Campbellville Wellfield Update

Halton-Hamilton Source Protection Committee

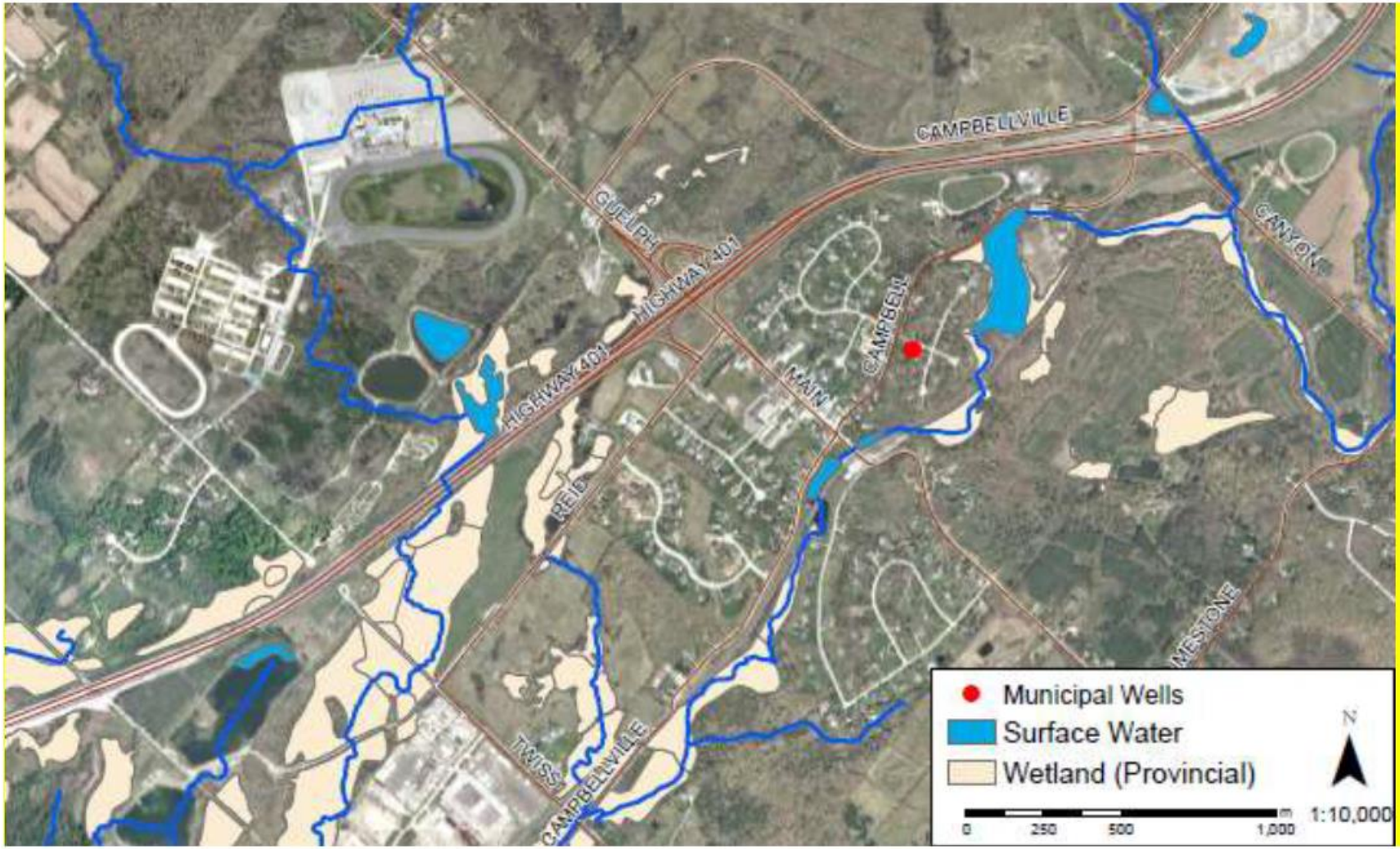
December 10, 2019

Campbellville Wellfield - Update

1. Location and Geological Setting
   - Services approximately 140 residents
   - 2018 average taking was approximately 24,000 L/day
   - No expansion of current system anticipated
2. Review of Sodium and Chloride Concentrations
3. Installation of New Monitoring Wells
4. Desktop Analysis of Alternate Operational Options at Campbellville Plant
5. Update SPC in early 2020

