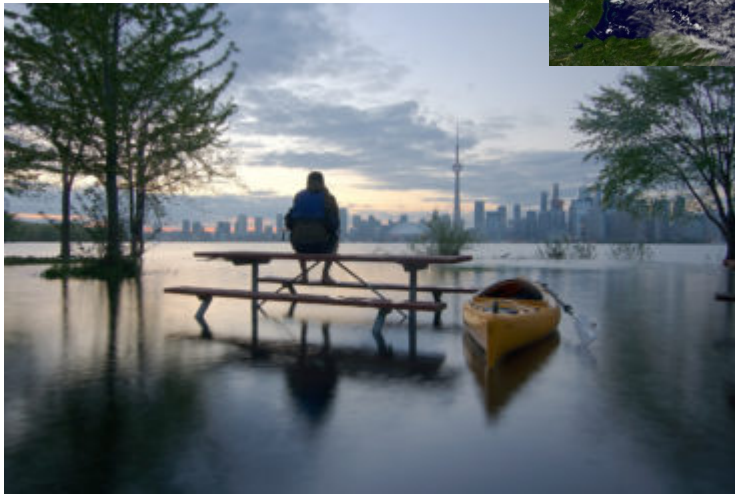


# City of Windsor Flood Update

September 2017



# Climate change or just bad luck?

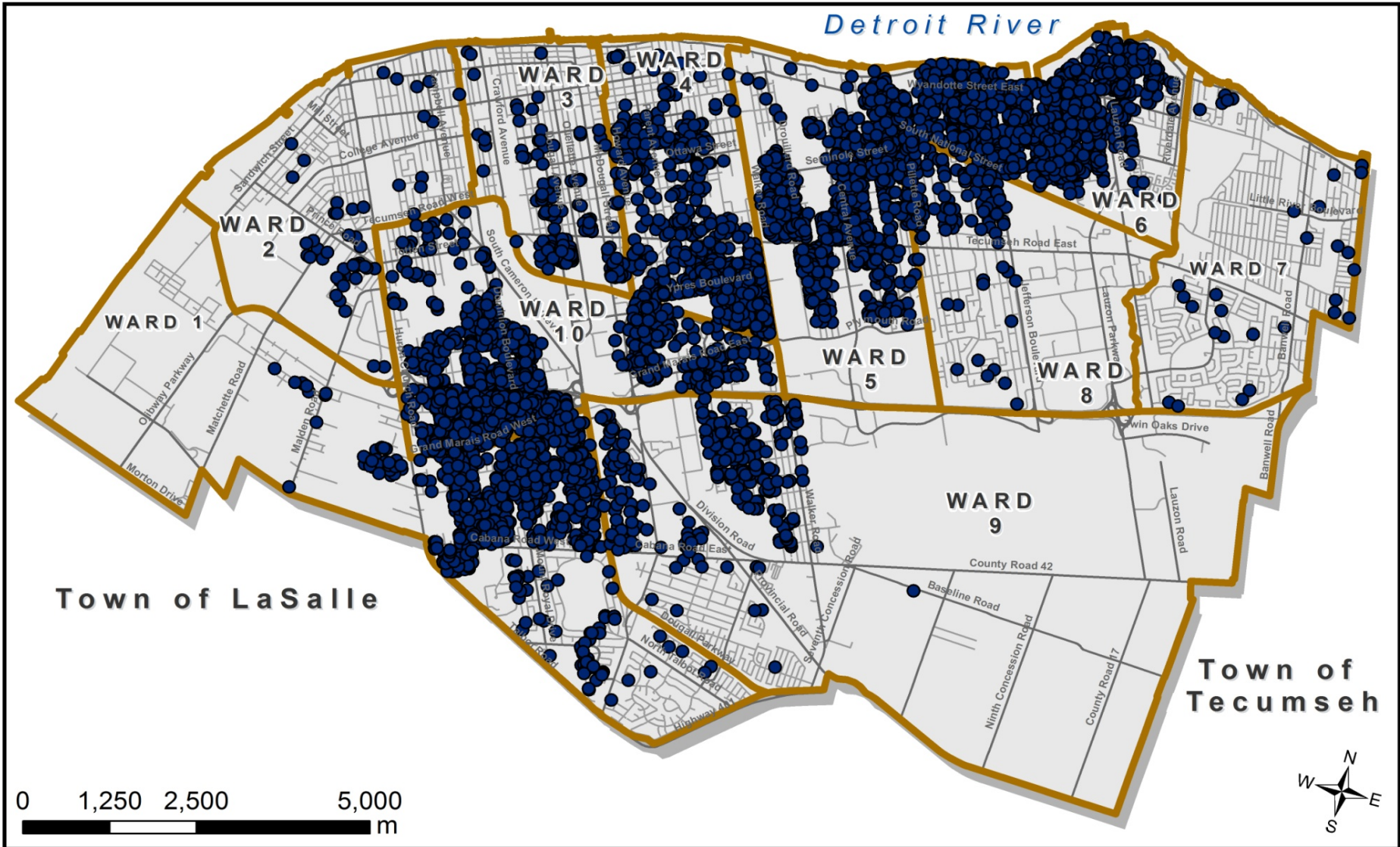


# Scope of damage in Windsor

- 220+ mm of rainfall
- > 6,231 flooded basements
- Flooding in Windsor, LaSalle, McGregor, Tecumseh, Amherstburg and Lakeshore
- Damage estimates > \$175m
- Province activated their disaster recovery assistance program
- **Largest single flood event in our City's recorded history**

