

Town of Aurora

Backflow Prevention Program & By-Law

Council Presentation

April 16th 2019



DFA Infrastructure International Inc.

What is the Purpose of this Presentation?



- Inform you about the “Backflow Prevention Program and By-Law” (BFPP)

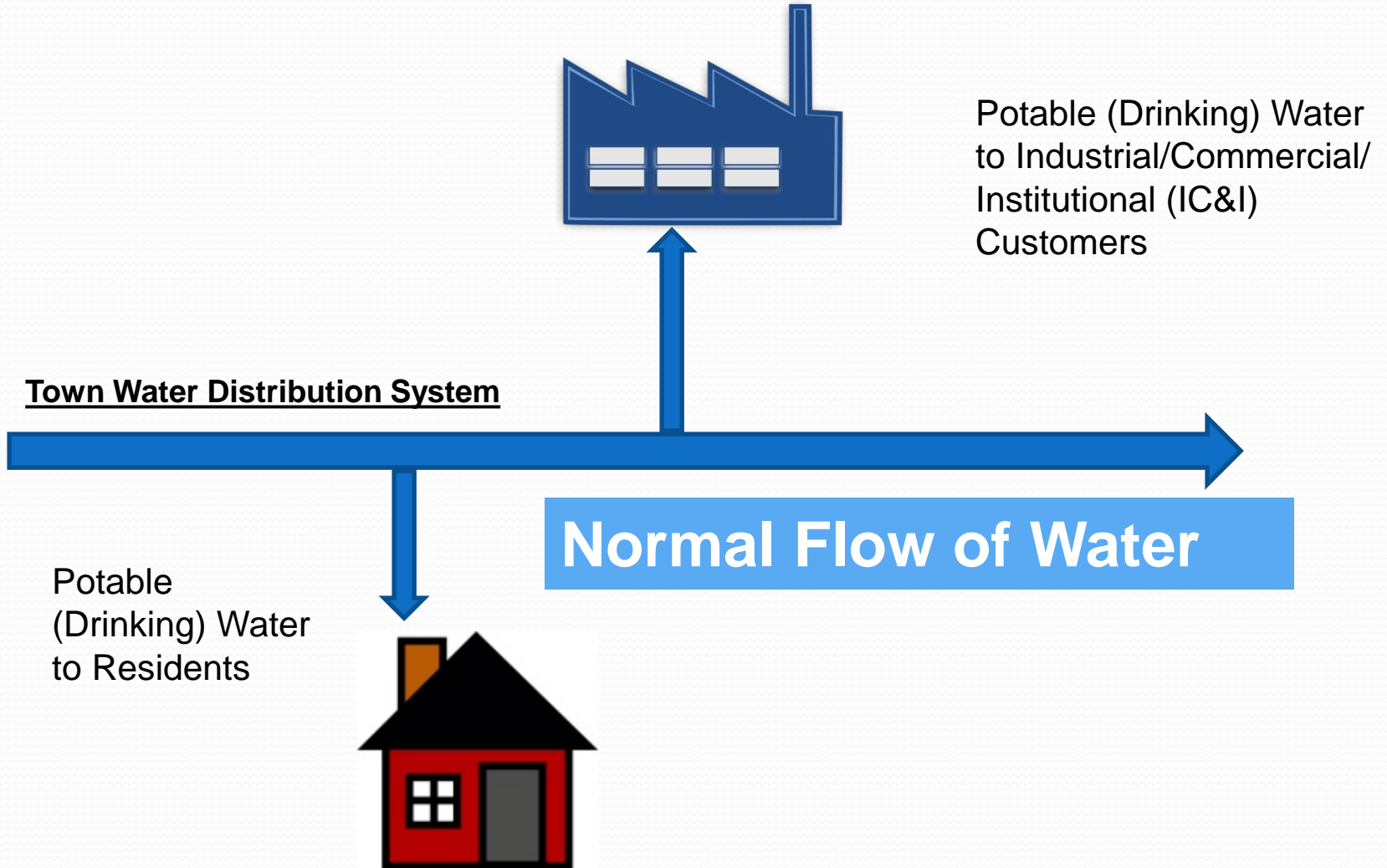


- Address any comments, questions, concerns and receive suggestions that you may have about the program

