



Experience on System-wide ECAs for Wastewater / SWM Systems by Ontario Municipalities

Prepared by:
WEAO – Government Affairs Committee

In partnership with:
City of Greater Sudbury, Region of Halton, City of Barrie, and Region of Peel

MOECC / OMAFRA / OCWA 11th Engineer's Professional Development Day
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Who is GAC?

- WEAO committee established in June 2017
- Mandate:
 - To monitor and review existing and proposed legislation, regulation, and policies.
 - To advise WEAO Board and membership on government affairs and policies
 - GAC does not do lobbying / advocacy
- GAC has 15 committee members
- Communication plan



GAC work to date

- **EBR letters**

- Lake Erie TP Reduction – May 2017
- LID Manual – Dec 2017 (support CSC's efforts)
- Climate Change Adaptation – Jan 2018

- **Meetings**

- 5 regular meetings @ WEAO offices
- 1st MECP/OWWA/OMWA Executive (Apr 2018)
- 1 meeting hosted by MECP (Sep 2018)



GAC work to date (cont.)

- **Influent magazine articles**

- GAC Kick off – Fall 2017
- Lake Erie – WEAO's comments – Fall 2017
- MECP 1-year Standard, CA roles – Spring 2018
- Climate Change Adaptation – Spring 2018
- MECP/WEAO/OWWA/OMWA Group – Summer 2018
- GAC Study, System-wide ECA – Fall 2018



GAC work to date (cont.)

- **Policy priorities (Board-approved) – new partnerships with OMWA and OCSI**
- Support of research and pilot projects (new technologies)
- I/I on collection systems
- Water quality trading
- Stormwater infrastructure resiliency / Climate change adaptation
- Review of DRAFT LID manual



System wide ECA

- What is a System-wide ECA?
- Basic message
- The issues
- Chronology of System-wide ECAs
- Analysis
 - **Survey A** – Halton, Sudbury, Barrie, and Peel
 - Cost benefit review
 - **Survey B** – MWWRC& WW Practitioners Group
- Conclusions
- Recommendations



Introduction

- What is a System-wide ECA for sewage works?
 - Its an Environmental Compliance Approval (ECA)
 - It can cover the entire sewage works system, from cradle to grave
 - Sanitary collection & treatment (Sudbury, Halton)
 - Sanitary collection (Barrie, Peel)
 - Stormwater management system (Barrie)
 - It resembles the Drinking Water Permit, which involves all the distribution and treatment systems
 - It revokes and replaces 1,000's of existing ECAs

Introduction (cont.)

- Study prepared for the MECP / OMAFRA / OCWA – Engineer’s Day, May 9, 2018
- Since then, additional discussions have occurred with the MECP regarding the future of the System-wide ECA
- Sep 19, 2018, SOWC workshop attended by WEAO, the MECP stated: “***System-wide ECAs are a ministry priority for sewage systems***”

Basic message

- The System Wide ECA for municipal sanitary and stormwater collection systems are seen as **very positive rule instrument that brings significant benefits to municipalities:**
 - Brings unapproved infrastructure **into compliance**
 - Supports a **risk-based approach** for low risk sewage works
 - Municipal **incentives** for system **performance assessment**
 - Provides a **level playing field w/drinking water** permit approach
 - **Shorter timelines** for construction (LOF)
 - **Reduces municipal costs** for compliance & project development
 - Allows for **multi-media approvals** for the entire system

The issues

- Regular ECAs are based on a **piecemeal approach** (i.e. by municipal project), resulting in 1,000s ECA
- Long waiting periods for **low risk activities**
- The removal of the **grandfathering provision** from s. 53 OWRA (2011), left many municipalities into **non-compliance**
- **Municipalities manage both** water distribution & wastewater collection systems w/ 2 regulatory frameworks

The issues... cont.

