



# WATER & WASTEWATER: Infrastructure

Planning for the future



# Water and Wastewater Current State

**Current replacement value of infrastructure** 

- Water assets \$1.5B
- Wastewater assets \$2.9B

609 million litres of water treated per day capacity

329 million litres of wastewater treated per day capacity

# Water and Wastewater Current State

We have no redundancies for proper maintenance

No redundancies for equipment failures

**Need to keep our current system functioning** 

No Plan B if system fails



# **Environmental Changes and Emerging Issues:**

Increase in severe weather events

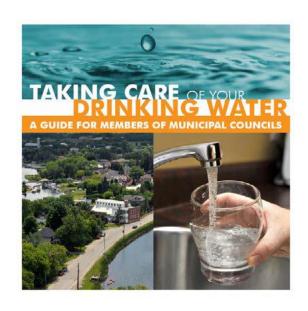
Warmer temperatures
can lead to increases
in algae and other
contaminants

Rise in pharmaceuticals in our water





Changing Provincial & Federal regulations



### Standards of Care

- Wastewater is much further behind than Water
- More of the incremental transfer is allocated here
- Lower reserve balances causes a higher reliance on debt

www.ontario.ca/drinkingwater



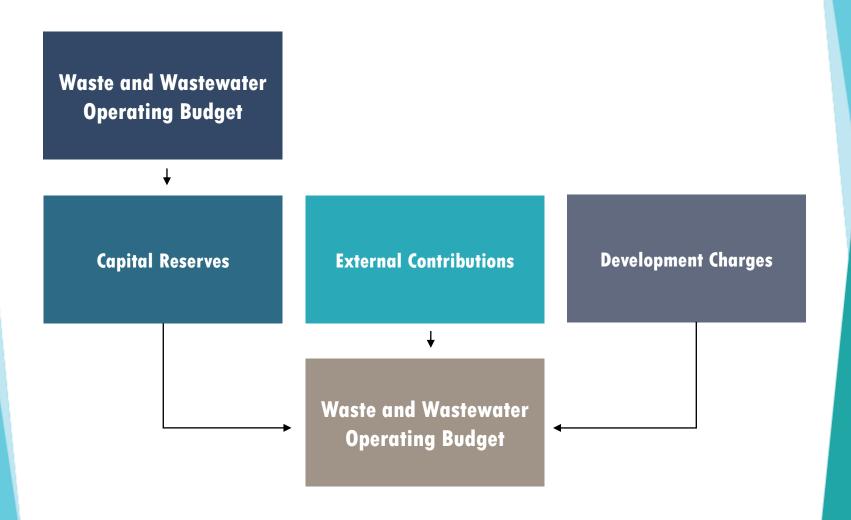


## Water and Wastewater

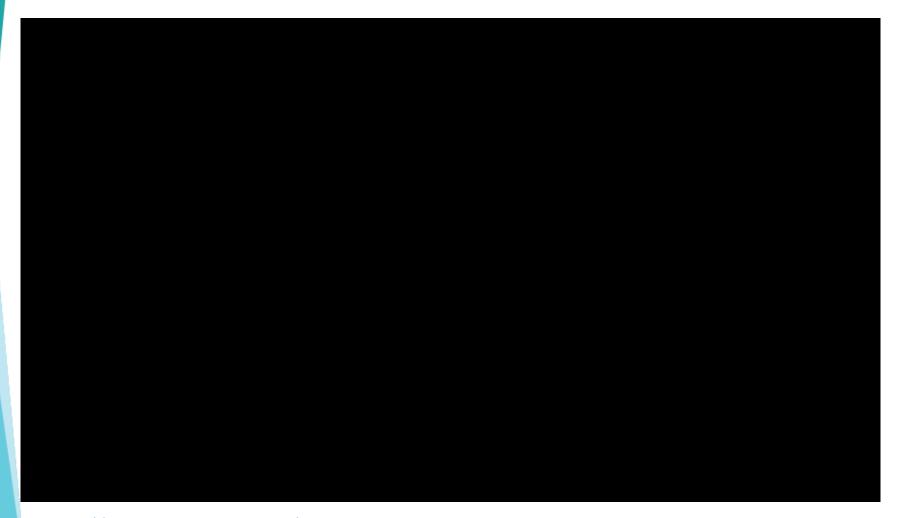


https://www.youtube.com/watch?v=I709NKHFq7Q&feature=youtu.be

### How Water and Wastewater Projects are Funded



## Water and Wastewater



https://www.youtube.com/watch?v=I7c9sbuKeGM&feature=youtu.be

## Some Current Repair/ Replacement Projects

#### Niagara Falls Wastewater Treatment Plant

- Current MECP non-compliance order
- Replacement of secondary treatment and digesters

#### Port Dalhousie Wastewater Treatment Plant

- Aeration system in continuous service since late 1960s
- New technology needed to improve the process and save energy

#### Welland Water Treatment Plant Phase Two Upgrade

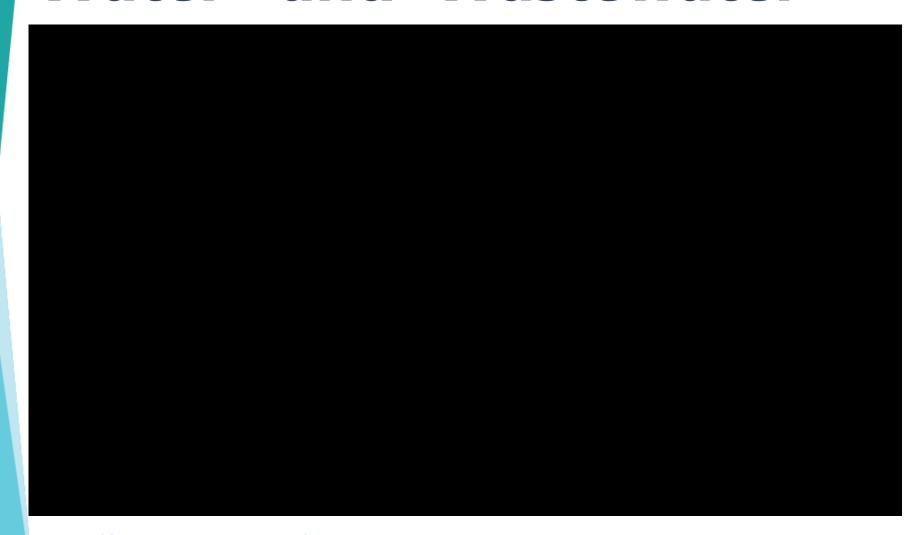
- Original plant = 1926, expanded in 1956
- Complete replacement of original plant and process train



# Risk & Funding Challenges

- Current rate requisitions does not meet future needs
- Potential reductions or cuts to existing programs
- Increased financial risk if further infrastructure failures
- Increased risk of non-compliance due to aged and failing infrastructure
- No quick fixes

## Water and Wastewater



https://www.youtube.com/watch?v=dn3TR900vio&feature=youtu.be



### Not just a Niagara Problem

#### **York Region**

York Council approved the first 6 years of rate increases for the phase in of full cost recovery pricing beginning April 1, 2016 as follows:

2016	2017	2018	2019	2020	2021
9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

- Forecasted increases beyond the 6 years are \$47M in 2022, \$48M in 2023, \$29M in 2024 and \$51M in 2025 or 2.9% a year
- Targeted rate increases are part of a comprehensive Water and Wastewater financial sustainability Plan

### **Next Steps**

Safe Drinking Water Act Financial Plan

Water and Wastewater Capital and Operating budgets

**Asset Management** 

