1. 2020 DRINKING WATER QUALITY MANAGEMENT SYSTEM REPORT

RAPPORT DE L'EXAMEN PAR LA DIRECTION ET PLAN D'EXPLOITATION EN VERTU DE LA NORME DE GESTION DE LA QUALITÉ DE L'EAU POTABLE DE 2020

COMMITTEE RECOMMENDATION

That Council receive the 2020 Management Review Report of the Drinking Water Quality Management System.

RECOMMANDATION DU COMITÉ

Que le Conseil municipal prenne connaissance du rapport de 2019 sur l'examen de la gestion du Système de gestion de la qualité de l'eau potable.

DOCUMENTATION

1. Acting Director's Report, Water Services, Public Works and Environmental Services, dated 10 September 2021 (ACS2021-PWE-WTS-0002).

   Rapport de la directrice par intérim, Services d'eau, Direction générale des travaux publics et de l'environnement, daté le 10 septembre 2021 (ACS2021-PWE-WTS-0002).

2. Extract of Draft Minutes, Standing Committee on Environmental Protection, Water and Waste Management, 21 September 2021.

   Extrait de l'ébauche du procès-verbal, Comité permanent de la protection de l'environnement, de l'eau et de la gestion des déchets, le 21 septembre 2021.

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13 OCTOBER 2021

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LE 13 OCTOBRE 2021

Report to
Rapport au:

Standing Committee on Environmental Protection, Water and Waste Management
Comité permanent de la protection de l'environnement, de l'eau et de la gestion des déchets
21 September 2021 / 21 septembre 2021

and Council
et au Conseil
13 October 2021 / 13 octobre 2021

Submitted on September 10, 2021
Soumis le 10 septembre 2021

Submitted by
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File Number: ACS2021-PWE-WTS-0002

REPORT 18
13 OCTOBER 2021

RAPPORT 18
LE 13 OCTOBRE 2021

SUBJECT: 2020 Drinking Water Quality Management System Report

OBJET: Rapport de l'examen par la direction et plan d'exploitation en vertu de la Norme de gestion de la qualité de l'eau potable de 2020

REPORT RECOMMENDATION

That the Standing Committee on Environmental Protection, Water and Waste Management recommend that Council receive the 2020 Management Review Report of the Drinking Water Quality Management System.

RECOMMANDATION DU RAPPORT

Que le Comité permanent de la protection de l'environnement, de l'eau et de la gestion des déchets recommande que le Conseil municipal prenne connaissance du rapport de 2019 sur l'examen de la gestion du Système de gestion de la qualité de l'eau potable.

EXECUTIVE SUMMARY

The Drinking Water Quality Management Standard (DWQMS) was adopted provincially in 2007 and legislated under Ontario Regulation 188/07 under the Safe Water Drinking Act, 2002. A requirement of the DWQMS is to conduct an annual management review on the implementation and performance of the quality management system, and to ensure that the results are communicated to the Owner (Council).

The City has successfully implemented its DWQMS Operational Plan. There are 16 topics that must be considered in the annual management review. During the 2020 Management Review, two (2) action items were created:

Action #1: Britannia low-lift venturi flowmeter is not reliable in low flow range (80 – 120 million litres per day (ML/d) and has led to several coagulation failures in recent years. Management recommends replacement of Britannia's low-lift venturis as a priority capital project. This project should be created as a separate capital project to be initiated in 2022 due to risk of failure.

Action #2: Include the amount of lead service pipes removed from the system every year as a result of the Lead Pipe Replacement Program and the capital renewal projects within the Management Review reports going forward.

As you are aware, the City of Ottawa, including Water Services (Drinking Water), entered a State of Emergency on March 25, 2020 for the COVID-19 Pandemic. Despite the challenges due to the COVID-19 pandemic, there were no positive cases of COVID-19 for the 282 staff who work in drinking water and an uninterrupted supply of safe drinking water was provided to Ottawa residents throughout the emergency.

The DWQMS requires the Operating Authority to conduct an annual exercise to evaluate the drinking water Incident Escalation and Response Plan (IERP); however, in lieu of a mock emergency exercise, Water Services opted to use the actual COVID-19 pandemic emergency to assess its existing emergency-related procedures. The 2020 DWQMS Emergency Exercise Report concluded that the group achieved the identified objectives and practiced effective decision-making.