- TOR program (1970's), provides relief to large cities, but it is based on the same **piecemeal approach and lacks a coordinated approach for:**
 - Treatment and linear systems
 - Timelines for approval for same project (2 submissions)
- MECP's2 models for **low risk activities**:
 - **For drinking water:**
 - Tech. rev. (Form 1 & 2), by cities & consultants - **(No application!)**
 - **For wastewater:**
 - Technical review either through regular submission or TOR, or
 - **LOF (No application!) – Stamped by P. Eng., approved by city**
- **TOR is good!**, but seen as an “oil lamp” ... why upgrade an oil lamp, if we have electricity (System-wide/ EASR/ LOF)?

Chronology of System-wide ECAs

MECP has been creating **pilot System-wide ECAs** for **WW & SWM – risk based approach**

Year	Description
2011	1 st WW ECA w/ LOF conditions (Durham – Harmony Creek)
2012	WW ECAs with LOF conditions – ongoing for private/municipal
2013	City of Toronto appeal, Environmental Review Tribunal (ERT) (resulted in improved LOF conditions)
2013	System-wide ECA for Halton Region
2014	System-wide ECA for Sudbury
2016	System-wide ECA for Barrie – Sanitary and 1st for SWM
2017	System-wide ECA for Peel Region

Analysis

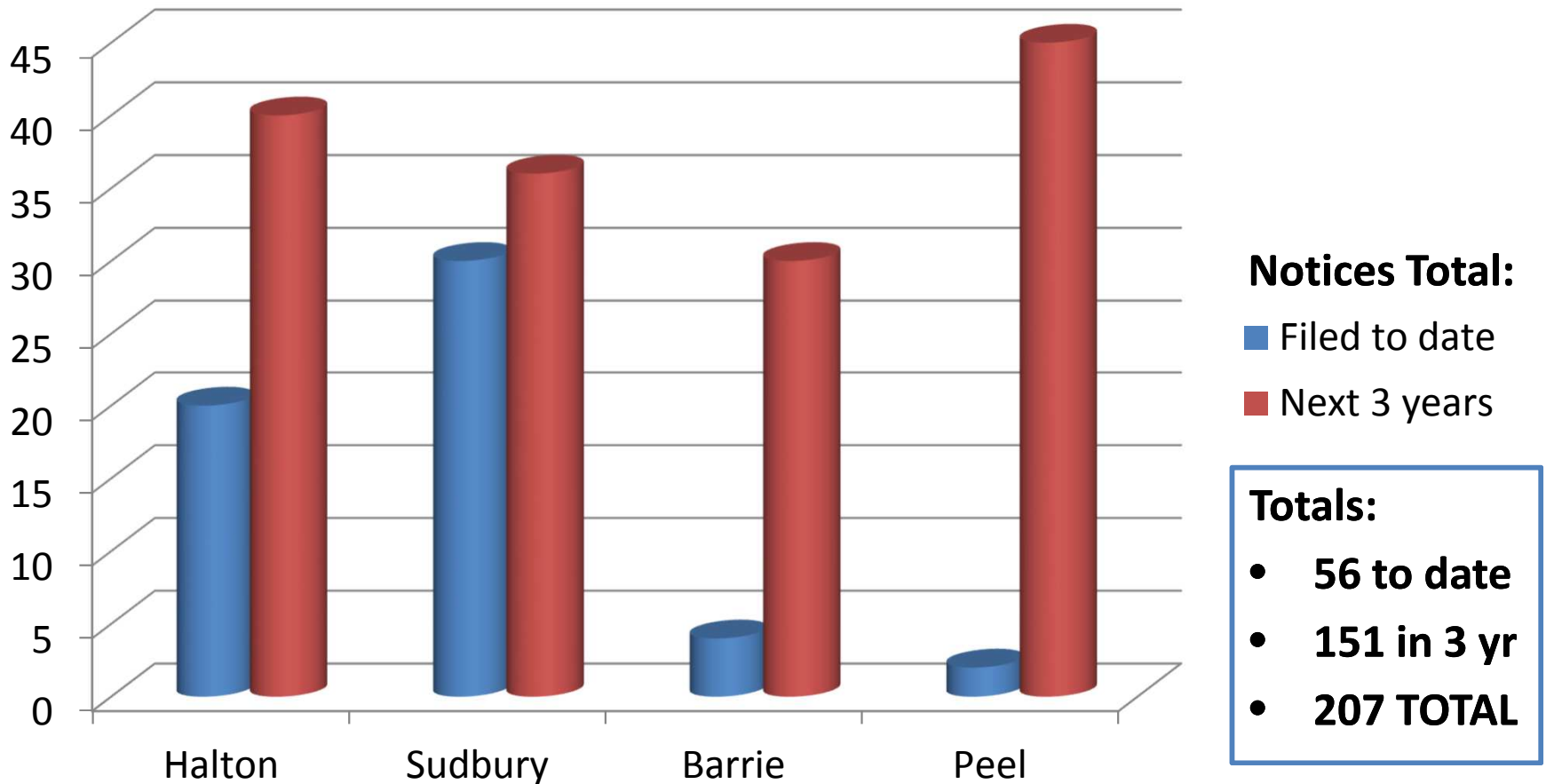
- Two (2) surveys
 - **(A) 4 municipalities** that have System-wide ECAs
 - **(B) MWWRC** – All system owners/operators & WEAO-MECP WW **Practitioners Group**
- Data gathered
 - Quantitative
 - Qualitative
- Survey involved professionals across diff. groups
 - Semi-structured questions
 - Open and closed-ended questions

