

City of London Pollution Prevention Control Plan (PPCP) Update Study

Public Information Centre

London City Hall

300 Dufferin Avenue, London, ON N6B 1Z2
2nd floor. Committee Rooms 1 and 2

Date: May 7, 2025
Time: 5 – 7 p.m.

Land Acknowledgement

We acknowledge that we are gathered today on the traditional lands of the Anishinaabek, Haudenosaunee, Lūnaapéewak and Attawandaron.

We acknowledge all the treaties that are specific to this area: the Two Row Wampum Belt Treaty of the Haudenosaunee Confederacy/Silver Covenant Chain; the Beaver Hunting Grounds of the Haudenosaunee NANFAN Treaty of 1701; the McKee Treaty of 1790, the London Township Treaty of 1796, the Huron Tract Treaty of 1827, with the Anishinaabeg, and the Dish with One Spoon Covenant Wampum of the Anishnaabek and Haudenosaunee.

This land continues to be home to diverse Indigenous people (First Nations, Métis and Inuit) whom we recognize as contemporary stewards of the land and vital contributors to society. We hold all that is in the natural world in our highest esteem and give honour to the wonderment of all things within Creation. We bring our minds together as one to share good words, thoughts, feelings and sincerely send them out to each other and to all parts of creation. We are grateful for the natural gifts in our world, and we encourage everyone to be faithful to the natural laws of Creation.

The three Indigenous Nations that are neighbours to London are the Chippewas of the Thames First Nation; Oneida Nation of the Thames; and the Munsee-Delaware Nation who all continue to live as sovereign Nations with individual and unique languages, cultures and customs.

This Land Acknowledgement is a first step towards reconciliation. Awareness means nothing without action. It is important that everyone takes the necessary steps towards decolonizing practices. We encourage everyone to be informed about the traditional lands, Treaties, history, and cultures of the Indigenous people local to their region.



Why are we here?

Public Information Centre Objectives



Welcome!

Here are the objectives for today’s Public Information Centre (PIC):



Present the Public and Primary Interest-Holders with an opportunity to learn about the study.



Outline the study schedule and what steps are being taken to support the decision-making process.



Answer any questions you may have about the study process or potential outcomes.

Get Engaged!

- ✓ Please sign-in and take a comment sheet.
- ✓ Have a look at the project information on display and chat with the Project Team.
- ✓ Provide your feedback regarding the information presented.



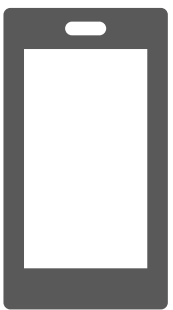
PIC Timeline

May 7, 2025: Release of PIC Materials

May 7 to May 28, 2025: Comment Period

June 5, 2025: Comments Posted to Project Website.

Note that this is the only PIC held for this study.

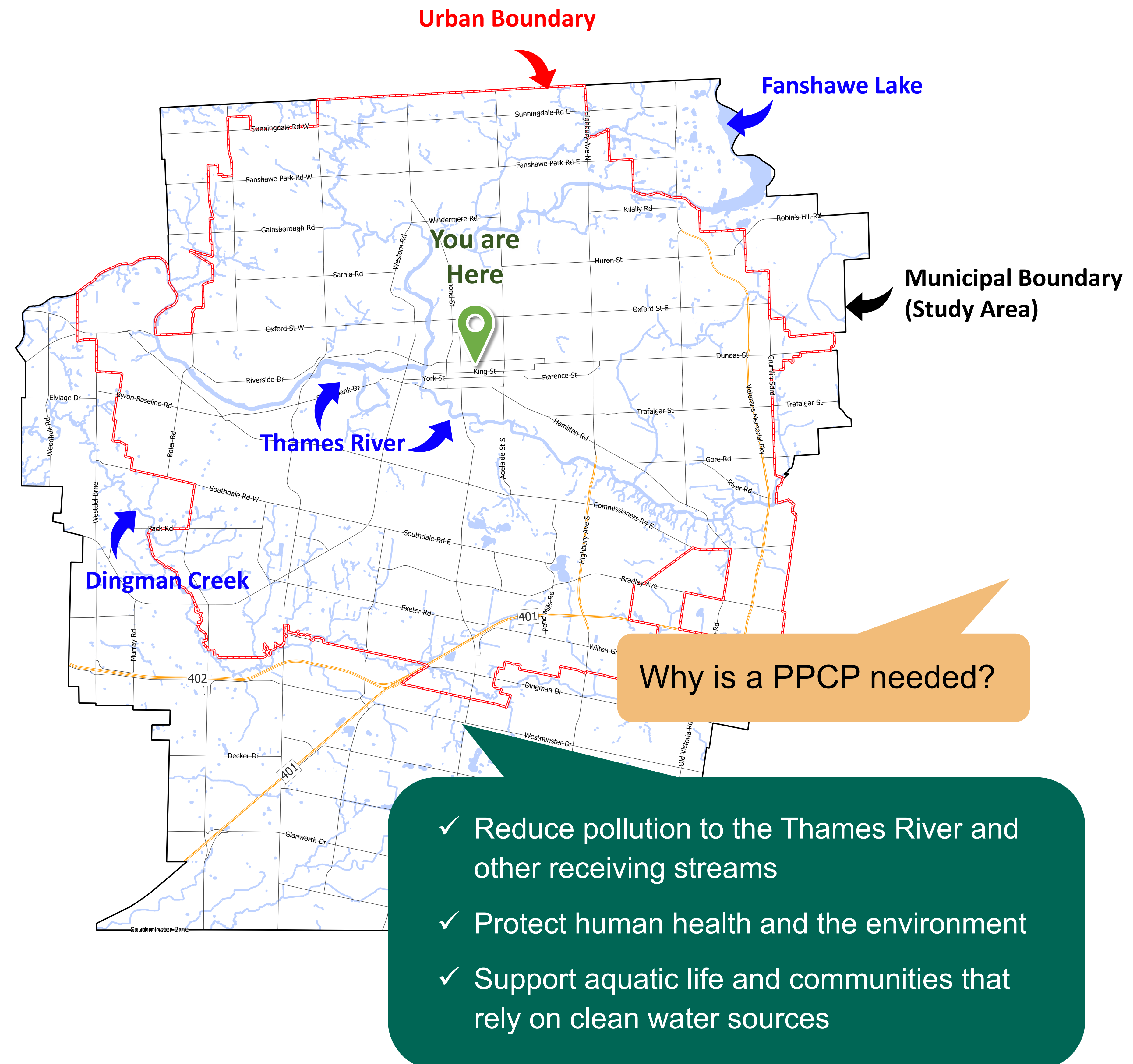


Additional project information can be found on the project website, which can be accessed by scanning the QR Code with your smartphone.

What is the Pollution Prevention Control Plan Update Study about?

Study Introduction and Background

- ❖ The **Pollution Prevention Control Plan (PPCP)** update study was initiated as part of the City's ongoing efforts to improve the performance and resiliency of the sanitary system, as well as improve the quality of the City's existing waterways.
- ❖ The study will be completed as a Master Planning Study, satisfying Phases 1 and 2 of the **Municipal Engineers Association Class Environmental Assessment** process (October 2000, as amended in 2007, 2011, 2015, 2023, and 2024); an approved process under the **Environmental Assessment Act**.
- ❖ Objective of the Study is to develop an implementation plan for a long-term solution that will limit the volume and frequency of **Combined Sewer Overflows (CSOs)** and **Sanitary Sewer Overflows (SSOs)** into local tributaries.
- ❖ The implementation plan will follow the principles as set out by the **Ministry of Environment, Conservation, and Parks (MECP) Procedure F-5-5**.

