



Make working for
The City work for you.



Water Resources Engineer - Water Demand Forecasting and Analytics

If you are committed to public service, enjoy collaborating with others, share our values and have a desire to learn and grow, join [The City of Calgary](#). City employees deliver the services, run the programs and operate the facilities which make a difference in our community. We support work-life balance, promote physical and psychological safety, and offer competitive wages, pensions, and [benefits](#). Together we make Calgary a great place to make a living, a great place to make a life.

The City is committed to fostering a respectful, inclusive and equitable workplace which is representative of the community we serve. We welcome those who have demonstrated a commitment to upholding the values of equity, diversity, inclusion, anti-racism and reconciliation. Applications are encouraged from members of groups that are historically disadvantaged and underrepresented. Accommodations are available during the hiring process, upon request.

As a Water Resources Engineer in the Environmental Analysis Team, you will be responsible for providing expertise to support municipal water demand forecasting, water efficiency planning, and operational decision making. This role applies engineering judgment, data analytics, and machine learning supported models to inform drought management, capital planning, water efficiency strategies, and day to day utility operations. The position also provides technical support during emergency and system disruption events. Primary duties include:

- Develop and maintain short- and long-term water demand forecasts.
- Apply engineering judgement to interpret and improve data driven and machine learning supported forecasting models.
- Support drought planning, water supply reliability assessments, climate scenario analysis, and water efficiency planning.
- Analyze water distribution systems to support operations, reliability, and capital planning.
- Integrate demand forecasts into water supply planning, demand management, water efficiency initiatives, and investment decisions.
- Conduct water demand economic analysis including rate and revenue forecasting.
- Work with Supervisory Control and Data Acquisition (SCADA) and Advanced Metering Infrastructure (AMI) metering, billing, and climate datasets to support modeling and analysis.
- Provide real time analytical support during emergency and critical system events.
- Prepare technical reports, dashboards, and briefings for decision makers.
- Collaborate with engineering, operations, planning, finance, sustainability, and water efficiency teams.

Qualifications

- A degree in Civil or Environmental Systems Engineering and at least 4 years of relevant professional engineering experience obtained after receiving your P. Eng. Designation and a current licensure as a Professional Engineer with the Association of Professional Engineers and Geoscientists of Alberta (APEGA) complete with practicing status OR licensure and practicing status by the first day of work. [Click here for more details.](#)
- Equivalent combinations of education and experience may be considered.
- Experience using water demand forecast modeling tools is essential: GOLDSIM, hydrotechnical analysis and statistical tools (Python, R, etc.).
- Ability to learn and automate modeling workflows and integrate real time operational and metering data into forecasting and analytical models.
- Knowledge of drought planning, demand management, water efficiency planning, and municipal water operations.
- You are a strong communicator with excellent analytical, presentation, and project management skills, along with the ability to influence people, build relationships, and manage time efficiently.

Pre-employment Requirements

- Successful applicants must provide proof of qualifications.

Workstyle

- This position may be eligible to work from home for at least part of the time as one of several flexible work options available to City employees. These arrangements depend on the operational requirements of the role, employee suitability, and are subject to change based on operational needs and corporate direction.

Note: Applicants may be considered for current or future opportunities within Infrastructure Services, Operational Services, or Climate & Environment, based on qualifications and evolving organizational needs.

Union: Exempt	Business Unit: Climate and Environment
Position Type: 1 Permanent	Location: 625 25 Avenue SE
Compensation: Level P3E \$115,464 - 144,330 per annum	Days of Work: This position works a 5 day work week earning 1 day off in a 3 week cycle.
Hours of work: Standard 35 hour work week	Apply By: March 30, 2026
Audience: Internal/External	Job ID #: 313936

Apply online at www.calgary.ca/careers