Survey A – 4 municipalities

Municipality	Syst-wide ECA	Pre-ECA Un-approved works	ECAs revoked (SPS + other)	ECAs revoked (sewer pipes)
Halton Region (Burlington system)	2013	-	17	500+
Sudbury	2014	-	28	500+
Barrie (Sanitary)	2016	1%	11	500+
Barrie (Stormwater)	2016	0%	100	100
Peel	2017	10%	37	1,000+

Survey A... cont.

Notice of Modifications to date & expected over 3 years



@ \$5k per application ≈ \$1 million

Survey A... cont.

How these municipalities perceive the System-wide ECA?

	Indicator	Negative	Neutral	Positive	Very positive
1	Clear roles & responsibilities for municipal staff, developers, and contractors			XXX	X
2	Shortened timelines for approval			X	XXX
3	Shortened timelines for project implementation		X	X	XX
4	It helps municipalities to be in compliance for the entire wastewater collection system		X	X	XX
5	Promotes consistency w/ drinking water pre-approval		X	XX	X
6	Doc. control for ECA and compliance information				XXXX
7	Consistent with Asset Management and GIS mapping		X	X	XX
8	Management for development applications		X	X	XX
9	Asist to align consistency with DWQMS			XX	XX
10	Facilitates for multi-media approval		XX		XX

Survey A... cont.

Totals:	Negative	Neutral	Positive	Very Positive
	0	7	12	21

- Specific comments:
 - For timelines for approval & development applications:
 - “extending LOF to the collection system: invaluable”
 - “very helpful in cutting back bureaucracy”
 - “better than transfer of review”
 - “more guidance needed to assist cities/developers in transition to ECA”
 - For helping to be in compliance:
 - “more complex conditions than previous approvals”
 - “very simple to track and demonstrate compliance during inspections”
 - “creates streamlined approach and ability for QMS”
 - “having sewage works and air approvals in one document allows for better coordination of requirements and inventory of compliance”

Survey A – Cost/Benefit review

- Did you have **additional costs, or savings** with System Wide ECA vs. multiple ECAs?

“The system wide ECA... saves time and money on getting the projects on the ground on time” **Sudbury**

“[we] previously had TOR, so the main benefits are simplified application and shorter timelines” **Halton**

“Probably savings due to labour hours saved on staff/contractor drafting individual applications, reviewing draft approvals, and compliance staff getting to know the ECAs. Cannot quantify savings - we don't track the hours”
Peel

Survey A – Cost/Benefit review... cont.