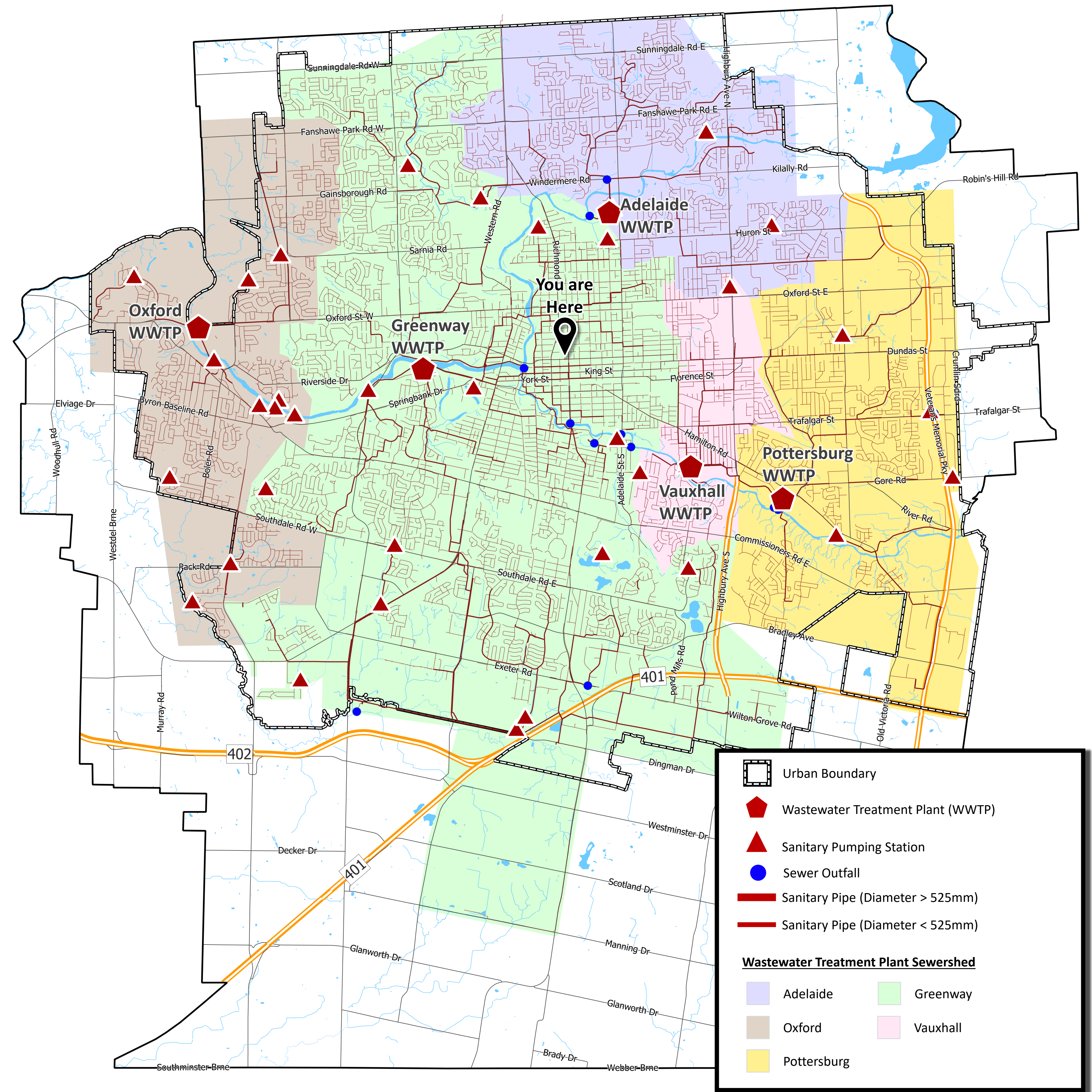


What are the challenges of the system?

Existing System Constraints

The City owns and operates all its sewer system infrastructure.

- ❖ 128 sanitary sewer overflows
- ❖ 1,450 km of sanitary sewers
 - 11.5 km are combined sewers
- ❖ 35 sanitary pumping stations (SPS)
 - 29 SPSs discharge directly to receiving streams or indirectly through storm sewers during extreme rainfall events
- ❖ 5 wastewater treatment plants (WWTP)

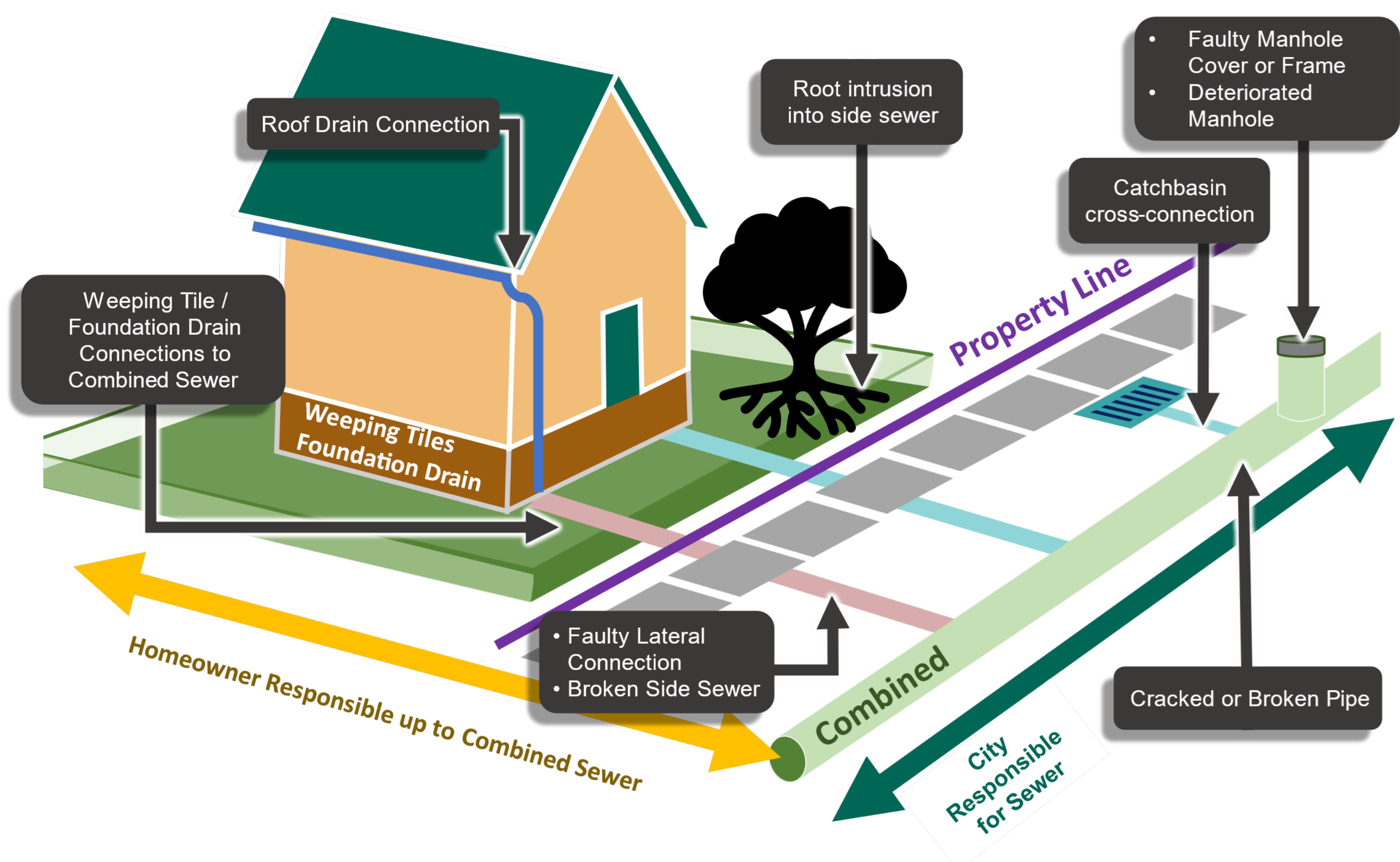


Where are wet weather flows coming from?

