



GEORGINA

**2023 QMS Management Review Report
of the Town of Georgina
Keswick & Sutton Water Distribution Subsystem**

Review Period: January 1 – December 31, 2023

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Management Review presentation to the Top Management: January 25, 2024.

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Background

The Ontario Government implemented the Municipal Drinking Water Licensing Program in 2007 as recommended by Justice O’Conner to the government regarding the Walkerton incident Inquiry. In response to this recommendation, the Ministry of Environment, Conservation, and Parks (MECP) developed the Drinking Water Quality Management Standard (DWQMS) that applied to owners and operating authorities for municipal drinking water systems. The DWQMS Operational Plan is implemented to the Owners and or Operating Authorities through the Safe Drinking Water Act 2002.

The annual Management Review is a requirement of the DWQMS (Element 20) and covers key aspects of managing the town’s drinking water system. The annual Management Review report consists of a summary of the information for the 2023 calendar year that Top Management must annually review in accordance with the Ontario Drinking Water Quality Management standard.

It allows staff and Top Management to review the Drinking Water Distribution Subsystem, and evaluate the continuing suitability, adequacy, and effectiveness of the Quality Management System on an annual basis, as legislated by the MECP. Top Management ensures reviewing annual system performance, identifying deficiencies, and delivering reports/results to the Owner of the Drinking Water System. The DWQMS Compliance Officer/QMS Representative must complete the review and ensure all Action Items that arise from the review are completed within the allotted timelines.

Re-accreditation of the DWQMS is required every 3 years and the town will be required to obtain re-accreditation of the DWQMS in August 2024. This will involve a Full Scope Audit of the Entire DWQMS for the Town of Georgina Keswick-Sutton Drinking Water System.

a. Incident of Regulatory Non-Compliance and Ministry Inspection

The Safe Drinking Water Act (2002) sets out several requirements for owners and Operating authorities of drinking water systems. Any event of failure to meet the requirements of the regulations could be considered an incident of regulatory non-compliance. In preparing the Management Review report, internal staff carefully reviewed the following records for evidence of non-compliance during the operating period January 1st – December 31, 2023.

- MECP inspection report (TBD)
- Operator certification records for drinking water services
- Water quality records
- Lead testing regulatory requirements
- Annual and summary reports
- Municipal Drinking Water License
- QMS Operational Plan

The Ministry of Environment, Conservation, and Parks (MECP) conducted an unannounced, detailed inspection of the Keswick-Sutton Distribution System on February 6, 2024. This inspection is a Full inspection and all data/records for the time period of February 1, 2023 to February 6, 2024, will be inspected, along with visiting selected pumping stations.

This inspection will assess the Keswick-Sutton Distribution System's compliance with Safe Drinking Water Act, 2002 (SDWA), conformity with ministry drinking water policies and guidelines, operations manuals, standard operating procedures, logbooks, operator certifications, and training credentials, water quality results, water quality monitoring processes, reporting procedures, and corrective actions. MECP performed a comprehensive, multi-barrier inspection of the water system focusing on the source, treatment, distribution components, and management system. The inspection has been conducted pursuant to Section 81 of the SDWA.

Action Item:

Once the MECP inspection is completed and a report provided for the calendar year of 2023, a briefing report to Council will be provided to inform the Owner and Top Management on the Town of Georgina's Drinking Water System.

b. Incidents of Adverse Drinking Water Tests

Out of 721 Microbiological samples taken and 5,531 daily chlorine residual tests in 2023, the Town observed five (5) adverse drinking water test results. Adverse Water Quality Incidents (AWQIs) also include any exceedance of a health-based drinking water standard (approximately 70 parameters) or a situation that directs improperly disinfected water to consumers.

