
Project **DATA MANAGEMENT SYSTEM FOR A WATER WELL SAMPLING PROGRAM**

Client **Ontario Federation of Agriculture (OFA)**

Objectives

- Design and build a data management system that could be used to automate data handling and analyses tasks.

Key Aspects

- Link to provincial MOE water-well record database
- Automated import and QA of laboratory data
- Automated reporting based on Ontario Drinking Water Objectives
- Built-in project and financial management

Project Description

OFA manages a program to facilitate testing of water-well quality for the farmers of Ontario. EarthFX was retained to design and build the data management system (DMS), required to automate all data handling and analysis tasks, from the farmer's phone call to the generation of the final report letter.

The DMS uploads the completed laboratory analysis, passes the data through a series of nomenclature and unit conversions, and assesses the data against the MOE drinking water criteria. Parameters that exceed these criteria are flagged and highlighted in a personalized letter, with all laboratory data in a clearly legible format.

To promote the value of the data, the system includes the MOE water-well record database, such that for each caller, the system finds and flags the appropriate corresponding well record(s). Program participants thereby receive a full copy of the well-construction data, and (with the owner's permission) the MOE database is updated with corresponding names, addresses and water-quality data. With approximately two new participants each day, this database will become an important regional groundwater management tool.

