



MANAGEMENT REPORT

Date: January 9, 2025
To: Finance and Labour Relations Committee
From: Adam Betteridge, Director of Building and Planning Services
Report Number: FIN25-003
Attachments: None.

Title: Building and Planning Services Backflow Prevention Additional Information

Objective: To provide additional contextual information to Council for the 2025 Budget deliberations, particularly the Expansion Initiatives for additional by-law enforcement positions recommended by the Building and Planning Services Department.

Background: At the December 9 budget meeting, and after considering various questions raised regarding the draft 2025 budget items, the following motion, among others, was made:

 THAT the Backflow Prevention officer be referred to staff to provide an overview of the backflow prevention program.

In addition, much of the discussion around the additional by-law enforcement positions is based on the ability of Administrative Monetary Penalties, or "AMPs", to achieve greater compliance with City By-laws, but also to gain additional revenues from properties that are in non-compliance with By-laws. Following the information on the backflow prevention program, commentary will be provided on the City's ability to generate revenues through AMPs.

Analysis: Cross Connection By-law 50-2004 was implemented in March 2004 after an incident where soaps from a car wash entered Stratford's municipal water supply, posing a significant risk to public health. The by-law was adopted to provide a framework for the safe supply of water by requiring backflow prevention devices (BFDs) at sites where potential contamination hazards exist. These sites are generally commercial, industrial, and institutional sites, but also include multi-residential properties, and residential properties with lawn irrigation systems.

Since its inception, the program has grown significantly. At the start of 2024, there were approximately 450 properties on the Cross Connection Program list undergoing

testing. However, following a comprehensive audit of existing records and other potential properties in the City, it was determined that over approximately 900 properties now require monitoring, testing, or enforcement under the program.

The audit revealed several critical issues:

- Many properties with BFDs had not undergone testing in years.
- Testing records were incomplete or inaccurate, with missing information about devices installed on properties.
- BFDs were being replaced or installed without acquiring the necessary permits (the permit fee is \$130.00 per device).
- The Cross Connection Program list was outdated, with properties and devices not being adequately tracked.

These deficiencies are largely attributed to insufficient staffing resources. By-law Officers currently tasked with managing the program also handle all other by-law complaints and enforcement across the City, and this lack of dedicated attention has prevented the program from being run as it should, exposing the City to potential risks to its water supply and associated liabilities. More information is provided later in this report regarding insufficient staffing resources.

To ensure the program's effectiveness and to address current gaps, the duties of a dedicated Backflow Prevention Officer are to include:

- Cross-referencing test results and surveys with property records to ensure all devices (ranging from 1–70 per property) are accounted for, functioning properly, and are compliant with backflow prevention standards. Without this activity, gaps in record-keeping may leave untested devices undetected, posing a potential risk to water quality.
- Updating and maintaining the Cross Connection Program list to ensure an accurate inventory of properties and devices with BFDs. An outdated list undermines the City's ability to ensure proper compliance, track overdue testing, or identify properties requiring immediate attention.
- Ensuring permits are obtained for replaced or newly installed BFDs and issuing permits where required. Currently, some devices are being replaced or installed without permits, resulting in lost revenue for the City and no assurance that installations meet safety standards.
- Conducting on-site inspections for newly installed or replaced BFDs to confirm compliance with permits and CSA standards. These inspections are critical for verifying the proper installation and operation of devices, safeguarding the integrity of the water supply.
- Enforcing compliance by issuing orders, water shut-offs, and penalties such as late filing fees (\$100.00) or charges under the Provincial Offences Act when necessary. As the City begins implementation of Administrative Monetary Penalties (AMPs), enforcement capabilities should improve, allowing for quicker

resolution of non-compliance and less reliance on time-intensive court proceedings.

- Collaborating with other City departments and divisions (Building, Engineering, and Environmental Services – Water Divisions) to address backflow prevention requirements during new subdivision and infrastructure developments, including installations for temporary water bypasses during roadwork. Proper coordination ensures that compliance with backflow prevention standards is integrated into project planning from the start.
- Liaising with plumbing contractors to ensure installations meet CSA standards and providing technical expertise to contractors and property owners as needed. A lack of clear communication or oversight can lead to installations that do not meet the necessary safety standards.
- Issuing monthly reminder notices to over 75 properties due for testing to ensure timely compliance. Without consistent notifications, properties may inadvertently neglect their obligations, further delaying necessary testing.

None of these tasks are being conducted to the level required due to competing demands on existing staff who also handle all other by-law complaints and enforcement across the City. This lack of dedicated attention has left key elements of the Cross Connection Program under-addressed, including untested devices, incomplete records, and unpermitted installations. While the City continues to meet its overall obligations under By-law 50-2004, gaps in the program's administration increase the likelihood of non-compliance and diminish the ability to proactively mitigate risks to the municipal water system.

