Water is treated at four filtration plants located on the north shore of Lake Ontario. Water is transported from the sources to higher elevation pressure districts throughout the system through pumping stations, storage reservoirs, elevated tanks and approximately 500km of transmission mains.

While the City of Toronto and York Region provide the water delivery requirements to customers in a cost effective and uninterrupted manner, the complexity of the water system and energy tariff structure present opportunities for optimizing the pumping strategy to minimize operational energy costs in real time.
BlueIQ is a software solution that is assisting Toronto Water reduce system-wide pumped energy costs while operating within the required level of water quality and service delivery to customers.

The solution integrates with SCADA and uses a variety of real-time input data feeds.

BlueIQ has been in operation since November 2015 and is currently reducing Toronto Water’s system-wide energy costs with an associated reduction in greenhouse gas emissions.

“This is a completely new technology package that provided a customized solution for Toronto. Combining all the real-time inputs, with an accurate calibrated hydraulic model, and generating a proven and effective advanced pump schedule has significantly reduced Toronto Water’s operating costs.”

– TORONTO WATER