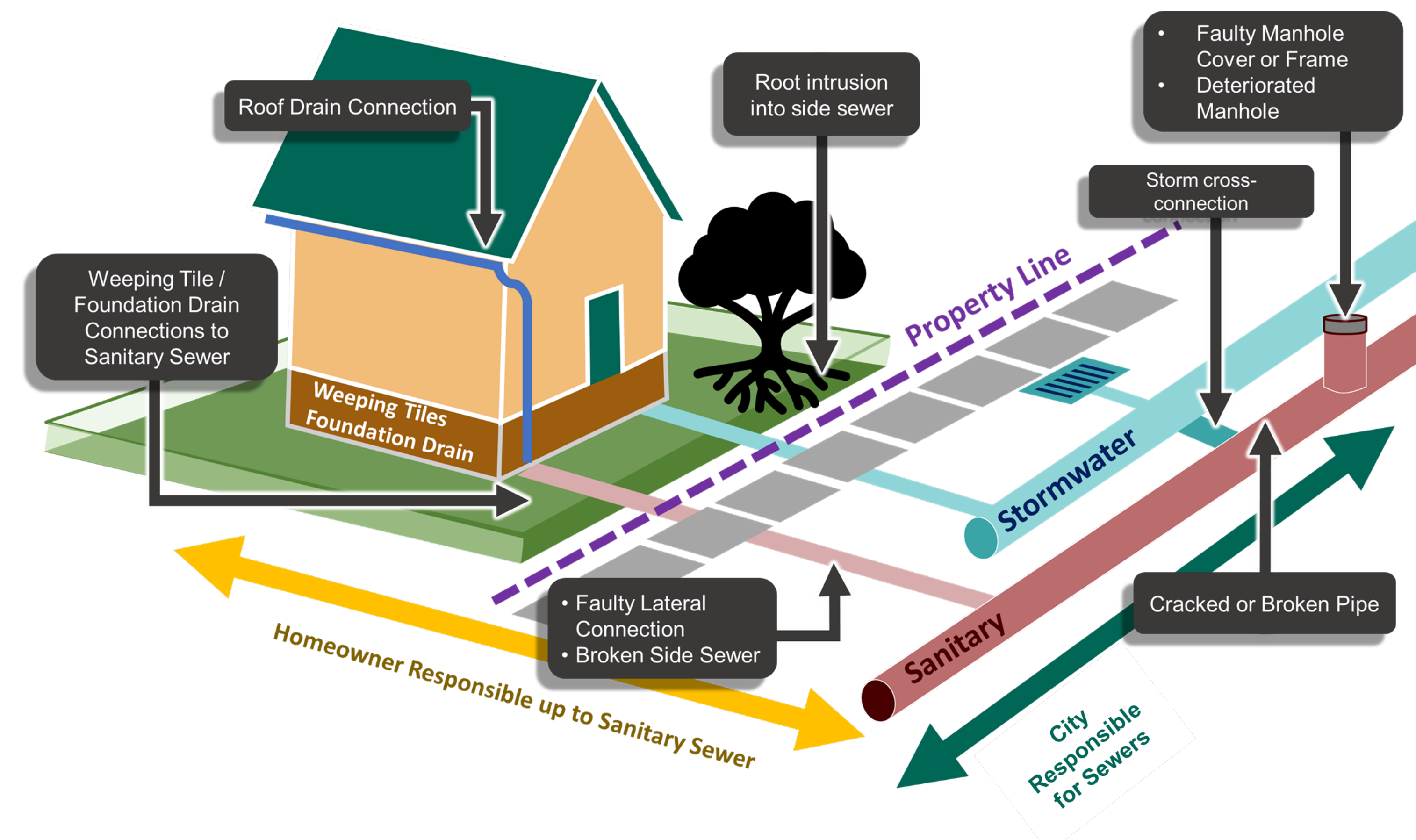
Inflow and Infiltration

Inflow and Infiltration (I&I) refers to groundwater and stormwater that enters the sanitary sewer system and causes problems including risk of basement flooding, CSOs and SSOs into the environment, reduced system capacities, reduced treatment plant efficiencies, and increased costs to residents.

Sources of Wet Weather Flow



Combined System



Separated System

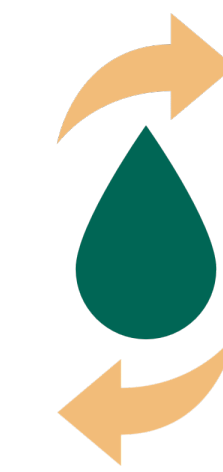
How are flows treated?

MECP Procedure F-5-5

- ❖ CSOs and SSOs release untreated sewage and stormwater to the environment when the system is overwhelmed – typically during an extreme rainfall event.
- ❖ The **Procedure F-5-5** defines the rules for treating sewage and reducing CSOs and SSOs to achieve provincial water quality objectives.

The PPCP update study will recommend a long-term implementation plan that aims to limit the volume and frequency of overflows to meet F-5-5 requirements.

Final Deliverable



Procedure F-5-5

- ☒ Treat 100% of Daily Sewage from Residents
 - ☒ Maintain or Improve the Existing Level of Treated Sewage
 - ☒ Develop a Pollution Prevention Control Plan to Identify Pollution Sources and Causes
 - ☐ Treat 90% of Wet Weather Flows from April to October
- ↓
- Propose Alternatives, Solutions and Recommend an Implementation Plan

What has been done so far?

Previous Pollution Prevention Control Plan Strategy

Phase 1 PPCP 2014: 149 SSOs were identified.

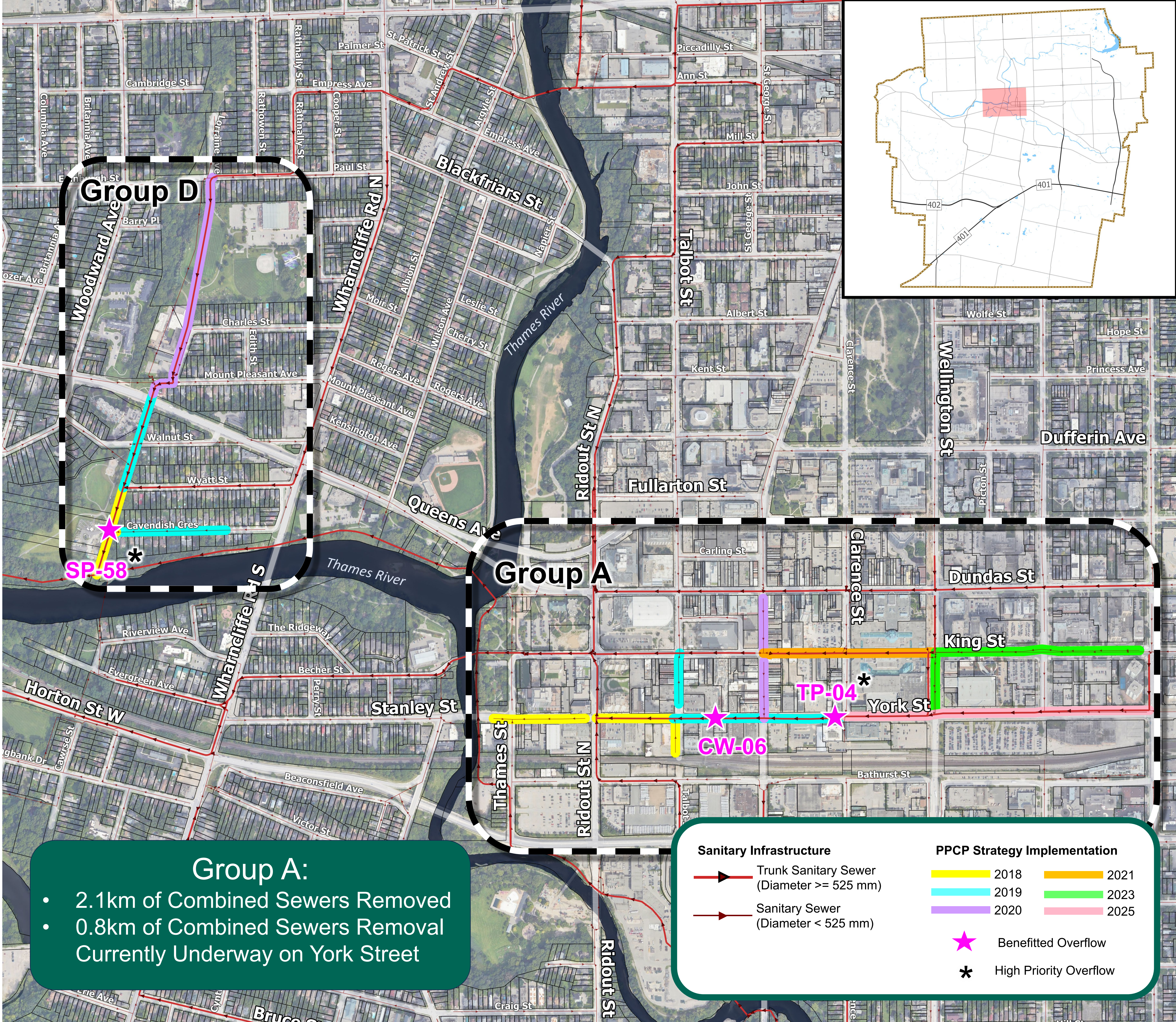
Phase 2 PPCP 2018: 11 SSOs were determined as high priority.

