

Drinking Water System Regulation O. Reg. 170/03

City of Richmond Hill
Quality Management System - 2020 Annual Report



Quality Management System for Richmond Hill's Drinking Water Distribution System

The Drinking Water Quality Management Standard (DWQMS) requires the City of Richmond Hill to establish and maintain a Quality Management System (QMS) that conforms to the standard. The City owns a stand-alone drinking water distribution system, QMS policies and procedures govern the activities and services performed by the City. The DWQMS also requires that Members of Council are made aware to the following areas within the QMS, as they are:

- Review and Provision of Infrastructure
- Infrastructure Maintenance, Rehabilitation and Renewal Summary
- Management Review Outcomes
- Third-Party Audit Outcomes and Accreditation Renewal
- Organizational Structure, Roles, Responsibilities and Authorities

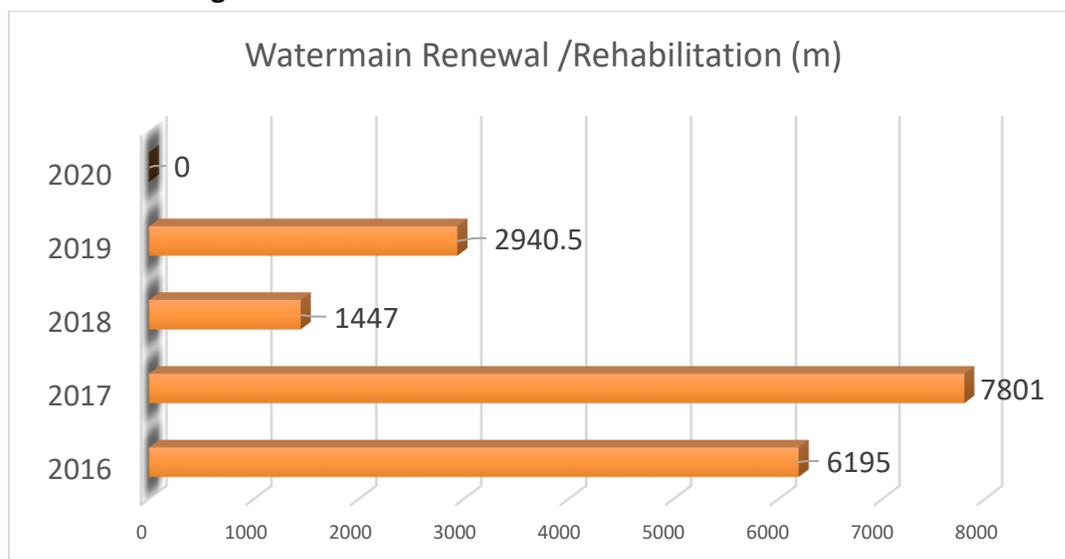
1. Review and Provision of Infrastructure

Council is being communicated on the status of the programs in place to maintain, rehabilitate and renew the infrastructure of the drinking water system through the 10 Year Capital Forecast for Roads, Water and Wastewater.

