



Canada Wildfire

2017-2021
STRATEGIC PLAN

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UNIVERSITY OF ALBERTA
ALBERTA SCHOOL OF FOREST
SCIENCE & MANAGEMENT



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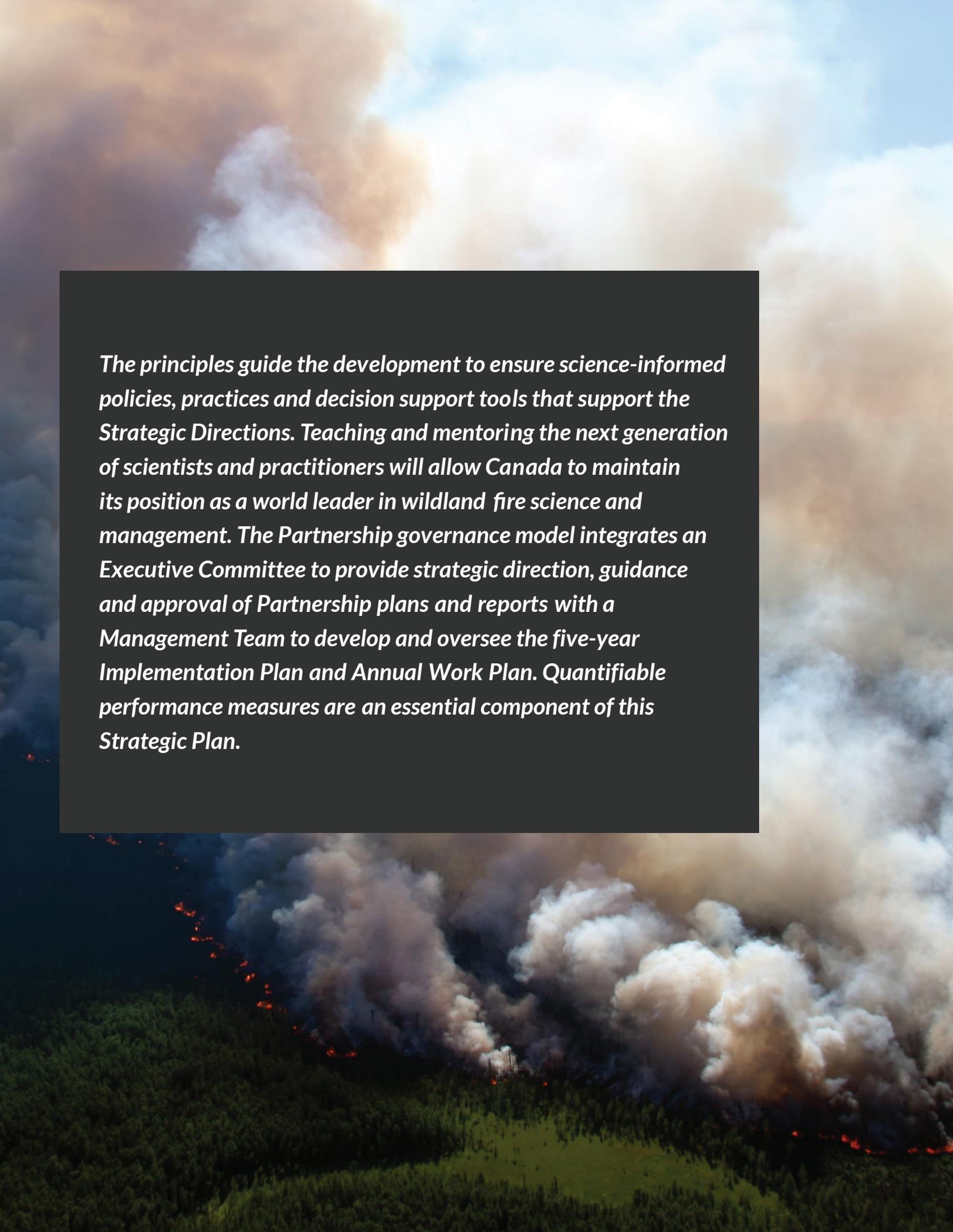
EXECUTIVE SUMMARY

Wildland fire is an important ecological process on the Canadian forest landscape. Fire management agencies must understand the fundamentals of this process, as solutions to today's major wildland fire issues require integrated and multidisciplinary scientific approaches. We can no longer treat smoke emissions, climate change, biodiversity and wildland-urban interface issues independently. For wildland fire managers to effectively use fire as a tool to achieve land management objectives while protecting values-at-risk, they need to understand the full suite of consequences of their management decisions. The Canadian Partnership for Wildland Fire Science ('the Partnership') has a mandate to conduct basic and applied research, as well as education at the public, undergraduate, graduate, and professional development scales. The Partnership positively influences wildfire policy through science and evidence, but does not undertake advocacy activities.

