GENERAL DESCRIPTION

Performs complex (journey-level) hydrological work. Work involves collecting and analyzing data and samples, preparing reports, conducting inspections and ecological or environmental impact studies, and ensuring compliance with applicable statutes and regulations. May provide guidance to others. Works under general supervision, with limited latitude for the use of initiative and independent judgment.

EXAMPLES OF WORK PERFORMED

Collects and analyzes water samples as part of field investigations or to validate data from automatic monitors.

Collects chemical, physical, biological, and hydrological data, analyzes findings, and assists with data calculations and the development of recommendations for programs or projects and ecological risk assessments.

Conducts inspections and evaluates data for compliance with laws, regulations, and specifications.

Analyzes and interprets environmental data to determine existing conditions, long-term trends, compliance with quality assurance requirements and permitting standards, and environmental impact.

Conducts scientific hydrogeological investigations to ensure that accurate and appropriate information is available for use in water resource management decisions.

Studies and documents quantities, distribution, disposition, and development of underground and surface waters.

Researches public water supply issues, including flood and drought risks, water quality, wastewater, and impacts on wetland habitats.

Researches laws and policies and delivers responses to the public and governmental agencies.

Maintains and prepares records and reports and presents technical evaluations and plans.

Implements technical projects and completes design preparation, plans, estimates, and calculations.
Operates and maintains equipment used in the collection of data for water surveys and tests.

May develop or use hydrologic models for application.

May provide guidance to others.

Performs related work as assigned.

GENERAL QUALIFICATION GUIDELINES

EXPERIENCE AND EDUCATION

Experience in hydrological work. Graduation from an accredited four-year college or university with major coursework in hydrology or a related field is generally preferred. Experience and education may be substituted for one another.

KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of hydrological principles, techniques, and procedures; of mathematics and statistics; and of the practical application of hydrology, water quality, and water management technologies.

Skill in scientific data management, in collecting and assessing hydrological data, in applying modeling and statistical procedures, in the use of a computer and applicable software, and in the use of standard tools of the profession.

Ability to plan projects, to conduct inspections, to apply hydrological concepts, to communicate effectively, and to provide guidance to others.