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
2023/07/28	Total Coliforms	P	PA	Flushed water main, resampled original AWQI location, as well as upstream and downstream locations. E7 Notified MECP and YRPH. Test results received for all locations passed Ontario Drinking Water Quality Standards.	2023/08/02
2023/09/21	High Sodium Content	36	MG/L	Flushed, re-sample.	2023/09/27
2023/09/21	High Sodium Content	34	MG/L	Flushed, re-sample	2023/09/27
2023/09/21	High Solium Content	35	MG/L	Flushed, re-sample	2023/09/27
2023/09/21	High Solium Content	36	MG/L	Flushed, re-sample	2023/09/27

Resulting of Watermain/Water service leaks, or resulting from operational challenges, the Town reported five (5) AWQIs to the MECP Spills Action Centre (SAC) and the York-Durham Public Health Unit in 2022. The number of AWQIs increased in 2023 from 2022.

The Town took immediate action in accordance with O. Reg. 170/03, Drinking Water Systems. For each incident, the location of the potential adverse sample and upstream and downstream locations were flushed and then sampled for microbiological contamination and free chlorine concentration. The results of each sample returned negative for the presence of Microbiological contamination, and free chlorine concentrations remained within acceptable levels.

The Region of York tests for sodium as they are the Treatment facility, however the Town of Georgina sampled in 2023 for sodium and results were posted on the town's website (<https://www.georgina.ca/living-here/water-and-wastewater/drinking-water-reports>)

Sodium (Na) in drinking water

The Regional Municipality of York provides treated drinking water to the Town of Georgina to distribute to residents. Both the Region and Town have reported an average sodium concentration of elevated levels:

- 2019: 34mg/L Region Report
- 2020: 32.3 to 32.5mg/L Regional Report
- 2023: 34-36mg/L Town of Georgina Report

When test results for sodium exceed 20mg/l, the *Safe Drinking Water Act* requires the Operating Authority to report this as an adverse test result to the Ministry of Environment, Conservation and Parks (MECP) and to the Regional Medical Officer of Health.

Action Item:

None

c. Deviations from Critical Control Points / Critical Control Limits and Response Actions

Through the DWQMS risk assessment process, Critical Control Points (CCPs) are identified within the water distribution system. A CCP is defined as a step at which control can be applied to prevent or eliminate a drinking water hazard or reduce it to an acceptable concentration that is within the established Critical Control Limit (CCL). Deviations from the CCLs ranges were captured and reviewed to determine potential preventative measures to implement in the system.

The Water/Wastewater Supervisor and Water/Wastewater Lead-Hand conducted an annual review of the Risk Assessment table in July 2023 and provide minor changes to the document, and no deviations from Critical Control points were identified in 2023.

Action Item:

None

d. Effectiveness of the Risk Assessment Process

The QMS Risk Assessment process has been established to collectively identify, assess, rank and prioritize potential drinking water related hazards and associated risks. A risk assessment review is conducted annually, and a full review is conducted at least once every 36 months (3 years). Reviews are to check the validity of the risk assessment information and evaluate the methodology and approach taken.

At least once every calendar year and every 36-month a review or following a major process change, the QMS Representative shall facilitate a formal review of the risk assessment document with designated Town of Georgina personnel.

Risk Assessment Schedule	2022	2023	2024	2025	2026
Full Risk Assessment (every 3 years)	✓			X	
Review Risk Assessment (annually)		✓	X		X
✓ = Completed X = To be completed					

The intent of assessing potential risks in the drinking water system is to ensure the projected measures to adopt/mitigate the risk/hazardous incidents will assist staff in responding accordingly. The Risk Assessment remains valid and current.

With the addition of new staff to the Operating Authority team, a full risk assessment is recommended, however it will still be reviewed as planned for the calendar year for any anticipated updates based on observations and regulations.

Action Item:

None

e. Results from Internal and External Audits

The Ontario Drinking Water Quality Management Standard (DWQMS) requires the Owner and/or Operating Authority to conduct an internal audit of each element of QMS once every calendar year. In addition, an external surveillance audit is to be conducted annually, following the internal audit. Every three (3) years, an external on-site verification audit of the QMS must be completed by the recognized accreditation body in order to obtain re-certification.

