

**CLASS SPECIFICATION**  
**Hydrogeologist**

FLSA Status: Exempt  
Union Representation: Professional and Technical Employees (PTE)

**GENERAL PURPOSE**

Under general direction of the program manager, plans and implements projects and conducts complex analyses of policies, facilities and processes necessary for the protection, development and/or management of groundwater resources. Develops multi-objective and cross program solutions that achieve the City's regulatory requirements, program goals, and related watershed health or groundwater management goals; monitors activities and results against program goals, objectives, and regulatory requirements; leads and participates in efforts to build program support and participation with internal and external program or project stakeholders; and performs related duties as assigned.

**DISTINGUISHING CHARACTERISTICS**

The incumbent in this class is responsible for: planning, developing, implementing and directing strategies and actions that meet the City's regulatory requirements for protecting groundwater quality and utilizing groundwater resources as a drinking water source. Analyzes technical, geological and hydrological data to ensure the City's groundwater related activities and regulatory requirements are carried out in compliance with federal, state and local environmental protection laws and regulations and protect the city's groundwater supply, treatment processes and/or receiving streams. Incumbents serve in an advisory role in the formulation of the City's groundwater supply strategy, environmental policy and strategy, and develop and maintain effective working relationships with regulatory agencies; residential, commercial and industrial water users; environmental groups; and the local community in general. Responsibilities and assignments are broad in scope and require independent professional evaluation and judgment on technical and scientific issues that are complex and interpretive in nature.

**ESSENTIAL DUTIES AND RESPONSIBILITIES**

Any one position in this class may not perform all the duties listed below, nor do the listed examples of duties include all similar and related duties that may be assigned to this class.

1. Develops, recommends and implements coordinated, multi-objective compliance strategies and solutions that meet permit requirements in a manner that maximizes environmental benefit and addresses the underlying issues of the watershed; emphasizes solutions that utilize stormwater as a watershed resource, prevents groundwater impacts by managing stormwater at the surface, minimizes exposure of stormwater to pollutants, and treats stormwater prior to discharge into the ground.
2. Develops, recommends and implements coordinated multi-objective strategies for the development and protection of groundwater resources for municipal water supply in order to meet the city's emergency, seasonal augmentation and future water supply needs, and implements capital improvement projects to address such future water supply needs; identifies short and long term operations and maintenance needs of the City's groundwater supply system, and implements programs and capital improvement projects to address those needs; and identifies potential risks

to the quality and quantity of the city's municipal groundwater supply and implements programs or projects to identify, evaluate and mitigate such potential risks.

3. Serves as an expert program resource; assembles and evaluates technical data and information on facilities, environmental conditions and potential sources of stormwater pollutants draining into UIC's; utilize modeling and/or risk assessment techniques as necessary to evaluate the potential impacts of stormwater infiltration on groundwater; conducts studies to evaluate the feasibility and effectiveness of proposed or ongoing actions implemented to manage stormwater and protect groundwater.
4. Assists in development and implementation of program goals, strategies and priorities necessary to protect groundwater and meet permit requirements; creates and interprets program policies and associated regulations; develops and implements or recommends associated program policies and operating and administrative procedures.
5. Researches, develops and implements program or project plans to meet goals and service objectives; evaluates the effectiveness of program activities and makes or recommends program modifications; monitors conformance with permit requirements; prepares narrative and statistical program performance reports and recommendations.
6. Manages assigned programs or projects; develops an annual work program and calendar; establishes priorities for completion; plans, organizes, implements and evaluates work activities to meet established program or project goals and objectives; analyzes alternative methods or processes to meet program and service delivery goals, including conducting cost benefit and resource requirement analyses; ensures program compliance with all applicable City and outside agency requirements; ensures work is accomplished in a timely and fiscally responsible manner.
7. Makes recommendations in development of operating and capital improvement budgets; manages elements of program budget, features and metrics; identifies and recommends solutions to program resource needs and requirements.
8. Supervises staff or consultants (or is lead worker on specific tasks) in the development and implementation of projects designed to evaluate and demonstrate protection of groundwater; develops source control, pollution prevention and capital improvement actions necessary to reduce pollutant loads entering UIC's.
9. Supervises and participates in drafting requests for proposal, including defining scope of work; evaluates proposals and selects successful bidders; prepares required ordinances and other related reports; administers contracts for services and monitors work to ensure contract requirements are met.
10. Prepares and makes presentations to internal and external stakeholders with diverse backgrounds and skill sets; briefs Bureau management team regarding major groundwater issues, findings or concerns; makes recommendations to section manager regarding groundwater and UIC program issues and funding requirements; represents the bureau in meetings with outside agencies.
11. Provides training and technical assistance to City and other agency staff; Coordinates and integrates program services and activities with other bureaus and City offices; develops program partnerships, where applicable, with external agencies and organizations; leads, facilitates and manages development of agreements for multi-agency efforts.

