



## Appendix 1. FIELD FORM FOR GULLY ASSESSMENT

Section 1. Gully system identification		
Watershed	Cutblock No.	Date (y/m/d)
Gully No.	Road No.	Recorded by
Reach No.	Dist. (start/end) (m)	Roll/photo No.

Fans assessments: complete Sections 2, 3, 4, 5 (and 7 if post-harvest).

Transport zone and headwall assessments: complete Sections 2, 3, 4, 6 (and 7 if post-harvest).

Enter the results in Management Strategies Tables 2–5.

Section 2. Downstream impact potential	L	M	H
Connection to a community watershed intake	None	Indirect	Direct
Dwellings, major installations, safety	No		Yes
Connection to fish streams or lakes or sensitive marine zones	None	Indirect	Direct

Section 3. Upslope debris flow potential	L	M	H
Stability class upslope (from terrain mapping)	I–III, or S	IV or P	V or U
Slope gradient upslope (if no terrain mapping)	<50%	50–60%	>60%
Evidence of landslides or debris flows in gully systems	N	N/C	Y

Section 4. Water transport potential (WTP)	L	M	H
Channel width (m)	<2	>2–<3.5	>3.5
Size of water transported woody debris	SWD	LWD	Logs or no WD
Largest sediment in storage wedges (mm)	≤100	>100–<200	>200

Section 5. Fan destabilization potential (FDP)			
Channel incision (CI) _____ (m)	Number of channels (CN) (If there are no channels on the fan, the FDP is L, low)		
	1	2–3	>3
<0.5	H	H	H
0.5–<1	M	H	H
1–<2	L	M	H
≥2	L	L	M



<b>Table A1. Headwall failure potential (HWFP)</b>					
Headwall slope angle _____ (%)	Headwall surficial material				
	R	C	M, F	W, L	FS
>70	L	H	H	H	H
>60-70	L	M	H	H	H
>50-60	L	L	M	H	H
≤50	L	L	L	M	H

Enter the results in Table C

<b>Table A2. Sidewall failure potential (SWFP)</b>					
Sidewall slope angle _____ (%)	Sidewall surficial material				
	R	C	M, F	W, L	FS
>70	L	H	H	H	H
>60-70	L	L	M	H	H
>50-60	L	L	L	H	H
≤50	L	L	L	M	H

Enter the results in Table C

<b>Table B. Gully geometry potential for debris flow hazard (GGP)</b>			
Sidewall slope distance _____ (m)	Channel gradient _____ (%)		
	<30	>30-≤40	>40
>15	L	M	H
7-≤15	L	L	M
0-≤7	L	L	L
All headwalls	M	H	H

Enter the results in Table C

<b>Table C. Debris flow initiation hazard (DFIH)</b>			
HWFP or SWFP (Table A1 or A2)	Gully geometry potential for debris flow initiation (Table B)		
	L	M	H
H	L	M	H
M	L	M	M
L	L	L	L

Enter the results in Section 5

<b>Section 6. Debris flow initiation potential (DFIP)</b>	L	M	H
Debris flow initiation hazard (Table C)	L	M	H
Past debris flow initiation in this reach	No	not clear	Yes

<b>Section 7. Post-harvest conditions</b>				
Years since harvesting	<1	2-5	6-10	>10
Logging debris in channel	Sparse	Moderate	Heavy	Very heavy
Sediment stored behind logging debris	Sparse	Moderate	Heavy	Very heavy