

# Quality Management System Operational Plan

Keswick And Sutton  
Water Distribution Subsystem

Revision 10

Issued: October 2024



**GEORGINA**

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# Introduction

## Purpose

The purpose of this Operational Plan is to describe the comprehensive Quality Management System (QMS) developed and implemented by the Town of Georgina for the operation and maintenance of the Keswick-Sutton Water Distribution System. This Operational Plan includes references to all components of the Drinking Water Quality Management Standard (DWQMS).

## Scope

This Operational Plan covers the activities and personnel associated with all operational aspects of the drinking water distribution system for the Town of Georgina.

This Operational Plan, the procedures, appendices and other QMS documentation that are referenced herein, have been developed in accordance with the legislated requirements for the provision of safe drinking water in the province of Ontario.

The scope of the water distribution system begins at the point where the treated water enters the Town of Georgina's distribution main from the transmission pipelines of the Region of York and ends at the property lines of the consumers. The scope of this operational plan does not cover metering.

## References

- Drinking Water Quality Management Standard (DWQMS) version 2.0
- Safe Drinking Water Act, 2002 and applicable regulations (Ontario)
- Municipal Drinking Water Licence, Number 119-201
- Drinking Water System, Number 2600626886

## Definitions/acronyms

**Audit** – A systematic and documented verification process that involves objectively obtaining and evaluating documents and processes to determine whether a quality management system conforms to the requirements of the DWQMS.

**Compliance** – The fulfillment of a regulatory requirement.

**Conformance** – The fulfillment of a DWQMS requirement.

**Control Measure** – Includes any process, physical steps or other contingencies that have been put in place to reduce a hazard before it occurs.

**Critical Control Limit (CCL)** – The point at which a critical control point response procedure is initiated.

**Critical Control Point (CCP)** – An essential step or point in the system at which control can be applied to prevent or eliminate a drinking water health hazard or to reduce it to an acceptable level.

**Document** – Writing (physical or digital) conveying information that can be changed, altered, or updated.

**DWQMS** – Drinking Water Quality Management Standard (DWQMS) is a ministry standard introduced after the Walkerton inquiry to ensure compliance of all water systems in Ontario. This standard is approved by the Ministry of Environment, Conservation and Parks (MECP) in accordance with s.21 of the Safe Drinking Water Act (SDWA).

**Emergency** – A situation that poses an immediate risk to health, life property or environmental. Potential situations have been identified from the annual risk assessment that are considered emergencies, i.e. service interruption that may result in the loss of the ability to maintain a supply of safe drinking water to consumers.

**ERP** – Emergency Response Plan (ERP) is a department internal document that provides clear and concise guidance for staff when dealing with an emergency incidents/event.

**Hazard** – A source of danger that may cause drinking water to be unsafe for consumption. Hazard may be biological, chemical, physical or radiological in nature.

**Infrastructure** – The set of interconnected structural elements that provide the framework for supporting the operation of the drinking water system, including buildings, workspaces, process equipment, water mains, valves, hydrants, hardware, software, and support services.

**MECP** – Ministry of the Environmental, Conservation and Parks (MECP) enforces compliance with environmental laws and responsible for protecting and improving the quality of the environment.

**Monitoring** – Includes any checks or systems that are available to detect the potential for hazards to occur.

**Non-compliance** – A failure to meet requirement under that Safe Drinking Water Act (SDWA), Ontario Water Resources Act (OWRA) or any regulation or legislation under these Acts that are associated with drinking water.

**Non-Conformance** – A failure to fulfill a requirement of the Drinking Water Quality Management Standard.

**Operating Authority** – The person or entity that is given responsibility by the owner for the operation, management, maintenance or alteration of the subject system

**Operators** – Water/Wastewater Operators are licensed and certified under the Ministry of the Environment, Conservation and Parks (MECP) and oversee all aspects of the water system through operation, maintenance, and monitoring.

**ORO** – Overall Responsible Operator are licenced and certified under the Ministry of the Environment, Conservation and Parks (MECP) and direct operators on operating decision beyond the knowledge, skills, and experience of the operators.

**Owner** – Owners of drinking water systems that supply water to the public have the responsibilities to ensure the water is safe to drink. The Mayor and Council are designated owners of the Town of Georgina’s drinking water system.

**QMS** – Quality Management System is a system designed to establish a policy/objective and methods of how to achieve these, and to direct and control the organization with regard to quality.

**QMS Representative** – DWQMS Compliance Officer is responsible for the management, coordination and administration of the QMS.

**Record** – A document stating results achieved or providing proof of activities performed. Written (physical or digital) conveying information that cannot be changed, altered or updated.

**SCADA** – Supervisory Control and Data Acquisition (SCADA) is a computer-based system for gathering and analyzing real-time data to monitor and control equipment that deals with critical and time sensitive materials or events.

**SOP** – Standard Operating Procedure (SOP) – developed to standardize certain policies, processes, procedures and work instructions such that greater efficiency, greater safety, higher level of understanding, and an increased level of service is achieved

**Top management** – A person, persons or group or people at the highest management level within the operating authority that makes decisions about the QMS and makes recommendations to the Owner about the Drinking Water System. At the Town of Georgina, this includes the Director of Operations and Infrastructure, and Chief Administrative Officer (CAO).

# **1. Element – Quality Management System**

## **1.1 Purpose**

The Town of Georgina, as the owner and operating authority of its drinking water system, the Keswick-Sutton Water Distribution System, is required to conform to the Drinking Water Quality Management Standard (DWQMS version 2.0) developed by the Ministry of the Environment, Conservation and Parks (MECP) through the Municipal Drinking Water Licensing Program.

The QMS is applied to the distribution of potable drinking water to consumers within the distribution system boundaries. The Operational Plan is comprised of documents that outline the processes and procedures for the overall quality management of the Towns' Drinking Water System. The Operational Plan has been developed to represent the Operating Authority's QMS that conforms to the Standard and satisfies the requirements for the Town's drinking water licence.

## **1.2 Description**

The Town of Georgina's water distribution system receives treated water from the Regional Municipality of York and the Operational Plan covers the water distribution system owned by the Town of Georgina (Owner) and operated by the Department of Operations and Infrastructure (Operating Authority).

