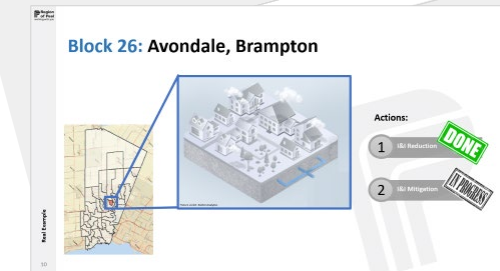


Agenda

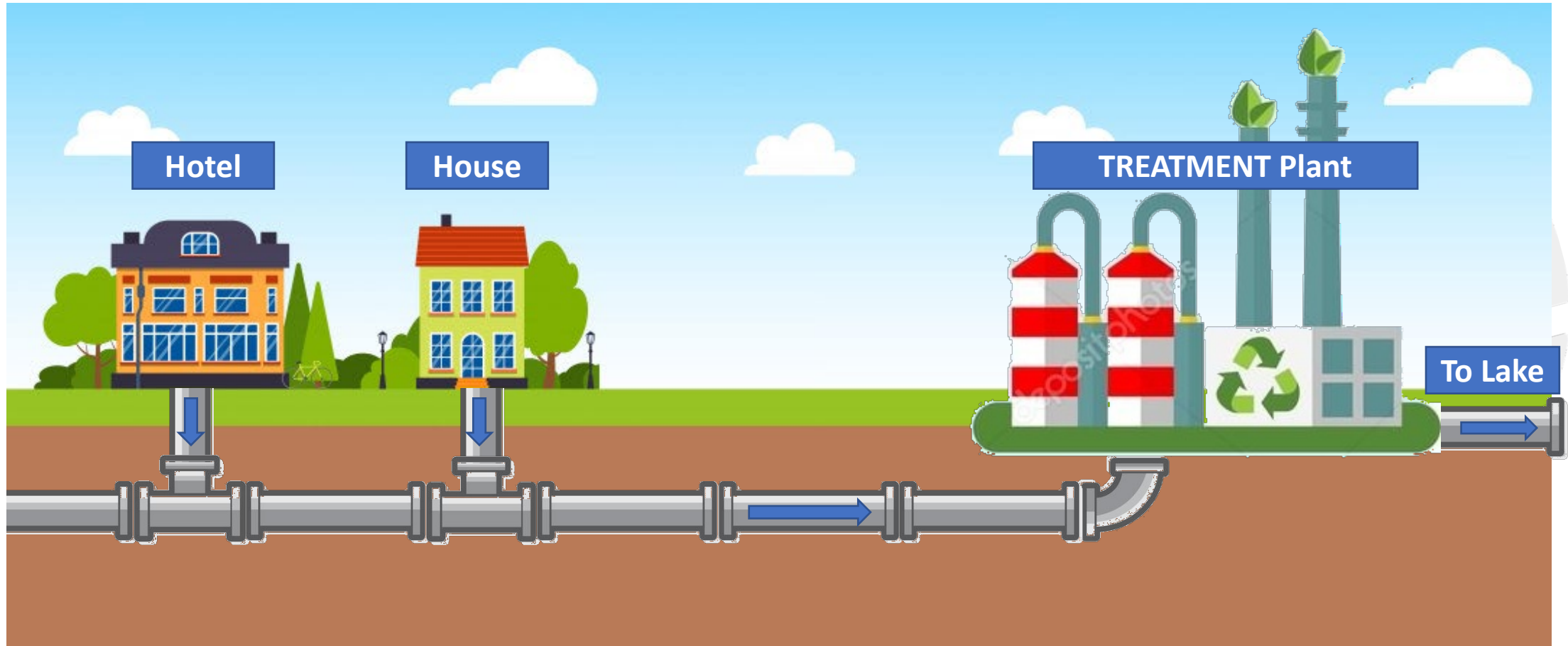
Strategy Overview

A Real Example (Block 26, Avondale, Brampton)

Next Steps



Sanitary Collection System



I&I is non-Peel-water (such as rain and groundwater) inside sanitary system.

