

Update

Ministry
Agriculture and Irrigation

Describe: Basic Job Details

Position

Position ID
Position Name (30 characters)
Agricultural Water Specialist

Current Class
Technologies 6

Job Focus
Supervisory Level
Operations/Program
00 - No Supervision

Agency (ministry) code
Cost Centre
Program Code: (enter if required)

Employee

Employee Name (or Vacant)

Organizational Structure

Division, Branch/Unit
PA/NRMB/FWS
Current organizational chart attached?

Supervisor's Position ID
Supervisor's Position Name (30 characters)
Supervisor's Current Class
Director, Farm Water Supply

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:
This position provides technical support to agricultural producers and groups relative to on-farm water issues specific to the Peace region but may also be required to provide a provincial perspective on on-farm water topics. The position provides support to facilitate the growth of a sustainable, competitive agriculture industry by addressing farm water issues including supplies, conservation, drought and variable

climate impacts, water quality, treatment, water reuse and protection. This position helps to ensure safe and stable on-farm water supplies (surface and subsurface) for livestock and domestic use. As a member of the Farm Water Supply team, the Agricultural Water Specialist actively participates in and may be required to lead projects relating to technology transfer, tool development and program development and delivery. The position is also responsible for assessment of information and technology needs with respect to on-farm water, which is done through engaging with producers, producer groups and other interest groups and working closely with other agencies.

Responsibilities

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

1. Provides tech transfer to agricultural producers and other stakeholders relative to surface and groundwater issues and on-farm water supply management.

Activities:

- a) Provides technical advice regarding on-farm water supply system design, construction, management, maintenance and trouble shooting. Such systems may include groundwater wells, dugouts, local/ regional pipelines, etc.
- b) Assesses on-farm water management (supply and quality) issues and develops long-term sustainable solutions.
- c) Develops information and recommendations regarding on-farm water supply topics such as water quality and treatment systems for domestic, livestock, and agricultural processing uses.
- c) Provides advice and assistance, to agricultural producers and multi-stakeholder partnerships, in the development of drought proofing water sources or long-term water management planning.
- d) Responds to technical referrals and requests from other agencies including Farmers Advocate, NRCB, Municipalities, health authorities and other government departments.
- e) Participates in inter-agency and industry water management activities or initiatives.
- f) Provide feedback and technical information regarding the availability and suitability of surface and groundwater supplies for domestic and agricultural purposes.
- g) Assess industry needs or identify gaps for research and technology development.
- h) Interacts and communicates with relevant stakeholders, including other government departments, municipalities, NGOs, equipment suppliers, and contractors, to keep abreast of current programs, policies, legislation, technologies and practices and ensure department and agricultural interests are represented.
- i) Promotes adoption of beneficial management practices and the value of efficient use of water among producers.

2. Supports sustainable land and water resource management through government support programs and initiatives.

Activities:

- a) Provides technical information to clients of water supply programming, such as those developed under federal-provincial agricultural frameworks.
- b) Assists in the assessment of technical compliance of projects under water supply programs, such as those developed under federal-provincial agricultural frameworks.
- c) Provides support, assistance and technical expertise regarding environmental risk assessment and mitigation options or best practices for water related activities.
- d) Provides leadership, support and assistance to multi-stakeholder water committees, project teams, and programs, such as Working Well.
- e) Provides support and assistance to the Water Pumping Program as needed.

3. Supports the development of new technology, tools, and knowledge relating to on-farm water management.

Activities:

- a) Develops tech transfer information and tools.
- b) Evaluates new technologies and equipment for on-farm water supplies.
- c) Develops and applies information and databases for on-farm water applications and topic/issue summaries or briefings.
- d) Consults on research/technology issues with industry or stakeholders including manufacturers,

producers, client groups and associations, other governments, and NGOs.

Problem Solving

Typical problems solved:

- 1) Provide technical assessment of farm water management issues (e.g., water system sizing, water source selection and siting, water quality and quantity issues, water treatment).
- 2) Represent department mandates, positions, etc. while on multi-stakeholder groups; understand and balance advocacy vs advisory roles; and represent agricultural regions and clients to the department. Ability to relay information back and forth in different roles and recognize when issues, challenges and opportunities need to be brought forward.
- 3) Provide technical advice and relaying legislative responsibilities to agricultural producers verbally or in writing. This requires the ability to read the situation and client in order to balance the information so the agricultural producer has the required information to make a decision and maintain public trust.

