

## Reclassification

Ministry

Forestry and Parks

## Describe: Basic Job Details

## Position

Position ID

Position Name (30 characters)

Provincial Fish Assess. Spec.

Current Class

Natural Resources 8

Requested Class

Natural Resources 9

Job Focus

Policy

Supervisory Level

01 - Yes Supervisory

Agency (ministry) code

Cost Centre

Program Code: (enter if required)

## Employee

Employee Name (or Vacant)

## Organizational Structure

Division, Branch/Unit

Lands Operations, Hunting and Fishing Branch



Current organizational chart attached?

Supervisor's Position ID

Supervisor's Position Name (30 characters)

Provincial Fish Alloc &amp; Use Sp

Supervisor's Current Class

Natural Resources 9

## Design: Identify Job Duties and Value

## Changes Since Last Reviewed

Date yyyy-mm-dd

Responsibilities Added:

With the recent re-organization of February of 2023, the roles and responsibilities for Alberta fisheries management have been split between two separate ministries (Forestry and Parks and Environment and Protected Areas). The primary mandate of the new Hunting and Fishing Branch under Forestry and Parks is to determine the sustainable allocation of fisheries resources, while Environment and Protected Areas fisheries staff are responsible for the assessment of fisheries. As such, my role as the Provincial Fish Stock Assessment Specialist has changed dramatically and my advanced responsibilities highlight the shift in organizational structure and focus. Although outlined more fully in the below job description and responsibilities, key added responsibilities include:

-Leading the formulation of provincial-level policy and direction documents to operationalize short and long-term ministerial priorities and guide strategic initiatives in Alberta fisheries management. For example, lead the development of fisheries management objectives and fishery regulation changes.

-Leading the standardization of provincial fisheries allocations in Alberta by implementing scientifically-defensible fisheries allocations policies, protocols and strategies.

-Serving as a fisheries science subject matter expert to provide supporting materials for departmental staff, management, upper executive and stakeholders. This includes conducting high-level quantitative analyses, preparing technical reports, and responding to a substantial volume of Ministerial Actions Requests (ARs) and Briefing Notes (BNs).

-Creating and maintaining fisheries allocation data tools for internal and external stakeholders for visualizing fisheries allocation data (past and present).

#### Responsibilities Removed:

While I continue to temporarily support Alberta fisheries stock assessment and liaise and advise with Environment and Protected Area staff, stock assessment does not fall under Forestry and Parks mandate and these responsibilities have been removed. Specifically,

- Developing provincial protocols and standards for fish stock assessment (termed the Fish Sustainability Index or FSI) and reporting on identified priority fish species in Alberta.
- Development and completion of FSI assessments and other stock assessment analyses.
- Ensuring that fisheries management standards are developed, assessed, implemented, reviewed, and updated for key fisheries duties and responsibilities.

### Job Purpose and Organizational Context

#### Why the job exists:

Reporting to the Fisheries Allocation and Use Manager, the Provincial Fish Stock Assessment Specialist is tasked with developing and implementing robust fisheries allocation policies, protocols, and strategies. This includes collaborating closely with provincial stakeholders, including the Environment and Protected Areas (EPA) team, to ensure that allocation decisions are grounded in sound scientific principles and support the overarching goals and objectives of the Branch. Furthermore, this role spearheads the design of department-led policy initiatives and research projects, working collaboratively with both internal and external partners to address provincial and regional fisheries management priorities.

### Responsibilities

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

#### 1. Development and standardization of provincial fisheries allocations.

At the direction of the manager, lead the development and implementation of scientifically-defensible fisheries allocation policies, protocols, and strategies for priority fish species by:

- Developing provincial-level policy:* Draft and implement policies to guide the allocation and use of fish for recreational, Indigenous, and commercial purposes to renew the fisheries allocation program.
- Modernize fisheries management objectives:* Considering the annual cycle of fisheries management, lead efforts to modernize, finalize, and publish Fisheries Management Objectives for watersheds and individual waterbodies to support the sustainable use of fisheries resources.
- Design stakeholder surveys:* Working closely with human dimension specialists, lead the design of human dimensions stakeholder surveys to collect information on user typology, satisfaction, preferences, values, and attitudes to inform recreational sportfishing regulations and measure changes in values and attitudes towards fisheries management actions.
- Coordinate assessment data:* Collaborate with EPA and Forestry and Parks staff to obtain standardized fisheries assessment data, ensuring data quality and consistency.
- Quantitative analysis:* Conduct quantitative analyses of assessment data to support scientifically-

defensible fisheries regulations and allocations.

f. *Develop protocols and strategies*: Create provincial-level protocols and strategies for annual fisheries allocations based on scientific rationale and management objectives.