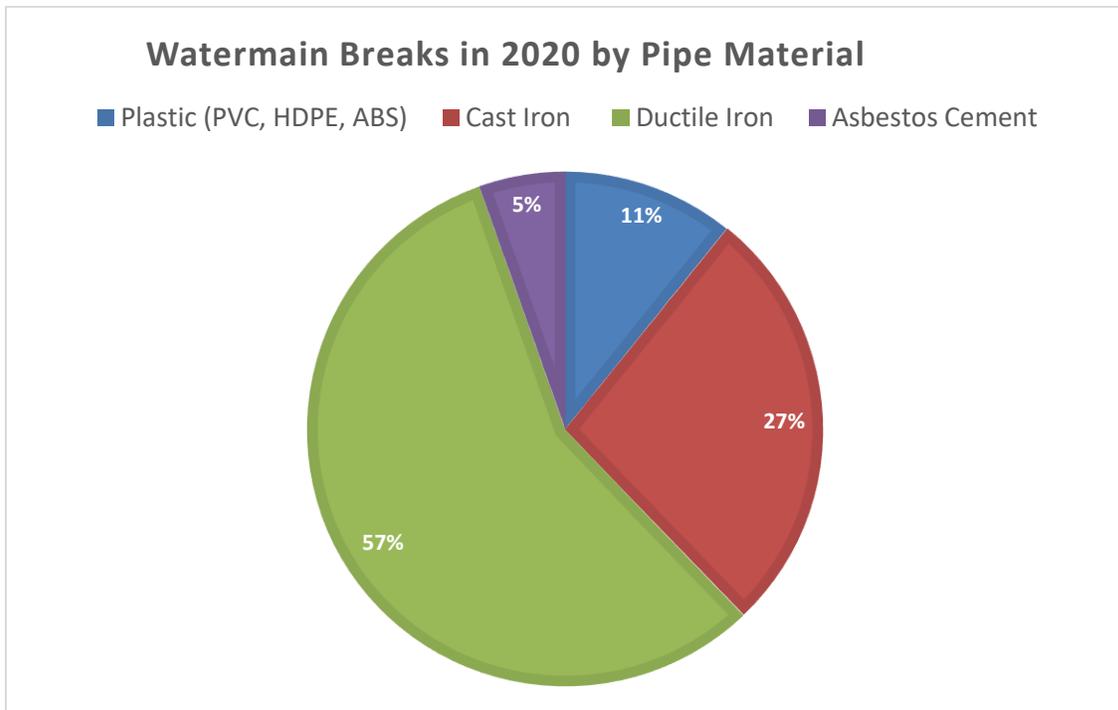
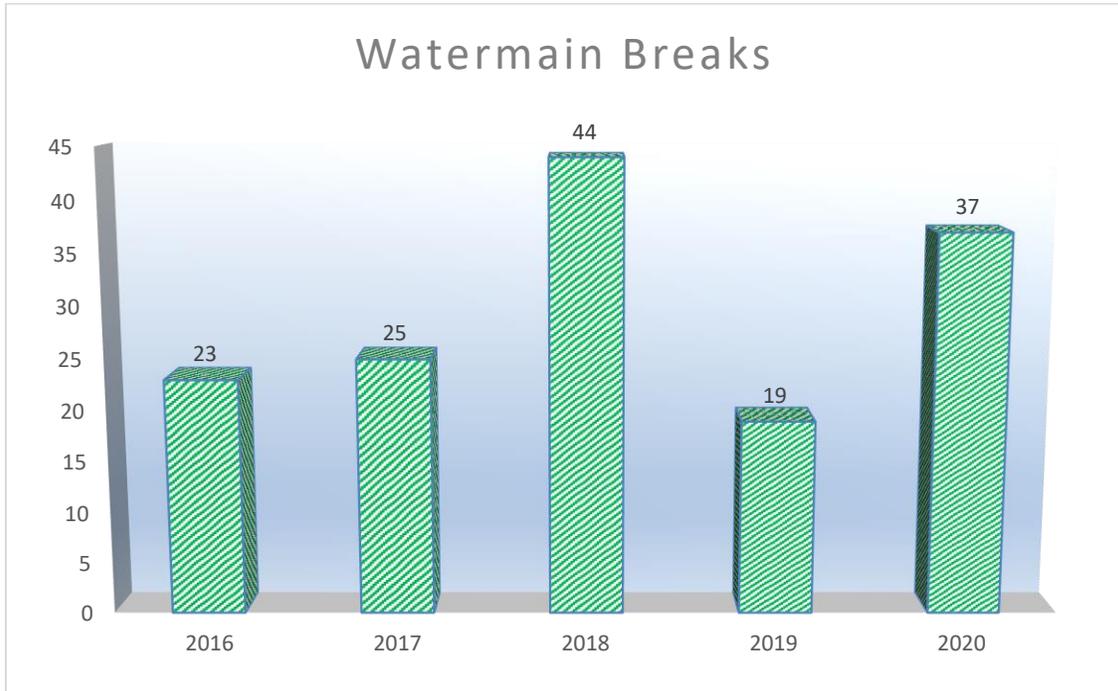
2. Infrastructure Maintenance, Rehabilitation and Renewal Summary

Programs are in place to maintain, rehabilitate and renew the infrastructure of the drinking water system.

