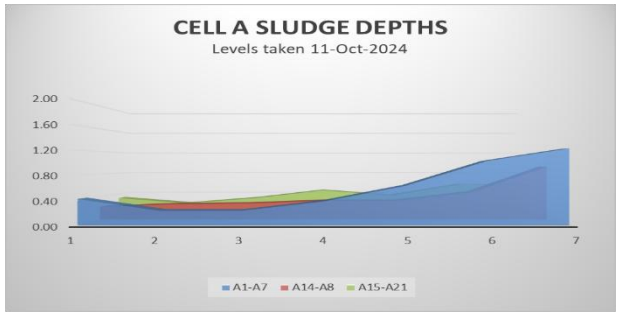
Date	Cell A- Sample Point Sludge Volume m^3																											Total Sludge Volume (m^3)	Warning Trigger	Sludge Volume %
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21									
05-Jun-20	1236	927	876	1520	1132	2309	3013	3404	709	972	668	466	770	837	1599	1173	1238	1049	1021	1240	1189								27347		52.2
28-Oct-20	670	1271	743	1127	1395	1784	3794	631	466	628	466	304	405	972	1487	864	634	655	902	1667	793								21660		41.3
11-Nov-22	787	742	1142	865	1264	2047	3710	2548	770	466	871	162	446	724	1190	1173	922	1520	1258	1560	1941								26104		49.8
13-Oct-23	933	583	1009	1520	2317	2047	3850	2322	1175	972	567	770	243	837	1562	988	1094	1389	285	1560	1523								27544		52.5
15-Apr-24	1399	609	1009	1127	1553	1915	1311	969	1073	668	466	567	567	520	1004	556	662	603	546	1026	459								18611		35.5
11-Oct-24	1224	609	611	996	1658	2703	3431	2097	972	668	668	567	547	497	1190	679	922	1232	878	1240	1189								24579		46.9
Date	Cell B- Sample Point Sludge Volume m^3																											Total Sludge Volume (m^3)	Warning Trigger	Sludge Volume %
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20										
04-Jun-20	2048	1792	2109	2892	4296	3271	4244	2987	1883	2491	2045	1053	749	1627	1348	1007	1691	2162	2370	2220									44286	Total Sludge Volume High	86.9
28-Oct-20	1897	2076	2419	2274	3959	4047	4244	2717	2288	1316	1114	1175	810	1236	1152	1367	2549	2303	2963	4718									46625	Total Sludge Volume High	91.5
04-Nov-22	2349	512	928	2892	4296	4518	4563	1078	1377	1377	1175	1073	567	1236	2010	1727	1509	2050	1467	1789									38493	Total Sludge Volume High	75.5
13-Oct-23	2319	1422	2897	2892	4072	4103	4084	2313	2693	2592	1377	1762	1154	1453	1642	1247	1353	1460	1044	1419									43298	Total Sludge Volume High	85.0
15-Apr-24	663	1792	2194	2331	1011	2717	1149	943	2410	2410	770	1377	1073	1019	1912	1871	1639	2050	1495	2220									33044	Total Sludge Volume High	64.9
11-Oct-24	2470	1934	2025	2611	3594	3410	4084	2425	2592	2390	1256	1458	1154	1453	1520	1487	1483	1320	2031	2683									43380	Total Sludge Volume High	85.1
Date	Cell C- Sample Point Sludge Volume m^3																											Total Sludge Volume (m^3)	Warning Trigger	Sludge Volume %
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27			
04-Jun-20	3578	3097	4276	5424	4920	2558	1883	1235	1377	1114	1867	3910	1073	1013	1175	2592	2174	2902	972	1073	972	1767	2836	1523	1624	1751	2911	61595	Total Sludge Volume High	93.1
28-Oct-20	3361	3041	3046	3819	4248	2105	2187	1377	1276	871	1603	713	1377	466	830	1681	1181	1573	1215	972	871	702	1128	1318	1367	1176	1349	44854	Total Sludge Volume High	67.8
11-Nov-22	3516	3990	3940	4373	4248	2784	2086	1580	1883	1478	2262	1577	851	851	1377	2086	3142	2727	1175	972	972	2086	2073	1816	1054	2681	2024	59602	Total Sludge Volume High	90.1
13-Oct-23	3516	3013	3018	4373	4785	2988	1478	1073	1276	1580	1691	1793	1154	851	1154	1559	2528	2517	1175	648	1175	2512	2683	1816	1624	1833	3657	57469	Total Sludge Volume High	86.9
11-Oct-24	2240	3711	4136	4788	4382	3237	2693	1681	1580	1478	1713	2009	851	1276	1580	1357	2552	1993	648	0	1478	1980	2683	1084	-456	1696	2379	54746	Total Sludge Volume High	82.8

Note: if a Sample Point Volume or the Total Sludge Volume is underlined, this signifies that the volume of sludge in that section is high and action might be required to obtain a uniform distribution.

Sludge Volume Profile

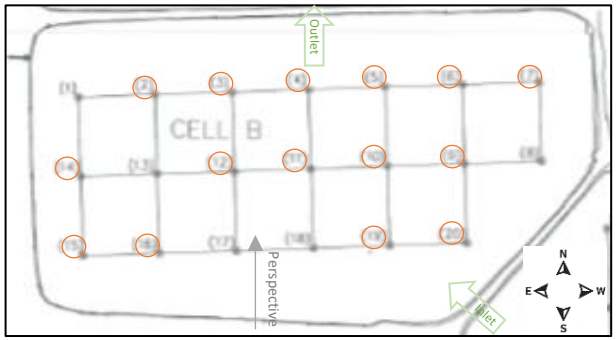
CELL A

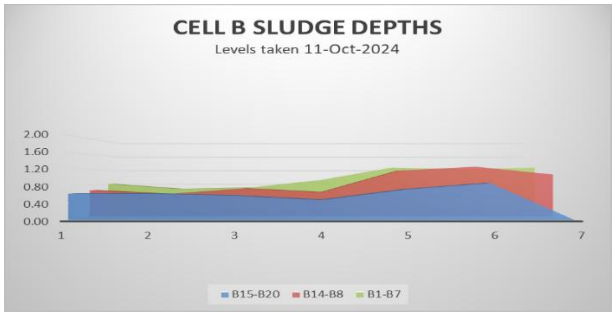




- Last depth reading: October 11, 2024.
- Cell volume is calculated to be 46.9%.
- Sludge volume decreased 5.6% from Fall 2023 value.
- 4 locations exceeded trigger levels:
  - 5,6,7,8
- Highest volume noted in south-west corner of cell.

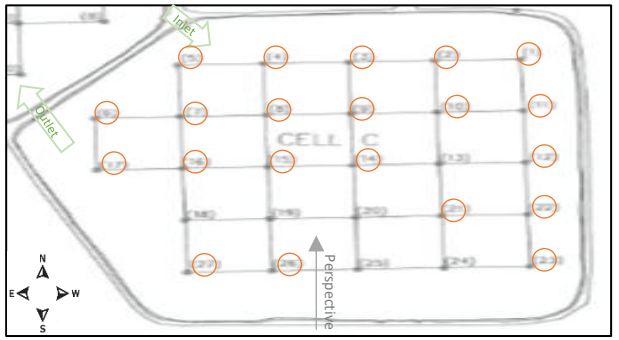
CELL B

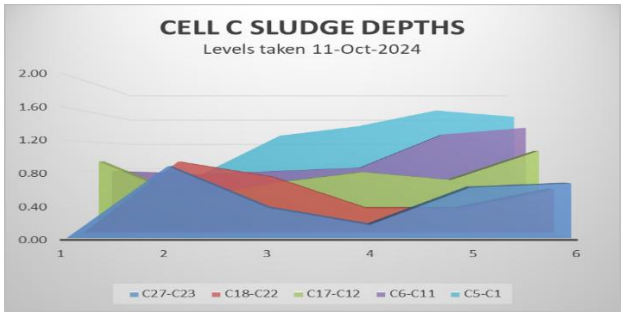




- Last depth reading: October 11, 2024.
- Cell volume calculated to be 85.1%.
- Sludge volume increased 0.1% from Fall 2023 value.
- 16 locations exceeded trigger levels:
  - 2,3,4,5,6,7,8,9,10,11,12,14,15,16,19,20
- Highest volume located in north-east area of cell.

CELL C





- Last depth reading: October 11, 2024.
- Cell volume calculated to be 82.7%.
- Sludge volume reduced 4.1% from Fall 2023 values.
- 21 locations exceeded trigger levels:
  - 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 14,15, 16, 17, 21, 22, 23, 26, 27
- Highest volume located in north-west corner of cell.

1.0- Provide the following information for each bypass that occurred at each sewage pumping station or treatment plant bypass location for the reporting year. Start with a new line for each event.

Facility Name: Alexandria WWTP
Report Year: 2024

Date	Location	Type [1]	Start Time	Duration	Volume	Disinfect [2]	Reason Code [3]	Sample Results			
dd-mmm-yyyy				Hrs	m^3			BOD_5 (mg/L)	SS (mg/L)	TP (mg/L)	E. Coli (mg/L)
09-Aug-24	Alexandria MPS (SSOP)	P	5:50	17.92	4821.5	N	1	20.0	138.0	0.8	1100000
09-Aug-24	MH150 (SSOP)	P	8:28	5.58	402.0	N	1	8	84	0.59	2700000
09-Aug-24	MH160 (SSOP)	P	8:28	5.58	402.0	N	1	33	142	1.41	870000
09-Aug-24	MH170 (SSOP)	P	8:28	5.58	402.0	N	1	8	58	0.35	800000
09-Aug-24	MH120	P	8:25	5.58	1206.0	N	1	6.0	37.0	0.7	25000

Comments Area for Pumping Stations and Plant Bypasses:

Type [1]		Disinfect [2]	Reason Code [3]
P: Primary	*the discharge of raw sewage subject to no treatment*	*Y: Yes*	*1: Heavy Precipitation*
S: Secondary	*excludes grit removal and/or chlorination*	*N: No*	*2: Snow Melt*
	the discharge of sewage that has undergone solids removal at the primary clarifiers but bypassed the secondary treatment process	*U: Unknown*	*3: Equipment Failure*
			4: Equipment Maintenance
			5: Sewer Problems
			6: Power Failure
			7: Exceed Design
			8: Other

2.0- Pumping Station and Plant Bypass Monthly Summary

Facility Name: Alexandria WWTP

Month	Primary Bypass			Secondary Bypass		
	No. of Days (days)	Duration (hours)	Volume (m^3)	No. of Days (days)	Duration (hours)	Volume ($1000m^3$)
January	0			0		
February	0			0		
March	0			0		
April	0			0		
May	0			0		
June	0			0		
July	0			0		
August	1	17.92	6027.5	0		
September	0			0		
October	0			0		
November	0			0		
December	0			0		
Total	1	17.92	6027.5	0	0	0

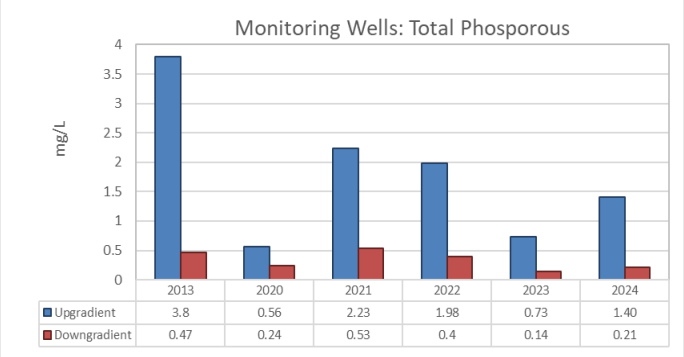
AADF: Annual Average Daily Flow | *% of AADF= ((Volume of Bypass/ADDF)/365)*100*

**AADF(m^3/d) = 3798*

Volume of Bypass as % of AADF* / Daily Flow = 0.43%

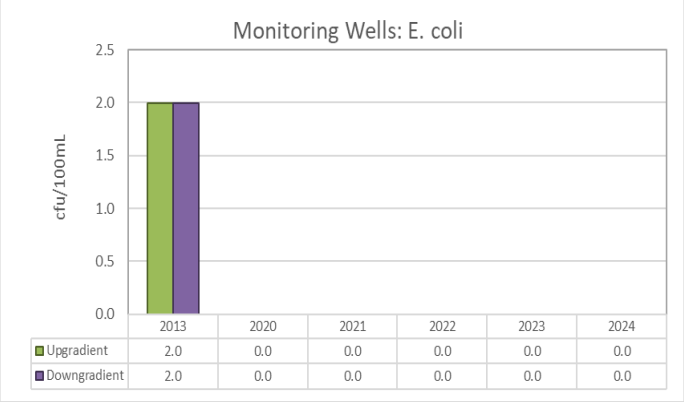
5-Year Groundwater Sampling Results Analysis

Prior to sampling both wells are purged of standing water through one of 3 methods, well hydraulic performance purge, field parameter monitoring or calculated well casing volume purge. Each well is equipped with an inertia pump/foot valve and poly tubing which extends from the top of the well to the bottom of the well casing. During Sampling operational staff are to ensure all required PPE is in place, all samples are to be collected in laboratory prepared sampling containers, and all samples are to be stored in coolers and delivered to laboratory for analysis. Charts below display the last 5 years and the original background sample, but all evaluations include results from 2013 through 2024.



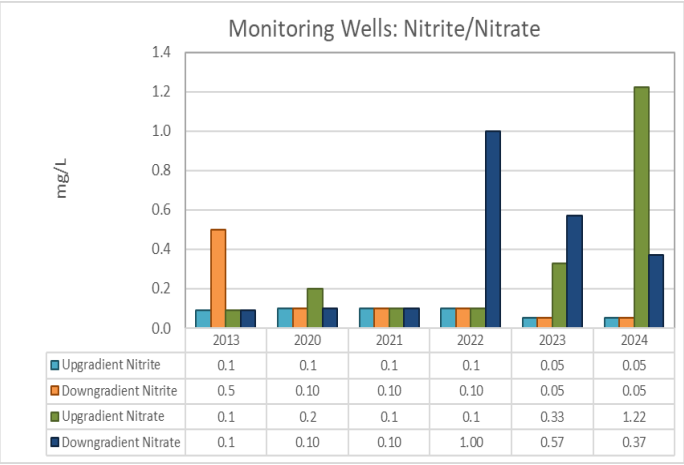
	2013	2020	2021	2022	2023	2024
Upgradient	3.8	0.56	2.23	1.98	0.73	1.40
Downgradient	0.47	0.24	0.53	0.4	0.14	0.21

- There is no standard or guideline for this parameter in the ODWS Table 2 Chemical Standards or Table 4 Objectives and Guidelines.
- Total Phosphorous in the downgradient well was found to be consistently lower than the result from the upgradient well
- Results would appear to indicate little to no impact from the lagoon system for this parameter.