Phase 3 PPCP 2018: 10 SSOs were removed, with 139 SSOs remaining.

Short and medium-term strategies recommended as part of the implementation plan.

- ❖ **Group A:** Sewer Separation (In-Progress)
- ❖ **Group B, H, & I:** Weeping Tile Disconnection (In-Progress)
- ❖ **Group C & E:** I&I Reduction Feasibility Studies (In-Progress)
- ❖ **Group D:** Cavendish Trunk Upsizing (Completed)
- ❖ **Group F:** Pipe Realignment (Not yet initiated)

These recommendations when implemented, aim to reduce the wet weather flow to the City's high priority SSOs and prevents overwhelming of the sanitary system during extreme rainfall events.



What has the current study found?

Overflow Assessment Update

PPCP 2025 Update:

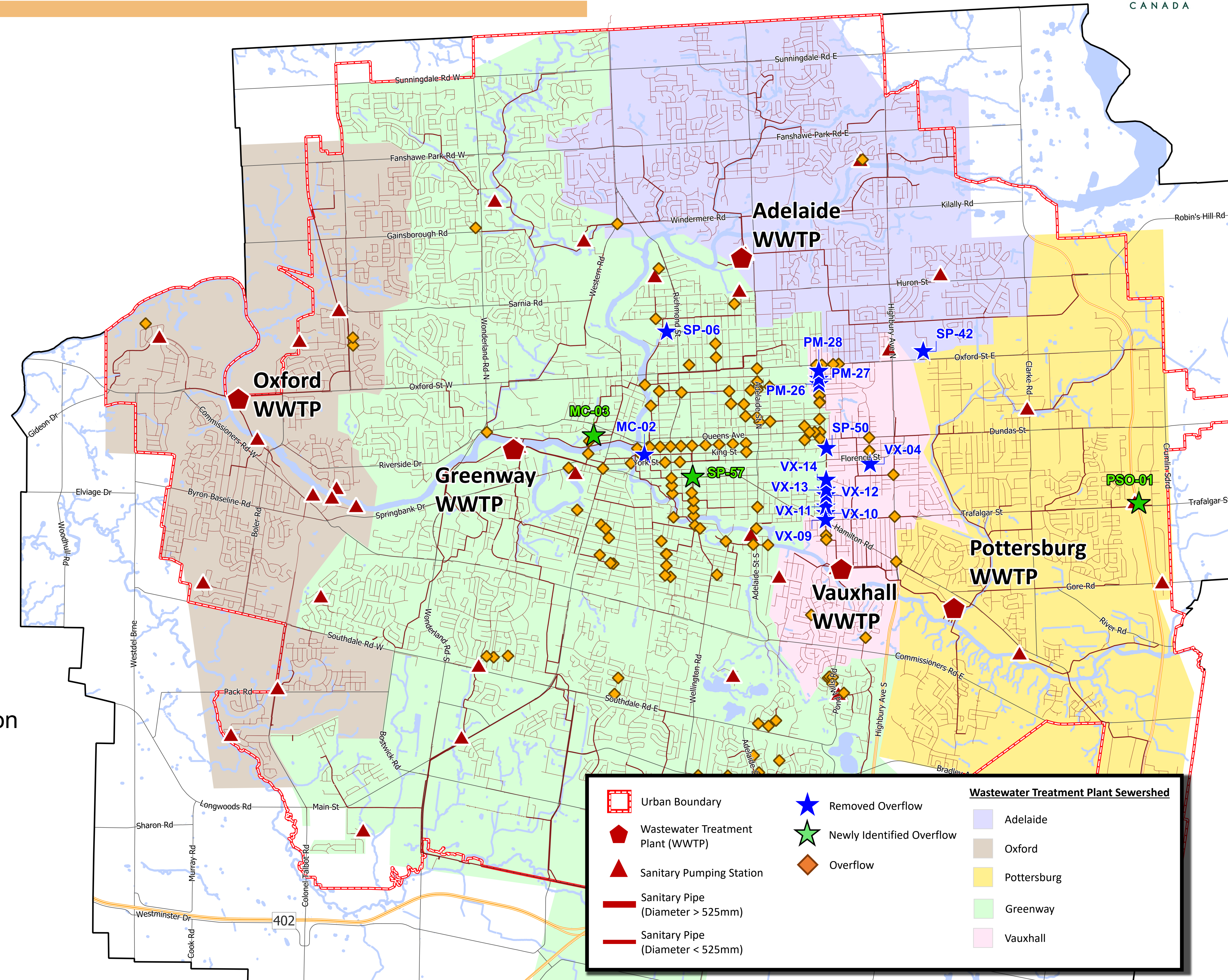
- ❖ 128 SSOs were identified.

Since 2018, 3 SSOs were newly identified and 14 SSOs were entirely removed through sewer system improvements!

Many more overflows have been greatly reduced.

However, the City was challenged with the implementation of the targeted weeping tile disconnections due to limited participation:

- ❖ Benefits of disconnection were not conveyed effectively to homeowners.
- ❖ Coordination with homeowners to work on their private property and inside homes was difficult.



What has the current study found?
Removed Overflows Since 2018 PPCP



System Overflow	Year Removed	Location (or nearest intersection)	Reason for Removal
VX-10	2019	Egerton St. and Ormsby St.	Egerton Sewer system was redesigned, and overflows deemed no longer necessary.
VX-11	2019	Egerton St. and Hackett St.	
VX-12	2019	Egerton St. and Grafton St.	
VX-13	2019	Egerton St. and Pine St.	
VX-14	2019	Egerton St. and Brydges St.	
SP-42	2020	Roehampton Ave.	Inactive overflow removed during reconstruction of Roehampton Avenue.
MC-02	2020	King St. between Thames St. & Ridout St.	Removed to minimize stormwater entering the sanitary sewer system.
SP-06	2018	Cheapside St. and St. George St	Removed as part of infrastructure renewal project.
SP-50	2018	Egerton St. and King St.	Egerton Sewer system was redesigned, and overflow deemed no longer necessary.
VX-04	2016	Ashland Ave. and Frances St.	Removed as sanitary sewers on Ashland Avenue were reconfigured.
VX-09	2021	Egerton St. and Trafalgar St.	Egerton Sewer system was redesigned, overflows deemed no longer necessary.
PM-26	2023	Quebec St. and Mornington Ave.	Removed as Quebec Street was reconstructed from Oxford Street East to the CP rail yard.
PM-27	2023	Quebec St. north of Mornington Ave.	
PM-28	2023	Quebec St. north of Mornington Ave.	

What has the current study found?

