

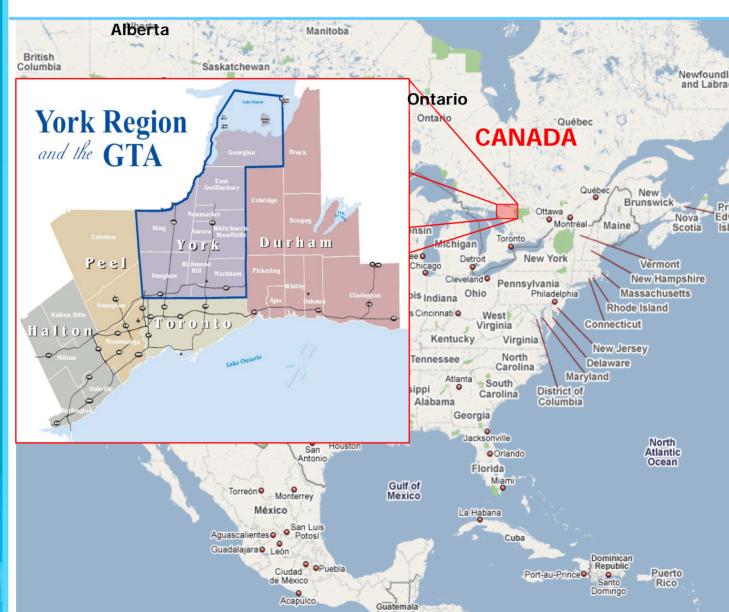
OUTLINE Background Implementation Highlights Challenges **Achievements Moving Forward** 1/25

PRESENTATION OUTLINE

- BACKGROUND
- IMPLEMENTATION OF THE BY-LAW
- HIGHLIGHTS OF THE 2005 SEWER USE BY-LAW
- CHALLENGES DURING IMPLEMENTATION
- ACHIEVEMENTS
- MOVING FORWARD



YORK REGION AND GTA





OUTLINE Background Implementation Highlights Challenges Achievements Moving Forward 3/25

SEWER USE BY-LAW COMPARISON

Parameters	1978	1992	2005
Sanitary-Conventional	10	10	10
Sanitary-Metals	19	25	17
Sanitary-Organic	0	0	20
Storm-Conventional	7	5	6
Storm-Metals	17	27	17
Storm-Organic	0	0	16



SEWER USE BY-LAW CHANGES

Parameter	1978	1992	2005
Conventional	10	BOD - 300 from 500 S.S 350 from 600 P – 10 from 100	No change
Metals	19	Ni – 3 from 5 Cd – 1 from 2	Cd – 0.7 from 1 Cr – 2 from 5 Hg – 0.01 from 0.1 Ni – 2 from 3 Se – 1 from 5
		Deleted Ba	Zn – 2 from 3 Cl Fe S
		Sb Mn Mo Se Ag	20 Organic Parameters York Region





4/25

OUTLINE Background Implementation Highlights Challenges **Achievements Moving Forward** 5/25

REGULATORY DRIVERS

- Municipal Industrial Strategy for Abatement (MISA)
- Model Sewer Use By-Law
- The Canadian Council of Ministers of the Environment (CCME)
- IEMDMS



OUTLINE Background Implementation Highlights Challenges **Achievements Moving Forward** 6/25

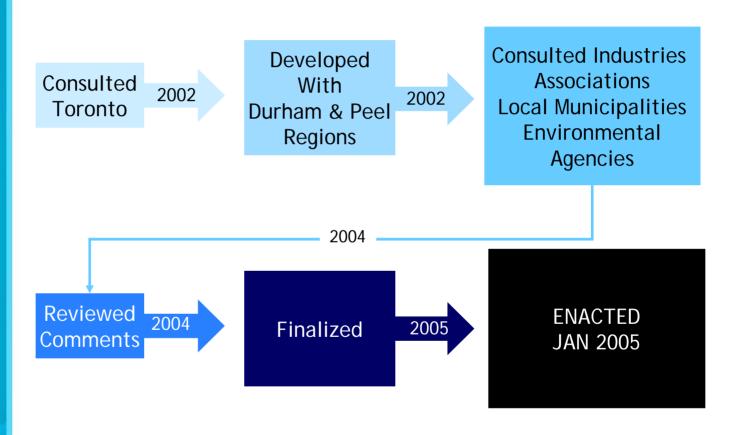
NEW SEWER-USE BYLAW

- Simplified, Easy to Understand
- Incorporation of ISO 14001 and Pollution Prevention
- Limits comparable to other GTA municipalities
- More stringent metal limits