Why I&I is a concern?

When left unchecked it can result in:



Sanitary Sewer Back Ups



Overflows to Environment



Consume Growth Capacity

What can be done with I&I?



1

I&I Reduction



2

I&I Mitigation

I&I Actions

1

I&I Reduction



Maintaining Sewers and Maintenance Holes

Fixing Cross-connections



2

I&I Mitigation

Build Net-new Infrastructure



Peel Image



Peel Image

In turn, these actions can be further broken down into activities such as flow monitoring, smoke testing, modeling, etc.

I&I Actions

1

I&I Reduction



Maintaining Sewer and Manhole

Fixing Cross-connections



2

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Peel Image

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I&I Actions

1

I&I Reduction

Maintaining Sewer and Manhole

Fixing Cross-connections

2

I&I Mitigation

ACCEPT

Build Net-new Infrastructure

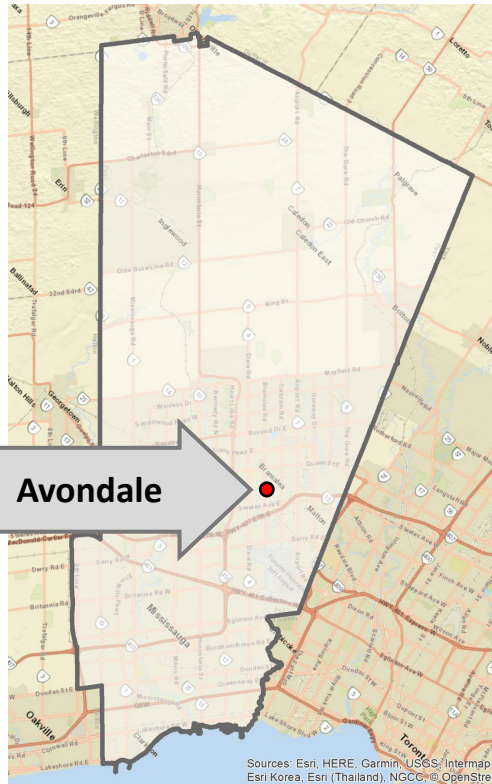


Peel Image

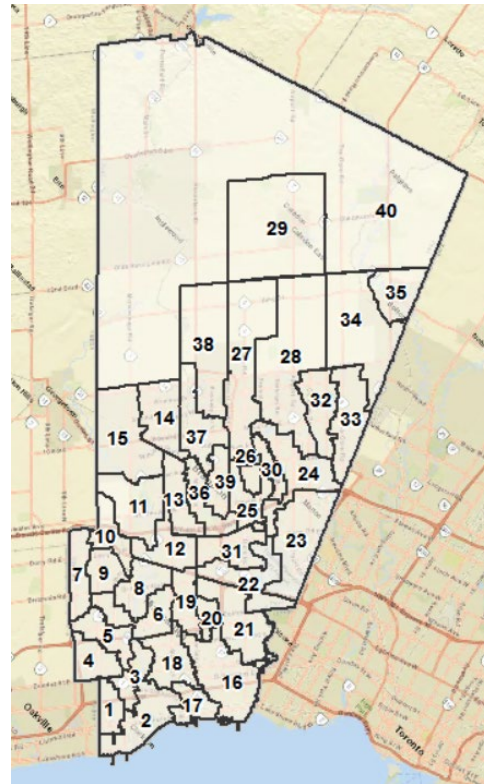


In turn, these actions can be further broken down into activities such as flow monitoring, smoke testing, modeling, etc.

