



FSN – Establishment of NEW Access Management Working Group

It is estimated that there are approximately 719,000 kilometers of roads in BC, of which 92% (661,500km) are unpaved. Resource roads (Forest Service Roads and road permit access roads etc.) comprise most of the unpaved roads with an estimate of over 620,000 km. These roads are a vital part of the province’s transportation infrastructure and continue to grow annually at a projected average rate of +/- 10,000 km.

making roads difficult to travel safely as well as complicating evacuation procedures of an injured worker in an emergency. Conversely, when excessive deactivation measures are completed, it can create extremely hazardous conditions for crews due to removal of certified crossing structures and creation of deep cross-ditches which are hazardous to navigate.

In March of 2023, the BC SAFE Forestry Program completed a survey of its members to assess the frequency and extent of access hazards that silviculture contractors face in their worksites due to road deactivation, rehabilitation, or closure after harvesting. The primary objective of the survey was to make recommendations to reduce these hazards and improve safety and productivity for silviculture crews. The survey focused on access conditions respondents experienced over the last five-year period and addressed all access scenarios except for those restricted to the use of helicopters.

The survey respondents provided a range of enhanced emergency response planning measures they felt were required to ensure timely and safe emergency transportation, including providing radios to every worker, air transport arrangements, modifying the worksite, bringing in additional first aid resources, and refusal of completing unsafe work. Many respondents identified the importance of having an Emergency Response Plan (ERP) in place that considers access management and procedures for air medivac as being critically important to ensuring worker safety in these situations. The table below summarizes the responses to survey questions.

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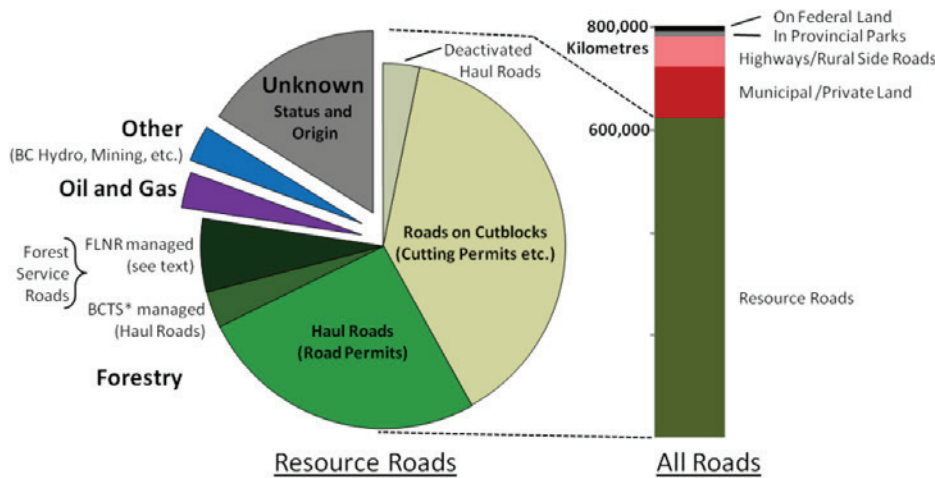


Figure 1. Estimates of road length in BC by responsibility (Source: FPB SR/49)

Resource roads are most often used by industrial traffic involved in large scale forestry, oil and gas, mining, and agriculture for accessing and managing British Columbia’s vast natural resources. They are also critically important to smaller commercial users such as hunting and fishing lodges, recreational users and are a critical link for providing access to essential services for residents of remote communities.

If not properly designed, constructed, maintained, and deactivated, resource roads have the potential to adversely contribute to landscape alteration and can negatively impact visual quality, biological diversity through habitat loss and fragmentation as well water quality through erosion and sedimentation. Numerous different pieces of legislation administer responsibilities for managing resource roads in BC (*Forest Act, Forest & Range Practices Act, Forest Planning and Practices Regulation etc.*). Industrial users that hold an agreement with the provincial government are obliged to follow this often-complex suite of laws which can sometimes conflict with each other regarding achieving government objectives and values such as maintaining all-weather roads to provide safe access to conduct obligatory contractual operations vs. deactivating roads to limit access and ensure environmental values are protected.

These conflicting objectives can often also result in extremely hazardous conditions for forestry crews accessing worksites once primary harvesting activities are complete. A lack of regular maintenance and/or implementation of adequate deactivation measures can lead to erosion and landslide events

BC SAFE Forestry Program Road Deactivation Hazard Survey Results:			
Survey Question	# of Respondents	Yes Responses	No Responses
Did your company experience injuries, property damage, or near misses involving crews and/or vehicles while operating in worksites with roads that had been deactivated, rehabilitated, or closed after harvesting?	36	86.11%	13.89%
Were the access issues known to you prior to arriving for work on the block e.g., where they described in the viewing package?	36	38.89%	61.11%
Did the access conditions change between viewing and commencing work?	34	52.94%	47.06%
Do you consider these access situations you have encountered a hazard to your workers?	36	94.44%	5.56%
Do you think these access problems could have been avoided by different planning on the part of your clients?	36	91.67%	8.33%

Figure 2: 2023 BC SAFE Forestry Program Road Deactivation Hazard Survey Results

In response to these concerns, the BC SAFE Forestry Program and BC Forest Safety Council are working towards the establishment of an Access Management Working Group. The focus of this new working group will be to develop standards and procedures for industry to implement when completing road deactivation activities. These standards will provide guidance on technical specifications required to ensure worker safety when deactivating roads while still ensuring that environmental objectives are maintained.

