

Ministry

Environment and Protected Areas

## Describe: Basic Job Details

Position Name (30 characters)

Conservation K9 Specialist

Requested Class

Natural Resources 7

Job Focus

Operations/Program

Supervisory Level

00 - No Supervision

## Organizational Structure

Division, Branch/Unit

Resource Stewardship, Conservation Risk Mitigation

Supervisor's Position Name (30 characters)

AIS Operations/K9 Program Lead

## Design: Identify Job Duties and Value

### Job Purpose and Organizational Context

Why the job exists:

Reporting to the AIS Operations and K9 Program Lead, this professional, full working level Conservation K9 field specialist exists to protect the long term sustainability of Alberta's natural resources by preventing the introduction of aquatic invasive species and detecting their spread using specialized conservation detection canines. The role delivers science based field programs that generate reliable data to inform provincial readiness, prevention, and rapid response strategies, while integrating AIS objectives into broader resource and landscape management initiatives. It strengthens provincial invasive species management by advancing applied research, improving detection techniques, and embedding canine detection as a specialized tool within a coordinated AIS program. The position also supports informed decision making through technical reporting, stakeholder and inter-agency collaboration, and public education and outreach. Together, these functions ensure operational readiness, effective risk mitigation, and sustained program capacity across Alberta.

## Responsibilities

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

### **Outcome 1: Science-based invasive species prevention and monitoring strengthened through Conservation K9 detection and integrated program delivery**

#### Key activities

- Deliver AIS detection, prevention, and monitoring work (e.g., invasive mussel inspections; shoreline/forest/parks assessments; laboratory water sample screening) using approved/standard methods and support other prioritized conservation initiatives (e.g., wildlife surveys such as bat carcass work at wind turbines).
- Design and adapt detection approaches by applying professional conservation science and exercising independent judgment in complex, emergent, or rapidly changing field conditions.
- Lead and continuously improve the Conservation K9 program by contributing to program design, field implementation, and refinement of canine-supported conservation projects focused on invasive species prevention and threat reduction.
- Assess and manage risk (ecological, operational, public safety, and program) to select appropriate response options and ensure safe, effective field operations.
- Integrate detection results into broader strategies by translating findings into actionable prevention, compliance, and conservation planning/management decisions.
- Support provincial and local invasive species planning through participation in management and implementation plan development, including compilation, analysis, and interpretation of program data.
- Advance innovation and emerging techniques by synthesizing complex data to identify trends/issues and recommending improvements or new canine detection techniques to the K9 Lead/Resource Managers.
- Engage communities and stakeholders by participating in interactions with local Indigenous communities and conducting consultations to communicate assessment results and prevention techniques.
- Maintain high-quality data management practices by loading, retrieving, and manipulating resource management information using standardized digital tools (e.g., Survey123 and Field Maps).
- Contribute to province-wide outcomes by supporting efforts that reduce the likelihood of invasive species introductions and disease outbreaks with significant economic, ecological, and social impacts.

### **Outcome 2: Regional conservation and aquatic invasive species management are strengthened through canine based detection and integrated decision making**

#### Key activities:

- Integrate canine detection results into regional management actions by translating survey outcomes into localized readiness, prevention, and rapid response measures for priority waterbodies and landscapes.
- Provide regional subject matter expertise in conservation detection by advising ministries, regions, and partners on the application and limitations of conservation canines within invasive species management.
- Collaborate with specialists and agencies (e.g., invasive species experts and DFO) to coordinate regionally relevant detection, surveillance, and response activities.
- Embed AIS and canine detection objectives into regional planning by contributing to watershed, waterbody, and access management plans with detection informed recommendations.

- Review and guide regional projects and proposals by providing professional advice on invasive species prevention and response plans developed by municipalities, Non-Government agencies, and conservation organizations.
- Apply legislation and policy at the regional scale by using provincial conservation frameworks to guide where, when, and how canine detection is deployed and how results inform management decisions.