Internal Audit

The objective of the internal audit is to document evidence of conformance to the drinking water quality management standard, the current version of the QMS Operational Plan, SOPs, and corrective actions (CAs) as created to address non-conformances. The CAs, and Opportunities for Improvement (OFIs) are discussed and taken as an opportunity to improve the QMS.

The action items are tracked as part of the QMS Continual Improvement process, and following the 2023 internal and external audit the following audit results are summarized:

The Internal Audit provided:

- Sixteen (16) Opportunities for Improvement (OFIs)
- Zero (0) Minor Non-Conformity
- Zero (0) Major Non-Conformity

Receiving sixteen (16) OFIs and zero (0) minor and major non-conformances, demonstrate that the Town is implementing recommendation where required to maintain the QMS in the drinking water system.

The following are the Internal Audit OFIs (check ✓ indicates the OFI has been completed):

- Element 3 – Commitment & Endorsement – additional Operators will be needed in the near future as resources are now getting a bit lean with some Operators on modified duty and others nearing retirement.
- ✓ Element 4 – QMS Representative – notice of appointment endorsed by Top Management for new QMS Representative needs to be completed in July 2023 and Operational staff informed.
- Element 7 & 8 – Risk Assessment & Risk Assessment Outcomes – summary table of CCPs and CCLs could be provided to Operators for easy access and reference. For exercising valves at Booster Stations needs to be revised and finalized.
- Element 9 – Organizational Structure, Roles, Responsibilities and Authorities – based on hiring of new Manager and QMS Representative the roles, responsibilities and authorities should be reviewed to see if any updates are required.
- ✓ Element 10 – Competencies – Undertake a review and update of key procedures and SOPs (e.g., emergency, lead sampling, reporting an adverse) with Operators.
- ✓ Element 13 – Essential Supplies and Services – Inclusion of QMS Policy or set out separately to essential suppliers or contractors by Top Management information them of the DWQMS. In the future this information could be included in the contracts package through Procurement. Another option would be for Procurement to include a copy of the QMS Policy in the package for proposals, tenders and quotations that are related to the drinking water systems.

- ✓ Element 14 – Review and Provision of Infrastructure – Could provide Operations with a stronger voice to Engineering to ensure potential issues (e.g., type of hydrant) are addressed early on. Informally group meets to review infrastructure needs, but this could be formalized (Asset Management, Operations and Infrastructure, Capital Delivery, Engineering).
- ✓ Element 15 – Infrastructure Maintenance, Rehabilitation and Review – Develop process for new developments from commissioning to assumption to keep operations notified of the status and ensure IT updates the infrastructure on GIS. Develop valve exercising program for new infrastructure valves or following valve replacement.
- ✓ Element 18 – Emergency Management – Emergency procedures could be reviewed with Operators as a refresher. For larger or more complex emergencies a debriefing could be conducted and documented to review what was done and lessons learned as form of the emergency exercise.
- ✓ Element 20 – Management Review – A summary table of Action Items from Management Review could be developed by QMS Representative to more easily track any items that are outstanding and need to be addressed.
- ✓ Element 21 – Continual Improvement – Could develop a log to track non-conformances, OFIs, Corrective Actions and Preventative Actions to more easily track issues for follow-up and reporting to Top Management.

There is still significant work required to enhance the QMS performance in relation to best management practices (BMP), as the corporation is growing annually in population, new development, and the increase of assets and infrastructure. This would aid in the performance of the Drinking Water System in the delivery of safe, high quality drinking water, provide mechanisms to optimize efficiencies within the drinking water system and/or QMS and provide information to assist in future planning.

External Audit

SAI Global completed a 12-month surveillance audit of the DWQMS for the Keswick-Sutton Water Distribution System on July 11, 2023. The Town received two (2) Opportunities for Improvement (OFIs) during the 2023 external audit.

