Wildfire Resilience Workshop Summary: June 4, 2025

Purpose

The Wildfire Resilience Knowledge Workshop #2 took place in Smithers on June 4, 2025. Its purpose was to establish a foundational understanding of wildfire issues to guide planning and management actions. Participants discussed a variety of wildfire challenges and opportunities, which helped develop a preliminary list of questions for the project team to investigate further.

This document summarizes the discussions and outcomes from the workshop. The project team will use these outcomes to create modelling scenarios and other decision-support tools.

Objective 1: Inform and establish the foundation problem set that the project must address.

After a presentation, participants gathered in small groups to discuss the wildfire challenges that the project needs to address. The following key points summarize the perspectives provided, but do not represent a consensus opinion or agreement by all participants regarding any single point:

- Near communities, community safety is the top priority, even if it may come with some ecological trade-offs.
- It is essential to acknowledge that the community's footprint extends far beyond the Wildland-Urban Interface (WUI).
- We must plan for a future that may see an increase in large, severe, and rapid wildfires.
- Planning should take into account the uncertainties related to climate change and its impacts.
- Management decisions must recognize the unpredictability of treatment effectiveness.
- Strategies are needed to scale treatments at the landscape level to maximize their impact.
- It's crucial to determine the most effective locations for treatments, ensuring a good return on investment.
- Consideration should be given to how forest management and silviculture practices can enhance wildfire resilience.

- We need to explore how mitigation actions can be more effective in improving community safety.
- Finding ways to create incentives that encourage positive changes is essential.
- Balancing the increase of beneficial fire with other forest values, such as economic benefits, non-timber resources, and critical habitats, is essential.

From these discussions, four overarching themes emerged to guide the project:

1. Enhance decision-making processes about wildfire risk and understanding value trade-offs.
2. Identifying the locations and threats to community resources and devising strategies to improve resilience and safety.
3. Assessing the risks to timber, non-timber, and cultural resources, along with strategies for their management.
4. Fostering improved community education on these issues.

Objective 2: Explore the solution space by looking at two aspects of wildfire: 1. landscape-scale wildfire hazard, and 2. wildfire resilience.

Following short presentations on the fire model (TEF), landscape hazard and resilience assessment, the participants met in small groups to explore solutions to the landscape-scale wildfire hazard and wildfire resilience. The following is a summary of the perspectives and the discussions of the participants.

<u>Assessing/addressing wildfire hazard at the landscape scale:</u>

- Old and mature stands – hazard is increased by the presence of dead
- Defined zones at the landscape scale for fuel management and tonnage targets
- Decreasing fuel loads in strategic locations to allow for backburns as a suppression action.
- Roads provide egress for communities and access for suppression – plan treatments to strengthen as control points and a safety measure
- Defined control points to get the best return on investment. How can the model assist?
- Understand the cumulative impact of treatments at scale and across the landscape
- Defined economic zones for salvage harvest. What level of harvest is needed to have an effect?

- Improve our understanding of the fire pathways into communities to plan the location of treatments
- Gain a better understanding of when not to suppress. Learnings from the 2024 Witset fire
- Need to know the location of values to be managed and the overlap with high-priority treatment areas
- Importance of incorporating local knowledge, such as the effect of wind in proactive planning, as well as suppression actions

<u>Addressing the ecological element of wildfire resilience:</u>

- Resistance at the community level, resilience at the landscape/backcountry scale.
- Ecological resilience needs fire
- What fire regime is acceptable measured by scale, frequency and severity?
- At what landscape scale do we seek to achieve resilience? Consider cultural practices and needs/impacts at the House scale.
- Increase resilience through a natural succession pathway vs restocking? Consider where to re-stock and salvage harvest to minimize compounding disturbance.
- Better understand Indigenous burning and the legacy to understand the benefit of managed fire for ecosystem services.

Objective 3: Develop a synthesis of the questions the model should address

The project team synthesized the discussions and proposed the following descriptions of questions to be addressed.

Wildfire hazard and hazard treatment effectiveness

Questions:

- Which treatments are most likely to be effective?
- How much of those treatments, where and at what rate, and what are their benefits and effects on wildfire?
- What pace of treatments is needed to reach an objective?
- What are potential conflicts with other values?

Scenarios:

1. Current conditions: assume the current system (harvesting/forest management and suppression) with policy/financial constraints
2. Hazard reduction –unconstrained capacity: Assume human resource capacity/financial/is not limiting hazard reduction
3. Hazard reduction – unconstrained land use objectives: Assume the policy/social constraints are flexible

Ecosystem resilience

Assumptions:

- Human systems want some stability for many ecosystem/forest values, e.g. timber, water
- Scale matters. Need to consider managing fire so effects are acceptable at local (i.e. house group, watershed) as well as larger scales
- Generally, the goal is to avoid catastrophic losses to important values at different scales
- Fire contributes to resilience
- Some places require more resistance to fire (i.e. close to communities), and other places can allow more fire.
- It's about choices and how much change we want where.

Questions:

a) Is some level of ecological transformation ok? Where, when?
b) How can we prioritize where to put treatments, where to encourage resistance, and where to allow more fire?

Scenario:

4. Beneficial wildfire/ecosystem landscape (resilience). Target indicator values for fire size, fire severity, fire frequency, stand composition, and landscape pattern.