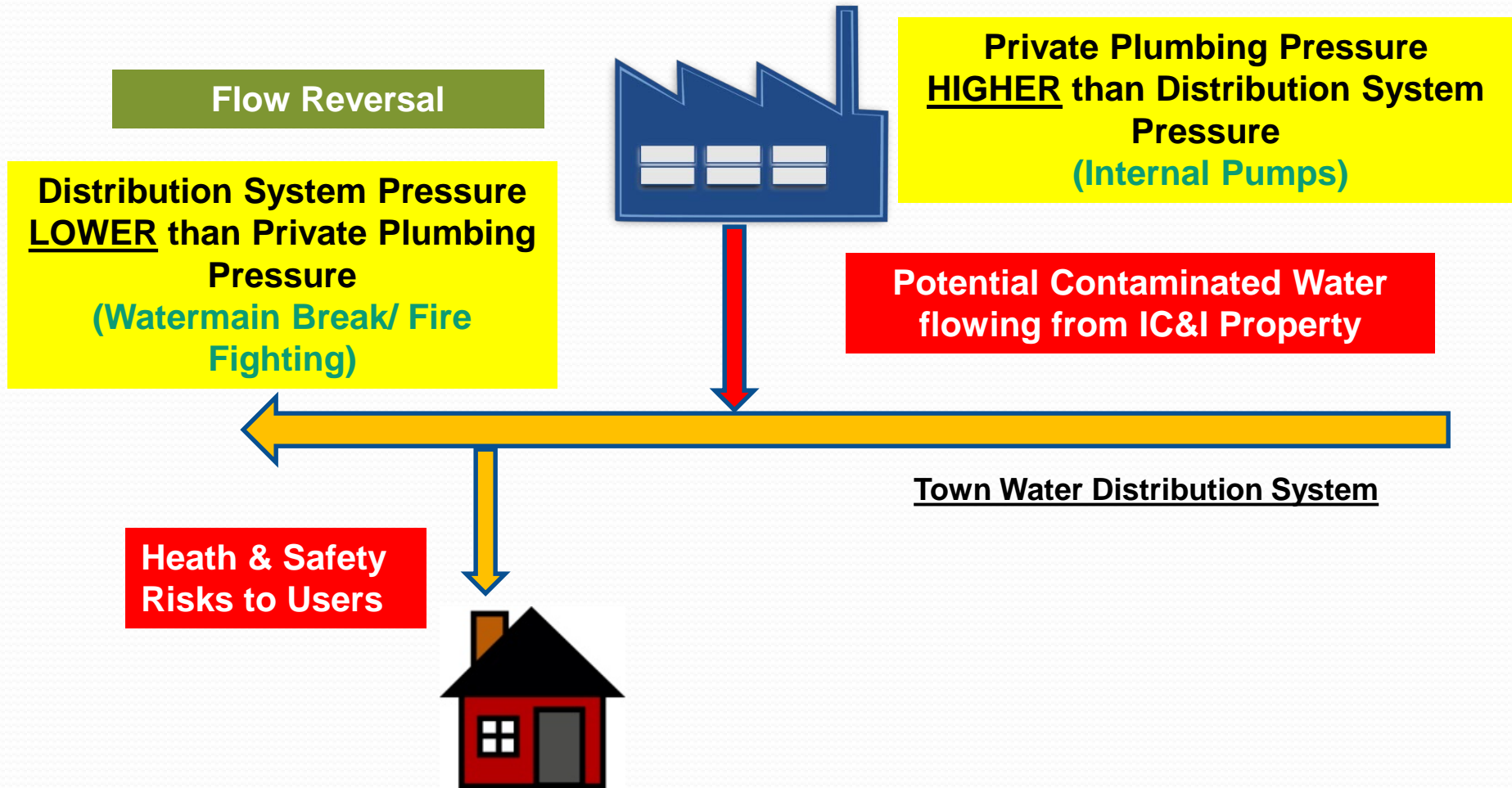
Presentation Covers

- What is *Backflow*?
- Why is a Backflow Prevention Program (BFPP) needed?
- What are the key features of the BFPP?
- Who will administer the program?
- How will Stakeholders be involved?
- When will the program be implemented?
- Next Steps

