

Senior Hydrogeologist

[Senior Hydrogeologist Job Details | theregio03](#)

Job Number: 2994
Job Type: Full-Time
Location: 150 Frederick St - Regional Admin Headquarters
Job Category: Other
Number of Positions: 1
Department: Hydrogeology 2
Division: Engineering and Environmental Services
Hours of Work: 35
Union: Management/Management Support
Grade: Management/Management Support Grade 08
Salary Range: \$112,330.40 - \$140,413.00 annually
Posting Date: June 13, 2025
Closing Date: June 19, 2025

Internal employees transferring from a bargaining unit to another bargaining unit or a Management/Management Support position will not be eligible for the payout of unused sick leave credits upon resignation, termination, or retirement, as per the collective agreement or HR Policy III-16 (Sick Leave). For more details please contact the Benefit Coordinator via email BenefitsHRC@regionofwaterloo.ca.

About Us!

The Region of Waterloo is a thriving, diverse community committed to fostering opportunities for current and future generations. Waterloo Region is part of the Dish with One Spoon wampum, a treaty guiding our commitment to:

- Taking only what we need
- Leaving some for others
- Keeping the dish clean

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

Waterloo Region is 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 prioritize homes for all, climate aligned growth, equitable services and opportunities and a resilient and future ready organization. Our mission is to provide essential services that enhance the quality of life for all residents, while our core value emphasizes 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.

The Role

Plans, designs, manages, and authorizes hydrogeologic services for municipal groundwater, including large scale, high profile, complex, and politically sensitive projects. Provides technical expertise and advice on the quantity, quality, and protection of municipal groundwater supply sources. Leads the design, and assists in the implementation of source water protection strategies, work plans, and programs.

Duties/Responsibilities

- Supervises Hydrogeologists, Project Hydrogeologists, a Water Resources Technologist, an Information Analyst, and students. Administers contracts with consultants and contractors.
- Plans, designs, manages, and authorizes hydrogeologic investigations, environmental assessments, and supply well replacement projects to define the quantity and quality of groundwater resources, sources of surface and groundwater contamination, expand and upgrade municipal groundwater supply sources, and meet legislative requirements. Designs and implements related public consultation.
- Plans, designs, and manages databases and systems that support internal and external workflows and programs.
- Assists in the planning and implementation of master plans and departmental, divisional, and group strategies. Leads and/or provides technical support to internal and external working groups.
- Conceptualizes, designs, and implements water budget studies and water quantity risk assessments, groundwater vulnerability assessments, and activity risk assessments to meet legislative requirements.
- Oversees the application process for obtaining regulatory approval of water taking permits. Assesses adequacy of permit conditions and ensures compliance.
- Coordinates responses to, and acts as a witness in, judicial appeals of permits to take water, official plan policies, development applications, and environmental assessments.
- Supervises the implementation and maintenance of hydrogeological data management systems and computer modelling systems. Researches and selects software, and completes software testing, configuration, data input, verification, visualization/dash-boarding, and reporting.
- Supervises the supply well maintenance and rehabilitation program. Analyzes and tracks well performance, reviews well pumping and diagnostic tests and rehabilitation results, and recommends additional actions and wells for maintenance/rehabilitation. Supervises the planning and installation of electronic pressure transducers in supply wells and monitoring wells. Advises operations staff on pumping rates, and well and aquifer performance. Makes recommendations for supply well replacement and decommissioning.
- Supervises hydrogeologic water quantity and quality monitoring programs. Reviews supply well performance; determines monitoring locations, parameters, and monitoring frequency; analyzes and tracks results; and recommends construction of new monitoring infrastructure and changes to water supply well operating strategies. Negotiates land access agreements with landowners for the infrastructure and monitoring network.
- Identifies study requirements, develops guidance documents, provides technical advice/recommendations, and prepares technical reviews to assess impact of land use activities on groundwater, including conditions of approval on development applications, contamination investigations, drought and spills response, and as part of infrastructure projects.
- Assists in the planning and implementation of public education and awareness initiatives, including attending open houses and conducting presentations.
- Assists in developing policies and programs to reduce risks and impacts of land use activities on municipal drinking water sources, such as monitoring, incentive, inspection, and awareness programs.
- Leads studies and research initiatives with academic institutions and other organizations. Researches, monitors, and evaluates trends, legislation, practices, and technology.
- Provides recommendations into master plans, strategies, annual work plans, and the 10-year capital program and operating budgets. Has signing authority up to defined limit and approves purchase requisitions and payments to contractors and consultants.

Additional Duties/Responsibilities

- Provides technical advice, guidance documents, and project recommendations to other departments, divisions, and external agencies. Provides technical advice to operations staff as it relates to sustainable and maximum supply well pumping rates.
- Discusses water quality data and sampling with operations and enforcement managers. Discusses well construction projects with project managers. Discusses appeals and compliance issues with Legal Services. Participates in the procurement process.
- Shares information and negotiates programs and joint activities with contractors, consultants, conservation authority, municipal staff, university faculty, and Ministry staff.
- Performs related duties as required.

Knowledge, Skills, and Abilities

- Knowledge of hydrogeology, geology, geophysics, geochemistry, groundwater assessment, and mathematical modelling, normally acquired through a Masters degree in Hydrogeology or equivalent education, plus progressively responsible related experience.
- Must have current registration to practice professional geoscience with the Professional Geoscientists of Ontario, or hold a license under the Professional Engineers Act to prove competence to practice professional geoscience.
- Knowledge of and ability to comply with policies, procedures, collective agreements, 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, problem solving, and continuous improvement skills.
- Leadership skills to supervise, mentor, coach, train, develop, motivate, and support staff.
- Human relations and communication skills to present technical reports and recommendations internally and externally; conduct public presentations to technical and non-technical audiences; present and promote objectives for groundwater resource management and protection; communicate complex technical information and negotiate agreements; represent the Region on committees and working/advisory groups; and participate as an effective and accountable team member.
- Ability to read and interpret technical hydrogeology reports, engineering reports, letters, memos, technical journals, literature, equipment, and techniques. Ability to write council reports, engineering reports, technical hydrogeology reports, project specifications, letters, memos, and scientific articles.
- Computer skills with ability to use software such as Microsoft Office, Access, ArcGIS, groundwater databases, geodatabases, and numeric modelling/visualization software.
- Ability to adjust schedule occasionally to attend public open houses, committee/advisory group meetings, and field projects.
- Ability to support the Region's Strategic Plan.
- Ability to travel within and outside Waterloo Region.
- Ability to support and demonstrate the Region's values.

We invite internal applicants to APPLY ONLINE through the HR Portal by 11:59 p.m., by the closing date.

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The Region of Waterloo is an equal opportunity employer dedicated to an inclusive and accessible recruitment process. We actively encourage applications from diverse groups, including Black, racialized, First Nations, Métis, Inuit individuals, women, people with disabilities, and 2SLGBTQIA+ persons, and are committed to equity, diversity, accessibility, and inclusion in the workplace.

For an accommodation request, please contact us and we will work with you to meet your accessibility needs. Alternate formats of this document are available upon request. Please contact the Service First Contact Centre at phone number (519) 575-4400 to request an alternate format, or email talentmanagement@regionofwaterloo.ca.

Please note: candidates will be provided an update on their application. Please check your spam or junk folder occasionally as some candidates have noticed our emails in those folders (Gmail and Hotmail in particular).