OUTLINE Background **Implementation** Highlights Challenges **Achievements Moving Forward** 7/25

IMPLEMENTATION FLOW CHART





2005 HIGHLIGHTS

Pollution Prevention

Simplified Format

BY-LAW \$64-2005-009

Specific conditions for acceptance of Hauled sewage

20 New Organic Parameters

P B N S



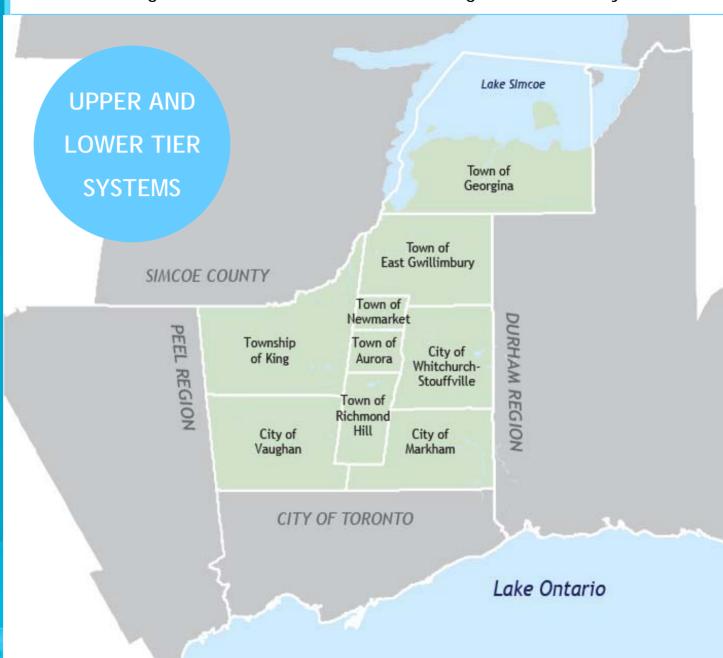


OUTLINE Background **Implementation** Highlights Challenges Achievements **Moving Forward** 9/25

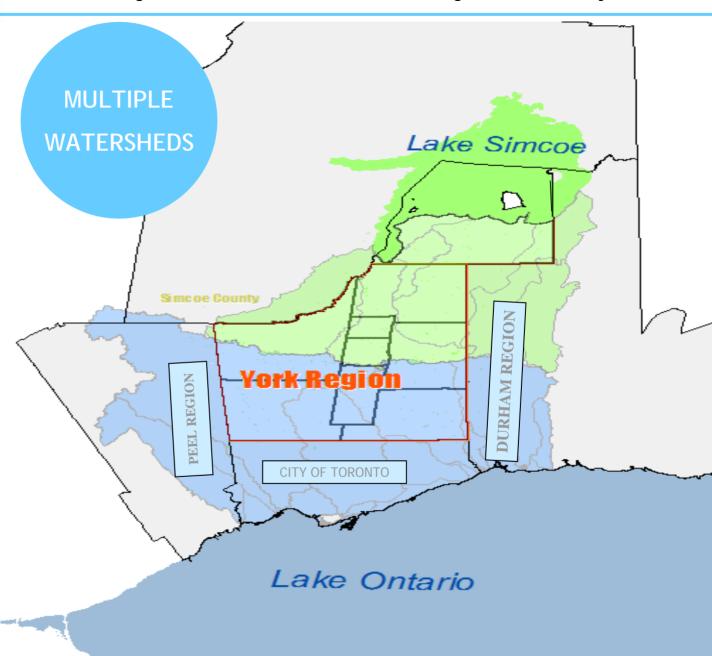
CHALLENGES



OUTLINE Background **Implementation** Highlights Challenges **Achievements Moving Forward** 10/25



