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Fire Management Policy for Provincial Parks and Conservation Reserves

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1.0 PURPOSE

To establish an approach for informing appropriate response to wildland fire in Ontario's provincial parks and conservation reserves and identifying opportunities for prescribed burning.

The policy provides direction on:

- the role and use of wildland fire in provincial parks and conservation reserves
- assessing opportunities for the ecological benefits of fire
- identifying assets and resources needing protection
- establishing preferred fire management direction

The policy complements broader provincial direction for protecting public safety and property, minimizing social and economic disruption, and managing costs.

The policy replaces fire management related policy from the following sources:

- Ontario Provincial Parks: Planning and Management Policies (1978 and 1992 update)
- Conservation Reserves Policy PL 3.03.05 (1997)

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2.0 INTRODUCTION

Ecological role of fire in provincial parks and conservation reserves

The Provincial Parks and Conservation Reserves Act, 2006 (PPCRA) establishes that maintaining and restoring ecological integrity guides all aspects of the planning and management of provincial parks and conservation reserves. Ecosystems have integrity when their lands, waters, native species and natural processes are intact. Fire is an important natural process for maintaining and restoring ecological integrity in many terrestrial ecosystems.

Fire management in provincial parks and conservation reserves is guided by the the Ministry of Northern Development, Mines, Natural Resources and Forestry's (NDMNR) strategic direction for management of wildland fire within the province of Ontario.

Fire renews forests and grasslands, creates healthy, natural ecosystems and provides diverse landscapes. The composition, structure and function of ecosystems are shaped by fire and other natural disturbances. Many ecosystems have adapted to fire and cannot persist without periodic fires. Historically, the Indigenous cultural use of fire has also provided fire-related benefits on the landscape.

Fire exclusion can alter ecosystems and natural fire regimes. Over time, fire exclusion can influence direct and indirect effects to ecosystems, including an increase in older forests, fewer regenerating forests, changes to natural processes, and a decline in fire dependent communities and species. In addition, a changing climate can increase the potential for more frequent and intense fires.

Ontario's provincial parks and conservation reserves provide opportunities for achieving ecological benefits and reducing hazards by using wildland fire and prescribed burning where appropriate and consistent with broader direction.

Responsibility for Wildland Fire Management

Aviation, Forest Fire & Emergency Services (AFFES) in the NDMNR provides leadership and program delivery for the protection of people, property and communities threatened by wildland fires, floods and other emergency situations. Wildland fire management in Ontario is guided by the Wildland Fire Management Strategy. As outlined in the strategy, each wildland fire is assessed and receives an appropriate response based on the situation and condition of the fire. AFFES responds to fires that pose an immediate threat to public safety and assets or resources. Fires are managed

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to limit negative impacts and costs when assets or resources are not threatened or when the environment could benefit.

Relationship to the Wildland Fire Management Strategy

This policy complements strategic and operational policies for fire management in Ontario. Information provided on assets, resources and preferred fire management direction for provincial parks and conservation reserves helps with decision-making during a fire situation. AFFES will continue to work collaboratively with Ontario Parks to identify assets, resources and preferred fire management direction. Implementing this policy will support AFFES in responding appropriately in the event of a fire to minimize social and economic disruption and ensure public safety, inside and outside provincial parks and conservation reserves.

3.0 GOAL AND OBJECTIVES

Goal

The goal of fire management in Ontario's provincial parks and conservation reserves is to protect public safety and promote and encourage the use of fire as a natural ecological process for the maintenance and restoration of ecological integrity.

Objectives

- 1) Establish an approach to inform appropriate response to wildland fire based on:
 - opportunities for achieving ecological and other benefits of fire
 - protection of assets and resources from the adverse effects of fire

Protecting public safety and property, minimizing social and economic disruption, and managing costs is fundamental to fire management inside and outside provincial parks and conservation reserves.

- 2) Apply prescribed burning to achieve specific resource management interests.
- 3) Support provincial efforts to increase knowledge and understanding of the ecological role of fire and awareness of fire prevention and mitigation.

4.0 FIRE MANAGEMENT IN PROVINCIAL PARKS AND CONSERVATION RESERVES

Fire management in provincial parks and conservation reserves focuses on the use of fire as an ecological process to maintain biodiversity and restore fire dependent

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ecosystems, while also protecting assets and resources that could be negatively affected by fire. Fire can also be used to achieve other resource management interests such as invasive species control, habitat renewal and reducing fire hazards.

