

Update

Ministry

Forestry and Parks

Describe: Basic Job Details

Position

Position ID

Position Name (30 characters)

Resource Analyst

Current Class

Job Focus

Operations/Program

Supervisory Level

00 - No Supervision

Agency (ministry) code

Cost Centre

Program Code: (enter if required)

Employee

Employee Name (or Vacant)

Organizational Structure

Division, Branch/Unit

Forestry Division

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

2013-01-01

Responsibilities Added:

No changes

Responsibilities Removed:

No changes

Job Purpose and Organizational Context

Why the job exists:

The resource analyst is a professional position that provides quantifiable information to support forest planning at multiple landscape scales. They perform a variety of spatial and statistical analyses, timber supply forecasts and geospatial tasks to inform senior management for decision making, and to ensure divisional business is completed. Their review of submitted forest management plans and recommendations help to determine the acceptability of annual harvest levels proposed by companies,

and allows the Division to adjust harvest levels over time.

Responsibilities

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

1. Responsible for evaluation of complex technical analyses submitted by forest industry to ensure that proposed harvest levels can be approved by the Executive Director, Forest Management and Wildfire Mitigation (FMWM) branch.
 - Reviews the components involved in the AAC determination of industry's Forest Management Plans (FMP) and makes recommendations regarding the approval of the proposed resource modeling strategy / timber supply strategy. This requires a thorough knowledge of the land base determination, linkage of growth and yield forecasts to the net land base, reforestation transitions, harvest sequencing, timber supply analysis protocols, and integration of the goals and objectives.
 - Conducts assessments based on the results of the FMP review to evaluate the short- and long-term risks associated with the proposed harvest levels. In extreme cases, a complete shadow analysis is performed. Provides recommendations to both the senior resource analyst and the director based on this evaluation.
 - Develops, reviews and supports understanding of Forestry Division policies, guidelines, procedures and technical standards related to timber supply including the Alberta Forest Management Planning Standard, the document that sets the standards for forest company harvest plans submitted to Forestry Division.
2. Resolves complex wood supply issues and executes landscape level resource analyses (e.g. land base impact assessment).
 - Conducts complex analysis and provides recommendations in response to questions from the Senior Analyst, Director, or Senior Management. Responds to requests for complex technical assistance by conducting the technical analyses, reviewing provided information and preparing reports on the results of their work. Coordinates the various components of project management, ensuring that timelines are met, resources are available, and key strategies are developed.
 - Conducts land base related impact assessments to the approved harvest levels associated with large wildfires and land use removals.
 - Produces outputs (including GIS products, statistical analysis, and written reports) through resource analysis for decision support.
 - Responsible for fulfilling specified administrative duties to ensure that assigned projects are completed within the expected time frame, to the expected professional standard and the associated risks (e.g. data limitations, analysis assumptions, proposed management strategies) have been appropriately assessed.
3. Provides ongoing support to forest planning through geospatial practices
 - Prepares and maintains specialized databases and GIS products for use by divisional staff or departmental senior management. This involves creating scripted tools and transparent documentation to ensure continuity.
 - Completes spatial roll-ups and creates summary statistics to support divisional business.
 - Maintains contact with other sections, regions, services and agencies to be knowledgeable in advances in computing capabilities, resource analysis modeling and GIS technology. A level of interaction with the growth-and-yield aspects of forest management is also expected.

Problem Solving

Typical problems solved:

Most duties and responsibilities associated with this position require originality in assessing the appropriate course of action required to resolve complex resource allocation issues. For example, resolving conflicting forest management strategies between conifer and deciduous forestry companies operating in the same forest management agreement area (where such conflicts ultimately impact the sustainable harvest levels) requires the ability of the incumbent to adapt and find creative solutions to the problem (in both a technical and operational context) as each situation is unique and in many cases standards or precedents for resolving the issue do not exist. Multiple options are often compared before a course of action is made, and each solution is

tailored to the particular challenge.

The incumbent must recommend decisions on the appropriate technical approach to take in responding to requests for assistance are made by the position on a daily basis. Decisions are also made on the design of specialized analysis outputs to meet user requirements.

