



## **Internal/External Job Posting**

### **Regular Full Time Non Union Position**

### **Water Resources Engineer**

The Grand River Conservation Authority (GRCA) has an international reputation for excellence in managing the natural resources of the largest inland river system in southern Ontario. Encompassing approximately 6,800 square kilometers, the Grand River watershed has a population of almost one million people in 39 municipalities and two First Nations. Designated as a Canadian Heritage River, the Grand River and its major tributaries boast many outstanding human heritage features and excellent recreational opportunities. The GRCA is committed to environmental protection by delivering services that ensure the well-being of the environment and its inhabitants. The Grand River Conservation Authority is responsible for issuing flood warnings to municipalities and operating a flood forecasting and warning system. Extensive water control infrastructure including dams, dikes, and monitoring gauges is used to reduce flooding and manage water throughout the year to achieve strategic goals of reducing flood damages and improving the health of the watershed.

#### **General Accountabilities**

Reporting to the Senior Engineer – Flood Management, the Water Resources Engineer is responsible for completing hydrologic investigations and preparing technical reports related to water supply and water quantity management. This position is responsible for the development and maintenance of watershed management surface water information databases and analytical tools. This position assists with planning, implementation and maintenance of the gauge monitoring network owned and operated by GRCA.

The Water Resources Engineer will also act as a Senior Flood Operations Officer and supervises the position of Water Resources Technician and Water Resources Technician Assistant (student).

#### **Specific Accountabilities**

1. Information Development and Maintenance: Work with other technical staff to develop, maintain and integrate watershed information bases for ground water, surface water and water quality needed to support analytical tools including flood frequency analysis and preparation of monthly watershed condition reports.
2. Working with the Senior Engineer-Flood Management, this position is responsible for planning of the hydrometric and climate data network and will supervise the collection, management and analysis of hydrological, climate, hydrometric, reservoir data and stream flow gauge rating curves, in support of water management operations including flood forecasting and warning, water supply, low water and reservoir management.
3. Working with the Senior Engineer-Flood Management, this position supports the maintenance, enhancement and long range planning of the flood forecasting and data

collection systems; evaluation of electronic equipment requirements pertinent to water management control system needs.

4. Water Quantity Program Development: Assist the Senior Engineer-Flood Management in the development and maintenance of the Water Quantity Program. Carry out technical analysis in support of the Water Quantity Program, specifically Low Water Response, Permit to Take Water and identified water quantity issue areas.
5. Surface and Groundwater Modeling: Take a lead role in developing, implementing and enhancing analytical tools required to support surface and groundwater investigations. With input from engineering, groundwater and water quality groups, develop methodologies to characterize surface/ groundwater interactions, and integrate watershed modeling.
6. Liaison with Watershed Partners: Provide technical support to the Ontario Low Water Response Program in the Grand River Watershed. Liaise with water use sectors stakeholders to form a cohesive response to low water conditions.
7. Represent the Grand River Conservation Authority on related provincial committees including Ontario Hydrometric Network and provide hydro-technical support to Climate Change Working Groups.
8. Act as a Senior Flood Operations Officer in the GRCA Flood Forecasting and Warning System responsible for technical response including reservoir operations, river flow monitoring and issuing flood messages in the on-call rotation. This responsibility would be enacted subject to an appropriate period of training and experience.
9. Provide support in the development and maintenance of department plans, reports and projects.

