Hydrogeologist

Job Description

Hydrogeologists study water’s interaction with rocks and soils and the natural processes that are impacted by them, such as glaciation, river formation and movement, floods and other natural disasters and long-term environmental processes. They also test water supplies for safety, as some rocks and soils contain contaminants that are harmful to human health. Hydrogeologists often act as consultants to both litigators and land-use planners.

Core Tasks

- Design construction dewatering schemes and deal with groundwater problems
- Determine water is availability to sustain water supply with minimal side effects
- Investigate the quality of the water to ensure that it is fit for its intended use
- Help to harness geothermal energy through groundwater-based heat pumps.
- Design and construct water wells

Workplace / Environment

- Work hours
  Approx. 40 hours/week
  (Highly dependent on the employer)
- Environment
  Federal Government employees make up 28% of hydrogeologists
  Independent Contractors make up the rest
- Travel
  Field Travel is common for newer individuals, but this decreases over time

Salary

Entry – $50,410
Middle – $79,550
Top – $120,370

Education / Prerequisites

Education Level
Bachelor’s degree in environmental science, geography, geology, earth sciences, or a related field, alongside electives in math-related subjects. (Master’s is recommended)

Licensing
Varies by state

Pre-Job Preparation
Advanced science courses and lab experience

Experience

Soft skills
- Effective verbal and written communication
- Attention to detail
- Ability to work both independently and in teams

Technical skills
- Data organization and management
- Computer skills for database utilization