The early growth of the Western Partnership for Wildland Fire Science (WPWFS) had a western Canadian focus, however, the vision of the founding partners was, and continues to be, to foster and support a Pan-Canadian collaborative. The new branding of Canadian Partnership for Wildland Fire Science conveys building an expanded collaboration that includes new partners from across Canada. The Partnership continues to take a leadership role in Canada's fire science community.

This is the second five-year plan and provides strategic direction for managing and conducting wildland fire research and education through the Partnership. This plan reflects recommendations made by the Formal Review Committee of the 2010-2015 WPWFS Strategic Plan. This is the first plan as the Partnership as it seeks to team up with new partners across Canada to combine knowledge and resources.

VISION	The Canadian Partnership for Wildland Fire Science (CPWFS) will be an international leader in wildland fire science, shaping wildland fire management in Canada and around the world.
MISSION	To provide excellence in wildland fire research, education, and knowledge exchange for the development of innovative policies and practices while teaching and mentoring generations of scientists and practitioners.
PRINCIPLES	<ul style="list-style-type: none">• Excellence• Collaboration• Strategic Alignment• Adaptation• Innovation• Open Science
STRATEGIC DIRECTIONS	<ul style="list-style-type: none">• Research• Education• Partnerships and Collaborations• Applications and Communications

An aerial photograph of a large wildfire. The fire is visible as a line of orange and red flames along the edge of a dense green forest. Thick, billowing plumes of white and grey smoke rise from the fire, filling the upper portion of the frame. The sky is a mix of blue and white, with the smoke creating a dramatic, hazy atmosphere. The overall scene is one of a powerful natural event.

The principles guide the development to ensure science-informed policies, practices and decision support tools that support the Strategic Directions. Teaching and mentoring the next generation of scientists and practitioners will allow Canada to maintain its position as a world leader in wildland fire science and management. The Partnership governance model integrates an Executive Committee to provide strategic direction, guidance and approval of Partnership plans and reports with a Management Team to develop and oversee the five-year Implementation Plan and Annual Work Plan. Quantifiable performance measures are an essential component of this Strategic Plan.

1.0 INTRODUCTION

1.1 Purpose of the Strategic Plan

The Strategic Plan provides direction for managing and conducting wildland fire research and education through the Partnership. It ensures the highest standard of science and education is maintained, thereby allowing Canadians to continue to benefit from knowledge-informed policies and practices in wildland fire management.

The Strategic Plan respects the jurisdictional priorities established internally by each of the partners and strongly reflects and contributes to the 2016 Canadian Wildland Fire Strategy (CWFS) mandate towards:

- Resilient communities and an empowered public;
- Healthy and productive forest ecosystems; and
- Modern business practices.

Canadian wildland fire research programs need to continue to evolve and build collaborations with interdisciplinary initiatives to address emerging issues such as climate change, risk perceptions, public safety, socio-economic impact of wildfire, and improved decision support systems. To contribute to the CWFS mandate, this Plan presents an outline of some of the opportunities with respect to research, education, and technology thereby providing foundational direction for the Partnership.

1.2 Implementation and Annual Work Plans

With guidance from the Strategic Plan, the Implementation Plan identifies the specific actions associated with each strategic direction that will be undertaken over a five year planning horizon. It provides the important function of integrating the partners' needs while still embracing the common vision of the Partnership. Medium-term goals and associated Key Performance Indicators (KPI) are included in the Implementation Plan. The Annual Work Plans establish the short-term goals and associated KPIs for each fiscal year (April 1 to March 31) that will build towards the successful completion of the Implementation plan.

