



HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING

Geology & Hydrogeology

Geology is a broad field that encompasses a host of specialized subdisciplines such as geophysics, sedimentology, geochemistry, geomorphology, and hydrogeology. At Haley Ward, we apply our expertise in hydrology, material resources, and near-surface geologic processes to both environmental and engineering investigations and natural resource development projects.

The application of these and many other sub-disciplines allows us to understand the framework within which we must work to solve environmental problems or develop and utilize the Earth's natural resources to meet project-specific objectives. Whether you are developing a new source of drinking water or are attempting to locate and design a landfill, it cannot be done successfully without first completing a thorough geologic investigation. These projects can involve everything from the mapping of existing geologic conditions to evaluating the potential for meeting future material or natural resource needs.

Given our specific background in hydrogeology and surficial geology, Haley Ward provides services related to groundwater supply development, natural resource management, geologic hazard avoidance, and environmental impact investigations. Projects range from the design of groundwater management programs and development of contaminant fate and transport models to the design and construction of water supplies used for residential and industrial/commercial purposes.

Groundwater Supply Development

- Location of High-yield Industrial and Commercial Water Wells
- Water Well Design
- Design of Aquifer Pumping Tests for Well Yield Evaluation
- Aquifer Mapping
- Aquifer Characterization and Analysis; Fractured Crystalline Bedrock, Karst Terranes, and Porous Media
- Location and Development/Licensing of Spring Water Sources

Geological Hazard Analysis and Design Support

- Slope Stability Analysis
- Evaluation of Developments in At-risk Environments
- Flood Plain Identification and Planning
- Erosion and Sediment Control Measures

Materials Inventory and Resource Planning

- Construction Material Mapping and Inventory
- Mining Layout and Design
- Baseline Water Quality Assessments and Monitoring

- Material Feasibility Determinations
- Mineral Resource Development
- Resource Utilization Planning