
Project **DATA INTEGRATION SYSTEM FOR A WATER/WASTEWATER TREATMENT PLANT**

Client **The City of Hamilton**

Objectives

- Develop a customized integrated database system that will assist with the efficient operation of the water/wastewater treatment systems

Outcomes

- High level review of water/wastewater quality data
- Automation of many routine calculations and equations
- Time savings by having immediate access to all data

Key Aspects

- Single interface for managing LIMS, SCADA and operational data
- Automated notification of system exceedances
- Automated reporting tools for regulatory requirements



Project Description

The operation of the City of Hamilton's water and wastewater treatment plants produces three main sources of data: (1) LIMS (Laboratory Information Management System), (2) SCADA (Supervisory, Control and Data Acquisition), and (3) operational log data. To efficiently evaluate the operation of the treatment plants, it is necessary to have all three sources of data present.

The City of Hamilton retained EarthFX to develop a data integration system that pulls relevant LIMS and SCADA data from their respective databases into a single interface that is used to manipulate and review the data. It also provides tools for the electronic storage of operational log data. Using the interface, staff will be able to quickly review, query, graph and report data from all three data sources.

The data integration system will become a hub for future data sources such as waste haulage, plant modelling results and equipment information and calibration data.