The Operational Plan was developed to ensure that safe and reliable drinking water is provided to all the citizens, businesses and visitors of the Town of Georgina. The Operational Plan also enables the Town of Georgina to continue planning, implementing, checking and continually improving the drinking water system to ensure the higher quality of the drinking water.

## **1.3 Associated documents and references**

- DWQMS Element 1 – Quality Management System
- SOP-1 Quality Management System
- DWQMS 1 QMS Schedule

## **2. Element – Quality Management System Policy**

### **2.1 Purpose**

It is the requirement of the Drinking Water Quality Standard (DWQMS) to create a policy that demonstrates the Town's commitment to the delivery of safe drinking water and enhance consumer confidence in the quality of the drinking water.

### **2.2 Description**

The Town of Georgina and its water distribution system shall comply with all relevant legislation and regulations for the consistent delivery of safe drinking water to its residential and commercial/industrial customers.

The Town of Georgina shall also commit to the continuous improvement of and maintenance of the Quality Management System, and communicate openly and effectively with the public concerning relevant aspects of drinking water quality.

The Quality Management System Policy is endorsed by the owner (Mayor/Council) and top management (CAO/Director of Operations and Infrastructure). The adopted policy can be found in the following locations:

- [The Town of Georgina's website](#)
- The Civic Centre – Water/Wastewater Operations Facility

### **2.3 Associate documents and references**

DWQMS Element 2 – Quality Management System Policy

SOP-2 Quality Management System Policy

Town of Georgina Quality Management System Policy



## **3. Element – Commitment and endorsement**

### **3.1 Purpose**

To communicate the owners' (Mayor/Council) and top management's (CAO/Director of Operations and Infrastructure) commitment and endorsement of the QMS described in this Operational Plan.

### **3.2 Description**

The owner and top management of the Operating Authority are committed to the implementation, maintenance and continual improvement of the QMS that meets the requirements of the DWQMS. The owner and top management acknowledges the need for and supports the provision of sufficient resources to maintain and continually improve the QMS and the Drinking Water System.

The Operational Plan for the QMS has been reviewed and approved for the Town of Georgina by top management and endorsed by Council as owner's of the drinking water system. Top management shall ensure that all staff of the Operating Authority are aware of all applicable legislation and regulatory requirements and that the QMS is effectively communicated to the owner through the Annual Summary Report and QMS Management Reviews.

### **3.3 Associated documents and references**

- DWQMS Element 3 – Commitment and Endorsement
- SOP-3 Commitment and endorsement
- FORM -3 Commitment and endorsement

## **4. Element – Quality Management System Representative**

### **4.1 Purpose**

To identify the QMS Representative for the Town of Georgina and outline the associated responsibilities and authorities as set in the DWQMS.

### **4.2 Description**

The Town of Georgina has appointed and authorized the DWQMS Compliance Officer as the QMS Representative, who is irrespective of other duties, has the following responsibilities;

- Ensure the processes and procedures needed for the QMS are established and maintained
- Reporting to top management on the performance of the QMS and any needed improvement
- With the cooperation of all Operating Authority staff, ensuring that current versions of the document required by the QMS are easily identified, retrievable and being used at all times
- With cooperation of all Operating Authority staff, ensuring that personnel are aware of all applicable legislative and regulatory requirements that pertain to their duties for the operation of the Town of Georgina distribution system
- Promoting awareness of the QMS throughout the Operating Authority

A Notice of Appointment document shall be signed/authorized by the Chief Administrative Officer (CAO), Director of Operations and Infrastructure, and Operations Manager Water/Wastewater/Waste, representing the Town of Georgina's QMS Representative.

### **4.3 Associated documents and references**

- DWQMS Element 4 – Quality Management System Representative
- SOP-4 Quality Management System Representative
- FORM -4 Quality Management System Representative – Notice of Appointment

## **5. Element – Documents And records control**

### **5.1 Purpose**

To describe the procedure for ensuring the Town of Georgina's documents and records associated with the QMS and drinking water system are kept current, legible, readily available, retrievable, stored, protected, retained and disposed of in an appropriate manner.

### **5.2 Description**

The QMS documents outline and define the process for managing, maintaining and protecting all documents and records required for the conformance of the QMS. All documents, records and forms are properly identified, stored, protected, retained and disposed/discarded.

### **5.3 Associated documents and references**

- DWQMS Element 5 – Documents and records control
- SOP-5 Documents and records control
- Master list of documents

## **6. Element – Drinking Water System**

### **6.1 Purpose**

To provide an overview of the Town of Georgina's drinking water system.

### **6.2 Description**

The Town of Georgina owns and operates the Keswick-Sutton Distribution System and is responsible for the operation of the Class 2 Water Distribution System. The Town serves a population of approximately 49,300 and operates and maintains the distribution system, which is comprised of watermains, valves, two booster-pumping stations, hydrants, meters and 13,500 service connections.

Municipal drinking water is being supplied to the communities of Keswick and Sutton, located on the south shore of Lake Simcoe. Surface water from Lake Simcoe is treated by the Regional Municipality of York, while the Town of Georgina distributes treated water to end users.

The performance of the Keswick-Sutton Water Distribution System is outlined in the Keswick-Sutton Water Distribution System Annual Report. A copy of the Annual Water Quality Report is available for public viewing prior to the end of February each year in accordance with O. Reg. 170/03. In addition, a summary report is communicated to the Owner in the form of a council report prior to the end of March each year. The Water Quality Report is available for public viewing on the Town of Georgina website and at the Municipal Office (Civic Centre) in the Office of the Clerk.

