



#3, MARCH, 2026

ABOUT THE PROJECT

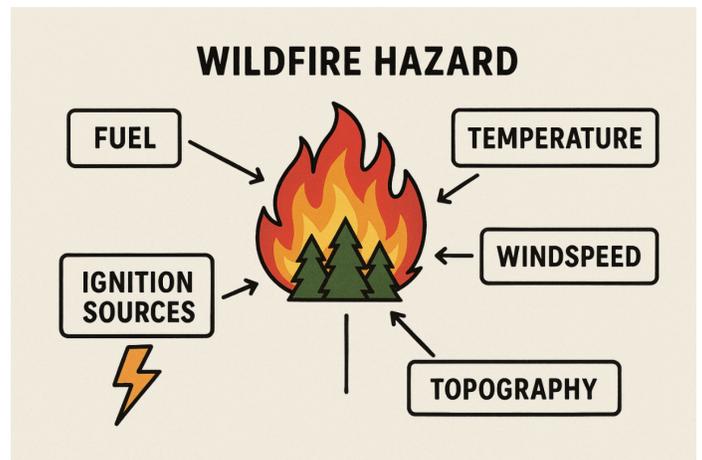
The Bulkley Morice Wildfire Resilience Project is an independent research project focused on collating existing knowledge of wildfire ecology, forest and fuel management practices and assessing how practices could be revised to improve wildfire resilience within the Bulkley and Morice planning area. The project is not making policy or operational decisions about land use; rather, its outcomes may inform Indigenous stewardship plans, community wildfire resilience plans (CWRPs), fire management plans, and landscape-scale forest management plans (FLPs).

Project Progress

The project is completing year 2 of a multi-year project. It has been a productive year for the project team. In year 2, our focus has been on transitioning from research and knowledge collection to analysis and synthesis of this information. The goal of the knowledge-gathering phase is to better understand all of the dimensions of wildfire in our region; what we know about historical and contemporary wildfires and their management, as well as documenting gaps in knowledge. The knowledge will then be applied in two aspects of wildfire resilience: how wildfires affect ecosystems, and how wildfires may affect human communities and the things communities value.

1. Ecosystems and wildfire: The starting point is understanding the historical role of fire in our ecosystems. We can then examine how much fires have changed. With this information, land managers can make informed decisions about fire and forest management systems – *from an ecological resilience perspective, is more or less fire needed on the landscape?*

2. Communities and wildfire: A community's wildfire risk is the combination of hazard and vulnerability. In simple terms, this means how likely a fire is in a certain place (hazard) and how likely it is to damage something we care about (vulnerability).



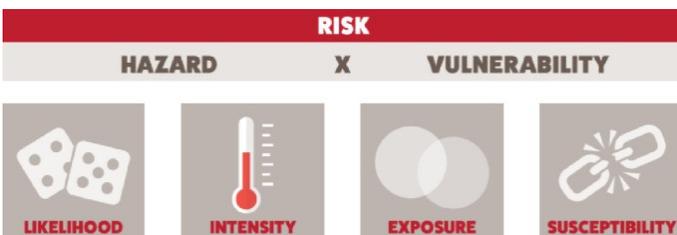
This project is initially focused on understanding the hazard component of the risk formula.

The starting point is to understand fire behaviour and wildfire hazard in our ecosystems.

Wildfire hazard is a function of certain physical conditions that make a location susceptible to damage; these are:

- **fuel** (live or dead vegetation available to burn)
- **weather, topography,** and
- **ignition potential.**

One of these – **fuels** can be modified by forest and fire management. By managing forests differently, it is possible to alter the landscape's fuels, which in turn can affect wildfire hazard. For example, harvesting practices that resemble historic fires (such as broadcast burning) will reduce the hazard compared to other practices.



Fire Regime

Managing for wildfire resilience requires a deep understanding of the local fire regime. A fire regime encompasses the patterns of wildfires within an ecosystem over time, including key attributes such as fire size, severity, frequency or burn rate, seasonality, and ignition sources.

These attributes are critical for assessing wildfire risk, identifying potential imbalances in fuel loads and forest composition, and determining the capacity of forests to recover and adapt to changing conditions.



Diagram: What is the Fire Regime?

Project Outcomes

Fire Regime Classification and Description: A key project outcome is to describe the fire regimes in the project area. Currently, forest management in BC uses the Natural Disturbance Type (NDT) classification framework to describe how different forest ecosystems are shaped by natural disturbance regimes – primarily fire, but also including disease, wind, insects, and other processes – and to understand disturbances. This system has many strengths, but it doesn't provide managers with the information they need to better understand wildfires in their region. For example, the NDT system does not describe how different fire severities (high, moderate and low) are expected to occur in an ecosystem. Since fire severity is an essential driver of wildfire impacts, this is a significant gap.