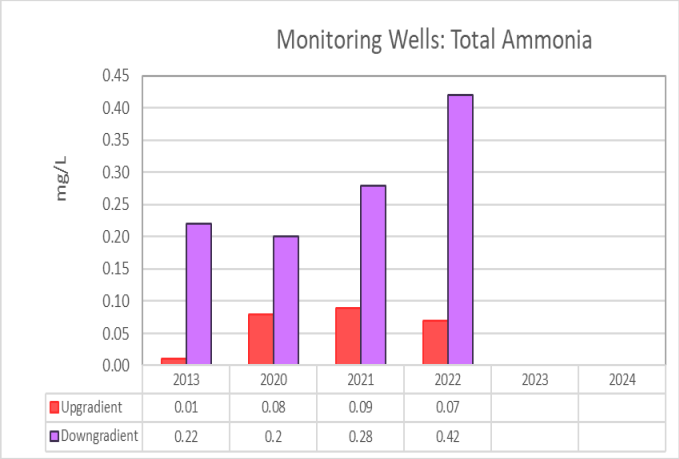
	2013	2020	2021	2022	2023	2024
Upgradient	2.0	0.0	0.0	0.0	0.0	0.0
Downgradient	2.0	0.0	0.0	0.0	0.0	0.0

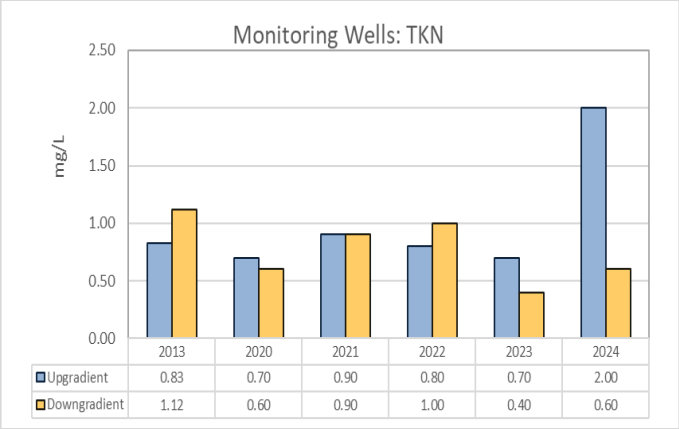
- The ODWS Table 1 Microbiological Standard is non-detectable
- E. coli has not been detected in the downgradient well since 2019. It should be noted the background value from 2013 is < 2 cfu/100mg/L result, represented as a 2 on chart.
- Results would appear to indicate little to no impact from this parameter. The 2019 result would appear to be the only sample where E.coli was found at the same level in both wells, which questions the sample integrity for this parameter.

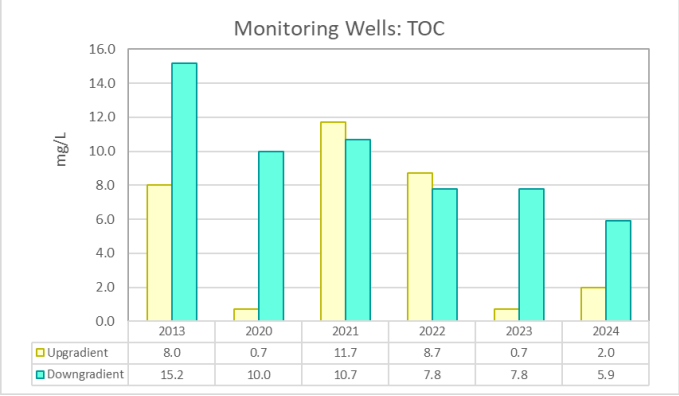


	2013	2020	2021	2022	2023	2024
Upgradient Nitrite	0.1	0.1	0.1	0.1	0.05	0.05
Downgradient Nitrite	0.5	0.10	0.10	0.10	0.05	0.05
Upgradient Nitrate	0.1	0.2	0.1	0.1	0.33	1.22
Downgradient Nitrate	0.1	0.10	0.10	1.00	0.57	0.37

- The ODWS Table 2 Chemical Standards for Nitrite is 1mg/L and Nitrate is 10mg/L. MAC (maximum allowable concentration.
- Nitrite samples in the downgradient well were not detectable apart from 2013 and 2017.
- Nitrate samples in the downgradient well have been detected starting in 2022 but are trending downwards. All results are well below 25% of MAC indicated.
- Results would appear to indicate there is potential for impact on groundwater for Nitrate, however more investigation may be required to confirm impact and rule out other environmental factors.







- There is no standard or guideline for this parameter in the ODWS Table 2 Chemical Standards or Table 4 Objectives and Guidelines.
- No sampling was completed in 2023 or 2024 due to scheduling/COC errors.
- Historical trending results from the downgradient well indicate gradually increasing levels since 2016, but all levels are well below 1mg/L.
- Results would appear to indicate there is potential for impact on groundwater from Ammonia, however more investigation may be required to confirm impact and rule out other environmental factors.
- There is no standard or guideline for this parameter in the ODWS Table 2 Chemical Standards or Table 4 Objectives and Guidelines.
- Historical results from upgradient and downgradient have consistently been close until 2024. The downgradient value is substantially lower, but all levels are less than 2mg/L.
- Results would appear to indicate there is potential for impact on groundwater from TKN, however more investigation may be required to confirm impact and rule out other environmental factors.
- There is no standard or guideline for this parameter in the ODWS Table 2 Chemical Standards or Table 4 Objectives and Guidelines.
- Historical results have shown the TOC results to be increased in the downgradient well but have been slowly decreasing since 2021.
- Results would appear to indicate there is potential for impact on groundwater from TOC, however more investigation may be required to confirm impact and rule out other environmental factors

Township of North Glengarry

Maxville Wastewater System

2024 Annual Report

Contents

A. System Overview

Summary of all system components and designations.

The Maxville wastewater system is owned an operated by the Corporation of the Township of North Glengarry. The sewage system is comprised of a class 2 collection system and a class 1 seasonal discharge lagoon system. It was originally constructed in the late 1980's, with minor extensions throughout the years to meet the village population growth.

The wastewater systems now operate under 2 Environmental Compliance Approvals (ECA). ECA 181-W601, issued in October 2023 for all municipal sewage collection systems located within the North Glengarry Township boundaries and ECA 5368-8PPQA2, issued in 2012 for the Maxville Sewage Lagoons.

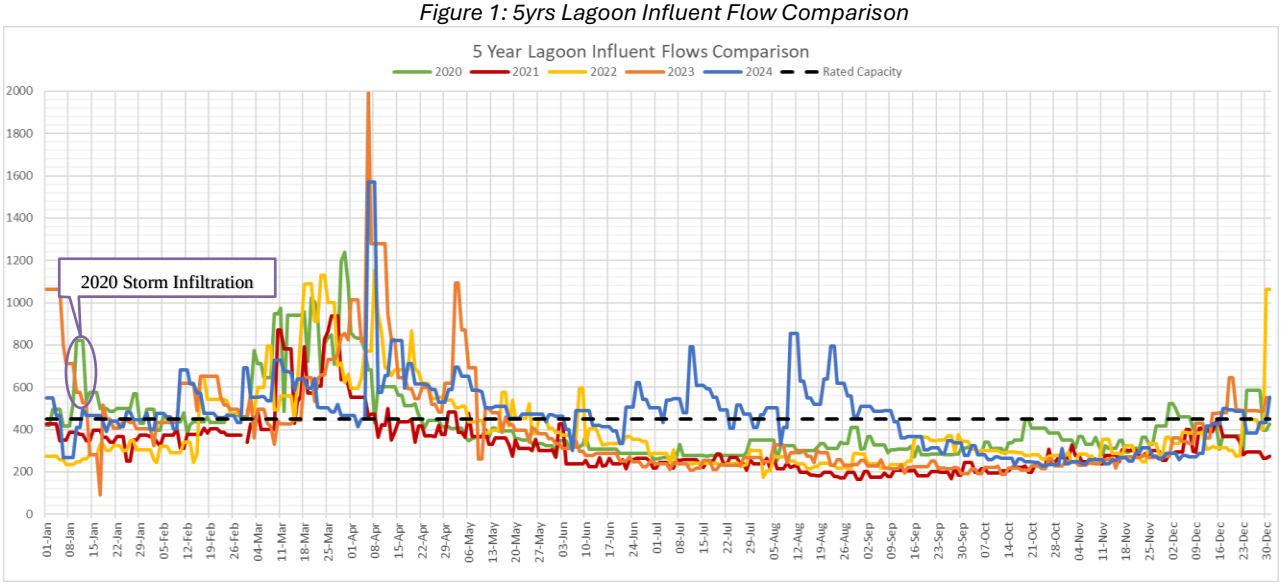
The collection system is comprised of approximately 12.0kms of sanitary sewage collection piping and force mains of various sizes, with approximately 445 service connections, one sanitary lift station and one main pumping station. The treatment system is comprised of a conventional facultative lagoon system with a coagulant addition system dosing into the influent chamber, two treatment cells that run in parallel, and a discharge chamber. The lagoons are discharge annually in the spring to coincide with the peak spring flows of the west branch of the Scotch River. At the influent chamber the wastewater is directed into one of the two cells, with an annual rotation of slide gates to ensure that over a 2-year period both cells receive influent sewage. Between the two cells an interconnecting valve and piping is left in the open position, so cell levels are equalized throughout the year. The wastewater is treated through natural biological means prior to discharge.

B. Performance Assessment

Summary and interpretation of all monitoring data collected in accordance with condition 10 and a comparison to the effluent limits outlined in condition 7, including an overview of the success and adequacy of the works.

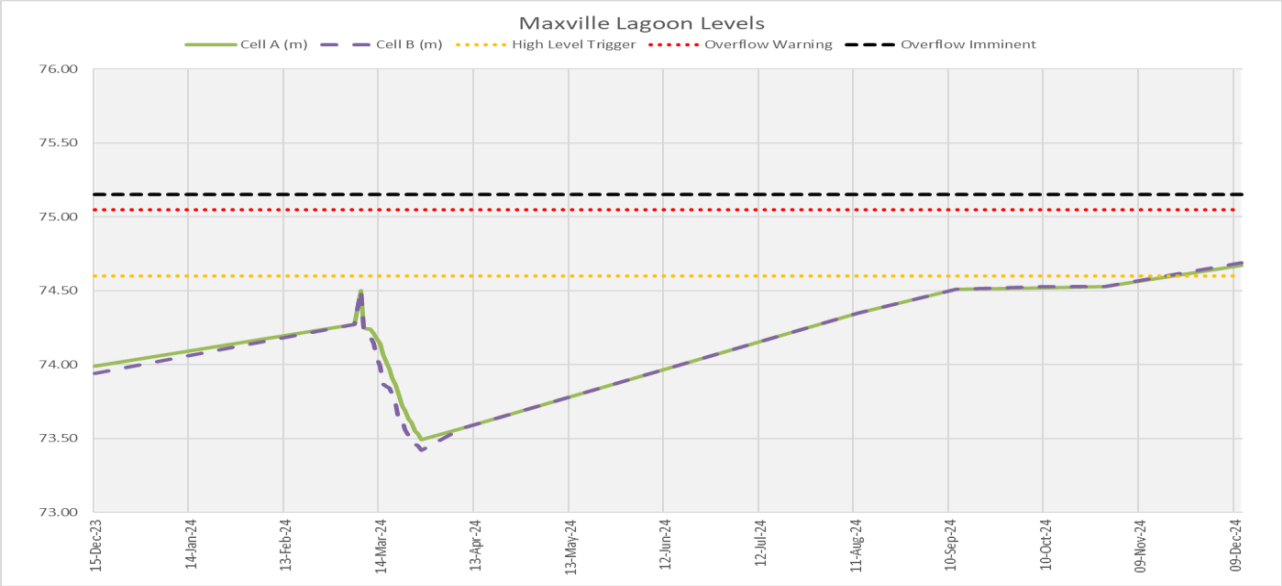
During the 2024 calendar year, 171,220m^3 of untreated raw sewage was directed to the Maxville Lagoon system for treatment, based on the metered flow at the influent piping prior to the influent structure. This raw sewage is mainly comprised of residential and commercial waste from the village of Maxville. The influent flows were found to be higher than the previous year's flows, possibly caused by higher-than-normal flows during the summer months (Jun-Sep). This trending is in-line with previous findings of steadily increasing since 2018, which is concerning as there has been limited growth within this system during this period. There was no additional effluent sewage sources into the system throughout this calendar year.

Figure 1: 5yrs Lagoon Influent Flow Comparison



The figure below displays the lagoon cell levels as measured throughout 2024. The top of the berm is represented by 76.00m and the bottom of the lagoon cell is represented by 73.00m. The levels were taken from each cell daily during the seasonal discharge and at least monthly outside of the discharge period when the cells were not covered by ice. A high-water level trigger has been set at 76% capacity or 74.60m, at which point the township will implement a contingency plan to prevent overflow. The only issues identified during the 2024 period, was a cell level discrepancy noted during the Spring Discharge caused by a minor blockage in the equalization piping and increasing sewage levels noted about the High-Level Trigger starting in December. Due to the high-level trigger exceedance in December, an inflatable plug was installed into the cell B overflow pipe as a precaution due to increasing levels. The operators are continuing to monitor and determine if more action will be required prior the discharge period.

Figure 2: Annual Lagoon Levels



i. Raw Sewage Monitoring

Condition 10 (3) of the ECA requires monthly raw sewage sampling at the Main Station for $CBOD_5$, Total Suspended Solids (TSS) and Total Phosphorus (TP). All sampling was completed as per conditions listed above; no additional samples were taken during 2024. Although the results have slightly varied from previous years for most parameters, the sewage strength appears to be consistent with previous finding indicating not much variation in the inflowing sewage strength. Overall, in the last 5 years the TSS appears to be steadily increasing, where TP and BOD_5 are fairly consistent. Please refer to Appendix A for a full summary of the raw quality analysis.

Table 1: Annual Average Raw Sewage Monitoring Comparison

Year	Annual Average Result				
	2020	2021	2022	2023	2024
BOD_5	81.8 mg/L	75.5 mg/L	104.6 mg/L	183.1 mg/L	83.9 mg/L
TSS	359.9 mg/L	355.5 mg/L	201.4 mg/L	170.5 mg/L	127 mg/L
TP	4.40 mg/L	5.27 mg/L	4.22 mg/L	4.12 mg/L	3.92 mg/L

ii. Pre-Discharge Monitoring

Condition 10(3) of the ECA requires the sampling and analysis of BOD_5, TSS and TP in each lagoon cell 14 days prior to discharge commencement, which is performed to ensure that the effluent limits of each parameter are met prior to discharge. The table below summarizes the dates samples were taken and sample results within the 14-day period. In 2024 a total of 2 sets of samples were taken prior to the

commencement of the discharge, all results indicated effluent sewage did not require additional treatment prior to discharge.