Fire management interests may be achieved through wildland fire response, prescribed burning, or a combination of these tactics. A general objective to maintain or restore fire as a natural ecological process may be realized by allowing wildland fires to burn under low-risk conditions. Wildland fires may be managed for ecological or other benefits whether the source of the fire is natural (e.g., a lightning strike) or human caused. Prescribed burning may be used to achieve more specific outcomes (e.g., reduce competition from woody species in a grassland ecosystem, reduce fuels to assist in managing wildland fires) within a defined timeframe, or where opportunities to allow wildland fire are limited.

Wildland fire and prescribed burning are fire management options for provincial parks and conservation reserves located inside the Fire Region of Ontario. NDMNRF is responsible for managing wildland fires inside the Fire Region to achieve the best overall result, with the aim of realizing ecological benefits, reducing adverse impacts and managing costs. In areas where local municipalities respond to wildland fires in provincial parks and conservation reserves, they are generally limited to full suppression and prescribed burning. This includes those in southern Ontario that are outside the Fire Region, as well as those inside the Fire Region that are within a municipal protection area.

Fire mitigation involves on-the-ground actions to reduce the threat of wildland fire. Mitigation measures to reduce potential adverse impacts on assets and resources may facilitate opportunities for fire benefits. For example, hazard reduction may be appropriate in some areas where a history of wildland fire suppression has caused a build-up of forest fuels. Similarly, mitigation may support adaptation to climate change by reducing risks to assets and resources from more frequent and severe fires. Priorities for mitigation should be informed by wildland fire hazard assessments which identify assets at greatest risk. Mitigation measures should support provincial park and conservation reserve objectives, and avoid or minimize negative impacts on other assets, resources, and ecological integrity.

The location, size, provincial park class, and zoning are considerations that may inform fire management planning however, they are not determining factors.

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5.0 FIRE MANAGEMENT PLANNING

There is wide variability in the ecosystems, Indigenous traditional uses, recreational activities, land uses and regional context of provincial parks and conservation reserves that will influence fire management. For these reasons, opportunities for wildland fire and prescribed burning will be assessed for each area based on the ecological role of fire in the respective forest region, assets and resources that are present, and management interests.

Fire management direction is established through provincial park or conservation reserve management planning. In particularly complex situations, that direction can be augmented through the development of secondary plans such as fire management plans.

Management plans

Fire management direction will be developed for each provincial park and conservation reserve during management planning. Management plans set broad direction on whether opportunities for wildland fire and/or prescribed burning exist in part or all the planning area and are prepared in accordance with Ontario's Protected Areas Planning Manual and associated guidelines.

Fire management plans

A fire management plan is a type of secondary plan that may be prepared at the discretion of the provincial park or conservation reserve manager when additional planning is needed to develop specific objectives to be achieved through wildland fire response, and/or to guide extensive or complex prescribed burning programs. Detailed fire management direction may also be provided in other types of secondary plans such as vegetation management plans.

6.0 KNOWLEDGE AND UNDERSTANDING

Fire management direction for provincial parks and conservation reserves is informed by the best available science, information and knowledge.

Many Indigenous communities have traditional knowledge of fire ecology and behaviour, cultural assets and resources, and the use of fire for resource management. Information contributed by Indigenous communities is beneficial for fire management planning and is considered when preparing and implementing fire management direction.

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Similarly, information about other types of assets and resources that could be affected by fire, such as improvements associated with occupational authority (e.g., commercial outpost camps, private recreation camps), may be contributed by local stakeholders such as commercial tourism operators, or the public.

Fire science in provincial parks and conservation reserves is encouraged to promote a better understanding of fire ecology, such as ecosystem and species responses to fire, fire behaviour, and effects of climate change on the fire regime. Consistent with objectives of the PPCRA, research that uses provincial parks and conservation reserves as points of reference for monitoring ecological change on the broader landscape is encouraged.

In keeping with an adaptive management approach, fire management direction is adjusted in response to new information and data. Knowledge gained through monitoring and the outcomes of fire management activities is applied to assess and amend fire management direction. Fire management direction is also informed by changing environmental conditions due to climate change and adaptation strategies identified through management planning.

