

Project Hydrogeologist

January 31st, 2025 Job Number: 2274

Job Type: Full-Time

Temp Contract Length:

Location: 150 Frederick St - Regional Admin Headquarters

Job Category: Environmental

Number of Positions: 1

Department: Hydrogeology 1

Division: Engineering and Environmental Services

Hours of Work: 35

Union: Management/Management Support

Grade: Management/Management Support Grade 05

Salary Range: \$83,556.20 - \$104,431.60 annually

Posting Date: January 28, 2025

About Us!

The Region of Waterloo is a thriving, diverse community committed to fostering opportunities for current and future generations. Home to over 674,000 residents and expected to grow to nearly one million by 2051. Guided by our [2023-2027 Strategic Plan](#), "Growing with Care," we focus on equity, inclusion, and sustainability. Our mission is to provide essential services that enhance the quality of life for all residents, while our core values emphasize caring for people and the land we share. Join us and be part of a team dedicated to making a meaningful difference in our community.

Dish with One Spoon Wampum:

Waterloo Region is part of the Dish with One Spoon wampum, a treaty guiding our commitment to:

- Recognizing our shared humanity and land
- Taking only what we need
- Leaving some for others
- Keeping the dish clean

This agreement underpins our vision, mission, and core values, and reinforces our dedication to meaningful reconciliation and equity.

The Role

Assists in the planning, design, management of the provision of hydrogeologic services for municipal groundwater supplies; provides technical expertise and advice on the quantity, quality and protection of the Region's municipal groundwater supply sources; and assists in the design and implementation of source water protection programs.

Duties/Responsibilities

- Works individually or as part of project teams regarding conceptual program and design studies, and development of risk management programs to meet regulations. Occasionally monitors the work of other Regional staff assigned to projects, including: Design & Construction project managers, inspectors, and surveyors; Water Services project managers and coordinators; and students. Administers contracts with consultants and contractors.
- Assists in the planning, design, and management of hydrogeologic investigations to define the quantity and quality of groundwater resources, sources of surface and groundwater contamination, and supply well rehabilitation/maintenance programs. Assists in the public consultation process.
- Reviews and assesses developer/consultant/external agency hydrogeologic submissions (e.g., development applications, risk assessments, watershed studies, environmental assessments) to determine gaps, defensibility, and long- and short-term impacts on the Region's municipal groundwater supply sources. Communicates adequacies and inadequacies with same to define and negotiate issues, terms of reference, technical requirements, studies, and resolutions. Defends professional scientific/technical opinion and position regarding same.
- Assists with vulnerability and activity risk assessments to meet legislative requirements, including delineation and scoring of protection areas, and assessing presence of activities creating water quality and quantity risks.
- Provides technical support in the development of policies and programs to reduce the risk that land use activities could impact municipal drinking water sources, including monitoring, incentive, inspection, and awareness programs.
- Assists in the preparation of submissions to the Ministry and conditions on supply well water taking permits. Compiles and interprets hydrogeologic data, and prepares documentation for submission, tracks progress and compliance requirements.
- Implements hydrogeologic water quantity and quality monitoring programs. Reviews supply well performance, determines monitoring locations, parameters and monitoring frequency, analyses and tracks results, and recommends construction of new monitoring infrastructure. Assists in negotiating land access agreements with land owners for related infrastructure and monitoring network.
- Assists in the implementation and maintenance of a data management system. Coordinates transfer of data and information from the hydrogeologic data management system to consultants and incorporation of project outcomes and monitoring data into same. Ensures proper handling of confidential and sensitive data.
- Assists in the implementation of a supply well maintenance program. Analyses and tracks well performance, and reviews tests and rehabilitation results.
- Assists in the coordination of responses to and acts as a witness in judicial appeals of permit to take water, official plan policies, and development applications.

Additional Duties/Responsibilities

- Researches, monitors, and evaluates hydrogeology and source water management and protection trends, legislation, practices, and technological developments.
- Identifies and estimates capital project costs for assigned projects and provides same for Senior Hydrogeologist for inclusion into ten-year capital program and operating budget. Provides recommendations for monitoring equipment purchases.
- Participates on project teams and working groups. Presents hydrogeologic information to divisions and departments. Occasionally makes presentations and provides advice to Planning and Works Committee and Council. Participates in the procurement process with Procurement.
- Has regular contact with engineering and hydrogeological consultants, Ministry staff, area municipalities, conservation authority, public utility officials, contractors, residents, and the public to exchange information.
- Performs related duties, as required.

Knowledge, Skills, and Abilities

- Knowledge of hydrogeology, geology, groundwater assessment numerical modelling and groundwater protection concepts, normally acquired through a Bachelors degree in Hydrogeology, Hydrogeological Engineering, Environmental Engineering, or equivalent discipline, plus related experience.
- Membership, or eligibility for membership in the Association of Professional Geoscientists, or Professional Engineers of Ontario with competence in professional geoscience.
- Knowledge of and ability to comply with policies, procedures, and related legislation (e.g., Environmental Protection Act, Ontario Water Resources Act, Clean Water Act, Lake Erie Source Protection Plan, Drinking Water Guidelines, Planning Act, health and safety, freedom of information).
- Analytical and problem solving skills to plan and develop projects and programs; research and prepare complex technical reports and project specifications.
- Human relations and communication skills to present technical reports and recommendations; conduct public presentations; present and promote objectives related to groundwater resource management and protection; communicate complex technical information; and participate as an effective team member.
- Ability to read and interpret technical hydrogeology reports, letters, memos, technical journals, and literature. Ability to write project specifications and scientific articles.
- Computer skills with ability to use software such as Microsoft Office, ArcGIS, Access, relational hydrogeologic databases and numeric modelling/visualization software.
- Ability to occasionally work evenings and weekends to attend public meetings.
- Ability to travel within and outside Waterloo Region.
- Ability to support and demonstrate the Region's values.

The Region of Waterloo is an equal opportunity employer committed to an inclusive, barrier-free recruitment and selection process. The Region of Waterloo invites applications from all qualified individuals. We are strongly committed to employment equity, diversity and inclusion in the workplace and encourage applications from Black, racialized/visible minorities, Indigenous/Aboriginal people, women, persons with disabilities, and 2SLGBTQIA+ persons.

The Region of Waterloo is committed to providing accommodations throughout the recruitment process. If you require an accommodation, please notify us and we will work with you to meet your needs. Alternate formats of this document are available upon request. Please contact the Service First Contact Centre at phone number (519) 575-4400, TTY number (519-575-4608) to request an alternate format.