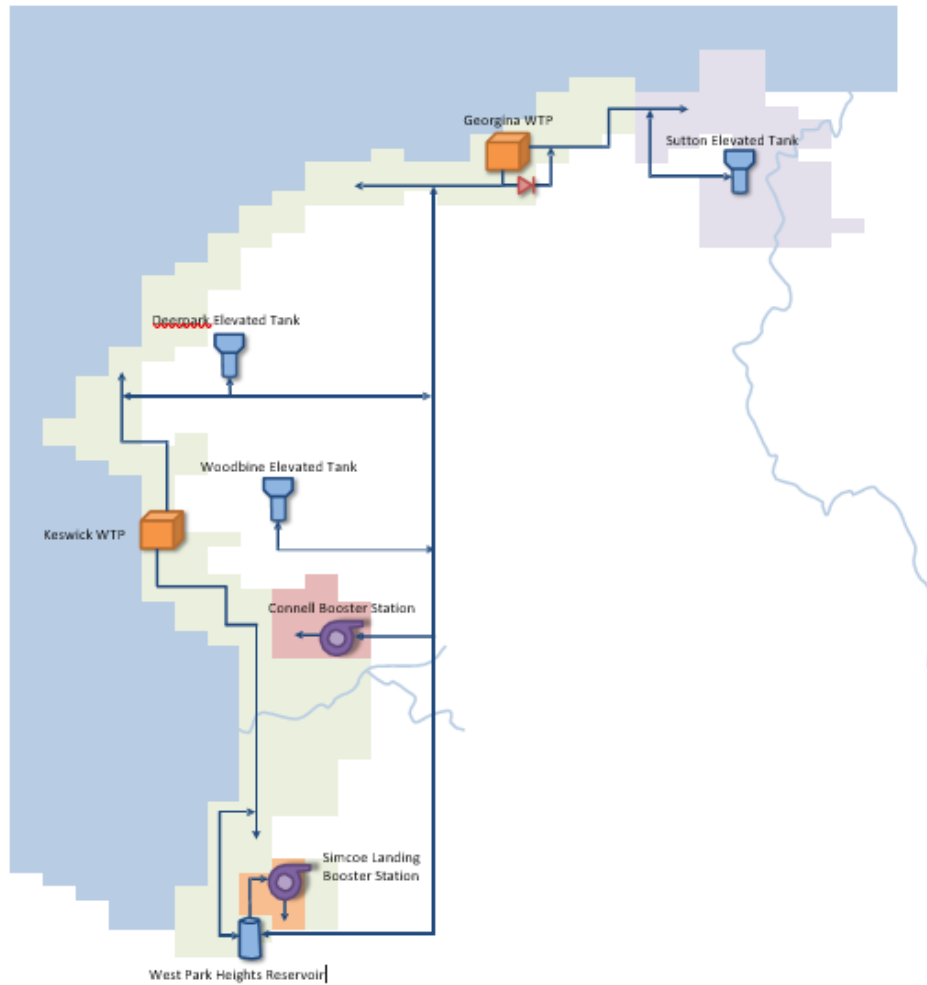
### **6.3 Associated Documents and References**

- DWQMS Element 6 – Drinking Water System
- SOP-6 Drinking Water System
- Town of Georgina Water System Schematic
- Annual Water Quality Report

# Water Distribution System Overview Map/Schematic



## TOWN OF GEORGINA WATER SYSTEM GEORGINA - EXISTING SYSTEM SCHEMATIC



### LEGEND

	Water Treatment Plant		Elevated Tank		Lake Simcoe		Pressure Zone 1 (Keswick)	HGL (m)
	Pump		Standpipe		Rivers		Pressure Zone 1 (Sutton)	277.0
	Motorized Valve						Pressure Zone 2	270.4
							Pressure Zone 3	302.7
								298.0

## **7. Element – Risk assessment**

### **7.1 Purpose**

To describe the method and approach taken by the Town of Georgina to identify, assess and where possible, mitigate and/or eliminate potential risks within the drinking water system. The focus of the assessment is on risks affecting the water quality and water quantity.

### **7.2 Description**

A risk assessment process has been established to collectively identify, assess, rank and prioritize potential drinking water related hazards and associated risks. This risk assessment is conducted at least once every 36 months, and a review of the validity of the risk assessment information is conducted annually. The methodology and approach taken to conduct the risk assessment is described in QMS Risk Assessment documentation.

### **7.3 Associated documents and references**

- DWQMS Element 7 – Risk assessment
- SOP-7 Risk assessment

## **8. Element – Risk assessment outcome**

### **8.1 Purpose**

To establish an effective and organized approach to conducting, assessing and improving hazard risks associated with the drinking water system.

### **8.2 Description**

The risk assessment must be conducted in accordance with the Town of Georgina's QMS risk assessments documents. The results of the risk assessment are to be recorded in a table displayed as Risk Assessment Outcomes, using Hazard Analysis and Critical Control Point Assessment (HACCP) process of risk assessment definitions, risk rank table, and control measures.

### **8.3 Associated documents and references**

- DWQMS Element 8 – Risk assessment outcome
- SOP-7 Risk assessment
- Risk assessment outcome table