The PPCRA includes an objective for provincial parks to provide opportunities for learning about Ontario's natural and cultural heritage. Some provincial parks are well-positioned to offer opportunities to educate the public about the benefits of fire, as well as its historical use by Indigenous peoples. In addition, provincial parks may contribute to provincial objectives to increase awareness about the safe use of fire and wildland fire prevention by distributing information to park visitors.

7.0 IMPLEMENTING FIRE MANAGEMENT DIRECTION

Implementing fire management direction requires the preparation of supporting information to guide wildland fire response or direct prescribed burning.

7.1 Fire response

As per the Wildland Fire Management Strategy, all wildland fires inside the Fire Region of Ontario, including those in provincial parks and conservation reserves, are assessed and receive an appropriate response determined at the time of fire. Fire management direction provides information about the preferred outcomes to wildland fires that informs the appropriate response. Implementing fire management direction during a wildland fire occurrence is guided by assets, resources and opportunities maps, where available.

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NDMNR has a mandate to provide forest fire protection inside the Fire Region, as described in the Forest Fires Prevention Act and regulations. Fire protection south of the Fire Region is the responsibility of the municipality having jurisdiction over those lands. Many municipalities south of the Fire Region only have resources available to provide full suppression when responding to a wildland fire.

Assets, resources and opportunities maps

Assets, resources and opportunities maps identify areas with assets and resources that could be adversely affected by wildland fire, as well as areas with opportunities for beneficial effects from fire. Assets, resources and opportunities maps are prepared for every provincial park and conservation reserve to support decision making at the time of a wildland fire. Areas with a municipal agreement or located within municipal protection areas are exempt. Where provincial parks and conservation reserves meet this exemption, staff are encouraged to work with the municipality to develop assets, resources and opportunities maps if the municipality can meet their needs.

Assets, resources and opportunities maps reflect the management interests for the provincial park or conservation reserve as described by the management plan (e.g., vision, objectives, site-specific policies). Maps provide readily available information about preferred outcomes that otherwise may not be considered at the time of a fire. In some cases, an amendment to the management plan may be necessary to support mapping where the preferred fire management approach is contrary to existing direction.

Assets, resources and opportunities maps can be prepared at any time over the term of the approved management plan, during management planning, or as part of a fire management plan. Maps will be completed on a priority basis and/or as resources permit. In the absence of an assets, resources and opportunities map, wildland fire response and operations will be carried out in accordance with the Wildland Fire Management Strategy in consultation with land managers.

7.2 Prescribed burning

Prescribed burning is a resource and land management tool that can be applied to reintroduce fire disturbance where opportunities for wildland fire are limited, and where specific management interests are best achieved with fire. Some examples of the uses of prescribed burning include restoration of a fire dependent vegetation community, control of invasive species and hazard reduction.

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The use of prescribed burning to achieve specific land management interests should be considered when preparing management plans. If the need for prescribed burning is identified at a later date and is not contrary to area management policies, a management plan amendment isn't required. Fire management or other secondary plans may guide extensive or complex prescribed burning programs. Prescribed burns will be planned and implemented in accordance with provincial policies and protocols.

8.0 IMPLEMENTATION

Fire management in provincial parks and conservation reserves is a shared responsibility among Ontario Parks and fire managers. Provincial park and conservation reserve managers are responsible for preparing fire management direction and assets, resources and opportunities maps, in collaboration with fire managers.

Wildland fire response and operations in provincial parks and conservation reserves will be carried out in accordance with the Wildland Fire Management Strategy. Fire management direction and assets, resources and opportunities maps provide information to assist with deciding on the appropriate response in the event of a wildland fire. A variety of other factors will be considered in determining the appropriate response, such as potential values at risk, safety of the public and workers, availability of firefighting resources and costs, weather and fire behaviour. For these reasons, decisions about the appropriate response to a wildland fire may vary from the fire management direction and the assets, resources and opportunities map, depending on conditions at the time of a fire.

Fire management direction approved prior to this policy remains in effect. Some previously approved management plans do not include site-specific policies for fire management (e.g., the documents formally known as interim management statements). In these cases, direction in this policy takes precedence where there are discrepancies due to changes in provincial policy since the plan was approved (e.g., park class and zone-specific policies on prescribed burns, fire suppression, suppression of human-caused fires, and requirements for fire management planning). Adjustments needed to align with this policy will be identified during the examination of the management plan, or earlier as needed.

