TABLE 6-8. Bank erodibility hazard rating guide. (*Rosgen, 1990*)

	BANK EROSION POTENTIAL											
CRITERIA	**VERY LOW**		**LOW**		**MODERATE**		**HIGH**		**VERY HIGH**		**EXTREME**	
	VALUE	INDEX	VALUE	INDEX	VALUE	INDEX	VALUE	INDEX	VALUE	INDEX	VALUE	INDEX
Bank Ht/Bkf Ht	1.0-1.1	1.0-1.9	1.1-1.19	2.0-3.9	1.2-1.5	4.0-5.9	1.6-2.0	6.0-7.9	2.1-2.8	8.0-9.0	>2.8	10
Root Depth/Bank Ht	1.0-0.9	1.0-1.9	0.89-0.50	2.0-3.9	0.49-0.30	4.0-5.9	0.29-1.15	6.0-7.9	0.14-.05	8.0-9.0	<.05	10
Root Density (%)	80-100	1.0-1.9	55-79	2.0-3.9	30-54	4.0-5.9	15-29	6.0-7.9	5-14	8.0-9.0	<5.0	10
Bank Angle (Degrees)	0-20	1.0-1.9	21-60	2.0-3.9	61-80	4.0-5.9	81-90	6.0-7.9	91-119	8.0-9.0	>119	10
Surface Prot. (%)	80-100	1.0-1.9	55-79	2.0-3.9	30-54	4.0-5.9	15-29	6.0-7.9	10-15	8.0-9.0	<10	10
TOTALS												
		5-9.5		10-19.5		20-29.5		30-39.5		40-45		46-50
Numerical Adjustments												

BANK MATERIALS: BEDROCK: BANK EROSION POTENTIAL ALWAYS VERY LOW
BOULDERS: BANK EROSION POTENTIAL LOW
COBBLE: DECREASE BY ONE CATEGORY UNLESS MIXTURE OF GRAVEL/SAND IS OVER 50%, THEN NO ADJUSTMENT
GRAVEL: ADJUST VALUES UP BY 5-10 POINTS DEPENDING ON COMPOSITION OF SAND
SAND: ADJUST VALUES UP BY 10 POINTS
SILT/CLAY: NO ADJUSTMENT

STRATIFICATION: 5-10 POINTS (UPWARD) DEPENDING ON POSITION OF UNSTABLE LAYERS IN RELATION TO BANKFULL STAGE

TABLE 6-9. Stress in the near-bank region, conversion of numerical indices to adjective ratings.

CONVERSION OF NUMERICAL INDICES TO ADJECTIVE RATINGS

Near Bank Stress Rating	Velocity Gradient***	A nb/A**	Near Bank Stress/Mean Shear Stress*
Low	1.0-1.2	.32 or less	.32 or less
Moderate	1.21-1.6	.33-.41	.3-.5
High	1.61-2.0	.42-.45	.6-1.0
Very High	2.1-2.3	.46-.50	1.1-1.3
Extreme	2.4 or more	.51 or more	1.4 or more

* Near bank shear stress/mean shear stress
(shear stress = depth*slope*water density)

** A = cross-sectional area: Near-bank cross-sectional area = width*depth* for 1/3 of the channel width in the near bank region.

*** Velocity gradient in ft/sec/ft is the difference in velocity from the core of velocity isovel along the orthogonal length to bank region in feet.