

**Subject: Source Water Protection Septic System Inspection Program:
Municipal Wellhead Protection Area Risk Management**

File Number: ACS2025-IWS-AM-0003

Report to Agriculture and Rural Affairs Committee on 1 May 2025

and Environment and Climate Change Committee on 20 May 2025

and Council 28 May 2025

**Submitted on April 11, 2025 by Susan Johns, Director, Asset Management
Services**

**Contact Person: Tessa Di Iorio, Risk Management Official/Inspector, Senior
Hydrogeologist, Asset Management, Infrastructure & Water Services Department**

613-580-2424 x17658, tessa.diiorio@ottawa.ca

Ward: Citywide

**Objet: Programme d'inspection des systèmes septiques pour la protection
des sources d'eau: gestion des risques des secteurs de protection
des têtes de puits municipaux**

Numéro de dossier : ACS2025-IWS-AM-0003

Rapport présenté au Comité de l'agriculture et des affaires rurales

Rapport soumis le 1er mai 2025

et au Comité l'environnement du changement climatique le 20 mai 2025

et au Conseil le 28 mai 2025

Soumis le 2025-04-10 par Susan Johns, directrice, Gestion des actifs

**Personne ressource : Tessa Di Iorio, responsable/inspectrice de la gestion des
risques, hydrogéologue principale, Gestion des actifs, Direction générale des
services d'infrastructure et d'eau**

613-580-2424, poste 17658, tessa.diiorio@ottawa.ca

Quartier : À l'échelle de la ville

REPORT RECOMMENDATION(S)

That the Agriculture and Rural Affairs Committee and the Environment and Climate Change Committee recommend Council approve the Source Water Protection Septic Inspection Program as described in this report.

RECOMMANDATION(S) DU RAPPORT

Que le Comité de l'agriculture et des affaires rurales et le Comité de l'environnement et du changement climatique recommandent au Conseil d'approuver le Programme d'inspection des systèmes septiques pour la protection des sources d'eau, tel qu'il est décrit dans le présent rapport.

BACKGROUND

Ontario's [Clean Water Act, 2006](#) requires municipalities to implement Source Protection Plans to protect existing and future sources of municipal drinking water from various threats. Drinking Water Source Protection safeguards public health from drinking water threats by raising awareness and protecting our groundwater and surface water resources. In addition, the City's [Official Plan policy 4.9.5.1](#) requires that the City comply with local Source Protection Plan policies.

Private Septic Systems in Municipal Wellhead Protection Areas

Within the highest vulnerable area near municipal wells (Wellhead Protection Area with a vulnerability score of 10), septic systems and septic holding tanks are considered a significant drinking water threat. Both the [Mississippi-Rideau Source Protection Plan](#) and the [Raisin-South Nation Source Protection Plan](#) include mandatory policies related to the inspection of a septic system where they are considered a significant drinking water threat.

Greely Septic System Inspection Program – 2015

In 2015, Council approved [\(ACS2015-CMR-ARA-0006\)](#) funding for an initial round of septic systems inspections in Greely in 2015. A budget of \$50,000 per year was established for this program and operated within the existing budget envelope for the Rural Affairs Office. The report recommended that City staff return to Committee and Council if the program is to be extended beyond the initial two years.

The Rideau Valley Conservation Authority was retained to implement the original septic inspection program in Greely based on the approved recommendations by Council in 2015 [\(ACS2015-CMR-ARA-0006\)](#).

The Greely septic system inspection program was put on hold in 2020 due to a variety of factors including the pandemic. This report presents a revised septic system inspection program to meet the legislative requirements in the local Source Protection Plan policies.

DISCUSSION

Septic System Inspection Program Proposal

As previously mentioned, Source Protection Plan policies require a septic system inspection, as per the [Ontario Building Code](#), for all septic systems within the highest vulnerable area near municipal supply wells every five years. The Ontario Building Code requires that the inspections be completed by the principal authority responsible for septic system inspections, which is the Ottawa Septic System Office within the City of Ottawa. The Ottawa Septic System Office would be retained to complete the inspections.

The current proposed program would include 128 private septic systems in Greely. This number accounts for additional septic systems from new development within the eligible area. Program eligibility is limited to the areas where the Source Protection Septic System Inspection Policy applies, which is within a municipal Wellhead Protection Area with a vulnerability score of 10; thus, the program would apply to all Wellhead Protection Areas across the City, should new septic systems be added within the highest vulnerable areas.