# 9. Element – Organizational structure, roles, responsibilities and authorities

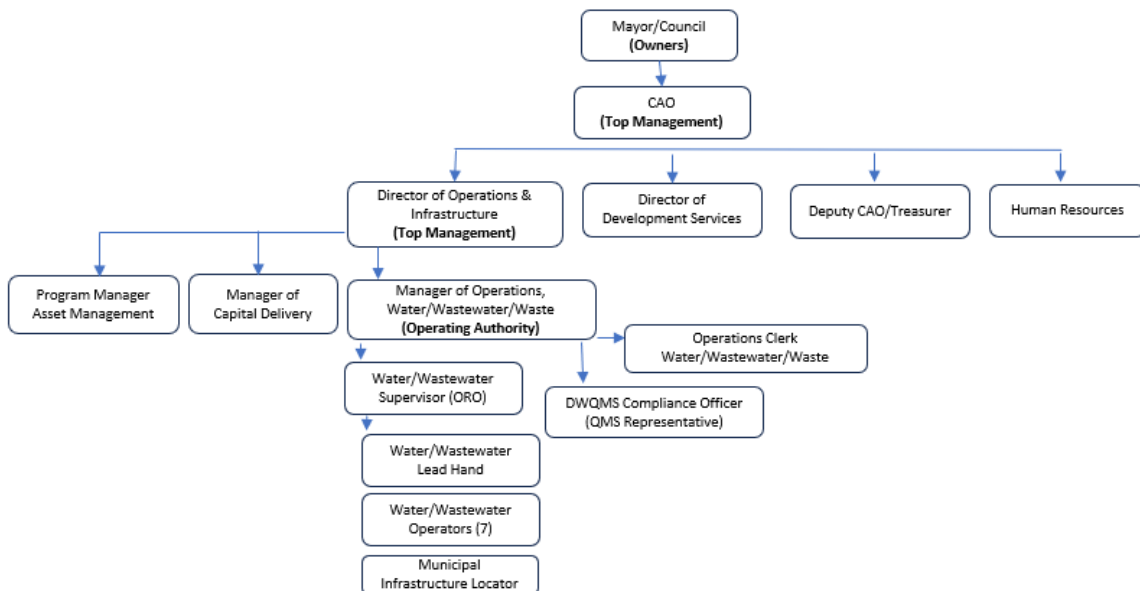
## 9.1 Purpose

The outline the organizational structure, as well as the roles, responsibilities and authorities of personnel as it relates to the operation and performance of the Town of Georgina’s QMS and drinking water system.

## 9.2 Description

The Town of Georgina is defined as the owner of Georgina’s drinking water system as represented by the Mayor/Council and the Operating Authority as represented by Operations and Infrastructure, Water/Wastewater/Waste Division. Top management is the management level in the Operating Authority and is responsible for ensuring management reviews are conducted annually as outlined in the organizational structure, roles, responsibilities and uthorities QMS documentation.

The structure of the organization is depicted in the Town of Georgina’s organizational chart.



## 9.3 Associated documents and references

- DWQMS Element 9 – Organizational structure, roles, responsibilities and authorities



- SOP-9 Organizational structure, roles, responsibilities and authorities
- Town of Georgina Organizational Structure Chart

## **10. Element – Competencies**

### **10.1 Purpose**

To determine the competency requirements for personnel performing duties directly affecting drinking water quality and to identify the means needed to meet those competencies.

### **10.2 Description**

QMS competencies documentation describe the process for identifying, developing and maintaining required competencies for personnel performing duties directly affecting drinking water quality. Records of staff certification, licensing and training demonstrate ongoing efforts to uphold the competencies outlined in our procedures and ensure that personnel remain informed and aware.

### **10.3 Associated documents and references**

- DWQMS Element 10 – Competencies
- SOP-10 Competencies
- Training and certification records
- Operator certificate/licence records

# **11. Element – Personnel coverage**

## **11.1 Purpose**

To ensure continuous coverage and availability of certified and competent personnel for the drinking water distribution system to address all issues relating to and carry out necessary duties that directly affect the drinking water quality.

## **11.2 Description**

The Town of Georgina will ensure competent personnel are always available to fulfill duties that affect drinking water quality. Competent personnel are available during regular operating hours and on standby after hours to perform tasks and respond to emergencies. The Town will ensure that all personnel included in the coverage schedule possess the necessary skill and knowledge to effectively fulfill their responsibilities.

## **11.3 Associated documents and references**

- DWQMS Element 11 – Personnel coverage
- SOP-11 Personnel coverage
- Standby schedule

## **12. Element – Communications**

### **12.1 Purpose**

To identify the process for communicating information related to the QMS Operational Plan to appropriate internal and external parties and outline the method for receiving and processing related communication.

### **12.2 Description**

QMS communications documentation describes the process for ensuring relevant aspects of the QMS are communicated between top management, and the owner, water distribution system personnel, suppliers and the public.

### **12.3 Associated documents and references**

- DWQMS Element 12 – Communications
- SOP-12 Communications
- Management reviews
- Reports to Council

## **13. Element – Essential supplies and services**

### **13.1 Purpose**

To describe the process for ensuring that all supplies and services deemed essential for the delivery of safe drinking water are available and provided when and where required.

### **13.2 Description**

The QMS Essential Supplies and Services documentation outline the process for identifying critical supplies and services, ensuring requirements are clearly defined and procurement methods are effectively communicated.

### **13.3 Associated documents and references**

- DWQMS Element 13 – Essential supplies and services
- SOP-13 Essential supplies and services
- Essential suppliers and services responsibilities package – Town of Georgina
- QMS Essential supplies list

## **14. Element – Review and provision of infrastructure**

### **14.1 Purpose**

To identify the process to review the adequacy of the infrastructure needed for the efficient operation and maintenance of the Town of Georgina's Drinking Water Distribution System and ensure the provision of this infrastructure.

### **14.2 Description**

The QMS infrastructure review and provision documentation outlines the processes and procedures for assessing the adequacy of the Town of Georgina's infrastructure, ensuring its provision and effectively communicating review findings to the owner. Annually, the Town conducts a thorough evaluation of the water distribution system's infrastructure and any key insights and findings from this assessment are documented in a report submitted to top management. Additionally, designated personnel will continuously monitor performance trends in the drinking water system to ensure ongoing reliability and effectiveness.

### **14.3 Associated documents and references**

- DWQMS Element 14 – Review and provision of infrastructure
- SOP-14 Review and Provision of infrastructure
- Annual operating and capital project budgets

## **15. Element – Infrastructure maintenance, rehabilitation and renewal**

### **15.1 Purpose**

To identify the maintenance, rehabilitation and renewal programs that the Town of Georgina has in place for the drinking water system infrastructure.

### **15.2 Description**

The Town of Georgina's infrastructure maintenance includes both preventative and corrective maintenance, inspections and record keeping in accordance with regulatory requirements and best practices. Top management shall ensure a long-term forecast of major maintenance including large scale rehabilitation/replacement programs and capital projects are reviewed at a minimum annually and a summary of these programs are communicated to the owner.

### **15.3 Associated documents and references**

- DWQMS Element 15 – Infrastructure maintenance, rehabilitation and renewal
- SOP-15 Infrastructure maintenance, rehabilitation and renewal
- Water Rate Study

## **16. Element – Sampling, testing and monitoring**

### **16.1 Purpose**

To ensure sampling, testing and monitoring is conducted to provide safe drinking water for the Town of Georgina's Drinking Water Distribution System.

### **16.2 Description**

The Town of Georgina is responsible for establishing and maintaining the sampling, testing, and monitoring program that, at a minimum, meets regulatory requirements. Regulatory sampling, testing and reporting at designated stations throughout the distribution system, system chlorine residual testing at designated locations throughout the Town, and regulatory sampling, testing and reporting system interruption for emergency repairs and scheduled repairs.