**Outcome 3: Research generates evidence to improve conservation and invasive species detection**

**Key activities:**

- Assessing gaps in invasive species and conservation monitoring where Conservation K9 applications can improve early detection and management outcomes.
- Design and support applied research projects by contributing to study design, business cases, and implementation of regionally relevant scientific projects that evaluate or expand the use of detection canines.
- Generate decision ready research outputs by preparing technical reports and contributing to peer review that inform regional and provincial conservation and AIS management decisions.
- Contribute expertise to collaborative science initiatives by participating on regional or inter departmental task teams focused on standards, guidelines, and landscape level conservation strategies.
- Advance emerging canine applications by identifying and participating in new or innovative projects (e.g., invasive plants, species at risk) through regional networking, analysis of conservation trends, climate driven risks, and inter-jurisdictional collaboration.

**Outcome 4: Public awareness, understanding, and engagement in aquatic invasive species management are strengthened**

**Key activities**

- Serve as a professional authority and ambassador by representing the Government of Alberta as a credible source of expertise in conservation detection science and invasive species management.
- Engage diverse audiences by interacting with the public, media, scientists, and conservation professionals.
- Build and sustain partnerships by developing collaborative relationships that support K9 program goals.
- Contribute to outreach planning and implementation by collaborating on local AIS education and outreach initiatives aligned with established education and outreach plans.
- Respond to information requests and provide resources by creating and delivering presentations, conducting canine demonstrations, and supplying conservation canine information to internal and external audiences (e.g., governments, academia, Non-government organizations, industry, schools, and community organizations).
- Evaluate outreach effectiveness by conducting regular media scans and maintaining records to track and report on media coverage, public education efforts, and outreach engagement outcomes.

**Outcome 5: Administrative accountability and occupational health and safety requirements are effectively met**

**Key activities**

- Ensure financial compliance and accountability by conducting transactions in accordance with established policies, maintaining accurate financial records, meeting quarterly reporting requirements, and contributing to budget forecasting.

- Manage equipment and assets responsibly by procuring required tools and equipment, maintaining inventories, ensuring assets meet operational standards, and confirming safe and appropriate use.
- Meet OH&S requirements by adhering to departmental safety programs, developing project specific safety plans, and verifying compliance with legislation, regulations, and standard operating procedures.
- Maintain professional and safety certifications by keeping current on required OH&S training and job specific certifications in accordance with departmental, regional, and branch requirements.

**Outcome 6: Conservation canine care, field readiness, and detection capability are maintained at a high professional standard**

**Key activities**

- Maintain operational proficiency of the canine team by handling and training the Conservation K9 on approved detection targets and ensuring both handler and dog meet required performance standards for field deployment.
- Achieve and sustain certification standards by demonstrating competency in obedience, scent detection, and tracking through internal certification protocols that verify team effectiveness.
- Advance skills through adaptive training by using varied training tools, techniques, and learning opportunities as needed, and maintaining detailed records of training activities and canine performance.
- Provide continuous canine care and oversight by housing the assigned detection dog year-round and following departmental and Working Dogs for Conservation (WD4C) guidelines.
- Ensure canine health, welfare, and readiness by delivering 24/7 care that supports physical health, mental well-being, socialization, and any specialized or emerging training needs required for effective detection work.

## Problem Solving

### Typical problems solved:

The Conservation K9 Handler supports regional aquatic invasive species (AIS) management by generating detection results, analyses, and recommendations that directly inform prevention, readiness, and rapid response decisions, while balancing conservation outcomes, public safety, and operational constraints.

Working with minimal supervision, the position must solve complex, time-sensitive problems where information is often incomplete --such as deciding how to deploy a canine team across priority sites, interpreting canine alerts under variable field conditions, selecting appropriate confirmatory sampling, and adapting survey methods when conditions, access, or risks change. The role also requires advanced troubleshooting and judgment to protect dog welfare and maintain certification-level performance through year-round care, proficiency training, and accurate documentation, recognizing and correcting performance or safety issues immediately.

