

US EPA ARCHIVE DOCUMENT

Appendix B:

**Sediment Source Analysis
for the Upper Eel River Sediment TMDL**

Table B-1 identifies the terrain/geology types for each subwatershed and the entire basin. To determine the terrain types, the USFS Wilderness Area was removed and the USFS and State Geology maps were reviewed for the remaining basin. Similar rock types were then lumped into five basic categories: Schist, Melange, Alluvium, Coastal Belt, and Franciscan. A grid of 41.8 acre cells was then applied over the entire basin and the dominant terrain type for each cell was determined. Cells were randomly selected for inclusion in the stratified random sampling study of small sediment sources (plot features <3,000 yds³). Table B-1 also identifies the number of grid cells, their total area, and the number of plots sampled for each watershed, geology type, and ownership.

Watershed	Stratum	Terrain/ Geology Type	Public domain				Private domain				Total study area (public + private)				
			# grid cells	Area of grid cells (mi ²)	Proposed grid cell sample	PWA # of grid cells sampled	# grid cells	Area of grid cells (mi ²)	Proposed grid cell sample	PWA # of grid cells sampled	# grid cells	Area of grid cells (mi ²)	Proposed grid cell sample	PWA # of grid cells sampled	
Entire Upper Eel watershed study area	1	Schist	1,955	127.6	11	11	268	17.5	4	4	2,223	145.1	15	15	
	2	Melange	609	39.8	7	7	376	24.6	7	7	985	64.4	14	14	
	3	Alluvium	55	3.6	3	3	204	13.3	3	2	259	16.9	6	5	
	4	Coastal Belt	164	10.7	5	5	830	54.2	10	8	994	64.9	15	13	
	5	Franciscan	2,250	147.0	14	14	3,826	249.8	16	12	6,076	396.8	30	26	
	Total			5,033	328.7	40	40	5,504	359.4	40	33	10,537	688.1	80	73
	Lake Pillsbury area removed			46	3.0	-	-	-	--	-	-	46	3.0	-	-
	Wilderness area removed			270	17.6	-	-	-	--	-	-	270	17.6	-	--

Table B-1 (continued)

Watershed	Stratum	Terrain/ Geology Type	Public domain				Private domain				Total study area (public + private)			
			# grid cells	Area of grid cells (mi ²)	Proposed grid cell sample	PWA # of grid cells sampled	# grid cells	Area of grid cells (mi ²)	Proposed grid cell sample	PWA # of grid cells sampled	# grid cells	Area of grid cells (mi ²)	Proposed grid cell sample	PWA # of grid cells sampled
Outlet Creek	1	Schist	0	0.0	--	0	0	0.0	--	0	0	0.0	--	0
	2	Melange	0	0.0	--	0	0	0.0	--	0	0	0.0	--	0
	3	Alluvium	0	0.0	--	0	189	12.3	--	2	189	12.3	--	2
	4	Coastal Belt	3	0.2	--	0	468	30.6	--	0	471	30.8	--	0
	5	Franciscan	62	4.0	--	0	1,725	112.7	--	4	1,787	116.7	--	4
	Subtotal			65	4.2	--	0	2,382	155.6	--	6	2,447	159.8	--
Rice Fork	1	Schist	95	6.2	--	2	28	1.8	--	1	123	8.0	--	3
	2	Melange	34	2.2	--	1	18	1.2	--	0	52	3.4	--	1
	3	Alluvium	0	0.0	--	0	0	0.0	--	0	0	0.0	--	0
	4	Coastal Belt	0	0.0	--	0	0	0.0	--	0	0	0.0	--	0
	5	Franciscan	1,059	69.2	--	6	131	8.6	--	1	1,190	77.8	--	6
	Subtotal			1,188	77.6	--	9	177	11.6	--	1	1,365	89.2	--
Soda Creek	1	Schist	482	31.5	--	1	116	7.6	--	1	598	39.1	--	2
	2	Melange	11	0.7	--	0	36	2.4	--	0	47	3.1	--	0
	3	Alluvium	0	0.0	--	0	0	0.0	--	0	0	0.0	--	0
	4	Coastal Belt	78	5.1	--	0	187	12.2	--	3	265	17.3	--	3
	5	Franciscan	0	0.0	--	0	10	0.6	--	0	10	0.6	--	0
	Subtotal			571	37.3	--	1	349	22.8	--	4	920	60.1	--

Table B-1 (continued)

Watershed	Stratum	Terrain/ Geology Type	Public domain				Private domain				Total study area (public + private)			
			# grid cells	Area of grid cells (mi ²)	Proposed grid cell sample	PWA # of grid cells sampled	# grid cells	Area of grid cells (mi ²)	Proposed grid cell sample	PWA # of grid cells sampled	# grid cells	Area of grid cells (mi ²)	Proposed grid cell sample	PWA # of grid cells sampled
Tomki Creek	1	Schist	229	15.0	--	1	16	1.0	--	0	245	16.0	--	1
	2	Melange	30	2.0	--	0	321	21.0	--	7	351	23.0	--	7
	3	Alluvium	0	0.0	--	0	1	0.1	--	0	1	0.1	--	0
	4	Coastal Belt	83	5.4	--	5	175	11.3	--	5	258	16.7	--	10
	5	Franciscan	327	21.3	--	2	1,882	122.9	--	8	2,209	144.2	--	10
	Subtotal			669	43.7	--	8	2,395	156.3	--	20	3,064	200.0	--
Upper Main Eel	1	Schist	1,149	75.0	--	7	108	7.0	--	2	1,257	82.0	--	9
	2	Melange	534	34.9	--	6	1	0.1	--	0	535	35.0	--	6
	3	Alluvium	55	3.6	--	3	14	0.9	--	0	69	4.5	--	3
	4	Coastal Belt	0	0.0	--	0	0	0.0	--	0	0	0.0	--	0
	5	Franciscan	802	52.4	--	6	78	5.1	--	0	880	57.5	--	6
	Subtotal			2,540	165.9	--	22	201	13.1	--	2	2,741	179.0	--

Table B-2 illustrates the distribution of erosion features by ownership and terrain type for small sediment sources (<3,000 yds³) in addition to the total measured erosion and estimated sediment delivery. These numbers reflect actual plot data (before erosion and sediment delivery volumes were extrapolated to the entire basin).

Table B-2. Total measured erosion and sediment delivery measured in the 73 sample plots by ownership, terrain type and erosional feature type for the Upper Eel River watershed study area							
Erosional Feature Type	Number of Field Measured Features by Terrain Type (#)					Total measured erosion (yds ³)	Total estimated sediment delivery (yds ³)
	1. Schist	2. Melange	3. Alluvium	4. Coastal Belt	5. Franciscan		
<i>Public Domain (plots/m²)</i>	<i>11/127.6</i>	<i>7/39.8</i>	<i>3/3.6</i>	<i>5/10.7</i>	<i>14/147</i>	<i>40/328.7</i>	<i>40/328.7</i>
Debris Slide (DL)	19	10	2	17	49	15,856	10,109
Debris Torrent Track (DT)	0	0	0	0	0	0	0
Bank Erosion (BE)	10	4	14	13	23	6,254	6,061
Road related gully (GU)	3	1	2	0	6	156	133
Non road related gully (GU)	11	0	0	1	2	414	238
Stream Crossing (XI)	5	0	0	0	2	183	132
Channel Incision (CI)	11	1	0	1	4	577	576
Surface Erosion (SE)	7	2	1	0	6	635	337
Subtotals	66	18	19	32	92	24,075	17,586

Table B- 2 (continued)

Erosional Feature Type	Number of Field Measured Features by Terrain Type (#)					Total measured erosion (yds ³)	Total estimated sediment delivery (yds ³)
	1. Schist	2. Melange	3. Alluvium	4. Coastal Belt	5. Franciscan		
<i>Private Domain (plots/mi²)</i>	<i>4/17.5</i>	<i>7/24.6</i>	<i>2/13.3</i>	<i>8/54.2</i>	<i>12/249.8</i>	<i>33/359.4</i>	<i>33/359.4</i>
Debris Slide (DL)	14	31	0	19	47	45,010	15,038
Debris Flow Source (DF)	1	0	0	0	0	444	400
Bank Erosion (BE)	5	16	21	16	60	5,212	4,934
Road related gully (GU)	3	0	1	1	12	658	578
Non road related gully (GU)	5	7	0	8	3	1,065	1,001
Stream Crossing (XI)	2	0	0	6	10	410	401
Surface Erosion (SE)	1	0	0	0	0	60	54
Active Earthflow (SDS)	0	3	0	0	4	1,461	175
Channel Incision (CI)	1	9	0	6	19	922	914
Subtotals	32	50	22	56	155	55,242	23,495
Total # of features, erosion and delivery volumes for all domains	98	68	41	88	247	79,317	41,081
Total # of plots/terrain type area in mi²	15/145.1	14/64.4	5/16.9	13/62.2	26/396.8	73/688.1	73/688.1

Table B-2a. Total measured erosion and sediment delivery measured in the 73 sample plots by ownership, terrain type and erosional feature type for the Outlet Creek subwatershed, Upper Eel River watershed study area.