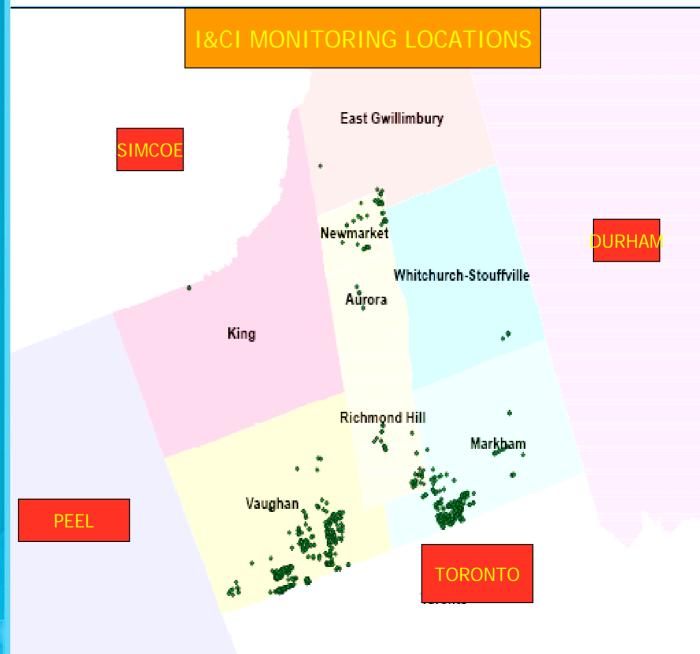
OUTLINE Background Implementation Highlights Challenges **Achievements Moving Forward** 11/25



OUTLINE Background Implementation Highlights Challenges Achievements Moving Forward 12/25

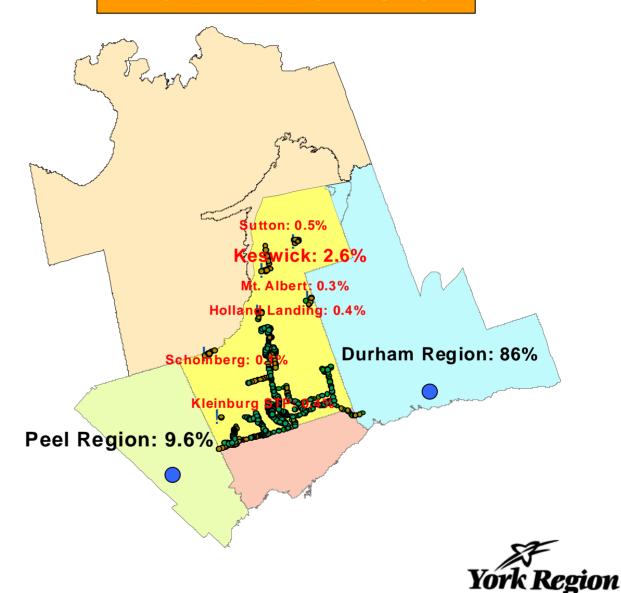


OUTLINE Background Implementation Highlights Challenges Achievements **Moving Forward** 13/25



OUTLINE Background Implementation Highlights Challenges Achievements **Moving Forward** 14/25

WASTEWATER DISTRIBUTION

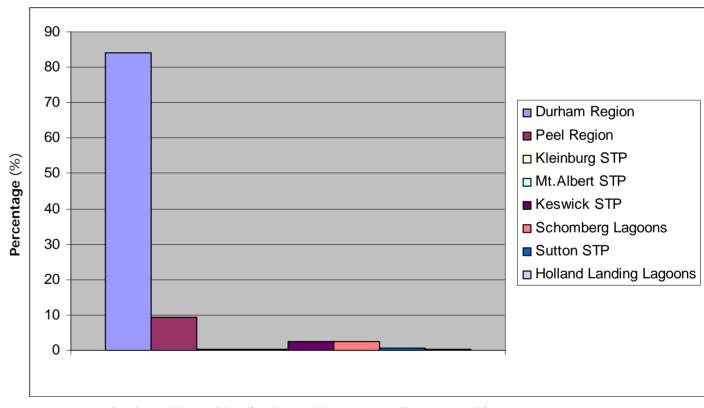


OUTLINE Background **Implementation** Highlights Challenges **Achievements Moving Forward**

15/25

York Region - Pollution Prevention Through Sewer Use By-law

WASTEWATER DISTRIBUTION



Sanitary Water Distribution to Wastewater Treatment Plants



OUTLINE

Background



York Region - Pollution Prevention Through Sewer Use By-law

ACHIEVEMENTS

MET STP REQUIREMENTS

POSITIVE FEEDBACK **REDUCTION OF LOADING PARAMETERS**





OUTLINE Background Implementation Highlights Challenges **Achievements Moving Forward** 17/25