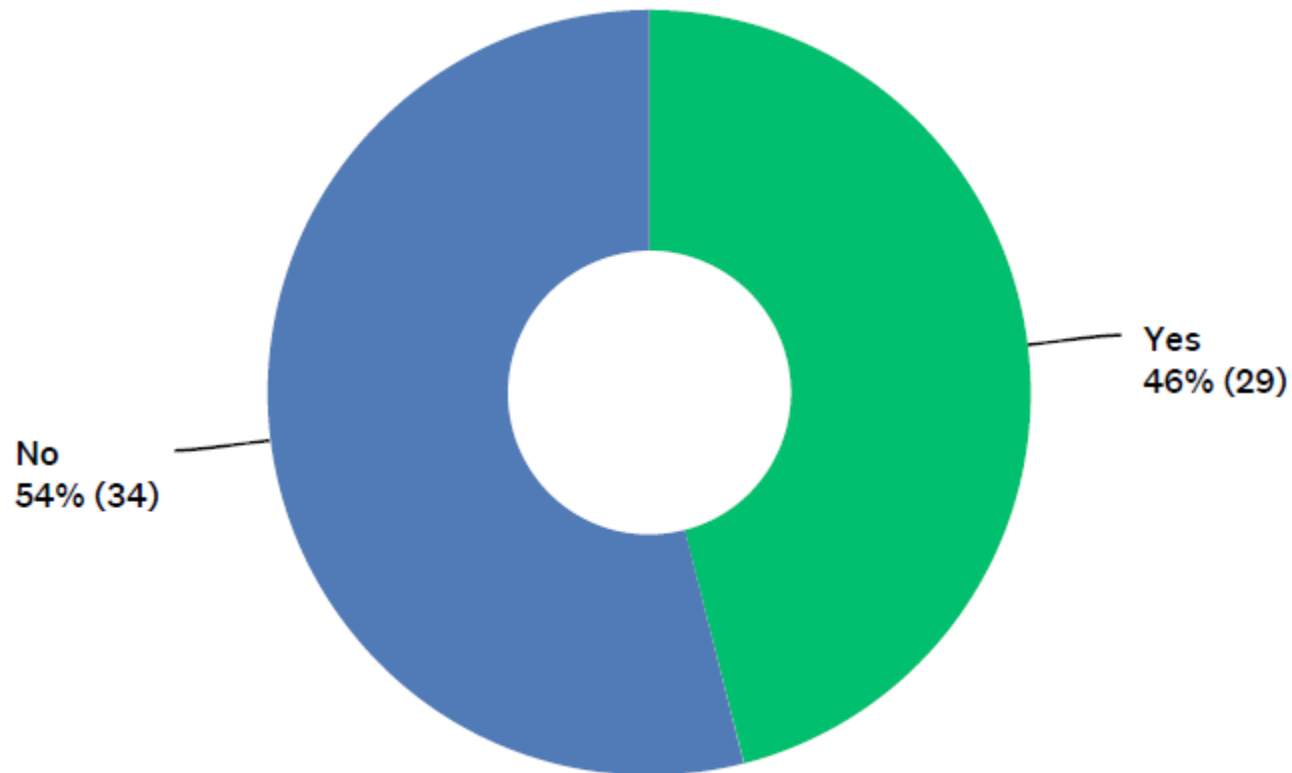
“Increased costs have been incurred to meet conditions for monitoring and reporting. Amendments to System Wide ECA’s have resulted in increased cost of administration and re-organization of internal plans and programs. These **additional costs have been offset** somewhat with consistency of requirements, alignment of processes for stormwater and wastewater and ease of management as compared to multiple ECA’s. The **stormwater ECA provides a foundation for support of stormwater priorities to assist with securing O&M funding**” Barrie

Survey B – MWWRC & WWPG

- **10 questions** to 310 & 90 members respectively
- All **questions were reviewed** by the 4 municipalities and WEAO GAC members
- **67 responses** received between **April 13 to 30**
- Identity of respondents **confidential**
- Survey administered by Peel through an **independent administrator for QAQC purposes**