Table 2: Pre-Discharge Sampling Summary

Sampling Locations	Cell A			Cell B		
Effluent Parameters (mg/L)	BOD_5	TSS	TP	BOD_5	TSS	TP
ECA Effluent Limit (mg/L)	30	30	1	30	30	1
27-Feb-2024	9	27	0.36	14	25	0.41
28-Feb-2024	12	20	0.32	14	20	0.28

iii. Spring Discharge Monitoring

The 2024 annual spring discharge was a non-stop flow over 20-day period, within a calculated 457.1hrs. The discharge was started on Friday March 8, 2024 and was shut down on Wednesday March 27, 2024, with a total effluent volume of 163,307m^3 discharged into the West Branch of the Scotch River. Throughout the discharge, daily flow monitoring was completed to ensure the flows remained within the allowable 3:1 mixing ratio.

Table 3: Discharge Flow Summary

Date	Start Time	Total hours	River Flow (m^3/s)	Discharge Rate (m^3/s)	Mixing Ratio (3:1)	Discharge Amount (m^3)
	(from Sting Ray)	(calculated)	(calculated)	(calculated)	(calculated)	(from Sting Ray)
08-Mar-2024	8:52		0.795	0.125	6.36 :1	
09-Mar-2024	8:56	24.06	0.451	0.115	3.92 :1	9,425.66
10-Mar-2024	8:52	24.93	2.727	0.100	27.27 :1	4,782.77
11-Mar-2024	11:00	26.13	1.107	0.105	10.54 :1	8,908.10
12-Mar-2024	9:14	22.23	0.831	0.135	6.16 :1	8,047.69
13-Mar-2024	8:40	23.43	0.566	0.145	3.90 :1	10,634.20
14-Mar-2024	8:52	24.20	0.466	0.130	3.58 :1	11,929.65
15-Mar-2024	9:11	24.32	0.351	0.105	3.34 :1	11,496.87
16-Mar-2024	8:57	23.77	0.424	0.110	3.85 :1	8,910.39
17-Mar-2024	9:09	24.02	1.220	0.110	11.09 :1	9,294.78
18-Mar-2024	10:01	24.86	0.845	0.150	5.63 :1	9,635.39
19-Mar-2024	9:30	23.48	0.525	0.150	3.50 :1	11,822.67
20-Mar-2024	8:30	23.00	0.245	0.074	3.31 :1	11,622.20
21-Mar-2024	10:54	26.40	0.425	0.130	3.27 :1	7,054.58
22-Mar-2024	8:57	22.05	0.293	0.090	3.26 :1	10,285.05
23-Mar-2024	9:04	24.70	0.207	0.063	3.29 :1	8,288.61
24-Mar-2024	9:44	24.66	0.355	0.105	3.38 :1	5,427.31
25-Mar-2024	8:38	22.90	0.080	0.025	3.20 :1	8,378.84
26-Mar-2024	8:19	23.68	0.216	0.065	3.32 :1	2,437.93
27-Mar-2024	8:34	24.25	0.226			4,924.36

Condition 10(2) of the ECA requires that during the discharge the lagoon effluent is to be sampled at a minimum of 4 times per cell based on the % draw down. Samples are to be collected at the start of the discharge, at 33%, at 67% and on the final day. During the 2024 discharge, samples were collected 4 times from a single point at the discharge outfall, as the cell discharges are blended before being released. The effluent discharge was also tested for acute lethality, as per federal requirements. There was one exceedance for TSS at the beginning of the sampling period, although the average did not exceed the provincial limits. Please refer to section 7 and Appendix A for further information.

C. Groundwater and Surface Water Monitoring

Summary and Interpretation of all groundwater monitoring data

Condition 10(3) of the current ECA addresses the requirements of the monitoring program. Sampling is to be performed annually, semi-annually or three times per year depending on the parameter, as per Table 6-Groundwater Monitoring and Table 7-Surface Water Monitoring. JP2G Consultants in association with the Greer Galloway Group was retained by the Township to complete the annual monitoring program for the Maxville lagoon system. An annual report is submitted to the Ministry of Environment and to the Township upon completion each calendar year.

As per the 2023 report, *the groundwater flow direction is east-northeast, consistent with historical findings and results indicate that the lagoons are having some impacts on the groundwater in the area. However, the results were well within the compliance requirements of the MOECC B-7 guideline and no potable groundwater users are within the area immediately downgradient of the site. The surface water results indicated the lagoons do not appear to have significantly impacted the water quality in the West Branch of the Scotch River and the results observed in river were significantly outside the concentrations measured in the eastern cell of the lagoons*.

D. Operational Problems

A description of any operating problems encountered and corrected

Collection System:

- Intermittent sewage pump failure due to debris in wet well.
  - pulled pump and removed debris from pump impeller as required and placed back in service.
- Sewage pump taken out of service from Manor Station due to on-going electrical issues.
  - pump removed from January until October.
  - pump was replaced with new unit and only placed into service once new panel was installed in October.
- Repair to utility Bell servicing to restore alarm panel operation.
  - Manor Station repair completed in April.
  - Main Pumping Station completed in December.
- Intermittent wet well sensor issues
  - Main Pumping Station level sensor was cleaned and moved due to defective operation (July).
  - Manor Station level sensor operational issues caused by excessive foam in wet well causing echo loss (October-December).

Treatment System:

- Noted lagoon cell levels offset during annual discharge indicating possible blockage in interconnected piping.
  - contractor flushed piping to clear obstruction after annual discharge was competed.
- During influent structure inspection, noted that influent piping into cell A was blocked.
  - contractor flushed lines and removed obstructions.

E. Maintenance

Summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works

Collection System:

- Annual generator maintenance in March.
- Annual lifting device inspection in January.
- Annual inspection of force main signage and repair/replacement as required In October.
- Annual Wet Well cleaning and inspection completed in April.

- Monthly emergency generator testing as scheduled, no issues noted.
- Monthly alarm signal testing, as scheduled.
- Monthly pest control monitoring, no issues noted.
- Installed new control panel and SCADA System at Manor Station for pump control and trending purposes in October.
- Manor Station Hydro Meter was replaced by Hydro One in May.
- Manor Station back-up float system installed in October.

Treatment System:

- Annual flow meter calibration in April 2024
- Annual Influent chamber and piping cleaned and inspected.
- Monthly battery bank and generator inspection and maintenance completed as scheduled.
- Monthly pest control monitoring, no issues noted
- Removed vegetation growth inside berms as required.

F. Effluent Quality Control and Assurance

Summary of any effluent quality assurance or control measures undertaken in the reporting period

All sampling was performed within provincial guidelines by licensed operators, as per internal SOP's. Sampling schedules with sign off are also used to ensure that operational staff are aware of sampling requirements and timeline as per the ECA and Federal requirements.

Effluent quality control and assurances measures were undertaken by the MOE certified laboratory, Caduceon Environmental Laboratories and AGAT Laboratories, which conducts analysis for the Township.

G. Flow Measurement and Equipment Calibration

Summary of the calibration and maintenance carried out on all effluent monitoring equipment

Annual calibration of the flow sensing device (magmeter) at the Maxille Lagoons waws completed in April 2024 and the calibrations on all level detection units (pumping station levels and chemical tank levels), and flow sensing device at the Main Pumping Station (miltronics, etc) was completed by St- Laurent Instrumentation in November 2024.

H. Effluent Objectives

A description of efforts made, and results achieved in meeting the effluent objectives of condition 6

Sampling was completed once for acute lethality and four times throughout the discharge period for $CBOD_5$, TSS and TP, as per the system ECA and the Federal Wastewater System Regulation. The TSS annual average was found to exceed the ECA objectives and the Federal Wastewater System Regulation limits, due to the first sample results being elevated, but all remaining TSS sample results below the provincial objectives. All other sampling parameters results were well below the provincial ECA design objectives, the provincial ECA effluent limits, and the Federal Wastewater System Effluent Regulations limits, including the acute lethality results which indicated the sample was not acutely lethal.

Throughout the discharge per there was no notation of abnormal observances during sampling or an indication the sample had an increased suspended solid appearance. Please refer to the tables below for the summary results. A full discharge summary can be found in Appendix C.

Table 4: Provincial and Federal Effluent Sampling Results

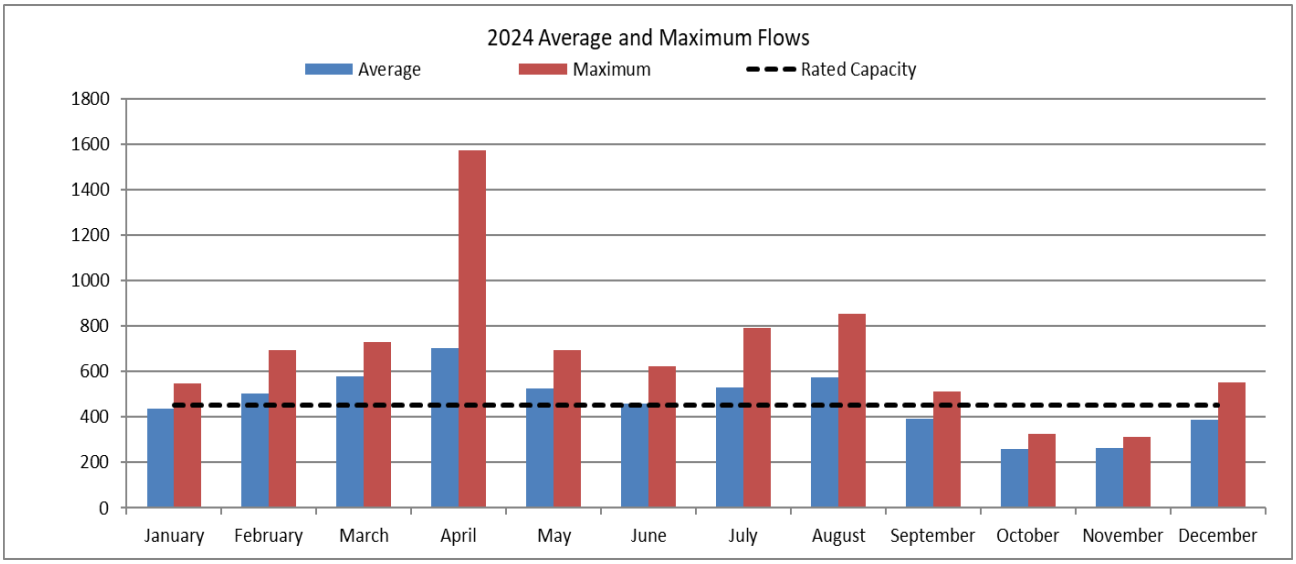
Effluent Parameter	$CBOD_5$	TSS	TP	pH	Acute Lethality
Provincial Effluent Limits (mg/L)	*30*	*30*	*1*	*6.0 - 9.5*	
Federal Effluent Limits (mg/L)	*25*	*25*			*50 %*
08-Mar-2024	10	46	0.60	7.22	
12-Mar-2024	8	20	0.42	7.16	
14-Mar-2024					40
19-Mar-2024	8	21	0.34	7.65	
27-Mar-2024	3	23	0.50	7.11	
2024 Maxville Average Concentration	**7.3**	**27.5**	**0.47**	**7.11-7.65**	**40**

Table 5: Provincial Calculated Waste Loading Results

Effluent Parameter	$CBOD_5$	TSS	TP
Provincial Average Waste Loading Limits (kgs)	4932	4932	164
2024 Maxville Average Waste Loading (kgs)	1184	4491	76

The annual average daily flow for 2024 was calculated to be 468m^3/day, and the maximum daily flow for the year was reported to be 1,572m^3/day. This represents 104% of the total rated capacity, which exceeds the rated capacity of this facility. Please refer to the chart below and to Appendix A for a full summary of flows, for the Maxville Sewage Treatment Works. The flow values displayed below are based on the lagoon influent flows, due to flow discrepancies noted in previous years.

Figure 3: Monthly Average and Maximum Flow Comparison



There were no reports made in regard to floating or settleable solids within the wastewater effluent. There were also no reports made that the effluent wastewater contained oil or any other substance that created a visible film, sheen, foam or discolouration to the receiving waters.

I. Lagoon Cell Sludge Accumulation

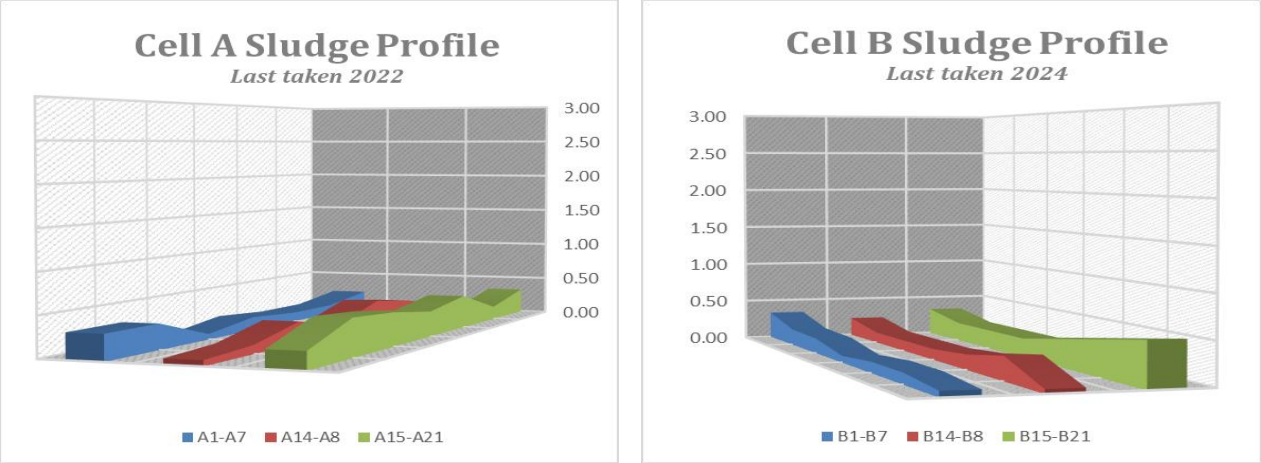
A tabulation of the volume of sludge generated in the reporting period, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed

A Sludge Management Plan created by McIntosh Pert and put into place in 2008. As part of the monitoring methods, it is recommended that sludge level should be taken annually.

