Appendix D:

Geomorphic Assessment

Upper Fountain Creek Stream Bank Erosion Table

ID	Valley Type	Valley Width (ft)	Average Bank Ht (ft)	Length (ft)	Existing			Proposed			Erosion Savings (tons)	Erosion Savings per foot	Priority
					Existing Sream Type	Unit Erosion Rate Tons/ft/yr	Total Erosion (Tons/yr)	Stream Type	Erosion Rate (tons/ft /yr)	Total Erosion (tons)			
1	8c	>120	4	186.3	G4 Fair	0.279	52.0	B4	0.00466	0.868	51.1	0.274	44
2	8c	>120	7	1220.1	F4 Fair	0.119	145.7	C4	0.00633	7.723	138.0	0.113	21
3	8c	>120	2.5	600.5	C4 Fair	0.012	7.0	B4	0.00466	2.798	4.2	0.007	65
4	8b	40-80	3	380.6	G4 Fair	0.105	39.8	B4	0.00466	1.774	38.1	0.100	32
5	8b	80-120	4	841.2	G4 Fair-Poor	0.503	422.8	B4	0.00466	3.920	418.9	0.498	9
6	8a	40-80	5	221.5	F4 Poor	1.039	230.2	B4	0.00466	1.032	229.2	1.035	15
7	8a	40-80	8	335.2	F4 Poor	1.494	500.8	B4	0.00466	1.562	499.3	1.490	6
8	8b	40-80	1.5	598.8	F4 Fair-Poor	0.169	101.0	B4	0.00466	2.791	98.2	0.164	26
9	8b	40-80	1.5	1003.9	C4 Fair	0.007	7.0	B4	0.00466	4.678	2.4	0.002	64
10	8b	40-80	9	143.6	F4 Poor	1.681	241.3	B4	0.00466	0.669	240.7	1.676	12
11	8b	80-120	2	182.6	F4 Poor	0.416	75.9	B4	0.00466	0.851	75.1	0.411	33
12	8b	80-120	3	524.8	G4 Fair	0.209	109.9	B4	0.00466	2.446	107.4	0.205	24
13	8b	40-80	8	159.9	F4 Poor	1.494	239.0	B4	0.00466	0.745	238.2	1.490	13
14	8b	80-120	4	636.0	F4 Fair-Poor	0.450	286.1	B4	0.00466	2.964	283.2	0.445	14
15	8a	20-40	1.5	1368.0	B4 Fair	0.025	34.5	B4	0.00466	6.375	28.1	0.021	49
16	8a	40-80	3	141.3	G4 Fair	0.209	29.6	B4	0.00466	0.658	28.9	0.205	53
17	8b	40-80	1.5	227.7	C4 Fair	0.007	1.6	B4	0.00466	1.061	0.5	0.002	70
18	8b	40-80	3	447.4	G4 Fair	0.209	93.6	B4	0.00466	2.085	91.6	0.205	27
19	8b	40-80	1.5	192.6	C4 Fair	0.007	1.3	B4	0.00466	0.898	0.5	0.002	71
20	8b	20-40	3.5	1507.4	G4 Fair-Poor	0.440	663.0	B4	0.00466	7.025	656.0	0.435	5
21	8c	>120	7	522.4	F4 Fair	0.119	62.4	B4	0.00466	2.434	59.9	0.115	40
22	8b	80-120	6	674.2	F4 Fair	0.102	69.0	B4	0.00466	3.142	65.9	0.098	36
23	8b	>120	3	327.9	F4 Fair	0.051	16.8	B4	0.00466	1.528	15.2	0.047	57
24	8b	80-120	3	513.1	B4 Fair	0.050	25.9	B4	0.00466	2.391	23.5	0.046	55
25	8b	>120	0	198.2	D Deposition4 Fair	0.000	0.0	C4	0.00633	1.255	0.0	0.000	72
26	8b	>120	3	81.0	G4 Fair-Poor	0.377	30.6	B4	0.00466	0.378	30.2	0.372	52
27	8b	80-120	2	155.4	B4 Fair	0.034	5.2	B4	0.00466	0.724	4.5	0.029	66
28	8b	80-120	4	167.3	G4 Fair-Poor	0.503	84.1	B4	0.00466	0.779	83.3	0.498	31
29	8b	80-120	3	1716.9	B4 Fair	0.050	86.6	B4	0.00466	8.001	78.6	0.046	30