# Storm Flooding (Basement Flooding)

August 2017 Storm Event as of 10am on September 12th



# How much are we spending on sewers in Windsor?



# Investments in sewers

**Since 2001 the City of Windsor has invested approximately half-a-billion dollars to upgrade our sewer system.**

- 2001-2008                      \$122 million
- 2009-2016                      \$273 million
- July 2017                      \$12 million for several projects  
(fast-track of sewer cameras,  
Mt. Carmel sewer, Lennon Drain,  
reviews at Pontiac and St. Paul  
stations)

# So you spent all that money and we still flooded!!!!!!!

- No system in Canada could have handled the volume of water
- 6-systems underneath our city
- Sanitary is interlinked
- Storm is not always interlinked
- Solutions are both long-term and short-term

# The long-term view

- **Sewer Master-Plan**

- Flow monitoring started in 2013 (\$1.5m engaged Dillon Engineers)
- All across Windsor we undertook smoke and dye testing
- Camera inspections through all sewers
- All data will inform final plan



# What can you do to protect your home?



# Windsor's 8-Point Plan

Everyone working together

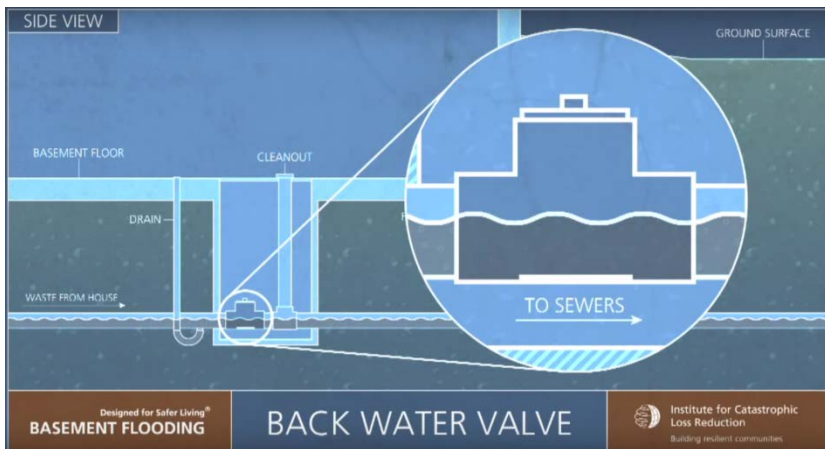
# One: Review development policies

- Working in conjunction with the Town of Tecumseh, Windsor will conduct a review of development policies as they relate to sewer management to ensure the system can handle increased development



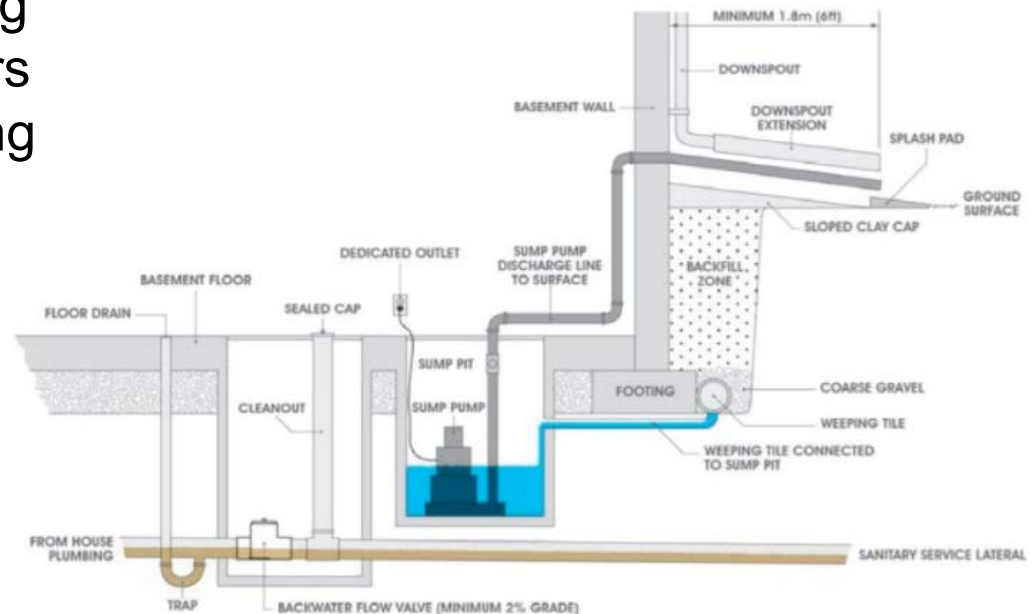
# Two: Mitigate sewage backup

- Through the Basement Flooding Protection Subsidy, Windsor will cover 100% of the cost of installing backflow valves and sump pumps for residents
- Priority will be given to residents who have experienced flooding



