APPENDIX C

Sediment Yield

Table C-1 - Mean Sediment Yield

		Mean Observed Sediment Yield (grams/m^2) per plot			Mean Predicted Sediment Yield (grams/m^2) per plot					
					PRISM Climate			Observed Climate		
Site Name	Year	Short Slope	Intermediate Slope	Long Slope	Short Slope	Intermediate Slope	Long Slope	Short Slope	Intermediate Slope	Long Slope
	2003	0.53	0.01	0.50	0.0	0.0	0.0	1.6	1.0	1.0
Cabin Gulch North	2004	0.52	0.02	0.48	0.0	0.0	0.0	1.4	2.3	1.6
	2005	1.03	0.01	0.99	0.0	0.0	0.0	1.4	2.3	1.6
	2003	0.40	0.02	0.38	0.0	0.0	0.0	0.11	0.00	0.00
Cabin Gulch South	2004	0.80	0.04	0.76	0.0	0.0	0.0	1.22	1.33	0.89
	2005	0.57	0.01	0.55	0.0	0.0	0.0	1.22	1.33	0.89
	2003	0.05	0.05	0.02	25.3	20.0	21.3	1.2	0.67	0.67
Sheep Gulch North	2004	0.02	0.01	0.01	3.00	1.7	2.1	1.4	1.0	1.0
	2005	0.02	0.01	0.01	0.00	0.00	0.00	24.0	58.0	18.2
	2003	0.68	0.01	0.36	20.8	12.3	21.9	4.3	2.3	4.9
Sheep Gulch South	2004	0.49	0.02	0.28	4.7	2.7	4.4	16.1	9.7	15.7
	2005	0.50	0.27	0.25	0.11	0.00	0.22	0.0	4.7	12.7
	2003	0.05	0.01	0.03	0.0	0.0	0.0	0.0	0.0	0.0
Skookum #1 North	2004	0.06	0.01	0.04	0.0	0.0	0.0	0.0	0.0	0.0
	2005	0.05	0.01	0.04	0.0	0.0	0.0	0.0	0.0	0.0
	2003	0.66	0.18	0.31	0.0	0.0	0.0	0.0	0.0	0.0
Skookum #1 South	2004	0.21	0.07	0.09	0.0	0.0	0.0	0.0	0.0	0.0
	2005	0.42	0.18	0.17	0.0	0.0	0.0	0.0	0.0	0.0
	2003	0.02	0.03	0.01	0.0	0.0	0.0	0.0	0.0	0.0
Skookum #2 North	2004	0.02	0.02	0.01	0.0	0.0	0.0	0.0	0.0	0.0
	2005	0.09	0.04	0.03	0.0	0.0	0.0	0.0	0.0	0.0
	2003	0.80	0.86	0.20	0.0	0.0	0.0	0.0	0.0	0.0
Skookum #2 South	2004	0.11	0.07	0.04	0.0	0.0	0.0	0.0	0.0	0.0
	2005	0.56	0.59	0.15	0.0	0.0	0.0	0.0	0.0	0.0
Lick Creek No Treatment #1	2004	0.6	0.05	0.6	0.0	0.0	0.0	1.6	1.7	1.8
	2005	0.2	0.31	0.1	0.0	0.0	0.0	1.6	1.7	1.8
Lick Creek Fuels Yard #1	2005	12.4	0.08	7.2	22.7	27.3	27.2	38.7	53.7	59.9
Lick Creek Commercial Yard #1	2005	4.1	0.00	2.1	18.9	16.7	19.2	37.9	48.7	49.1
Lick Creek Burn Only #1	2005	0.4	0.02	0.2	23.2	35.3	20.9	38.1	67.7	51.2
Lane Creek Control	2004	0.19	0.08	0.10	0.00	0.00	0.00	1.56	2.00	0.00

Table C-2 - Disturbed WEPP Prediction Performance Level

		Percent over/under prediction					
		PRISM Climate			Observed Climate		
Site	Year	Short Slope	Intermediate Slope	Long Slope	Short Slope	Intermediate Slope	Long Slope
Cabin Gulch North	2003	-100	-100	-100	192	9471	99
	2004	-100	-100	-100	176	12123	226
	2005	-100	-100	-100	41	16377	58
Cabin Gulch South	2003	-100	-100	-100	-72	-100	-100
	2004	-100	-100	-100	53	3029	17
	2005	-100	-100	-100	116	10869	60
Sheep Gulch North	2003	46753	44317	132639	2160	1381	4048
	2004	12629	11688	20032	6029	6973	9436
	2005	-100	-100	-100	120140	493298	268795
Sheep Gulch South	2003	2954	91302	6030	537	17192	1269
	2004	860	12520	1491	3214	45647	5508
	2005	-78	-100	-12	-100	1617	4902
Skookum #1 North	2003	-100	-100	-100	-100	-100	-100
	2004	-100	-100	-100	-100	-100	-100
	2005	-100	-100	-100	-100	-100	-100
Skookum #1 South	2003	-100	-100	-100	-100	-100	-100
	2004	-100	-100	-100	-100	-100	-100
	2005	-100	-100	-100	-100	-100	-100
Skookum #2 North	2003	-100	-100	-100	-100	-100	-100
	2004	-100	-100	-100	-100	-100	-100
	2005	-100	-100	-100	-100	-100	-100
Skookum #2 South	2003	-100	-100	-100	-100	-100	-100
	2004	-100	-100	-100	-100	-100	-100
	2005	-100	-100	-100	-100	-100	-100
Lick Creek No Treatment #1	2004	-100	-100	-100	148	3424	201
	2005	-100	-100	-100	573	433	1689
Lick Creek Fuels Yard #1	2005	82	36206	279	211	71184	733
Lick Creek Commercial Yard #1	2005	363	521030	830	829	1521601	2276
Lick Creek Burn Only #1	2005	6481	158338	12294	10701	303324	30292
Lane Creek Control	2004	-100	-100	-100	716	2496	-100