As previously reported to Council, the trend for nitrate levels in the Shadow Ridge Well System steadily increased over the first 10 years of operation but has levelled off during 2018-2020 with current nitrate levels at 3.2 mg/L, safely within the 10 mg/L Ontario Drinking Water Standard.

In order to provide a long-term solution for the nitrate issue, the City will drill new well sources located deeper into the aquifer. Geofirma and the City completed testing in 2020/2021 and confirmed the deeper aquifer water quality and quantity is acceptable. The City engaged Stantec Consulting to design two new deep wells and the associated mechanical and electrical systems. Construction is planned to start in 2022. The new well system, including all permits and approvals, will be completed in 2023.

Due to increasing health concerns for lead exposure, Health Canada, on March 8th, 2019, published a new stringent guideline of 5 parts per billion (ppb) for lead in drinking water. Although Ottawa's tap water is lead free, small amounts of lead can dissolve during transport through lead service pipes and/or household plumbing and tap fixtures. In Ottawa, there are approximately 27,945 homes that have lead service pipes currently

in use. During 2020, there were 83 older homes that had their lead service pipes replaced and are no longer supplied with lead service pipes.

To further minimize lead exposure through drinking water, the City is engineering a new treatment strategy that uses a trace amount of phosphate to form a protective coating on lead pipes. The project is expected to reduce lead concentrations by approximately 70% and the project is currently in the design phase at both water purification plants and is expected to be implemented in 2023.

RÉSUMÉ

La norme de gestion de la qualité de l'eau potable (NGQEP), régie par le Règlement de l'Ontario 188/07 pris en application de la Loi de 2002 sur la salubrité de l'eau potable, a été adoptée à l'échelle provinciale en 2007. Elle prévoit entre autres un examen annuel de la gestion servant à évaluer la mise en place et le rendement du système de gestion de la qualité, examen dont les résultats doivent être transmis au propriétaire (le Conseil municipal).

La Ville d'Ottawa a bien instauré le plan opérationnel relatif à la NGQEP. Il y a maintenant 16 sujets à couvrir dans l'examen annuel. Mentionnons qu'à l'issue de l'examen de 2020, les deux (2) mesures à prendre suivantes avaient été établies :

Mesure n^{o} 1 : Le débitmètre Venturi à basse pression de Britannia est inexact lorsque le débit est faible (de 80 à 120 millions de litres par jour [ML/j]), ce qui a troublé à plusieurs reprises la coagulation ces dernières années. L'équipe de direction recommande donc de faire du remplacement de ces débitmètres un projet d'immobilisations prioritaire distinct, qui devra être entamé en 2022 vu le risque de défaillance.

Mesure n^{o} 2 : Il faut désormais consigner dans les rapports d'examen le nombre de conduites en plomb qu'on retire chaque année du système dans le cadre du Programme de remplacement des conduites en plomb, ainsi que les projets de renouvellement des immobilisations.

Vous n'êtes pas sans savoir que la Ville d'Ottawa, de même que les Services d'eau (Direction des services de gestion de l'eau potable), est entrée en état d'urgence le 25 mars 2020 à cause de la pandémie de COVID-19. Si le virus a apporté son lot de

défis, il n'y a eu aucun cas positif parmi les 282 employés de la Direction. Les résidents d'Ottawa ont donc pu compter sur un approvisionnement ininterrompu en eau potable salubre pendant cette période.

La NGQEP oblige l'organisme d'exploitation à évaluer annuellement le plan d'intervention échelonnée en cas d'incident lié à l'eau potable. Mais plutôt que de prévoir un exercice d'urgence, les Services d'eau ont décidé de tirer parti de l'urgence bien réelle suscitée par la pandémie pour évaluer leurs procédures d'urgence. Le rapport de 2020 sur l'exercice d'urgence en lien avec la NGQEP a conclu que l'équipe avait atteint les objectifs qu'elle s'était fixés, et qu'elle avait pris ses décisions efficacement.

Comme il a déjà été indiqué au Conseil, la tendance concernant les taux de nitrate dans le système de puits de Shadow Ridge s'est accentuée à un rythme constant durant les dix premières années d'exploitation, mais s'est stabilisée entre 2018 et 2020. Le taux de nitrate actuel est de 3,2 mg/L, bien en deçà de la norme ontarienne pour l'eau potable fixée à 10 mg/L.