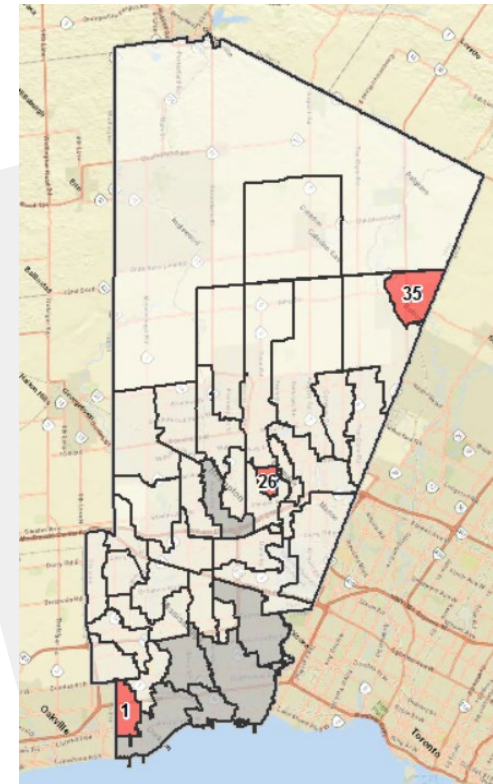
Where to focus actions?



Region vs Neighborhood

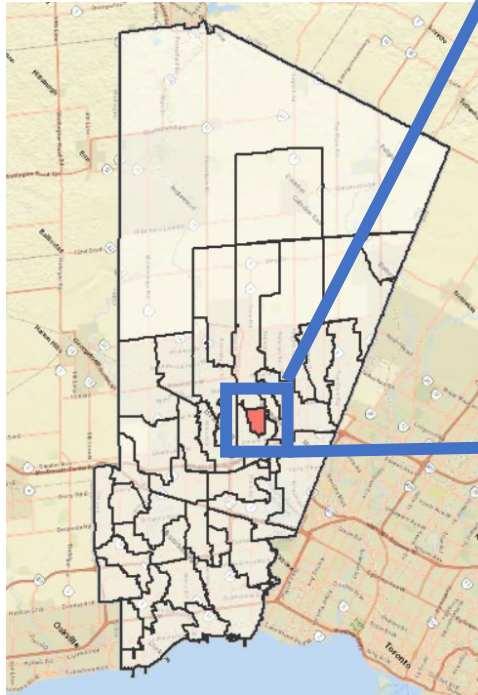


40 Blocks



Active Blocks

Block 26: Avondale, Brampton



Actions:

1

I&I Reduction



2

I&I Mitigation



New Program For Downspout Disconnection

Key features:

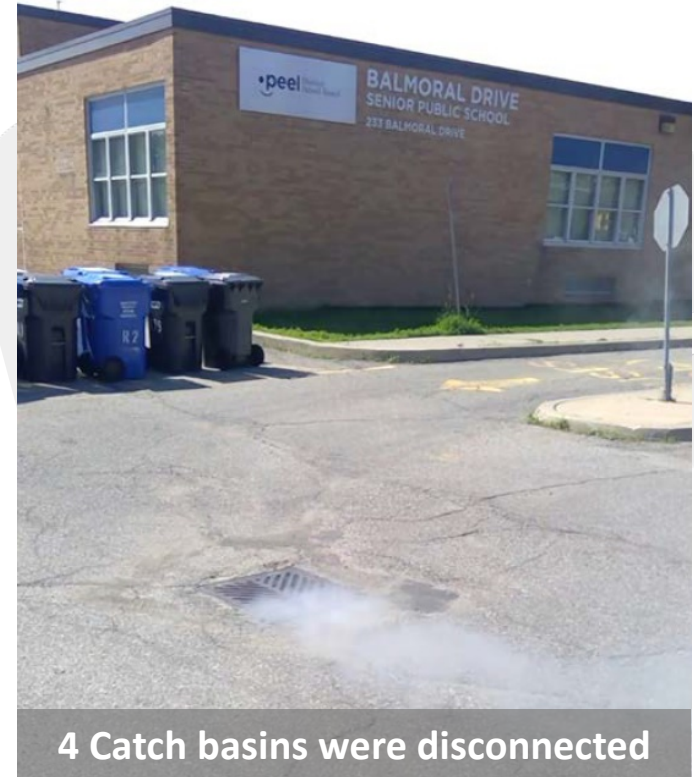
- Effortless and Free for the residents
- Targets ONLY what matters, connected downspouts
- Go the extra mile for difficult disconnections
- Every downspout is cataloged