Types of guidance available for problem solving:

Work is completed within the regulatory framework of the Ministry (i.e. Forests Act and Regulations), Ministry and Division business plans, as well as within related policies and procedures. When there are gaps in policy, or options exist on how to meet policy, the resource analyst will have to determine a reasonable technical solution that reflects the underlying policy intent. If encountered problems are outside the context of existing legislation or policy, or there are issues that cannot be resolved directly by the incumbent, they will be referred to supervisor for general discussion on a course of action. Discussions with senior staff may also occur before issues are resolved to ensure consistency in direction to industry.

The incumbent works with a great deal of independence when deciding the course of action for projects. Multiple requests for urgent work that cannot be met by the available resources, or major new projects that would require substantial changes to the current work plan are referred to the director for priority setting.

Direct or indirect impacts of decisions:

Decisions made by the resource analyst influence whether a submitted management plan is approved. Their decisions also influence the alteration of harvest levels in response to land base removals. Decisions made by the incumbent may have significant impact on departmental decisions, policies, initiatives and directions (e.g. how AACs are determined). These decisions are long-term, and are typically revisited on a 5-10 year cycle.

Key Relationships

Major stakeholders and purpose of interactions:

The contacts for this position include FMWM senior professional and technical staff, FMWM Section directors and Executive Director as well as forest industry clients and consultants, for purposes of information gathering and development/review of analyses. Contacts will also include peers in other Branches within the Division.

Required Education, Experience and Technical Competencies

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

If other, specify:

Forest Management degree. Registration with Alberta Association of Forest Management Professionals

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

- Advanced understanding of the underlying principles and concepts of both spatial and aspatial Timber Supply modelling.
- Thorough understanding of Growth and Yield in relation to Timber Supply modelling.
- Thorough understanding of Alberta Vegetation Inventory (AVI) classifications.
- Thorough understanding of the underlying principles and concepts of Geographic Information Systems.
- Working knowledge of computing skills on Windows-based PC based computers and associated peripherals are required. Working knowledge of database programs and programming such as MSAccess. Advanced working knowledge of MS Excel and working knowledge of the MS Office suite of tools is required.
- Advanced working knowledge of programming/modelling skills in Woodstock/Stanley, Patchworks, and other Timber Supply models as well as ArcPRO/Python 3.
- Thorough understanding of forest management principles, practices and concepts is required to integrate specialist knowledge into a resource analysis model.
- Thorough understanding of forest planning related policy, including Forests Act, Timber Management Regulation, Forest Management Agreements, Quota Policy, Alberta Forest Management Planning Standard, and Harvest Planning and Operational Ground Rules.

- Good oral and written communication skills as well as interpersonal skills.
- Ability to deal with multiple ongoing projects, complex projects, shifting priorities and tight timelines.
- Demonstrated logical and good analytical judgment.
- A high degree of originality and creativity when interpreting the results of resource analysis into real world terms and designing output products (e.g. summary tables, digital maps, graphs) that meet the end user requirements.

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		
Systems Thinking	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Takes a long-term view towards organization's objectives and how to achieve them:</p> <ul style="list-style-type: none"> • Takes holistic long-term view of challenges and opportunities • Anticipates outcomes and potential impacts, seeks stakeholder perspectives • Works towards actions and plans aligned with APS values • Works with others to identify areas for collaboration 	
Creative Problem Solving	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Engages the community and resources at hand to address issues:</p> <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 	
Agility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<p>Proactively incorporates change into processes:</p> <ul style="list-style-type: none"> • Creates opportunities for improvement • Is aware of and adapts to changing priorities • Remains objective under pressure and 	

		supports others to manage their emotions <ul style="list-style-type: none"> • Proactively explains impact of change on roles, and integrates change in existing work • Readily adapts plans and practices 	
Drive for Results	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	Takes and delegates responsibility for outcomes: <ul style="list-style-type: none"> • Uses variety of resources to monitor own performance standards • Acknowledges even indirect responsibility • Commits to what is good for Albertans even if not immediately accepted • Reaches goals consistent with APS direction 	
	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>		

Benchmarks

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

Assign

The signatures below indicate that all parties have read and agree that the job description accurately reflects the work assigned and required in the organization.

Employee Name	Date yyyy-mm-dd	Employee Signature
Supervisor / Manager Name	Date yyyy-mm-dd	Supervisor / Manager Signature
Director / Executive Director Name	Date yyyy-mm-dd	Director / Executive Director Signature
ADM Name	Date yyyy-mm-dd	ADM Signature
DM Name	Date yyyy-mm-dd	DM Signature