Negative percent indicates model under-prediction, positive percent indicates model over-prediction

Table C-3 - Sediment Yield Correlation Statistics for the Red Fir Project

Red Fir Project	Observed			Predicted					
				PRISM Climate			Observed Climate		
	Short Slope	Intermediate Slope	Long Slope	Short Slope	Intermediate Slope	Long Slope	Short Slope	Intermediate Slope	Long Slope
Sediment Yield Correlation Statistics per Watershed for All Measurement Dates									
Cabin Gulch North									
Mean	0.69	0.01	0.66	0.0	0.0	0.0	1.44	1.89	1.44
Std. Dev.	1.74	0.01	1.76	0.0	0.0	0.0	0.51	1.05	0.80
Intercept *a*				0.0	0.0	0.0	1.4	1.2	1.4
Slobe *b*				0.0	0.0	0.0	0.04	50.5	0.04
N	27	9	27	27	9	27	27	9	27
RMSE				1.85	0.02	1.84	1.86	2.12	1.99
$RMSE_s$				1.85	0.02	1.84	0.49	0.91	0.78
$RMSE_u$				0.00	0.00	0.00	0.00	0.00	0.00
Index of agreement				0.29	0.43	0.28	0.36	0.01	0.34
Cabin Gulch South									
Mean	0.60	0.03	0.57	0.0	0.0	0.0	0.89	0.89	0.59
Std. Dev.	1.38	0.03	1.39	0.0	0.0	0.0	0.85	1.05	0.93
Intercept *a*				0.0	0.0	0.0	0.65	0.64	0.33
Slobe *b*				0.0	0.0	0.0	0.39	9.57	0.46
N	27	9	27	27	9	27	27	9	27
RMSE				1.48	0.04	1.48	1.08	1.31	0.98
$RMSE_s$				1.48	0.04	1.48	0.87	0.90	0.73
$RMSE_u$				0.00	0.00	0.00	0.64	0.95	0.66
Index of agreement				0.31	0.43	0.31	0.75	0.04	0.80
Sheep Gulch North									
Mean	0.03	0.02	0.01	9.00	7.22	7.33	8.89	19.89	6.63
Std. Dev.	0.07	0.04	0.01	12.63	9.65	10.37	12.82	43.98	9.43
Intercept *a*				7.0	4.5	4.3	9.5	26.1	7.6
Slobe *b*				62.2	115.4	273.5	-19.0	-263.1	-89.7
N	27	9	27	27	9	27	27	9	27
RMSE				15.28	11.59	12.53	15.39	45.98	11.38
$RMSE_s$				9.95	8.30	8.30	8.97	22.03	6.75
$RMSE_u$				11.59	8.09	9.39	12.51	40.36	9.16
Index of agreement				0.01	0.01	0.0	0.0	0.0	0.0
Sheep Gulch South									
Mean	0.49	0.10	0.27	8.19	5.00	8.22	7.07	5.56	11.22
Std. Dev.	0.76	0.24	0.34	12.41	6.65	12.36	11.43	4.75	14.03
Intercept *a*				8.8	5.9	7.2	6.4	6.4	9.2
Slobe *b*				-1.4	-8.7	3.8	1.5	-8.7	7.6
N	27	9	27	27	9	27	27	9	27
RMSE				14.48	8.02	14.48	12.96	7.12	17.55
$RMSE_s$				7.89	5.37	8.01	6.60	5.88	11.17
$RMSE_u$				12.13	5.95	12.06	11.16	4.02	13.53
Index of agreement				0.02	0.0	0.02	0.04	0.00	0.02
Sediment Yield Correlation Statistics per Watershed Treatment Type for All Measurement Dates									
Control (CGN, CGS)									
Mean	0.64	0.02	0.61	0.0	0.0	0.0	1.17	1.39	0.98
Std. Dev.	1.56	0.02	1.57	0.0	0.0	0.0	0.80	1.14	0.92
Intercept *a*				0.0	0.0	0.0	1.05	1.27	0.85
Slobe *b*				0.0	0.0	0.0	0.18	6.09	0.22
N	54	18	54	54	18	54	54	18	54
RMSE				1.67	0.01	1.67	1.54	1.64	1.52
$RMSE_s$				1.67	0.01	1.67	1.35	1.21	1.27
$RMSE_u$				0.0	0.0	0.0	0.73	1.03	0.85
Index of agreement				0.29	0.78	0.27	0.55	0.0	0.57
Treatment (SHGN, SHGS)									
Mean	0.29	0.06	0.15	9.0	6.2	8.3	7.9	12.7	8.9
Std. Dev.	0.75	0.17	0.33	12.3	8.0	11.4	12.1	31.2	12.1
Intercept *a*				9.0	6.7	7.3	8.0	14.3	8.1
Slobe *b*				0.1	-7.2	6.5	-0.6	-24.4	5.1
N	54	18	54	54	18	54	54	18	54
RMSE				15.0	9.8	13.8	14.2	32.8	14.8
$RMSE_s$				8.7	5.7	8.2	7.4	12.1	8.8
$RMSE_u$				12.2	7.5	11.0	11.9	29.9	11.8
Index of agreement				0.0	0.0	0.0	0.0	0.0	0.0