Sludge levels in Cell A were collected on October 18, 2024 but levels in Cell B were not collected due to excessive vegetation and low sewage level making it impossible to access the cell for measurement. As per the report, no points exceeded the volume/depth elevation as developed through the plan, but a

warning trigger was exceeded at Cell B outfall and as such the sludge should be removed or dispersed as per recommendations. The Township is to determine if any action is required.

Figure 4: Lagoon Cell Sludge Levels



J. Complaints

Summary of any complaints received during the reporting period and any steps taken to address the complaints.

There was one complaint of sewer back up from a commercial user and upon further inspection it was determined to be an issue on owners side, which was corrected through the owner.

K. Bypass, Overflow, Spill or Abnormal Discharge Event

A summary of all bypass, overflow, spill, abnormal discharge events

There were no bypasses, overflows, spills or abnormal discharge events in 2024.

L. Other

Any other information the District Manager requires from time to time

i. Additional Equipment Summary: EOS 2000

The date of installation and removal of the EOS-2000 unit within each unit

The EOS unit was not installed into the lagoon cells during this reporting period. No additional monitoring in regard to operations was completed.

ii. Authorized System Alterations Summary

A summary of all alterations within the reporting period as authorized by the ECA, including all alterations that pose a significant drinking water threat.

As ECA 181-W601 schedule D, section 6.2.2 a real-Time control system was installed at the Manor lift station to replace the existing control panel, that was no longer repairable due to age of equipment and pump compatibility issues. The system installed was installed and commissioned in October 2024 and was integrated the existing SCADA system used by the Waterworks Department.

After the SCADA system was installed a new sewage pump was installed into the we well to replace the secondary pump that was damaged in January 2024 due to compatibility issues with the existing panel. This work was completed as repair to damaged equipment.

iii. Collection System Inspection, Repair and Remediation to Reduce System Overflows

A summary of all works completed within the reporting period as authorized by the ECA, including all projects undertaken, PPCP updates and an assessment of the effectiveness of these actions.

Work to reduce infiltration and inflow was continued through collection system flow monitoring by EVB technicians, which included monthly or bi-monthly sensor inspection and data collection. The sensors are

intermittently moved throughout the collection system to ensure a more comprehensive system overview. More targeted work to reduce inflow and infiltration is intended to be completed in the near future to help reduce the suspected inflow and infiltration into collection system as a part of working towards regaining compliance of the rated capacity at the Maxville Sewage Lagoons.

NORTH GLENGARRY WATER WORKS

WASTEWATER TREATMENT WORKS PERFORMANCE RESULTS

Municipality: North Glengarry
Year: 2024
Project: Maxville WWTP
Receiving Stream: West Branch Scotch River
Description: 1 Pumping Station, 2 Facultative Cells
Seasonal Discharge with Phosphorous Removal
Design Capacity: 450 m^3/day

MONTH	Flows						Biochemical Oxygen Demand				Suspended Solids			
	Total Influent Flow (m^3)	Average Daily Influent Flow (m^3)	Maximum Daily Influent Flow (m^3)	Total Effluent Flow (m^3)	Average Daily Effluent Flow (m^3)	Maximum Daily Effluent Flow (m^3)	Average Raw BOD_5 (mg/L)	Average Effluent $CBOD_5$ (mg/L)	Percent Removal (%)	Average $CBOD_5$ Loading (kgs)	Average Raw TSS (mg/L)	Average Effluent TSS (mg/L)	Percent Removal (%)	Average TSS Loading (kgs)
January	13,486	435	548				115				140			
February	14,606	504	693				24				114			
March	17,976	580	729	163,307	8,595	11,930	68	7.3	89	1,184	280	27.5	90	4,490.9
April	21,150	705	1,572				57				195			
May	16,314	526	694				132				275			
June	13,753	458	622				187				1,000			
July	16,374	528	792				64				480			
August	17,849	576	854				27				360			
September	11,709	390	511				17				115			
October	8,084	261	324				110				460			
November	7,907	264	314				0				0			
December	12,013	388	552				71				440			
Total	171,220			163,307						1,184				4,491
Average	14,268	468		163,307	8,595		73	7	89		322	28	90	
Maximum	21,150		1,572	163,307		11,930	187	7	89		1,000	28	90	
Criteria		***450***						***30***		***4932***		***30***		***4932***

NORTH GLENGARRY WATER WORKS

WASTEWATER TREATMENT WORKS PERFORMANCE RESULTS

2024

MONTH	Phosphorus				Total Kjeldahl Nitrogen			Nitrite			Nitrate		
	Average Raw TP (mg/L)	Average Effluent TP (mg/L)	Percent Removal (%)	Average TP Loading (kgs)	Average Raw TKN (mg/L)	Average Effluent TKN (mg/L)	Percent Removal (%)	Average Raw Nitrite (mg/L)	Average Effluent Nitrite (mg/L)	Percent Removal (%)	Average Raw Nitrate (mg/L)	Average Effluent Nitrate (mg/L)	Percent Removal (%)
January	2.6												
February	2.0												
March	2.1	0.47	78	164									
April	2.1												
May	5.9												
June	11.0												
July	4.5												
August	9.4												
September	0.9												
October	3.6												
November	0.0												
December	4.7												
Total				164									
Average	4.07	0.47	78										
Maximum	11.00	0.47	78										
Criteria	9.70	0.38											

NORTH GLENGARRY WATER WORKS

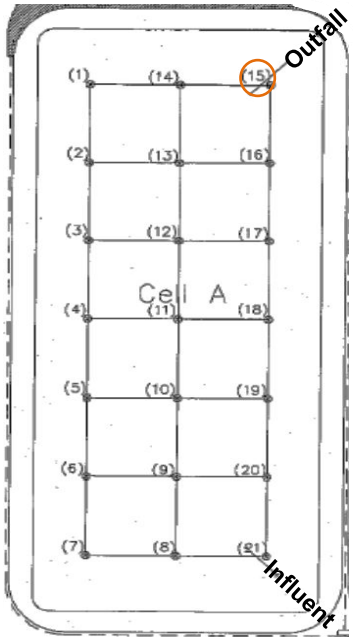
WASTEWATER TREATMENT WORKS PERFORMANCE RESULTS

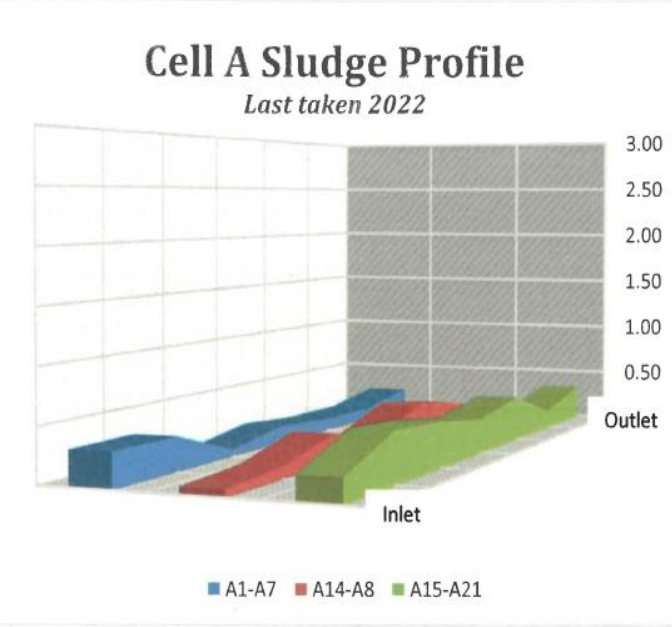
2024

MONTH	Total Dissolved Solids			O-Phosphate			Ammonia			E-Coli		
	Average Raw TDS (mg/L)	Average Effluent TDS (mg/L)	Percent Removal (%)	Average Raw O-Phosphate (mg/L)	Average Effluent O-Phosphate (mg/L)	Percent Removal (%)	Average Raw Ammonia (mg/L)	Average Effluent Ammonia (mg/L)	Percent Removal (%)	Average Raw E.Coli (mg/L)	Average Effluent E.Coli (mg/L)	Percent Removal (%)
January												
February												
March												
April												
May												
June												
July												
August												
September												
October												
November												
December												
Total												
Average												
Maximum												
Criteria												

2024 Annual Cell A Sludge Reports

Maxville Lagoon Cell A-Sample Point Sludge Volume (m^3)																						Total Sludge Volume (m^3)	Total Sludge Volume (%)	Warning Trigger [2]
Date	1	?	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21			
06-Oct-14	521	395	291	271	291	395	427	438	81	446	162	344	284	438	616	437	479	458	333	500	403	8,010	32	
06-Nov-15	379	437	1478	229	541	437	498	369	324	324	527	628	628	600	379	541	749	645	1082	749	379	11,923	47	
07-Nov-16	403	125	458	333	229	562	142	369	324	446	446	446	446	507	24	562	354	458	458	250	261	7,600	30	
29-Oct-19	687	458	458	500	229	500	332	323	527	425	648	547	344	738	569	604	604	604	562	770	853	11,279	45	
28-Oct-20	450	437	437	604	541	437	616	600	911	486	182	527	324	369	24	604	541	541	333	333	877	10,174	40	
11-Nov-22	521	250	250	354	146	666	759	161	223	547	243	648	446	161	759	354	874	666	874	978	521	10,400	41	
19-Oct-23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18-Oct-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	



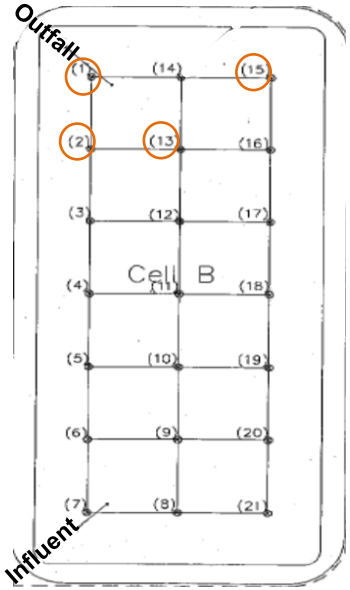


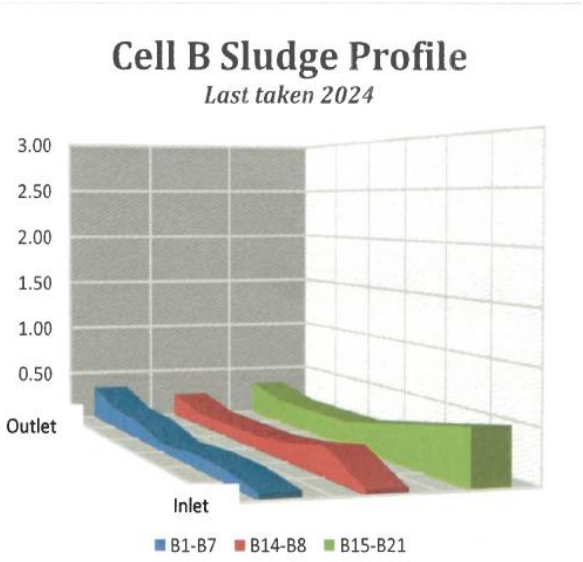
Triggers and Suggested Actions

- Sludge depth completed in November 2022.
- In 2022 Cell A was at 41% of allowable volume, which is a 1% decrease from 2020.
- No single point location exceeded sludge depth triggers in each cell.
- Sludge Depth Warning noted at sample site 15 near the outfall (depth exceeded 0.25m)
  - *Removal or dispersion of sludge may be required.*

2024 Annual Cell B Sludge Reports

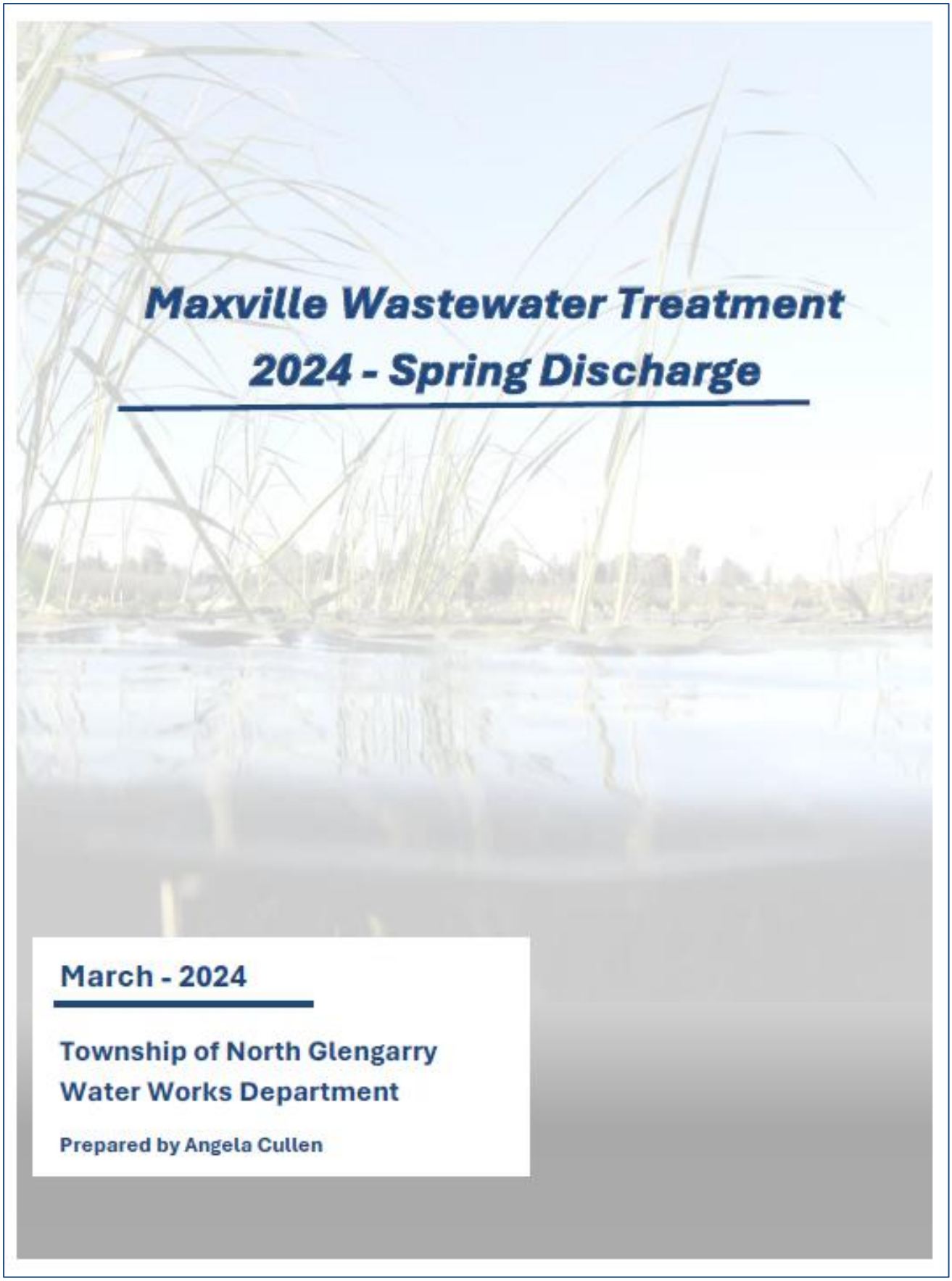
Maxville Lagoon Cell B-Sample Point Sludge Volume (m^3)																						Total Sludge Volume (m^3)	Total Sludge Volume (%)	Warning Trigger [2]
Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21			
06-Oct-14	640	333	666	479	541	395	593	254	263	263	81	101	284	392	403	520	458	187	479	208	593	8,133	32	
06-Nov-15	640	458	333	333	229	229	735	369	225	20	243	344	344	623	640	354	125	354	770	229	261	7,857	31	
07-Nov-16	284	354	354	562	354	562	521	277	243	344	344	547	446	623	166	21	562	562	354	354	877	8,710	35	
29-Oct-19	924	125	333	562	291	395	379	969	648	425	324	446	385	969	616	333	500	562	500	708	379	10,772	43	
28-Oct-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14-Nov-22	806	541	645	812	812	624	735	554	628	527	628	527	527	484	782	708	645	770	541	645	972	13,911	55	Total Sludge Volume is Elevated
19-Oct-23	616	895	1166	645	645	645	616	715	324	628	628	425	527	715	735	749	957	749	645	541	853	14,420	57	Total Sludge Volume is Elevated
18-Oct-24	782	416	375	167	271	271	166	115	567	365	263	263	263	530	782	479	479	479	687	895	1256	9,870	39	





