

Steep slope risk assessment

Risk identification and assessment form.

Forest owner:		Logging contractor:		Date:
Forest:		Compartment:		
Mean tree height:		Tree species:		

Steep slope risk assessment and identification table

RISKS	LOW RISK	MEDIUM RISK	HIGH RISK	Comments
Slope and slope length (tracked machine)	<input type="checkbox"/> 22° to 27° and slope length <50 metres	<input type="checkbox"/> 22° to 27° and slope length >50 metres	<input type="checkbox"/> >27° and slope length >10 metres	
Slope and slope length (wheeled machine)	<input type="checkbox"/> 19° to 24° and slope length <50 metres	<input type="checkbox"/> 19° to 24° and slope length >50 metres	<input type="checkbox"/> >24° and slope length >10 metres	
Terrain stability/ classification	<input type="checkbox"/> No instability indicators and slopes <27°	<input type="checkbox"/> Instability indicators and slopes <27°	<input type="checkbox"/> Slopes >27°	
Ground roughness: boulders, outcrops, depressions	<input type="checkbox"/> <17° of steep slope area covered by roughness features	<input type="checkbox"/> <17° to 27° of steep slope area covered by roughness features	<input type="checkbox"/> >27° of steep slope area covered by roughness features	
Soils	<input type="checkbox"/> Well drained (e.g. gravel, coarse sand)	<input type="checkbox"/> Moderately drained (fine sand, silt indicators of sub-surface flows)	<input type="checkbox"/> Poorly drained or saturated (clay, silt) high water table	
Soil depth	<input type="checkbox"/> >30 cm to bedrock	<input type="checkbox"/> 15 to 30 cm to bedrock	<input type="checkbox"/> Thin soil (less than 15 cm) or bedrock exposures	
Pre-existing and post harvest debris	<input type="checkbox"/> Open understory, not windthrow	<input type="checkbox"/> Moderate windthrow, understory, stumps <30 cm	<input type="checkbox"/> Heavy windthrow, understory, stumps >30 cm	
Human factors: State of mind	<i>Consider operator focus, alertness, understanding of plan and how to implement, confidence, stress level, physical and mental workplace distractions, well fed and well rested. AVOID complacency, fatigue, rushing</i>			
Risk ranking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Operator competency	<i>Does the operator have adequate training and experience to complete this work? Has the operator demonstrated successful operations using this machine on sites with similar attributes and timber?</i>			
Risk ranking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Duration of exposure	<i>How long will the operator be working on a specific steep slope site? Also consider shift length, number of consecutive shift days, etc...</i>			
Risk ranking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Worker isolation - time for assistance to reach operator	<input type="checkbox"/> <15 minutes	<input type="checkbox"/> 15 to 30 minutes	<input type="checkbox"/> >30 minutes	
Weather conditions	<input type="checkbox"/> Calm day, change unlikely	<input type="checkbox"/> Chance of changeable weather	<input type="checkbox"/> Adverse rapidly changeable weather	

4 ticks in high risk or 5 ticks in medium risk, results in a **"NO GO SITUATION"** unless additional measures are taken.

Manager/Contractor/Foreman:.....**Signature:**.....

Steep slope risk assessment

Practices and controls to eliminate or minimise risks.

Forest:	Compartment:	Date:
Type of machine:	<input type="checkbox"/> Feller/Buncher <input type="checkbox"/> Skidder <input type="checkbox"/> Excavator <input type="checkbox"/> Processor <input type="checkbox"/> Other:.....	
Operator:	Experience:	<input type="checkbox"/> Competent

Mechanical features prescribed to ensure machine stability

<input type="checkbox"/> Non-tilting cab	<input type="checkbox"/> Tilting cab	<input type="checkbox"/> Zero tail swing design
<input type="checkbox"/> Telescoping boom	<input type="checkbox"/> Grousers (describe height/spacing)	<input type="checkbox"/> Extended tracks
<input type="checkbox"/> Chains on 4 wheels	<input type="checkbox"/> Tracks	<input type="checkbox"/> Other:.....

Machine processing head information

<input type="checkbox"/> Non-swivel head	<input type="checkbox"/> Rotating head	<input type="checkbox"/> Intermittent saw	<input type="checkbox"/> Hot saw
<input type="checkbox"/> Swing grapple	Head cutting capacity (diameter):.....		
Allowable stump height:.....		Tree/weight handling capacity:.....	
Target bunch/drag size:.....			

Terrain/tracking/slope information and controls

<input type="checkbox"/> Approach steep slopes from below	<input type="checkbox"/> Operate during daylight hours only
<input type="checkbox"/> Utilise existing benches	<input type="checkbox"/> Uphill, safe turn-around, direct down slope skid
<input type="checkbox"/> Construct and use machine tracks	
<input type="checkbox"/> All seasons operations <input type="checkbox"/> Summer only <input type="checkbox"/> Winter only	

Communications process (e.g. 2-way radio, cellphone, etc...)

Check-in frequency (who, how often)

Poor weather shut-down conditions (describe)

Available assistance (machine, operator)

Site-specific requirements and notes:

Date:	Signature:	Date:	Signature:
Date:	Signature:	Date:	Signature:
Manager/Contractor/Foreman:		I have reviewed the associated steep slope risk assesment and verify its accuracy.	
		Signature:	