- Element 8 – consider including Risk/Hazards associated with a Chemical Spill in the Risk Assessment Outcomes.
- Element 21 – Consider adding the OFIs from the 2023 Internal Audit onto the Action Items List and monitor for completion.

It is suggested that the Opportunities for Improvement (OFIs) be considered by management to further enhance the corporation's QMS and performance. 2023 surveillance audit determined the DWQMS of the Town of Georgina remains effective and meets the requirements of the DWQMS V2.0.

Action Item:

None

f. Result of Emergency Response Testing

The DWQMS requires the documentation and implementation of procedures for emergency response and recovery for any identified potential emergencies. The procedures should be developed locally and should be comprehensive enough to deal with each type of identified potential emergency.

Emergency procedures will cover how to prepare for response and restore the system to normal operation in the event of an emergency. It is a dynamic process that includes, training, conducting drills, testing equipment and coordinating activities within the department, Town and neighboring municipalities.

Emergency response training and testing shall be planned and recorded by the QMS Representative in partnership with designated Water/Wastewater personnel. Training shall be planned, conducted, documented and filed according. Emergency testing shall consider the results of the Risk Assessment and priorities higher risk events summarized in the Risk Assessment Table. Emergency response testing may be in the form of a desktop exercise and/or mock emergency situation exercise, where applicable. Emergency Response training and testing shall be conducted annually to ensure staff awareness of emergency protocols.

Emergency response testing was completed on December 22, 2023, and an After Action Review (AAR) was completed following the exercise to determine lessons learned and develop Action Items to better assist staff when responding to an emergency incident.

Action Item:

None

g. Operational Performance

The Town of Georgina's Drinking Water System and the tracking of Operational Performance, is categorization through Water Quality testing and System Performance listed below in more detail.

Water Quality Testing

Chlorine Residuals

In total 5,531 free Chlorine residuals tests were performed within the distribution system (total of Daily Chlorine residuals tests, Weekly Flushing Chlorine residuals tests, and biweekly Microbiological sampling Chlorine tests). 2,384 samples of free chlorine residuals were taken during the Daily Chlorine residuals sampling program. The Town of Georgina performs a Weekly Flushing program. The flushing is done at Blow-Off Valves, Fire Hydrants, and Sample Stations. This is done to purge stagnant water from within the distribution system (i.e., Dead ends), allowing Chlorine residuals to be monitored and maintained at acceptable levels.

The range of free Cl₂ residual from all samples in 2023 was <0.05mg/L (min) to 2.17mg/L (max). The minimum acceptable legislated residual level is 0.05mg/L and the maximum is 4.00mg/L. The town did not experience any event of free chlorine residuals below the legislated minimum acceptable concentration.

Microbiological Sampling

The Town tested for 721 microbiological samples and one (1) sample returned with presence of TC. All microbiological samples are accompanied by a free chlorine residual sample; therefore, 721 samples were taken while sampling for microbiological contamination. 210 microbiological samples were tested for Heterotrophic Plate Count (HPC), calculated in CFUs, or colony-forming units. Heterotrophic bacteria present in water poses no health risk to human, but a high HPC count is an indicator of ideal condition for the growth of bacteria. It can be a breeding ground for more dangerous bacteria such as legionella or E. Coli. As per legislation, at minimum, 25% of all samples must be tested for HPC. The Town exceeds this minimum threshold as approximately 29% of all samples taken are tested for HPCs.

Lead Sampling

The Town is exempt from lead testing within the residential plumbing systems, however, must still sample for Lead within the Distribution system on a rolling three-year cycle.

Year 1: Alkalinity / pH samples are taken (2022)

Year 2: Alkalinity / pH samples are taken (2023)

Year 3: Lead, Alkalinity / pH samples are taken (2024)

In 2023, the Town was in Year 2 of the three-year cycle, and was required to sample for alkalinity and pH, however samples were taken prematurely for Lead in 2023. In total, four (8) samples were taken for Alkalinity and six (6) for Lead in 2023.