To improve the NDT system, the project is adopting a classification system being developed by the UBC research team led by Dr. Lori Daniels and Dr. Jen Baron, which uses a Historic Fire Regime classification. This system aligns with historical fire processes, incorporates mixed-severity typologies, and enables assessment of deviations from historical conditions. We plan to have preliminary classification in the spring so stay tuned.

Fire modelling and scenarios: A key outcome of the project is to provide decision support for land managers and planning tables in the project area. A landscape fire modelling tool, the TEF (Time-based Empirical Fire) model is being developed for this purpose. Landscape fire models are used to assess fire risk to communities, the impact on valued resources (e.g., timber, wildlife habitat, old-growth forests, water quality), and the potential for hazard reduction if mitigation treatments are applied.

The project is finishing wildfire hazard model validation for the study area and moving into scenario development. In this phase, the model will assist managers in understanding how wildfire mitigation can reduce hazards across landscapes. The model will help explore key questions about different mitigation approaches:

- How much treatment is required to have a significant effect on wildfire hazard?
- What effect can land use and management objectives, such as old-growth management areas and visual quality objectives, have on the effectiveness of mitigation?
- What is the potential effect of the design and placement of mitigations?

Past Events

- **UNBC Wildfire Conference (Oct. 2025)**

Understanding Our Fire Regime
See [poster](#) on Fire Regimes.

- **Workshop #3** – December 4, 2025
- **PODs workshop** – February 12, 2026

Workshops

A workshop/open-house discussion on hazard modelling is planned for June 10, 2026 at the Old Church in Smithers and will be delivered as a BVRC seminar.

Workshops are the primary element of the collaborative design approach, informing project outcomes through multiple interactions with land managers, stakeholders, Indigenous peoples, and the public. Engaging diverse perspectives ensures that solutions are shaped by local expertise, cultural values, and community priorities, leading to more inclusive and equitable outcomes.

Past Workshops

Workshop #3 (Dec 4, 2025)

The 3rd project workshop, held on December 4, 2025, explored wildfire hazard modelling, reviewed the beta version of current-conditions wildfire hazard maps, and discussed the design of learning scenarios for wildfire management and hazard mitigation.

 [Read the workshop summary.](#)

Potential Operational Delineations (PODs)

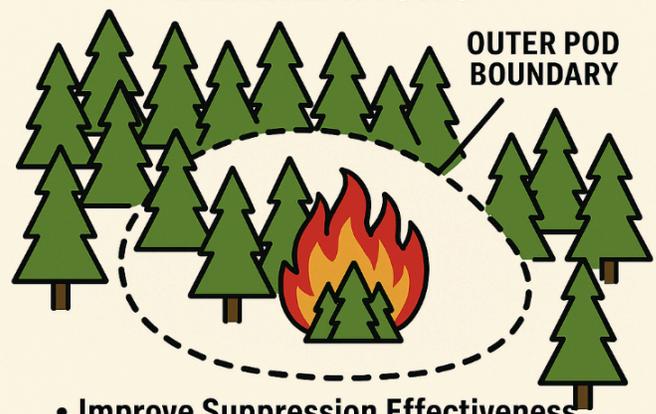
The Bulkley–Morice Wildfire Resilience Project is piloting a new approach to landscape-scale wildfire planning using Potential Operational Delineations (PODs). PODs are strategic planning units whose boundaries follow natural or human-made features—such as roads, rivers, and ridgelines—that can help firefighters safely and effectively manage wildfire. PODs integrate natural and constructed landscape features to guide wildfire suppression and risk reduction and provide a shared platform for coordinating forest management, fuel mitigation, and emergency response.

This pilot explores how PODs—widely used in the United States—can support wildfire resilience in the Bulkley and Morice Timber Supply Areas. The project aims to pilot a process that will improve alignment between wildfire planning and forest management. POD's can be used for three complementary management objectives:

- improve suppression effectiveness,
- prioritize where to place fuel treatments to have the greatest benefit, and,
- support long-term resilience planning for where to encourage more beneficial fire on the landscape.

In addition to developing PODs for the Bulkley Morice, the project will test a repeatable POD-design methodology that fits within B.C.'s Forest Landscape Planning Framework. By combining local expertise, spatial analysis, and collaborative workshops, the project seeks to create a defensible, scalable model for integrating wildfire resilience into broader land-use planning across the province.

POTENTIAL OPERATIONAL DELINEATIONS



- Improve Suppression Effectiveness
- Prioritize Fuel Treatment
- Encourage Beneficial Fire

PODs are also being proposed as part of the Lakes Forest Landscape Plan, so if you would like to learn more about this emerging tool, take a look at the scoping report posted here:

[POD scoping report link.](#)

Contact Us

Contact us to learn more or to [sign up for our newsletter.](#)

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