



WHAT ABOUT BROADCAST BURNING AS A FIREFIGHTING PREVENTION SOLUTION?

Last summer, while attending a TLA Levent in Prince George during the most devastating fire season on record, TLA member Klaus Posselt—of Klaus Posselt Logging Ltd. in Burns Lake—commented on the ability of the Shovel Lake fire near Fraser Lake to move unabated across freshly harvested pine cutblocks into adjoining stands of mature forest. Posselt had flown over some of the areas that had already burned, noting that “the large amount of pre- and post-harvest coarse and fine woody debris” that was left behind in the cutblocks provided ample fuel for the massive wildfire to facilitate its movement eastward into adjacent forested stands.

While it is undeniable that the extensive salvage harvesting of mountain pine beetle-attacked forests in the central Interior has greatly reduced the overall fire hazard, the slash load left behind in some cutblocks provides a significant source of fuel for a number of years post-harvest. Although slash piles at roadsides and landings are burned as required, there are still varying amounts of woody debris throughout the block that can act as fuel for wildfires. In the same effort of the TLA’s recent survey of its membership to understand how contractors can support wildfire suppression (see page 60), northern Interior contractors have held similar discussions and concluded that a prescribed broadcast burn might be an effective method of reducing the dispersed slash load in a cutblock, and therefore minimizing the fuel source for wildfires.

Broadcast burning (referred to as a “Resource Management Open Fire” in the BC Wildfire Regulation) is the process by which slash and logging debris are burned where it lies evenly across a newly harvested area. The burning is usually done in the late fall or early spring during wet conditions and when the fire hazard is low. Prior to broadcast burning, a burn plan detailing the logistics of the operation must be submitted to the BC Wildfire Service for approval.

As an effective tool in forest management, broadcast burning has both advantages and disadvantages. Advantages include the following:

- Reduces the wildfire hazard by minimizing the fuel load over a larger area;
- Enhances wildlife habitat for ungulates and other early-seral species;
- Reduces competing vegetation, insects and disease on the site;
- Improves access for site preparation and planting activities; and
- Provides a rapid flush of nutrients in the soil, thereby increasing the survival of newly planted seedlings.

Disadvantages:

- Risk of fire escaping into adjacent stands, with related liability issues;
- Potential environmental and health concerns related to smoke emissions; and
- Can be logistically difficult, requiring significant human resources and equipment onsite and on standby (which can be costly).

While an argument can be made for both the pros and the cons of broadcast burning, the main issue of minimizing the fire hazard across the landscape should take precedence given the recent trend of large-scale wildfires in the BC interior.

In the past, broadcast burning was used to excess as a silviculture treatment, with the side benefit of greatly reducing block slash loads. Over the last three decades, however, there has been a sharp decline in the incidence of broadcast burning, mainly in response to a public outcry about air quality and the desire to reduce atmospheric carbon emissions. Tenure managers who balance the risks and benefits of this management strategy have also shied away from broadcast burning in favour of simply burning in piles near the roadside. The results have been clear.

In 2018, the Shovel Lake fire burned an area of nearly 100,000 hectares and forced the evacuation of numerous communities in and around Fraser Lake, BC. Experts suggest that fires of this scale are going to be the new norm until the remaining stands of dead pine in the Interior have been either salvaged or burned. We propose implementing management plans that include broadcast burning as a means to help reduce the fuel load over a larger area, and therefore create firebreaks in freshly logged areas.

While not yet part of a broader discussion—or considered to be the only solution—using broadcast burning as a treatment method to reduce the overall fire hazard in BC is one possible strategy that could be encouraged by government and implemented more regularly across the industry on appropriate sites. This can be done by providing financial incentives, providing knowledge and personnel that are already employed by the BC Wildfire Service, taking on some of the liability if things do not go as planned, and alleviating strict venting index requirements. In addition, the government can help the public understand that the short-term effect on air quality due to controlled broadcast burning is much less of an environmental and health risk than the large smoke emissions experienced during a single summer of wildfires.▲

Paul Schuetz has spent more than 20 years working in the Northern Interior forests with Industrial Forestry Service Ltd. His experience in timber cruising, road engineering and crew management give him unique insights into contractor issues in the north. If you have an issue you want to bring to the TLA, call Paul at 250-564-4115.