Fire response plans have, in the past, been prepared for some provincial parks and conservation reserves. The direction in these plans remains in effect for the term of the plan. Fire response plans will be replaced with an assets, resources, and opportunities map or a fire management plan after the fire response plan expires.

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Some wildland fire operations have the potential to cause negative impacts to assets and resources. Wildland fire response for sensitive sites (e.g., areas susceptible to erosion, shallow or wet soils, waterways, cultural heritage assets, endangered species habitat) will be managed to minimize impacts in accordance with provincial operating policies and guidelines.

9.0 DEFINITIONS

Appropriate response: Actions taken over the life of a wildland fire intended to produce the best outcome given the need to:

- realize the benefits of fire (e.g., reducing hazardous fuels, contributing to ecological functioning);
- manage the detrimental impacts of fire (e.g., loss of property and infrastructure, economic and social disruptions); and,
- manage the costs of wildland fire (e.g., monitoring, alternative suppression tactics, divisional suppression).

An appropriate response minimizes the expected total cost, plus net loss from a wildland fire, accounting for constraints such as public and worker safety, risk, available resources and many other factors.

Asset: Any construction that has cultural, recreational or socio-economic value.

Assets, resources and opportunities map: A map displaying where and to what degree fire is desired or not desired.

Beneficial fire: Fire burning in forest, grass and shrub that contributes to the proper ecological function of the ecosystem, contributes to resource management objectives or protects public safety (e.g., by reducing hazardous forest conditions (OMNRF 2014a)).

Ecological integrity: A condition in which biotic and abiotic components of ecosystems and the composition and abundance of native species and biological communities are characteristic of their natural regions and rates of change and ecosystem processes are unimpeded (PPCRA, 2006).

Fire management: The activities concerned with the protection of people, property, and forest values from wildland fire and the use of fire for the attainment of forest management and land management goals and objectives, all conducted in a manner that considers environmental, social and economic criteria (OMNRF 2014a).

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Fire management plan: A plan that describes the preferred fire management direction in a defined area to achieve specific resource management objectives and outcomes, while ensuring the protection of life, assets and resources. A fire management plan for a provincial park or conservation reserve is a type of secondary plan.

Fire regime: The kind of fire activity or pattern of fires that generally characterize a given area. A fire regime is normally described by the following characteristics: frequency, fire cycle, magnitude (intensity and severity), type, spatial extent and seasonality (Van Sleeuwen 2006).

Fire response plan: An operational plan prepared prior to 2019 that identifies the preferred response to wildland fires within a planning area to achieve general objectives for the beneficial effects of fire while protecting life, property and values.

Fuels: Wildland vegetation materials that can burn. While usually referring to aboveground living and dead wildland surface vegetation, roots and organic soils such as peat are often included (OMNRF 2014a).

Hazard reduction: A treatment of dead or dying forest fuels to diminish the chance of fire starting and to lessen the potential rate of spread and resistance to control (OMNRF 2014a).

Management interest: A desired condition or state of a value, process or attribute achieved by maintaining or modifying its current condition, as determined through management planning.

Management plan: A document that provides site-specific management policies to guide protection, development and management of one or more provincial parks and conservation reserves. Includes the documents formerly known as management statements.

Opportunity: In the context of an assets, resources and opportunities map, this is an area where it is possible to use fire to achieve a management objective.

Prescribed burning: The deliberate, planned and knowledgeable application of fire by authorized personnel and in accordance with NDMNRF policy and guidelines to a specific land area to accomplish pre-determined forest management or other land use objectives (OMNRF 2014a).

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Resource: A natural attribute or feature that is a value of a provincial park or conservation reserve. Resources may be of ecological, cultural, recreational or socio-economic value.

Secondary plan: A plan prepared generally for complex topics where approved management direction does not provide sufficient policy direction to address those complex topics (OMNRF 2014b).

Value: A specific attribute or feature (Indigenous, cultural, ecological or recreational), or ecological function within a provincial park or conservation reserve that may require additional/special consideration during the management planning process and subsequent management (OMNRF 2014b).

Wildland fire: Any fire burning in forest, grass or alpine/tundra vegetation (OMNRF 2014a).

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