



Southwest Guelph Water Supply Class EA

Quarterly Progress Update, April 2023

The City of Guelph launched the Southwest Guelph Water Supply Class Environmental Assessment in September 2021. The Environmental Assessment includes a data gathering process called an Operational Testing Program, which is a six-stage, multi-year testing program that will determine the quantity of groundwater that can be safely and sustainably pumped from existing and new City production wells. The Operational Testing Program will evaluate two key objectives: (1) how will the Dolime Quarry pond be managed after the quarry has closed, to maintain and protect the high-quality groundwater in the surrounding aquifer, and (2) how can the City sustainably pump a portion of the additional water required to supply the community in the future.

Operational Testing Program Stage 2

Operational Testing Program Stage 2 took place between October and December 2022 and provided information about how the aquifer around the Dolime Quarry pond responds to variable pumping rates at the Rocco Well, the municipal well closest to the quarry. The Stage 2 Plan was based on data collected during Stage 1 and baseline data collected at a series of groundwater and surface water monitoring locations. The City also continued to collaborate with the University of Guelph's Morwick G360 Groundwater Research Institute to plan and construct additional groundwater monitoring locations that will benefit the Operational Testing Program and progress the Institute's ongoing groundwater research in the City of Guelph.

During the Stage 2 testing, the City continued collaboration with River Valley Developments, the quarry owner, in the monitoring of the quarry pond. To simulate future conditions following quarry closure, the pond water level was maintained within a target elevation range, determined by the City. Data, including pumping rates and water levels, were collected at the municipal well locations and at the same groundwater and surface water monitoring locations where baseline data was gathered. Some of the data were monitored in real-time, using telemetry technology implemented between Stage 1 and 2 of the testing.

Next Steps

Stage 3 of the Operational Testing Program started in mid March 2023 and is scheduled to finish in early August 2023. This stage will test additional municipal pumping scenarios while monitoring the





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groundwater and surface water systems. Project summaries and updates will continue to be posted on the City's website approximately every quarter.