Anyone interested in participating in this initiative and becoming a member of the working group are encouraged to contact John Betts, Executive Director Western Forestry Contractors' Association at info@wfca.ca or Dorian Dereshkevich, Manager Transportation and Northern Safety at ddereshkevich@bcforestsafesafe.org. 📍

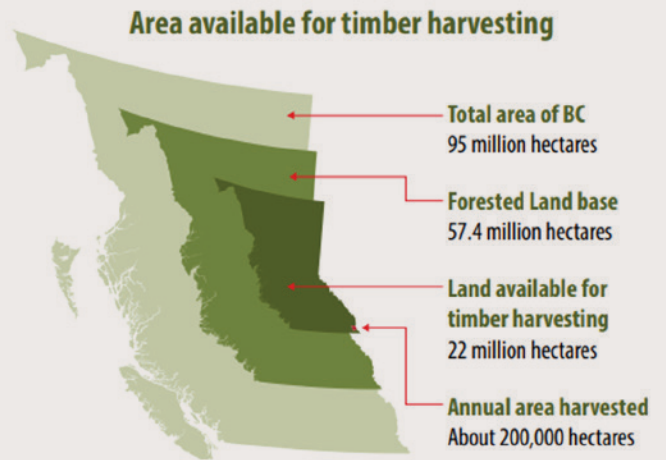
ERP: Operator Extraction and Steep Slope Rescue Drill Safety Video

Access to economical timber throughout British Columbia has never been more challenging. The mid-term and long-term supply have been impacted by factors such as bark beetle infestations and large-scale wildfires throughout the interior. Increased focus on non-timber forest values such as preserving wildlife habitat and managing community watersheds has placed additional constraints on the amount of area available within the Timber Harvesting Land base (THLB).

These factors, and several others, have required companies that hold timber harvesting tenures to shift their operations to areas with more challenging conditions, which results in increased safety risks to forest workers. This shift in operations has also resulted in the rapid adaptation and implementation of winch or traction-assist harvest systems. While exact numbers are not known, it is estimated that since the initial introduction of the winch-assist technology in approximately 2015, there are now over 100 systems working throughout British Columbia. These systems have been proven to help reduce safety risks by removing workers from the many hazards of manual work and placing them in protective cabs. However, placing more mechanized equipment onto steep slopes has also resulted in the introduction of new hazards that the industry must ensure it is adequately prepared for. The Trucking and Harvesting Advisory Group (TAG) identified steep slope emergency preparedness procedures as a key initiative to address for the period of 2022-2024.

In the fall of 2022, BCFSC, in partnership with industry members, initiated a three-part, multi-year project with a focus on documenting and introducing best practices for Steep Slope Emergency Preparedness within the timber harvesting sector. The first phase of the project was the production of an [Emergency Response Drill video](#) demonstrating tools and techniques to gain access to the cab of a piece of equipment that had all of the escape doors blocked or rendered inoperable in an upset condition.

A second video demonstrating techniques required to extract a worker from a cab and administering first aid in a steep slope harvesting scenario is planned for release in January 2024. During filming of the second video, the project participants highlighted several challenges they felt would have a significant impact upon how they proceeded during an actual safety incident but could not



be simulated in a drill scenario. The goal of the video is to prompt contractors to critically examine their own level of preparedness and complete similar drills with their crews. Once editing and final production is complete, the second Steep Slope Harvesting ERP video will be posted on all BCFSC media platforms. 🚧



Rainfall Shutdown and Resumption Procedures

Forest tenure holders/Licensees must provide and maintain their land and premises used as a workplace in a manner that ensures the health and safety of workers. This includes direct employees as well as contractors who are working on their behalf.

One of the obligations is to ensure that there is effective rainfall shutdown and resumption procedures in place, not only on active work sites but also on the travel routes to and from these sites. This is particularly important given recent rain fall triggered landslide events within BC which have resulted in workers being injured or killed. These events are getting more common place, leading to increased importance for having these procedures in place.

Rainfall shutdown procedures are comprised of three parts:

- 1) Identification of areas of high risk to landslide. These are typically areas containing steep slopes where high rainfall events or rain on snow events could result in a landslide and put workers at risk. Knowing where these areas are relative to the work site as well as the direct routes traveled to and from work is critical.
- 2) Identification of when a locally significant rainfall event has occurred or is happening. This requires:
 - a. Representative local weather stations or rain gauges which identify rainfall accumulation hourly and over the past 24 to 48 hours.
 - b. On site rain gauges to measure rainfall either over night or during the day.
 - c. Worker awareness of what conditions are normal and what might represent abnormal or extreme conditions (i.e., very swollen rivers and streams).
- 4) Process for either calling workers off when it is unsafe to go to work or having them determine that current conditions are making it unsafe to remain at work. Having workers driving into an unsafe situation is as bad as having them remain on site when conditions are getting more hazardous.

Whether the procedures are in the hands of the licensee or the contractors working on their behalf, it is critical that areas that are high risk are identified and that there is a procedure in place to address the potential hazard.

The final component is having effective resumption procedures in place. Determining when it is safe to return to the work site can be as simple as waiting 24 hours post rain event or as involved as calculating when the soil water balance is appropriate. In addition, a best practice is to have a competent individual review the access and work site prior to crews returning to ensure their safety.

Links

[Forest Stewardship - Province of British Columbia \(gov.bc.ca\) \(Search: Wet Weather\)](#) 🌲