### **16.3 Associated documents and References**

- DWQMS Element 16 – Sampling, testing and monitoring
- SOP-16 Sampling, testing and monitoring
- Safe Drinking Water Act, 2002 (Ontario)
- Ontario Regulation 169/03 – Ontario Drinking Water Quality Standard
- Ontario Regulation 170/03 – Drinking Water Systems
- SOP-16 Sampling, testing and monitoring
- WWW1 – Drinking water sampling and testing – microbiology
- WWW2 – Drinking water sampling and testing – chemical
- WWW3 – Drinking water sampling and testing – lead
- WWW4 – Water quality Monitoring
- WWW5 – Adverse water quality monitoring



## **17. Element – Measurement and recording equipment calibration and maintenance**

### **17.1 Purpose**

To describe the calibration program for all water sampling, monitoring and/or testing equipment and devices used by the Town of Georgina Water/Wastewater/Waste Division.

### **17.2 Description**

Calibration and maintenance can be performed either in house or by the manufacturer in accordance with relevant legislative requirements and/or manufacturer's specifications. Equipment inspected by Water/Wastewater Operators for performance verification and portable chlorine analyzers are calibrated according to the manufacturer's manual. Calibration of the water quality field testing equipment is contracted to qualified suppliers/service providers.

### **17.3 Associated documents and references**

- DWQMS Element 17 – Measurement and recording equipment calibration and maintenance
- SOP-17 Measurement and recording equipment calibration and maintenance
- WWW7 – Field test kit calibration and standards check

## **18. Element – Emergency management**

### **18.1 Purpose**

To describe the process used by the Town of Georgina Water/Wastewater/Waste Division to identify emergency situations and to manage its response to these events.

### **18.2 Description**

The QMS Emergency Management documentation outlines the framework for maintaining emergency preparedness within the Drinking Water Distribution System. The Town of Georgina will engage a risk assessment process to identify potential emergencies and establish specific preparedness activities. This approach ensures that staff are well-trained and informed about:

- Individual roles and responsibilities
- Emergency response and recovery procedures
- Existing threats and hazards and associated protective actions
- Details and location of emergency equipment

### **18.3 Associated documents and references**

- DWQMS Element 18 – Emergency management
- Emergency Response Plan (ERP)
- SOP-18 Emergency Management
- SOP 18a – Emergency management – contact list
- SOP 18b – Emergency management – essential supplies and services contacts
- SOP 18c – Emergency management – equipment list

## **19. Element – Internal audits**

### **19.1 Purpose**

To ensure that the QMS meets or exceeds the requirements of DWQMS and to confirm it is operating effectively.

### **19.2 Description**

Internal audits shall be conducted annually conforming to the requirements of the DWQMS requirement and will ensure the QMS has been effectively implemented, properly maintained and is described in the procedure of internal audits, including audit criteria, frequency, scope, records, methodology and schedule.

### **19.3 Associated documents and references**

- DWQMS Element 19 – Internal audits
- SOP-19 Internal audits
- Audit reports

## **20. Element – Management review**

### **20.1 Purpose**

The Town of Georgina will continually evaluate and improve the effectiveness of its Quality Management System (QMS).

### **20.2 Description**

Management reviews are a structured assessment of the ongoing suitability and effectiveness of the Quality Management System (QMS). These reviews will be conducted at least once each calendar year, with the results communicated to top management and Council through the QMS Annual Report.

### **20.3 Associated documents and references**

- DWQMS Element 20 – Management review
- SOP-20 Management review
- Management review agenda and minutes
- Annual Water Quality Summary Report

## **21 Element – Continual improvement**

### **21.1 Purpose**

To outline the processes by which the Town of Georgina identifies, develops and implements improvements to the Quality Management System (QMS).

### **21.2 Description**

The Town is committed to enhancing the effectiveness of its QMS by implementing best practices and taking corrective and preventative actions. The Town of Georgina will evaluate the feasibility of integrating best management practices for drinking water as part of our ongoing improvement efforts. Corrective actions identified through internal and external audits, management reviews, document assessments and submissions related to the non-conformities and opportunities for improvement will be systematically address and assessed to ensure they effectively enhance the QMS.

### **21.3 Associated documents and references**

- DWQMS Element 21 – Continual improvement
- SOP-21 Continual improvement
- After action review report
- Staff suggestion report
- Continual Improvement report

## History of changes

Revisions of documents are identified at the end of each document. Revision number, date, description of revision and individual completing the revision are included for each controlled document.

Version No.	Date	Description	By
010	2024	Update Attachment D contact information and minor adjustments to phrasing throughout document	AA
010	2023	Complete re-edit of Operational Plan document and supporting associated documents – Elements 1 through 21, with appendices	AA MP
009	2023	E4 – update QMS Representative appointment information	AA
009	2022	E4 – update QMS Representative appointment information E8 – review and re-evaluate potential risks and hazards E1 – created QMS annual schedule document E21 – developed action items tracking sheet, form, document control master list	SN
008	2019	E9 – update to roles and responsibilities for HR and Customers Service. E9 – add roles and responsibilities for Development Engineering group E5 – update location for storing digital records E18 – ERP008 Rev 7, update emergency contacts list E21 – update associated documents related to continual improvement tracking	TL
008	2018	E9 – update ERP and associated documents/references E13 – update essential supplies and services contact list DWQMS 2.0 version update	TL