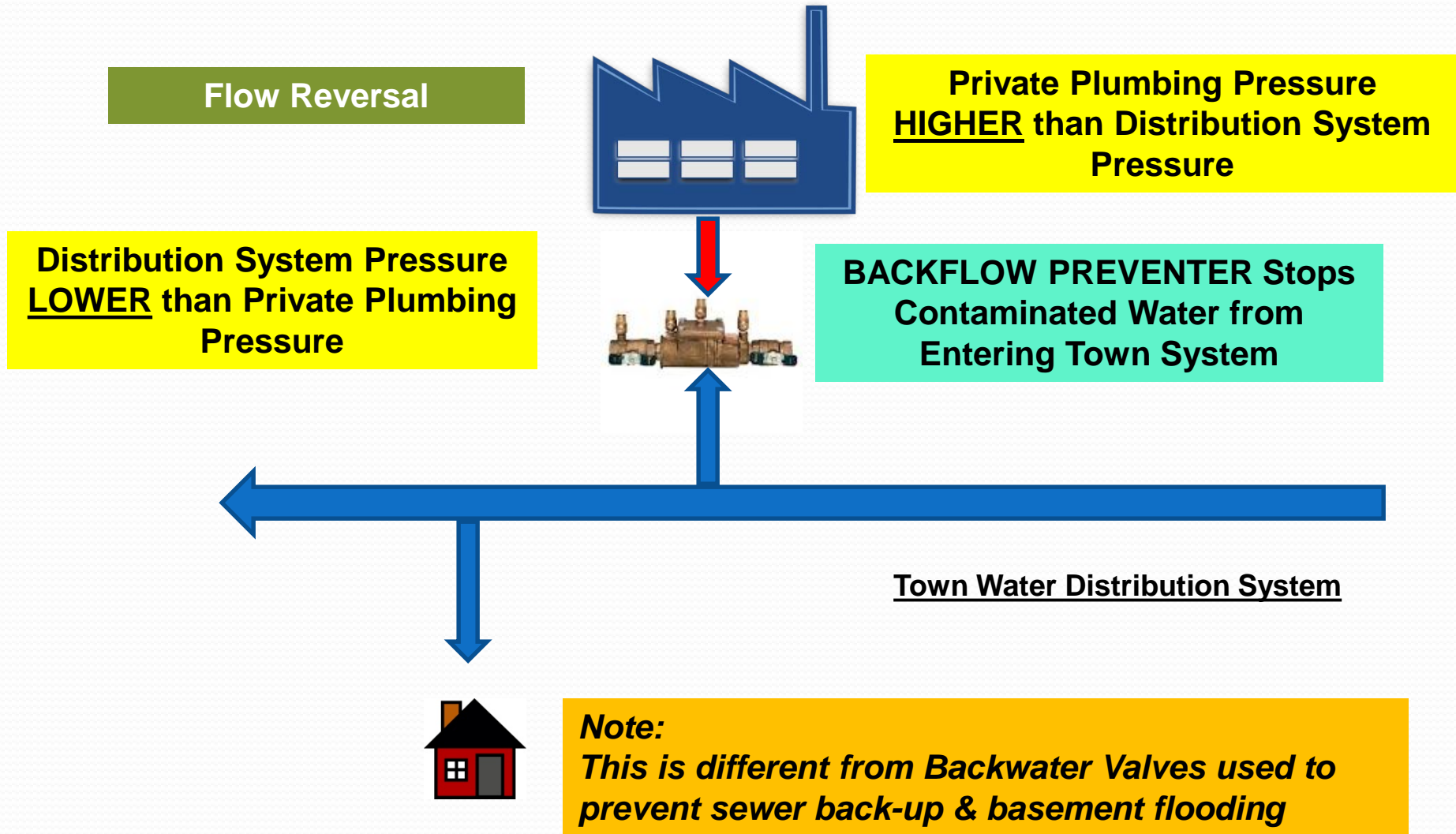
What is Backflow?



Backflow Condition



Solution – Premise Isolation



What Are Cross Connections?

- **Cross Connections** are the potential sources of contamination
- These are any physical connections or arrangements between potable and a source of contamination (suspect water, steam, gas, or chemical) whereby a flow from one system to the other is possible





Why is a Backflow Prevention Program Needed?

Why is a Backflow Prevention Program Needed?

- Legislation & Regulations :
 - Safe Drinking Water Action, Section 19, Standard of Care
 - Ontario Building Code (OBC) Section 7 – Requires Backflow Preventers to be installed (New Buildings)
- Ministry of Environment Conservation & Parks (MECP) Recommendation (Not Mandatory)
- Industry Best Practice (over 40 municipalities have BFPPs)
- Customer Confidence in Drinking Water Quality
- DWQMS Policy - Commitment to ensuring safe water

SDWA SECTION 19 – STANDARD OF CARE

- 19 (1) Each of the persons listed in subsection (2) shall,
- (a) exercise the level of care, diligence and skill in respect of a municipal drinking water system that a reasonably prudent person would be expected to exercise in a similar situation; and
 - (b) act honestly, competently and with integrity, with a view to ensuring the protection and safety of the users of the municipal drinking water system. 2002, c. 32, s. 19 (1).
- 19(2) The following are the persons listed for the purposes of subsection (1):
1. The owner of the municipal drinking water system.
 2. If the municipal drinking water system is owned by a corporation other than a municipality, every officer and director of the corporation.
 3. If the system is owned by a municipality, every person who, on behalf of the municipality, oversees the accredited operating authority of the system or exercises decision-making authority over the system. 2002, c. 32, s. 19 (2).

