Government
of Alberta ■

NON-MANAGEMENT JOB DESCRIPTION
POINT RATING EVALUATION PLAN

Working Title	Name
Wildfire Management Specialist	

Position Number	Reports to Position No., Class & Level	Division, Branch/Unit	Ministry
	Wildfire Manager	Forestry Division, Forestry Field Operations, Fort McMurray Forest Area	Forestry and Parks

Present Class	Requested Class

Dept ID	Program Code	Project Code (if applicable)

PURPOSE: Give a brief summary of the job, covering the main responsibilities, the framework within which the job has to operate and the main contribution to the organization (see Non-Management Job Description Writing Guide **Pages 7-8**).

Reporting to the Forest Area Manager, the Wildfire Management Specialist is a senior technical specialist providing support and services to achieve wildfire mitigation, response, preparedness, and recovery for lands administered within the Forest Protection Area. A major focus of this position is to support a variety of wildfire management approaches to achieve landscape-level forest and land management objectives. With an advanced understanding of wildfire behaviour, this position will influence wildfire management planning, vegetation management, prescribed fire, wildfire use, as well as integrated planning activities. The Wildfire Management Specialist will provide real-time fire behaviour analysis and strategic wildfire management services.

RESPONSIBILITIES AND ACTIVITIES: The purpose of the job can be broken down in different responsibilities and end results. Each end result shows what the job is accountable for, within what framework and what the added value is. Normally a job has 4-8 core end results. For each end result, approximately 3-6 activities should be described (see Writing Guide **Pages 9-10**).

1. **Plan and integrate strategies with the aim of integrating wildfire into land and resource management within the Forest Area.**

   Activities

   - Wildfire Management Specialist must work cooperatively and collaborate with major forest industry stakeholders on engineering disturbances on forested landscapes with a goal of achieving landscape objectives. Stakeholders including other GOA Departments, Non-Government Organizations, industry, and First Nations to assist with wildfire management strategies using landscape fire assessment information, through use of harvest planning, prescribed fire, and management tools.

   - Work with the Forest Management and Wildfire Mitigation Branch to ensure that fire is incorporated at a landscape planning level as part of long-term goals and commitments with the intent of reducing the probability of large landscape resource losses from wildfire.

   - Participate as a technical expert when required on forest management plan development teams to ensure wildfire prevention objectives are addressed and included in forest management planning.

   - Review forest harvest plans and management plans from a wildfire perspective to ensure wildfire landscape concerns are identified and incorporated into the timber harvest process.

   - Participate and support forest health planning to provide wildfire management strategic support, including risk assessments.

   - Participate and support resource management planning for species at risk and biodiversity objectives, ensuring wildfire strategies are considered as tools to achieve desired results.

Classification: Protected A

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- Liaise with stakeholders and affected parties and manage conflicting objectives in achieving landscape level objectives and the protection of values at risk.

- Integrate landscape planning at an operational level with Forest Operations, timber stakeholders and other industrial users within the Area.

- Work with Forestry Division and Environment and Protected Areas to develop prescribe burn proposals for provincially managed lands within the Area. Integrate with Forestry Division and Environment and Protected Areas staff to implement landscape-level fire and resource management goals and provide input on defining ecologically based landscape-level forest management objectives.

2. **Work closely with Forest Area staff, AWCC staff to accomplish operational wildfire management goals and objectives.**

<u>Activities</u>

- Assist the Forest Manager and Wildfire Operations Officer on escaped wildfire and multi-fire assessments providing values at risk and fire behaviour expertise as well as provide fire behaviour predictions for active wildfire and simulations.

- Participate in active fire suppression within the Forest Area and on export throughout the Province as needed to support the provincial needs and to expand on experience and expertise.

- Recommend updates to the provincial Fire Behaviour Prediction fuel grids after large wildfire events in the Area.

- Provide fire behaviour predictions as requested, for real time decision making (daily @ HFI 4+).

- Participate in incident management roles on prescribe burns, pre-suppression and wildfires as required or requested.

- Participate in export role as certification and expertise dictates, to support interagency resource sharing.

- Be conversant with requirements for tools to ensure accurate applicability of information used in fire management planning and projection. Such as fire behaviour fuel type layers, weather record accuracy, cured fuel stages and values at risk information.

- Be available for shifts as Duty Officer and Deputy Duty Officers as per the seasonal duty roster, and to fill in as the need arises.

3. **Support both the Forest Area and provincial fuel management program.**

<u>Activities</u>

- Participate in the development of fuel management objectives, strategies, and priorities for the Forest Area.

- Assist with budget estimates for the Prescribed Burn Program and fire science component of the Forest Area operations.

- Identify potential opportunities for wildland fire use and working to develop and manage prescribed fire plans within the Forest Area.

- Participate in task forces and working groups related to, fire sciences and wildfire management planning.

- Communicate regional issues with AWCC staff in the development of landscape policy and to ensure consistency.

- Support the FireSmart program in the Forest Area by providing modelling, assessments and input into strategy development for hazard mitigation.