Triggers and Suggested Actions

- Sludge depth completed in October 2024
- Currently Cell A is at 39% of allowable volume, which is a 18% decrease from 2023.
- No single point location exceeded sludge depth triggers in each cell.
- Sludge Depth Warning noted at sample site 1,2,13, & 15 near the outfall (depth exceeded 0.25m)
  - ➢ *Removal or dispersion of sludge may be required.*


Maxville Wastewater Treatment
2024 - Spring Discharge
March - 2024
Township of North Glengarry
Water Works Department
Prepared by Angela Cullen

2024 Annual Maxville Spring Discharge Report

Discharge Summary

The annual spring discharge met all requirements of set out in ECA#5368-8PPQA2 under section 9 (Special Operations), as listed below.

- The discharge was targeted to start during Spring peak flows as observed in the West Branch of the Scotch River.
- The annual discharge continuously run over 20 days from Friday, March 8, 2024, until Wednesday, March 27, 2024.
- The discharge effluent flows were maintained to ensure discharge to river mixing ratio was never less than 3.2:1.

Summaries of the annual spring discharge totals and daily flow observations can be found in the tables listed below.

Table 1: Maxville Annual Spring Discharge Summary

Parameter	Total
Total Days Discharged	20
Total Hours Discharged	457.1
Total Amount Discharge to Creek (m^3)	163,307
Average Daily Flow to Discharge (m^3)	8,595

Table 2: Daily Maxville Discharge Flowy Summary

Date	Start Time (from Sting Ray)	Total hours (calculated)	River Flow m^3/s (calculated)	Discharge Rate m^3/s (calculated)	Mixing Ratio (3:1) (calculated)		Discharge Amount m^3 (from Sting Ray)
08-Mar-2024	8:52		0.795	0.125	6.36	:1	
09-Mar-2024	8:56	24.06	0.451	0.115	3.92	:1	9,425.66
10-Mar-2024	8:52	24.93	2.727	0.100	27.27	:1	4,782.77
11-Mar-2024	11:00	26.13	1.107	0.105	10.54	:1	8,908.10
12-Mar-2024	9:14	22.23	0.831	0.135	6.16	:1	8,047.69
13-Mar-2024	8:40	23.43	0.566	0.145	3.90	:1	10,634.20
14-Mar-2024	8:52	24.20	0.466	0.130	3.58	:1	11,929.65
15-Mar-2024	9:11	24.32	0.351	0.105	3.34	:1	11,496.87
16-Mar-2024	8:57	23.77	0.424	0.110	3.85	:1	8,910.39
17-Mar-2024	9:09	24.02	1.220	0.110	11.09	:1	9,294.78
18-Mar-2024	10:01	24.86	0.845	0.150	5.63	:1	9,635.39
19-Mar-2024	9:30	23.48	0.525	0.150	3.50	:1	11,822.67
20-Mar-2024	8:30	23.00	0.245	0.074	3.31	:1	11,622.20
21-Mar-2024	10:54	26.40	0.425	0.130	3.27	:1	7,054.58
22-Mar-2024	8:57	22.05	0.293	0.090	3.26	:1	10,285.05
23-Mar-2024	9:04	24.70	0.207	0.063	3.29	:1	8,288.61
24-Mar-2024	9:44	24.66	0.355	0.105	3.38	:1	5,427.31
25-Mar-2024	8:38	22.90	0.080	0.025	3.20	:1	8,378.84
26-Mar-2024	8:19	23.68	0.216	0.065	3.32	:1	2,437.93
27-Mar-2024	8:34	24.25	0.226				4,924.36

Sampling Summary

All pre-discharge monitoring requirements were met prior to commencement, as listed in Table 4 under condition 10 (Monitoring and Recording),

- 1 set of samples were taken from each cell to be discharged on February 27, 2024, and February 28, 2024.
- CBODs, TSS and TP results were found to be below the effluent limits.

Table 3: Pre-Discharge Sampling Summary

Parameter	Adverse Samples	# Samples Taken	ECA Parameter Objectives (mg/L)	ECA Parameter Limits (mg/L)	Average Reading (mg/L)	Maximum Reading (mg/L)
CBODs	N	4	25	30	11	14
T.S.S	N	4	25	30	24	27
T.P.	N	4	0.8	1	0.34	0.41

The discharge was started 9 days after the pre-monitoring sampling. All discharge monitoring requirements were met as listed in Table 5 under condition 10 (Monitoring and Recording).

- Sampling was completed on 4 occasions at 3 separate locations (upstream of discharge, at the discharge outfall and 500m downstream of discharge confluence area).
- All sampling results were well below the provincial objectives and limits, but TSS did exceed the federal limits.
  - The TSS annual average result was below the ECA limit of 30mg/L, but it did exceed the federal limit of 25mg/L.
- Sampling was also completed for acute lethality to meet the requirements for the Federal Wastewater Systems Effluent Regulation. The sample result indicated 40% mortality, meaning the effluent was not acutely lethal to rainbow trout.

Table 4: Discharge Sampling Summary

Parameter	Adverse Samples	# Samples Taken	ECA Parameter Objectives (mg/L)	ECA Parameter Limits (mg/L)	Average Reading (mg/L)	ECA Average Waste Loading Limits (Kgs)	Average Waste Loading (kgs)	Mortality %
Upstream								
CBODs	n/a	4	n/a	n/a	3.0	n/a	n/a	n/a
TSS	n/a	4	n/a	n/a	15.3	n/a	n/a	n/a
TP	n/a	4	n/a	n/a	0.21	n/a	n/a	n/a
pH	n/a	4	n/a	n/a	7.34 – 7.89*	n/a	n/a	n/a
Discharge								
CBODs	N	4	25	30	7.3	4932	1183.9	n/a
TSS	N	4	25	30	27.5	4932	4490.9	n/a
TP	N	4	0.8	1	0.47	164	75.94	n/a
pH	N	4	6.0 - 9.5		7.11 - 8.19*	n/a	n/a	
Lethality	N	1	n/a	n/a	n/a	n/a	n/a	40
Downstream								
CBODs	n/a	4	n/a	n/a	3.0	n/a	n/a	n/a
TSS	n/a	4	n/a	n/a	16.8	n/a	n/a	n/a
TP	n/a	4	n/a	n/a	0.09	n/a	n/a	n/a
pH	n/a	4	n/a	n/a	7.19 – 7.77*	n/a	n/a	n/a

*Minimum and maximum values, not average

Table 5: Daily Discharge Monitoring and Sampling Results Summary

Date	pH	Dissolved Oxygen	Temp.	TSS Sample	TSS Loading	$CBOD_5$ Sample	$CBOD_5$ Loading	TP Sample	TP Loading	Acute Lethality
		mg/L	°C	mg/L	kg	mg/L	kg	mg/L	kg	%
	(grab sample)	(grab sample)	(grab sample)	(grab sample)	(calculated)	(grab sample)	(calculated)	(grab sample)	(calculated)	(grab sample)
8-Mar-24	7.22	7.73	5	46		10		0.60		
9-Mar-24	6.61	4.88	5.8		433.58		94.26		5.66	
10-Mar-24	6.67	3.09	5.2		220.01		47.83		2.87	
11-Mar-24	6.90	6.62	5.8		409.77		89.08		5.34	
12-Mar-24	7.16	7.56	6.1	20	160.95	8	64.38	0.42	3.38	
13-Mar-24	7.27	7.16	8.1		212.68		85.07		4.47	40
14-Mar-24	7.25	7.66	6.3		238.59		95.44		5.01	
15-Mar-24	7.36	6.72	10.3		229.94		91.97		4.83	
16-Mar-24	7.27	6.42	8.5		178.21		71.28		3.74	
17-Mar-24	7.17	7.14	8.4		185.90		74.36		3.90	
18-Mar-24	7.56	7.90	8.0		192.71		77.08		4.05	
19-Mar-24	7.65	9.02	3.4	21	248.28	8	94.58	0.34	4.02	
20-Mar-24	7.89	8.66	6.2		244.07		92.98		3.95	
21-Mar-24	8.42	9.85	4.8		148.15		56.44		2.40	
22-Mar-24	8.61	8.36	5.4		215.99		82.28		3.50	
23-Mar-24	8.58	7.75	3.3		174.06		66.31		2.82	
24-Mar-24	8.57	8.79	6.9		113.97		43.42		1.85	
25-Mar-24	8.66	7.12	4.9		175.96		67.03		2.85	
26-Mar-24	7.17	7.36	5.3		51.20		19.50		0.83	
27-Mar-24	7.11	7.39	7.4	23	113.26	3	14.77	0.5	2.46	
ECA Limit	*6.0-9.5*			*30*	*4932*	*30*	*4932*	*1*	*164*	*50*
# Samples	20	20	20	*4*	*19*	*4*	*19*	*4*	*14*	*1*
Minimum	**6.61**	**3.09**	**3.30**	**20**	**51.2**	**3**	**14.8**	**0.34**	**0.83**	40
Average	**7.56**	**7.36**	**6.26**	**28**	**207.8**	**7**	**70.0**	**0.47**	**3.57**	40
Maximum	**8.66**	**9.85**	**10.30**	46	**433.6**	**10**	**95.4**	**0.60**	**5.66**	40

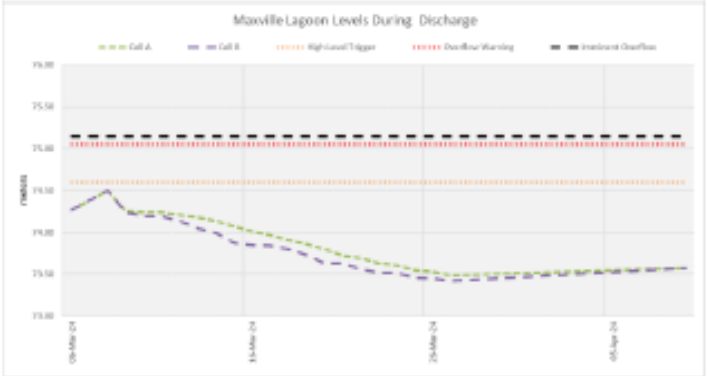
Lagoon Levels

Lagoon cell levels were measured from Cell A and Cell B in March, prior to discharge commencement, and cell levels were monitored daily throughout the discharge period and summarized in Table 6 below. During the discharge it was noted a cell level discrepancy, but levels did equalize.

Table 6: Lagoon Cell Level Summary

Discharge Period		
Parameters	Cell A	Cell B
	Cell Level (m)	Cell Level (m)
Discharge Start	74.50	74.50
Discharge End	73.49	73.42
Total Difference	1.01	1.08
Average Daily Discharge	-0.04	-0.04

Figure 1: Lagoon Discharge Levels

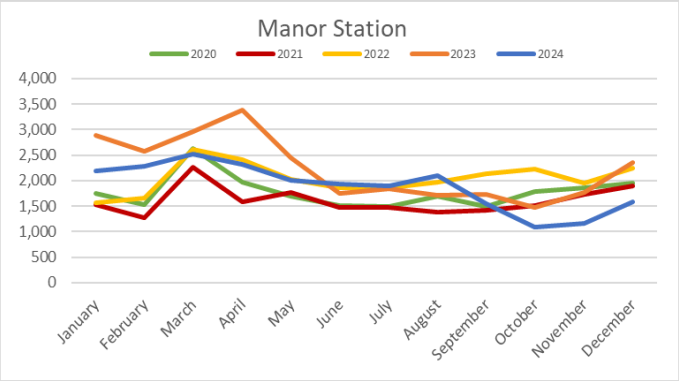


Observed Issues

Observed issues noted during this discharge period were minor in nature and include the following:

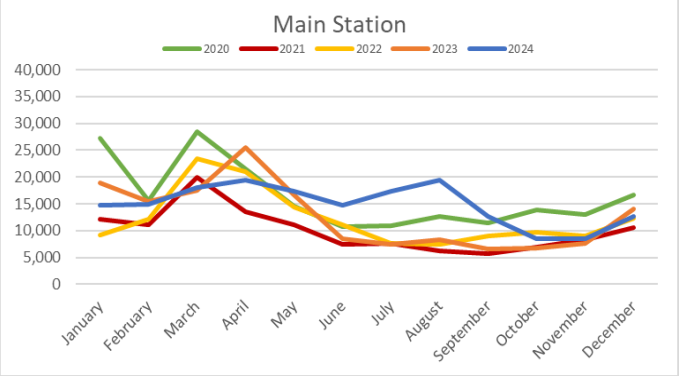
- Minor issues with data collection and flow loss, 1 minute filter was applied to compensate for trending drop-out.
- As per operational staff, foam observed at the beginning of the discharge near the outfall, caused by effluent flow velocity and discharge outfall configuration. It was only noted on two occasions, March 9 and March 11.
  - foam never noted near mixing zone.
- No noted issues in ERIS e-logs.