Erosional Feature Type	Number of Field Measured Features by Terrain Type (#)					Total measured erosion (yds ³)	Total estimated sediment delivery (yds ³)
	1. Schist	2. Melange	3. Alluvium	4. Coastal Belt	5. Franciscan		
<i>Public Domain (plots/mi²)</i>	0/0	0/0	0/0	0/0.2	0/4	0/4.2	0/4.2
Debris Slide (DL)	0	0	0	0	0	0	0
Debris Flow Source (DF)	0	0	0	0	0	0	0
Debris Torrent Track (TT)	0	0	0	0	0	0	0
Bank Erosion (BE)	0	0	0	0	0	0	0
Road related gully (GU)	0	0	0	0	0	0	0
Non road related gully (GU)	0	0	0	0	0	0	0
Stream Crossing (XI)	0	0	0	0	0	0	0
Channel Incision (CI)	0	0	0	0	0	0	0
Surface Erosion (SE)	0	0	0	0	0	0	0
Subtotals	0	0	0	0	0	0	0

Table B- 2a (continued)

Erosional Feature Type	Number of Field Measured Features by Terrain Type (#)					Total measured erosion (yds ³)	Total estimated sediment delivery (yds ³)
	1. Schist	2. Melange	3. Alluvium	4. Coastal Belt	5. Franciscan		
<i>Private Domain (plots/mi²)</i>	0/0	0/0	2/12.3	0/30.6	4/112.7	6/155.6	6/155.6
Debris Slide (DL)	0	0	0	0	20	2,038	1,204
Debris Flow Source (DF)	0	0	0	0	0	0	0
Debris Torrent Track (TT)	0	0	0	0	0	0	0
Bank Erosion (BE)	0	0	21	0	12	1,899	1,748
Road related gully (GU)	0	0	1	0	7	354	291
Non road related gully (GU)	0	0	0	0	2	35	35
Stream Crossing (XI)	0	0	0	0	3	133	129
Surface Erosion (SE)	0	0	0	0	0	0	0
Active Earthflow (SDS)	0	0	0	0	0	0	0
Channel Incision (CI)	0	0	0	0	4	339	339
Subtotals	0	0	22	0	48	4,798	3,746
Total # of features, erosion and delivery volumes for all domains	0	0	22	0	48	4,798	3,746
Total # of plots/terrain type area in mi²	0/0	0/0	2/12.3	0/30.8	4/116.7	6/159.8	6/159.8

Table B-2b. Total measured erosion and sediment delivery measured in the 73 sample plots by ownership, terrain type and erosional feature type for the Rice Fork subwatershed, Upper Eel River watershed study area.

Erosional Feature Type	Number of Field Measured Features by Terrain Type (#)					Total measured erosion (yds ³)	Total estimated sediment delivery (yds ³)
	1. Schist	2. Melange	3. Alluvium	4. Coastal Belt	5. Franciscan		
<i>Public Domain (plots/mi²)</i>	<i>2/6.2</i>	<i>1/2.2</i>	<i>0/0</i>	<i>0/0</i>	<i>6/69.2</i>	<i>9/77.6</i>	<i>9/77.6</i>
Debris Slide (DL)	3	0	0	0	15	1,484	856
Debris Flow Source (DF)	0	0	0	0	0	0	0
Debris Torrent Track (TT)	0	0	0	0	0	0	0
Bank Erosion (BE)	2	0	0	0	14	875	702
Road related gully (GU)	1	0	0	0	4	46	39
Non road related gully (GU)	2	0	0	0	0	22	22
Stream Crossing (XI)	0	0	0	0	0	0	0
Channel Incision (CI)	5	0	0	0	1	134	134
Surface Erosion (SE)	0	0	0	0	3	82	57
Subtotals	13	0	0	0	37	2,643	1,810

Table B- 2b (continued)

Erosional Feature Type	Number of Field Measured Features by Terrain Type (#)					Total measured erosion (yds ³)	Total estimated sediment delivery (yds ³)
	1. Schist	2. Melange	3. Alluvium	4. Coastal Belt	5. Franciscan		
<i>Private Domain (plots/mi²)</i>	<i>1/1.8</i>	<i>0/1.2</i>	<i>0/0</i>	<i>0/0</i>	<i>0/8.6</i>	<i>1/11.6</i>	<i>1/11.6</i>
Debris Slide (DL)	0	0	0	0	0	0	0
Debris Flow Source (DF)	0	0	0	0	0	0	0
Debris Torrent Track (TT)	0	0	0	0	0	0	0
Bank Erosion (BE)	0	0	0	0	0	0	0
Road related gully (GU)	1	0	0	0	0	12	6
Non road related gully (GU)	1	0	0	0	0	30	30
Stream Crossing (XI)	1	0	0	0	0	16	16
Surface Erosion (SE)	0	0	0	0	0	0	0
Active Earthflow (SDS)	0	0	0	0	0	0	0
Channel Incision (CI)	0	0	0	0	0	0	0
Subtotals	3	0	0	0	0	58	52
Total # of features, erosion and delivery volumes for all domains	16	0	0	0	37	2,701	1,862
Total # of plots/terrain type area in mi²	3/8	1/3.4	0/0	0/0	6/77.8	10/89.2	10/89.2

Table B-2c. Total measured erosion and sediment delivery measured in the 73 sample plots by ownership, terrain type and erosional feature type for the Soda Fork subwatershed, Upper Eel River watershed study area.

Erosional Feature Type	Number of Field Measured Features by Terrain Type (#)					Total measured erosion (yds ³)	Total estimated sediment delivery (yds ³)
	1. Schist	2. Melange	3. Alluvium	4. Coastal Belt	5. Franciscan		
<i>Public Domain (plots/m²)</i>	<i>1/31.5</i>	<i>0/0.7</i>	<i>0/0</i>	<i>0/5.1</i>	<i>0/0</i>	<i>1/37.3</i>	<i>1/37.3</i>
Debris Slide (DL)	5	0	0	0	0	222	189
Debris Flow Source (DF)	0	0	0	0	0	0	0
Debris Torrent Track (TT)	0	0	0	0	0	0	0
Bank Erosion (BE)	5	0	0	0	0	49	49
Road related gully (GU)	0	0	0	0	0	0	0
Non road related gully (GU)	2	0	0	0	0	164	11
Stream Crossing (XI)	0	0	0	0	0	0	0
Channel Incision (CI)	2	0	0	0	0	22	22
Surface Erosion (SE)	0	0	0	0	0	0	0
Subtotals	14	0	0	0	0	457	271

Table B- 2c (continued)

Erosional Feature Type	Number of Field Measured Features by Terrain Type (#)					Total measured erosion (yds ³)	Total estimated sediment delivery (yds ³)
	1. Schist	2. Melange	3. Alluvium	4. Coastal Belt	5. Franciscan		
<i>Private Domain (plots/mi²)</i>	<i>1/7.6</i>	<i>0/2.4</i>	<i>0/0</i>	<i>3/12.2</i>	<i>0/0.6</i>	<i>4/22.8</i>	<i>4/22.8</i>
Debris Slide (DL)	4	0	0	7	0	10,669	2,005
Debris Flow Source (DF)	0	0	0	0	0	0	0
Debris Torrent Track (TT)	0	0	0	0	0	0	0
Bank Erosion (BE)	2	0	0	3	0	134	119
Road related gully (GU)	0	0	0	0	0	0	0
Non road related gully (GU)	1	0	0	2	0	120	100
Stream Crossing (XI)	0	0	0	0	0	0	0
Surface Erosion (SE)	0	0	0	0	0	0	0
Active Earthflow (SDS)	0	0	0	0	0	0	0
Channel Incision (CI)	0	0	0	4	0	40	40
Subtotals	7	0	0	16	0	10,963	2,264
Total # of features, erosion and delivery volumes for all domains	21	0	0	16	0	11,420	2,535
Total # of plots/terrain type area in mi²	2/39.1	0/3.1	0/0	3/17.3	0/0.6	5/60.1	5/60.1

Table B-2d. Total measured erosion and sediment delivery measured in the 73 sample plots by ownership, terrain type and erosional feature type for the Tomki Creek subwatershed, Upper Eel River watershed study area.