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4. **Develop and maintain wildfire management plans to address wildfire preparedness, mitigation, response, and recovery for and within the Forest Area.**

Activities

- This position leads in the areas of landscape fire assessments and modeling. This position will use wildfire threat assessment and fire regime analysis to integrate wildfire knowledge into forest and land management planning.
- Develop and maintain a Forest Area Wildfire Management Plan, based on the principles of risk management and as per Provincial standards.
- Develop smaller scale wildfire management plans for specific landscape areas, to address land and resource management objectives.
- Integrate wildfire management planning components into Land Use Framework regional and sub-regional plans.
- Assist in developing alternative approaches and wildfire management strategies to protect values at risk on the landscape.
- Participate in the implementation, training, and maintenance of decision support tools such as AVI2FBP, CroSum, Behave, Prometheus, Burn P2, SFMS, and Wildfire Threat Assessment.

SCOPE: List specific information that illustrates the challenges, problem solving and creativity requirements and decision making capacity of the position. Also identify the internal or external areas the job impacts (see Writing Guide **Pages 11-12**).

- This position is critical to develop new Forest Area wildfire management approaches, such as wildfire use, to address ever increasing wildfire complexity. The Wildfire Management Specialist will need an advanced understanding of the wildfire environment, wildfire threat to values at risk, and the ability to influence a wide range of clients and stakeholders.
- The Wildfire Management Specialist will influence wildfire mitigation and preparedness approaches while providing support to wildfire response and recovery in the Forest Area. Wildfire management is needed to address the complex problems associated with implementing new wildfire management approaches.
- The Provincial FireSmart program enhancement will be supported by a highly competent and skilled Wildfire Management Specialist. This will involve a strong understanding of wildfire behaviour, modeling, data management, prescribed fire, and fuel management techniques. This position will be required to assist with setting priorities regarding strategies associated with vegetation management.
- Provides support to Forest Area wildfire operations and prevention, the Wildfire Management Specialist will provide analysis for wildfire management activities. The focus of this position is to protect values at risk, and to ensure the ecological benefits of wildfires support biodiversity objectives.
- The complexity of wildfire management resulting from more extreme wildfire risk requires an increased wildfire behaviour knowledge for real-time decision making as well as strategic planning. The Wildfire Management Specialist is expected to drive the application of wildfire behaviour information at a local level. This position will use wildfire behaviour knowledge to assist in the management of escaped wildfires, as well to provide input to preparedness and mitigation strategies in anticipation of wildfire incidents. Wildfire management strategies such as prescribed burning and wildland fire use will be recommended where appropriate by the Wildfire Management Specialist to achieve objectives of landscape level wildfire management planning.
- The Wildfire Management Specialist must integrate wildfire with a wide range of other disciplines. Forest management, forest health, fish and wildlife habitat, range, and others require wildfire knowledge and support to achieve their objectives. Wildfire strategies, recommended by the Wildfire Management Specialist will help achieve that wide range of objectives across forested landscapes. The Wildfire Management Specialist will lead the development of Forest Area wildfire management plans, considered key to developing wildfire management strategies.
- The Wildfire Management Specialist may be identified as the primary contact, at the Forest Area level, to address emerging GOA priorities such as LUF regional and sub-regional planning. This position will participate on regional planning teams to ensure effective integration of wildfire into these plans.

SCOPE: List specific information that illustrates the challenges, problem solving and creativity requirements and decision making capacity of the position. Also identify the internal or external areas the job impacts (see Writing Guide **Pages 11-12**).

- This position will interact with other Forest Operations Branch and Environment and Protected Areas staff involved with land and resource management policy, by providing expert opinion and information in support of policy development.

- The Wildfire Management Specialist will interact frequently with external stakeholders in the Area including, timber industry, and the wildfire science community to advance the priorities and interests of the department.

- This position is responsible for the delivery of the fire science aspects of the wildfire prevention program. This will involve overseeing the activities of the provincial vegetation management crews, organizing, and overseeing wildfire science projects, and testing new science and technology methods.

- While this position is based in Fort McMurray and is intended to support primarily the Fort McMurray Forest Area, this Specialist may be required from time to time to provide the same or similar support in other Forest Areas and or on Incident Management Teams throughout the province and internationally.

KNOWLEDGE, SKILLS & ABILITIES: Include information on required diplomas and degrees along with identifying the most important knowledge factors, including knowledge about practical procedures, administrative, technical or professional techniques, technical, scientific or program related processes, etc. Detail specific training if there is an occupational certification/registration requirement for the position. Specify the type of experience required for the position (see Writing Guide **Pages 12-14**).

- Strong analytical skills are a must to identify potential wildfire risks and threats, and then apply a strong understanding of wildfire behaviour to identify opportunities to effectively mitigate the concerns. Effective communication and negotiation skills are necessary to get buy in from forest industry stakeholders and ensure conflicts are resolved and that FireSmart recommendations are implemented in a timely manner.

- Related diploma or degree in natural sciences is required to effectively develop vegetative management prescriptions and to interact with other professionals.