SDWA SECTION 19 – STANDARD OF CARE

- 19(3) Every person under a duty described in subsection (1) who fails to carry out that duty is guilty of an offence. 2002, c. 32, s. 19 (3).
- 19(4) A person may be convicted of an offence under this section in respect of a municipal drinking water system whether or not the owner of the system is prosecuted or convicted. 2002, c. 32, s. 19 (4).



What are the key features of the BFPP?

Which Properties will the BFPP Apply to?

- **Program will apply to:**
 - Industrial, Commercial and Institutional (IC&I), Mixed Use and Multi-Residential Properties (approximately 600 Customers)
 - Properties with connections to other water sources apart from the Town's system
 - Any property that may pose a contamination risk (at Director's determination)
- Some properties may already have Backflow Preventers installed due to OBC(Section 7) requirements

What are the Program Components?

Program Components include:

- Customer awareness & education on backflow prevention (Town)
- Cross Connection Surveys to be conducted by qualified persons **to assess risks** (Property Owners)
- Installing and testing of backflow preventers by qualified persons to achieve “premise isolation” (Property Owners)
- Submission of surveys, test reports, corrective action reports and tester certification to the Town within specified timelines (Property Owners)
- Approval of a Backflow Prevention By-Law by Council (Town)
- Program implementation and administration (Town)

What are the Proposed Timelines?

Item	Proposed Timeline
Cross Control Surveys	<ul style="list-style-type: none">• December 31, 2019 – Initial Submission• Every 5 Years
Backflow Preventer Installations	<ul style="list-style-type: none">• September 30, 2020– for first installations• Replacements as needed
Test Reports	<ul style="list-style-type: none">• With Initial Survey (if there is already a backflow preventer)• September 30, 2020 – for first time installations• Annually
Tester Certification	<ul style="list-style-type: none">• With Initial Surveys and Test Reports
Equipment Calibration Certificates	<ul style="list-style-type: none">• With Initial Surveys and Test Reports

What are the Roles of the Town and Property Owners?

Town:

- Issuing and ensuring that building permit requirements are met for new backflow preventer installations (Building Services)
- Program implementation, monitoring and enforcement in accordance with the By-Law (Operational Services)

Staffing:

- One (1) New Staff Person in W&WW beginning in 2020
- Possibly shared 50/50 with other responsibilities

What are the Roles of the Town and Property Owners?

Property Owners:

- Ensuring Cross Connection Control Surveys are completed
- Ensuring that Backflow Preventers are installed and tested at their properties
- Ensuring that only OWWA qualified testers are retained to do surveys and device testing
- Ensuring that all submissions to the Town, in accordance with the By-Law requirements, are made on time
- Responsible for all costs related to device installation, testing and corrective actions and payment of applicable fees to the Town



How will Stakeholders be Involved?

Public Engagement Goals & Objectives

- Provide opportunities to engage stakeholders and obtain feedback (Direct Mail, Public Open House & On-line)
- Identify questions and concerns and how they might be addressed
- Document input received
- Develop recommendations reflective of stakeholder input and broad acceptance of the program

Internal Stakeholder Consultation

- Input from various departments – legal, finance, by-law, engineering, communications, IT (meeting held on March 7 2019)
- Presentation of program to Council – April 2019

Public Consultation Activities

- Project Website – May 2019
- Video – May 2019
- Social Media “sound bites” – May 2019
- Project “post card” – May 2019
- Town page in local Newspapers - May 2019
- Public Open House (POH) – May/ June 2019

What are the Next Steps & Proposed Timelines?

Item	Proposed Timeline
Internal Stakeholder Engagement	Ongoing
Draft By-Law	Completed and under internal review
Presentation to Council	April 16 2019
Public Engagement	May – June 2019
Program Implementation	June – July 2019
Cross Control Surveys	December 2019
New device installations & Initial Test Reports	September 2020



QUESTIONS?