

Geomatics and GIS

Large amounts of data can be generated during the life cycle of an environmental project. Whether the data is collected through field operations or by reviewing and assembling historical or legacy information, it needs to be managed in a way that allows it to be readily used for analysis. Linking the data with a Geographic Information System (GIS) provides a powerful tool for data analysis. Geomatics is the discipline that includes the compilation of data, development of databases and GIS, data reporting, data mapping, and fundamental data analysis.

Aquilologic's geomatics staff is experienced in utilizing geospatial information and environmental data management systems to analyze complex conditions for major water resources and environmental projects, particularly those involving contaminated groundwater. We have the ability to visualize groundwater plumes and subsurface geology in three-dimensional (3D) space. We also are able to visualize changes in conditions over time using tools such as charts and time-series maps. Using satellite imagery, we can identify changes in ground cover over time to assist in activities such as wetlands delineation and assessment. These tools are used to identify risks and aid in decision-making.

We believe that proper data management is integral to any project. This is especially true when there are multiple chemicals of concern (COCs), areas of concern (AOCs), release sites, potentially responsible parties (PRPs), a long history of investigation activities, and multiple consultants. Information is made readily available through web-based tools, GIS maps, database reports, and other visual means.

Aquilologic's geomatics team works directly with hydrogeologists and engineers to ensure that the latest technology is used to communicate information to clients and staff.