High Priority Overflows

PPCP 2025 Update:

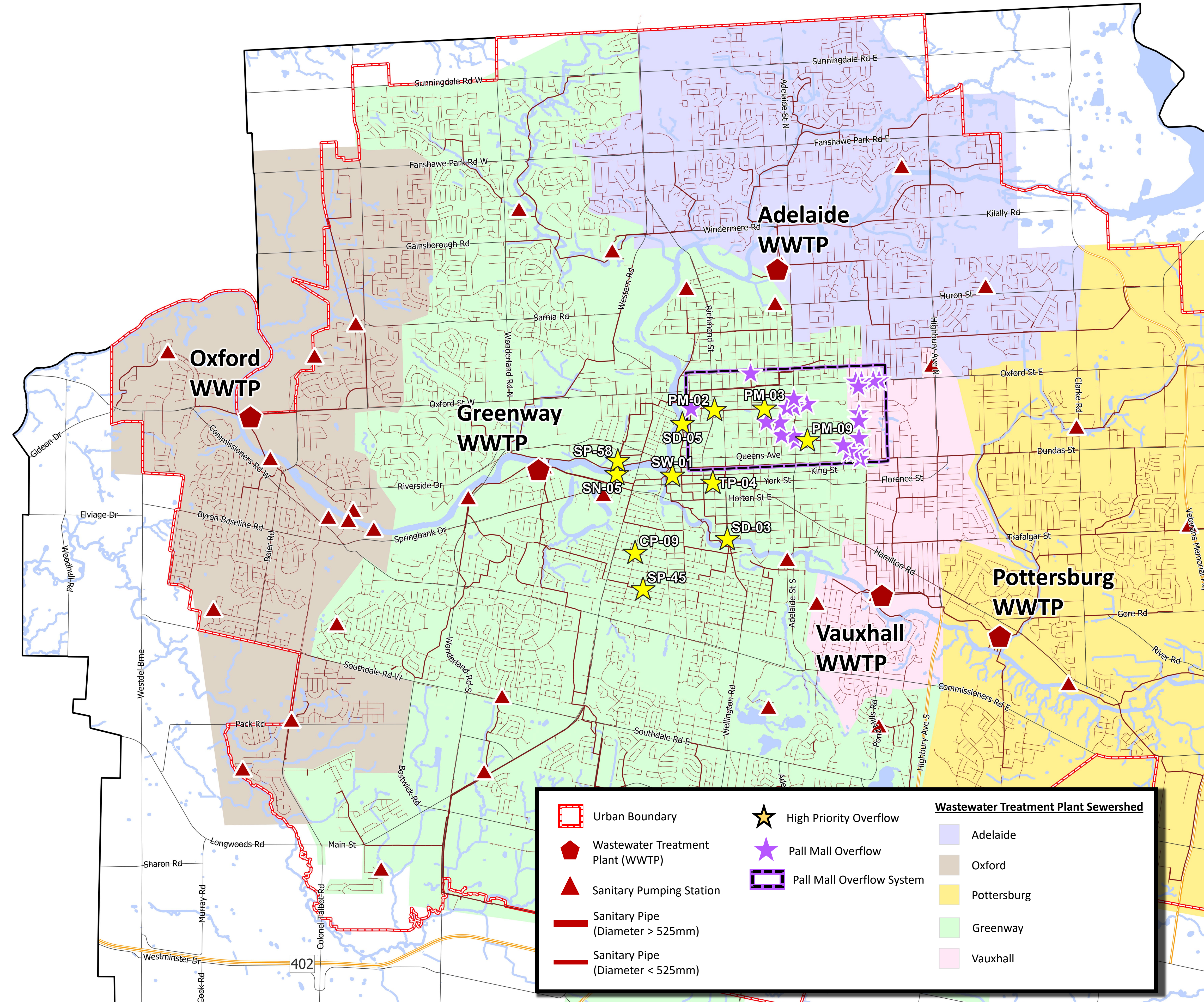
- ❖ 11 SSOs were determined as high priority.

Since 2018, overflow volume across the City has greatly decreased as a result of successful combined sewer separation projects.

A high priority overflow site is determined based on a combination of assessment criteria:

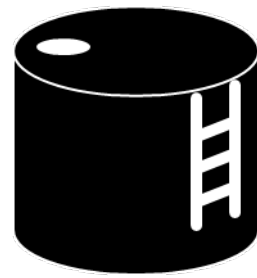
1. It does not treat **90% of Wet Weather Flows** from April to October.
2. The **water quality** downstream is already polluted or starting to degrade.
3. Annual discharge surpasses **1,000 m³** determined from hydraulic model results.

Note that the **Pall Mall Overflow System** will be treated as one additional high priority overflow since all overflow sites in this area discharge to a common relief sewer.



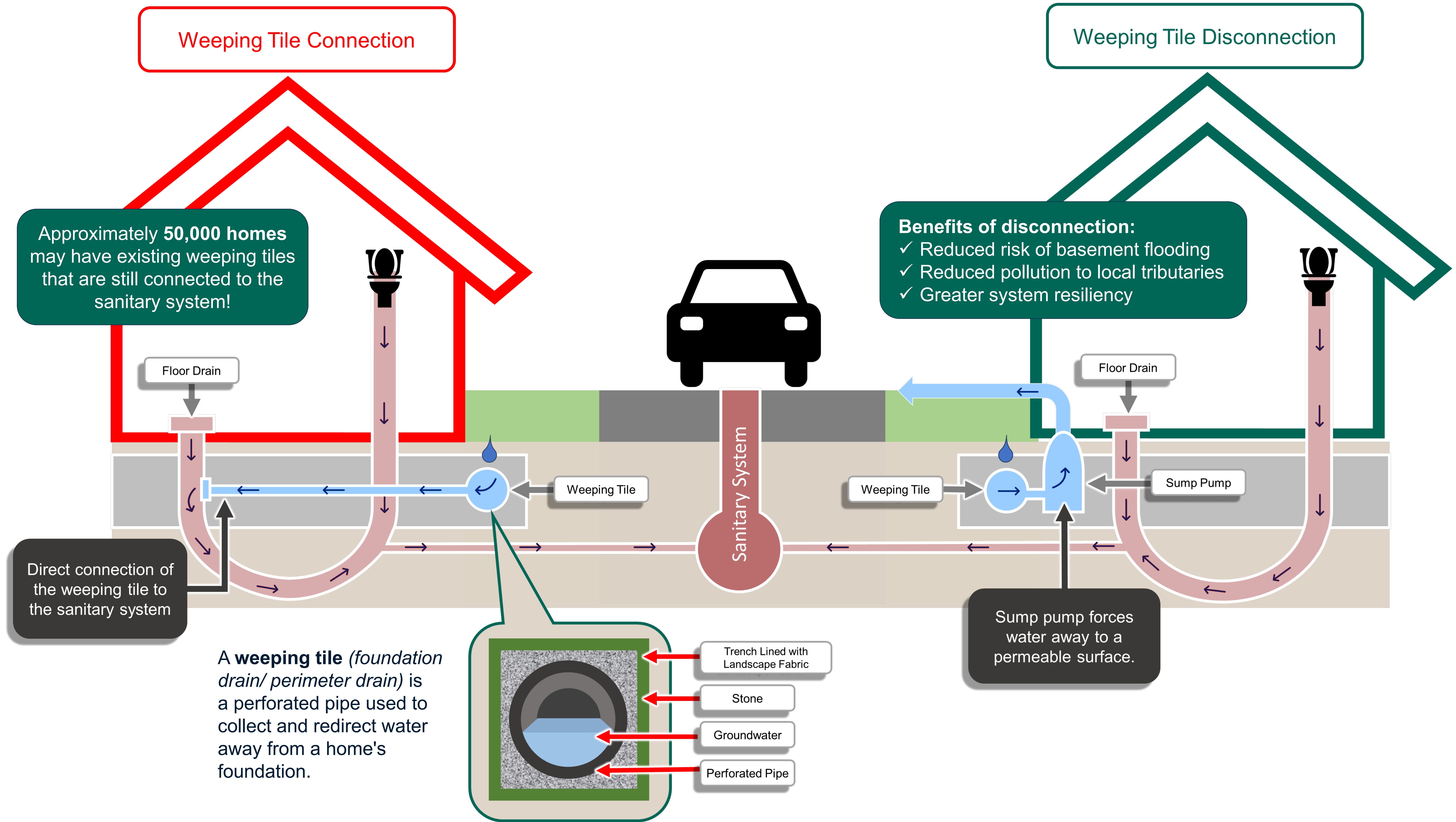
How can we address overflows?