Table C-4 - Sediment Yield Correlation Statistics for Skookum Creek Project

Skookum Project	Observed			Predicted					
				PRISM Climate			Observed Climate		
	Short Slope	Intermediate Slope	Long Slope	Short Slope	Intermediate Slope	Long Slope	Short Slope	Intermediate Slope	Long Slope
Sediment Yield Correlation Statistics per Watershed for All Measurement Dates									
Skookum #1 North									
Mean	0.04	0.01	0.03	0.0	0.0	0.0	0.0	0.0	0.0
Std. Dev.	0.06	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0
Intercept *a*				0.0	0.0	0.0	0.0	0.0	0.0
Slobe *b*				0.0	0.0	0.0	0.0	0.0	0.0
N	9	3	9	9	3	9	9	3	9
RMSE				0.08	0.01	0.05	0.08	0.01	0.05
$RMSE_s$				0.08	0.01	0.05	0.08	0.01	0.05
$RMSE_u$				0.00	0.00	0.00	0.00	0.00	0.00
Index of agreement				0.40	0.43	0.37	0.40	0.43	0.37
Skookum #1 South									
Mean	0.43	0.14	0.19	0.00	0.0	0.0	0.0	0.0	0.0
Std. Dev.	0.61	0.11	0.34	0.00	0.0	0.0	0.0	0.0	0.0
Intercept *a*					0.0	0.0	0.0	0.0	0.0
Slobe *b*					0.0	0.0	0.0	0.0	0.0
N	9	3	9	9	3	9	9	3	9
RMSE				0.74	0.18	0.38	0.74	0.18	0.38
$RMSE_s$				0.74	0.18	0.38	0.74	0.18	0.38
$RMSE_u$				0.00	0.00	0.00	0.00	0.00	0.00
Index of agreement				0.39	0.44	0.35	0.39	0.44	0.35
Skookum #2 North									
Mean	0.05	0.03	0.01	0.0	0.0	0.0	0.0	0.0	0.0
Std. Dev.	0.11	0.03	0.03	0.0	0.0	0.0	0.0	0.0	0.0
Intercept *a*				0.0	0.0	0.0	0.0	0.0	0.0
Slobe *b*				0.0	0.0	0.0	0.0	0.0	0.0
N	9	3	9	9	3	9	9	3	9
RMSE				0.12	0.04	0.03	0.12	0.04	0.03
$RMSE_s$				0.12	0.04	0.03	0.12	0.04	0.03
$RMSE_u$				0.00	0.00	0.00	0.00	0.00	0.00
Index of agreement				0.26	0.47	0.26	0.26	0.47	0.26
Skookum #2 South									
Mean	0.47	0.50	0.13	0.0	0.0	0.0	0.0	0.0	0.0
Std. Dev.	0.79	0.56	0.20	0.0	0.0	0.0	0.0	0.0	0.0
Intercept *a*				0.0	0.0	0.0	0.0	0.0	0.0
Slobe *b*				0.0	0.0	0.0	0.0	0.0	0.0
N	9	3	9	9	3	9	9	3	9
RMSE				0.91	0.73	0.23	0.91	0.73	0.23
$RMSE_s$				0.91	0.73	0.23	0.91	0.73	0.23
$RMSE_u$				0.00	0.00	0.00	0.00	0.00	0.00
Index of agreement				0.38	0.46	0.39	0.38	0.46	0.39
Sediment Yield Correlation Statistics per Watershed Treatment Type for All Measurement Dates									
Control (S2N, S2S)									
Mean	0.27	0.27	0.07	0.0	0.0	0.0	0.0	0.0	0.0
Std. Dev.	0.60	0.46	0.15	0.0	0.0	0.0	0.0	0.0	0.0
Intercept *a*				0.0	0.0	0.0	0.0	0.0	0.0
Slobe *b*				0.0	0.0	0.0	0.0	0.0	0.0
N	54	18	54	54	18	54	54	18	54
RMSE				0.65	0.44	0.16	0.56	0.44	0.17
$RMSE_s$				0.65	0.44	0.16	0.56	0.44	0.17
$RMSE_u$				0.0	0.0	0.0	0.0	0.0	0.0
Index of agreement				0.31	0.46	0.33	0.37	0.46	0.32
Treatment (S1N, S1S)									
Mean	0.24	0.08	0.11	0.0	0.0	0.0	0.0	0.0	0.0
Std. Dev.	0.47	0.11	0.25	0.0	0.0	0.0	0.0	0.0	0.0
Intercept *a*				0.0	0.0	0.0	0.0	0.0	0.0
Slobe *b*				0.0	0.0	0.0	0.0	0.0	0.0
N	54	18	54	54	18	54	54	18	54
RMSE				0.52	0.13	0.27	0.52	0.13	0.27
$RMSE_s$				0.52	0.13	0.27	0.52	0.13	0.27
$RMSE_u$				0.0	0.0	0.0	0.0	0.0	0.0
Index of agreement				0.33	0.40	0.26	0.32	0.40	0.28