Pour fournir une solution à long terme au problème du nitrate, la Ville entend creuser de nouveaux puits-sources plus profondément dans l'aquifère. Elle a réalisé des essais avec Geofirma en 2020-2021, et confirmé que la qualité et la quantité de l'eau dans l'aquifère de fond étaient acceptables. La Ville a fait appel à Stantec Consulting pour la conception de deux nouveaux puits profonds et des systèmes mécaniques et électriques connexes. Le début des travaux est prévu pour 2022. Le nouveau système de puits, assorti de tous les permis et de toutes les approbations nécessaires, sera achevé en 2023.

Au vu des préoccupations croissantes en lien avec les dangers de l'exposition au plomb pour la santé, Santé Canada a publié le 8 mars 2019 une nouvelle ligne directrice limitant la concentration de plomb dans l'eau potable à cinq parties par milliard (ppb). Même si, à Ottawa, l'eau du robinet est exempte de plomb, de petites quantités peuvent se dissoudre pendant le transport dans les conduites d'eau en plomb ou dans la plomberie et les accessoires de robinetterie des résidences. À l'heure actuelle, quelque 27 945 résidences d'Ottawa ont des conduites d'eau en plomb. En 2020, on a remplacé celles de 83 vieilles maisons; leur tuyauterie ne contient désormais plus de plomb.

Afin de réduire davantage l'exposition au plomb dans l'eau potable, la Ville met actuellement au point une nouvelle stratégie de traitement qui utilise une quantité infime de phosphate pour déposer un enduit protecteur sur les parois des conduites en plomb. Le projet devrait réduire la concentration de plomb d'environ 70 %; il en est à la phase de conception aux deux usines de purification de l'eau et devrait voir le jour en 2023.

BACKGROUND

In 2002, Justice Dennis O'Connor published Part Two of the Report of the Walkerton Inquiry, which recommended the adoption of a quality management approach for municipal drinking water systems. The report also recommended that a quality management standard, specifically designed for drinking water systems, be developed and implemented in Ontario; thus, leading to the creation of the Drinking Water Quality Management Standard (DWQMS). The requirement to implement the DWQMS is now mandated through the Safe Drinking Water Act, 2002.

As the Owner of the municipal drinking water systems, Council has a number of duties and responsibilities under the Safe Drinking Water Act, 2002, described in sections 11, 13, 16 and 17 of the Act. The duties of the Owner related to the Standard of Care are described under Section 19 and came into force on December 31, 2012. In order to ensure that City Councillors were made aware of their duties and responsibilities under the Act, staff organized a Technical Briefing of newly elected City Councillors on November 15, 2018.

In his 2002 report, Justice O'Connor further commented that municipalities who had an accredited Operating Authority would be making a significant step in meeting the owner's due diligence and responsibilities under the Act. One of the primary tools that the Owner has in place to satisfy the Standard of Care under the Act is to have Municipal Drinking Water Licences for all its drinking water systems. The elements of each Licence include:

- A permit to take water;
- A drinking water works permit;
- An operational plan;

- A financial plan; and
- An accredited operating authority.

The City of Ottawa maintains valid licences for all eight of its municipal drinking water systems:

- Britannia Water Purification Plant
- Lemieux Island Water Purification Plant
- Carp Well System
- Kings Park (Richmond) Well System
- Munster Hamlet Well System
- Richmond West (Richmond) Well System
- Shadow Ridge (Greely) Well System
- Vars Drinking Well System

The new Richmond West Well System was commissioned during April 2019, and ownership assumed in 2019. This system underwent a Limited Scope Audit in 2018 and a Full Scope Audit in 2019 to fulfill the DWQMS accreditation requirements. The first Ministry of Environment (MECP) Annual Inspection was carried out for this system on March 4, 2020 and received an Inspection Rating of 100%.

The City of Ottawa received the first phase of DWQMS accreditation effective April 29, 2009 (Limited Scope – Entire DWQMS), with Full Scope accreditation on October 3, 2011, then re-accreditation on September 4, 2014, October 2, 2017, and September 14, 2020. Results of the 2020 external audit demonstrated zero findings of non-conformance and six opportunities for improvement (OFI). The third-party accreditation body conducts their surveillance audits of the City's Quality Management System (QMS) annually between the years when re-accreditation is required. The Richmond West Well System underwent a Limited Scope Audit in 2018 and a Full Scope Audit

was completed in early 2019 to fulfill the DWQMS accreditation requirements, both of which resulted in zero findings of non-conformance.