Typical problems include: planning and executing canine detection surveys and inspections in a region to maximize early detection; collecting and managing defensible samples and georeferenced data and analyzing results to produce technical reports; integrating detection findings into regional conservation planning (e.g., watershed/waterbody/access planning) and advising partners on prevention/response approaches; evaluating emerging canine detection techniques or research needs to address data gaps; and coordinating safe field operations, OH&S requirements, and resources so detection work remains effective and reliable.

### Types of guidance available for problem solving:

Problem solving is largely independent and extremely variable.

Professional advice may be sought from:

Working Dogs for Conservation (contractors),

K9 Program Lead,

AIS Specialist

Engagement and Education specialists

Academia and other colleagues

Fisheries Act (Alberta) and Regulations

Federal Fisheries Act

Fish and Wildlife Policy

Alberta Fisheries Conservation and Management Strategy

Environmental Protection and Enhancement Act

Primary print and academic journals

Provincial Fisheries Scientist

Office of the Chief Scientist

### Direct or indirect impacts of decisions:

When early detection is confirmed, rapid response actions can be initiated before an infestation or outbreak becomes established. If detection is missed or a false negative occurs, invasive species may spread and response costs can increase significantly. Misinterpreting results or acting on a false positive can lead to unnecessary closures or response measures, creating avoidable costs and stakeholder concern. Errors in sample handling or data entry can invalidate results, delay management action, and reduce confidence in the program.

Decisions about canine fitness and workload directly influence detection accuracy and long-term operational effectiveness. Choosing to suspend or modify work for safety reasons may reduce short-term coverage but prevents injuries and equipment loss.

### Key Relationships

Major stakeholders and purpose of interactions:

Environment and Protected Areas and other GoA Ministry senior program staff, managers and other Ministry staff. Purpose: Set detection priorities and provide direction for AIS prevention, surveillance, readiness, and response across the region and province. This role coordinates deployment of the Conservation K9 team as a detection tool; aligns regional work plans, project delivery, and reporting with branch/ministry outcomes; supports rapid response decision-making using defensible detection results; contributes to strategic/operational planning, budgets, and OH&S expectations

Other Government of Alberta Ministries . Purpose: Invasive species and vector pathways touch multiple mandates (e.g., transportation corridors, agriculture/animal health risks, parks/recreation access, infrastructure protection). This role provides canine detection expertise and integrates findings into inter-ministry planning; supports coordinated readiness and response; ensures capacity and actions align with broader GoA business plan outcomes and regional risk mitigation.

Members of the Public. Purpose: : Public behavior is a major driver of prevention success (e.g., watercraft movement, cleaning practices, reporting suspicious findings. This role delivers education/outreach, presentations, and K9 demonstrations; provides clear prevention messaging; collects feedback to improve program relevance; contributes to stronger awareness and compliance.

External Stakeholders. Purpose: They manage local access points, infrastructure, bylaws, and community-level prevention and response actions. This role provides professional advice on prevention and response plans; shares detection outcomes that inform local risk mitigation; supports education/outreach to strengthen compliance and reduce vectors.

Local Indigenous communities. Purpose: Indigenous communities are rights holders and knowledge holders, and many communities have direct stewardship interests in regional waterbodies and landscapes. This role participates in respectful engagement, shares results and prevention information, and incorporates local context to support effective, regionally appropriate management.

Academia and research partners (universities, labs, scientists). Purpose: Research validates methods, improves detection effectiveness, and addresses knowledge gaps (including emerging/climate-driven risks). This role supports study design and data collection, contributes to technical/scientific reporting and peer review, and helps evaluate emerging canine detection applications.

### Required Education, Experience and Technical Competencies

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

If other, specify:

**Environmental, Conservation, other degrees will be considered**

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

Physical ability to walk up to 20 kms / 8 hrs in a day off trail, with a large backpack while having an active medium-large dog.

Physical agility to manage unstable footing (position requires bending, stopping, crouching and crawling on a regular basis to negotiate field obstacles).