**End Result:** Ensure that fisheries allocations support the strategic goals and objectives of the Hunting and Fishing Branch, are scientifically-defensible and promote the long-term sustainability of Alberta's fish populations.

## 2. Creation and maintenance of fisheries allocation data tools.

Develop and maintain internal and external tools for visualizing fisheries allocation data by:

a. *Develop a data accessibility system*: Establish a system for archiving and accessing archived allocation data for fisheries staff.

b. *Create data portals and reports*: Develop and maintain fisheries allocation data portals (e.g., powerBI), GIS maps, summary reports, and web content for internal and external stakeholders.

c. *Dissemination of data*: Ensure that allocation data are disseminated to all fisheries staff through workshops and information sessions. Collaborate with Education and Engagement staff to disseminate data to a wider stakeholder audience.

d. *Regular updates*: Maintain regular updates and reviews of fisheries allocations to meet regional, Branch, Departmental, and interdepartmental needs.

**End Result:** Supports transparent and well-informed fisheries management decisions at provincial and regional levels.

## 3.Provision of expert advice and supporting materials.

Provide expert advice and prepare supporting materials for departmental staff, management, external agencies, and stakeholders.

a. *Advanced quantitative modelling*: Conduct advanced statistical modeling to support allocation policy development, fisheries regulation development, and scientific advice given to branch management and executive.

b. *Prepare technical reports and Action Requests (ARs)*: Develop technical reports, ministerial briefing notes, and correspondence to provide robust advice to branch management and executive.

c. *Disseminate knowledge*: Ensure understanding of fish allocation and management science among staff, external agencies, and partnership agencies through educational materials and presentations.

d. *Recommendation for policy and management*: Make recommendations for policy development, species management plans, and recreational regulations based on scientific understanding and field protocols.

e. *Lead task-teams*: Lead and participate in provincial-level task-teams on fisheries management issues, providing expertise and guidance.

f. *Support and participate in engagements and consultations*: Prepare materials for Indigenous consultations and annual public engagements, providing necessary information for informed decision-making. Act as a subject-matter expert in consultations and engagements, providing insights and responding to inquiries as needed.

**End Result:** To ensure informed decision-making and compliance with provincial legislative requirements and Alberta's Fish Conservation and Management Strategy objectives.

#### 4. Recognition of Alberta's fisheries allocation process.

Ensure Alberta's fish stock allocation process and reporting are recognized as credible and informative.

- a. *Applied research initiatives:* Develop and manage applied research initiatives in collaboration with government agencies, research institutions, and private sectors.
- b. *Publications and presentations:* Publish scientific findings in relevant periodicals and present at conferences and seminars related to fisheries stock assessment and allocation.
- c. *Collaborative initiatives:* Collaborate with other government agencies, research institutions, and private sectors to advance fisheries management initiatives.

**End Result:** To uphold provincial standards and contribute to the advancement of fisheries science nationally and internationally.

#### 5. Staffing, safety, and budget management

Ensure efficient management of staffing, safety and budgetary resources within the fisheries program.

- a. *Staffing needs identification:* Identify staffing needs and supervise junior staff, ensuring work priorities align with program objectives.
- b. *Training and development:* Identify training needs, recommend appropriate training, and ensure staff meet outlined performance expectations.
- c. *Equipment procurement and safety:* Procure necessary equipment, maintain inventory, develop safety plans, and adhere to OH&S standards.
- d. *Budget preparation:* Prepare budget needs and business cases for resources and equipment, ensuring adherence to financial policies and procedures.

**End Result:** Maintain operational effectiveness within Hunting and Fishing Branch.

### Problem Solving

Typical problems solved:

This position routinely engages in solving complex biological and social issues related to fisheries allocations that need to consider conservation, Indigenous rights, and diverse stakeholder interests when fisheries resources are limited. This necessitates significant independent analytical thinking, creativity, and problem-solving skills to address various challenges at different scales, from individual waterbodies to a provincial-scale. Some typical problems encountered include:

- When tasked with setting bag and size limits for a specific fish species at a lake, holistically considers the problem and balances complex biological, economic and social aspects (i.e., sustainability).
- Leads and contributes as a subject matter expert to provide strategic advice to executive on any proposed allocation priorities and approaches
- Creating advanced statistical models to determine fish population-level effects and trade-offs of different proposed fishing regulations.
- How to educate and consult meaningfully with the public and Indigenous peoples about social and

biological trade-offs and how they relate to fisheries harvest.

Types of guidance available for problem solving:

This position will require a range of problem-solving approaches, skill-sets and knowledge of legislation, policy and procedures.