Campbellville Location

Campbellville Wellfield



Geological Setting

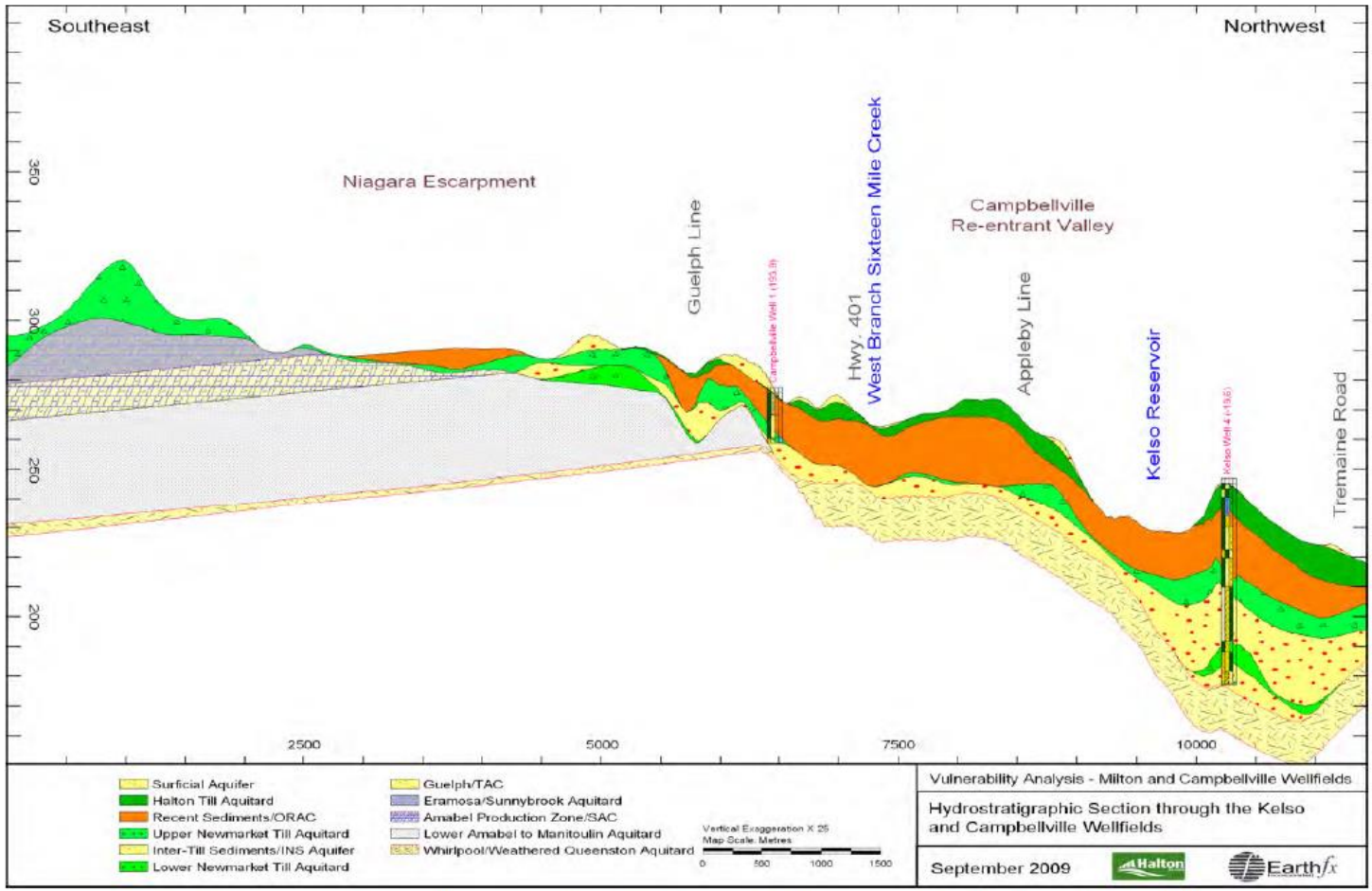


Figure 3.9: West-East hydrostratigraphic section through the Campbellville and Kelso wellfields (Earthfx, 2010b).

Raw Groundwater Quality at Campbellville Wellfield

- Assessment Report Indicated:
  - Sodium and chloride are aesthetic parameters (i.e., not health-related)
  - Sodium and chloride concentrations remained below the Aesthetic Objectives, and did not appear to be increasing over the previous decade
  - An issue contributing area therefore was not delineated
- Halton Region has continued to monitor groundwater quality in Campbellville as part of a pro-active monitoring program – 2019 sodium and chloride concentrations are similar to concentrations at the time of the Assessment Report
- A review of sodium and chloride concentrations at Campbellville Wellfield is part of the Section 36 Update Work Plan

Installation of New Monitoring Wells

- Purpose: To pro-actively supplement the existing monitoring network in Campbellville, Halton Region is installing additional monitoring wells at Town of Milton-owned properties to provide further insight into groundwater quality data in the municipal aquifer
- Halton Region will monitor groundwater levels and collect groundwater samples for water quality analysis
- Five monitoring wells are being installed at three locations, with wells completed in either the municipal aquifer (three wells) or underlying bedrock (two wells)
- Monitoring well installations started December 2nd and are being completed this week

WHPA and Monitoring Well Locations

Analysis of Alternate Operational Options at Campbellville Plant

- Purpose: To pro-actively identify potential alternate operational options for sodium and chloride concentrations at Campbellville Wellfield, if required
- Awarded to CH2M Hill (Jacobs) and to be completed in early 2020
- Key deliverable is technical memo that will summarize operational options