Table C-5 - Sediment Yield Correlation Statistics for Lick Creek Project

Lick Creek Project	Observed			Predicted					
				PRISM Climate			Observed Climate		
	Short Slope	Intermediate Slope	Long Slope	Short Slope	Intermediate Slope	Long Slope	Short Slope	Intermediate Slope	Long Slope
Sediment Yield Correlation Statistics per Watershed									
Lick Creek Fuels Yard #1									
Mean	12.44	0.08	7.19	22.7	27.3	27.2	38.7	53.7	59.9
Std. Dev.	19.29	0.07	9.52	5.8	2.5	8.4	7.0	6.1	18.7
Intercept *a*				21.9	24.7	27.5	38.7	50.0	66.3
Slobe *b*				0.1	34.6	0.0	0.0	48.8	-0.9
N	9	3	9	9	3	9	9	3	9
RMSE				20.63	27.33	23.47	32.59	53.82	57.54
$RMSE_s$				19.92	27.33	22.09	31.92	53.67	55.35
$RMSE_u$				5.35	0.04	7.95	6.58	4.06	15.72
Index of agreement				0.46	0.0	0.37	0.41	0.0	0.17
Lick Creek Burn Only #1									
Mean	0.35	0.02	0.17	23.22	35.33	20.89	38.11	67.67	51.22
Std. Dev.	0.90	0.03	0.43	15.43	3.06	10.42	20.16	7.09	23.93
Intercept *a*				18.0	33.7	19.2	31.3	66.8	47.6
Slobe *b*				14.76	71	10	19.21	38	21
N	9	3	9	9	3	9	9	3	9
RMSE				26.7	35.4	22.9	41.9	67.9	55.8
$RMSE_s$				25.7	35.4	21.0	40.8	67.7	51.7
$RMSE_u$				7.3	1.6	8.9	9.7	5.7	20.8
Index of agreement				0.08	0.00	0.0	0.05	0.00	0.0
Lick Creek Commercial Yard #1									
Mean	4.08	0.0	2.07	18.89	16.67	19.22	19.22	48.67	49.11
Std. Dev.	9.95	0.0	4.47	4.91	2.52	5.49	5.49	4.04	11.16
Intercept *a*				17.8	16.5	18.1	36.3	53.8	47.3
Slobe *b*				0.28	60	1	0.39	-1619	1
N	9	3	9	9	3	9	9	3	9
RMSE				16.7	16.8	17.9	34.9	48.8	48.1
$RMSE_s$				16.3	16.7	17.3	34.3	48.7	47.0
$RMSE_u$				3.8	2.1	4.7	6.6	3.1	9.8
Index of agreement				0.48	0.00	0.3	0.30	0.00	0.1
Lick Creek No Treatment #1									
Mean	0.43	0.18	0.35	0.0	0.0	0.0	0.0	0.0	0.0
Std. Dev.	1.17	0.35	1.14	0.0	0.0	0.0	0.0	0.0	0.0
Intercept *a*				0.0	0.0	0.0	1.60	1.58	1.84
Slobe *b*				0.0	0.0	0.0	-0.09	0.48	-0.18
N	9	3	9	9	3	9	9	3	9
RMSE				1.22	0.37	1.16	1.81	1.56	2.03
$RMSE_s$				1.22	0.37	1.16	1.68	1.50	1.94
$RMSE_u$				0.0	0.0	0.0	0.68	0.45	0.60
Index of agreement				0.27	0.39	0.21	0.23	0.26	0.15
Sediment Yield Correlation Statistics per Watershed Treatment Type for All Measurement Dates									
Control (LKNT)									
Mean	0.43	0.18	0.35	0.0	0.0	0.0	0.0	0.0	0.0
Std. Dev.	1.17	0.35	1.14	0.0	0.0	0.0	0.0	0.0	0.0
Intercept *a*				0.0	0.0	0.0	1.60	1.58	1.84
Slobe *b*				0.0	0.0	0.0	-0.09	0.48	-0.18
N	9	3	9	9	3	9	9	3	9
RMSE				1.22	0.37	1.16	1.81	1.56	2.03
$RMSE_s$				1.22	0.37	1.16	1.68	1.50	1.94
$RMSE_u$				0.0	0.0	0.0	0.68	0.45	0.60
Index of agreement				0.27	0.39	0.21	0.23	0.26	0.15
Treatment (LKB, LKFY, LKCY)									
Mean	4.87	0.02	2.51	21.2	26.4	22.2	37.5	56.7	52.8
Std. Dev.	12.54	0.03	5.05	9.6	8.4	8.5	12.6	9.9	18.0
Intercept *a*				20.4	24.5	21.3	36.75	55.75	53.04
Slobe *b*				0.1	57.9	0.3	0.13	27.26	-0.07
N	27	9	27	27	9	27	27	9	27
RMSE				21.24	27.58	21.19	35.89	57.40	53.15
$RMSE_s$				19.11	26.55	19.59	33.72	56.65	50.13
$RMSE_u$				9.3	7.5	8.1	12.29	9.28	17.65
Index of agreement				0.41	0.00	0.32	0.30	0.00	0.13