Watermain Programs:



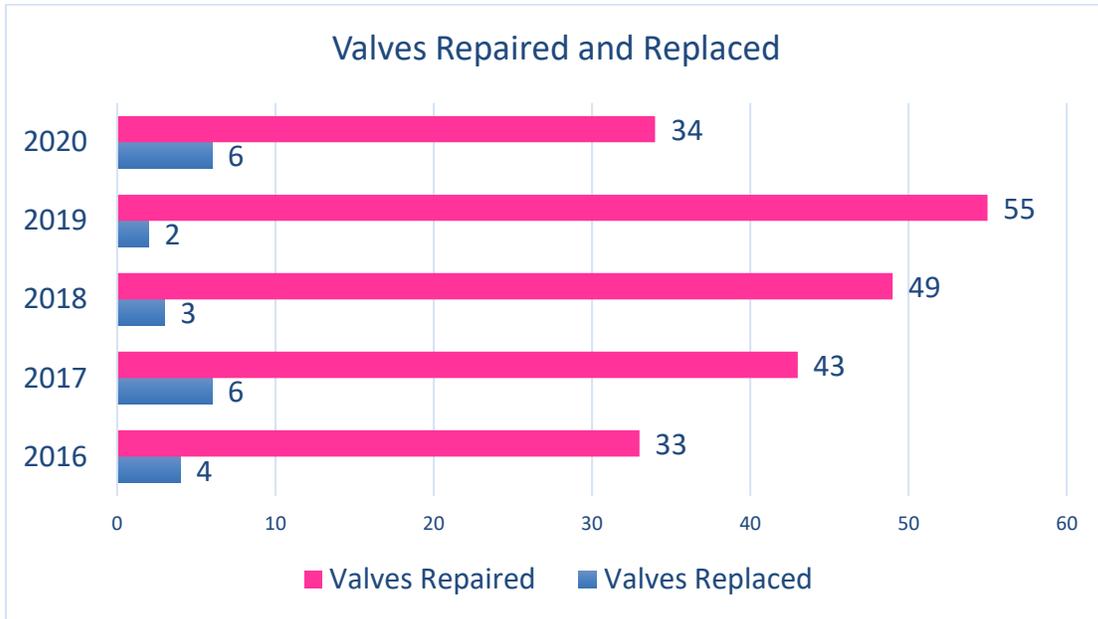
Watermain Repairs - Repair of watermains following pipe breakage.



Valve Programs:

Valve Cycling and Inspection - A preventative program that exercises all valves in the system to locate and identify inoperable, defective or broken valves as well as to help ensure operability and prolong lifespan of infrastructure (valves are on a 2 or 5 year cycle program).

Valve Repair and Replaced – Repair/replacement of inoperable, defective or broken valves.