All Lead results since 2007 are below the regulatory limit of 0.010 mg/L. The Town is expected to sample and test for Lead in the distribution system in 2024.

THM Sample Results

In 2023, eight (8) samples were tested for Trihalomethanes (THMs) at locations that are deemed to have the highest potential for elevated THM values (furthest from the Treatment Facilities). The maximum 12-month running average allowable limit is 100 µg/L. The results of the Town samples for the THM 12-month running average for 2023 was 59.39 µg/L. Even though the Town's results are all within compliance limits, the pattern of consistently increasing THM will be placed in discussion with York Region. The Town has not exceeded the prescribed limit for THM running annual average.

HAA Sample Results

In 2023, eleven (11) samples were tested for Haloacetic Acids (HAAs) at locations deemed to have the highest potential of the highest possible HAA values (locations closest to the Treatment Facilities). The maximum 12-month running average allowable limit is 80 µg/L. The results of the Town samples for the HAA 12-month running average for 2023 was 39.25 µg/L, demonstrating that the water is within regulatory limits, but elevated results approaching half the limit need to be monitored. Schedule 23: Inorganic Parameters and Schedule 24: Organic Parameters in O. Reg. 170/03 are sampled by York Region.

Sodium Results

The Region of York tests for sodium as they are the Treatment facility, however the Town of Georgina sampled in 2023 for sodium and results were posted on the town's website (<https://www.georgina.ca/living-here/water-and-wastewater/drinking-water-reports>).

Nitrate and Nitrite Testing

The Region of York performs Nitrate and Nitrite testing of the drinking water at the treatment facilities where the water enters the distribution system as required under *Schedule 13, O. Reg. 170/03*. In 2023, the Town did not perform sampling for nitrites and nitrates as determined by the Water/Wastewater Supervisor.

System Performance

Scheduled and unscheduled emergency maintenance and rehabilitation on the Town of Georgina’s Drinking Water infrastructure. Maintenance and rehabilitation activities are planned and tracked through several software programs.

Preventative maintenance related to the Town of Georgina’s Drinking Water System is planned and administered by the Operating Authority. The nature and frequency of planned preventative maintenance conducted for infrastructure is based, where appropriate, on manufacturer’s recommendations, industry standards, best practices and equipment manuals.

The following list activities and the comparison of 2022 and 2023:

Description	2022	2023
Number of Watermain Breaks	14	2
Number of Water Services Repairs	35	38
Number of Water Service Replacements		134
Frozen Services	0	0
Valve Repair	9	0
Valve Replacement	0	3
Water Box repairs	52	60
Water Box replacement	52	57
Curb stop replacement	2	1
Fire Hydrant Inspections	all	1462
Fire Hydrant Repairs	32	12
Fire Hydrant Replacements	1	1
Fire Hydrant painted	730	730
Thawing of Fire Hydrants	16	16

**All fire hydrants are to be inspected annually as per the Ontario Fire Code O. Reg 213/07*

Outcomes from 2023, on-going review of complete/incomplete preventative maintenance programs and activities as it pertains to Water/Wastewater is planned for 2024. And an in-dept review of work-flow process and staffing complement will need to be conducted to better evaluate the gaps within the Water/Wastewater division in not meeting Preventative Maintenance program requirements. (OFI in 2023 audit identifies need of additional Operators).

Action Item:

Include Nitrate and Nitrite testing in the sampling schedule.

h. Raw Water Supply & Drinking Water Quality Trends

Raw Water Supply

Designated Town of Georgina staff participate in quarterly meetings with York Region to review raw water quality parameters.

Drinking Water Quality Trends

Discussed in g) Operational Performance – Water Quality Testing, above.

Action Item:

None

i. Follow-up Action Items from Previous Management Reviews

In 2023 a tracking structure was put in place to ensure Action Items are recorded, assigned and followed-up through the QMS Representative.