System Station Flow Comparisons



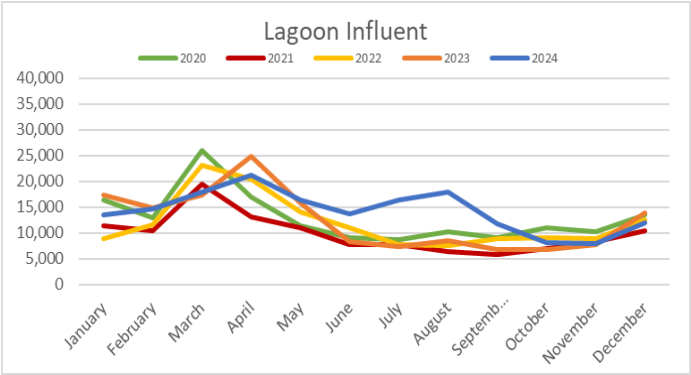
Manor Station

Month	2020	2021	2022	2023	2024
January	1,755	1,531	1,562	2,894	2,184
February	1,530	1,272	1,654	2,566	2,287
March	2,633	2,259	2,605	2,952	2,511
April	1,966	1,588	2,401	3,380	2,310
May	1,695	1,766	2,017	2,437	1,999
June	1,501	1,466	1,859	1,750	1,937
July	1,497	1,465	1,863	1,844	1,888
August	1,693	1,375	1,963	1,704	2,094
September	1,500	1,417	2,127	1,724	1,552
October	1,786	1,507	2,233	1,475	1,081
November	1,857	1,733	1,943	1,762	1,154
December	1,955	1,903	2,244	2,360	1,582
Annual	21,367	19,284	24,471	26,850	22,579



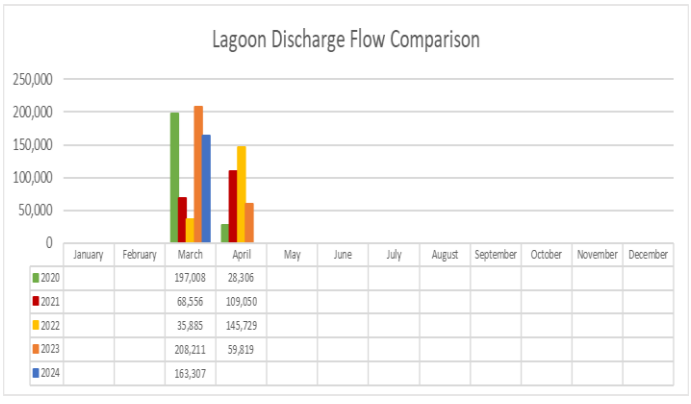
Main Station

Month	2020	2021	2022	2023	2024
January	27,201	12,056	9,161	18,864	14,699
February	15,535	11,010	12,113	15,457	14,965
March	28,496	19,874	23,348	17,430	17,953
April	21,512	13,432	21,067	25,509	19,448
May	14,503	11,144	14,431	16,720	17,324
June	10,729	7,483	11,150	8,514	14,672
July	10,843	7,525	7,560	7,431	17,300
August	12,729	6,291	7,504	8,280	19,504
September	11,457	5,773	8,924	6,559	12,651
October	13,929	6,924	9,673	6,665	8,475
November	12,937	8,289	8,993	7,692	8,433
December	16,586	10,500	12,276	14,105	12,631
Annual	196,457	120,301	146,199	153,227	178,055



Lagoon Influent

Month	2020	2021	2022	2023	2024
January	16,293	11,389	8,918	17,382	13,486
February	12,904	10,444	11,502	14,799	14,606
March	26,004	19,383	23,010	17,428	17,976
April	17,037	13,113	20,501	24,888	21,150
May	11,349	10,914	14,075	15,863	16,314
June	9,161	7,697	11,090	8,398	13,753
July	8,784	7,663	7,812	7,348	16,374
August	10,186	6,305	7,453	8,410	17,849
September	9,085	5,788	8,872	6,704	11,709
October	10,909	6,987	9,019	6,741	8,084
November	10,252	8,288	8,811	7,687	7,907
December	13,577	10,442	12,552	13,902	12,013
Annual	155,542	118,413	143,615	149,550	171,220



Lagoon Effluent

Month	2020	2021	2022	2023	2024
January					
February					
March	197,008	68,556	35,885	208,211	163,307
April	28,306	109,050	145,729	59,819	
May					
June					
July					
August					
September					
October					
November					
December					
Annual	225,314	177,606	181,614	268,031	163,307

STAFF REPORT TO COMMITTEE OF THE WHOLE **Report No: PW-2025-10**

April 23, 2025

From: Timothy Wright, Director of Public Works

RE: Public Works Workplan Update Q1 2025

Recommended Motion:

THAT The Committee of the Whole receives report PW-2025-10 Public Works Workplan Update Q1 2025 for information purposes only;

Contents

Background / Analysis:

First Quarter Operations

1. Roads Department

Winter Operations and Severe Weather Response

This past winter in North Glengarry was marked by persistent cold temperatures, multiple heavy snowfalls, periods of freezing rain, and frequent freeze-thaw cycles. January brought significant snow accumulation and icy conditions, with high winds at the end of the month. February saw several major snow events, leading to deep snowbanks and ongoing cold, while March featured continued freeze-thaw cycles, occasional additional snowfalls, and gradual warming toward the end of the season. These conditions placed extraordinary demands on the Roads Department, requiring extended hours and mobilization of all available resources.

Significant Weather Event

The Township of North Glengarry was under a formal Significant Weather Event declaration beginning on February 16, 2025, due to heavy snowfall, drifting snow, and whiteout conditions caused by high winds. The declaration was made officially at 11:28 a.m. on February 16, 2025, in accordance with Ontario Regulation 239/02. The Significant Weather Event declaration was ended on February 19, 2025. During this period, residents were advised to avoid unnecessary travel and to expect delays in the clearing of sidewalks, parking lots, and roadways.

Key impacts of winter weather on operations included:

- **Operational Strain and Delays:**

  The intensity and frequency of storms occasionally overwhelmed the department's ability to meet the Ontario Regulation 239/02 Minimum Maintenance Standards for Municipal Roads. During officially declared significant weather events, staff worked extended shifts to restore service levels as quickly as possible. Communications with residents emphasized safety and provided updates on progress and expected delays.

- **Snow Accumulation and Plowing:**

  Multiple snow events led to significant accumulation, necessitating repeated plowing of roads and sidewalks. The high volume and frequency of snow sometimes resulted in delays to regular plowing schedules, with some roads and residential areas temporarily inaccessible. In certain cases, snow removal equipment inadvertently blocked driveways or private walkways, or caused damage to property such as mailboxes and fences. The department responded promptly to these reports, dispatching crews for repairs and adjusting procedures to minimize recurrence.

- **Ice Control and Sidewalk Safety:**

  The freeze-thaw cycles created persistent icy conditions on sidewalks and roadways. The department increased salt and sand applications, particularly in high-risk areas identified by residents and identified by the Roads Forepersons.

- **Wind and Storm Damage:**

  High winds during storms caused trees to fall near hydro wires and across roadways. The department coordinated with utility providers and undertook emergency tree removal to restore safety and access.

Road and Sidewalk Repairs

- **Potholes and Asphalt Damage:**

  Repeated freeze-thaw cycles and heavy equipment use led to an increase in potholes and

dips, particularly on Victoria Street West and Elgin Street East. Temporary cold patch repairs were made, with plans for more permanent asphalt work as the weather improves.

- **Sidewalk Maintenance:**
  Sidewalks were monitored for ice and damage, with additional salting and repairs performed in response to public concerns. In some cases, sidewalk snow-clearing equipment inadvertently deposited snow onto private property, which was addressed through procedural reviews and operator training.

Garbage and Recycling Collection

- **Service Disruptions:**
  Severe winter weather repeatedly delayed or disrupted garbage and recycling collection. Snowbanks and unplowed streets made access difficult for collection vehicles. The department worked closely with contractors to ensure missed pickups were rectified, often increasing the allowable bag limit for affected residents and providing regular updates through municipal communication channels.

Other Notable Activities

- Tree removal following wind events.
- Streetlight repairs, particularly in Glen Sandfield.
- Repairs to damaged culverts and property impacted by snow removal operations.

2. Waterworks Department

Emergency Repairs and Maintenance

- **Water Main Breaks:**
  The department responded to several water main breaks, often complicated by frozen ground and snow cover. Notable incidents occurred on Macdonald Blvd and on Main Street South, requiring excavation, live leak repairs, and restoration of water service. Frozen hydrants were thawed using hot water to ensure fire protection capability.

- **Valve and Meter Repairs:**

  Routine inspections and repairs were conducted on water meters and line posts, with some requiring replacement due to damage from winter conditions or snow removal equipment. High water consumption complaints were investigated, typically traced to leaks or faulty fixtures within private residences.

Sewer and Wastewater Issues

- **Backups and Blockages:**

  The department addressed multiple sewer backups, often exacerbated by the infiltration of stormwater during rapid thaws. Crews flushed mains, cleared obstructions, and coordinated with contractors for complex repairs. Pump stations required maintenance, including reattaching chains and clearing impellers clogged with debris.

Community Engagement

- Residents reported issues such as low/high water pressure, outside leaks, and damaged infrastructure. The Waterworks team responded with site visits, repairs, and follow-up to ensure service restoration and infrastructure integrity.

3. Wastewater Treatment

Routine Operations

- **Daily Operations:**

  Both Alexandria and Maxville lagoons operated under regular schedules, with daily routines including sampling, chemical dosing (notably PAS-8 coagulant), and equipment maintenance. Data was consistently recorded in SharePoint and performance binders.

- **Weather-Related Challenges:**

  Heavy snowfall and ice accumulation required additional maintenance, such as clearing snow from solar panels and facility access points. Despite these challenges, all regulatory sampling and compliance activities were maintained.

Maintenance and Upgrades

- Calibration of pH probes and chlorine analyzers.
- Housekeeping, pest control, and solar panel maintenance.
- Delivery and transfer of coagulant chemicals.
- Generator and electrical system checks.
- Repairs and adjustments to chemical dosing equipment.

4. Summary Table of Key Activities

Department	Major Activities Q1 2025
Roads & Landfill	Intensive snow removal, mailbox and property repairs, pothole patching, sidewalk maintenance, garbage collection issue resolution
Waterworks	Water main break repairs, meter/valve maintenance, sewer backup resolution, hydrant servicing
Wastewater	Daily lagoon routines, chemical dosing, compliance sampling, equipment calibration and maintenance

5. Challenges and Community Issues

- **Severe Winter Weather:**

  The frequency and severity of storms created persistent operational challenges, including delayed plowing, blocked access, and increased infrastructure damage. The department's response required extended shifts, rapid redeployment of resources, and ongoing communication with residents to manage expectations and ensure safety.

- **Infrastructure Strain:**

  Aging infrastructure, combined with harsh winter conditions, led to frequent water main breaks and sewer issues, requiring rapid response and ongoing maintenance.

- **Contractor Performance:**
  Repeated complaints about missed garbage/recycling pickups highlighted the need for improved contractor oversight, especially during inclement weather.

Capital Projects and Policy Work

At this time Public Works Department has made notable headway on its infrastructure upgrade agenda, which remains the cornerstone of this year's workplan.

We had anticipated that in a regular year we would have been able to self-perform some of the preparation work to start consolidating staff at the 265 Industrial Boulevard location. Unfortunately, due to the significant winter weather experienced this has been impossible and we have made little progress in this regard. Despite this we have worked with contractors to start the removal of materials from the location and have finalized the purchase of the leased loader to facilitate operations at the location. The major maintenance cycle for the Kenyon Grader, including tire replacement, has also been completed, directly supporting the department's ability to deliver on resurfacing and grading projects as the weather improves.

A suite of infrastructure upgrades is scheduled for the coming summer, with progress tracking closely to the established timelines. The overlays for McCormick Road, Concession 4, William Street and East Boundary, and the GSP parking lot are all on course for completion in late summer. These projects will significantly improve driving conditions, extend the life of municipal roads, and enhance safety for residents and visitors alike.

The Rolland Massie Crossing regrade with the use of federal funds will finalize the work at that crossing and the sidewalk maintenance program will see around 650 linear meters of sidewalks replaced.

Facility improvements are another area of emphasis. Heating and general upgrades to the 265 Industrial Boulevard Public Works Building are advancing as mentioned, with expected staff moves in late summer/early autumn. Both the Kenyon and Lochiel garage updates are in the planning stages with the aim to provide safe, efficient workspaces for staff and ensure that critical equipment is housed in optimal conditions.

The Stormwater management and culvert relining programs are also in the planning stages, with completion anticipated in late summer. These upgrades are essential for reducing flood risk, meeting ministry requirements and maintaining the integrity of roadways and adjacent properties. The spring gravel resurfacing program starting soon will address rural road conditions and support safer transportation throughout the municipality.

The department is also advancing several water and wastewater infrastructure projects. While some, such as the Glen Robertson Water Treatment Plant building extension and watermain refurbishment are only in the planning stages this year, and construction is scheduled for 2026, immediate priorities like the valve and hydrant replacement, sewer relining of 200 meters of sewer main, and process equipment upgrades are on track for completion later this year. These investments are crucial for ensuring reliable water supply, effective wastewater management, and compliance with regulatory standards.

1. *Risk Factors and Mitigation Strategies*

Key risks to the infrastructure program include supply chain delays for construction materials, contractor availability, and weather-related disruptions. To mitigate these risks, the department has prioritized early procurement, maintained flexible scheduling, and fostered strong relationships with contractors and suppliers. Regular progress reviews allow for rapid response to emerging issues, while contingency plans are in place for projects with complex dependencies or longer timelines such as the Lagoon cleaning and upgrade.

Alternatives:
N/A

Financial Implications:
N/A

Attachments & Relevant Legislation:

Others Consulted:

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Reviewed and Approved by:
Sarah Huskinson, CAO/Clerk

STAFF REPORT TO COMMITTEE OF THE WHOLE Report No: PW-2025-11

April 23, 2025

From: Timothy Wright, Director of Public Works

RE: Minimum Maintenance Standards

Recommended Motion:

THAT The Committee of the Whole receives report PW-2025-11 Minimum Maintenance Standards for information purposes only;

Background / Analysis:

The Minimum Maintenance Standards for Municipal Highways: Purpose, Implementation, and Benefits

Ontario's municipal roadways serve as vital arteries for communities across the province, facilitating the movement of people, goods, and services. The Minimum Maintenance Standards for Municipal Highways (MMS), established under Ontario Regulation 239/02 and subsequently amended, provides a comprehensive framework that governs how municipalities maintain these critical infrastructure assets. This report examines the purpose, scope, and implementation of the MMS, while highlighting the significant benefits municipalities can derive from adopting these standards.