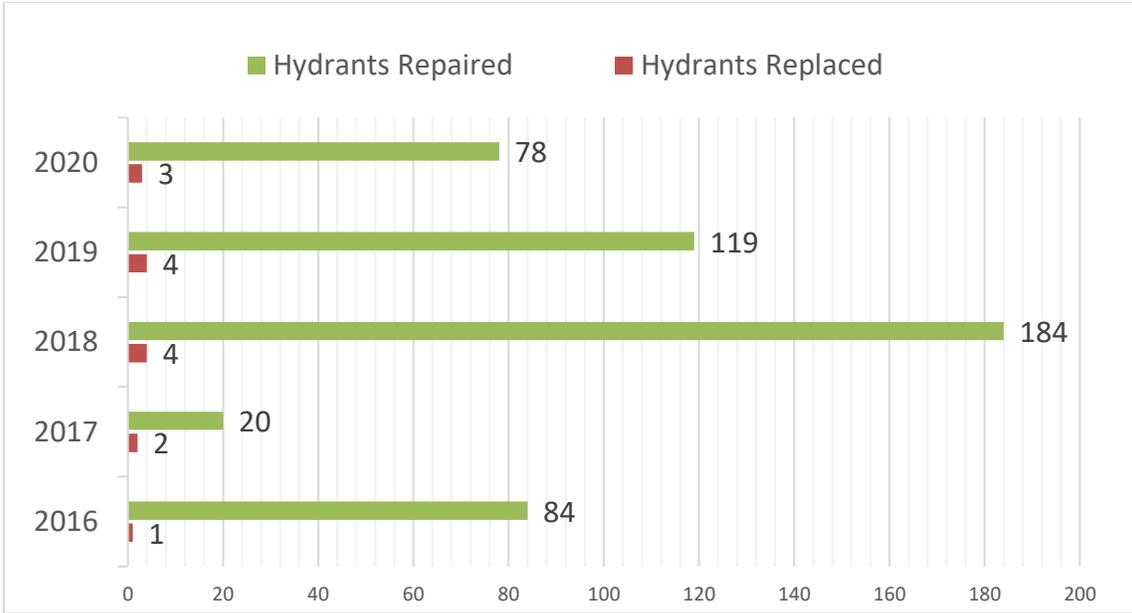


Hydrant Programs:

Hydrant Inspection and Winterizing - A preventative program to locate and identify inoperable, defective or broken hydrants and maintain operability during winter months (annual).

Hydrant Painting - A preventative program to protect hydrants from corrosion, maintain visibility and flow parameter (annual). For 2020 due to Covid-19, about 15 hydrants were painted.

Hydrant Repair and Replacement - Repair/replacement of inoperable, defective or broken hydrants.