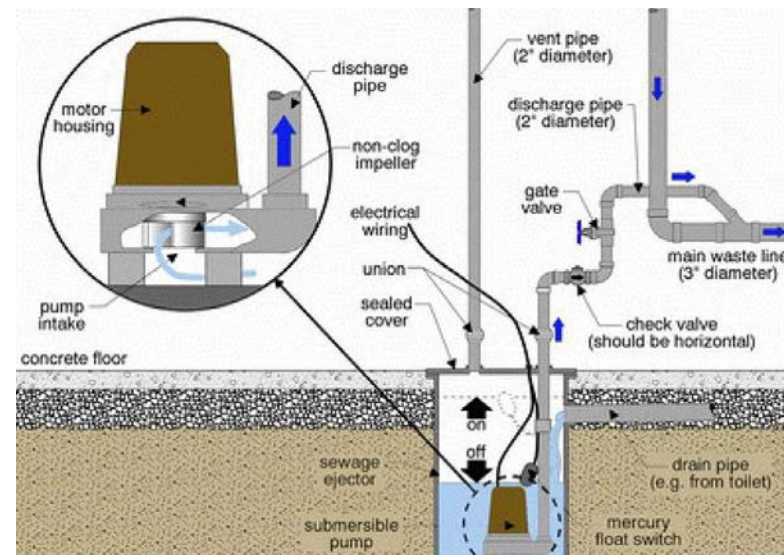
# Three: Weeping tile disconnection

- Investigating adding the disconnection of weeping tiles from sanitary sewers to the Basement Flooding Protection Subsidy program



# Four: Sewage Ejection Pumps

- LaSalle has experienced success with sewage ejection pumps
- Windsor will investigate adding this practice to the Basement Flooding Protection Subsidy program



# Five: Mandatory downspout disconnection

- Need to make this practice mandatory
- Exemptions will be made on a case-by-case basis
- City engineers have identified this as a simple and cost-effective way to mitigate flooding by diverting water flow



# Six: Riverside Vista Project

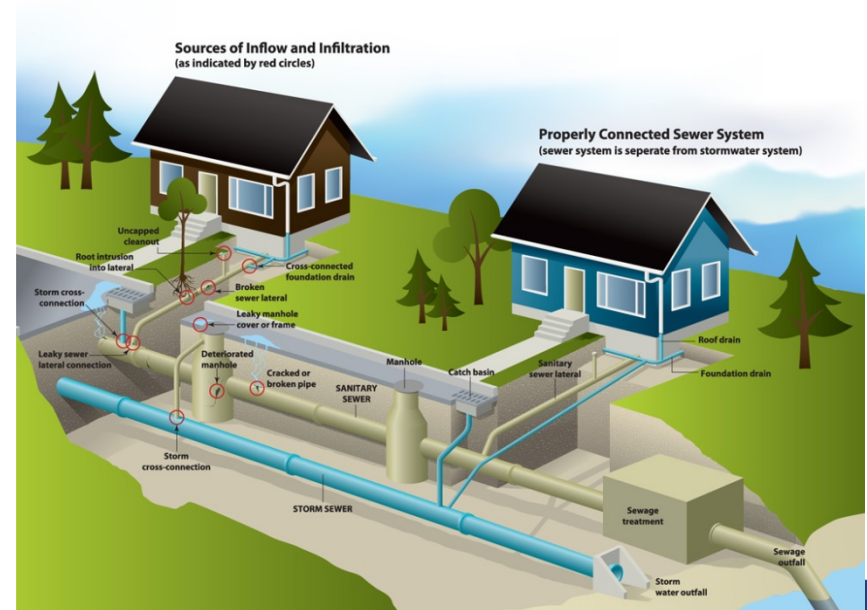
- Expedite Riverside Vista project between St. Rose and Ford Blvd. to deal with significant road flooding issues and increase sewer capacity





# Seven: Accelerate the Sewer Master Plan

- 6 separate systems
- Mapping entire system – camera data, flow monitoring, pumping studies.
- Scientific and data driven project
- Plan needed to drive big \$\$ expenditures



# Eight: Call for action from the province

1. Establish a province-wide insurance plan that will allow affected residents to purchase affordable flood insurance where no other option is available
1. Make immediate changes to the Disaster Recovery Assistance Program that currently excludes coverage for homeowners who experience sewer backup



# Together We Will Adapt to Climate Change

- City working on long-term mitigation
- City working with residents on short-term mitigation
- Other ideas for your property