The following Action Items from last year’s Management Review and Update:

NO.#	Generated year	Action Item	Update
1	2022	Provide Training to staff on AWQI reporting before the end of March	Training completed in-house by W/WW Supervisor April 13, 2022
2	2022	Under the QMS there are “elements”, CCP and CCL come from the Risk Assessment. The RA and CCPs/CCLs are to be reassessed.	Previous QMS Representative and W/WW Supervisor address item
3	2022	Review procedures re; excessive Free Chlorine samples	Discussed at York Region partnership meeting on September 19, 2023
4	2022	Meeting with York Region re: THM uptrend. Report outcomes to management	Discussed at York Region partnership meeting on September 19, 2023
5	2022	Consider SOP updates on Hydrant use and communication between W/WW and Fire	W/WW Supervisor pending review
6	2022	For Operational Performance (and other “quantitative” parameters) draw trend lines and use data points for the past several years. Make this information more visual (i.e., 3-year trend, graphs, table chart)	Re-assigned to new QMS Rep and Operations Manager to review and develop plan

Additional Action Items listed:

No./Year	Action Item	Assigned to	Update
CIR 2023-01	HAA sample point review and keep the sample points for a year to monitor HAA trend	S. Neupane R. Apavaloe	Reviewed and finalized fixed location for all samples
CIR 2023-02	Watermain break response testing/training to be provided in summer 2023	Re-assigned to A. Antoniadis	Emergency Response testing (mock Exercise) conducted on December 22, 2023

Action Item:

None

j. The Status of Management Action Items Identified Between Reviews

No action items identified between reviews and none to report for 2023. None to report for 2023.

Action Item:

None

k. Changes that Could affect the Quality Management System

As the Town of Georgina is planning to extend the QMS to the sewer system once the town implements Consolidated Linear Infrastructure Environmental Compliance Approval (CLI-ECA), the existing compliance resources will need to be reviewed to make sure adequate resources are in place to execute business as planned. Conditions in the CLI-ECA require the municipality, as the holder, to prepare and implement an operations and maintenance manual for the system. The operations and maintenance manual typically includes;

- Operating and maintenance procedures for routine operation of the system
- Inspection programs, including frequency of inspection and the methods or tests used to detect when maintenance is necessary
- Maintenance and repair programs
- Operational and maintenance requirements to protect sources of drinking water, such as those include in the ministry’s D-5 Planning for Sewage and Water Services and any applicable local source protection plan policies
- Procedures for the inspection and calibration of monitoring equipment
- Emergency response, spill reporting, contingency plans and procedures for dealing with equipment breakdown, potential spills and any other abnormal situations
- Procedures for reviewing, responding and recording public situations
- Procedures for receiving, responding and recording public complaints
- As-built drawings or record drawings

The Ministry of Environment Conservation and Parks (MECP) updated the Potential Hazardous Events list, adding persistent cyber security threats in the municipal water supply system. The Town of Georgina has kept this as an Action Item from last year’s Management Review and the Operations Manager, W/WW/W will further need to review and plan with the Director of Operations and Infrastructure.

Year	Carried over from 2022 Management Review	Status/update
2023	Consolidated Linear Infrastructure Environmental Compliance Approval (CLI-ECA) application, data assets, operations and maintenance programs, Operational Plan, SOPs and manuals – existing resources/ compliance requirements will need to be reviewed.	Operations Manager, W/WW/W to continue to review and plan
2023	Considered cyber security as a potential threat in drinking water supply system - recommended in 2022 Management Review that an action item to evaluate the impact of this addition	Operations Manager, W/WW/W to review with Director of O&I

Action Items:

Operations Manager W/WW/W to review; CLI-ECA application, data assets, operations and maintenance programs, Operational Plan, SOPs and manuals and Cyber security as a potential threat in drinking water supply system – recommended at 2022 Management Review that action item to evaluate the impact of this addition.