		<p>E9 - new table for role, responsibilities and authorities and add W/WW Supervisor</p> <p>E4 – update QMS representative and update staffing positions with responsibilities</p> <p>E7 and 8 – update ERP with risk assessment and contact list</p> <p>E12 and E20– update communications of QMS to top management and owners at management review</p> <p>Operational Plan OP007 updated and renamed OP008</p>	
007	2018	<p>Definitions/Acronyms update</p> <p>E3 – Commitment and endorsement revision/update</p> <p>E7 – Risk assessment contact position and update</p> <p>E15 – Infrastructure maintenance, rehabilitation and renewal update of top management responsibilities for communicating to Council (during budget review process)</p> <p>E19 – amend to ‘at least once every calendar year’</p>	TL
007	2017	E3 – OP3 Commitment and endorsement add, signing members aware of requirements in case of departure of staff or Mayor	MT
006	2015	<p>E9 – add CAO to top management as a result of management review</p> <p>E6 – revise water system description as a result of OFI from external audit</p> <p>Revise Operational Plan to include risk assessment, commitment and endorsement for new Mayor, Clerk, Bylaw 2015-0040 (PW 0-3) and revision of ERP and continual improvement</p>	<p>HY</p> <p>GS</p>
005	2014	Revision(s) to Operational Plan, procedures, ERP and commitment and endorsement	GS
005	2013	Revision(s) to Operational Plan, procedures, ERP from internal audit	HY

		E3 – Commitment and endorsement signed new Town Clerk (Bylaw 2013 – 0137) pwo-3	BF
004	2012	E7 – Risk assessment update contact information, new Director and department of Engineering Public Works, and department of Operations and Engineering	BF
003	2012	E1 – create QMS activity schedule E3 – amend procedure OP3 E18 – ERP update E21 – amend Appendix B to show Continual Improvement Changes to OP – replace Director of Engineering and Public Works to Director of Operations and Engineering	BF
002	2011	Amend Operational Plan, ERP, after hours contact information	BF
001	2011	E7 and 8 - amend Table 3 and 4 as a result of the risk assessment conducted Jan 2011 Update Operational Plan with population and contact information	BF
001	2010	E13 – Essential supplies and services update and emergency contacts list of Northern Six ERP update the communications checklist and procedure OP1 Water Distribution System drawings update Profile update for MOE – population served	BF
001	2009	Operational Plan (procedure OP5.1) review and update Emergency Response Plan (ERP) review and update	BF



# Appendices

Town of Georgina

QMS Operational Plan



**GEORGINA**

## **Quality Management Policy**

The Town of Georgina and its water distribution system shall comply with all relevant legislation and regulations for the consistent delivery of safe drinking water to its residential and commercial/industrial customers.

The Town of Georgina shall also:

Commit to the continuous improvement and maintenance of the Quality Management System.

Communicate openly and effectively with the public concerning relevant aspects of drinking water quality.



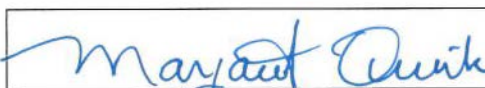
**Attachment B – Operational Plan**


**Commitment and Endorsement**

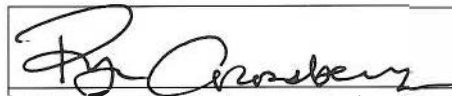
The Owner and Top Management of the Operating Authority are committed to the implementation, maintenance, and continual improvement of the Quality Management System that meets the requirements of the Drinking Water Quality Management Standard (DWQMS).

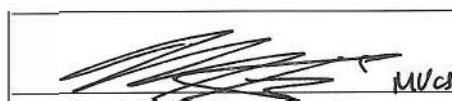
Top Management shall ensure that all staff of the Operating Authority are aware of all applicable legislative and regulatory requirements and that the QMS is effectively communicated to the Owner through the Annual Summary Report and Top Management Review meetings.

Owner and Top Management: Mayor, CAO and Director of Operations and Infrastructure appoint;

	
Margaret Quirk, Mayor (Owner)	Date: Jan 30, 2024

	
Rachel Dillabough, Town Clerk (Owner)	Date: January 30, 2024

	
Ryan Cronsberry, Chief Administrative Officer (Top Management)	Date: January 30/24

	
Michael Vos, Director of Operations and Infrastructure (Top Management)	Date: 1/30/24

	
Mario Puopolo, Operations Manager of Water/Wastewater/Waste (Operating Authority)	Date: 30-JAN-2024



Attachment C – Operational Plan


Quality Management System Representative letter of appointment:

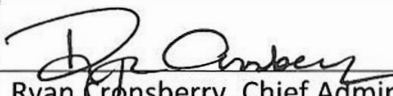
The Town of Georgian has appointed and authorized the DWQMS Compliance Officer as the Quality Management System Representative, who irrespective of other duties, has the following responsibilities;


- Ensure the processes and procedures needed for the QMS are established and maintained,
- Reporting to Top Management on the performance of the QMS and any needed improvement,
- With the cooperation of all Operating Authority staff, ensuring that current versions of the document required by the QMS are easily identified, retrievable and being used at all times,
- With cooperation of all Operating Authority staff, ensuring that personnel are aware of all applicable legislative and regulatory requirements that pertain to their duties for the operation of the Town of Georgina distribution system,
- Promoting awareness of the QMS throughout the Operating Authority

Top Management/Operating authority appoint;

*Anna Antoniadis*

	<i>30 JAN-2024</i>
Anna Antoniadis, DWQMS Compliance Officer	Date:

	<i>January 30/24.</i>
Ryan Cronsberry, Chief Administrative Officer	Date:

 <i>M/V</i>	<i>1/30/24</i>
Michael Vos, Director of Operations and Infrastructure	Date:

	<i>30 JAN-2024</i>
Mario Puopolo, Operations Manager of Water/Wastewater/Waste	Date:

## **Attachment D – QMS Operational Plan**

### **Schedule C – Subject System Description Form – Municipal Residential Drinking Water System**

#### **Drinking Water System Details**

Drinking Water System Name: Keswick-Sutton Distribution System

Drinking Water System Number: 260062686 – DWS Keswick

260026156 – DWS Georgina

Drinking Water System Category: Large Municipal Residential System (LMRS)

Municipality: Georgina

#### **Owner information**

The Corporation of the Town of Georgina

26557 Civic Centre Rd., Keswick, Ontario, L4P 3G1, Canada

#### **Operating Authority information**

24/7 Contact name: Mario Puopolo

Job title: Operations Manager, Water/Wastewater/Waste

Contact phone: 905-476-4301, ext. 2159

Contact email: mpuopolo@georgina.ca

Contact mobile: 905-955-2552

24/7 Contact name: Brendan Roffey

Job title: Supervisor, Water/Wastewater

Contact phone: 905-476-4301, ext. 3923

Contact email: broffey@georgina.ca

Contact mobile: 905-716-4539

## **Attachment E – Operational Plan**

### **Roles, responsibilities and authorities**

**Position:** Mayor/Council (owner)

**Roles/responsibilities:**

- Demonstrates commitment to the QMS
- Endorses the contents of the Operational Plan
- Ultimate responsibility for the provision of safe drinking water to the Town of Georgina
- Ensure resources needed to support the QMS are met
- Mayor is responsible for declaring a “State of Emergency”

