Hydrologist

CLASS TITLE	CLASS CODE	SALARY GROUP	SALARY RANGE
HYDROLOGIST I	2456	B18	$45,521 - $71,055
HYDROLOGIST II	2460	B20	$51,158 - $81,351
HYDROLOGIST III	2464	B22	$57,614 - $93,138
HYDROLOGIST IV	2465	B24	$65,104 - $106,634
HYDROLOGIST V	2466	B26	$76,530 - $129,430

GENERAL DESCRIPTION

Performs hydrological work collecting and analyzing data and samples, preparing reports, conducting inspections and ecological or environmental impact studies, and ensuring compliance with applicable statutes and regulations.

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 for compliance with laws, regulations, and specifications.

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

Researches laws and policies and responds to the public and other governmental agencies.

Maintains and prepares records and reports and helps present technical evaluations and plans.

Operates and maintains equipment used to collect data for water surveys and tests.

Performs related work as assigned.

DESCRIPTION OF LEVELS

Examples of work and descriptions are meant to progress through the levels. For example, an employee at level V may also perform work listed within the previous levels.

***Note**: Factors that may distinguish between the journey levels include the degree of independence in performing the work and the complexity of the work and may include the employee's related experience, education, and certifications. Employees at the journey levels may independently perform the full range of work listed in the examples or may assist others in that work.*

HYDROLOGIST I: Performs routine (journey-level) hydrological work. Works under moderate supervision, with limited latitude for the use of initiative and independent judgment. Employees at this level may rely on direction from others to solve problems that are not standard. Employees may also assist others in performing work of greater complexity.

HYDROLOGIST II: Performs complex (journey-level) hydrological work. Works under general supervision, with limited latitude for the use of initiative and independent judgment. Employees at this level may work more independently than those at the previous level and may routinely assist others in performing work of greater complexity. Employees at this level may:

- Conduct inspections and evaluate data for compliance with laws, regulations, and specifications.
- Analyze and interpret environmental data to determine existing conditions, long-term trends, compliance with quality assurance requirements and permitting standards, and environmental impact.
- Conduct scientific hydrogeological investigations to ensure that accurate and appropriate information is available for use in water resource management decisions.
- Research public water supply issues, including flood and drought risks, water quality, wastewater, and impacts on wetland habitats.
- Implement technical projects and complete design preparation, plans, estimates, and calculations.
- Develop or use hydrologic models for application.

***Note**: Any senior-level employee (levels III-V) can serve as a team lead or supervisor; however, supervisory responsibilities within this job classification series will normally be found at levels IV and V. Senior-level employees may perform the full range of work listed in the examples above and may coordinate or oversee that work for others. Factors that may distinguish between senior levels include the scope of responsibility and oversight, the complexity of the work performed, and the employee's related experience, education, and certifications.*

HYDROLOGIST III: Performs highly complex (senior-level) hydrological work. Works under limited supervision, with considerable latitude for the use of initiative and independent judgment. Employees at this level may:

- Coordinate the collection and analysis of water samples as part of field investigations or to validate data from automatic monitors.
- Coordinate the execution of technical projects and design preparation, plans, estimates, and calculations.
- Coordinate and evaluate the collection of chemical, physical, biological, and hydrological data for use in water quality, water resource management, and ecological risk assessments, and in the development of program or project recommendations.
- Review the activities of contractors, operators, and/or civic authorities.

- Prepare and present technical evaluations, plans, and reports.

HYDROLOGIST IV: Performs advanced (senior-level) hydrological work. Works under minimal supervision, with considerable latitude for the use of initiative and independent judgment. Employees at this level may fully perform highly complex hydrological work and may:

- Oversee inspections and the evaluation of data for compliance with laws, regulations, and specifications.
- Oversee and monitor studies on quantities, distribution, disposition, and development of underground and surface waters.
- Oversee technical projects, design plans, and the execution of estimates and calculations.
- Coordinate and evaluate the collection of chemical, physical, biological, and hydrological data for use in water quality, water resource management, ecological risk assessments, and in the development of program or project recommendations, and ensure that quality control standards are met.
- Coordinate and/or conduct scientific hydrogeological investigations to ensure that accurate and appropriate information is available for use in water resource management decisions.
- Evaluate and analyze water samples as part of field investigations and/or to validate data from automatic monitors.
- Research and evaluate public water supply issues, including flood and drought risks, water quality, wastewater, and impacts on wetland habitats.
- Interpret and research laws, regulations, and policies and respond to the public and other governmental agencies.
- Prepare and present technical evaluations, plans, and reports on programs and complex issues.

HYDROLOGIST V: Performs highly advanced (senior-level) hydrological work. Works under minimal supervision, with extensive latitude for the use of initiative and independent judgment. Employees at this level may independently perform the most complex hydrological work and may:

- Oversee scientific hydrogeological investigations to ensure that accurate and appropriate information is available for use in water resource management decisions.
- Oversee and evaluate the collection of chemical, physical, biological, and hydrological data for use in water quality, water resource management, ecological risk assessments, and the development of program or project recommendations, and ensure that quality control standards are met.
- Coordinate the evaluation and analysis of water samples as part of field investigations and/or to validate data from automatic monitors.
- Monitor the activities of contractors, operators, and civic authorities.

GENERAL QUALIFICATION GUIDELINES

EXPERIENCE AND EDUCATION

Agencies have the discretion to identify the general or specialized experience, education, or certifications required for positions and may tailor qualification requirements to specifically meet the agency's business needs. Agencies may substitute experience, education, military service, apprenticeships, and relevant credentials for one another, if appropriate and allowed by statute.

KNOWLEDGE, SKILLS, AND ABILITIES

For all levels

- Knowledge of hydrological principles, techniques, and procedures; mathematics and statistics; and 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, and to communicate effectively.

Additional for Hydrologist III-V levels

- Ability to plan, coordinate, and/or oversee projects; and to oversee and/or supervise the work of others.