2.0 CONTEXT, OPPORTUNITIES AND CHALLENGES

2.1 Background of the Partnership

Over the past three decades (1987–2016), an average of 7,855 wildland fires occurred and approximately 2.5 million hectares of forested land burned in Canada annually (McGee et al. 2015).

Wildland fires create myriad economic, environmental and social impacts. Knowledge of both short and long-term impacts of wildland fire is essential for effective risk assessment, policy formulation and appropriate wildland fire management. In Canada, wildland fires pose a serious threat to the health and safety of Canadians, rural communities, valuable timber assets, property and infrastructure, biodiversity, clean air and water, and cultural heritage. The risk to property and community safety will continue to grow as forested areas become more populated (i.e., increase in wildland-urban interface areas), and the amount of infrastructure in these areas increases. Flannigan et al. (2005) projected an increase in area burned in Canada by 74–118 percent by the end of 21st century in a 3 x CO₂ climate change scenario. Of particular concern is the increase in extreme wildland fire behaviour, wildland-urban interface events, and community and industrial evacuations.

On the other hand, wildland fire disturbance processes in Canada have important ecological value in many of Canada's forest ecosystems, particularly the boreal forests. Sustainable management of fire-dependent ecosystems therefore requires both minimizing the socioeconomic impacts of wildland fire while maximizing its ecological benefits. Although wildland fire is an essential component in maintaining healthy and productive ecosystems, the significant negative impacts of wildland fire on the environment, health and safety of Canadians, and availability of natural resources, must also be minimized.

Each province and territory, along with Parks Canada, manages wildfires and the resultant threats to public safety on their own lands. Wildland fire management includes prevention and mitigation, preparedness, detection, response and recovery. While Canadian fire management agencies have exchanged physical wildfire resources for decades through the Canadian

Interagency Forest Fire Centre (CIFFC), the need for enhanced sharing of knowledge, science, and technology only more recently came to light in the 2005 Canadian Wildland Fire Strategy (CWFS). The CWFS emphasized the role of research to provide important science-based evidence to support technology and decision-making in wildland fire management.

Collaboration is at the heart of innovation and the development of new technologies and best practices. Wildland fire researchers and practitioners recognize that deeper and targeted collaborative efforts are more important than ever. The collaborative research model is the standard being adopted around the world. Wildfire managers need science-based decision support tools to address emerging issues and trends, but no single wildfire management agency or research group has the capacity and capability to resolve complex wildland fire management issues that ultimately affect all Canadians. Building bridges and capacity are the keys to finding science solutions for common problems.

The Canadian Partnership for Wildland Fire Science (CPWFS) was initiated in June 2009, through a Memorandum of Understanding signed by three founding partners: Alberta Agriculture and Forestry (AAF), University of Alberta School of Forest Science and Management (UofA), and the Canadian Forest Service (CFS) represented by the Northern Forestry Centre (NoFC). Originally known as the Western Partnership of Wildland Fire Science, it was formed to address priority research needs by creating a fire science hub that linked AAF and NoFC with researchers at the UofA and other Canadian and international research institutions.

2.2 Common Vision

Members of the Partnership agree to work collaboratively to become an international leader in wildland fire science, contributing to shape wildfire management in Canada and around the world. The Partnership will provide leadership in wildfire science and its application to science and policy. Common science priorities arising from management needs will be identified and investigated. Synergies between member organizations will be emphasized and reinforced. This provides a good basis for the benefits for organizations to join the partnership – reducing overlap in research, complementarity of research, sharing resources, leveraging expertise, sharing problems and solutions. This is the common vision. No one organization can “go it alone” to manage all of the issues and provide sustainable solutions. Wildland fire researchers and practitioners recognize that strong multi-disciplinary collaborations are more important than ever before. Partnerships are about the collaboration and sharing of resources to build capacity. Collaboration between organizations is the key to unlocking opportunities for sustainability and discovering innovative and science informed solutions previously unimagined. The success of the Partnership depends on the motivation and commitment of the partners to embrace a common path guided by this shared vision.

While each partner has their own jurisdictional priorities, the common vision of the Partnership is the first and foundational priority. Not all partners contribute the same way, but all embrace the shared responsibility to advance wildfire management in Canada by being engaged and supporting the expansion of the Partnership to a national reach, as it was first envisioned.