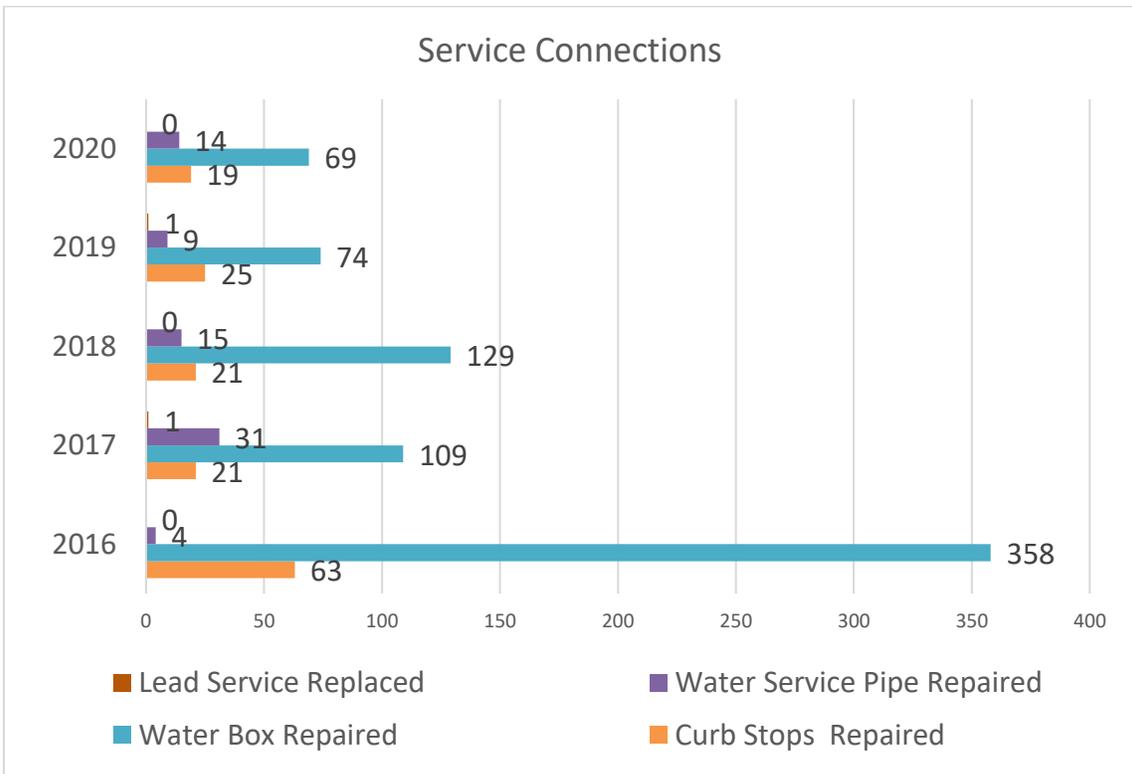


Service Connection Programs:

Curb stop Repairs - Repairs of inoperable, defective or broken curb stops.

Water Service Pipe Repairs - Repairs and/or replacement of broken water service pipes.

Frozen Services - Thawing of frozen water service piping.



3. **Management Review Outcomes** – Management Review meeting took place on December 2, 2020. The following table presents the outcomes of the management review:

Summary of Deficiencies	No deficiencies were identified for 2020.	
Summary of Decisions	<ul style="list-style-type: none"> • <u>Watermain Breaks</u> – Present the data based on type of pipe, what is the percentage of watermain breaks from ductile iron pipe, PVC pipe, etc. • <u>Operational Plan</u> - Top Management will include: Commissioner of Community Services, Director Public Works, Director Infrastructure Delivery Services, Manager WWW, Manager Design and Construction, Manager Capital Infrastructure Planning and Project Management Office and QMS Program Coordinator. • <u>Resources needed to maintain QMS</u> – Managers (from Top Management) to discuss program creation to utilize hydraulic model for chlorine dissipation and water age within distribution system. • <u>Operational Performance</u> – Unidirectional flushing (UDF) will take break for one more year to assess if there is a real correlation with adverse water quality incidents (from Sampling Stations). • <u>Changes that could affect the QMS</u> – Work with operator and municipal inspectors to have New Watermain Disinfection Procedure implemented by February 1, 2021. 	
Update on Previous Action items	<u>Operational Performance</u> Historical data must be analyzed for trends. Graphs need to be revised to demonstrate target vs actual.	Completed – Graphs have been revised to include target and actual accomplishments.
	<u>Resources needed to maintain the Quality Management System:</u> IT Department created copy of the EMS Corrective Action Database for QMS using Microsoft Access.	In progress – Access is being phase out by IT Department. Water Division will work with IT Department to find a suitable solution perhaps using SharePoint.
	<u>Infrastructure, Maintenance, Rehabilitation and Renewal – Hydraulic Model:</u> discussions to take place with Planning and Regulatory Services and EIS (dept.) in regards to having a hydraulic modeller for the City.	Completed – Contract for hydraulic model has been awarded.
	<u>Results of the Infrastructure Review - Data Trend Analysis</u> – Historical data must be presented with current year-to-date graphs.	Completed – Graphs now presented with historical data.

4. Third-Party Audit Outcomes and Accreditation Renewal

The surveillance audit took place on October 22 and 23, 2020. Two minor non-conformances both procedural were identified through the surveillance audit; Corrective Actions were implemented and accepted by certification body.

5. Organizational Structure, Roles, Responsibilities and Authorities

Members of Council as the “Owner” of the drinking water distribution system are responsible for ensuring their drinking water system meets all prescribed drinking water quality standards, operate in accordance with the *Safe Drinking Water Act* and its regulations, keep a fit state of repair, comply with all sampling, testing and monitoring requirements and meet all reporting requirements.

QMS Top Management will now consist of: Commissioner of Community Services, Director Public Works Operations, Director Infrastructure Delivery Services, Manager of Water and Wastewater, Manager of Design and Construction, Manager Capital Infrastructure Planning & Project Management Office and QMS Program Coordinator.