A dedicated Backflow Prevention Officer would ensure these important functions are carried out consistently and effectively, protecting the City's water supply, improving compliance with applicable standards, and safeguarding public health.

As noted earlier, insufficient staffing resources on the by-law enforcement front is the reason why additional positions, including a Supervisor of By-law and one additional By-law Enforcement Officer, have been identified as critical to the City's delivery of by-law enforcement overall. The City's by-law enforcement team currently consists of two dedicated officers, supplemented by a grant-funded Community Safety and Wellbeing By-law Officer. However, this staffing level is inadequate to meet the increasing demands of the community, including growing workloads, reporting and legislative requirements and the need for proactive enforcement measures.

To assess the adequacy of the City's by-law enforcement resources, a comparative analysis of similar municipalities was conducted. This analysis revealed that Stratford's by-law enforcement staffing levels, when measured as full-time equivalents (FTEs) per 1,000 residents, are significantly lower than what is typical in comparable small-to-mid-sized cities; generally, half the number of officers as what would be seen in other cities. This data underscores the need for additional staffing to ensure the City can continue to deliver timely and effective by-law enforcement/compliance services.

Lastly, the findings also confirmed that many other municipalities have adopted a by-law compliance supervisor or manager role, typically filled by an experienced by-law professional, rather than having by-law functions directly overseen by the Chief Building Official, Clerk, or similar positions.

Risk Considerations

- Failure to maintain an effective Cross Connection Program poses significant risks to the municipal water supply, with potential contamination affecting residents and businesses.
- Lost revenue from unissued permits and fines reduces the City's ability to recover current and future program costs. Non-compliance may also result in costs to the City for remedial actions.
- Inadequate management of the program could erode public trust and confidence in the City's ability to maintain essential infrastructure.

Summary

In consultation with Building, Engineering, and Environmental Services Divisions, the Building and Planning Services Director recommends for the Cross Connection Program to operate effectively and as originally set out by Council following the 2004 car wash incident, that a dedicated Backflow Prevention Officer is needed to address current and growing gaps in enforcement, record-keeping, and compliance. This position would also enhance public health, mitigate risks, and generate revenue through proper permitting and enforcement.

Administrative Monetary Penalties, or "AMPs"

The effectiveness of a right-sized By-law Division will be further benefitted once an AMPs program is implemented (AMPs cannot be effectively implemented with current staffing levels).

Once the required staffing is in place, implementing the AMP program is expected to take several months as processes, technology, and training are developed. Although precise revenue and cost implications are challenging to predict, the program is anticipated to generate meaningful revenue through penalties and licensing fees, particularly in areas such as short-term rental and bed-and-breakfast compliance. Initial projections suggest that first-year gross revenues from these sources alone could cover much of the program's operational costs, with potential surpluses depending on compliance levels and enforcement efforts.

The annual costs of running the program, in addition to the staffing (supervisor of by-law and additional by-law officer) will include administrative functions and necessary technology. The AMP program offers an opportunity to enhance the by-law enforcement service while creating a system that is both efficient and financially sustainable. As the program is rolled out, Staff will continue to evaluate its performance and adapt operational strategies to ensure its long-term success.

Financial Implications:

Financial impact to current year operating budget: This report is for informational purposes relating to the 2025 budget deliberations so there are no financial implications to the current year operating budget to be reported because of this report.

Financial impact on future year operating budget: Given this report is for informational purposes relating to the 2025 budget deliberations, any decision made will affect future year operating budgets.

Insurance considerations: Insurance considerations for the Cross Connection Program include increased liability risks to the City in the event of water contamination due to non-compliance with backflow prevention requirements. Proper administration of the program, including regular testing and enforcement, reduces the likelihood of claims related to negligence or damages caused by water supply issues. Establishing a dedicated Backflow Prevention Officer would further mitigate these risks by ensuring program compliance and addressing gaps proactively.

Alignment with Strategic Priorities:

Enhance our Infrastructure

This report aligns with this priority as investing in our infrastructure is to support the community's overall well-being.

Alignment with One Planet Principles:

Health and Happiness

Encouraging active, social, meaningful lives to promote good health and wellbeing.

Equity and Local Economy

Creating safe, equitable places to live and work which support local prosperity and international fair trade.

Land and Nature

Protecting and restoring land for the benefit of people and wildlife.

Staff Recommendation: THAT the report titled, "Building and Planning Services Backflow Prevention Additional Information" (FIN25-003), be received for information.

Prepared by: Adam Betteridge, Director of Building and Planning Services

Recommended by: Joan Thomson, Chief Administrative Officer