**Authorities:**

- Financial and administrative authority related to the provision and allocation of necessary resources for the safe operation, maintenance and upkeep of the Drinking Water System based on Town staff and management recommendations.
- Authority and ultimate decision with respect to hiring the Chief Administrative Officer (CAO)

**Position:** CAO/Director of Operations and Infrastructure (top management)

**Roles/responsibilities:**

- Complete oversight of the entire distribution system
- Endorse the development, implementation and maintenance of the QMS
- Provide and/or obtain resources to effectively maintain the QMS
- Obtain the necessary infrastructure and resources to operate and maintain the drinking water system safely and effectively
- Ensure the system is operating in accordance with all applicable legislation and regulations
- Communicate with the Mayor and Council about the QMS and the water distribution system
- Recommends to the owner resources required to maintain and continually improve the QMS and Drinking Water System (DWS)
- Ensure that the management review, as described in Element 20; management review, is conducted once every calendar year

**Authorities:**

- Financial, administrative and technical authority related to the distribution of safe drinking water within the Town of Georgina

- Act as signing authority (owner representative) for DWWP alteration forms (Form 1/2/3), and Director notification forms
- Procurement and signing authority as per Town Procurement Bylaw
- Makes recommendations to the owner regarding improvements to the Drinking Water System and Quality Management System
- Ultimate corporate decision-making authority with respect to hiring staff, budget preparation and approval of purchases in accordance with the Procurement Bylaw

**Position:** Manager of Operations Water/Wastewater/Waste (Operating Authority)

**Roles/responsibilities:**

- Oversight of the Operations and Infrastructure Department
- Support the development and implementation and maintenance of the QMS
- Monitors expenditures and financial performance
- Provide and/or obtain resources for the QMS and necessary infrastructure and resources to operate and maintain the drinking water system safely and effectively
- Ensure the system is operating in accordance with all applicable legislation and regulations
- Communicate with top management about the QMS and about the overall performance of the Water Distribution System
- Ensure that the management review, as described in Element 20; management review, has been delegated to the appropriate staff and is conducted once every calendar year

**Authorities:**

- Financial, administrative and technical authority related to the Operations, Maintenance and Management of the Drinking Water System at the Town of Georgina
- Supervises budget preparation
- Manages Operating Authority staff
- Review and approve the design of water system additions, modifications or extensions as they relate to capital projects
- Financial, administrative and technical authority related to the Operations, Maintenance and Management of the Drinking Water System at the Town of Georgina

**Position:** DWQM Compliance Officer (QMS Representative)

**Roles/responsibilities:**

- Carry out the activities and manage programs related to the Quality Management System as directed by the Director of Operations and Infrastructure
- QMS representative and implementation lead
- Preparation of budget and planning materials
- Recommendation of system improvements
- Develop procedures and processes for assuring water quality
- Coordinate emergency response planning, training
- Lead annual management review
- Ensures personnel are aware of all applicable legislative and regulatory requirements that pertain to their duties for the operation and maintenance of the Drinking Water System

**Authorities:**

- Maintain and update the QMS in conformance with the Drinking Water Quality Management Standard (DWQMS)
- Communicate QMS to top management
- Leads annual MECP Inspections
- Liaison for internal and external auditing process

**Position:** Water/Wastewater Supervisor (ORO) (Operating Authority)

**Roles/responsibilities:**

- Plan, schedule and supervise all operational activities related to the DWS.
- Coordinate and supervise all maintenance and repair tasks as related to the Town's DWS including, though not limited to facilities, booster stations, pump stations, valves, and all instrumentation
- Managing and maintaining the SCADA system
- Communication/liaison with Operations/maintenance staff, contractors, developers, engineers and service/material suppliers
- Communicate with the public to prevent, resolve or minimize the impact of utility related issues
- Coordinates training programs for all Operations staff
- Assessment of operators/personnel performance (annual)
- System Overall Responsible Operator (ORO)



- Ensure the system, and all staff within the system are operating in accordance with all applicable legislation and regulations

**Authorities:**

- Direct operators in day-to-day operation and maintenance of the water distribution system
- Oversee adverse water quality incidences and responses
- Reports AWQIs to MECP Spills Action Centre and to the York Region Public Health
- Identify and oversee staff training needs
- Recommends operational non-capital purchases
- Purchasing authority of <\$5000
- Recommend changes to the QMS
- Review designs and layouts of new developments as they relate to the DWWP and Form 1/2/3

**Position:** Water/Wastewater Lead Hand

**Roles/responsibilities:**

- Supervise the monitoring, maintenance and operate the distribution system in accordance with the established SOP.
- Report and act on incidents of non-compliance
- Report any abnormal conditions to the Water/Wastewater Supervisor or Environmental Services Manager
- Carry out duties and tasks as assigned by the Water/Wastewater Superintendent or Environmental Services Manager and as per established water distribution policies and procedures

**Authorities:**

- Monitor process and recommend corrective actions
- Recommend changes to the QMS
- Respond to and document public complaints
- Attend site visits
- Respond to public inquiries

**Position:** Water/Wastewater Operator

**Roles/responsibilities:**

- Monitor, maintain and operate the distribution system in accordance with established standard operating procedures

- Document all operating activities in the facility log in accordance with provincial legislation and established operating procedures
- Report and act on incidents of non-compliance
- Report any abnormal conditions to the Water/Wastewater Supervisor or Lead Hand
- Carry out duties and tasks as assigned by the Water/Wastewater Superintendent and as per established water distribution policies and procedures

**Authorities:**

- Monitor process and recommend corrective actions
- Recommend changes to the QMS
- Respond to and document public complaints

