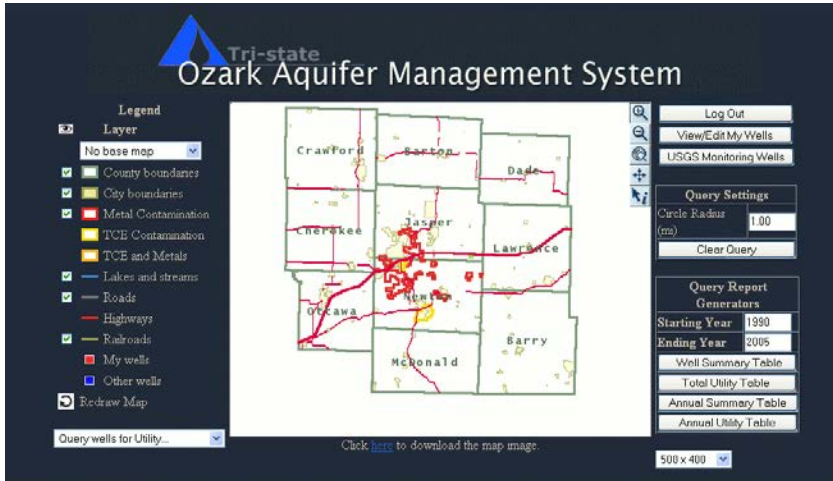


Managing Water Supplies using a Web-Based Data Collection and Management System

Missouri, Kansas, Oklahoma



The web-based data collection and management system interface.

Key Project Areas

Water Supply Management

Data Management

The Tri-State Water Resource Coalition (Coalition) hired Layne to design and construct a web-based data collection and management system for regional public water supply data. The objective of the project was to design and develop a database the Coalition could use to monitor changes in aquifer water level in response to changes in regional pumping patterns. The system allowed the Coalition to map where water levels have declined, understand and predict well interference, track water-quality changes, and help locate new wells.

We assembled necessary historical databases and constructed a data entry framework that was equipped with quality control measures for incorporating more recent data.

The database was designed so that a Coalition member could enter data securely from any computer connected to the internet. The database management system allows users to visualize data spatially and statistically, including cross-section aquifer visualization. Ultimately, the system was designed to inform regional decision making in the Ozark Aquifer region of Missouri, Kansas, and Oklahoma.