A requirement of the DWQMS is to conduct an annual management review of the QMS and to ensure that the results of this review are communicated to the Owner (Council) by Top Management. Top Management is a term defined in the DWQMS as,

> *"A person, persons or a group of people at the highest management level within an operating authority that makes decisions respecting the QMS and recommendations to the owner respecting the subject system or subject systems."*

The main purpose of this report is to provide Council, as the Owner of the municipal drinking water systems, with an update on the implementation and the performance of the QMS in 2020.

DISCUSSION

The DWQMS is the key tool that supports and assures Council, as the Owner of the drinking water systems, that it is meeting its duties and responsibilities under the Safe Drinking Water Act, 2002 and the Statutory Standard of Care (section 19).

As a requirement of the Operational Plan, a comprehensive review of the QMS must be undertaken annually by Top Management. This requirement is completed as part of the Management Review, which entails a series of meetings attended by Top Management where specific items are reviewed for the past year. This review and any recommendations for improvement are included within the Management Review reports prepared each year.

Since 2019, there have been a few changes to Top Management as noted in the two most recent updates to the Operational Plan in September 2020 and April 2021.

Top Management at the City of Ottawa now includes the:

- General Manager of Public Works and Environmental Services (PWES) Department

- General Manager of Planning, Infrastructure, Economic Development Department (PIED)
- Director of Infrastructure Services (IS)
- Direct of Water Services (WS)
- Director of Technology, Innovation and Engineering Support Services (TIES)
- Select Managers within PWES
- Quality Management System (QMS) Coordinator (and QMS Representative)

Top Management is responsible to make recommendations to the Owner regarding the drinking water systems and the QMS. In addition to the changes in Top Management, the QMS Representative has changed from a person to a designated role, the QMS Coordinator, TIES, PWES, and a QMS Representative alternative was designated to the position of Performance & Management Systems Specialist, TIES, PWES.

Overall, the City of Ottawa has successfully implemented its Operational Plan. Some examples that demonstrate this achievement in 2020, as documented in the Management Review report, include:

- Ottawa's Drinking Water Quality Management System continues to be successfully implemented. The program is well established, well managed, with high staff engagement and commitment.
- Despite the challenges due to the COVID-19 pandemic in 2020, an uninterrupted supply of safe drinking water was provided to Ottawa residents throughout the emergency.
- Continued excellent external audit results have been received since its initial accreditation in 2009. In 2020, the third-party accreditation body conducted their week-long comprehensive off-site surveillance audit of the City's DWQMS. This audit demonstrated zero findings of non-conformance for Ottawa's drinking water systems and six opportunities for improvement (OFI).

- The 2020 external audits marked the 9th year of receiving 0 non-conformances for its DWQMS.
- The Water Production's maintenance teams completed over 95% of planned and preventive maintenance.

Collectively, these efforts reinforce the fact that the City of Ottawa produces and delivers some of the best quality and safest drinking water in the world.

As you are aware, the City of Ottawa, including Water Services (Drinking Water), entered a State of Emergency on March 25, 2020 for the COVID-19 Pandemic. The pandemic consisted of several challenges for the City including supply, logistics, staffing, personal protective equipment, communications, continuity of operations, cases in the workplace, self-isolation, emotional and physical tolls to name a few. Despite the challenges due to the COVID-19 pandemic in 2020, there were no positive cases of COVID-19 for the 282 staff who work in drinking water and an uninterrupted supply of safe drinking water has been provided to Ottawa residents throughout the emergency.

There are 16 topic areas that must be considered in the annual management review (see Table 1). The Operational Top Management team prepared the 2020 Drinking Water Quality Management Review Report (100 pages) and held meetings on April 19, April 27, and May 3, 2021 to review the findings. The report was subsequently reviewed by the Corporate Top Management team on June 14, 2021. This report provides an update to only those items that require attention by Council. All other review topics are covered in the full report (Document 1). During the 2020 Management Review, two (2) actions were developed. The first action is regarding the unreliability of Britannia's low-lift venturi flowmeter which has led to several coagulation process upsets in recent years. The action item is to replace the flowmeter as a priority capital project. The second action is regarding the reporting of the yearly lead service pipe removal. The action item is to include the amount of lead service pipes removed each year as a result of the Lead Pipe Replacement Program and capital renewal projects in the Management Review reports going forward.

