
Position Title: Engineer, Flow Forecasting & Operations Planning

Division: Technical Services

Location: Moose Jaw, SK

Salary: \$6,402 - \$8,002 monthly (Management Class 5)

Competition #: WSA-63-2018/19

Apply by: 5:00 PM November 28, 2018

Note: Applicants with the required education but lesser experience are encouraged to apply as they may be considered for an Engineer-in-Training, Flow Forecasting & Operations Planning position at a Management Class 3 (\$5,198 - \$6,498). Applicants with the required education and 10 year or more of directly related experience are encouraged to apply as they may be considered for a Senior Engineer, Flow Forecasting & Operations Planning position at a Management Class 6 (\$6,914 - \$8,643).

Short Description:

Reporting to the Manager, Flow Forecasting & Operations Planning, an employee in this job will provide professional engineering expertise for forecasting stream flows for internal and external use, and for operation planning of major river systems requiring the real-time analysis, interpretation and distribution of forecasting and operations management information. This employee will also provide support to associated Water Security Agency (WSA) communication activities.

Key Duties and Responsibilities:

- 30% Analyze and/or assist in the analysis and interpretation of hydrometric and meteorologic data; assist in and/or prepare and distribute stream flow and water supply forecasts; assist in drafting flood alerts and other advisories; and support communications functions related to water supply, water levels, stream flow forecasts and structure operations.
- 30% Assist in the operations planning of WSA's water management infrastructure and review of operation plans of surface water infrastructure projects owned by others including SaskPower and the Government of Canada.
- 30% Participate in the investigation of, and/or the development and maintenance of in-house computerized applications for processing and assessing near real-time hydrometric and meteorological data, precipitation-runoff modelling, and hydrologic and hydraulic flow routing; assist in developing database programs required for the hydrometric program; and provide assistance and support in the operations of WSA's Forecast Centre.
- 5% Assist with the preparation and review of reservoir operation manuals.
- 5% Participate as a member on technical committees as required; participate in the investigation of scientific and technological innovations in the field of hydrologic forecasting including monitoring best management practices in engineering hydrology; and undertake other work as required.

Educational and Experience Requirements and Technical Qualifications:

Degree in Civil Engineering or a similar engineering discipline, a licence to practice professional engineering from the Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS) and 4 years of related experience.

Amount of experience typically required in-this-job to become fully competent assuming both the education level required and the prior experiences are present – 2 years.

Job Complexities/Challenges:

Know How:

This employee requires a sound understanding of professional engineering theory and principles and their application in a work environment. This employee must be aware of other activities within

JOB BULLETIN

Out-of-Scope

the work area and organize their work accordingly. Working with and influencing others in order to reach agreement involves employing tact and discretion; this is especially true when dealing with landowners and other project stakeholders. Most issues are based on common goals and interests.

This employee will provide professional engineering expertise in developing accurate and reliable flow and water level forecasts and in developing appropriate operation plans utilizing, at times, sophisticated computer models. There is a requirement to stay abreast of technological innovation and new developments in the engineering field.

Problem Solving:

All work is conducted in accordance with sound engineering principles and practices. Most engineering problems are solved by employing a variety of standard engineering methods and techniques. Assistance is usually available and normally provided when unique or unusual problems are encountered.

Accountability:

Supervision is provided to this employee but there is an expectation this employee will be able to work independently. Assignments are normally accompanied or covered by instructions with many of the details left to the discretion of the employee. This employee may be required to ensure the quality and timeliness of work performed by consultants and other technical experts without having direct authority over them. This employee must undertake his/her work in accordance with *The Engineering and Geoscience Professions Act* and *The Engineering and Geoscience Professions Regulatory Bylaws*.

Working Conditions:

Work is normally performed in an office environment. Some travel is required which results in occasional stays away from headquarters. During runoff events there is often a continual need to work outside normal business hours. There is exposure to high work load volumes, frequent interruptions and tight assignment deadlines during spring runoff and other high flow periods. Work is often undertaken in an environment where decisions are time critical and made with limited information.

Accuracy and detail in the completion of work is critical. At times, this employee may be exposed to angry clients and/or sensitive media inquiries.

To Apply:

Please submit a cover letter quoting competition number above and a detailed résumé to:

Human Resources
Corporate Services
4th Floor, 111 Fairford Street East
Moose Jaw, Saskatchewan S6H 7X9
Fax: 306-694-3991
Email: hr@wsask.ca (Preferred method)

We would like to thank all applicants for their interest; however, only those selected for an interview will be contacted. You will be evaluated on the relative degree to which you meet the knowledge, skills, and abilities related to the position assignment.

The Water Security Agency is an Employment Equity Employer and is committed to creating a respectful, diverse working environment.
