

**Project**            **REGIONAL GROUNDWATER MODEL FOR THE REGION OF HALTON**

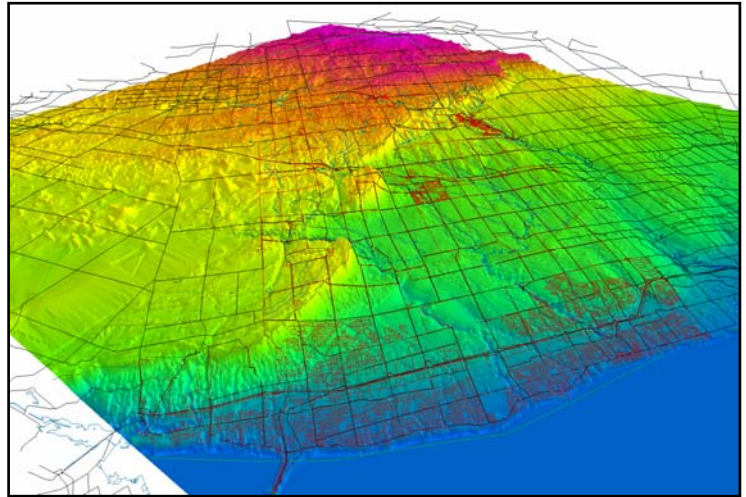
**Client**            **Regional Municipality of Halton**

**Objectives**

- Develop an integrated groundwater/ surface water model of the wellfields in the Region of Halton.
- Identify additional water-supply targets
- Delineate capture zones
- Evaluate the sensitivity of the wellfields to surface-water contamination

**Outcomes**

- A detailed understanding of the interaction between the rivers and the aquifer systems
- A useful management tool that allows Halton staff to perform additional analyses and simulations

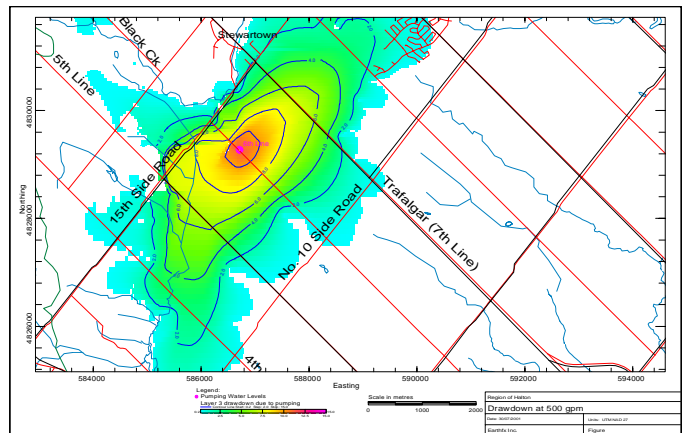


**Key Aspects**

- A well database that is fully integrated with the hydrogeologic model simulations

**Project Description**

Earthfx developed, in collaboration with Halton staff, a regional database of over 70,000 MOEE wells, regional pumping wells and associated geologic and monitoring data, stream-flow information and GIS coverages to support the development of a regional groundwater flow model. Earthfx staff then developed a five-layer hydrogeologic model to evaluate significant aquifers and simulate recharge, discharge, groundwater/surface water interaction and pumping activities.



## Applications

The Region of Halton has standardized on the VIEWLOG groundwater management system for all hydrogeologic data management.