Types of guidance available for problem solving:

- 1) Weekly meetings with other regional Water Specialists, Engineers and Director to discuss common issues, challenges or opportunities or share examples for feedback and to find a common approach or response. Staff share case studies and can ask for feedback or perspectives on various topics during these meetings or specially scheduled meetings.
- 2) Monthly one-on-ones with Director.
- 3) Access to briefing materials and response documents for common or relevant topics for the Farm Water Supply section.

Direct or indirect impacts of decisions:

Agricultural producers have the technical information they require to make informed decisions regarding on-farm water and securing sustainable supplies. Water development projects may result in grants from the department.
Interests of the department and the agriculture industry are represented at multi-stakeholder tables, with feedback incorporated where appropriate, and the department is aware of potential issues and opportunities, particularly in the Peace region.

Key Relationships

Major stakeholders and purpose of interactions:

1. Producers/producer groups - provision of technical expertise relating to on-farm water supply and water quality management (daily/weekly).
2. Multi-agency work teams - provision of technical expertise and opinion relating to the needs of producers and other rural water users with respect to water supply management (weekly/monthly).
3. Multi-agency work teams - representation of AGI interests and policies to other government agencies and the public (monthly).
4. Departmental program teams - provision of technical expertise, advice and opinion relating to the development and delivery of water supply programming (daily/weekly).

Required Education, Experience and Technical Competencies

Education Level	Focus/Major	2nd Major/Minor if applicable	Designation
Diploma (2 year)	Science		

If other, specify:

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

Education in water, agricultural or environmental sciences is required. Related field experience in the subject areas and within agricultural or rural settings is an asset.
Knowledge of surface and groundwater.
Familiarity and knowledge of Alberta's agriculture industry and production systems.
Familiarity of legislation, programs and policies affecting the development and management of agricultural water supplies.
Familiarity and knowledge of computer applications including Excel, Word, PowerPoint, Access as well as

data management and analysis.
 Strong writing, communication and presentation skills.
 Ability to work independently and with a team.

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		
Build Collaborative Environments	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Collaborates across functional areas and proactively addresses conflict: <ul style="list-style-type: none"> • Encourages broad thinking on projects, and works to eliminate barriers to progress • Facilitates communication and collaboration • Anticipates and reduces conflict at the outset • Credits others and gets talent recognized • Promotes collaboration and commitment 	Participates in collaborative weekly meetings with other regional specialists. Assesses the situation to balance information to support agricultural producers to make informed decisions and maintain public trust.
Creative Problem Solving	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Engages the community and resources at hand to address issues: <ul style="list-style-type: none"> • Engages perspective to seek root causes • Finds ways to improve complex systems • Employs resources from other areas to solve problems • Engages others and encourages debate and idea generation to solve problems while addressing risks 	Seeks to find the right technical expertise and incorporate ideas to find best solution for producer, etc. Looks for opportunities to develop tools for internal use or agricultural producers and look at a variety of options for tech transfer of information to meet stakeholder needs and for the specific target audience. Shares ideas and information and asks questions to find solutions.
Agility	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Identifies and manages required change and the associated risks: <ul style="list-style-type: none"> • Identifies alternative approaches and supports others to do the same • Proactively explains impact of changes • Anticipates and mitigates emotions of others • Anticipates obstacles and stays focused on 	Adapts to changing situations and information to provide the best advice to agricultural producers. Identifies needs, issues, barriers and opportunities to find solutions to remove barriers for producers in securing water resources while protecting public resources.

		<p>goals</p> <ul style="list-style-type: none"> • Makes decisions and takes action in uncertain situations and creates a backup plan 	
Develop Networks	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/>	<p>Makes working with a wide range of parties an imperative:</p> <ul style="list-style-type: none"> • Creates impactful relationships with the right people • Ensures needs of varying groups are represented <ul style="list-style-type: none"> • Goes beyond to meet stakeholder needs • Ensures all needs are heard and understood 	<p>Works with agricultural producers to develop and maintain trust. Builds and maintains relationships on multi-stakeholder teams so agricultural and department interests are sought out and incorporated.</p>