To reach the common vision, the Partnership provides excellence in wildland fire research, education, and knowledge translation for the development of innovative policies and practices while teaching and mentoring generations of scientists and practitioners. The four Strategic Directions (Research, Education, Partnerships and Collaborations, and Applications and Communications) provide guidance to achieve this goal. All partners provide input into the development of the strategic directions, goals and work plans. This is important as all partners need to measure the value and progress of the Partnership they invest in.

The 2016 review and renewed call of the Canadian Wildland Fire Strategy identified priorities to ensure Canadian wildfire management agencies are prepared to address future challenges. This next phase of the Strategic Plan is designed to ensure the Partnership makes a substantial contribution to addressing these priorities.

3.0 VISION, MISSION AND PRINCIPLES

3.1 Vision

The Partnership will be an international leader in wildland fire science, shaping fire management in Canada and around the world.

3.2 Mission

To provide excellence in wildland fire research, education, and knowledge and technology for the development of innovative policies, practices, and decision support tools while teaching and mentoring generations of scientists and practitioners.

3.3 PRINCIPLES

3.3.1 Excellence

The Partnership will produce the highest quality, leading-edge scientific knowledge to support sound policies, effective best practices, and informed decision making in wildland fire management. It will demonstrate transparency and openness in how it conducts its scientific activities, adhering to scientific principles and continuing to use proven quality assurance methods such as international standards, peer review and expert advice. The Partnership will foster innovation while inspiring excellence in teaching and mentorship.

3.3.2 Collaboration

The Partnership will build strong and sustained collaborative relationships to support better integration of science and education across a range of stakeholders. It will work with researchers and academia within Canada and internationally within universities, government science agencies, industry, granting councils and funding programs. It will find ways for members to work more efficiently together through shared facilities, financial resources, human resources, training opportunities, adjunct professorships and international cooperative agreements. In addition, it will maintain effective relationships between science and science-users by communicating and developing knowledge and tools that can be easily understood and applied.

3.3.3 Strategic Alignment

The Partnership activities will be designed to undertake the advancement of the Canadian Wildland Fire Strategy and the broader priorities or strategic goals of the partners, as represented on the Executive Committee.

3.3.4 Adaptation

The Partnership will operate in an adaptive manner, where priorities and approaches are continuously being assessed to ensure that objectives are being met. Projects will be modified to adapt to new and emerging information and trends.

3.3.5 Innovation

The scientific scope of the Partnership will not be limited to the traditional confines for wildland fire science. Partners are encouraged to adopt and adapt techniques and best practices from other disciplines, while at the same time investigating deeply into more traditional topics to gain new insights. The Partnership will encourage innovative approaches to teaching, stakeholder input, outreach, communication and collaboration.

3.3.6 Open Science

The dissemination of quality research will be a focus of the Partnership, not only through traditional venues such as top-tier academic journals, but also through more public avenues such as traditional media, social media, and public lectures. The Partnership will demonstrate transparency and openness in its scientific activities, while adhering to principles of the scientific method alongside expert advice, as well as to the public availability of results and derived products.

4.0 STRATEGIC DIRECTIONS

The four strategic directions include a list of actions and outcomes in order to provide guidance for clear and measurable deliverables, and may be expanded with additional membership in the partnership.

4.1 Research

Advance the physical, ecological, social and economic sciences in wildland fire.

Wildland fire is an important ecological process on the Canadian forest landscape. Wildfire management agencies must understand the fundamentals of this process to project the future role of fire and to help managers mitigate, prepare for and manage wildland fire. Today these agencies manage more wildland fire than ever before as fire seasons lengthen, wildland fire behaviour intensifies, and the wildland-urban interface expands. At the same time, national values-at-risk and the increasing demand of limited resources, necessitate the use of suppression strategies focusing on strategic protection rather than full perimeter control. Additionally there is a need to allow more prescribed and wildland fires to burn for ecological benefits.

