Table 1: Whitewater River Chanel Restoration Project, Annual Streambank Erosion Estimates

Worksheet 3-13. Summary form of annual streambank erosion estimates for various study reaches.

Stream:	Whitewater, Middle Fork			Location:	State Park, Restoration Site		
Graph Used:		Total Stream Length (ft):	1950			Date:	
Observers:	KZ & ME	Valley Type:	VIII			Stream Type:	B 3c

(1) Station (ft)	(2) BEHI rating (Worksheet 3-11) (adjective)	(3) NBS rating (Worksheet 3-12) (adjective)	(4) Bank erosion rate (Figure 3-9 or 3-10) (ft/yr)	(5) Length of bank (ft)	(6) Study bank height (ft)	(7) Erosion subtotal [(4)×(5)×(6)] (ft^3/yr)	(8) Erosion Rate (tons/yr/ft) {[(7)/27] × 1.3 / (5)}
1 MF-36+62	Moderate	High	0.397	501.0	5.9	1174.69	0.11290
2 MF-39+24	Low	Very High	0.326	62.0	4.4	89.03	0.06910
3 MF-40+02	High	Moderate	0.380	70.0	5.1	135.66	0.09330
4 MF-42+05	Low	Very High	0.479	192.0	1.6	147.14	0.03690
5 MF-42+90	Moderate	Extreme	1.236	72.0	4.5	400.57	0.26790
6 MF-44+15	Low	Extreme	0.351	139.0	11.0	535.89	0.18560
7 MF-47+61	Low	Low	0.063	36.0	3.5	7.96	0.01060
8 MF-48+27	Moderate	Moderate	0.226	121.0	6.0	164.20	0.06530
9 MF-49+98	Moderate	Extreme	1.217	261.0	10.0	3175.73	0.58580
10 MF-51+51	Moderate	Extreme	1.043	111.0	7.5	868.07	0.37650
11							
12							
13							
14							
15							

Sum erosion subtotals in Column (7) for each BEHI/NBS combination	Total Erosion (ft^3/yr)	6698.94
Convert erosion in ft^3/yr to yds^3/yr {divide Total Erosion (ft^3/yr) by 27}	Total Erosion (yds^3/yr)	248.11
Convert erosion in yds^3/yr to tons/yr {multiply Total Erosion (yds^3/yr) by 1.3}	Total Erosion (tons/yr)	322.54
Calculate erosion per unit length of channel {divide Total Erosion (tons/yr) by total length of stream (ft) surveyed}	Unit Erosion Rate (tons/yr/ft)	0.1654