

Backflow Prevention Implementation Plan

1) Establish Program Authority and Administrative Responsibility

- a) The establishment and County Council approval of a Backflow Prevention By-law.
- b) Administration of the County Backflow Prevention Program and the enforcement of the Backflow By-law through Oxford County Water and Wastewater Technical Services.

Status: In-Progress

- County staff have developed a draft Backflow Prevention By-law pending council approval.
- County staff have established the administrative framework to implement the Backflow Prevention Program for operating program with 0.5 FTE as detailed in current approved budget.

2) Establish Backflow Prevention Standard and Policy

- a) A current standard proposed in Schedule A of draft Backflow Prevention By-law - County of Oxford Cross Connection Control and Backflow Prevention Standards is pending council approval.
- b) General details as it relates to backflow preventer selection, installation, testing and maintenance practices and procedures are referenced in draft Backflow Prevention By-law and guided by CSA B64 Standard.

Status: In-Progress

- The administration of the County Backflow Prevention Program will be developed and detailed in a departmental procedure.
- The County Backflow Prevention Program will use CSA B64 Standard to guide backflow preventer selection, installation, testing and maintenance practices and procedures.

3) Evaluate Financial Implications, Establish Budget Structure and Identify Source of Funding

- a) The development of the Backflow Program will be funded through current rate structure and operating budget.

Status: In-Progress

- A user pay model has been proposed to implement the Backflow Prevention Program as a budget neutral program, pending Council approval.

4) Review Regulations and Standards for Backflow Prevention Devices

- a) Review applicable legislation and standards including, but not limited to, the following:
 - i) *Building Code Act, 1992,*
 - ii) *Safe Drinking Water Act, 2002,*
 - iii) *Municipal Act, 2001,*
 - iv) *Fire Protection and Prevention Act, 1997.*
- b) Review and incorporate requirements of CSA B64 Standard into Backflow By-law Appendix A.

Status: Completed

- County staff have developed a draft Backflow Prevention By-law, based on the regulations and standards indicated above.

5) Establish a Database Management System

- a) Evaluation and selection of platform that will track facilities assessed and inspected, associated inspection records and device records, inventory of backflow prevention devices, issued correspondence, etc.
- b) Developing and maintaining a roster of certified or registered companies for completing testing and inspections.
- c) Evaluation and review of the County's current work order system (i.e. Cartegraph) as a platform for the Backflow Prevention Program.

Status: Completed

- County staff evaluated a number of database management options and have selected a preferred solution pending the approval of the By-law.
- The preferred solution would include a certified testing company roster.
- Review of the County work order system as a potential platform has been considered.

6) Develop a Public Consultation, Education and Communication Campaign

- a) Identification of stakeholders (ICI, residents, municipal staff, professional, trade and technical groups, etc.).
- b) Public consultation with Large Water Users.
- c) Consultation with Local Authorities of Area Municipalities.
- d) Development of material and content to individual stakeholder groups.
- e) Development of awareness and educational program.
- f) Development of fact sheets, presentations, frequently asked questions, and resource materials.
- g) Development and updating of information on the County website.

Status: Completed

- County staff undertook a four month Public Consultation, Education and Communication Campaign soliciting feedback on the proposed BPP. The campaign included a Public Consultation Centre in each of the eight Area Municipalities, social media posts, fact sheet development and distribution and communication with Large Water Users.
- Awareness and educational materials will be developed for distribution during implementation.
- A migration plan is prepared for moving the material from the existing consultation webpage to a permanent URL on the County website.

7) Coordination with Area Municipalities

- a) The development, implementation, and maintenance of a Backflow Prevention Program requires co-ordination with many local authorities including business improvement areas, building, plumbing, public works and planning officials at the local Area Municipalities.

Status: In-Progress

- Consultation with Area Municipalities and their building officials was solicited through the public consultation process.
- Next steps would be to coordinate regular meetings with the building officials to develop process workflows for device registration and cross connection surveys for new developments.

8) Development of Standard Correspondence and Content

- a) Development of backflow forms and surveys including, but not limited to, the following:
 - i) Letter of introduction to the program,
 - ii) Notice of requirement for installation of backflow devices,
 - iii) Notice of inspection and testing requirements,
 - iv) Notice of fines and penalties,
 - v) Notice of renewals and certification updates,
 - vi) Cross connection inspection reports and surveys, and
 - vii) Backflow test reports.

Status: Completed

- The County's database management solution will provide templates for program notices outlined above and will distribute them to stakeholders as part of their service.

9) Requirements for a Survey and Hazard Assessment

- a) Identification and evaluation of requirements for survey and hazard assessment in the Backflow Prevention Program which is outlined in the Backflow By-law Appendix A standards.

Status: In-Progress

- County staff have developed a draft Backflow Prevention By-law, which identifies requirements for surveys and hazard assessments.

10) Establishment of Training, Inspection and Testing Protocols

- a) Development of standard operating procedures for County program administration, including; notification protocols, maintenance and reviewing records and forms, review of testers/surveyors licenses and accreditation, conducting audits, inspections, and by-law enforcement.
- b) Development of inspections, certification and testing requirements including timelines will be outlined in the Backflow By-law Appendix A standards.
- c) Development and maintenance of a publically posted third party roster of "Qualified Testers" to install, service and test backflow prevention devices and appurtenances.

Status: In-Progress

- County staff have developed a draft Backflow Prevention By-law, which identifies inspections, certification and testing requirements.
- A certified testing company roster will be maintained. Local testing companies can also be featured on the County website.

11) Development of a Backflow Incident Response Plan

- a) Development and incorporation of backflow incidents into the Water Services Emergency Response Plan within the County's drinking water QMS.
- b) Evaluation of the potential of creating a specific backflow incident response procedure which would include sampling, flushing, communication and documentation requirements.
- c) Development and provision of training to internal and external stakeholders to ensure appropriate and timely actions are taken in response to an incident.

Status: Planned

12) Establish Enforcement Strategies

- a) Development of inspections, reporting, installation, certification and testing requirements, including timelines, will be outlined in the Backflow By-law Appendix A standards.
- b) Development of notices, fines and penalties will be outlined in the Backflow By-law Appendix A standards.
- c) Development of enforcement strategies which will be incorporated as part of Section 10 - Establishment of Training, Inspection and Testing Protocols.

Status: In-Progress

- County staff have developed a draft Backflow Prevention By-law, which identifies inspections, certification and testing requirements as well as fines and penalties.
- County staff have developed draft cross connection inspection reports and surveys, and backflow test reports which are identified in the draft Backflow Prevention By-law.
- Upon approval by Council, County staff will work to migrate draft cross connection inspection reports and surveys, as well as backflow test reports to database management software.

13) Implement Quality Control and Assurance Strategies

- a) Development of quality control and assurance strategies which will be incorporated as part of Section 10 - Establishment of Training, Inspection and Testing Protocols, which will include, but is not limited to, the following:
 - i) Review of backflow preventer testers' performance, assessment and device test results.
 - ii) Review of certification and licensing requirements.
- b) Development and tracking of level of service framework as part of the County Asset Management Plan.
- c) Development of a report that summarizes the annual performance of the County's Backflow Prevention Program to County Council.

Status: In-progress

- Program start up and full implementation key performance indicators have been preselected to monitor the level of service of the Program.
- Process for reviewing certified testers accreditation status and device submission has been considered as part of the Programs database management.
- A summary of the annual performance of the program is to be included in a section of the Annual Drinking Water System Report to Council.