Recruiting Hydrogeologists, Watershed Scientists, and Geospatial Analysts at Alberta Environment & Parks

Alberta Environment & Parks has openings for up to twelve positions, from experienced hires to recent graduates, to work with the Science Branch within the Environmental Monitoring and Science Division. The successful candidates will participate in planning, analyzing and reporting on environmental monitoring in Alberta, primarily surface and groundwater monitoring. Compensation will be based on the successful candidate’s education and experience.

**Employment Duration:** Up to 18 months. Contingent upon satisfactory performance.

**Location:** Edmonton or Calgary

**Application Closing Date:** Tuesday August 8, 2017

**How to Apply:** Interested candidates should send a cover letter and CV with the position title and number in the subject line “Application for *insert position title and number here*” to: Cynthia.McClain@gov.ab.ca. For example, if one is applying for the senior hydrogeologist position the subject line would be “Application for Senior Hydrogeologist 17-001”. Applicants should also identify the position title and number applied for in their cover letter. Only those selected for interviews will be contacted.

**Position Descriptions/Qualifications:**

**Senior Hydrogeologist (17-001)**

- Lead critical review of current groundwater quality and quantity monitoring and research programs in Alberta; assess their relevance to government information needs.
- Lead development of long-term, provincial-scale groundwater monitoring programs focused on key scientific questions related to anthropogenic stressors, climate variability, and surface/groundwater interaction.
- Contribute to peer-reviewed manuscripts and other reporting products related to the work above in collaboration with other EMSD staff.
- Participate in field sampling, and document standard operating procedures as required.
- Knowledge of Alberta hydrostratigraphy (including Oil Sands region), sources of provincial groundwater data, Alberta’s acts, regulations and policies and frameworks related to groundwater.
- Expertise in (geo)statistical methods for large datasets.
- Familiarity with groundwater quantity assessments, provincial and Oil Sands Area hydrostratigraphy, and groundwater modeling, including software such as FEFLOW or MODFLOW.
**Hydrogeologist (17-002)**

- Critically review current provincial groundwater monitoring, and contribute to development of long-term groundwater monitoring plans.
- Analyze and evaluate existing groundwater data in support of evaluation of trends in groundwater quantity and quality in Alberta.
- Lead writing of peer-reviewed manuscripts and other reporting products related to the work above in collaboration with other EMSD staff.
- Participate in field sampling as appropriate and as required and necessary.
- Knowledge of Alberta and Oil Sands Area hydrostratigraphy, familiarity with time-series statistical methods, ArcGIS, R, Microsoft Access, KISTERS products (WISKI, KiWQM), AEP’s Water Data System (WDS), FEFLOW, MODFLOW.

**Groundwater Analyst (17-003)**

- Compile, organize, manage, and evaluate provincial groundwater quality and water level data in support of development of long-term groundwater monitoring plans.
- Analyze and visualize provincial groundwater monitoring data in support of evaluation of trends in groundwater quantity and quality in Alberta.
- Familiarity with Microsoft Excel and Access, KISTERS products (WISKI, KiWQM), AEP’s Water Data System (WDS), R.

**Watershed Scientist (17-004)**

- Lead evaluation and reporting surface water monitoring programs in Alberta, including water quality and quantity data, and near-real time monitoring using data sondes from the Athabasca River, Peace River, and North Saskatchewan River mainstem and tributaries.
- Participate in field sampling as appropriate and as required and necessary.
- Contribute to peer-reviewed manuscripts and other reporting products related to the work above in collaboration with other EMSD staff.
- Review past monitoring activities within North Saskatchewan River and lead the development of a Tributary Monitoring Network for the watershed.

**Watershed Science Program Support (17-005)**

- Provide support to the Watershed Sciences Director and the Watershed Sciences team with respect to all aspects of program planning, delivery, and deliverables.
- Assist data management in compiling monitoring meta-data and enhancing system capabilities.
- Familiarity with environmental science and with environmental monitoring programs strongly desired.
- Manage contracts with analytical laboratories, certify invoices and track budget expenditures, help complete work planning documents, provide assistance to team scientists with administrative duties.
• Familiarity with Microsoft Excel and Word desired.
• Attention to detail, strong organization and communication skills.

**Geospatial Analyst (17-006)**

• Design, create and deliver geospatial products to support environmental monitoring programs including surface water, groundwater, biodiversity and ecosystem health.
• Key tasks include cartography, database design and management, programming, image classification and spatial analysis.
• Proficiency with the use of ESRI software for geographic information systems is essential. Knowledge of methods to acquire, process, and interpret remotely sensed imagery is desirable.
• Contribute to evidence-based decision making by publishing scientific papers on the application of spatial data to environmental monitoring and management systems.