This role would be expected to collaborate and coordinate with the following:

- Fisheries Allocation and Use (formerly the Policy Manager)
- Provincial Fisheries Scientist
- Office of the Chief Scientist
- Departmental fisheries policy experts
- Engagement and Education specialists
- Academia and other colleagues

This role would use the following legislation, policies and procedures to guide their work:

- Fisheries Act (Alberta) and Regulations
- Federal Fisheries Act
- Fish and Wildlife Policy
- Alberta Fisheries Conservation and Management Strategy
- Environmental Protection and Enhancement Act,
- Fish Management Objectives and Fisheries Sustainability Index protocols
- Fish Species Management Frameworks
- Primary print and academic journals

Direct or indirect impacts of decisions:

Decisions could influence future direction of provincial fisheries management.

Recommendations and decisions will affect the short and long-term sustainability of Alberta's fisheries resources and in turn have effects on the resource sustainability, economic development and benefits, regulations, stakeholder interests (municipalities, Indigenous communities, anglers, fish and game clubs, guides, fishing lodges and campground owners).

The decisions made are tested in court by Indigenous communities to ensure that meaningful consultation and conservation considerations have been weighed and absolute minimum infringement of rights of Indigenous fishers are met. Considerable local and provincial political impacts are also a part of the management landscape for this position as decisions are made.

## Key Relationships

Major stakeholders and purpose of interactions:

Involved and influential for providing information to stakeholder consultation programs to obtain stakeholder input on fisheries management initiatives and management (e.g., angling regulations, species management plans, fisheries management objectives, management frameworks).

Allocates the fish resource via management tools (e.g., recreational fishing rules) amongst stakeholders, using data and following provincial policies, strategies, and frameworks, ensuring the sustainability of the fisheries resource.

Major stakeholders include:

- Indigenous communities (First Nations and Metis)
- Recreational anglers
- Municipalities
- Fish and Game clubs
- Competitive (tournament) event licence holders

- Industry and environmental consultants - Fish Research Licences
- Guides
- Lodge owners
- Local MLA's and Town Councils
- Fish and Wildlife Enforcement Officers
- Fisheries Culture Staff
- Alberta Conservation Association biologists and managers
- Licence Holders (Fish Research Licences, Special Licences, Competitive Fishing Licences)
- Referral partners and industry consultants
- Other departments (Water Management, Transportation, Environment and Protected Areas)

#### 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:

Plus 6 years of related experience. Advanced graduate degree preferred.

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

#### Academic and Experience Requirements:

-Position requires a minimum of a four year Bachelor of Science degree in Natural Resources or Biology and preferably with a specialization in Fisheries Management or Aquatics Ecology. An advanced graduate degree is preferred. Including an in-depth understanding of fisheries and aquatic ecological principles, data analysis and interpretation, fish habitat and population assessment/monitoring, project management, and the development of fisheries management plans.

-A minimum of six years of directly related practical field experience in fisheries management.

#### Knowledge and Skills:

-Requires a detailed understanding of fish biology, all aspects of fisheries science, application of field protocols and standard inventory techniques, mathematics and environmental assessments in order to successfully develop and implement scientifically defensible fisheries allocation protocols and strategies for priority fish species.

-Requires a detailed understanding of interactions between land-use and fish conservation, and provincial-level issues that affect fish conservation and management to develop assessments for use by fisheries management, resource allocation, regulation development, and land use planning at the regional and provincial level while ensuring mandates and provincial legislative requirements are met and upheld.

-Knowledge of relevant provincial and federal acts, regulations, policies, and procedures.

-Extensive experience working with resource management staff and regulators to address the common challenges of resource management at a senior staff level.

-Strong statistical, mathematical and computing literacy including understanding of GIS applications.

-Strong multitasking and organizational abilities to coordinate data collection and information exchange between groups of biologists and academics, and coordinate multiple projects at a provincial-level.

-Effective and efficient personal work habits specifically in organizing work, establishing priorities, managing multiple projects, shifting priorities, and establishing performance measures and work plans for direct reports. Some experience in financial expenditures and reconciling budgets is desirable.

-Experience in leading team sessions and workshops.

-Demonstrated ability to resolve complex resource management problems through effective utilization of

interpersonal skills to achieve desired outcomes.

-Extensive experience in writing and presenting technical reports including management recommendations to managers, colleagues, and external stakeholders (e.g., public groups, special interest groups).

-Supervisory experience involving development and assessment of work plans, assessment of staff performance and identification of training and development needs.

### Certification and Training:

Trained and experience operating off-highway vehicles (4X4, ATV, snowmobile), motorized boats, use of firearms, specialized fisheries equipment including radio/acoustic telemetry, gill nets, trap nets, electro-fishing (backpack and boat), water sampling and other fisheries management sampling equipment.