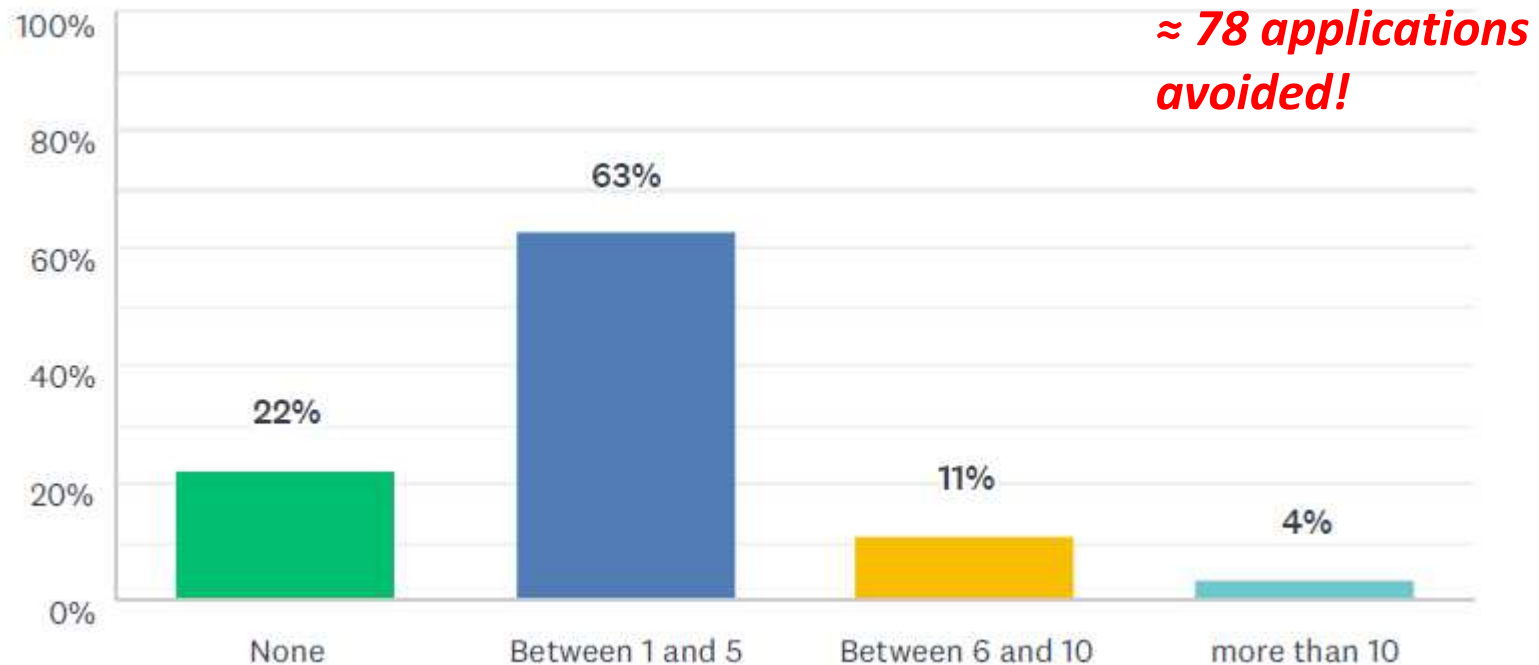
Survey B – MWWRC... cont.

- Q1 – Do you have a municipal treatment plant or SPS ECA with LOF conditions?