Origins and Purpose of the MMS

The Minimum Maintenance Standards for Municipal Highways were developed as a Provincial response to municipalities' requests for relief from onerous court decisions related to highway

maintenance [1]. The primary purpose of the MMS is to clarify the scope of the statutory defense available to a municipality under clause 44(3)(c) of the Municipal Act, 2001[2]. This provides municipalities with a clear framework for meeting their obligations under Section 44(1) of the Municipal Act, which states that a municipality with jurisdiction over a highway or bridge "shall keep it in a state of repair that is reasonable in the circumstances, including the character and location of the highway or bridge"[3].

The MMS exists as one of three alternative legal defenses which a municipality may assert when sued for "something wrong with the highway"[4]. It's important to note that compliance with these standards is optional. Municipalities may choose not to comply for various reasons, including lack of budgetary resources, equipment limitations, or policy decisions [4]. However, municipalities that do comply gain significant legal protection and operational clarity.

Legal Definitions of a Highway

Understanding the MMS begins with clarifying what constitutes a "highway" under the regulation. According to the definitions provided, a "highway" means a common and public highway maintained by the municipality and includes any bridge, trestle, viaduct, or other structure forming part of the highway [5]. This comprehensive definition ensures that municipalities understand the full scope of their responsibilities.

The regulation further defines key components of highways:

- "Roadway" refers to the part of the highway that is improved, designed, or ordinarily used for vehicular traffic, but does not include the shoulder [5].
- "Shoulder" means the portion of a highway that provides lateral support to the roadway and may accommodate stopped motor vehicles and emergency use [6].
- "Surface" means the top of a sidewalk, roadway, or shoulder, with this definition having been expanded to include sidewalks in recent amendments [7].

Additionally, Ontario Regulation 366/18 introduced new definitions for "bicycle facility" and "bicycle lane," reflecting the evolving nature of transportation infrastructure and ensuring that the MMS keeps pace with changes in how people use municipal highways [7].

Scope of the Regulation

The MMS applies to all highways under municipal jurisdiction, providing standardized maintenance requirements that municipalities can follow to establish a statutory defense against claims. The regulation classifies highways based on traffic volume and speed limits, with specific maintenance standards prescribed for each class [6].

While the regulation applies to most municipal highways, there are exceptions. For instance, the MMS doesn't apply to unopened road allowances, which are instead governed by the Occupiers' Liability Act [8]. Additionally, Ontario Regulation 239/02 does not apply to Class 6 highways under the regulation, although some municipalities choose to maintain these low-volume roads according to Class 5 standards [3].

It's worth noting that Section 44(1) of the Municipal Act, 2001, which requires municipalities to keep highways in a reasonable state of repair, applies to all municipal highways, including Class 6 highways [8]. This creates a situation where municipalities must still maintain these roads reasonably, even if the specific provisions of the MMS don't apply.

Significant Weather Events

One of the most important aspects of the MMS is its provisions for "significant weather events," defined as approaching or occurring weather hazards with the potential to pose a significant danger to highway users within a municipality [2]. This provision recognizes that during extreme weather conditions, municipalities may not reasonably be expected to maintain highways to normal standards.

When a municipality declares a significant weather event, they must:

1. Monitor the weather

2. Deploy resources to address issues starting from the time the municipality deems appropriate

Once the significant weather event is declared to have concluded, the municipality must address maintenance issues according to regular standards [2].

The regulation specifies that municipalities must declare the beginning and end of significant weather events through one or more of these methods:

1. Posting a notice on the municipality's website
2. Announcing on social media platforms
3. Sending press releases to media outlets
4. Notification through the municipality's police service
5. Any other notification method required by municipal by-law[2]

This framework provides municipalities with flexibility during extreme weather while establishing clear communication requirements to inform the public.

Clarifying Municipal Liability and Statutory Defense

The MMS serves as a powerful tool for municipalities to manage liability. As a statutory defense under the Municipal Act, compliance with these standards can shield municipalities from liability related to highway maintenance [4].

The regulation clarifies when municipalities should rely on the MMS versus other defenses, such as Municipal Act Section 44(9), which states: "Except in case of gross negligence, a municipality is not liable for a personal injury caused by snow or ice on a sidewalk"[9]. This clarification helps municipalities determine the most appropriate defense strategy based on specific circumstances.

By following the MMS, municipalities create a strong presumption that they have met their duty to keep highways in a reasonable state of repair. This significantly strengthens their position if faced with litigation related to highway maintenance issues.

Risk Management and Public Safety

Beyond legal protection, the MMS provides a comprehensive framework for risk management and public safety. The standards establish baseline maintenance requirements that, when followed, help ensure that municipal highways are kept in a condition that minimizes risks to users [10].

Following these standards is critical for managing a municipality's liability and risk while keeping highway infrastructure, including sidewalks, in a good state of repair [10]. The MMS balances practicality with safety, recognizing that municipalities have limited resources but must still maintain highways to reasonable standards.

Documentation plays a crucial role in this risk management approach. To use the statutory defense in court, municipalities must demonstrate through documentation that they met the minimum standards as defined in Regulation 239/02[1]. This emphasis on record-keeping encourages municipalities to maintain comprehensive maintenance records, which not only strengthens their legal position but also supports better asset management practices.

Response to Legal and Financial Pressures

The MMS was developed in response to significant legal and financial pressures facing municipalities. Prior to its implementation, municipalities were subject to onerous court decisions that created substantial financial liabilities related to highway maintenance [1].

Municipalities today face numerous challenges, including limited funding, population growth, stricter health and environmental requirements, and aging infrastructure [11]. The MMS helps address these challenges by providing a clear framework for prioritizing maintenance activities based on highway classification and usage patterns. This allows municipalities to allocate limited resources more effectively while still maintaining a reasonable defense against claims.

The regulation has evolved over time, with significant amendments in 2010, 2012, 2018, and beyond, reflecting changes in case law, transportation patterns, and municipal needs[12]. This evolution demonstrates the responsive nature of the MMS to the changing landscape of municipal infrastructure management.

Outcome-Based Standards

A key feature of the MMS is its outcome-based approach to maintenance standards. Rather than prescribing specific processes, the regulation establishes measurable outcomes that municipalities must achieve. For example, the standards include specific measurements for conditions like potholes, with provisions for determining surface area and depth [9].

These outcome-based standards provide municipalities with flexibility in how they achieve compliance. For instance, pothole measurements can be determined by either "performing an actual measurement" or "performing a visual estimate"[9]. This flexibility allows municipalities to adopt processes that work best for their specific circumstances while still meeting the required outcomes.

Highway Classification and Service Levels

The MMS classifies highways based on speed limit and average annual daily traffic, with classifications ranging from Class 1 to Class 6[6]. This classification system recognizes that different highways serve different functions and have varying levels of use, requiring appropriately scaled maintenance standards.

The average annual daily traffic on a highway can be determined either by counting and averaging daily two-way traffic or by estimating average daily two-way traffic [6]. This flexibility in traffic assessment acknowledges the practical challenges municipalities face in monitoring all roadways.

Different classifications have different repair timelines and maintenance requirements. For example, higher-class highways generally have shorter timelines for addressing maintenance issues like snow removal or pothole repair [2]. This tiered approach allows municipalities to prioritize resources for the most heavily used highways while still maintaining reasonable standards for lower-volume roads.

Examples of Standards

The MMS includes detailed standards for various aspects of highway maintenance:

Snow and Ice Control:

- For sidewalks, after snow accumulation has ended, municipalities must reduce snow to a depth of ≤ 8 cm within 48 hours and provide a minimum sidewalk width of 1 meter [2].

- For ice formation on sidewalks, municipalities must monitor weather in the 24-hour period preceding potential ice formation and treat sidewalks if practicable within 48 hours if there's a substantial probability of ice forming [2].

Road Surface Maintenance:

- Standards for potholes on paved surfaces include specific requirements based on area and depth, with timelines for repair varying by highway class [2].

- The regulation provides specific methods for measuring potholes, including both actual measurements and visual estimates [9].

Signage:

- If regulatory or warning signs are illegible, improperly oriented, or missing, they must be repaired or replaced within specific timelines based on the class of highway [5].

These examples illustrate how the MMS provides specific, measurable standards for various aspects of highway maintenance, giving municipalities clear guidelines for compliance.

Documentation and Compliance

Documentation is critical for municipalities seeking to use the MMS as a statutory defense. To successfully assert this defense in court, a municipality must demonstrate through documentation that it met the required standards [1].

A comprehensive MMS compliance approach typically includes:

1. Clear policies and procedures aligned with the regulation

2. Regular training for staff responsible for maintenance activities

3. Systematic documentation of inspections, maintenance activities, and repairs

4. Regular reviews to ensure ongoing compliance [1]

Many municipalities adopt the MMS by reference in their policies, stating that they "will reference the Minimum Maintenance Standards for Municipal Highways (O. Reg. 239/02 as amended) as a guideline for delivering a level of service for maintenance operations"[10]. This approach provides road authorities with clear direction from Council on the level of maintenance effort required for different classifications of highways.

Benefits of MMS for Municipalities

The adoption of the MMS offers numerous benefits for municipalities:

Legal Protection: By adhering to the MMS, municipalities establish a strong statutory defense against claims related to highway maintenance [1]. This protection can significantly reduce legal costs and potential settlements.

Clear Expectations: The MMS provides clear expectations for maintenance activities, helping municipalities establish appropriate service levels and allocate resources effectively [3].

Risk Management: Following these standards helps municipalities manage liability risks by maintaining highways in a reasonable state of repair [10].

Resource Allocation: The classification system allows municipalities to prioritize maintenance activities based on highway usage, ensuring efficient allocation of limited resources.

Public Safety: By establishing baseline maintenance requirements, the MMS helps ensure that municipal highways remain safe for users [10].

Operational Guidance: The standards provide operational guidance for maintenance staff, supporting consistent service delivery across the municipality.

Community Confidence: Adopting and communicating adherence to these standards can build public confidence in the municipality's commitment to maintaining safe transportation infrastructure.

Conclusion

The Minimum Maintenance Standards for Municipal Highways represents a vital framework for municipal highway maintenance in Ontario. By clarifying statutory defenses, establishing clear maintenance requirements, and providing a flexible approach to compliance, the MMS helps municipalities balance legal obligations with practical constraints.

Beyond the legal protection offered, these standards provide operational clarity, support efficient resource allocation, and contribute to public safety. As municipal infrastructure continues to age and financial pressures mount, the structured approach provided by the MMS becomes increasingly valuable.

By embracing these standards, North Glengarry can demonstrate its commitment to maintaining safe, reliable transportation networks while prudently managing public resources and legal risks. In an era of increasing infrastructure challenges, the MMS offers a proven pathway to effective highway maintenance that serves both municipal and public interests.

Alternatives:
N/A

Financial Implications:
N/A

Attachments & Relevant Legislation:

Others Consulted:

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Reviewed and Approved by:

Sarah Huskinson, CAO/Clerk

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SOUTH NATION CONSERVATION
DE LA NATION SUD

BOARD OF DIRECTORS ANNUAL GENERAL MEETING

Meeting No. 03/25
Thursday, March 20th, 2025 – 9:00 a.m.

Watershed Room, SNC

Directors Present:	Steve Densham, Stormont Dundas Glengarry, Chair Catherine Kitts, City of Ottawa, Second Vice-Chair Genevieve Lajoie, Prescott Russell *(electronic participation)* Mathew Luloff, City of Ottawa *(electronic participation)* Linda Payant, City of Ottawa Bill Smirle, Stormont Dundas Glengarry Tom Smyth, Stormont Dundas Glengarry François St. Amour, Prescott Russell Deb Wilson, Leeds Grenville Adrian Wynands, Leeds Grenville, Vice Chair
Regrets:	Mike Tarnowski, Prescott Russell
Staff Present:	Carl Bickerdike, Chief Administrative Officer Johanna Barkley, Director of Finance Ronda Boutz, Secretary-Treasurer Jennifer Boyer, Managing Director, Approvals Michelle Cavanagh, Team Lead, Special Projects James Holland, Senior Planner Hannah Jackson, Accounting and Resources Specialist Sandra Mancini, Managing Director, Natural Hazards and Infrastructure John Mesman, Managing Director, Property, Conservation Lands and Community Outreach Eric McGill, Corporate Counsel Gregory Payne, Permitting Officer Pat Piitz, Team Lead, Property Marieh Rajaie, Water Resource Specialist - Engineering Monique Sauve, Chief Building Official
Guests:	Ben Mann, Baker Tilly Craig Calder, CAO/Clerk, Township of North Stormont George Darouze, MPP, Carleton Emily DeRochie, St. Lawrence River Institute Dorothy Hamilton, OWA-SDG and Watershed Advisory Committee Alain Jacquement, Watershed Advisory Committee Jeff Ridal, St. Lawrence River Institute Cindy Saucier, Watershed Advisory Committee

SOUTH NATION CONSERVATION
DE LA NATION SUD

TRADITIONAL LAND ACKNOWLEDGEMENT

John Mesman, Managing Director, Property, Conservation Lands and Community Outreach, read an Indigenous land acknowledgement.

CHAIRS REMARKS

Steve Densham, Chair, called the SNC Board of Directors Annual General meeting of March 20th, 2025 to order at 9:00 a.m. Chair Densham welcomed guests to the meeting.

APPROVAL OF SNC BOARD OF DIRECTORS ANNUAL GENERAL MEETING AGENDA AND SUPPLEMENTAL AGENDA

RESOLUTION NO. BD-048/25

Moved by: Bill Smirle
Seconded by: Adrian Wynands

RESOLVED THAT: The Members approve the March 20th, 2025 Board of Directors Annual General Meeting main and supplemental agendas as amended:

a. Supplemental Agenda Item 2.a., Closed Session – Request for Approval: Negotiations Related to Leased Facility be moved to follow main Agenda item 13.b., Closed Session - Request for Approval: SNC Property Legal Matter (Verbal).

CARRIED

DECLARATION OF CONFLICT OF INTEREST

Chair Steve Densham declared a conflict of interest on Supplemental Agenda Item 2.a) Request for Approval: Negotiations Related to Leased Facility.

REQUEST FOR APPROVAL:

BOARD OF DIRECTORS MEETING MINUTES OFFEBRUARY 20TH, 2025

RESOLUTION NO. BD-049/25

Moved by: François St. Amour
Seconded by: Deb Wilson

RESOLVED THAT: The Members approve the Board of Directors Meeting Minutes of February 20th, 2025 as submitted.

CARRIED

GUEST SPEAKER: JEFF RIDAL, EXECUTIVE DIRECTOR, RIVER INSTITUTE

Jeff Ridal, Executive Director for the River Institute provided a PowerPoint presentation on the River Institute and its programs and projects.