Erosional Feature Type	Number of Field Measured Features by Terrain Type (#)					Total measured erosion (yds ³)	Total estimated sediment delivery (yds ³)
	1. Schist	2. Melange	3. Alluvium	4. Coastal Belt	5. Franciscan		
<i>Public Domain (plots/mi²)</i>	<i>1/15</i>	<i>0/2</i>	<i>0/0</i>	<i>5/5.4</i>	<i>2/21.3</i>	<i>8/43.7</i>	<i>8/43.7</i>
Debris Slide (DL)	6	0	0	17	8	6,620	5,048
Debris Flow Source (DF)	0	0	0	0	0	0	0
Debris Torrent Track (TT)	0	0	0	0	0	0	0
Bank Erosion (BE)	2	0	0	13	6	1,061	1,056
Road related gully (GU)	0	0	0	0	1	18	18
Non road related gully (GU)	0	0	0	1	2	48	48
Stream Crossing (XI)	0	0	0	0	1	11	11
Channel Incision (CI)	0	0	0	1	3	369	369
Surface Erosion (SE)	0	0	0	0	0	0	0
Subtotals	8	0	0	32	21	8,127	6,550

Table B- 2d (continued)

Erosional Feature Type	Number of Field Measured Features by Terrain Type (#)					Total measured erosion (yds ³)	Total estimated sediment delivery (yds ³)
	1. Schist	2. Melange	3. Alluvium	4. Coastal Belt	5. Franciscan		
<i>Private Domain (plots/mi²)</i>	<i>0/1</i>	<i>7/21</i>	<i>0/0.1</i>	<i>5/11.3</i>	<i>8/122.9</i>	<i>20/156.3</i>	<i>20/156.3</i>
Debris Slide (DL)	0	31	0	12	27	30,798	10,822
Debris Flow Source (DF)	0	0	0	0	0	0	0
Debris Torrent Track (TT)	0	0	0	0	0	0	0
Bank Erosion (BE)	0	16	0	13	48	3,161	3,049
Road related gully (GU)	0	0	0	4	7	415	404
Non road related gully (GU)	0	7	0	3	6	707	672
Stream Crossing (XI)	0	0	0	6	7	253	248
Surface Erosion (SE)	0	0	0	0	0	0	0
Active Earthflow (SDS)	0	3	0	0	4	1,344	175
Channel Incision (CI)	0	9	0	2	15	538	530
Subtotals	0	66	0	40	114	37,216	15,900
Total # of features, erosion and delivery volumes for all domains	8	66	0	72	135	37,216	22,450
Total # of plots/terrain type area in mi²	1/16.1	7/23	0/0	10/16.7	10/144.2	28/200	28/200

Table B-2e. Total measured erosion and sediment delivery measured in the 73 sample plots by ownership, terrain type and erosional feature type for the Upper Main Eel subwatershed, Upper Eel River watershed study area.

Erosional Feature Type	Number of Field Measured Features by Terrain Type (#)					Total measured erosion (yds ³)	Total estimated sediment delivery (yds ³)
	1. Schist	2. Melange	3. Alluvium	4. Coastal Belt	5. Franciscan		
<i>Public Domain (plots/mi²)</i>	<i>7/75</i>	<i>6/34.9</i>	<i>3/3.6</i>	<i>0/0</i>	<i>6/52.4</i>	<i>22/165.9</i>	<i>22/165.9</i>
Debris Slide (DL)	5	10	2	0	26	7,530	4,016
Debris Flow Source (DF)	0	0	0	0	0	0	0
Debris Torrent Track (TT)	0	0	0	0	0	0	0
Bank Erosion (BE)	1	4	14	0	3	4,269	4,254
Road related gully (GU)	2	1	2	0	1	92	76
Non road related gully (GU)	7	0	0	0	0	180	157
Stream Crossing (XI)	5	0	0	0	1	172	121
Channel Incision (CI)	4	1	0	0	0	52	51
Surface Erosion (SE)	7	2	1	0	3	553	280
Subtotals	31	18	19	0	34	12,848	8,955

Table B- 2e (continued)

Erosional Feature Type	Number of Field Measured Features by Terrain Type (#)					Total measured erosion (yds ³)	Total estimated sediment delivery (yds ³)
	1. Schist	2. Melange	3. Alluvium	4. Coastal Belt	5. Franciscan		
<i>Private Domain (plots/mi²)</i>	2/7	0/0.1	0/0.9	0/0	0/5.1	2/13.1	2/13.1
Debris Slide (DL)	10	0	0	0	0	1,505	1,007
Debris Flow Source (DF)	1	0	0	0	0	444	400
Debris Torrent Track (TT)	0	0	0	0	0	0	0
Bank Erosion (BE)	3	0	0	0	0	18	18
Road related gully (GU)	2	0	0	0	0	17	17
Non road related gully (GU)	3	0	0	0	0	33	24
Stream Crossing (XI)	1	0	0	0	0	8	8
Surface Erosion (SE)	1	0	0	0	0	60	54
Active Earthflow (SDS)	0	0	0	0	0	0	0
Channel Incision (CI)	1	0	0	0	0	5	5
Subtotals	22	0	0	0	0	2,090	1,533
Total # of features, erosion and delivery volumes for all domains	53	18	19	0	34	14,938	10,488
Total # of plots/terrain type area in mi²	9/82	6/35	3/4.5	0/0	6/57.5	24/179	24/179

Table B-3 outlines the erosion and sediment delivery volumes by geology type by ownership for both small features <3,000 yds³ and air photo-identified large features >3,000 yds³. The erosion and sediment delivery volumes for plot features were extrapolated to the entire Upper Eel River study area using the stratified random sampling method. Erosion and sediment delivery volumes for landslides are actual measurements from the air photo analyses.

Table B-3. Total past erosion and sediment delivery from small features <3,000 yds³ and large features >3000 yds³ by terrain type for each ownership in the Upper Eel River watershed study area							
Ownership ¹	Terrain Type/ Geology	Small Features (<3,000 yds ³)			Large Features (>3,000 yds ³)		
		Non earthflow Erosion (yds ³)	Non earthflow Sediment Delivery (yds ³)	Earthflow Erosion (yds ³)	Non earthflow erosion (yds ³)	Non earthflow Sediment Delivery (yds ³)	Earthflow erosion (yds ³)
Entire Upper Eel River study area	1	1,369,130	467,783	0	5,121,147	2,830,120	86,633
	2	1,311,878	485,764	18,209	2,406,644	1,244,569	222,102
	3	209,884	207,674	0	19,350	19,350	0
	4	943,469	613,337	0	1,443,858	885,955	22,444
	5	5,963,218	3,627,160	320,428	4,346,122	2,095,365	163,821
	Totals	9,797,579	5,401,718	338,637	13,337,121	7,075,359	495,000
Private	1	829,728	237,448	0	876,071	602,504	37,568
	2	942,041	282,967	18,209	636,476	426,179	162,211
	3	130,152	129,336	0	0	0	0
	4	759,035	467,705	0	1,137,848	626,458	22,444
	5	4,867,629	2,784,053	320,428	1,548,377	922,885	106,570
	Totals	7,528,585	3,901,509	338,637	4,198,772	2,578,026	328,793
Public	1	539,402	230,335	0	4,245,076	2,227,615	49,065
	2	369,837	202,797	0	1,770,168	818,391	59,891
	3	79,732	78,338	0	19,350	19,350	0
	4	184,434	145,632	0	306,010	259,497	0
	5	1,095,589	843,107	0	2,797,765	1,172,480	57,251
	Totals	2,268,994	1,500,209	0	9,138,349	4,497,333	166,207

¹ Total erosion and sediment yield for plot features (<3,000 yds²) for each ownership will not add up to the total yield for the entire Upper Eel River study area because each ownership is treated as a separate, smaller sample population, which is applied to each domain.