Mitigation Strategies

			 Selected Mitigation Strategy		
Mitigation Strategies	New Storage Tanks	Reconfigure Overflow Weirs	Weeping Tile Disconnection	Pipe Upsizing	Pumping Station Upsizing
Description	Temporarily hold excess overflows which are then slowly emptied into the sewer system and treated once capacity is available.	Designed to allow spills during extreme rainfall events to prevent system backups.	Disconnection weeping tiles from the sanitary system, and installation of a sump pit and pump.	Increased sewer capacity with larger diameter sewers to handle higher volumes.	Install larger or additional pumps so more sewage can be moved through system towards the treatment plants.
Benefits	Reduce frequency and volume of CSOs and SSOs during extreme rainfall events	- Reduce frequency and volume of CSOs and SSOs during extreme rainfall events - Better flow control to retain more volume in the system - Low cost - Localized solution	- Reduce frequency and volume of CSOs and SSOs during extreme rainfall events - Reduce overall stormwater volume entering system - Lower basement flooding risks - Prepare City for future potential provincial compliance changes	- Reduce frequency and volume of CSOs and SSOs during extreme rainfall events - Provide capacity for additional growth - Better suited to carry combined flow of sewage and stormwater	- Reduce frequency and volume of CSOs and SSOs during extreme rainfall events - Prevent system backup - Additional storage available to temporarily hold excess overflow
Drawbacks	- Odour - Location availability - Storage limits - Variable costs	- Increase downstream spillage risks - Increase upstream flooding risks - Limited ability to implement in existing system	Requires property owner participation	- Higher costs with larger upgrades - Designed capacity limits	- Highest cost - Does not eliminate overflow risk downstream - Significant maintenance required

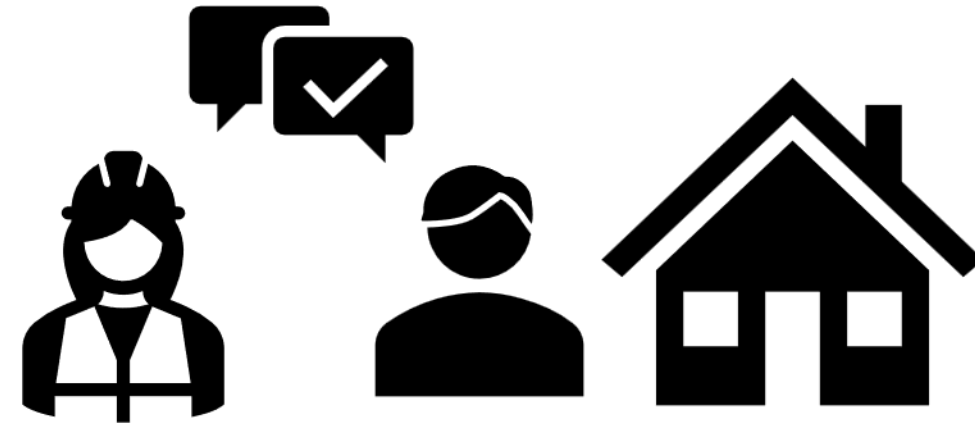
How do we disconnect weeping tiles?

Weeping Tile Disconnection and Sump Pit and Pump



How can we apply the weeping tile disconnection strategy?

Types of Weeping Tile Disconnection Programs



Voluntary Disconnection Program

- ❖ Homeowners voluntarily disconnect weeping tiles from the sanitary system.
- ❖ Eligible homeowners may be assisted financially through a partial or full rebate/subsidy.



Point-of-Sale Mandatory Disconnection Program

- ❖ Discharge of stormwater from property into sanitary system is prohibited, and all eligible property types must disconnect weeping tiles and install a sump pit and pump prior to land title transfer.
- ❖ Enforced for compliance.



Incentivized Program

- ❖ City encourages disconnection of weeping tiles through additional incentives shown as a credit benefit on the homeowner's recurring wastewater bill.
- ❖ Not enforced for compliance.



Disincentivized Program

- ❖ City encourages disconnection of weeping tiles through enforcement shown as a punitive charge on the homeowner's recurring wastewater bill.
- ❖ These charges offset increased system operation and maintenance costs from connected weeping tile flows.

How do we select the weeping tile disconnection program?

Evaluation Criteria

The following evaluation criterion were used to select the preferred weeping tile disconnection program.



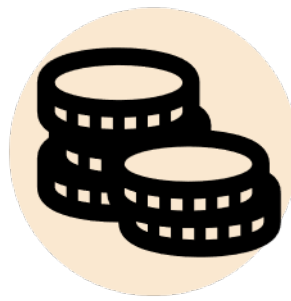
Flexibility of Choice

Does the program empower homeowners?



Participation Rate

Does the program reach minimum homeowner participation?



Financial Implications

Is the program financially feasible?



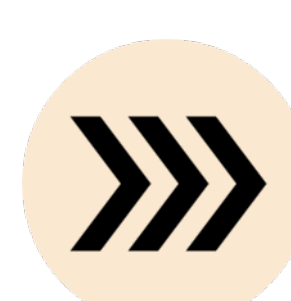
Costumer Impact

How will the program impact homeowners?



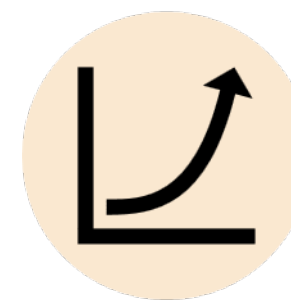
Efficacy of Reducing Overflows

How efficiently will the program reduce the volume and frequency of overflows within the City?



System Improvement Potential

How efficiently, in the short-term and long-term, will this program address existing system capacity constraints?



Implementation Flexibility

What is the scalability and practicality of the program from the City's operational perspective?



City Workload Management

What and how many City resources will be required to apply the program?

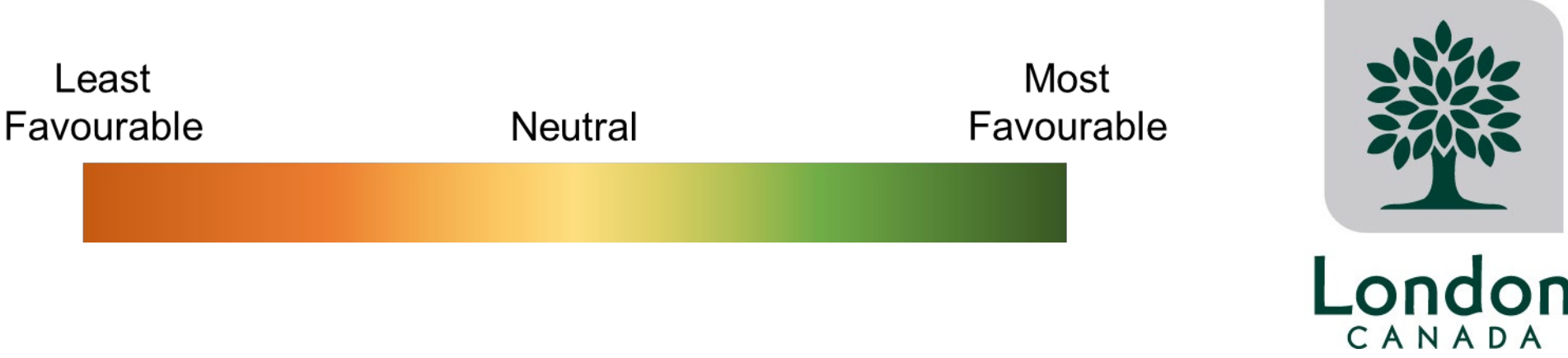


Program Time Scale

Will the program reduce overflow volume and frequency in a reasonable time scale?