ACHIEVEMENTS

MET STP REQUIREMENTS

- Assisted Duffin Creek WPCP to comply with new air emission limits
- Improved the quality of bio-solids



ACHIEVEMENTS

POSITIVE FEEDBACK

- Industries complied with the new limits
- Positive Feedback from Public Consultations





OUTLINE Background Implementation Highlights Challenges **Achievements Moving Forward** 19/25

ACHIEVEMENTS

REDUCTION
OF LOADING
PARAMETERS

- Reduced Metal Loadings
- Industries complied with all 20 New Organic
 Parameters introduced in the new bylaw

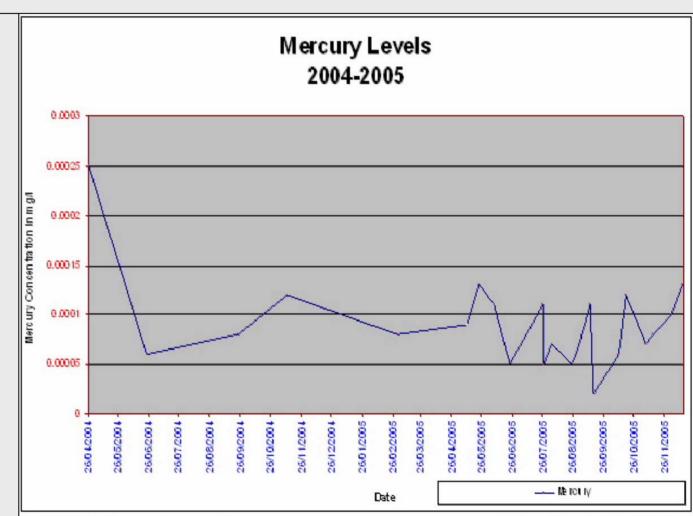


OUTLINE Background **Implementation** Highlights Challenges **Achievements Moving Forward**

20/25

York Region - Pollution Prevention Through Sewer Use By-law

CASE STUDIES



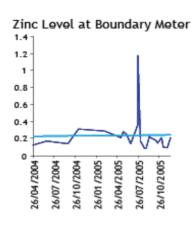
OUTLINE

Background

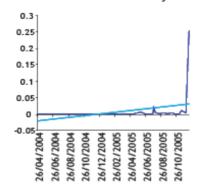


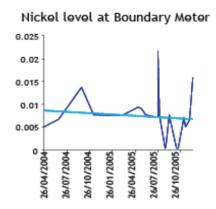
York Region - Pollution Prevention Through Sewer Use By-law

CASE STUDIES

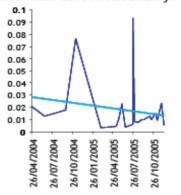


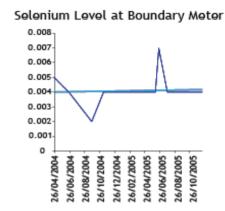






Chromium Level at Boundary Meter





0.0003 0.00025 0.0002 0.00015 0.0001 0.00005 26/10/2004 26/01/2005 26/04/2005 26/07/2005 26/10/2005

Mercury Level at Boundary Meter



OUTLINE



York Region - Pollution Prevention Through Sewer Use By-law

MOVING FORWARD

LAKE SIMCOE **PHOSPHOROUS REMOVAL**

BEST MANAGEMENT PRACTICES

POLLUTION PREVENTION







LAKE SIMCOE PHOSPHOROUS REMOVAL

- Submitted a proposal to Environment Canada
- Developing a corporate phosphorous management strategy for lake simcoe watershed
- Committed to reduce phosphorous loading from region's Water Pollution Control Plants





BEST MANAGEMENT PRACTICES

- Part of the Sewer Use By-law Enhancement Program
- Formulation of Best Practices by Research
- Continuous Reassessment as per Regional Mandates





POLLUTION PREVENTION

- Motto: Protection of Environment,
 Staff and Infrastructure
- Process changes, reuse and recycling
- Ontario Center for Environmental Technology Advancement (OCETA-TRSP) and Canadian Centre for Pollution Prevention (C2P2)
- Monitoring and Continuous Improvements using KPI

York Region





TAKE HOME MESSAGE

- Enacted Sewer Use By-Law to reduce metal parameter loadings
- Given 2 years for Industries for to comply
- With our due diligence and the Industries co-operation, Metal Parameters were reduced





THANK YOU

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