

# Water Efficiency Case Study



Region of Waterloo



## City of Kitchener

### Background

City of Kitchener is the largest municipality in the Region of Waterloo with over 233,000 residents. In partnership with the Region of Waterloo's Water Efficient Technology (WET) Program, the City has invested in several projects committed to the long-term sustainability of our drinking water supply.

### Water savings solutions

Between 2015 and 2018, the City completed four major water efficiency upgrades including:

- upgrading City Hall's cooling tower to a model that conserves more water
- optimizing a rainwater harvesting system at the city's Operations Centre
- auditing eight splash pads and installing water efficiency upgrades
- installing 32 water flow monitors at city facilities to detect leaks



By investing in efficiency, City of Kitchener is saving \$39,180 per year. The City also received \$26,915 from the Region of Waterloo's WET Program. The money helped fund water audits and sub-metering as well as providing rebates based on water savings.

### Water savings

City of Kitchener is saving 7,600 cubic metres of water each year, plus an estimated savings of 19,700 cubic metres per year on less measurable projects. When fully-operational, these upgrades would save enough water to supply 152 average, local households.

### Economic benefits

Water reducing measures	Cost of implementation	WET Program funding	Water savings (m <sup>3</sup> /year)	Annual water bill savings
Upgrading City Hall's cooling tower	\$373,650	\$10,523	2,811	\$14,505
Optimizing rainwater harvesting system	\$108,700	\$10,149	4,782	\$24,675

Water reducing measures	Cost of water audits/sub meters	WET Program cost share funding
Auditing/upgrading eight splash pads	\$1,600	\$800
Installing 32 water flow monitors to detect leaks	\$11,427	\$5,713

