

## Update

Ministry

### Describe: Basic Job Details

**Position**

Position ID

Position Name (30 characters)

Current Class

Job Focus

Supervisory Level

Agency (ministry) code

Cost Centre

Program Code: (enter if required)

**Employee**

Employee Name (or Vacant)

**Organizational Structure**

Division, Branch/Unit

 Current organizational chart attached?

Supervisor's Position ID

Supervisor's Position Name (30 characters)

Supervisor's Current Class

### Design: Identify Job Duties and Value

**Changes Since Last Reviewed**

Date yyyy-mm-dd

Responsibilities Added:

Responsibilities Removed:

**Job Purpose and Organizational Context**

Why the job exists:

also provided for provincial government policy development related to irrigation water management, land resource management, and surface and ground water quality. Alberta's agriculture industry depends on the continuing excellent quality of its surface and ground water for human and livestock consumption, safe crop production, and protection of aquatic ecosystems. The position will identify and assess emerging environmental threats to water quality, facilitate and support development and evaluation of innovative management systems to mitigate the risks, and position Alberta's agriculture industry to manage threats. The incumbent works with industry partners and other government agencies to support and facilitate scientific studies to develop, adapt, and demonstrate innovative irrigation management practices that increase on-farm water use efficiency, enhance irrigation water productivity and quality, and facilitate adaptation of new technologies. These projects facilitate the growth of the agriculture and agri-food industry and enhance environmental stewardship.

## Responsibilities

Job outcomes (4-6 core results), and for each outcome, 4-6 corresponding activities:

### **1. Provide leadership, direction, and technical expertise to support employees in the Natural Resource Innovation Section to conduct provincial government policy development related to water and land resource management.**

- Manage staff and resources within the Natural Resource Innovation Section at Lethbridge, Edmonton, and Brooks.
- Complete action requests and other administrative functions on time and in compliance with Ministry and Government of Alberta policy and procedures.
- Develop strategic and operational plans that are relevant and responsive to meet industry and stakeholder needs and meet the needs of the Minister.
- Lead initiatives which result in and support enhanced policy development, facilitate the economic growth, productivity, and resilience of the agriculture and agri-food industry and enhance environmental stewardship.
- Support cross-ministry initiatives in a timely and effective manner.
- Develop and assess innovative agricultural tools and technologies and provide leadership and technical expertise to support economic growth, productivity, and resilience in Alberta's agriculture industry.
- Lead implementation of the Sustainable Canadian Agricultural Partnership Water Program On-farm Irrigation Efficiency stream to enhance energy and water-use efficiencies.
- Contribute to development of a new five-year Agriculture Policy Framework, after the Sustainable Canadian Agricultural Partnership ends, and advocate for continuation of an Irrigation Efficiency Program in the suite of programs.
- Support implementation of the irrigation industry Conservation, Efficiency and Productivity sector plan under the Water for Life Strategy and support implementation of the Alberta Irrigation Strategy.
- Provide leadership and technical expertise to support implementation of the Land Use Framework (South Saskatchewan Regional Plan) and cumulative effects management (Environment and Protected Areas).
- Ensure agricultural strategies, policies, and initiatives are aligned with Government of Alberta policies and priorities.

### **2. Develop and promote innovative irrigation management technologies and practices to increase water application and energy use efficiencies of irrigation systems.**

- Promote increased use of soil moisture or evapotranspiration-based methods to enhance on-farm water use efficiency and optimize beneficial use of water.
- Develop crop coefficients (daily water use curves) and irrigation management practices for new varieties of traditional crops and for new/emerging crops.
- Work with post-secondary institutions and industry partners to support and facilitate applied research for emerging irrigation technologies to optimize yield and crop quality and increase water-use efficiency for new varieties of traditional and for new/emerging crops.