I&I Reduction

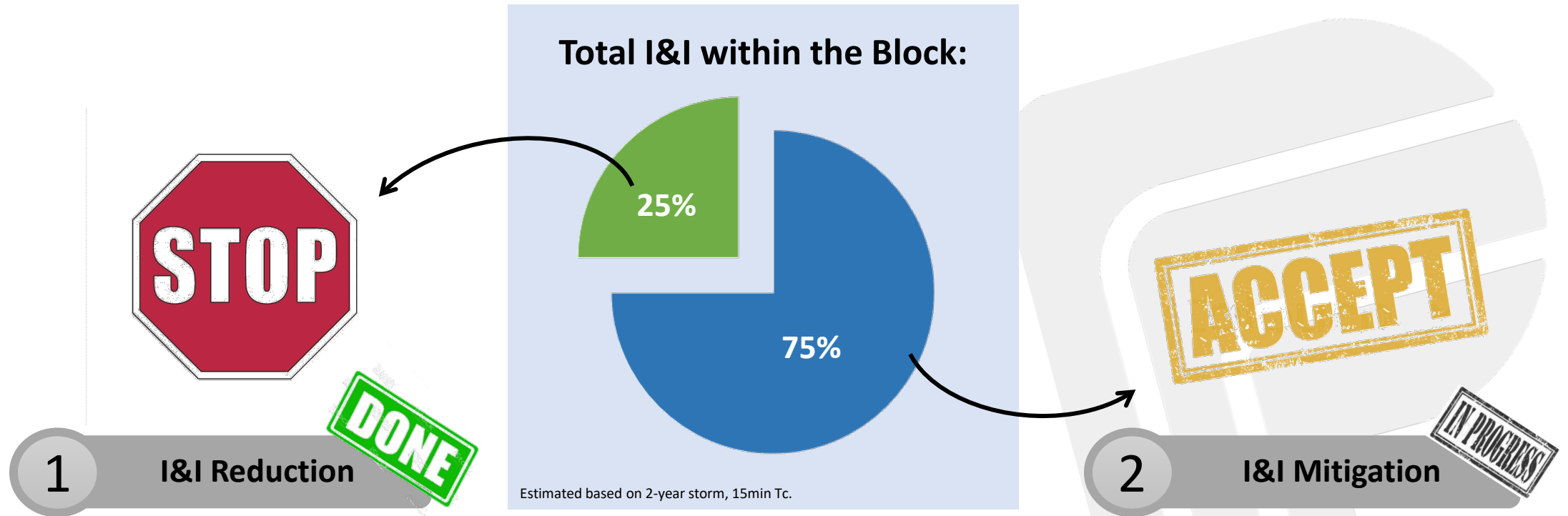


Completed

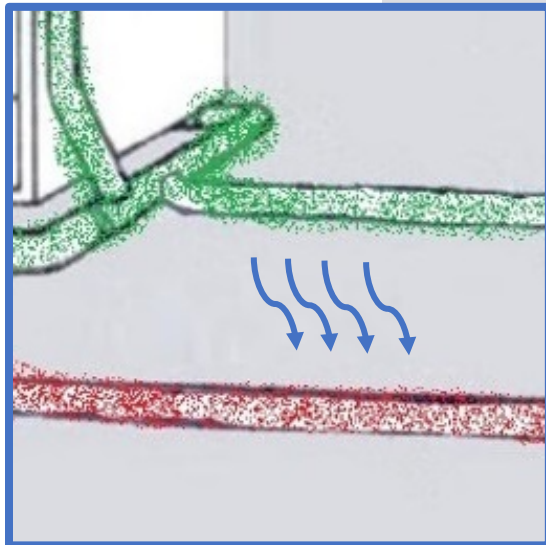
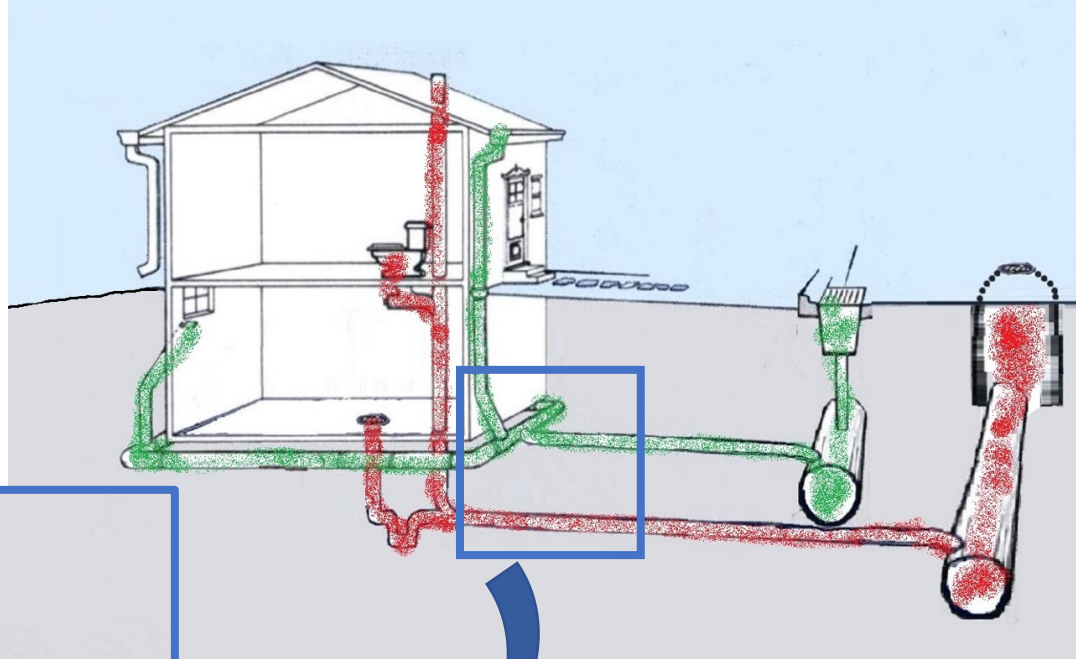


4 Catch basins were disconnected

Progress within Block 26



Why not reduce the 75% too?



Real Example

Small contributions, adds up!



How does

ACCEPT

(I&I Mitigation)

look like?

Project	Location	Status
Dixie Road Diversion	Mississauga	Completed
Haig Boulevard Storage	Mississauga	In construction
Cawthra Road Relief Sewer	Mississauga	Phase1 in construction
Lakeshore Relief Sewer	Mississauga	In construction
East-West Diversion / Storage	Brampton	In construction
West-East Diversion	Brampton	Completed
Etobicoke Creek Storage	Mississauga	Under design