Table C-6 - Sediment Yield Correlation Statistics for Lane Creek Project

	Sediment Yield Correlation Statistics per Watershed									
		Observed			**Predicted**					
					PRISM Climate			**Observed Climate**		
		Short Slope	Intermediate Slope	Long Slope	Short Slope	Intermediate Slope	Long Slope	Short Slope	Intermediate Slope	Long Slope
Lane Creek Project	***Lane Creek Control***									
	Mean	0.19	0.08	0.10	0.0	0.0	0.0	1.56	2.0	0.0
	Std. Dev.	0.24	0.12	0.12	0.0	0.0	0.0	1.67	0.0	0.0
	Intercept *a*				0.0	0.0	0.0	1.42	2.0	0.0
	Slobe *b*				0.0	0.0	0.0	0.72	0.0	0.0
	N	9	3	9	9	3	9	9	3	9
	RMSE				0.30	0.13	0.16	2.08	1.93	0.16
	$RMSE_s$				0.30	0.13	0.16	1.37	1.93	0.16
	$RMSE_u$				0.00	0.00	0.00	1.56	0.00	0.00
	Index of agreement				0.45	0.48	0.45	0.15	0.09	0.45

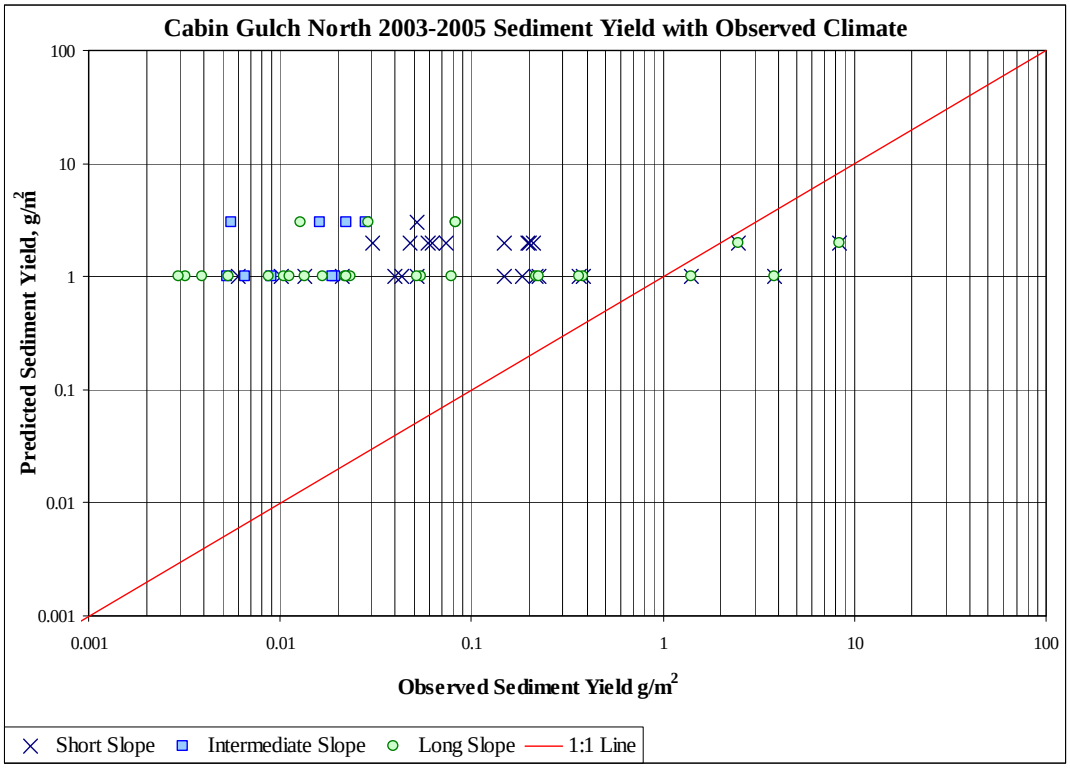

Figure C-1 - Cabin Gulch North Sediment Yield with Observed Climate

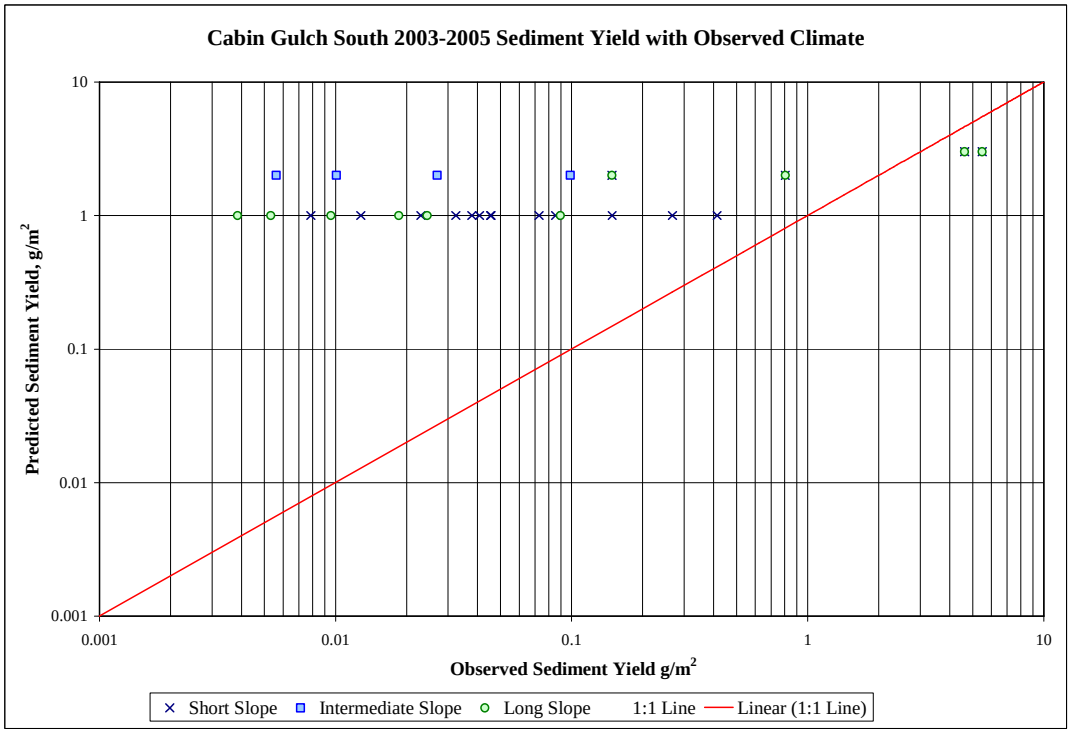

Figure C-2 - Cabin Gulch South Sediment Yield with Observed Climate

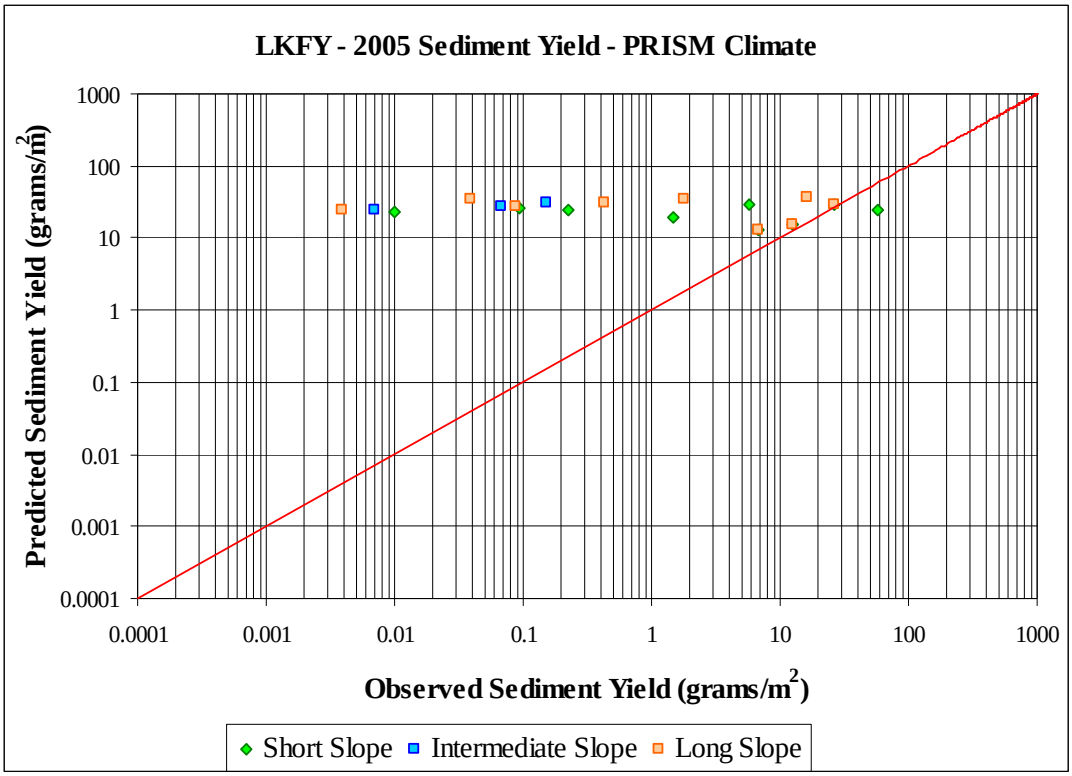

Figure C-3 - Lick Creek Fuels Yard Sediment Yield with PRISM Climate

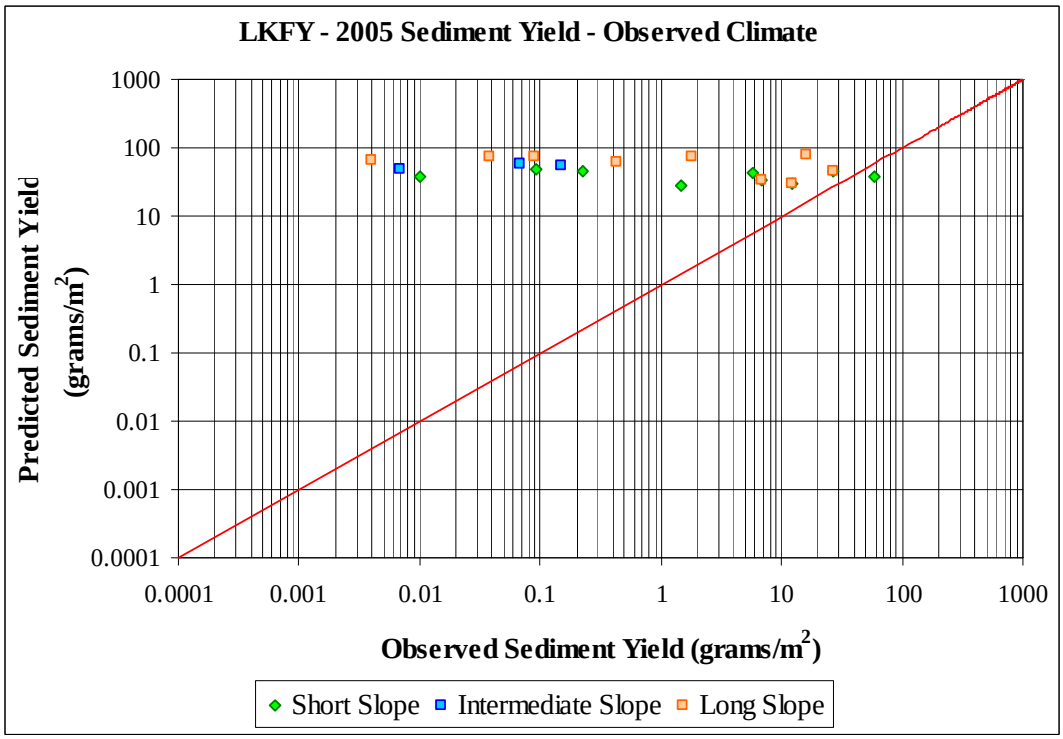