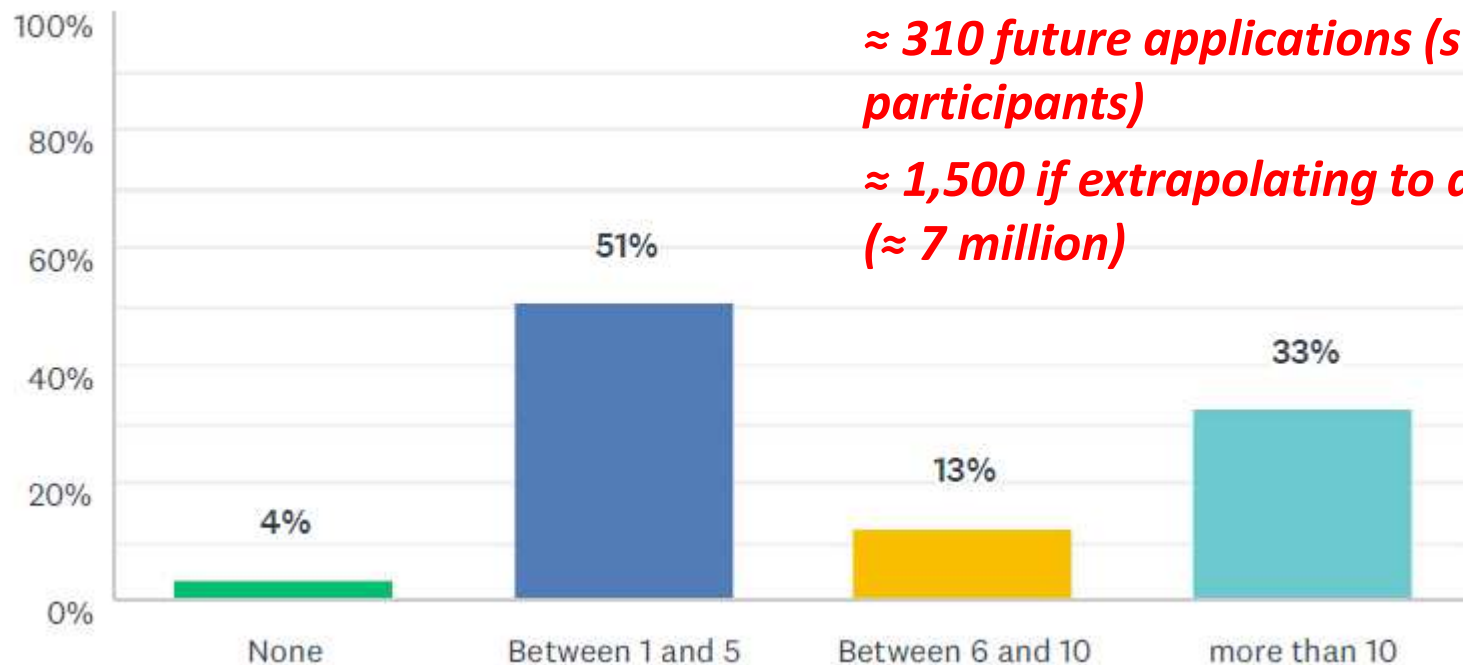
Survey B – MWWRC... cont.

- Q2 – Approximately, how many **Notice of Modifications** have you filed over the past 3-years using LOF?



Survey B – MWWRC... cont.

- Q3 – Approx. how many infrastructure upgrades and/or improvement projects are you planning to do on the sanitary collection system and SPS over the next 3-yrs?