Interest in working intimately with a detection dog.

Able to work independently with limited supervision.

Driver's license in good standing.

Valid passport and ability to travel to the USA. Extensive travel across Alberta, Canada and the US is likely.

Ability to operate Office Suite (Word, Excel, Powerpoint).

Independently and reliably perform field searches with the trained dog 4-5 days / week, including navigation and record keeping.

Provide peer support to other conservation detection dog handlers.

Independently and professionally engage with the public and project personnel.

Interact with the media and community groups for public outreach.

Be comfortable (safely) collecting and processing animal feces.

Thriving under repetition and tedium.

Have ability to work in remote locations, in inclement weather and conditions, early mornings and irregular hours over tough terrain.

Fishery Guardian appointment will be required as part of the Aquatic Invasive Species program.

### 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		

<p>Agility</p>	<p>○ ○ ○ ● ○</p>	<p>Proactively incorporates change into processes:</p> <ul style="list-style-type: none"> <li>• Creates opportunities for improvement</li> <li>• Is aware of and adapts to changing priorities</li> <li>• Remains objective under pressure and supports others to manage their emotions</li> <li>• Proactively explains impact of change on roles, and integrates change in existing work</li> <li>• Readily adapts plans and practices</li> </ul>	<p>Recommends best practice approaches to effectively deploy conservation detection canines for regional invasive species monitoring, with a focus on continuous improvement of detection methods and program effectiveness. Anticipates how changes in invasive species presence, pathways, or detection results may affect other users and management priorities, and provides early notification and recommendations to the AIS Operations and Conservation K9 Program Lead or regional managers. Adapts annual detection priorities, canine deployment, and use of staff time within available capacity to achieve the greatest risk reduction and conservation outcomes.</p>
<p>Creative Problem Solving</p>	<p>○ ○ ○ ● ○</p>	<p>Works in open teams to share ideas and process issues:</p> <ul style="list-style-type: none"> <li>• Uses wide range of techniques to break down problems</li> <li>• Allows others to think creatively and voice ideas</li> <li>• Brings the right people together to solve issues</li> <li>• Identifies new solutions for the organization</li> </ul>	<p>This position applies creative problem-solving to address evolving operational and environmental challenges, including canine behavior, field conditions, and public interactions. The handler identifies conservation or invasive species issues that could benefit from canine detection and advances innovative, evidence-based solutions through data collection, method development, and collaboration. Working closely with internal and external stakeholders, the role adapts protocols and</p>

			develops new approaches to ensure the effective and safe use of Conservation K9s.
Develop Networks	○ ○ ● ○ ○	<p>Leverages relationships to build input and perspective:</p> <ul style="list-style-type: none"> <li>• Looks broadly to engage stakeholders</li> <li>• Open to perspectives towards long-term goals</li> <li>• Actively seeks input into change initiatives</li> <li>• Maintains stakeholder relationships</li> </ul>	<p>This position actively develops and maintains collaborative networks across Government of Alberta ministries, federal agencies, other provinces/states, and external partners to advance conservation and invasive species outcomes. The handler builds strategic working relationships to explore and implement canine-based solutions to shared environmental challenges (e.g., partnering with Forestry and Parks on wild boar detection). Through these networks, the role expands the effective use of Conservation K9s and strengthens coordinated, multi-jurisdictional responses.</p>
Drive for Results	○ ○ ○ ● ○	<p>Works to remove barriers to outcomes, sticking to principles:</p> <ul style="list-style-type: none"> <li>• Forecasts and proactively addresses project challenges</li> <li>• Removes barriers to collaboration and achievement of outcomes</li> <li>• Upholds principles and confronts problems directly</li> <li>• Considers complex factors and aligns solutions with broader organization mission</li> </ul>	<p>This position provides a critical tool in invasive species management by use of a detection dog. There are several targets that a canine can learn and apply throughout the lifetime of the canine; the handler will consider the broad picture of government Alberta priorities when proactively assessing new targets of high conservation value.</p>