Figure C-4 - Lick Creek Fuels Yard Sediment Yield with Observed Climate

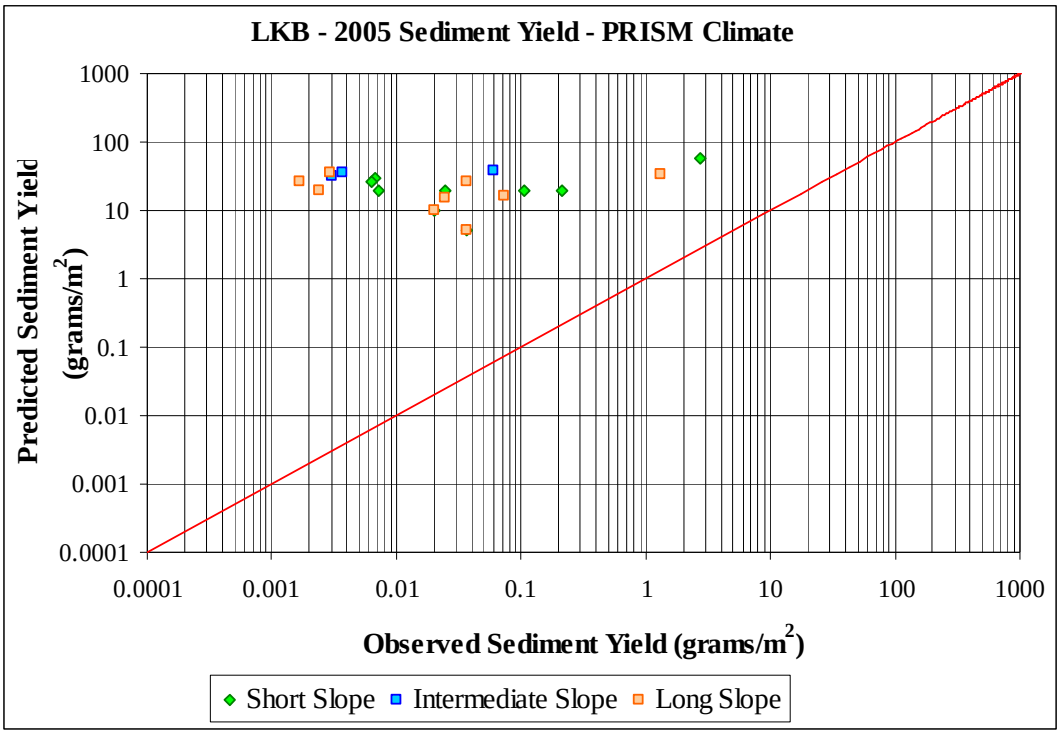

Figure C-5 - Lick Creek Burn Only Sediment Yield with PRISM Climate

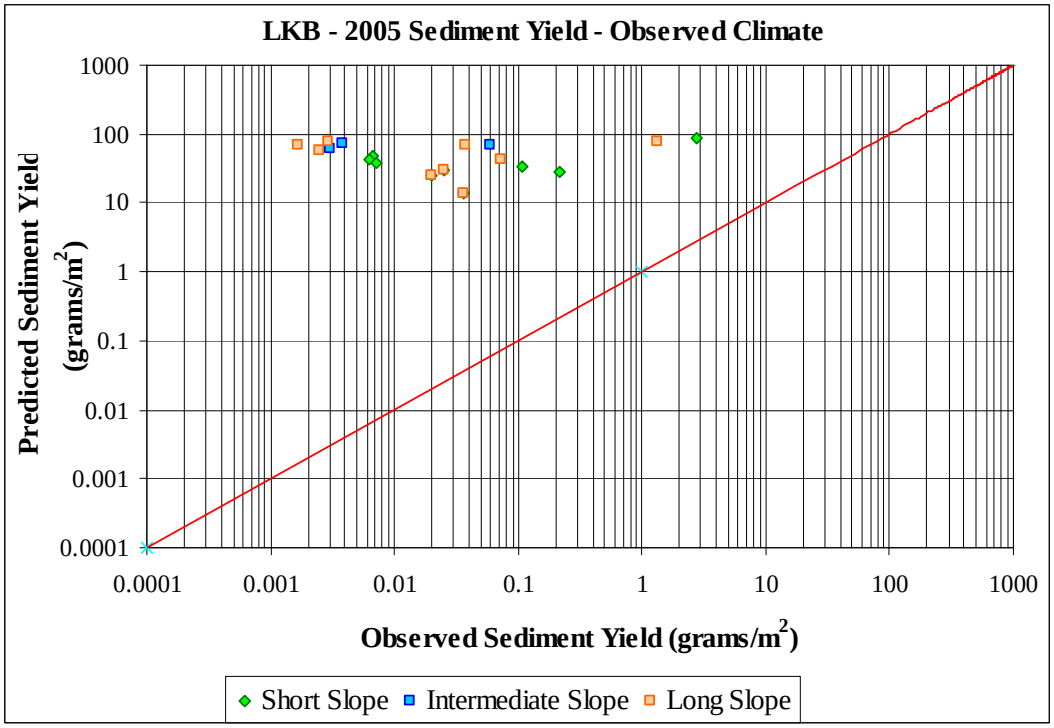

Figure C-6 - Lick Creek Burn Only Sediment Yield with Observed Climate

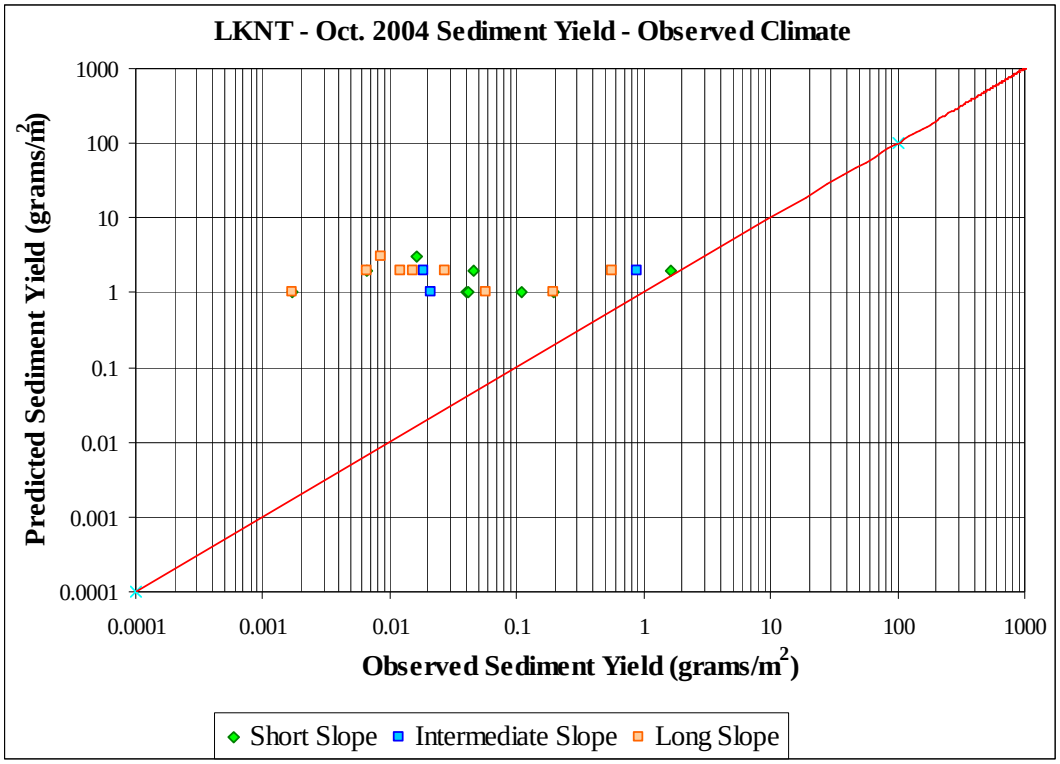

Figure C-7 - Lick Creek No Treatment Sediment Yield with Observed Climate