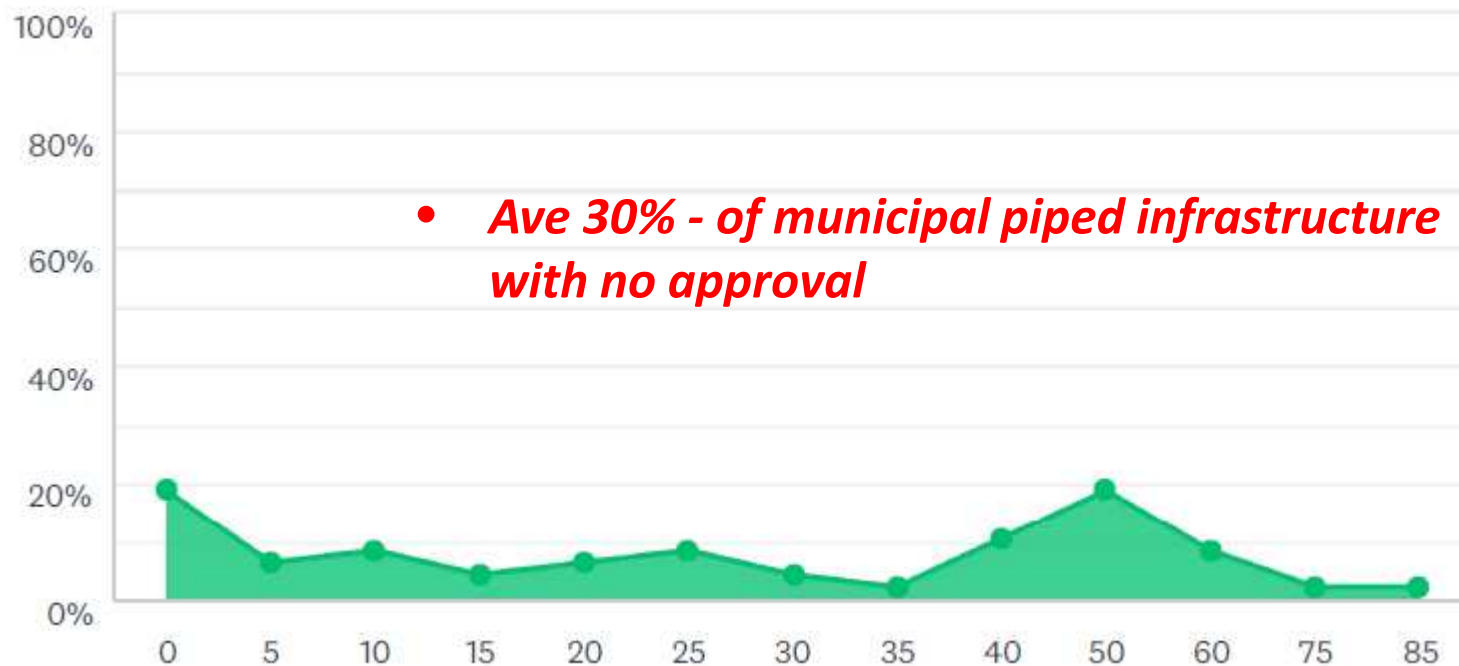


≈ 310 future applications (survey participants)

≈ 1,500 if extrapolating to all ON (≈ 7 million)

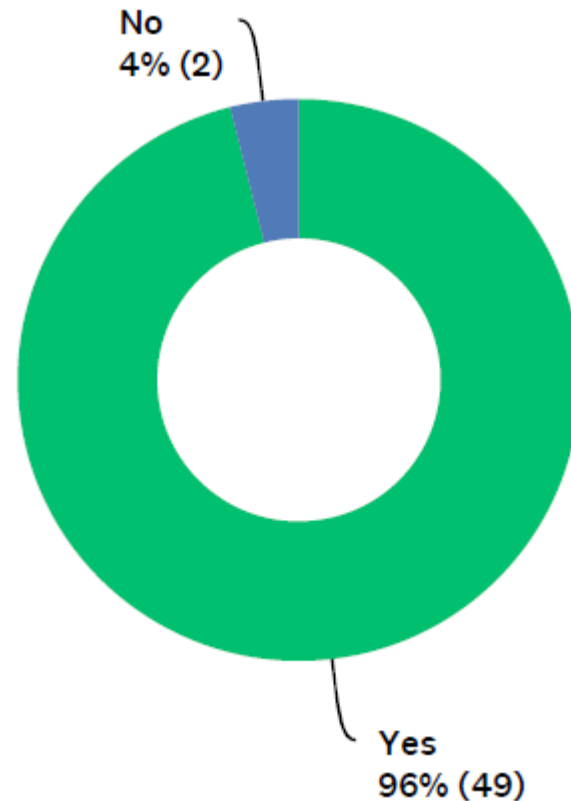
Survey B – MWWRC... cont.