To effectively use fire as a management tool to achieve land management objectives while protecting values-at-risks, managers need to understand the full suite of consequences of their wildfire management decisions. Whether the challenge is damaging fires, threatening communities, or use of fire to maintain healthy ecosystems, the solutions to today's major wildland fire issues require integrated and multidisciplinary approaches. We can no longer treat smoke emissions, climate change, biodiversity and wildland-urban interface issues independently because we know that the physics, chemistry, biological and social aspects of these issues interact. The research carried out will develop the information and knowledge needed to support improved wildland fire management, planning, prevention and appropriate response by Canada's wildland fire management agencies.

Actions:

- Undertake physical fire research to advance the fundamental understanding of fire behaviour, fire weather, fuel management impacts, and climate change impacts to improve fire weather, fire behaviour forecasting, risk assessments and the prediction of effects from prescribed fire and wildland fire.
- Promote a better understanding of the biophysical aspects of fire and the interactions of other natural disturbances and ecological processes to sustain healthy and productive forest ecosystems, and thereby adapting wildland fire management and balancing management options.
- Develop research on the social and economic impacts as well as the risks of alternative wildland fire and fuel management strategies.
- Maintain awareness of the human dimension of all wildland fire research. This includes proper community consultation and engagement when appropriate.
- When relevant, place research in the context of information technology practices that support the integration of research into wildland fire and landscape decision support systems. Facilitate this integration through documentation, scientific data standards, and compatibility with existing frameworks.

Measurable outcomes¹:

- Published scientific journal articles with respect to natural, social and economic advances in our understanding of wildland fires.
- Improved fire weather and behaviour forecasting models.
- Improved prescribed fire and wildland fire prediction models. An enhanced engagement of the public and stakeholders with the real-world aspect of wildfire science, including public presentations, field tours, and plain-language publications for non-specialists.

¹ An outcome is defined here as a "specific result a program is intended to achieve". Source: United States Department of State, https://eca.state.gov/files/bureau/performance_measurement_definitions.pdf



4.2 Education

Facilitate extension of science knowledge in Canada.

Canada must develop highly qualified personnel with the capacity to understand, utilize and further develop research that flows from the Partnership. The Partnership is committed to expanding graduate and undergraduate programs, and providing a broader opportunity for mentorship in Canada.

The Partnership will also expand educational opportunities to provide wildfire management professionals with non-degree options for advancing their education and skills and to remain current with respect to evolving science and practice. Professional education efforts will include non-credit modules and full course offerings employing both traditional and blended eLearning delivery methods. Workshops and certificates in focus areas of particular relevance may also be pursued. University members will lead, define, and strengthen linkages and synergies between teaching and research.

Actions:

- Expand the graduate and undergraduate programs in wildland fire science, technology and management.
- Provide opportunities for post-graduate projects and scholarships.
- Develop a knowledge based centre of excellence for national and international wildland fire education and research.
- Grow and expand educational opportunities to provide wildfire management professionals with options for advancing skills and remaining current (including non-degree modules, courses, and certificates; workshops; and use of both traditional and blended eLearning delivery models).
- Increase Canada's capacity and capability in wildland fire science and management knowledge and skills.

Measurable outcomes:

- A growing number of post-graduate students.
- New undergraduate and post-graduate courses in wildland fire science and management and increased enrolment in such courses.
- New positions – academic (tenure and non-tenure), and secondment positions, support staff, and scientific staff.
- A growing number of professionals exposed to training and extension programs.
- A growing number of visiting research fellows to the Partnership.

4.3 Partnerships and Collaborations

Develop productive partnerships to support improved capacity and investment in wildland fire science and technology.

Partnership and collaboration will ensure greater efficiencies in research investment, reduced duplication of effort, and more effective application of Canada's wildland fire research capacity in support of the Canadian Wildland Fire Strategy. Bringing new members into the Partnership will increase interaction and collaboration, working towards a "network effect" where advances are made in a pan-Canadian wildland fire science forum.

Actions:

- Maintain existing partnerships.
- Build new partnerships with wildfire management agencies, universities, and research organizations involved in wildland fire.
- Expand the Partnership engagement to the national level.

Measurable outcomes:

- Enhanced web presence - new web page outlining the advantages of involvement in the Partnership for members.
- A process map for integrating new members into the Partnership.
- Promotional material, containing a draft charter that explains the expectations all parties have as part of the Partnership.
- Additional partners in the Partnership
- Additional collaborations within and through the Partnership

4.4 Applications and Communications

Package, promote and deliver scientific information so that our stakeholders can understand it and use it effectively. Communicate with stakeholders using an adaptive feedback loop to re-identify issues and needs as new knowledge becomes available.