12. Supervises and participates in program outreach and promotional activities, including development of information and outreach materials and planning and conducting outreach and educational programs and events.

## **MINIMUM QUALIFICATIONS**

### **Knowledge of:**

1. Advanced principles, theories, and fundamentals of groundwater and surface water hydrology, groundwater flow, and fate and transport of pollutants in saturated and unsaturated zones.
2. Data analysis and presentation, laboratory and testing practices, and groundwater or stormwater monitoring.
3. Groundwater and vadose zone modeling techniques and supporting computer software; other computer software applications related to work.
4. Local, state and federal laws and court decisions pertaining to the work.
5. Administrative principles and methods including goal setting, strategic planning and analysis, and program/project development and implementation.
6. Principles, practices, tools and techniques of program/project planning, scheduling, evaluation and management.
7. Principles and practices of budget preparation and administration.
8. Principles and practices of sound communication.

### **Ability to:**

1. Analyze difficult and complex technical and programmatic issues, evaluate alternatives and reach sound, logical, fact-based conclusions and recommendations.
2. Apply sound, creative problem solving techniques to resolve complex program issues and problems.
3. Exercise independent judgment and initiative within general policy guidelines.
4. Plan, organize and manage complex program elements to achieve program goals and objectives.
5. Develop and implement goals, objectives, policies, procedures, work standards and management practices.
6. Recommend and monitor project budgets and anticipate future budgetary needs.
7. Collect, evaluate and interpret appropriate and applicable data, either in statistical or narrative form
8. Prepare clear, concise, and comprehensive reports, correspondence and other documents appropriate to the audience.
9. Present conclusions and recommendations clearly, logically and persuasively to both internal and external program/project stakeholders.

10. Establish and maintain effective working relationships with those encountered in the course of the work.

**Training and Experience:**

A typical way of obtaining the knowledge, skills and abilities outlined above is graduation from a four-year college or university with a degree in hydrology, geology, or a closely related field; and four years of increasingly responsible groundwater or water resources science and management experience; or an equivalent combination of training and experience. Experience in a public agency is preferred.

**Licenses; Certificates; Special Requirements:**

Certified as a Registered Geologist in Oregon within 18 months of employment.

**PHYSICAL AND MENTAL DEMANDS**

Persons with disabilities may be able to perform the essential duties of this class with reasonable accommodation. Reasonable accommodation will be evaluated on an individual basis and depends, in part, on the specific requirements for the job, the limitations related to disability and the ability of the hiring bureau to accommodate the limitation.

---

**Class History:**

Adopted: 08-24-05 New class Hydrogeologist (6055) created.  
Revised: 08-30-05 Union representation changed from Nonrepresented to COPPEA. Job class number changed from 7611 to 6055.  
Revised: 08-01-06 Spec history revised to reflect pre-2001 COPPEA Study history. Spec formatting modified.  
June 2009 - Change Job Class number from 6055 to 30000459, due to system change.  
July 2017 – Updated union name from COPPEA to PTE