### **Technical Accountabilities**

1. University degree in Civil Engineering with a specialization in, or experience with, water resources.
2. Eligible for License to practice Engineering in Ontario.
3. A minimum of six years related working experience.
4. Thorough understanding of flood forecasting and hydrologic modeling techniques.
5. Knowledge and experience in hydrology, open channel hydraulics, surveying and hydrometric data collection.
6. Excellent written communication skills with demonstrated ability to prepare correspondence, technical reports, board reports and other documents. Demonstrated analytical and research skills are also required.
7. Excellent interpersonal and oral communication skills to supervise staff and work effectively with multi-disciplinary team.
8. Thorough understanding of water budget methods, hydrologic techniques and experience with groundwater computer models is an asset.
9. Must keep up-to-date on the best available technology for hydrologic modeling tools, water budget methods and water resource data collection, storage, analysis and reporting.
10. Demonstrated project management skills administering technical studies an asset.
11. Working knowledge of data collection systems and data quality assurance methods.
12. Working knowledge of HEC-HMS, GAWSER, WISKI SODA, MIKE-SHE, HEC-RAS, ArcGIS, database and engineering related software.
13. Valid Ontario driver's license.

## **Technical Competencies and Abilities:**

### **Professional Judgement**

Demonstrated ability in the area of critical thinking, analysis and assessment of implications and various perspectives, making connections of underlying issues and the ownership of the outcome. Sound judgment based on experience and expertise resulting in fair, efficient and effective decision making, bringing clarity and resolution to complex and ambiguous situations. Ability to carry out skillful negotiations and interest based conflict resolution. Appropriately balances the interests of both internal and external stakeholders.

### **Integrity/Ethics**

The willingness to hold oneself and others accountable for acting in ways that are consistent with stated values, principles and professional standards. Maintaining impartiality, objectivity, confidentiality and fairness when dealing with co-workers, professional colleagues and stakeholders, and the general public.

### **Goal/Action Oriented**

Does not shy away from challenges and seldom gives up, especially in the face of resistance, setbacks or change. Seizes opportunities; takes initiative and is self-motivated. Organizes work, plans activities and sets priorities in a manner that meets competing needs and timely resolution of matters. Maintains high level of productivity and self-direction working independently or in collaboration. Demonstrated ability to work under pressure and manage multiple tasks simultaneously with changing priorities.

### **Team Work**

Interacts with people respectfully and effectively. Able and willing to share and receive information. The ability to gather facts and pertinent information to gain an understanding of the problem at hand and the perspective of others before drawing conclusions, taking action or resolving conflict. It involves active listening and comprehension of verbal and non-verbal signals to enhance understanding. Demonstrated ability build collaborative partnerships.

### **Customer Focus**

Dedicated to meeting the expectations and requirements of internal and external customers. Exceptional communication and negotiation skills to create, maintain and enhance relations with municipal partners, stakeholders, etc.

The GRCA strives to provide a collaborative and respectful work environment. We value the health and well-being of our employees and prioritizes Health and Safety in our workplace. We offer a comprehensive benefits package including health, dental, vision care, life and disability insurance; Participation in the OMERS defined benefit pension plan, with generous employer-matching and a pass for free entry into GRCA conservation areas. We currently provide an option to work a flexible schedule and/or hybrid to balance the demands of both work and home.

The annual salary range for this position is Job Level I \$84,950 to \$103,355 /35 hours per week

Approximate Start Date: April 2023

To Apply: Please send a resume and covering letter to [careers@grandriver.ca](mailto:careers@grandriver.ca) in MS Word or PDF format and quote "Water Resources Engineer" in the subject line.

Deadline for Applications: 4:00 pm March 10, 2023

We thank you for your interest, however only candidates under consideration will be contacted.

GRCA is an equal opportunity employer. We are committed to inclusive, barrier-free recruitment and selection processes and work environments. If you require any accessibility accommodations at any point during the application and hiring process, please contact us. Any information received relating to accommodation will be addressed confidentially.

Pursuant to section 29(2) of the Municipal Freedom of Information and Protection of Individual Privacy Act R.S.O. 1990, C. M.56 the personal information contained on this form is collected under the legal authority of the Conservation Authorities Act, R.S.O. 1990, chapter C.27 and is used for recruitment purposes. Questions about the collection of personal information should be directed to the Manager of Human Resources, Grand River Conservation Authority, PO Box 729, 400 Clyde Road, Cambridge, Ontario N1R 5W6; 519-621-2761.