Technology/knowledge transfer and communicating research findings are critical to keeping partners, collaborators, the public, and the broader science community, informed about the application of research outputs and to improve operational practices. Credible scientific results provide stakeholders with science-based knowledge to inform policy and decision making tools. The dissemination of research results needs to be tailored into practical products for a range of audiences. Communications with stakeholders is essential to obtain feedback on relevance and required adjustments based on newly identified gaps or issues.

Actions:

- Apply knowledge: develop novel techniques for adaptive wildfire management; produce quantitative tools that analyze the consequences of alternative wildland management strategies.
- Integrated knowledge: assimilate wildfire management planning alongside other objectives (ecological, economic, and social) to meet the demands of landscape management for multiple objectives.
- Share knowledge: establish a comprehensive communications plan to share outcomes arising from the Partnership with a broad audience within and outside the wildfire practitioner community. The communications plan will include: scientific articles, student theses, targeted research notes, white papers, public education materials, and seminars with both a practitioner and public focus.

Measurable outcomes:

- Participation in workshops, national and international conferences (including invited speaker).
- Participation in the CIFFC National Conversations on Forest Fire Management.
- Adaptation of software, decision support systems adopted by stakeholders.
- Communication in popular and social media.

5.0 STRATEGIC PLANNING FRAMEWORK

A schematic diagram of the structure and governance model is shown in Fig. 1.