Current certifications to operate off-highway vehicles, motorized boats, and electro-fishing equipment are highly desirable, as well as certificates for First Aid and CPR.

### 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		
Creative Problem Solving	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<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>-Thinks outside the normal box/innovative</p> <p>-Understands the difference between certainty and uncertainty</p> <p>-Researches and uses examples from other jurisdictions/governments to help develop current system or solve issues</p> <p>-Encouraging teams to develop novel approaches to resource management problems in timely and efficient ways.</p> <p>eg. Fish Management Framework Development or North American Standard Index Netting development and validation.</p>
Systems Thinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<p>Integrates broader context into planning:</p> <ul style="list-style-type: none"> <li>• Plans for how current situation is affected by broader trends</li> <li>• Integrates issues, political environment and risks when considering possible actions</li> <li>• Supports organization vision and goals through strategy</li> </ul>	<p>-Works on cross-departmental and cross-jurisdictional projects</p> <p>-Appreciates and understands the concept of sustainability and or socio-economic models</p> <p>-Connects the dots of the fisheries management adaptive cycle</p> <p>-Understands current issues/challenges but can</p>



		<ul style="list-style-type: none"> <li>• Addresses behaviours that challenge progress</li> </ul>	<p>see the path and develop the path to the desired state.</p> <ul style="list-style-type: none"> <li>-Understanding Ministerial and Departmental priorities and integrating these into the regional program. Considering social and economic as well as the biological factors in providing recommendations or trade-offs.</li> </ul>
Build Collaborative Environments	○ ○ ○ ● ○	<p>Involves a wide group of stakeholders when working on outcomes:</p> <ul style="list-style-type: none"> <li>• Involves stakeholders and shares resources</li> <li>• Positively resolves conflict through coaching and facilitated discussion</li> <li>• Uses enthusiasm to motivate and guide others</li> <li>• Acknowledges and works with diverse perspectives for achieving outcomes</li> </ul>	<ul style="list-style-type: none"> <li>-Involves a diversity of specialties for their input to help develop innovative products</li> <li>-Is positively critical/asks questions that may expose issues and lead to innovation</li> <li>-Able to compromise</li> <li>-Works collaboratively with EPA on the Annual sportfishing regulation engagement planning cycle.</li> <li>- Development of waterbody management plans with stakeholders and local communities.</li> <li>-Cooperative projects such as fish stocking or walleye spawn camps with our stakeholders.</li> </ul>
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>	<ul style="list-style-type: none"> <li>-Sees the bigger picture/ challenges/hurdles and proactively addresses issues/challenges</li> <li>-Creates task-teams and working groups to accomplish branch priorities</li> <li>-Creates long-term strategic plans to achieve ministerial objectives</li> <li>-Critically analyzes the cost/benefit analysis of initiatives and is nimble when required to readjust priorities and actions.</li> </ul>



## Benchmarks

List 1-2 potential comparable Government of Alberta: [Benchmark](#)

### **Environment and Protected Areas Provincial Aquatic Habitat Specialist-**

The Provincial Aquatic Habitat Specialist is responsible for ensuring the development and implementation of programs, policy, standards and guidelines to support the protection of aquatic ecosystems in the province. The emphasis is on aquatic habits and fish species. A key responsibility of this position is to ensure that fisheries objectives and considerations are incorporated into various land and water planning and management processes. Other responsibilities will include developing standards related to fish habitat assessment and monitoring and auditing protocols. As the Ministry's Specialist, the position will play a key role in defining provincial roles and responsibilities related to jurisdiction over the administration of the Fisheries Act in the province.

### **Environment and Protected Areas Provincial Flows Specialist-**

This position leads the Provincial Environmental Flows program. The Provincial Flows Specialist develops policy strategies and options as well as scientific standards to establish environmental flow guidelines to protect and conserve fisheries and fish habitat. They work closely with stakeholders to provide expert advice in support of various initiatives. This position is responsible for:

#### **Design and development:**

- Developing standardized monitoring protocols and assessing the effectiveness of those tools over time.
- Providing recommendations for provincial programs and policies that address fish and wildlife aquatic habitat protection requirements.
- Developing processes to ensure Fisheries Management objectives are considered during water management plan development and approved at both regional and provincial levels.

#### **Leadership:**

- Leading or managing applied research initiatives in partnership with government agencies, research organizations, and private industries.
- Providing leadership and technical expertise related to water management planning, fish and riverine ecology, fishways, fish passage, and fish exclusion.

#### **Legislation, policy and guidelines:**

Provide input into policy and legislation, in consultation with relevant stakeholders.

#### **Educating stakeholders:**

Working with and educating various governments and stakeholders about the importance of environmental flows and aquatic health at various venues.