### **3. Support and facilitate implementation of water, soil, air, and biodiversity beneficial management practices and targeted applied research for enhanced agricultural productivity.**

- Maintain a list of accredited land classification consultants and a database of Level II land classification for irrigation reports prepared by private consultants.
- Provide technical expertise to Irrigation Council regarding land classification standards for irrigation to ensure appropriate use of the province's valuable land and water resources.
- Identify and assess emerging environmental threats to water quality, facilitate and support development and evaluation of innovative management systems to mitigate the risks, and position Alberta's agriculture industry to manage threats.
- Provide leadership and technical expertise to industry groups and research organizations to support them in planning for applied research to evaluate new technologies and management practices, to disseminate technology and innovation information that will enhance sustainable growth of the irrigation industry, and to measure adoption of these technologies and practices.
- Provide leadership and coaching to Section professional staff to support and facilitate applied research and demonstration projects to adapt new irrigation technologies, develop appropriate irrigation management practices, and evaluate best management practices for enhancement of surface and ground water quality.
- Provide support and oversight to Section professional and technical staff to prepare presentations, technical reports, journal papers, fact sheets, brochures, maps, and other educational materials to disseminate information on appropriate irrigation management practices, beneficial management practices, and geographic information system analyses.
- Provide technical expertise and complete the transfer of equipment to Lethbridge College for the research and demonstration farm.
- Represent Agriculture and Irrigation as a board member of the Riparian Management Society (Cows and Fish).

### **4. Maintain a safe and positive work environment.**

- Work with Agriculture and Agri-Food Canada to manage facilities in the provincial portion of the Lethbridge Research and Development Centre. This includes remaining the key contact with federal counterparts, maintaining a list of staff working in the facility, and ensuring that relevant information is disseminated to the appropriate people such as Government of Alberta facilities representatives, provincial tenants of the Lethbridge Research and Development Centre, and federal contacts.
- Provide leadership for the Joint Worksite Health and Safety Committee at the Lethbridge Research and Development Centre. This includes active participation in office building and shop inspections and attendance at quarterly meetings.

- Complete duties as the Facility Emergency Response Coordinator for the Lethbridge Research and Development Centre, which includes ensuring that the Facility Emergency Response Plan remains up-to-date and in compliance with Government of Alberta policies and procedures, planning emergency training exercises, and responding to emergency situations.
- Ensure that new provincial tenants are aware of emergency procedures and their responsibilities to contribute to a safe and healthy workplace.
- Prepare hazard assessments and safe work procedures for duties relevant to Section staff.
- Provide employees with the equipment, computers, software, vehicles, communication tools, and technologies essential to do their work effectively and safely.
- Provide timely recognition for positive employee performance and contribute to positive workplace initiatives.
- Promote respect in the workplace, diversity and inclusion, and the Government of Alberta People Strategy.

**Problem Solving**

Typical problems solved:

Limitations of available data/research to support policy positions;

Types of guidance available for problem solving:

Direct or indirect impacts of decisions:

Robustness of policy options provided to executive leadership and elected officials

**Key Relationships**

Major stakeholders and purpose of interactions:

Key partners include other Agriculture and Irrigation staff, other Government of Alberta ministries, universities, Lethbridge College, Agriculture and Agri-Food Canada, Environment and Climate Change Canada, irrigation districts, and Alberta's industry commodity groups. The position supports the Water for Life goal that water is managed effectively to support competitive, sustainable economic development in Alberta. This position supports the Water Act, the Irrigation Districts Act, the Alberta Land Stewardship Act, and Irrigation Council.

**Required Education, Experience and Technical Competencies**

Education Level	Focus/Major	2nd Major/Minor if applicable	Designation
Bachelor's Degree (4 year)	Science		Other

If other, specify:

Designation as P.Ag. (Professional Agrologist) is an asset

Job-specific experience, technical competencies, certification and/or training:

**Behavioral Competencies**

Pick 4-5 representative behavioral competencies and their level.

Competency	Level					Level Definition	Examples of how this level best represents the job
	A	B	C	D	E		
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		