Real Example



I&I Prevention

I&I Strategy

1

I&I Reduction



2

I&I Mitigation

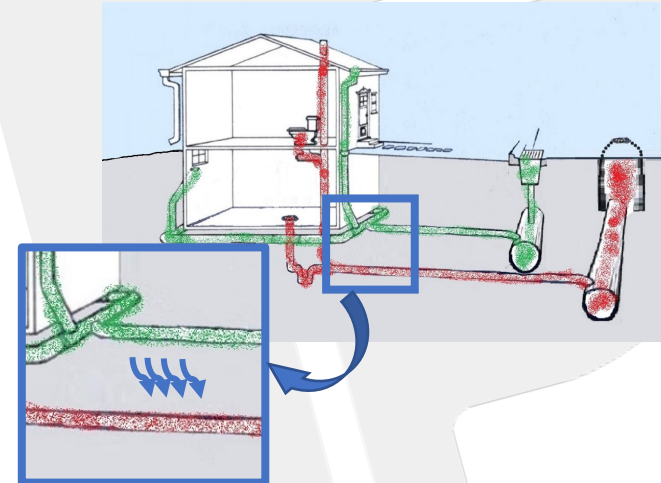


3

I&I Prevention

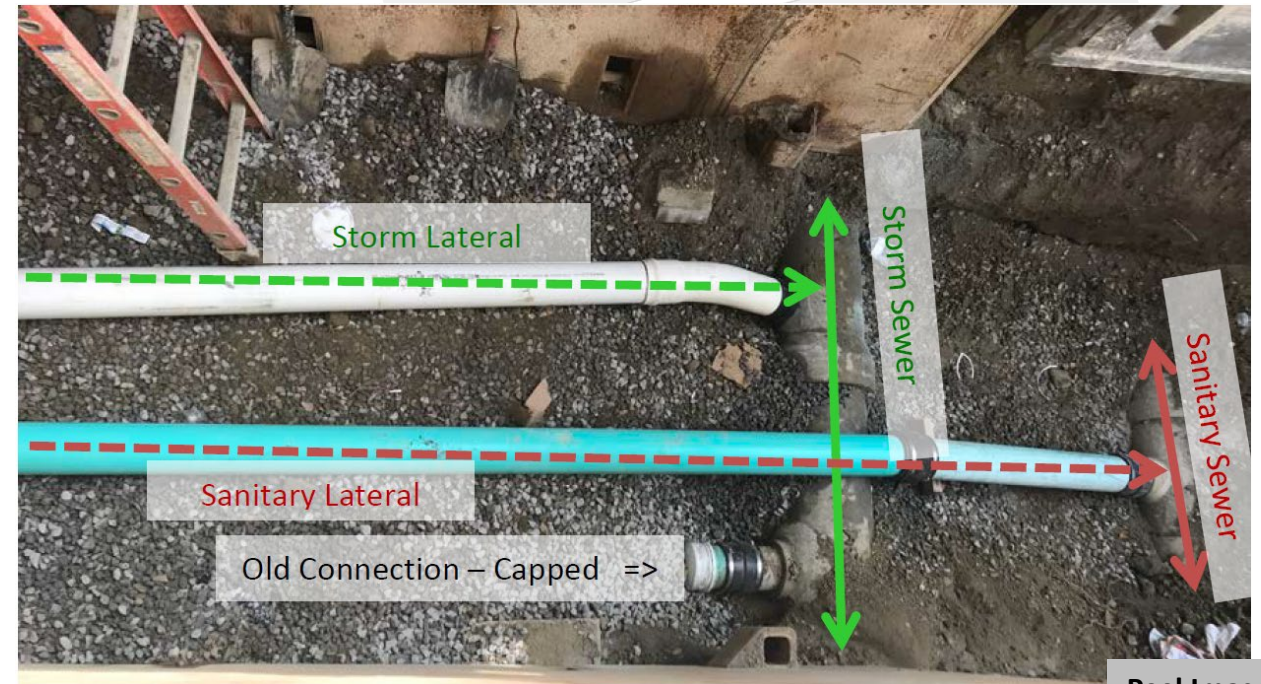


This can be avoided
at the time of construction.