Which weeping tile disconnection program is most preferred?

Evaluation Results



Selected Weeping Tile Disconnection Program

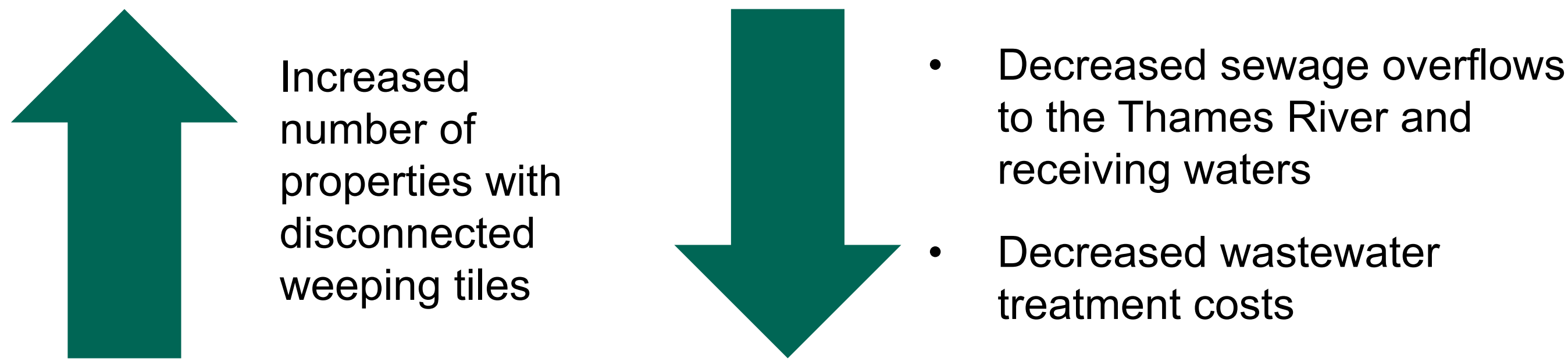
Evaluation Criterion	Voluntary	Point-of-Sale Mandatory	Incentivized	Disincentived
Flexibility of Choice	Most Favourable Homeowners can decide not to participate with no legal or financial repercussions.	Less Favourable By-law requirement, legal repercussions if not in compliance.	Most Favourable Credit benefit/ additional funding offered for homeowners who decide to participate.	Neutral Punitive charge incentive applied for homeowners who decide not to participate
Participation Rate	Less Favourable Low participation expected without additional funding, depends on public education for homeowners to act.	Most Favourable Highest participation expected as it is a requirement for all eligible homeowners across the City.	Neutral Higher participation expected than voluntary due to additional funding, relies on public education for homeowners to act.	More Favourable Higher participation expected than voluntary and incentivized, relies on public education for homeowners to act.
Financial Implications	Most Favourable Most financially feasible for homeowners, covering up to 90% of capital costs.	Less Favourable Some rebate/ subsidy opportunities may be available to support homeowners but will be less than voluntary.	Most Favourable Most financially feasible for homeowners as credit benefit/ additional funding is available to cover capital costs and future costs.	Less Favourable Some rebate/ subsidy opportunities may be available to support homeowners but will be less than voluntary.
Customer Impact	Most Favourable Will satisfy and benefit existing flood-impacted homeowners while not disrupting others.	Least Favourable Impacted homeowners affected due to potential property closing delays and may disproportionately disrupt certain demographics, leading to increased risk for legal challenges.	Neutral Level of disruption and impact dependent on homeowners' choice to disconnect.	Less Favourable Level of disruption and impact dependent on homeowners' choice to disconnect, may disproportionately affect certain demographics.
Efficacy of Reducing Overflows	Less Favourable Variable decrease in basement flooding risk and minimal overflow reduction anticipated, dependent on homeowner participation in same area/ sewershed	Most Favourable Decreased risk of basement flooding for homeowners in same area with limited number of overflows anticipated across the City.	Less Favourable Variable decrease in basement flooding risk and variable overflow reduction anticipated, however more homeowners expected to participate in same area/ sewershed compared to voluntary	Neutral Variable decrease in basement flooding risk and variable overflow reduction anticipated, however more homeowners expected to participate in same area/ sewershed compared to voluntary and incentivized.
System Improvement Potential	Less Favourable Minimal system improvements anticipated, no meaningful beneficial change from existing at current participation rate	Most Favourable Large system improvements and resiliency anticipated, including long-term WWTF and PS cost savings.	Neutral Some system improvements compared to existing due to higher participation rate.	More Favourable More system improvements compared to existing and incentivized due to higher participation rate
Implementation Flexibility	More Favourable More flexibility in scheduling inspections for seasons where weather conditions are favorable.	Less Favourable Less flexibility in scheduling inspections, based on timing of home sale.	Neutral Building Division required to inspect work when homeowner calls.	Neutral Building Division required to inspect work when homeowner calls.
City Workload Management	Most Favourable No additional implementation necessary, no strain anticipated on existing workloads.	Less Favourable High complexity expected requiring significant administration and City resources once by-law is approved and operational.	More Favourable Some complexity expected, requiring additional funding approval for incentives.	More Favourable Some complexity expected, requiring additional coordination with City wastewater operations team for wastewater billing when applying punitive charges.
Program Timescale	Least Favourable No enforcement available as it is homeowner-initiated program length may be indefinite without additional measures.	Most Favourable Strict and streamlined enforcement for homeowner compliance across the City will help to minimize program length.	Neutral No enforcement available as it is the homeowner's choice to disconnect, program length anticipated to be shorter than voluntary.	More Favourable Enforcement in the form of punitive charge for non-disconnection will help to minimize program length.
Overall Rating	Least Preferred Disconnection Approach	Most Preferred Disconnection Approach	Second Least Preferred Disconnection Approach	Second Most Preferred Disconnection Approach

How could this program be implemented?