Table 1 - List of Items for Annual Review that will be discussed in this report

Management Review Topic	**Summary – See Document 1 – DWQMS 2020 Management Review Report.**
Incidents of regulatory non-compliance	See Document 1 for details.
Incidents of adverse drinking water tests	See Document 1 for details.
Deviations from critical control point limits and response actions.	See Document 1 for details.
Effectiveness of the risk assessment process	See Document 1 for details.
Results of internal and external audits	See Document 1 for details.
Results of relevant emergency response testing	See discussion below.
Operational Performance	See Document 1 for details.
Raw water supply and drinking water quality trends	See discussion below.
Follow-up action items from previous management reviews	See Document 1 for details.
Status of management action items identified between reviews	See Document 1 for details.
Changes that could affect the QMS	See discussion below.
Summary of consumer feedback	See Document 1 for details.

Resources needed to maintain the QMS	See Document 1 for details.
Results of the infrastructure review	See discussion below.
Operational Plan currency, content, and updates	See Document 1 for details.
Summary of staff suggestions	See Document 1 for details.

Results of Relevant Emergency Response Testing

The DWQMS requires the Operating Authority to conduct an annual exercise to evaluate the drinking water Incident Escalation and Response Plan (IERP); however, in lieu of a mock emergency exercise, Water Services opted to use the actual COVID-19 pandemic emergency to assess its existing emergency-related procedures.

The COVID-19 pandemic consisted of several challenges including supply, logistics, staffing, personal protective equipment, communications, continuity of operations, cases in the workplace, self isolation, emotional and physical tolls to name a few. The mock emergency exercise event of responding to the first positive case in the workplace included participants from Water Distribution, Water Quality, Water Production and Wastewater Collection and Treatment.

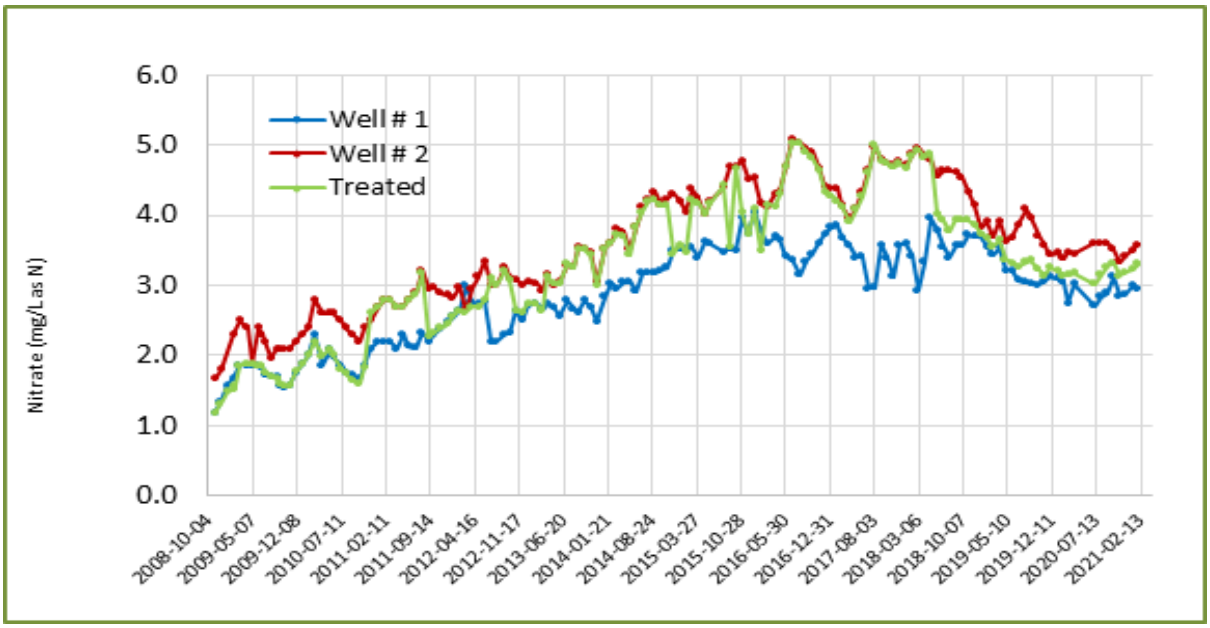
Based on observations made during the emergency event and in consequent debrief discussions, it was concluded that the group achieved the identified objectives and practiced effective decision-making. Recommendations for continual improvement were determined by the Water Services Management team and implemented as applicable. These recommendations are documented in the 2020 DWQMS Emergency Exercise Report.