- Q4 – Approx. what % of your municipality underground infrastructure (which is still in operation) was built prior to the OWRA (1950s)?



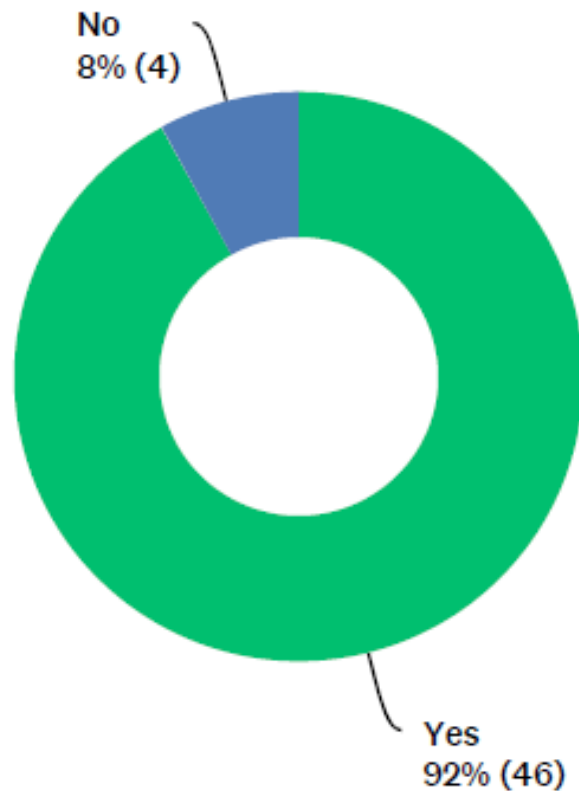
Survey B – MWWRC... cont.

- Q5 – Would it be beneficial to have one single ECA that covers all the existing sanitary collection system, including all SPS (similar to the DWP)?



Survey B – MWWRC... cont.

- Q6 – Would you support the MECP having a more proactive approach to System-wide ECAs for your sanitary and stormwater collection systems?



Conclusions

From Survey A

- System-wide ECA is seen **positive to very positive**
- **Collection System:**
 - LOF has avoided 56 ECAs
 - LOF will avoid an estimated 150 ECAs
- **LOF** will have an incremental **cost saving effect** to municipalities **and MECP**
- System-wide ECA for SWM **assists in securing O&M funding** for initiatives and programs – improves performance

Conclusions... cont.

From Survey B

- **96%** interest to apply
- **92%** interest in MECP more proactive approach
- **310 Low Risk future** applications represents est. **\$1.6 million** in direct savings; and allows MECP to focus on higher risk projects
- Ave. 30% of existing underground infrastr. likely under **non-compliance** (s.53 OWRA) - **“grandfathered”**

Recommendations

- Do apply for the System-wide ECA **for sanitary collection systems and SPS only** – no need to add the STP, if the STP has LOF
- Do apply for System-wide ECA for **Stormwater Systems (treatment inclusive)**
- By having a System-wide ECAs this will have a **significant incremental effect on cost savings** to municipalities
- MECP should work with municipalities/WEAO to develop **information sheets** and guidelines

Recommendations (cont.)

- Do's and Don'ts:
 - a. Do have a pre-submission consultation meeting
 - b. Do not include new sewage works
 - c. Do not describe the system in too much detail
 - d. Do not bother finding all ECAs – will be revoked
 - e. Do include all SWM treatment and collection
 - f. Do not include sanitary WWTP (those already have LOF)

Basic message

- The System Wide ECA for municipal sanitary and stormwater collection systems is seen as **very positive rule instrument that brings significant benefits to municipalities:**
 - Brings unapproved infrastructure **into compliance**
 - Supports a **risk-based approach for low risk** sewage works
 - It provides **incentives** for system **performance assessment**
 - Provides a **level playing field w/drinking water** permit approach
 - It uses GIS mapping as a regulatory tool (update @ 5 years)
 - **Shorter timelines** for construction (LOF)
 - **Reduces municipal costs** for compliance & project development

Thanks!

Questions?

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