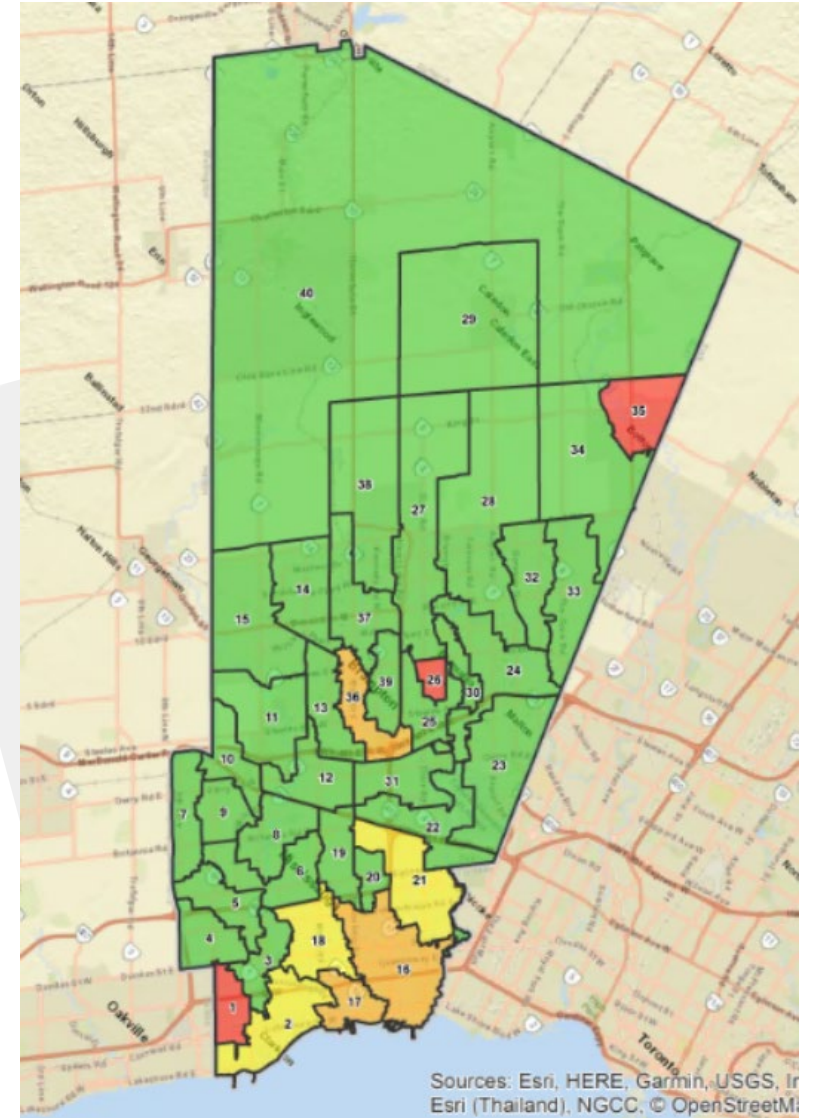
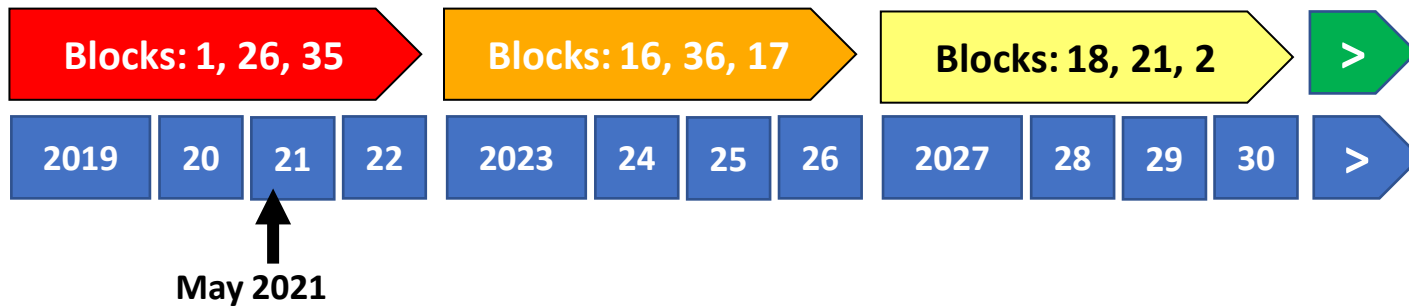
Collaboration with other organizations

- Cross-connection subcommittee with City of Mississauga
- DMAF funding for climate mitigation with TRCA
- Climate adaptation partnership with CVC
- Flood protection communication with residents with Caledon, Brampton, and Mississauga.