Raw water supply and drinking water quality trends

Shadow Ridge Well System

As previously reported, the nitrate concentrations in the Shadow Ridge well system continue to be higher than in Ottawa's other municipal well systems. Nitrate concentrations in the Shadow Ridge source wells have shown a gradual but steady increase from approximately 1.5 mg/L in 2008 to 4.5 mg/L in 2017 but have since levelled off in the 3 – 4 mg/L range. The 2020 average nitrate concentration in the treated water was 3.2 mg/L, which is within the safe drinking water standard of 10 mg/L as a Maximum Allowable Concentration.

Figure 2 - Nitrate level in Shadow Ridge treated water and source wells (2008 – 2021)



In order to provide a long-term solution for the nitrate issue, the City will drill new well sources located deeper into the aquifer. Geofirma and the City completed testing in 2020/2021 and confirmed the deeper aquifer water quality and quantity is acceptable. The City engaged Stantec Consulting to design two new deep wells and the associated mechanical and electrical systems. Construction is planned to start in 2022. The new well system, including all permits and approvals, will be completed in 2023.

Changes that could affect the QMS

COVID-19 Pandemic Impacts to Operations and the QMS

Response actions were primarily related to the protection of our essential workers that operate and maintain our drinking water systems. During 2020, there were no positive cases of COVID19 for the 282 staff who work in drinking water. A number of measures were implemented that impacted Operations and the QMS that are further described below:

- Personnel deemed essential were scheduled to work on rotating shift basis and decreased personnel to minimize staff encounters.
- Safety measures were implemented to eliminate or reduce the potential spread of COVID-19 including modification of water quality sampling locations to minimize personal contact for field staff.
- Both treatment plants developed 5-stage levels of emergency response ranging from Level 1 (normal operation) to Level 5 (full lockdown, staff shelter in place) to respond to potential decreasing staff levels due to COVID-19.
- Meetings and training were scheduled to be completed virtually after March 2020.
- Water Operator Certificates that expired during the period between March 23, 2020 and October 31, 2020 were automatically given a 6-month extension as per the temporary emergency order issued by the MECP under the Emergency Management and Civil Protection Act.
- Temporary regulatory relief for reduced sampling of lead testing in customer homes due to suspension of in-home visits; Granted by MECP for central distribution and Richmond West.
- Developed guidance document and slide presentation for flushing to restore drinking water quality in buildings that were vacated for extended periods; provided to OPH and Building Services.
- Assessment of risk of coronavirus as a waterborne pathogen, for communication with public and staff.

- Internal work, capital projects, development – increased notification period for residents to provide them with additional time to prepare for planned water service outages.

- Watermain repairs – where possible, provided residents with additional time to prepare for water service interruptions.

Lead in drinking water

During 2020, the City updated its Lead Pipe Replacement Program to better assist homeowners in replacing lead service pipes. A staged mail-out to approximately 30,000 older (pre-1955) homes is underway to make residents aware of the potential risk of lead service pipes, and to provide information to help minimize lead exposure. Due to COVID restrictions, the project was suspended in February 2020 and resumed in July 2021. To date, approximately 15,000 information packages have been mailed out to residents.

During 2020, 83 older homes took advantage of the City's program to replace their lead service pipes. In addition, there were 274 replacements of lead service pipes through watermain rehabilitation during 2020 (City portion of the lead service pipe only). While 83 homes were converted to non-lead water supply during 2020, there are still approximately 27,945 homes with lead water service pipes currently in use.

In March of 2020, as a result of the COVID-19 pandemic, all in-home sampling was suspended in order to protect both the homeowner and City employees. Homeowners requesting lead sampling were place in a queue until sampling could safely resume. In May 2020, a modified lead sampling procedure was developed to allow homeowners to take their own tap water samples for lead guided by City staff. During 2020, City staff responded to more than 450 customer requests for lead testing in older Ottawa homes.

To further minimize lead exposure through drinking water, the City is engineering a new treatment strategy that uses a trace amount of phosphate to form a protective coating on lead pipes. The project is expected to reduce lead concentrations by approximately 70% and the project is currently in the design phase at both water purification plants and is expected to be implemented in 2023.