Program implementation was discussed with the Rideau Valley Conservation Authority / Ottawa Septic System Office, who requested that septic inspections be divided evenly over a five-year schedule to better manage staffing resources. The proposed program would inspect approximately one-fifth of the 128 septic system which require inspections each year, on a five-year rotation, to meet the policy requirement. The program would include preparation of communication materials, communication with landowners, scheduling appointments, completion of septic inspections which may involve digging, site cleanup, and follow-up with landowners, and annual reporting to the City. If septic issues are identified, then landowners will be responsible to cover any expenses related to repairs or mitigative measures. As part of the program, Rideau Valley Conservation Authority staff will provide information to landowners about potential funding grants (if applicable), through the [Rural Clean Water Program](#), which is funded by the City and administered by the Rideau Valley Conservation Authority.

The proposed program would commence in spring 2025 and would cost is approximately \$200,000 over five years (\$40,000 per year), which would be reviewed to recur every five years thereafter. Staff will return to Committee for approval if there is a significant change to the program funding requirements or implementation plan, for example if there is a change in Source Protection Plan policies or the area where policies apply, if there is a significant increase in the number of septic systems eligible for the program or implementation costs significantly increase.

FINANCIAL IMPLICATIONS

Funds are available within existing budget authority. Future budget authority requirements will be brought forward through the annual budget process.

LEGAL IMPLICATIONS

There are no legal impediments to implementing the report recommendation.

COMMENTS BY THE WARD COUNCILLOR(S)

This is a City-wide program.

CONSULTATION

Landowner communication will be implemented by the Rideau Valley Conservation Authority and the Ottawa Septic System Office. Applicable residents will receive an information package by mail which will explain the septic inspection program and request that the resident schedule an appointment for an inspection. The information package will be reviewed by City staff prior to distribution. Conservation Authority staff will conduct home visits to discuss the program and encourage participation for residents who do not respond to the mailout.

ACCESSIBILITY IMPACTS

There are no accessibility impacts associated with this report.

ASSET MANAGEMENT IMPLICATIONS

The purpose of the program is to protect municipal drinking water resources by eliminating threats that could potentially contaminate the City's municipal groundwater supply wells. This project will protect City assets and prevent the need for future costly remediation (if even possible) or the need to seek a replacement drinking water source.

CLIMATE IMPLICATIONS

The purpose of the proposed program is to inspect septic systems that are located near municipal supply wells, to ensure the systems are properly functioning and do not contaminate the municipal drinking water source.

A poorly functioning septic system can contribute to releases of untreated wastewater and contaminate nearby water bodies and aquifers, impacting aquatic ecosystems and potentially harming drinking water resources. This program is intended to protect drinking water sources.

DELEGATION OF AUTHORITY IMPLICATIONS

There are no delegation of authority impacts associated with this report.

ENVIRONMENTAL IMPLICATIONS

The proposed program will inspect septic systems located near municipal supply wells, to ensure the septic systems are properly functioning and do not contaminate the local environment including the municipal drinking water source.

A poorly functioning septic system can contribute to releases of untreated wastewater and contaminate nearby water bodies and aquifers, impacting aquatic ecosystems and potentially harming drinking water resources. This program is intended to protect the environment and drinking water sources.

RISK MANAGEMENT IMPLICATIONS

All risks and associated mitigation measures have been outlined within the body of the report.

RURAL IMPLICATIONS

This project will benefit rural communities by protecting the municipal drinking water supplies through the inspection of private septic systems within the highest vulnerable area near the municipal wells in Greely, Vars, Richmond, Munster, and Carp. This program applies to any residents with private septic systems located within a wellhead protection area (vulnerability score 10). Currently, there are 128 private septic systems that are eligible for the program within the Greely wellhead protection area. Any new properties developed within the eligible areas of any municipal wellhead protection areas in the City would be incorporated into the program in the future.

TERM OF COUNCIL PRIORITIES

This project addresses the following Terms of Council Priority:

A City that is Green and Resilient.

DISPOSITION

Infrastructure and Water Services staff will work with the Rideau Valley Conservation Authority and the Ottawa Septic System Office to deliver the Source Protection Septic Inspection Program and will work directly with the affected homeowners when appropriate.