

TERMS OF REFERENCE FOR A SPECIAL INVESTIGATION

Wildfire Rehabilitation Practices

BACKGROUND

Emergency wildfire management frequently involves constructing essential, sometimes life-saving, temporary infrastructure including access trails, fire guards, water sumps, staging areas, and camps. In response to over 3.4 million hectares burned between 2017 and 2021, the BC Wildfire Service (BCWS) constructed nearly 16 000 kilometres of fireguards to aid suppression activities. Additionally, in 2023, another 5 177 kilometres of fireguards were built.

Damage caused during these activities can disrupt natural drainage patterns, impact water quality and stream habitats, increase soil erosion, affect terrain stability, promote the spread of invasive species, increase long-term fire hazards, and damage and destroy infrastructure. These effects can significantly impact biodiversity, public and private resources, infrastructure, and human health and safety.

Under section 9(6) of the *Wildfire Act*, government may rehabilitate land damaged by fire control activities. If it does, section 17 of the Wildfire Regulation requires government to assess fire hazards and prepare a plan to minimize fuel hazards, maintain natural drainage patterns to reduce surface soil erosion,¹ and prepare and implement site rehabilitation plans as soon as practicable.

In 2004-2005, the Board published interim and final reports on post-fire rehabilitation, investigating the rehabilitation of sites affected by the 2003 fire season. The investigation focused on plans that were prepared, implemented, and effective in controlling water and erosion. The Board concluded that rehabilitation efforts were generally effective and recommended ways to improve future practices, including revising rehabilitation plan submission timelines and conducting pre-season fire management planning with land managers' input.

Although legislation governing rehabilitation hasn't changed since the Board's last report, the area burned, and the extent of suppression efforts have intensified. As a result, the BCWS has updated its standard operating guidelines (most recently in 2020), shifted responsibilities from centralized to regional operations in natural resource districts, and increased rehabilitation activities.

The scale of post-fire rehabilitation and its potential effects on the environment, infrastructure, and human safety are significant. This is a Board special investigation to assess how well

¹ This includes stabilizing and re-vegetating soil disturbed or exposed by heavy equipment; stabilizing the stream channel and stream bed at stream crossings; and stabilizing sump and dam locations that were created for the purpose of carrying out fire control.

government is meeting its post-wildfire rehabilitation requirements and evaluating its effectiveness in the field.

OBJECTIVE

Assess compliance with legal requirements for post-wildfire rehabilitation by evaluating plans, assessments, and practices and examining their effectiveness.

SCOPE

The sampling includes completed rehabilitation activities carried out in the Thompson River and Stuart Nechako natural resource districts in 2021 and 2023. These districts experienced significant areas burned during these two years, resulting in the construction of over 2800 km of fireguards. These sample years follow the update of standard operating guidelines and the transfer of responsibility to regional operations, allowing sufficient time for a sample of rehabilitation activities to have been completed. Depending on the field review duration, a third district may be included in this investigation.

APPROACH

The focus will be on wildfire suppression rehabilitation plans and practices and assessing compliance with the *Wildfire Act* and *Wildfire Regulation*.

We will obtain inventories of suppression and rehabilitation activities from BCWS for 2021 and 2023 and evaluate Wildfire Suppression Rehabilitation Plans (WSRPs) from the districts of interest. Field assessments will verify compliance with the *Wildfire Regulation* by evaluating plan completion, implementation of identified measures, and effectiveness. This includes assessing plans and practices to restore natural drainage patterns to minimize surface soil erosion, addressing and reducing fire hazards, and meeting other post-wildfire rehabilitation objectives such as soil stability, promoting revegetation, or repairing infrastructure. Additionally, we will examine how rehabilitation practices account for other important government objectives identified under the *Forest and Range Practices Act*, such as cultural heritage resources and wildlife habitat.

Site visits will focus on high-risk and sensitive sites. We will interview BCWS rehabilitation practitioners and other relevant government staff and contractors, as well as engage with Indigenous communities and the affected public. We will compare the effectiveness of rehabilitation treatments with best practices described in professional guidelines.

REPORTING

Under section 122 of FRPA, the Board will publicly report the findings of this special investigation. Recommendations may be made to address legislation or policy related to wildfire rehabilitation activities authorized under the *Wildfire Act*.