Web-Based Data Storage and Visualization

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Goal

- Collect water quality data along the Provo River and make that data readily accessible online, with an easy-to-use visual interface

Figure 1. Web interface allows wide accessibility.

Research Methodology

- Stream data into an online database where it can be properly documented with meta-data and linked to a central hub that makes the data easily searchable

- Link data to a custom web interface where it can be visualized through maps, charts, and graphs and downloaded for additional analysis, modeling, and research

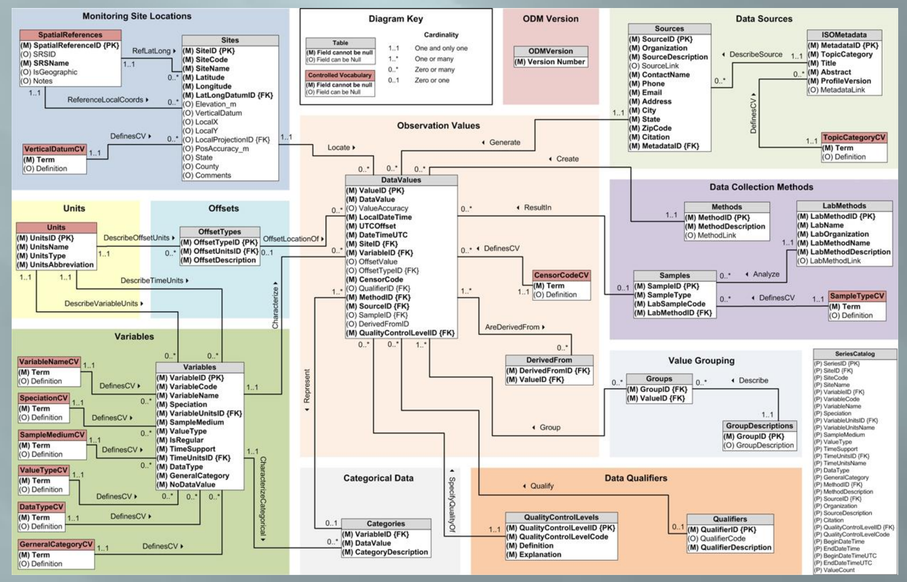

Figure 2. Observational Data Model (ODM) will be used to store data from sensors in watershed study areas. Using a standardized data format ensures data will be understood and accessible. (Image from http://his.cuahsi.org/odmdatabases.html)

Impact

- Ensures that data collected by the iUTAH project is available for educational, research, and analytical needs

- Provides a familiar and intuitive way to visualize data and model results and to enhance communication among students, faculty, stakeholders, and decision makers

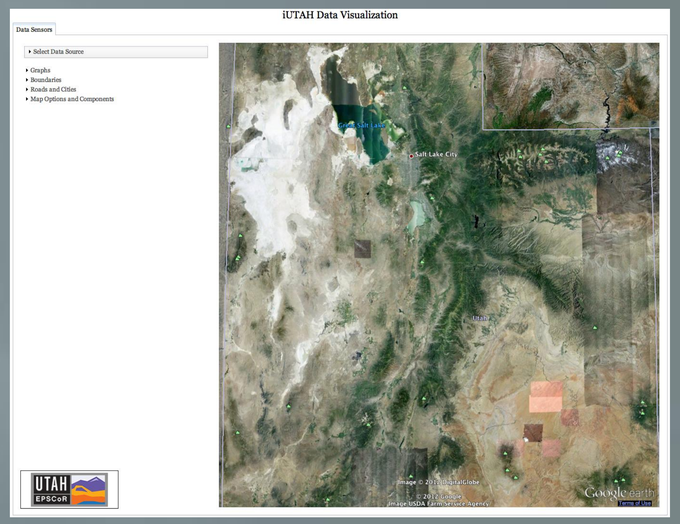

Figure 3. Webpage for mapping and data visualization.

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