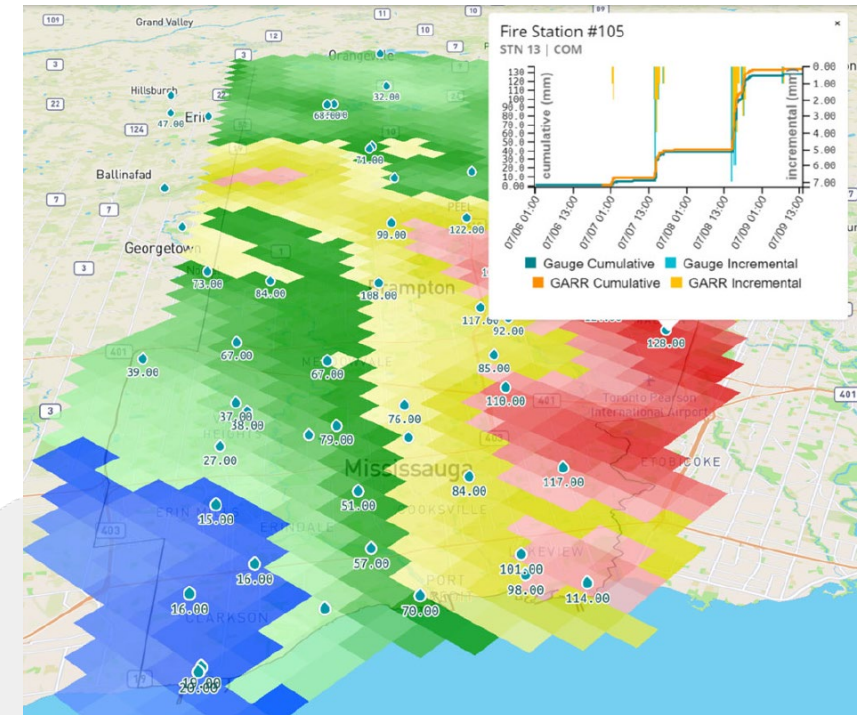
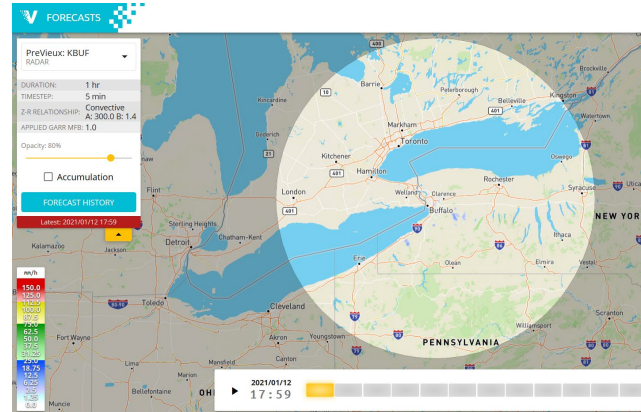
Peel Image

Timeline for Action



Leading the Industry

- Smart Data Management (GIS)
- Real time control (RTC)
- Gauge Adjusted Radar Rainfall (GARR)
- Now Casting
- Temperature Monitoring in Sewers
- Wet Weather CCTV
- Active Communication (Twitter, etc.)



Work Completed in 2020

Before



Infiltration gusher at the joint

After



Lining was performed

Fletchers Creek Trunk Sewer – Brampton
New pipe lining, approx. 400m Rehabilitation Completed 2020

Thank You!

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Advisor, Inflow and Infiltration Remediation

Anthony Parente, P.Eng.
General Manager, Water and Wastewater