I. Resources needed to maintain the Quality Management System

There is a need to identify which resources are needed in order to ensure the effective operation QMS. Resources will often include materials, infrastructure, finance, personnel and IT (hardware, software), all of which can be either internally or externally provided.

In 2023, a new QMS Representative, Operations Manager for Water/Wastewater/Waste, Water/Wastewater Clerk, and Water/Wastewater Operator were hired. In addition, the alignment of Asset Management and Capital Delivery units under Operations and Infrastructure have provide much needed support to the QMS.

Year	Description	Status/update
2023	Current practice for managing Preventative Maintenance programs within the Water/Wastewater division, i.e. hydrant inspections, valves cycling, air valves, and water sampling.	Continue to review work practice and assess gaps by end of Q2 to better align with what is outlined in our Core Asset Management Plan, i.e. Valves cycling biannually
2023	Existing practice for generating work orders, managing preventative maintenance programs, collecting asset data and developing reports is limited with the current system in place.	Essential for managing work related activities for preventative maintenance programs, records keeping and tracking of data, we will need to research software solutions.
2023	Personnel Coverage (Element 11), ensure continuous coverage and availability of certified and competent personnel for the Drinking Water System during normal business hours and stand-by after hours for emergencies	With existing staffing compliment, record of absenteeism, and staff nearing retirement, there has been issues with maintaining the stand-by schedule in 2023.

The Operations Manager W/WW/W will continue to review work practices and assess gaps within the Water/Wastewater division to ensure preventative maintenance programs are on-going, review record keeping and data collection methods, and evaluate personnel coverage in relation to compliance of the DWQMS.

Action Item:

Operations Manager W/WW/W to review; 1) work practice and identify gaps for all preventative maintenance programs – align with regulatory compliance, work/time management, and staffing compliment, 2) research software solutions to aid in managing/generating work orders, preventative maintenance programs, asset data and developing reports, 3) Personnel Coverage to ensure continuous coverage and availability of certified and competent personnel during normal business hours and stand-by after hours for emergencies. (*employment standard Act/CA*).

m. Consumer Feedback

Customer feedback is essential to collecting data about whether clients are satisfied or dissatisfied with a product or service and about their general experience. Customer opinion is a resource for improving customer experience and recognizing water issues within the system. There are varying methods in obtaining data for water complaints, therefore a review of processes and record-keeping platforms needs to be reviewed and discussed further.

Below are a list of trends/types of complaints from customer feedback from 2022 and 2023:

Types of Complaints	2022	2023
Taste and Odour	6	7
Low water pressure/No water complaints	16	17
Water Service Leaks/breaks	31	38
Frozen Water Service	0	0
Service Box repairs/lowering	6	3

Action Item:

None

n. Result of the Infrastructure Review

DWQMS requires a summary of infrastructure maintenance, rehabilitation and renewal programs be kept current, communicated and monitored for its maintenance program effectiveness. The following chart is from 2023 Infrastructure Review:

Infrastructure Review	Description
Asset Management Plan	For core assets, including linear/vertical water infrastructure - next phase, develop condition assessment and enhancement of existing maintenance program for DWS.
Capital Delivery	Replacement of Polybutylene water service connections, and metallic watermain segments along Queensway South that have exceeded their useful life.
Capital Delivery	Design of supplementary Morton Avenue watermain – construction planned for spring 2024 - Replacing valves and chambers on Morton Avenue
Capital Delivery	Queensway watermain – plan to move to design stage

In summary, a condition assessment is in progress for Simcoe Landing’s Water Booster Pumping Station, and the Water Distribution System has been included in the 2026 Capital budget for the Town’s 10-year capital plan. Ongoing maintenance programs for 2024 include an enhanced valve turning program, as well as the continued implementation of maintenance programs as identified in the Town’s Core Asset Management Plan (changes that could affect the WMS).