RECOGNITION FOR YEARS SERVICE: GEORGE DAROUZE, 10 YEARS

The Board of Directors recognized and thanked George Darouze for his dedicated service to South Nation Conservation.

The Board of Directors meeting recessed at 9:53 a.m.
The Board of Directors meeting reconvened at 10:05 a.m.

NEW BUSINESS

REQUEST FOR APPROVAL: SNC ADMINISTRATIVE BY-LAWS AMENDMENT

RESOLUTION NO. BD-050/25	Moved by:	Adrian Wynands
	Seconded by:	Bill Smirle
RESOLVED THAT:	The Board of Directors approve amendments to South Nation Conservation's Administrative By-laws.	

CARRIED

REQUEST FOR APPROVAL: 2025 BOARD OF DIRECTORS ELECTIONS (AND PROCEDURES)

RESOLUTION NO. BD-051/25	Moved by:	Deb Wilson
	Seconded by:	Matt Luloff
RESOLVED THAT:	The Board of Directors appoint Carl Bickerdike, Chief Administrative Officer as the Acting Chair; and	
FURTHER THAT:	The South Nation Conservation Administrative By-laws state: "All elections shall be in accordance with the Procedures for Election of Officers (Appendix B)" and relevant *Conservation Authorities Act* requirements be adhered to.	

CARRIED

Carl Bickerdike, Acting Chair, declared all positions vacant, according to SNC's Administrative By-laws.

First call for nominations for Chair:
Moved by: François St. Amour — Steve Densham be nominated for the position of Chair, South Nation Conservation.

Steve Densham accepted the nomination for position of Chair, South Nation Conservation.

Second call for nominations: None

Third call for nominations: None

RESOLUTION NO. BD-052/25 — Moved by: Adrian Wynands; Seconded by: Deb Wilson

RESOLVED THAT: Nominations be closed for the position of Chair.

CARRIED

First Call for nominations for Vice Chair:
Moved by: Deb Wilson — Adrian Wynands be nominated for position of Vice-Chair, South Nation Conservation.

Adrian Wynands accepted the nomination for position of Vice-Chair, South Nation Conservation.

Second Call for Nominations: None

Third Call for Nominations: None

RESOLUTION NO. BD-053/25 — Moved by: Linda Payant; Seconded by: Bill Smirle

RESOLVED THAT: Nominations be closed for the position of Vice-Chair.

CARRIED

First Call for nominations for Second Vice-Chair:
Moved by: Adrian Wynands — Catherine Kitts be nominated for position of Second Vice-Chair, South Nation Conservation.

Catherin Kitts accepted the nomination for the position of Second Vice-Chair, South Nation Conservation.

Second Call for Nominations: None

Third Call for Nominations: None

RESOLUTION NO. BD-054/25	Moved by:	Steve Densham
	Seconded by:	François St. Amour
RESOLVED THAT:	Nominations be closed for the position of Second Vice-Chair.	

CARRIED

RESOLUTION NO. BD-055/25	Moved by:	Bill Smirle
	Seconded by:	François St. Amour

RESOLVED THAT: For the year 2025, and until the Annual General Meeting of 2026:

i. Steve Densham be elected as Chair of SNC,
ii. Adrian Wynands be elected as Vice-Chair of SNC,
iii. Catherine Kitts be elected as Second Vice-Chair of SNC, and

FURTHER THAT: The Chair, Vice-Chair, and Second Vice-Chair be appointed the Executive Committee of SNC.

CARRIED

The Chair, Vice-Chair, and Second Vice-Chair assumed their offices.

REQUEST FOR APPROVAL: CONSERVATION ONTARIO VOTING DELEGATES

RESOLUTION NO. BD-05625	Moved by:	Linda Payant
	Seconded by:	Deb Wilson
RESOLVED THAT:	The Board of Directors appoint the Vice-Chair as the Conservation Ontario Council voting delegate; and	
FURTHER THAT:	The Board of Directors appoint the Chair as first alternate and Chief Administrative Officer as second alternate.	

CARRIED

REQUEST FOR APPROVAL: 2024 YEAR END, AUDITED FINANCIAL STATEMENTS AND AUDIT LETTERS

RESOLUTION NO. BD-057/25	Moved by:	Adrian Wynands
	Seconded by:	Geneviève Lajoie
RESOLVED THAT:	The Board of Directors approve and file the 2024 Draft Financial Statements, Audit Reporting Letter, Letter of Representation and signatures by Management and Chair: and	
FURTHER THAT:	The Board of Directors approve the 2024 reserve transfer to the Operating Reserve of $28,694.	
	CARRIED	

REQUEST FOR APPROVAL: 2024 SNC ANNUAL REPORT

RESOLUTION NO. BD-058/25	Moved by:	Bill Smirle
	Seconded by:	Linda Payant
RESOLVED THAT:	The Board of Directors approve the 2024 Annual Report; and	
FURTHER THAT:	The Board of Directors direct staff to circulate copies to member municipalities, local MPs and MPPs, Conservation Authorities, and various stakeholders.	
	CARRIED	

UPDATE: 2024 CONSERVATION AREAS VISITOR REPORT:

RESOLUTION NO. BD-059/25	Moved by:	Catherine Kitts
	Seconded by:	Deb Wilson
RESOLVED THAT:	The Board of Directors receive and file the 2024 Conservation Areas Monitoring Report; and	
FURTHER THAT:	The Board of Directors recommend that staff continue to monitor Conservation Areas to inform the management of these public spaces.	
	CARRIED	

UPDATE: WATERSHED ADVISORY COMMITTEE MEMBERSHIP

RESOLUTION NO. BD-060/25	Moved by:	Adrian Wynands
	Seconded by:	Tom Smyth
RESOLVED THAT:	The Board of Directors receive and file the Watershed Advisory Committee update.	

CARRIED

REQUEST FOR APPROVAL: STUMPAGE SALE CONTRACT NO. 13/23/30-2022 AMENDMENT

RESOLUTION NO. BD-061/25	Moved by:	Linda Payant
	Seconded by:	François St. Amour
RESOLVED THAT:	The Board of Directors approve amending the stumpage contract with 1704650 Ontario Ltd. (CMT Logging), for SNC Properties 13, 23, and 30 (North Stormont), to extend the completion date to March 31, 2026.	

CARRIED

REQUEST FOR APPROVAL: CAMP SHELDRICK MANAGEMENT AGREEMENT

RESOLUTUON NO. BD-062/25	Moved by:	Adrian Wynands
	Seconded by:	Bill Smirle
RESOLVED THAT:	The SNC Board of Directors approve negotiating renewal of the Camp Sheldrick Management Agreement with Scouts Canada; and	
FURTHER THAT:	The Agreement be brought back to the Board of Directors for approval.	

CARRIED

REQUEST FOR APPROVAL: FUNDING SUBMISSION

RESOLUTION NO. BD-063/25	Moved by:	Adrian Wynands
	Seconded by:	Tom Smyth
RESOLVED THAT:	The Board of Directors approves funding application submissions to the following programs:	

Project	Funding Request
1. Flood Hazard and Identification Mapping Program: Lepage Creek and Tributary	$400,000
2. Ontario Power Generation's Power for Change Project: Creating Resilient Forests in Eastern Ontario - A Tree Planting Initiative	$400,000
Total	**$800,000**

CARRIED

REQUEST FOR APPROVAL: VEHICLE PURCHASE

RESOLUTION NO. BD-064/25

Moved by: Adrian Wynands
Seconded by: Deb Wilson

RESOLVED THAT: The Board of Directors approve the purchase of a light duty truck to an upset limit of approximately $75,000 plus HST.

CARRIED

REQUEST FOR APPROVAL: MONIES RECEIVED AND DISBURSEMENT REGISTER FOR FEBRUARY 2025

RESOLUTION NO. BD-065/25

Moved by: François St. Amour
Seconded by: Linda Payant

RESOLVED THAT: The Board of Directors receive and file the money received report for February 2025; and

FURTHER THAT: The Board approve the Disbursement Register of $1,000,479.73 for February 2025.

CARRIED

UPDATE: TECHNICIAL REVIEWS

RESOLUTION NO. BD-066/25

Moved by: Tom Smyth
Seconded by: Catherine Kitts

RESOLVED THAT: The Board of Directors receive and file the Technical Reviews update for February 2025.

CARRIED

UPDATE PLANNING ACTIVITY

RESOLUTION NO. BD-067/25

Moved by: Tom Smyth
Seconded by: François St. Amour

RESOLVED THAT: The Board of Directors receive and file the Planning Activity update for February 2025.

CARRIED

UPDATE: SECTION 28.1 PERMITS ISSUED

RESOLUTION NO. BD-068/25

Moved by: Adrian Wynands
Seconded by: Deb Wilson

RESOLVED THAT: The Board of Directors receive and file the update on permits issued under Section 28.1 of the *Conservation Authorities Act* for February 2025.

CARRIED

UPDATE: ENFORCEMENT OF PARTS VI AND VII OF THE ACT

RESOLUTION NO. BD-069/25

Moved by: François St. Amour
Seconded by: Bill Smirle

RESOLVED THAT: The Board of Directors receive and file the update on reported *Conservation Authorities Act* regulation concerns received in the month of February 2025.

CARRIED

UPDATE: ON-SITE SEWAGE PERMITS RECEIVED

RESOLUTION NO. BD-070/25

Moved by: Adrian Wynands
Seconded by: Linda Payant

RESOLVED THAT: The Board of Directors receive and file the on-site sewage permits received for February 2025.

CARRIED

SOUTH NATION CONSERVATION
DE LA NATION SUD

SUPPLEMENTAL AGENDA

REQUEST FOR APPROVAL: OTTAWA STEWARDSHIP AGREEMENT

RESOLUTION NO. BD-071/25

Moved by: Adrain Wynands
Seconded by: François St. Amour

RESOLVED THAT: The Board of Directors approve entering into a multi-year contribution agreement with the City of Ottawa for the completion of stewardship projects on three SNC properties, at a value of $285,000.

CARRIED

REQUEST FOR APPROVAL: DISBURSEMENTS FOR 2025 PARTNERSHIP PROGRAMS

RESOLUTION NO. BD-072/25

Moved by: François St. Amour
Seconded by: Tom Smyth

RESOLVED THAT: The Board of Directors approves undertaking and disbursement of funds for the following Partnership Programs in 2025:

Program	2024 Encumbered Funds[1]	2025 Funds
1. Eastern Ontario Water Resources Program (EOWRP)		
a. United Counties of Prescott and Russell (UCPR) Floodplain Mapping Project	$25,000	$25,000
b. EOWRP Grant: Salt Responsibly Campaign	$3,972	$0
2. UCPR Woodlot Advisory Service	$0	$20,000
3. SDG Woodlot Advisory Service	$0	$20,000
4. City of Ottawa Special Levy Programs		
a. Ottawa Rural Clean Water Program	$268,137	To be confirmed[2]
b. Ottawa Tree Replacement Program	$17,868	To be confirmed[2]
Total	**$314,977**	**$65,000**

[1] Funding approved in 2024 and carried forward to 2025 budget for project completion.
[2] 2025 special levies approval pending, report will be brought back to the Board following City Council approval.

CARRIED

SOUTH NATION CONSERVATION
DE LA NATION SUD

UPDATE: FLOOD FORECASING AND WARNING – SPRING FRESHET CONDITIONS

Kat Watson, Coordinator - Early Warning Systems and Watershed Plans, and Phillip Dagenais, Water Resources Specialist – Monitoring, presented the members with an update on the Flood Forecasting and Warning and the 2025 Spring Freshet Conditions.

CORRESPONDENCE

a. George Darouze Letter: Resignation from SNC Board of Directors

DATES OF UCOMING MEETINGS, THIRD THURSDAY, AT 9:00 A.M. UNLESS INDICATED OTHERWISE:

- April 17th, 2025 (OGRA March 30th – April 2nd)
- May 15th, 2025
- June 19th, 2025
- July – no scheduled meeting

FUTURE MOTIONS OF THE BOARD AND/OR DISCUSSION OF SNC ISSUES

None.

CLOSED SESSION

RESOLUTION NO. BD-073/25	Moved by:	Bill Smirle
	Seconded by:	Adrian Wynands
RESOLVED THAT:	The Board of Directors meeting move into Closed Session for the following reports below: a. Request for Approval: Land Acquisition 2025-OTW-01 b. Request for Approval: SNC Property Legal Matter (verbal) c. Request for Approval: Negotiations related to leased facility	

CARRIED

The Board of Directors convened closed session at 11:20 a.m.

Having declared a conflict of interest, Chair Densham left the Closed Session for Supplemental Agenda item 2a); Vice-Chair Wynands assumed the role of Chair.

OPEN SESSION

RESOLUTION NO. BD-074/25	Moved by:	Bill Smirle
	Seconded by:	Deb Wilson

RESOLVED THAT: The Board of Directors move into open Session.

CARRIED

The Board of Directors reconvened open session at 12:25 p.m.

REQUEST FOR APPROVAL: LAND ACQUISITION

RESOLUTION NO. BD-075/25 Moved by: Adrian Wynands
Seconded by: Catherine Kitts

RESOLVED THAT: The Board of Directors direct staff to follow up with potential partners to acquire property 2025-OTW-01; and

FURTHER THAT: The Board delegate authority to the Executive Committee to approve proceeding with the acquisition, subject to external funding, to the upset limit as discussed.

CARRIED

REQUEST FOR APPROVAL: SNC PROPERTY LEGAL MATTER (VERBAL)

RESOLUTION NO. BD-076/25 Moved by: Tom Smyth
Seconded by: Adrian Wynands

RESOLVED THAT: The Board delegate authority to the Chief Administrative Officer, in consultation with the Chair and after considering legal advice, to accept a settlement offer they deem in the best interests of the Authority.

CARRIED

REQUEST FOR APPROVAL: NEGOTIATIONS RELATED TO LEASED FACILITY

The Chair declared a conflict of interest on this item, Vice-Chair Wynands chaired the discussion and resolution vote.

RESOLUTION NO. BD-077/25 Moved by: Deb Wilson
Seconded by: Tom Smyth

RESOLVED THAT: The Board of Directors approve option 2 with upset limits and adjustments to reserve as discussed.

CARRIED

SOUTH NATION CONSERVATION
DE LA NATION SUD

ADJOURNMENT

RESOLUTION NO. BD-078/25

Moved by: Tom Smyth
Seconded by: Bill Smirle

RESOLVED THAT:

The Board of Directors Annual General Meeting of March 20th, 2025 be adjourned at 12:29 p.m.

CARRIED

Steve Densham,
Chair.

Carl Bickerdike,
Chief Administrative Officer.

/rb