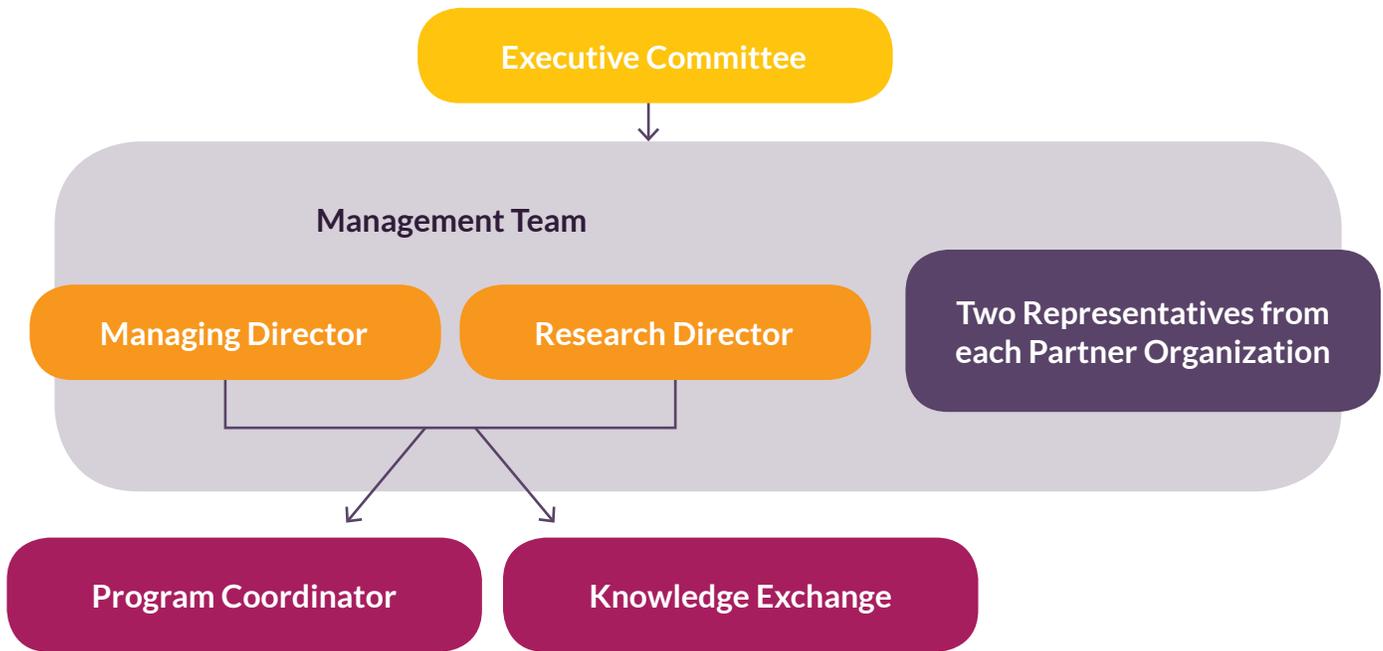


Fig.1 Organizational/Functional Structure

5.1 LEADERSHIP, GOVERNANCE AND ROLES

5.1.1 Executive Committee

The Executive Committee provides high-level oversight and strategic direction for the Partnership. It approves the Strategic, Implementation and Annual Work Plans and makes appointments as required including the Directorships of the Partnership. The governance of the Executive Committee is described in the Terms of Reference.

Members of the Executive Committee represent partners that have contributed significant funding and/or support-in-kind to the Partnership. New partners may be admitted to the Partnership on consensus agreement by the Executive Committee.

The Executive Committee membership includes:

- One high level representative from each partner (e.g. Executive Director)
- Partnership Managing Director – ex officio member
- Partnership Research Director – ex officio member
- Chairperson, Partnership Management Team – ex officio member
- Partnership Management Team invited to attend

5.1.2 Management Team

The Management Team is the overarching working group for the Partnership and is guided by an approved Terms of Reference that outlines its role and responsibilities; including:

- Develop and maintain the Strategic Plan
- Develop and maintain the five year Implementation Plan
- Review, provide input and recommend Annual Work Plans
- Compile and create Annual Report for the Executive Committee
- Develop protocols and guidelines to address data requirements, authorship of reports and manuscripts, and intellectual property rights
- Foster and promote awareness of the Partnership locally, nationally, and internationally
- Enhance and expand collaborative opportunities to optimize the use of partner resources
- Identify new challenges and recommend new opportunities to the Executive Committee
- Recommend new partnership opportunities to the Executive Committee

The Management Team will include the following voting membership: the Directors of the Partnership, and two representatives from each of the partner agencies. Members will serve for a term length at the discretion of their respective organization. Bi-monthly meetings will be held to ensure effective management of the Partnership. The Program Coordinator will serve as the meeting administrator.

5.1.3 Partnership Staff

Staff may be dedicated full-time employees, formal secondments or in-kind contributions from partner organizations.

5.1.3.1 Managing Director

The Managing Director is responsible for providing administrative and business leadership. This position oversees the administrative management of the basic components of the Implementation and Annual Work Plans and provides leadership for the advancement, prominence, communication and expansion of the Partnership. The Managing Director reports to the Executive Committee and is a member of the Management Team.

The Managing Director will work closely with the Research Director to develop the Implementation and Annual Work Plans and Budgets. They will liaise with external funders both within Canada and internationally and will advise the Management Team and Executive Committee on opportunities to support and initiate research programs or projects that are aligned to the overall objectives of the Partnership.

5.1.3.2 Research Director

The Research Director oversees all research activities within the Partnership. This position coordinates and identifies wildland fire science research priorities, and identifies the need for specific research outcomes, including workshops and conferences. The Research Director will lead the Partnership's overall work in relation to research strategy, collaboration and consultation among stakeholders. Integral to the role will be the provision of high level scientific advice and expertise to the Management Team, Executive Committee, and partner agencies. This role reports to the Executive Committee and is a member of the Management Team.

The Research Director will work closely with the partners to develop education standards, development of national curricula for wildland fire science in conjunction with agency training staff. The Research Director will work closely with the Managing Director to develop the Implementation and Annual Work Plans. The Research Director will represent the Partnership on working groups, projects, and broader wildland fire science initiatives, as appropriate and will support the showcasing of innovation and excellence in wildland fire science.

5.1.3.3 Program Coordinator

The Program Coordinator reports to and supports the Research Director and Managing Director by performing administrative duties related to planning, directing and coordinating both the research and operational activities of the Partnership. This position will undertake a variety of administrative and program management tasks. The Program Coordinator will help in planning and organizing programs and activities as well as carry out important operational duties.