Table B-3a. Total past erosion and sediment delivery from small features <3,000 yds³ and large features >3000 yds³ by terrain type for each ownership in the Outlet Creek subwatershed, Upper Eel River watershed study area

Ownership ¹	Terrain Type/ Geology	Small Features (<3,000 yds ³)			Large Features (>3,000 yds ³)		
		Non earthflow Erosion (yds ³)	Non earthflow Sediment Delivery (yds ³)	Earthflow Erosion (yds ³)	Non earthflow erosion (yds ³)	Non earthflow Sediment Delivery (yds ³)	Earthflow erosion (yds ³)
Private	1	0	0	0	0	0	0
	2	0	0	0	0	0	0
	3	120,582	119,826	0	0	0	0
	4	0	0	0	491,310	253,948	0
	5	1,518,862	1,068,638	0	387,636	230,538	84,114
	Sub -total	1,639,444	1,188,464	0	878,946	484,486	84,114
Public	1	0	0	0	0	0	0
	2	0	0	0	0	0	0
	3	0	0	0	0	0	0
	4	0	0	0	0	0	0
	5	0	0	0	0	0	0
	Sub -total	0	0	0	0	0	0
Totals		1,639,444	1,188,464	0	878,946	484,486	84,114

¹ Total erosion and sediment yield for plot features <3,000 yds² for each subwatershed will not add up to the total yield for the entire Upper Eel River basin because each ownership is treated as a separate, smaller sample population which is applied to each domain.

Table B-3b. Total past erosion and sediment delivery from small features <3,000 yds³ and large features >3000 yds³ by terrain type for each ownership in the Rice Fork subwatershed, Upper Eel River watershed study area

Ownership ¹	Terrain Type/ Geology	Small Features (<3,000 yds ³)			Large Features (>3,000 yds ³)		
		Non earthflow Erosion (yds ³)	Non earthflow Sediment Delivery (yds ³)	Earthflow Erosion (yds ³)	Non earthflow erosion (yds ³)	Non earthflow Sediment Delivery (yds ³)	Earthflow erosion (yds ³)
Private	1	1,624	1,456	0	3,968	1,190	0
	2	0	0	0	0	0	0
	3	0	0	0	0	0	8,505
	4	0	0	0	0	0	0
	5	0	0	0	72,019	25,101	5,478
	Sub -total	1,624	1,456	0	75,987	26,291	13,983
Public	1	22,658	13,062	0	59,624	15,121	830
	2	0	0	0	29,198	8,759	6,947
	3	0	0	0	0	0	0
	4	0	0	0	0	0	0
	5	382,299	270,928	0	1,088,179	438,533	42,808
	Sub -total	404,957	283,990	0	1,177,001	462,413	50,585
Totals		406,581	285,446	0	1,252,988	488,704	64,568

¹ Total erosion and sediment yield for plot features <3,000 yds² for each subwatershed will not add up to the total yield for the entire Upper Eel River basin because each ownership is treated as a separate, smaller sample population which is applied to each domain.

Table B-3c. Total past erosion and sediment delivery from small features <3,000 yds³ and large features >3000 yds³ by terrain type for each ownership in the Soda Creek subwatershed, Upper Eel River watershed study area

Ownership ¹	Terrain Type/ Geology	Small Features (<3,000 yds ³)			Large Features (>3,000 yds ³)		
		Non earthflow Erosion (yds ³)	Non earthflow Sediment Delivery (yds ³)	Earthflow Erosion (yds ³)	Non earthflow erosion (yds ³)	Non earthflow Sediment Delivery (yds ³)	Earthflow erosion (yds ³)
Private	1	1,187,376	227,244	0	674,610	428,341	27,410
	2	0	0	0	103,509	87,836	28,376
	3	0	0	0	0	0	0
	4	45,316	19,012	0	459,319	211,874	14,614
	5	0	0	0	0	0	0
	Sub -total	1,232,692	246,256	0	1,237,438	728,051	70,400
Public	1	220,274	130,622	0	915,639	539,462	18,553
	2	0	0	0	0	0	2,,082
	3	0	0	0	0	0	0
	4	0	0	0	65,516	39,213	0
	5	0	0	0	0	0	0
	Sub -total	220,274	130,622	0	981,155	578,675	20,635
Totals		1,452,966	376,878	0	2,218,593	1,306,726	91,035

¹ Total erosion and sediment yield for plot features <3,000 yds² for each subwatershed will not add up to the total yield for the entire Upper Eel River basin because each ownership is treated as a separate, smaller sample population which is applied to each domain.

Table B-3d. Total past erosion and sediment delivery from small features <3,000 yds³ and large features >3000 yds³ by terrain type for each ownership in the Tomki Creek subwatershed, Upper Eel River watershed study area

Ownership ¹	Terrain Type/ Geology	Small Features (<3,000 yds ³)			Large Features (>3,000 yds ³)		
		Non earthflow Erosion (yds ³)	Non earthflow Sediment Delivery (yds ³)	Earthflow Erosion (yds ³)	Non earthflow erosion (yds ³)	Non earthflow Sediment Delivery (yds ³)	Earthflow erosion (yds ³)
Private	1	0	0	0	2,218,593	1,306,726	91,035
	2	804,243	241,575	15,546	532,967	338,343	125,330
	3	0	0	0	0	0	0
	4	230,615	147,105	0	187,220	160,636	7,830
	5	2,763,011	1,471,254	236,426	999,388	618,871	16,978
	Sub -total	3,797,869	1,859,934	251,972	1,767,475	1,160,510	157,742
Public	1	78,776	68,242	0	1,034,037	757,718	27,815
	2	0	0	0	48,526	21,396	5,824
	3	0	0	0	0	0	0
	4	93,342	73,704	0	240,494	220,285	0
	5	353,160	296,262	0	625,629	213,031	0
	Sub -total	525,278	438,208	0	1,948,686	1,212,430	33,639
Totals		4,323,147	2,298,142	251,972	3,716,161	2,372,940	191,381

¹ Total erosion and sediment yield for plot features <3,000 yds² for each subwatershed will not add up to the total yield for the entire Upper Eel River basin because each ownership is treated as a separate, smaller sample population which is applied to each domain.

Table B-3e. Total past erosion and sediment delivery from small features <3,000 yds³ and large features >3000 yds³ by terrain type for each ownership in the Upper Main Eel subwatershed, Upper Eel River watershed study area

Ownership ¹	Terrain Type/ Geology	Small Features (<3,000 yds ³)			Large Features (>3,000 yds ³)		
		Non earthflow Erosion (yds ³)	Non earthflow Sediment Delivery (yds ³)	Earthflow Erosion (yds ³)	Non earthflow erosion (yds ³)	Non earthflow Sediment Delivery (yds ³)	Earthflow erosion (yds ³)
Private	1	112,860	82,782	0	149,593	130,312	2,554
	2	0	0	0	0	0	0
	3	0	0	0	0	0	0
	4	0	0	0	0	0	0
	5	0	0	0	89,334	48,374	0
	Sub -total	112,860	82,782	0	238,927	178,686	2,554
Public	1	288,399	74,193	0	2,235,776	915,314	1,867
	2	378,339	207,459	0	1,692,444	788,235	45,038
	3	79,732	78,338	0	19,350	19,350	0
	4	0	0	0	0	0	0
	5	332,964	253,833	0	1,083,937	520,916	14,442
	Sub -total	1,079,433	613,823	0	5,031,507	2,243,815	61,347
Totals		1,192,293	696,605	251,972	5,270,434	2,422,501	63,901

¹ Total erosion and sediment yield for plot features <3,000 yds² for each subwatershed will not add up to the total yield for the entire Upper Eel River basin because each ownership is treated as a separate, smaller sample population which is applied to each domain.

Table B-4 identifies sediment yield rates by time period for <3,000 yds³ small features and >3,000 yds³ large features for the Upper Eel River basin. The results are divided into earthflow and non-earthflow contributions for the small and large sediment sources. The sediment delivery rates for plot features were extrapolated to the entire Upper Eel River study area using the stratified random sampling method. The separation in the time period corresponds with the approximate changes in the Forest Practice Rules.