Results of the infrastructure review

Large Diameter Watermain Condition Assessment Program

The 2012 report - Drinking Water Transmission Main Condition Assessment Program: ACS2012-COS-ESD-0014 - recommended that a summary of inspections on critical water transmission mains, including an action plan for correction of pipes identified to be in very poor condition be provided as part of the Drinking Water Quality Management System annual report.

Beginning in the 2013 DWQMS annual report to Council, management has responded with a summary of inspections on critical water transmission mains and an action plan for the correction of pipes identified to be in poor condition. To date, the City has completed 37.89 km (72%) of structural condition assessment and 36.1 km (68.63%) of leak detection on this cohort of pipes. In total, 48.4 km (20%) of structural condition assessment and 96.2 km (40%) of leak detection have been completed on large-diameter watermains (≥610mm) in the City.

In 2020 both leak detection and structural analysis was done on 1.25 km length of watermain which is lower than last year. Due to ongoing light rail construction works, other capital project priorities and water demand management, structural inspections of two watermain segment were postponed until 2021.

Next Steps

Staff will continue to provide safe drinking water and ensure all legislation is followed under the Safe Drinking Water Act, 2002. Staff will also be implementing the action items identified as part of the 2020 Management Review.

RURAL IMPLICATIONS

Residents supplied by the six municipal well systems receive safe drinking water that meets all regulations, standards, inspections, and includes comprehensive management oversight by the DWQMS.

CONSULTATION

Ottawa Public Health (OPH) is a key partner in the provision of safe drinking water for Ottawa residents and businesses. To maintain continuity and responsiveness, Water Services and OPH staff meet bi-monthly to review water quality test results, adverse water quality incidents, communication protocols, and potential risks of new and emerging issues in drinking water. In addition, a formal meeting is held each year during Q2 to review the water quality results achieved over the last year. The joint review meeting for 2020 was held virtually via MS Teams on June 28, 2021.

COMMENTS BY THE WARD COUNCILLOR(S)

This is a City-wide report.

ADVISORY COMMITTEE(S) COMMENTS

There was no advisory committee consultation as part of this report.

LEGAL IMPLICATIONS

There are no legal impediments to Committee and Council's receipt of this report for information.

RISK MANAGEMENT IMPLICATIONS

All risks associated have been identified and explained in the report and are being mitigated by the appropriate staff.

ASSET MANAGEMENT IMPLICATIONS

The recommendations documented in this report are consistent with the City's Comprehensive Asset Management (CAM) Program objectives.

The Drinking Water Quality Management System considers asset management system elements that help inform decision making processes necessary to protect Ottawa's drinking water system and reduce public health risks.

FINANCIAL IMPLICATIONS

There are no financial implications associated with this report. Capital funding for the Proactive Lead Service Replacement Program and the Shadow Ridge Wells Rehab Project exists within the current approved Drinking Water Services 2021 Capital Budget, with additional funding for each project of $500K and $1,000K respectively to be included in the Drinking Water Services 2022 Draft Capital Budget to be tabled with Council on November 3.

ACCESSIBILITY IMPACTS

There are no accessibility impacts associated with this report.

ENVIRONMENTAL IMPLICATIONS

The development of the QMS is provincially legislated under the Safe Drinking Water Act, 2002. The QMS has been reviewed by a third-party accreditation body and the City of Ottawa has obtained its Operating Authority Accreditation. This report also fulfills the legislative requirement to report on the Annual Management Review of the QMS to the Owner.

TECHNOLOGY IMPLICATIONS

There are no technology implications to this report.

TERM OF COUNCIL PRIORITIES

ES1 – Support an environmentally sustainable Ottawa.

GP2 – Advance management oversight through tools and processes that support accountability and transparency.

SUPPORTING DOCUMENTATION

Document 1 – Drinking Water Quality Management System Report 2020 Management Review Report

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This document is available in English only and may be translated in whole or in part upon request. For more information, please contact Kristen Loiseau at 613-580-2424, extension 21919. Ce document n'existe qu'en anglais et pourrait être traduit en partie ou en totalité sur demande. Renseignements : Kristen Loiseau, 613-580- 2424, poste 21919.

DISPOSITION

Staff will continue to work to provide safe drinking water, following all legislation. Staff will implement any direction received as a result of this report.