**Position:** Operations Clerk, Water/Wastewater/Waste

**Roles/responsibilities:**

- Responsible for clerical support, customer service and administration within the division
- Financial administration related to the operation and maintenance of the Drinking Water System at the Town of Georgina
- Assure departmental compliance of procedures, records and date management
- Ensure compliance and conformance with all applicable legislation and Drinking Water Quality Management Standard requirements

**Authorities:**

- Respond to public inquiries and generate work orders where necessary
- Maintain and track training records and Operator licensing/certification

**Position:** Deputy CAO/Treasurer

**Roles/responsibilities:**

- Prepare and recommend financial plans for the Drinking Water System that satisfy the requirements prescribed in the Safe Drinking Water Act (SDWA) and the associated regulation O.Reg. 453/07 – financial plan
- Prepare or assist in the preparation of the annual budget based on business cases and detailed information provided by staff and management
- Monitors expenditures and financial performance and provides recommendations to top management regarding budget and finances
- Establish appropriate water rates based on the long-term requirements identified in the financial plan required under O.Reg. 453/07

- Provide financial reporting to top management

**Authorities:**

- Corporate signing authority regarding long-term financial plans as described in O.Reg 453/07 – financial plan
- Provides recommendations for the approval of corporate spending and procurement in accordance with the Procurement Bylaw and the requirements of O.Reg 453/07
- Financial plan

**Position:** Human Resources

**Roles/responsibilities:**

- Facilitate new employee orientation and corporate policy training
- Promote Town values, the Code of Conduct and HR policies with all staff
- Assist in developing job descriptions and career postings
- Schedule interviews with candidate applicants, and contribute to the hiring process by providing valued input to the hiring manager regarding the competencies and qualifications of potential hires
- Support department Managers throughout the hiring process

**Authorities:**

- Assist department Managers with Job/employee evaluations
- Respond to employee inquiries regarding HR policies, procedures, labour relations and programs
- Review and approve the design of water system additions, modifications or extensions as they relate to capital projects

**Position:** Development Services

**Roles/responsibilities:**

- Meet annually with the Operations and Infrastructure group to discuss and implement any updates to the ToG Development Design Criteria, as required
- Ensure all new developments requiring watermain additions, modifications or replacements satisfy pre-approvals of the Drinking Water Works Permit under ToG DWWP #119-201
- Ensure all new developments requiring watermain additions, modifications or replacements meet MECP guideline “Watermain Design Criteria for Future Alterations Authorized under a DWWP”

- Review and compare water model results for each assignment of Water/Wastewater servicing allocation
- Ensure allocations for water quantity, quality and pressure meets the Towns Design Criteria and MECP Design Guidelines
- Provide construction oversight
- Provide as-built drawings to the Operations and Infrastructure Department
- Responsible for ensuring the water model is updated upon approval of works
- Participate in the annual Operations and Infrastructure meeting for the provision of infrastructure and exchange of information sessions

**Authorities:**

- Review and approve designs of new developments
- Act as signing authority (owner representative) for DWWP alteration forms (Form 1/2/3)
- Provide Operations and Infrastructure group with the same for record keeping

**Position:** Asset Management Program Manager

**Roles/responsibilities:**

- Oversight of the Town's water-related infrastructure and assets
- Support the development and implementation of an Asset Management Plan
- Monitors expenditures and financial performance as related to W/WW linear and vertical assets
- Provide and/or obtain resources for the QMS and necessary infrastructure and resources to operate and maintain the drinking water system safely and effectively
- Communicate with top management about the W/WW infrastructure and about the overall performance of the Water Distribution System

**Authorities:**

- Provides input in budget preparation
- Review design of water system additions, modifications or extensions as they relate to capital projects, and/or asset management projects

**Position:** Taxation, Revenue and Customer Service

**Roles/responsibilities:**

- Field and direct customer (resident, public inquiries) calls relating to Water/Wastewater concerns



- Generate and escalate work orders as they relate to Water/Wastewater operation and maintenance
- Billing and collection
- Reporting

**Authorities:**

- Provide Water/Wastewater Operations and maintenance staff with details regarding customer inquiries
- Schedule water service “on/off” requests

**Position:** Capital Delivery

**Roles/responsibilities:**

- Prepare tender documents and administer all contracts for municipal watermain capital projects
- Liaise with consultants and contractors for municipal watermain capital projects design
- Provide technical expertise to staff and capital project Managers
- Provide yearly capital budget estimates (related to new watermains)

**Authorities:**

- Financial authority for design of capital projects
- Act as the signing authority (owner representative) for DWWP alteration forms (Form 1/2/3) as they relate to capital projects



## Attachment F – Operational Plan

### Personnel Coverage Table

<b>Role or Work Situation</b>	<b>Stand-by</b>	<b>Coverage</b>	<b>Delegated by:</b>
Operations Manager, Water/Wastewater/Waste	Yes	Manager of Water/Wastewater/Waste	Director of Operations and Infrastructure
Supervisor, Water/Wastewater	Yes	Supervisor Water and Wastewater Operations	Operations Manager, Water/Wastewater/Waste
DWQMS Compliance Officer	No	Manages the QMS for Water and Wastewater Operations	Operations Manager, Water/Wastewater/Waste
Lead Hand, Water/Wastewater	Yes	A certified Operator is available 24 hours/day 7 days/week (OIC) through Water/Wastewater personnel or backup service	Supervisor, Water/ Wastewater Operations Manager, Water/Wastewater/Waste
Certified Operator (OIC)	Yes	A certified Operator is available 24 hours/day 7 days/week (OIC) through Water/Wastewater personnel or backup service	Supervisor, Water/ Wastewater Operations Manager, Water/Wastewater/Waste
Overall-responsible-Operator (ORO)	Yes	Supervisor and/or Manager acts as ORO unless otherwise delegated to Certified Operator holding Class 2 Water Distribution (facility-level certification) ORO role rotates between Supervisor and Manager	Supervisor, Water/ Wastewater Operations Manager, Water/Wastewater/Waste
Stand-by schedule	-	An up-to-date stand-by schedule is determined by assessing staff availability and levels of competency	Supervisor, Water/ Wastewater Operations Manager, Water/Wastewater/Waste