- Type 2 incident management training will assist this position to support wildfire operations effectively.

- Advanced fire behaviour and fire behaviour specialist training, along with experience as a fire behaviour analyst. Knowledge of wildfire behaviour, forest fuel types, weather, and effects of topography on wildfire as well as the ability to understand and apply complex scientific principals of fire behaviour. This knowledge and set of skills are of paramount importance for this position, and encompasses the primary products and services provided.

- Prescribed fire planning training and experience with prescribed fire delivery will be required to effectively implement and provide input into fuel management program.

- Extensive related experience in all aspects of wildfire management with a good working knowledge of wildfire preparedness, mitigation response, and recovery, to support both wildfire operations and prevention.

- Exposure to forest and land management planning and operations. Knowledge of land management to plan the fire component into the landscape and potential mitigating options that may exist. Ability to understand and apply scientific principles of fire behaviour to landscape-level forest management.

- Extensive working knowledge and ability to interpret forest management policy, legislation, and administration - *Forest and Prairie Protection Act* and Regulations, Wildfire Management Branch policies and standard operating procedures and *Public Lands Act*, *Forests Act* and associated Regulations and Policies, *Occupational Health and Safety Act*, Alberta Employment Standards Code and *Municipal Government Act*.

- Highly developed verbal communication skills to deal with a broad spectrum of the public as well as strong listening and written communication skills are required to interact and communicate effectively and ability to work closely with and influence external stakeholders.

- An ability to lead and be part of a team to meet organizational goals and priorities related to the department business plan.

- Supervisory skills and the ability to prioritize, delegate and motivate employees to reach objectives in a timely and efficient manner.

- Strong mediation and problem-solving skills.

- Ability to multitask will be required to work within a complex and ever-changing work environment.

SCOPE: List specific information that illustrates the challenges, problem solving and creativity requirements and decision making capacity of the position. Also identify the internal or external areas the job impacts (see Writing Guide **Pages 11-12**).

- Class 5 driver's License.
- A thorough knowledge of Forest Management Area Agreements and associated Fire Control Agreements and annual Fire Control Plans.
- Ability to use tact and good judgement when dealing with sensitive and confidential information.
- Extensive knowledge of GIS systems and ArcView.
- Computer skills (MS Word, MS Excel, MS Outlook, and MS PowerPoint) will be required daily in execution of job duties.
- Analytical abilities with a strong knowledge of decision support tools such as SFMS, WTR, FIRES, FBP 97, BEHAVE, Prometheus. The Wildfire Management Specialist will be required to interpret model outputs to people without a modeling background.
- Standard First Aid Certificate, CPR, OH&S certifications, TDG air and ground mode, WHIMIS, are basic job requirements.

CONTACTS: Identify the main contacts the position communicates with and the purpose of the communication (See Writing Guide **Pages 14-15**).

- Develops and maintains contacts with other science specialists within the Alberta Government, Parks Canada, municipalities, neighbouring provinces and states, and industry to stay current on the state-of-the-art knowledge and developments in wildfire science.
- Will be required to participate in wildfire management planning groups and participate with other planning teams on a periodic basis.
- Direct and frequent collaboration with Wildfire Operations, Wildfire Prevention and Forest Management Sections at a Forest Area and Provincial level.
- Periodic interaction with the Predictive Services Section.
- Work directly with timber industry representatives to incorporate wildfire risk reduction components within management and operational plans on a frequent and ongoing basis,
- Communicates division programs and encourage compliance with legislation by meeting one on one with stakeholders.
- Work directly with First Nations to manage and plan controlled burns and Fire Control Agreements that deal with prevention issues specific to their lands as well as develop Fire Control Plans.
- Work with Environment and Protected Areas regarding wildfire suppression, wildfire management plans and prescribed burn plans and operations, annually.
- Frequently represent Forest Area interests at the local level on committees and at public meetings in relation to fire science issues.
- Liaise with representatives from other government departments on issues of mutual concern.

SUPERVISION EXERCISED: List position numbers, class titles, and working titles of positions directly supervised (see Writing Guide **Page 15**)

Optional, depending upon Forest Area specific requirements.

CHANGES SINCE LAST CLASSIFICATION REVIEW: Identify significant changes, that have impacted the responsibilities assigned to your position since the last review (see Writing Guide **Pages 15-16**).

This information is being collected under the authority of Section 10 of the Public Service Act and will be used to allocate positions within a classification plan and to manage the Alberta government human resources program. If you have any questions about the collection of this information, contact the Job Evaluation Unit, 6th Floor, Peace Hills Trust Tower, 10011 - 109 Street, Edmonton, Alberta, T5J 3S8, phone 780/408-8400 or contact your Ministry Human Resource Office.

Signatures

The signatures below indicate that the incumbent, manager, and division director/ADM have read, discussed and agreed that the information accurately reflects the work assigned (see Writing Guide **Page 16**)

Incumbent

| Name | Signature | Date |

Manager

| Name | Signature | Date |

Division Director/ADM

| Name | Signature | Date |