Table B-4. Sediment yield (in yds ³ /mi ² /year and tons/mi ² /year) by ownership and time frame for small features <3,000 yds ³ and large features >3,000 yds ³ in the Upper Eel River watershed study area												
Watershed	Ownership domain		Pre -1970					Post-1970				
			Small features (<3,000 yds ³)		Large Features (>3,000 yds ³)		Total	Small features (<3,000 yds ³)		Large Features (>3,000 yds ³)		Total
			non Ef	EF	non Ef	EF		non Ef	EF	non Ef	EF	
Entire Upper Eel River watershed study area	Private	yds ³ /mi ² /yr	243	20	188	24	475	105	10	45	6	166
		tons/mi ² /yr	374	30	289	37	730	162	16	70	9	257
	Public	yds ³ /mi ² /yr	70	0	311	9	390	73	0	128	7	207
		tons/mi ² /yr	107	0	479	14	601	112	0	197	10	319
	Totals	yds³/mi²/yr	160	10	247	17	434	90	5	85	6	186
		tons/mi²/yr	247	16	380	26	669	138	8	130	10	286
Outlet Creek	Private	yds ³ /mi ² /yr	107	0	94	18	219	130	0	9	0	139
		tons/mi ² /yr	165	0	144	28	337	200	0	14	0	214
	Public	yds ³ /mi ² /yr	0	0	0	0	0	0	0	0	0	0
		tons/mi ² /yr	0	0	0	0	0	0	0	0	0	0
	Sub-totals	yds³/mi²/yr	104	0	91	18	213	127	0	9	0	135
		tons/mi²/yr	161	0	140	27	328	195	0	13	0	208

Table B-4 (continued)

Watershed	Ownership domain		Pre -1970					Post-1970				
			Small features (<3,000 yds ³)		Large Features (>3,000 yds ³)		Total	Small features (<3,000 yds ³)		Large Features (>3,000 yds ³)		Total
			non Ef	EF	non Ef	EF		non Ef	EF	non Ef	EF	
Rice Fork	Private	yds ³ /mi ² /yr	4	0	30	0	34	0.4	0	40	35	76
		tons/mi ² /yr	6	0	47	0	52	0.7	0	61	54	117
	Public	yds ³ /mi ² /yr	43	0	120	10	173	70	0	69	10	149
		tons/mi ² /yr	66	0	185	15	267	107	0	106	16	230
	Sub-totals	yds ³ /mi ² /yr	38	0	109	9	155	61	0	65	14	140
		tons/mi ² /yr	58	0	167	13	239	93	0	101	21	215
Soda Creek	Private	yds ³ /mi ² /yr	132	0	861	49	1042	201	0	179	48	428
		tons/mi ² /yr	203	0	0	75	1605	310	0	276	73	659
	Public	yds ³ /mi ² /yr	0	0	391	2	393	103	0	111	15	229
		tons/mi ² /yr	0	0	602	3	605	159	0	171	23	353
	Sub-totals	yds ³ /mi ² /yr	50	0	569	1	621	140	0	137	27	305
		tons/mi ² /yr	77	0	877	2	955	216	0	211	42	469

Table B-4 (continued)

Watershed	Ownership domain		Pre -1970					Post-1970				
			Small features (<3,000 yds ³)		Large Features (>3,000 yds ³)		Total	Small features (<3,000 yds ³)		Large Features (>3,000 yds ³)		Total
			non Ef	EF	non Ef	EF		non Ef	EF	non Ef	EF	
Tomki Creek	Private	yds ³ /mi ² /yr	304	33	180	29	546	82	18	60	4	163
		tons/mi ² /yr	468	51	277	45	841	126	28	92	6	252
	Public	yds ³ /mi ² /yr	260	0	703	26	989	65	0	196	0	261
		tons/mi ² /yr	401	0	1083	40	1524	100	0	301	0	401
	Sub-totals	yds ³ /mi ² /yr	294	0	294	29	617	78	0	90	3	171
		tons/mi ² /yr	453	0	453	44	950	120	0	138	4	263
Upper Main Eel	Private	yds ³ /mi ² /yr	112	0	371	0	483	87	0	73	6	167
		tons/mi ² /yr	172	0	571	0	743	134	0	113	9	257
	Public	yds ³ /mi ² /yr	40	0	287	6	333	74	0	144	5	223
		tons/mi ² /yr	61	0	442	10	514	114	0	222	8	344
	Sub-totals	yds ³ /mi ² /yr	45	0	293	6	344	75	0	139	5	219
		tons/mi ² /yr	69	0	452	9	530	115	0	214	8	337

¹ Total erosion and sediment yield for plot features <3,000 yds² for each ownership will not add up to the total yield for the entire Upper Eel River basin study area because each ownership is treated as a separate, smaller sample population which is applied to each domain.

Table B-5 compares pre-1970 and post-1970 sediment volumes for management and non-management land use association on private and public lands.

Table B-5. Sediment delivery by time frame and management association for each ownership in the Upper Eel River study area					
Ownership		Total Yield by Time Period for Management Sediment Yield (yds³ & %)		Total Yield by Time Period for Non- Management Sediment Yield (yds³ & %)	
		Non Earthflow	Earthflow	Non Earthflow	Earthflow
Basin-wide					
Private	Pre-1970 (30 years)	2,299,049 (32%)	27,961 (<1%)	2,342,797 (33%)	439,219 (6%)
	Post-1970 (34 years)	698,328 (10%)	3,703 (<1%)	1,139,359 (16%)	202,832 (3%)
	Subtotals	2,997,377 (42%)	31,664 (<1%)	3,482,156 (49%)	642,051 (9%)
Public	Pre-1970 (30 years)	711,708 (12%)	10,516 (<1%)	3,044,859 (49%)	80,159 (1%)
	Post-1970 (34 years)	612,852 (10%)	8,748 (<1%)	1,628,123 (26%)	66,785 (1%)
	Subtotals	1,324,560 (22%)	120,242 (<1%)	4,672,982 (75%)	146,949 (2%)
Basin-wide Total		4,321,937 (32%)	50,928 (<1%)	8,155,138 (61%)	789,000 (6%)
Outlet Creek subwatershed					
Private	Pre-1970 (30 years)	304,216 (17%)	11,330 (<1%)	633,198 (36%)	72,784 (4%)
	Post-1970 (34 years)	279,910 (16%)	0	455,625 (26%)	0
	Subtotals	584,126 (33%)	11,330 (<1%)	1,088,823 (62%)	72,784 (4%)
Public	Pre-1970 (30 years)	0	0	0	0
	Post-1970 (34 years)	0	0	0	0
	Subtotals	0	0	0	0
Totals for the Outlet Creek subwatershed		584,126 (33%)	11,330 (<1%)	1,088,823 (62%)	72,784 (4%)

Table B-5 (continued)

Ownership		Total Yield by Time Period for Management Sediment Yield (yds ³ & %)		Total Yield by Time Period for Non- Management Sediment Yield (yds ³ & %)	
		Non Earthflow	Earthflow	Non Earthflow	Earthflow
Rice Fork subwatershed					
Private	Pre-1970 (30 years)	3,556 (9%)	0	8,279 (20%)	0
	Post-1970 (34 years)	8,980 (21%)	0	6,933 (16%)	13,984 (34%)
	Subtotals	12,536 (30%)	0	15,212 (36%)	13,984 (34%)
Public	Pre-1970 (30 years)	38,903 (5%)	2,682 (<1%)	341,247 (43%)	20,295 (3%)
	Post-1970 (34 years)	67,388 (8%)	830 (<1%)	298,866 (37%)	26,779 (3%)
	Subtotals	106,291 (13%)	3,512 (<1%)	640,113 (80%)	47,074 (6%)
Totals for the Rice Fork subwatershed		118,827 (14%)	3,512 (<1%)	655,325 (78%)	61,058 (7%)
Soda Creek subwatershed					
Private	Pre-1970 (30 years)	206,403 (20%)	10,526 (1%)	472,939 (45%)	22,972 (2%)
	Post-1970 (34 years)	220,572 (21%)	0	74,392 (7%)	36,901 (4%)
	Subtotals	426,975 (41%)	10,526 (1%)	547,331 (52%)	59,873 (6%)
Public	Pre-1970 (30 years)	73,674 (10%)	0	363,916 (50%)	1,974 (<1%)
	Post-1970 (34 years)	160,228 (22%)	639 (<1%)	111,478 (15%)	18,022 (2%)
	Subtotals	233,902 (32%)	639 (<1%)	475,394 (65%)	19,996 (3%)
Totals for the Soda Creek subwatershed		660,877 (37%)	11,165 (<1)	1,022,725 (58%)	79,869 (5%)

