



Utilities
Kingston

Active Leak Detection

Katie Morrow, P.Eng.
Utilities Engineer

Water System Attributes/Inventory

- 575 km of watermain
- 2 treatment plants
- 6 booster stations
- 8 water storage facilities



O'Connor Drive Reservoir and Booster Station



Creekford Road Elevated Tower

Water Loss in Kingston

- ❖ Aging infrastructure will experience failures
- ❖ Water Loss in 2012
 - ❖ 46% or roughly 12,000,000 m³



Water Loss Reduction

- ❖ Water Loss Reduction Program
 - ❖ Developed in 2012
 - ❖ Multi disciplinary team
- ❖ Several Initiatives to reduce lost water
- ❖ Watermain Breaks/Leaks
 - ❖ Reported Breaks
 - ❖ Unreported Breaks



Active Leak Detection (ALD)

- ❖ 141 leaks repaired in 2016
 - ❖ 58 were found through ALD
- ❖ Water loss reduced by 1,907,188 m³ since 2014
- ❖ 0.234 kWh used to pump 1m³ of water
- ❖ 446,282 kWh reduction since 2014.



Thank You.....



Questions?

Katie Morrow, P.Eng.

Utilities Engineer

kmorrow@utilitieskingston.com