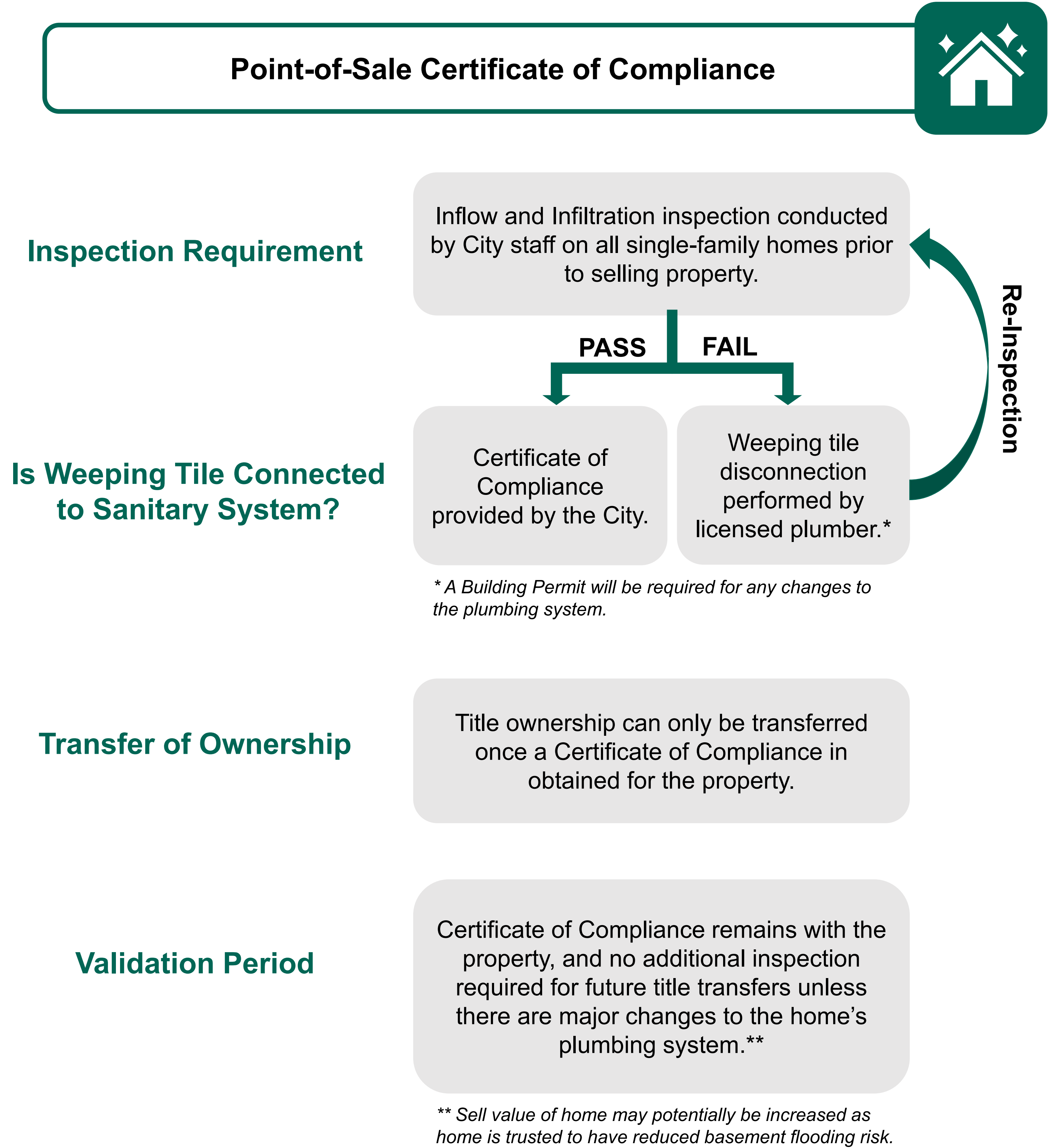
“Point-of-Sale” Mandatory Disconnection Program



- ❖ **Point-of-Sale Disconnection Program:** a mandatory requirement for all single-family homes to disconnect their weeping tiles if they have an existing connection to the municipal sanitary system at the time the property is sold.
- ❖ Disconnected homes would receive a **Point-of-Sale Certificate of Compliance**, similar to when you sell your car and need to obtain a Vehicle Safety Standards Certificate.
- ❖ Every disconnected weeping tile through this program will reduce the amount of flow in the sanitary sewer system.



This is a long-term strategy which will be a total net benefit for the entire sanitary system, reducing the City’s volume and frequency overflow discharges beyond the F-5-5 90% compliance, and greatly reduces basement flooding risk.



How will this program be implemented?

“Point-of-Sale” Benefits & Challenges

Benefits of the Program

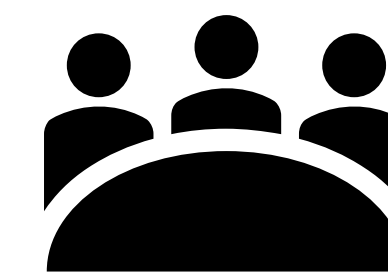
- ✓ Reduced Volume and Frequency of Overflows
- ✓ Reduced Volume and Frequency of Flow Bypasses at the Wastewater Treatment Plants
- ✓ Reduced Risk of Basement Flooding
- ✓ Increased System Resiliency for Climate Change
- ✓ Reduced Pollution into Local Tributaries
- ✓ Minimized Potential for Impacts on Human Health and Aquatic Life

Note that the remaining 2018 recommended strategies for **Groups A, C, E, and F** are carried through in the updated Implementation Plan for the short-term.

Together with the efforts from the Point-of-Sale Disconnection Program, the City aims to have all high priority overflow sites reduced or eliminated in the long-term.

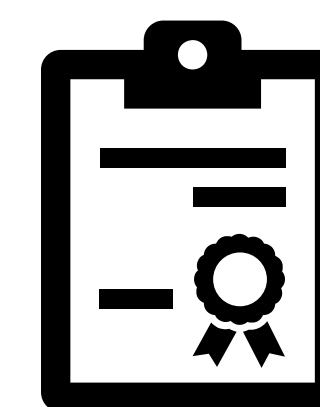
This is still a working program and will require Council buy-in and approval before implementation.

Challenges of the Program



➤ Resource Planning

- ❖ Coordination between major primary interest-holder groups
- ❖ Coordination with the existing **Basement Flooding Grant Program**
- ❖ Hiring additional City Inspection and Administration staff



➤ Administration Considerations

- ❖ Funding and Resource Costs
- ❖ Enforcement for Compliance Measures
- ❖ Exemptions and Special Cases

2018 PPCP Recommendations Carried Forward

Short-Term Implementation Plan



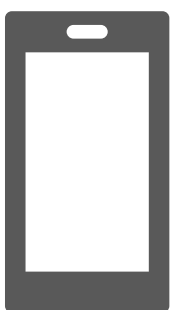
The PPCP focuses on high priority overflows to recommend necessary system improvements to achieve the greatest potential for overflow reduction in the system.

Priority Group	Recommended Projects/ Studies from the 2018 PPCP Implementation Plan	Downstream High Priority Overflow Locations Benefitted	Planned Timing
Group A	Sewer separation in the City Centre along Wellington Street, York Street, Talbot Street, Richmond Street, King Street.	SW-01	Will be completed in 2025
	Sewer separation in the City Centre along Clarence Street.	SW-01	Will be completed in 2027
Group A and Group C	- Study to determine the feasibility of reducing the I&I by 50% in the PM-02, PM-03 and PM-09 catchment areas (Option 1). - Study to determine the feasibility of removing storm flows from the Pall Mall Storm and Relief sewer to utilize the sewer as in-line storage for the Pall Mall Trunk SSOs (Option 2).	SW-01 PM-02 PM-09 SD-05 PM-03	Addressed though 2025 PPCP Recommendations (Point-of-Sale Disconnection)
Group E	Study to determine the feasibility of removing I&I from the identified sources.	CP-09	Addressed though 2025 PPCP Recommendations (Point-of-Sale Disconnection)
Group F	Realignment of the Horton/ Wharncliffe Sewer.	SN-05	Construction TBD

Study Timeline

- August 2025:** Finalize Implementation Plan
- September 2025:** Completion of PPCP Update Study
- October 2025:** Present Implementation Plan to City Council

Engagement with Indigenous Communities, review and approval agencies, the public as well as other primary interest-holders will continue throughout the project timeline.



Additional project information can be found on the project website, which can be accessed by scanning the QR Code with your smartphone.

How to Stay Involved



- ✓ Fill out the questionnaire and comment sheet.
- ✓ Sign-up for project information updates.

Do you have any questions, comments, or want to stay up to date?
Please contact us anytime.

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Please note that information related to this study will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. All comments received will become part of the public record and may be included in the study documentation prepared for public review. If you need any accommodations to provide comments and/or feedback for this study, please contact the Project Manager.

For More Information On.. Existing City Programs and Initiatives

Communication and Public Education

- ❖ Basement flooding awareness campaigns.
- ❖ Website dedicated to information regarding basement flooding causes, prevention and City contact.



Scan the QR Code to visit the City's website on Basement Flooding.

Basement Flooding Grant Program

- ❖ A voluntary financial assistance program for qualifying residential properties that have experienced basement flooding due to City sewer backups.



Scan the QR Code to visit the City's website on the *Basement Flooding Grant Program*.

Pilot Projects

The City has completed weeping tile disconnection pilot projects for specific neighborhoods throughout the City.

Impacted neighborhoods were found to have:

- ❖ Significant basement flooding issues
- ❖ Weeping tile connection to the sanitary sewer
- ❖ Downspout discharge location at or near a building's foundation wall