Table B-5 (continued)

Ownership		Total Yield by Time Period for Management Sediment Yield (yds ³ & %)		Total Yield by Time Period for Non- Management Sediment Yield (yds ³ & %)	
		Non Earthflow	Earthflow	Non Earthflow	Earthflow
Tomki Creek subwatershed					
Private	Pre-1970 (30 years)	1,270,622 (37%)	6,105 (<1%)	997,098 (29%)	288,046 (8%)
	Post-1970 (34 years)	206,090 (6%)	3,703 (<1%)	546,634 (16%)	111,859 (3%)
	Subtotals	1,476,712 (43%)	9,808 (<1%)	1,543,732 (45%)	399,905 (12%)
Public	Pre-1970 (30 years)	256,799 (15%)	971 (<1%)	1,006,542 (60%)	32,668 (2%)
	Post-1970 (34 years)	105,203 (6%)	0	282,093 (17%)	0
	Subtotals	362,002 (21%)	971 (<1%)	1,288,635 (77%)	32,668 (2%)
Totals for the Tomki Creek subwatershed		1,838,714 (36%)	10,779 (<1%)	2,832,367 (55%)	432,573 (9%)
Upper Main Eel subwatershed					
Private	Pre-1970 (30 years)	154,450 (59%)	0	35,261 (13%)	0
	Post-1970 (34 years)	41,103 (15%)	0	30,654 (12%)	2,554 (1%)
	Subtotals	195,553 (74%)	0	65,915 (25%)	2,554 (1%)
Public	Pre-1970 (30 years)	290,888 (10%)	6,863 (<1%)	1,336,805 (46%)	25,221 (1%)
	Post-1970 (34 years)	294,600 (10%)	7,279 (<1%)	935,344 (32%)	21,984 (1%)
	Subtotals	585,488 (20%)	14,142 (<1%)	2,272,149 (78%)	47,205 (2%)
Totals for the Upper Main Eel subwatershed		781,041 (25%)	14,142 (<1%)	2,338,064 (73%)	49,759 (2%)

Table B-6 identifies sediment delivery rates by management practice and ownership for small features (<3,000 yds³) and large features (>3,000 yds³). These results are also separated by earthflow and non-earthflow contributions.

Domain (Private and Public ownership) (mi ²)		Non Earthflow						Earthflow						Total sediment yield (non EF+ EF)	
		No land use	Road Related	Timber harvest	Ag/ Grazing	Fire	Total non EF sediment yield	No land use	Road Related	Timber harvest	Ag/ Grazing	Fire	Total EF sediment yield		
Private (359.4 mi ²)	Plot <3,000 yds ³ sediment sources	yds ³ /mi ² /yr	94	26	30	19	0	170	15	0	0	0	0	15	184
		tons/mi ² /yr	145	40	46	30	0	261	23	0	0	0	0	23	284
		%	56	15	18	11	0	100	100	0	0	0	0	100	100
	>3,000yds ³ sediment sources	yds ³ /mi ² /yr	56	22	30	2	2	112	12	1	0	0	0	13	125
		tons/mi ² /yr	86	35	47	3	3	173	18	2	0	0	0	20	192
		%	50	20	27	2	1	100	91	9	0	0	0	100	100
	Sub-total/ %	yds ³ /mi ² /yr	150	48	61	21	2	282	26	1	0	0	0	27	309
		tons/mi ² /yr	230	74	93	33	3	434	41	2	0	0	0	43	476
		%	53	17	22	8	<1	100	96	4	0	0	0	100	100

Table B-6 (continued)

Domain (Private and Public ownership) (mi ²)			Non Earthflow					Earthflow					Total sediment yield (non EF+ EF)		
			No land use	Road Related	Timber harvest	Ag/ Grazing	Fire	Total non EF sediment yield	No land use	Road Related	Timber harvest	Ag/ Grazing		Fire	Total EF sediment yield
Public (328.7 mi ²)	Plot <3,000 yds ³ sediment sources	yds ³ /mi ² /yr	44	9	18	0	0	71	0	0	0	0	0	0	71
		tons/mi ² /yr	68	14	28	0	0	110	0	0	0	0	0	0	110
		%	62	13	25	0	0	100	0	0	0	0	0	0	100
	>3000yds ³ sediment sources	yds ³ /mi ² /yr	177	23	12	<1	1	214	5	<1	<1	0	<1	5	219
		tons/mi ² /yr	272	36	18	<1	2	330	7	<1	<1	0	<1	7	337
		%	82	11	6	<1	<1	100	94	<1	<1	0	5	100	100
	Sub-total/ %	yds ³ /mi ² /yr	221	33	30	<1	1	285	5	<1	<1	0	<1	5	290
		tons/mi ² /yr	340	50	46	<1	2	439	7	<1	<1	0	<1	7	446
		%	77	11	10	<1	<1	100	94	<1	<1	0	5	100	100
Basin-wide (688.1 mi ²)	Plot <3,000 yds ³ sediment sources	yds ³ /mi ² /yr	70	18	24	10	0	123	8	0	0	0	0	8	130
		tons/mi ² /yr	108	28	38	16	0	189	12	0	0	0	0	12	201
		%	57	15	20	8	0	100	100	0	0	0	0	100	100
	PWA >3,000yds ³ sediment sources	yds ³ /mi ² /yr	114	23	22	1	1	160	8	0.7	<1	0	<1	9	170
		tons/mi ² /yr	175	35	33	2	2	247	13	1	<1	0	<1	14	261
		%	71	14	13	1	1	100	93	7	<1	0	<1	100	100
	Sub-total/ %	yds ³ /mi ² /yr	184	41	46	11	1.5	283	16	0.7	<1	0	<1	17	300
		tons/mi ² /yr	283	63	71	17	2	436	25	1	<1	0	<1	26	462
		%	65	14	16	4	<1	100	95	4	<1	0	<1	100	100

Table B-6a. Sediment yield (in yds³/mi²/year, tons/mi²/year and %) by ownership and primary land use association for small and large features in the Outlet Creek subwatershed, Upper Eel River watershed study area

Domain (Private and Public ownership) (mi ²)		Non Earthflow						Earthflow					Total sediment yield (non EF+ EF)	
		No land use	Road Related	Timber harvest	Ag/ Grazing	Fire	Total non EF sediment yield	No land use	Road Related	Timber harvest	Ag/ Grazing	Total EF sediment yield		
Private	Plot <3,000 yds ³ sediment sources	yds ³ /mi ² /yr	80	20	10	10	0	119	0	0	0	0	0	119
		tons/mi ² /yr	122	31	16	15	0	184	0	0	0	0	0	184
		%	67	17	8	8	0	100	0	0	0	0	0	100
	>3,000yds ³ sediment sources ⁵	yds ³ /mi ² /yr	30	11	5	2	0	49	73	1	0	0	74	123
		tons/mi ² /yr	46	17	8	4	0	75	113	2	0	0	114	189
		%	61	23	11	5	0	100	98	2	0	0	100	100
	Sub-total/ %	yds ³ /mi ² /yr	109	31	15	12	0	168	73	1	0	0	74	242
		tons/mi ² /yr	168	48	24	18	0	259	113	2	0	0	114	373
		%	65	19	9	7	0	100	98	2	0	0	100	100

Table B-6a (continued)

