

Planning for Safety in Partial Cutting

Licensees and contractors involved in planning forest operations are responsible for the identification of risks and hazards unique to partial cutting systems. They must carefully consider and identify measures which ensure that worker safety is adequately addressed in all phases. (e.g., Emergency Response Planning, Safe Work Practices, Hazard Identification).

Guiding principles for partial cutting should be built upon operating procedures used for the planned harvest methods in order to minimize hazards and optimize worker safety. Those involved in the planning process must have or source expertise in the systems they are proposing and key measures to minimize risk. Worker safety requires the integration of management objectives and operational activities, both in the office and in the field.

To provide flexibility in the partial cutting applications, operational plans should not be overly restrictive with regards to operating criteria. Instead, they should place increased emphasis on communicating management objectives to all supervisors and workers. In this way, individuals who are carrying out field verification, layout, engineering and harvesting may apply their knowledge and expertise to meet the stated objectives safely and efficiently.

Key planning activities:

- review landscape-level management objectives identified in both higher-level plans and Woodlot License Plans to identify the range of silvicultural systems that might be applied under different stand and site conditions to meet those objectives
- identify probable or known locations of hazardous/problem/special resource areas
 e.g., unstable class IV and V slopes, landslide and blowdown events, avalanche tracks,
 wind exposed areas, floodplains, steep slopes, rock, organic soils, old-growth
 management areas, wildlife habitat areas or other significant wildlife/recreational/
 cultural features. Traditional and non-traditional weather patterns must also be
 considered (e.g., prevailing wind direction, seasonal storm events)
- propose mitigative measures where operations may impact identified values and other resource users
- Once a site-specific area has been identified the plan needs to ensure the presence of site hazards, critical stand characteristics, safety concerns and resource values that may influence the choice of silvicultural systems or partial cutting methods are addressed

All information related to planning should be considered within the context of both landscape-level & stand-level objectives and are instrumental in the development of the site plan and subsequent forest operations. In addition, field verification may drive planned layout/engineering to be modified to ensure both operational feasibility and worker safety.

*Planning must address worker safety as it relates to:

- felling patterns and techniques
- yarding/skidding methods
- equipment access limitations/operability
- ground stability: risk of rock and mud slides, organic materials
- reserve and management zones, machine free zones
- danger tree removal
- wildlife tree/patch retention
- wind exposure hazards and windfirm stand characteristics
- avalanche hazards
- fire protection
- emergency evacuation and first-aid requirements
- environmental factors i.e., rain, drought, wind

Comprehensive planning is critical in ensuring partial cutting operations meet forest stewardship, operational, and safety objectives. Careful consideration of the potential hazards in concert with comprehensive field verification, monitoring and follow up is critical. This, along with effective communication and coordination of key information between all phases from layout to silviculture is essential in ensuring operations are conducted in as safe a manner as possible.

Resource Links:

Website Links	Link Descriptions
https://www.for.gov.bc.ca/hfd/pubs/docs/sil/Sil435.htm	MOFLRO's partial cutting safety handbook
https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/stand-tending/3partial cutting overview of training and gy models_6.pdf	MOFLRO's partial cutting training materials, standards, systems and models
https://www.bcforestsafe.org/resource/harvesting-resource- packages/	BCFSC's resource packages & best practices for chain shot, lock out, steep slope and winch assist
https://www.bcforestsafe.org/construction-initiated-slides-working-group-ciswg/	 BCFSC's Construction Initiated Slides Working Group's (CISWG) resources for road construction personnel, workers, supervisors and professionals including presentations, training, videos and posters
https://www.bcforestsafe.org/news/tree-planter-danger-tree-awareness/	BCFSC's free interactive online training course for tree planters to help recognize dangers trees and what to do when working near potential danger trees
https://www.bcforestsafe.org/resource/audit-submission- support-sebase-isebase-emergency-response-plan-erps/	BCFSC's sample emergency responses plans and exposure control plans
https://www.bcforestsafe.org/resource/avalanche-safety-resource-package/	BCFSC's avalanche safety resource package

^{*}Key elements. Others may be present and will depend on site characteristics