Action Item:

None

o. Operational Plan Currency, Content, and Updates

The Town of Georgina’s QMS Operational Plan was revised in late 2023 (version .10) and has gone through an overhaul of content and formatting to better streamline the order of information. The revised QMS Operational Plan is a high-level document of information that can be shared on the website and to the public and is pending review/approval from Top Management.

The following changes have been made to the QMS Operational Plan (version 10) –

- Update: Commitment & Endorsement new Operating Authority (Operations Manager, W/WW/W)
- Update: QMS Representative new appointment information (DWQMS Compliance Officer)
- Revise: Information/description for each element (Elements 1 to 21), with associated documents & references (SOPs)
- Appendices: endorsement forms, water system profile, personnel coverage

Associated documents & references consisting of new/revised documents that support each element, i.e. SOPs, Forms, Emergency Response Plan (ERP), Emergency Management SOPs and Contact Lists, Essential Suppliers and Services Agreement and SOPs, and Master List of Documents.

The Operational Plan is the primary instrument for communicating the Town’s QMS from staff to Mayor/Council, and from Mayor/Council to Ontario’s Ministry of Environment, Conservation and Parks (MECP), and to the public. It is endorsed/communicated by QMS Top Management and Town Council. The original QMS Operational Plan was rolled out prior to 2009, and as we revise this document, Top Management shall review/endorse where required and any updates for the QMS Operational Plan are to be formally communicated through staff reports and/or council meetings to inform the Owner (Mayor/Council).

Major revisions done to the QMS Operational Plan document shall be reviewed/approved by Top Management and shared with the Owner through a briefing note and/or council report. All updates to QMS documents shall be shared and/or communicated to the Owner, Top Management, Operating Authority and to personnel whose roles and responsibilities directly affect the drinking water system.

Action Item:

Top Management review/endorse version 10 of QMS Operational Plan on January 30th, 2024

p. Staff Suggestions

In August 2023 the QMS Representative implemented an employee suggestion program, whereby Water/Wastewater staff are encouraged to submit helpful ideas for internal processes, potential improvements to the workplace, or call attention to any problems or difficulties they may be experiencing.

A staff suggestion box has been placed in the lunchroom, all suggestions are tracked in a tracking sheet and brought forward at monthly staff meetings where they are shared, discussed and follow-ed up.

Action Item:

None

Summary of Action Items from 2023 QMS Management Review:

Action Item #	Action Item description	Assigned to/ due by:
1	Once the MECP inspection is completed and a report provided for the calendar year of 2023, a briefing report to Council will be provided to inform the Owner and Top Management on the Town of Georgina’s Drinking Water System.	W/WW/W Operations Manager/QMS Rep Q2
2	Include Nitrate and Nitrite testing in the sampling schedule.	W/WW/W Operations Manager/W/WW Supervisor Q1
3	Review; CLI-ECA application, data assets, operations and maintenance programs, Operational Plan, SOPs and manuals and Cyber security as a potential threat in drinking water supply system.	W/WW/W Operations Manager TBD
4	Review work practice and identify gaps for all preventative maintenance programs – align with regulatory compliance, work/time management, and staffing compliment, 2) research software solutions to aid in managing/generating work orders, preventative maintenance programs, asset data and developing reports, 3) Personnel Coverage to ensure continuous coverage and availability of certified and competent personnel during normal business hours and stand-by after hours for emergencies. (<i>employment standard Act/CA</i>).	W/WW/W Operations Manager Q4
5	Review; 1) work practice and identify gaps for all preventative maintenance programs – align with regulatory compliance, work/time management, and staffing compliment, 2) research software solutions to aid in managing/generating work orders, preventative maintenance programs, asset data and developing reports, 3) Personnel Coverage to ensure continuous coverage and availability of certified and competent personnel during normal business hours and stand-by after hours for emergencies. (<i>employment standard Act/CA</i>).	W/WW/W Operations Manager Q4
6	Top Management to review/endorse version 10 of QMS Operational Plan.	Top Management Q1