Domain (Private and Public ownership) (mi ²)			Non Earthflow					Earthflow					Total sediment yield (non EF+ EF)		
			No land use	Road Related	Timber harvest	Ag/ Grazing	Fire	Total non EF sediment yield	No land use	Road Related	Timber harvest	Ag/ Grazing		Total EF sediment yield	
Public	Plot <3,000 yds ³ sediment sources	yds ³ /mi ² /yr	0	0	0	0	0	0	0	0	0	0	0	0	
		tons/mi ² /yr	0	0	0	0	0	0	0	0	0	0	0	0	0
		%	0	0	0	0	0	0	0	0	0	0	0	0	0
	>3000yds ³ sediment sources ⁵	yds ³ /mi ² /yr	0	0	0	0	0	0	0	0	0	0	0	0	0
		tons/mi ² /yr	0	0	0	0	0	0	0	0	0	0	0	0	0
		%	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sub-total/ %	yds ³ /mi ² /yr	0	0	0	0	0	0	0	0	0	0	0	0	0
		tons/mi ² /yr	0	0	0	0	0	0	0	0	0	0	0	0	0
		%	0	0	0	0	0	0	0	0	0	0	0	0	0
Outlet Creek CALWAA Totals (159.8 mi ²)	Plot <3,000 yds ³ sediment sources	yds ³ /mi ² /yr	77	20	10	9	0	116	0	0	0	0	0	116	
		tons/mi ² /yr	119	30	15	14	0	179	0	0	0	0	0	179	
		%	67	17	8	8	0	100	0	0	0	0	0	100	
	PWA >3,000yds ³ sediment sources ⁵	yds ³ /mi ² /yr	29	11	5	2	0	47	71	1	0	0	72	119	
		tons/mi ² /yr	45	17	8	4	0	73	110	2	0	0	111	184	
		%	61	23	11	5	0	100	98	2	0	0	100	100	
	Sub-total/ %	yds ³ /mi ² /yr	106	31	14	12	0	164	71	1	0	0	72	236	
		tons/mi ² /yr	164	47	23	18	0	252	110	2	0	0	111	363	
		%	65	19	9	7	0	100	98	2	0	0	100	100	

Table B-6b. Sediment yield (in yds³/mi²/year, tons/mi²/year and %) by ownership and primary land use association for small and large features in the Rice Fork subwatershed, Upper Eel River watershed study area

Domain (Private and Public ownership) (mi ²)		Non Earthflow							Earthflow					Total sediment yield (non EF+ EF)
		No land use	Road Related	Timber harvest	Ag/ Grazing	Fire	Total non EF sediment yield	No land use	Road Related	Timber harvest	Ag/ Grazing	Total EF sediment yield		
Private	Plot <3,000 yds ³ sediment sources	yds ³ /mi ² /yr	0	<1	2	0	0	2	0	0	0	0	0	2
		tons/mi ² /yr	0	<1	3	0	0	3	0	0	0	0	0	3
		%	0	12	88	0	0	100	0	0	0	0	0	100
	>3,000yds ³ sediment sources ⁵	yds ³ /mi ² /yr	20	3	12	0	0	35	0	0	0	0	0	35
		tons/mi ² /yr	32	5	18	0	0	55	0	0	0	0	0	55
		%	58	9	33	0	0	100	0	0	0	0	0	100
	Sub-total/ %	yds ³ /mi ² /yr	20	3	13	0	0	37	0	0	0	0	0	37
		tons/mi ² /yr	32	5	21	0	0	58	0	0	0	0	0	58
		%	55	9	36	0	0	100	0	0	0	0	0	100

Table B-6b (continued)

Domain (Private and Public ownership) (mi ²)			Non Earthflow						Earthflow					Total sediment yield (non EF+ EF)
			No land use	Road Related	Timber harvest	Ag/ Grazing	Fire	Total non EF sediment yield	No land use	Road Related	Timber harvest	Ag/ Grazing	Total EF sediment yield	
Public	Plot <3,000 yds ³ sediment sources	yds ³ /mi ² /yr	45	10	3	0	0	57	0	0	0	0	0	57
		tons/mi ² /yr	69	15	5	0	0	88	0	0	0	0	0	88
		%	78	17	5	0	0	100	0	0	0	0	0	100
	>3000yds ³ sediment sources ⁵	yds ³ /mi ² /yr	84	2	7	0	0	93	4	0	0	0	4	97
		tons/mi ² /yr	130	3	11	0	0	143	7	0	0	0	7	150
		%	90	2	8	0	0	100	100	0	0	0	100	100
	Sub-total/ %	yds ³ /mi ² /yr	129	11	10	0	0	150	4	0	0	0	4	155
		tons/mi ² /yr	198	18	15	0	0	231	7	0	0	0	7	238
		%	86	8	6	0	0	100	100	0	0	0	100	100
Total Rice Fork CALWAA (89.2 mi ²)	Plot <3,000 yds ³ sediment sources	yds ³ /mi ² /yr	39	8	3	0	0	50	0	0	0	0	0	50
		tons/mi ² /yr	60	13	4	0	0	77	0	0	0	0	0	77
		%	78	17	5	0	0	100	0	0	0	0	0	100
	PWA >3,000yds ³ sediment sources ⁵	yds ³ /mi ² /yr	76	2	8	0	0	86	4	0	0	0	4	90
		tons/mi ² /yr	117	3	12	0	0	132	6	0	0	0	6	138
		%	89	2	9	0	0	100	100	0	0	0	100	100
	Sub-total/ %	yds ³ /mi ² /yr	115	10	10	0	0	136	4	0	0	0	4	140
		tons/mi ² /yr	177	16	16	0	0	209	6	0	0	0	6	215
		%	85	8	7	0	0	100	100	0	0	0	100	100

Table B-6c. Sediment yield (in yds³/mi²/year, tons/mi²/year and %) by ownership and primary land use association for small and large features in the Soda Creek subwatershed, Upper Eel River watershed study area

Domain (Private and Public ownership) (mi ²)		Non Earthflow						Earthflow						Total sediment yield (non EF+ EF)	
		No land use	Road Related	Timber harvest	Ag/ Grazing	Fire	Total non EF sediment yield	No land use	Road Related	Timber harvest	Ag/ Grazing	Fire	Total EF sediment yield		
Private	Plot <3,000 yds ³ sediment sources	yds ³ /mi ² /yr	11	0	157	0	0	169	0	0	0	0	0	0	169
		tons/mi ² /yr	17	0	242	0	0	260	0	0	0	0	0	0	260
		%	7	0	93	0	0	100	0	0	0	0	0	0	100
	>3,000yds ³ sediment sources ⁵	yds ³ /mi ² /yr	336	115	21	0	28	499	35	7	0	0	0	42	541
		tons/mi ² /yr	518	176	32	0	42	768	54	11	0	0	0	65	834
		%	67	23	4	0	6	100	83	17	0	0	0	100	100
	Sub-total/ %	yds ³ /mi ² /yr	348	114	178	0	28	668	35	7	0	0	0	42	710
		tons/mi ² /yr	535	176	274	0	42	1028	54	11	0	0	0	65	1093
		%	52	17	27	0	4	100	83	17	0	0	0	100	100

Table B-6c (continued)

Domain (Private and Public ownership) (mi ²)			Non Earthflow					Earthflow					Total sediment yield (non EF+ EF)		
			No land use	Road Related	Timber harvest	Ag/ Grazing	Fire	Total non EF sediment yield	No land use	Road Related	Timber harvest	Ag/ Grazing		Fire	Total EF sediment yield
Public	Plot <3,000 yds ³ sediment sources	yds ³ /mi ² /yr	0	0	55	0	0	55	0	0	0	0	0	0	55
		tons/mi ² /yr	0	0	84	0	0	84	0	0	0	0	0	0	84
		%	0	0	100	0	0	100	0	0	0	0	0	0	100
	>3000yds ³ sediment sources ⁵	yds ³ /mi ² /yr	199	33	11	0	0	242	6	0	0	0	2	8	250
		tons/mi ² /yr	307	50	17	0	0	373	10	0	0	0	3	13	386
		%	82	13	5	0	0	100	74	0	0	0	26	100	100
	Sub-total/ %	yds ³ /mi ² /yr	199	33	65	0	0	297	6	0	0	0	2	8	305
		tons/mi ² /yr	307	50	101	0	0	458	10	0	0	0	3	13	470
		%	63	10	21	0	0	100	74	0	0	0	26	100	100
Soda Creek CALWAA Total (60.1 mi ²)	Plot <3,000 yds ³ sediment sources	yds ³ /mi ² /yr	4	0	94	0	0	98	0	0	0	0	0	0	98
		tons/mi ² /yr	7	0	144	0	0	151	0	0	0	0	0	0	151
		%	4	0	96	0	0	100	0	0	0	0	0	0	100
	PWA >3,000yds ³ sediment sources ⁵	yds ³ /mi ² /yr	251	64	14	0	10	340	17	3	0	0	1	21	361
		tons/mi ² /yr	387	98	22	0	16	523	27	4	0	0	2	33	556
		%	74	19	4	0	3	100	81	13	0	0	6	100	100
	Sub-total/ %	yds ³ /mi ² /yr	255	64	108	0	10	437	17	3	0	0	1	21	459
		tons/mi ² /yr	393	98	167	0	16	674	27	4	0	0	2	33	707
		%	58	15	25	0	2	100	81	13	0	0	6	100	100