5.1.3.4 Knowledge Exchange and Communications

The Knowledge Exchange and Communications (KEC) staff provides leadership in the dissemination of the research outcomes of the Partnership. By collaborating with staff from Partnership members, the KEC tailors written and dynamic content for wildfire management practitioners as well as the public at large. The KEC works with students to ensure their hard-earned research results make it to the fireline.

5.2 CRITICAL RESOURCES

The complementarity of member resources coupled with the potential to build future integrated capacity is the realized strength of the Partnership. The sustainability of the Partnership through longer-term investments in both infrastructure and personnel will be paramount to its continued success.

5.2.1 Infrastructure Resources

Currently, members of the Partnership have access to infrastructure and equipment for scientific discovery, graduate training, undergraduate teaching, wildfire suppression, technology transfer and application, and public relations. Research infrastructure includes both wet and dry laboratories, field equipment, and analytical and computing resources. The unparalleled archive of long-term, national and regional databases and predictive models provide an extensive and powerful resource. Complementing these resources is wildfire suppression infrastructure, active prescribed burning program, and public knowledge exchange opportunities.

The operation and maintenance of infrastructure are the financial responsibilities of the individual partners and constitute 'in-kind' support for the Partnership. However, it is imperative that the partners ensure on-going complementarity and avoid duplication when opportunities for infrastructure renewal appear.

5.2.2 Human Resources

The research capacity of the Partnership is supported by existing academic, provincial and federal researchers with expertise in environmental sciences (forestry, natural resource management, atmospheric and weather sciences, statistical analysis and modelling, remote sensing); information technology (GIS applications, data base management, computing science, web and software development); and social fire sciences (social science, human behaviour, natural resource economics).

As the Partnership builds and additional funds become available, additional positions can be staffed to support the Partnership through new academic or staff positions, secondments, adjunct professorships or re-assignment of staff from partner agencies. Functional assignments from within partner organizations will be encouraged to deliver on focused agreed priorities of the partnership.

The administration of the Partnership is 'housed' at the UofA, with dedicated office space and graduate/research HR and financial staff.

5.2.3 Financial Resources

Secured and sustained financial support for Research Director, Managing Director and the Program Coordinator will be essential for the ongoing operation of the Partnership. Operating funds will be sought from partner organizations in the form of cash or in-kind contributions.

Research financial support will be through research grants awarded to individual or collaborations of scientists within the partnership. The Partnership will seek funding of post graduate scholarships through two main Canadian federal granting agencies – the Natural Sciences and Engineering Research Council of Canada, and the Social Sciences and Humanities Research Council of Canada. Funding of post graduate scholarships will also be sought from the appropriate provincial and industrial funding agencies.

6.0 REPORTING

Performance measures are used to monitor progress, inform future editions of the Strategic and Implementation Plans, and ensure a process of continuous improvement within the Partnership. The identification of short- and medium-term goals and associated Key Performance Indicators facilitates performance reporting. Performance measures will be used to promote the success of the Partnership, by demonstrating its achievements in a measurable and unbiased manner.

The Annual Report for the Partnership will be based on measurable outcomes for each Strategic Direction in terms of short- and medium-term goals, linked to actions and outcomes described herein.



7.0 STRATEGIC REVIEW

It is important for the partners to measure and report on the Partnership's value and progress. The five year Implementation Plan addresses the strategic goals and needs of each partner.

At the end of the 5-year strategic planning period (2021), a Review Committee will be established to assess the overall effectiveness of the Partnership in response to the following points of enquiry:

- *Does the Partnership's science contribute to the CWFS and the broader strategic goals and research priorities of the partners?*
- *Are the Partnership's Strategic and Work Plan's effectively adapting to emerging research priorities?*
- *Does the Partnership's science contribute to the individual partner's business plans and goals?*
- *Is there an effective feedback loop between the Partnership's Work Plan and the Executive Committee?*
- *Do the Partnership's activities have a direct linkage to those of each partner organization?*
- *Is the Partnership demonstrating excellence in research and education according to recognized international measures of excellence?*
- *Does the Partnership have adequate mechanisms in place to facilitate external advice on the quality and relevance of its research and education?*
- *Does the Partnership collaborate effectively with a diverse group of universities, research providers, and wildfire management agencies to deliver the wildland fire science that meets Canadian needs?*

7.0 REFERENCES

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