Table B-6d. Sediment yield (in yds³/mi²/year, tons/mi²/year and %) by ownership and primary land use association for small and large features in the Tomki Creek subwatershed, Upper Eel River watershed study area

Domain (Private and Public ownership) (mi ²)		Non Earthflow							Earthflow					Total sediment yield (non EF+ EF)	
		No land use	Road Related	Timber harvest	Ag/ Grazing	Fire	Total non EF sediment yield	No land use	Road Related	Timber harvest	Ag/ Grazing	Fire	Total EF sediment yield		
Private	Plot <3,000 yds ³ sediment sources	yds ³ /mi ² /yr	113	30	16	23	0	182	25	0	0	0	0	25	207
		tons/mi ² /yr	175	46	24	35	0	280	39	0	0	0	0	39	319
		%	62	17	9	12	0	100	100	0	0	0	0	100	100
	>3,000yds ³ sediment sources ⁵	yds ³ /mi ² /yr	41	16	57	2	<1	116	15	<1	0	0	0	15	131
		tons/mi ² /yr	63	25	87	4	<1	179	22	1	0	0	0	23	202
		%	35	14	49	2	<1	100	96	4	0	0	0	100	100
	Sub-total/ %	yds ³ /mi ² /yr	154	46	72	25	<1	298	40	<1	0	0	0	40	338
		tons/mi ² /yr	238	71	111	39	<1	459	61	1	0	0	0	62	521
		%	52	16	24	8	<1	100	98	2	0	0	0	100	100

Table B-6d (continued)

Domain (Private and Public ownership) (mi ²)			Non Earthflow						Earthflow						Total sediment yield (non EF+ EF)
			No land use	Road Related	Timber harvest	Ag/ Grazing	Fire	Total non EF sediment yield	No land use	Road Related	Timber harvest	Ag/ Grazing	Fire	Total EF sediment yield	
Public	Plot <3,000 yds ³ sediment sources	yds ³ /mi ² /yr	83	46	28	0	0	157	0	0	0	0	0	0	157
		tons/mi ² /yr	128	70	43	0	0	241	0	0	0	0	0	0	241
		%	53	29	18	0	0	100	0	0	0	0	0	0	100
	>3000yds ³ sediment sources ⁵	yds ³ /mi ² /yr	369	21	34	1	8	434	12	<1	0	0	0	12	446
		tons/mi ² /yr	569	32	52	2	13	668	18	1	0	0	0	19	686
		%	85	5	8	<1	2	100	97	3	0	0	0	100	100
	Sub-total/ %	yds ³ /mi ² /yr	452	66	62	1	8	590	12	<1	0	0	0	12	602
		tons/mi ² /yr	697	102	95	2	13	909	18	<1	0	0	0	19	927
		%	77	11	10	<1	1	100	97	3	0	0	0	100	100
Tomki Creek CALWAA Total (200 mi ²)	Plot <3,000 yds ³ sediment sources	yds ³ /mi ² /yr	107	34	18	18	0	176	20	0	0	0	0	20	196
		tons/mi ² /yr	164	52	28	27	0	272	30	0	0	0	0	30	302
		%	61	19	10	10	0	100	100	0	0	0	0	100	100
	PWA >3,000yds ³ sediment sources ⁵	yds ³ /mi ² /yr	113	17	52	2	2	185	14	<1	0	0	0	14	200
		tons/mi ² /yr	173	26	80	3	3	285	21	1	0	0	0	22	308
		%	61	9	28	1	1	100	96	4	0	0	0	100	100
	Sub-total/ %	yds ³ /mi ² /yr	219	51	70	20	20	362	33	<1	0	0	0	34	395
		tons/mi ² /yr	338	78	108	31	31	557	52	1	0	0	0	53	610
		%	61	14	19	5	5	100	98	2	0	0	0	100	100

Table B-6e. Sediment yield (in yds³/mi²/year, tons/mi²/year and %) by ownership and primary land use association for small and large features in the Upper Main Eel subwatershed, Upper Eel River watershed study area

Domain (Private and Public ownership) (mi ²)			Non Earthflow					Earthflow					Total sediment yield (non EF+ EF)		
			No land use	Road Related	Timber harvest	Ag/ Grazing	Fire	Total non EF sediment yield	No land use	Road Related	Timber harvest	Ag/ Grazing		Fire	Total EF sediment yield
Private	Plot <3,000 yds ³ sediment sources	yds ³ /mi ² /yr	<1	1	97	0	0	99	0	0	0	0	0	0	99
		tons/mi ² /yr	<1	2	150	0	0	152	0	0	0	0	0	0	152
		%	<1	1	99	0	0	100	0	0	0	0	0	0	100
	>3,000yds ³ sediment sources ⁵	yds ³ /mi ² /yr	78	88	47	0	0	213	0	0	0	0	0	0	213
		tons/mi ² /yr	121	136	72	0	0	328	0	0	0	0	0	0	328
		%	37	41	22	0	0	100	0	0	0	0	0	0	100
	Sub-total/ %	yds ³ /mi ² /yr	79	89	144	0	0	312	0	0	0	0	0	0	312
		tons/mi ² /yr	121	137	222	0	0	480	0	0	0	0	0	0	480
		%	25	29	46	0	0	100	0	0	0	0	0	0	100

Table B-6e (continued)

Domain (Private and Public ownership) (mi ²)			Non Earthflow						Earthflow						Total sediment yield (non EF+ EF)
			No land use	Road Related	Timber harvest	Ag/ Grazing	Fire	Total non EF sediment yield	No land use	Road Related	Timber harvest	Ag/ Grazing	Fire	Total EF sediment yield	
Public	Plot <3,000 yds ³ sediment sources	yds ³ /mi ² /yr	45	2	11	0	0	58	0	0	0	0	0	0	58
		tons/mi ² /yr	69	3	17	0	0	89	0	0	0	0	0	0	89
		%	77	4	19	0	0	100	0	0	0	0	0	0	100
	>3000yds ³ sediment sources ⁵	yds ³ /mi ² /yr	169	33	9	<1	<1	211	2	0	<1	0	0	2	213
		tons/mi ² /yr	261	50	14	<1	<1	325	4	0	<1	0	0	4	329
		%	80	15	4	<1	<1	100	98	0	2	0	0	100	100
	Sub-total/ %	yds ³ /mi ² /yr	214	35	20	<1	<1	269	2	0	<1	0	0	2	271
		tons/mi ² /yr	329	54	31	<1	<1	414	4	0	<1	0	0	4	418
		%	79	13	7	<1	<1	100	98	0	2	0	0	100	100
Upper Main Eel Total (179 mi ²)	Plot <3,000 yds ³ sediment sources	yds ³ /mi ² /yr	41	2	17	0	0	61	0	0	0	0	0	61	
		tons/mi ² /yr	64	3	27	0	0	94	0	0	0	0	0	94	
		%	68	3	29	0	0	100	0	0	0	0	0	100	
	PWA >3,000yds ³ sediment sources ⁵	yds ³ /mi ² /yr	163	37	12	<1	<1	211	2	0	<1	0	0	2	213
		tons/mi ² /yr	250	56	18	<1	<1	326	4	0	<1	0	0	4	329
		%	77	17	6	<1	<1	100	98	0	2	0	0	100	100
	Sub-total/ %	yds ³ /mi ² /yr	204	39	29	<1	<1	272	2	0	<1	0	0	2	274
		tons/mi ² /yr	314	60	45	<1	<1	419	4	0	<1	0	0	4	423
		%	75	14	11	<1	<1	100	98	0	2	0	0	100	100