30	8b	>120	6	104.8	G4 Fair	0.419	43.9	B4	0.00466	0.488	43.4	0.414	45
31	8b	>120	2	1935.1	B4 Fair	0.034	65.0	B4	0.00466	9.018	56.0	0.029	39
32	8b	>120	4	327.6	G4 Fair	0.279	91.4	B4	0.00466	1.526	89.9	0.274	28
33	8b	>120	2	1284.4	B4 Fair	0.034	43.2	B4	0.00466	5.985	37.2	0.029	47
34	8b	>120	5	53.1	G4 Fair-Poor	1.258	66.9	B4	0.00466	0.248	66.6	1.253	37
35	8b	>120	6	178.7	F4 Fair-Poor	0.978	174.7	B4	0.00466	0.833	173.9	0.973	17
36	8b	80-120	2	787.0	B4 Fair	0.034	26.4	B4	0.00466	3.667	22.8	0.029	54
37	8b	>120	5	410.3	G4 Fair	0.349	143.1	B4	0.00466	1.912	141.2	0.344	22
38	8b	80-120	2.5	205.3	B4 Fair	0.042	8.6	B4	0.00466	0.957	7.7	0.037	61
39	8b	>120	4	697.8	G4 Fair	0.279	194.7	B4	0.00466	3.252	191.5	0.274	18
40	8b	>120	2	394.6	B4 Fair	0.034	13.3	B4	0.00466	1.839	11.4	0.029	58
41	8b	>120	4	295.9	G4 Fair-Poor	0.503	148.8	B4	0.00466	1.379	147.4	0.498	20
42	8b	>120	2	598.5	B4 Fair	0.034	20.1	B4	0.00466	2.789	17.3	0.029	56
43	8b	>120	4	197.1	G4 Fair	0.279	55.0	B4	0.00466	0.919	54.1	0.274	42
44	8b	>120	2	910.4	B4 Fair	0.034	30.6	B4	0.00466	4.243	26.4	0.029	51
45	8b	>120	4	172.8	G4 Fair-Poor	0.503	86.9	B4	0.00466	0.805	86.1	0.498	29
46	8b	>120	2	1550.8	B4 Fair	0.034	52.1	B4	0.00466	7.227	44.9	0.029	43
47	8b	>120	5	951.6	G4 Fair-Poor	0.628	597.9	B4	0.00466	4.434	593.5	0.624	7
48	8b	>120	1.5	1092.1	C4 Fair	0.007	7.7	B4	0.00466	5.089	2.6	0.002	62
49	8b	>120	0	957.2	D Deposition4 Fair	0.000	0.0	C4	0.00633	6.059	0.0	0.000	73
50	8b	>120	7	578.7	G4 Poor	1.273	736.8	B4	0.00466	2.697	734.1	1.269	4
51	8b	80-120	2	316.8	B4 Fair	0.034	10.6	B4	0.00466	1.476	9.2	0.029	60
52	8b	80-120	4	351.7	G4 Fair-Poor	0.503	176.8	B4	0.00466	1.639	175.1	0.498	19
53	8b	>120	3	166.0	C4 Fair	0.014	2.3	B4	0.00466	0.773	1.6	0.009	68
54	8b	>120	2	350.8	B4 Fair	0.034	11.8	B4	0.00466	1.635	10.2	0.029	59
55	8b	>120	3	359.2	G4 Fair	0.209	75.2	B4	0.00466	1.674	73.5	0.205	34
56	8b	>120	2	942.9	B4 Fair	0.034	31.7	B4	0.00466	4.394	27.3	0.029	50
57	8b	80-120	4	405.5	G4 Fair	0.279	113.2	B4	0.00466	1.890	111.3	0.274	23
58	8b	>120	1.5	288.6	B5 Fair	0.025	7.3	B4	0.00466	1.345	5.9	0.021	63
59	8b	>120	2	137.2	B4 Fair	0.034	4.6	B4	0.00466	0.639	4.0	0.029	67
60	8b	>120	5	119.2	G4 Fair-Poor	0.628	74.9	B4	0.00466	0.556	74.4	0.624	35
61	8b	80-120	4	36.5	G4 Fair-Poor	1.195	43.7	B4	0.00466	0.170	43.5	1.190	46
62	8b	80-120	4	720.5	G4 Fair-Poor	0.503	362.2	B4	0.00466	3.357	358.8	0.498	10
63	8b	80-120	4	58.1	G4 Fair-Poor	5.644	327.9	B4	0.00466	0.271	327.6	5.639	11
64	8b	>120	2	50.6	G4 Poor	1.126	57.0	B4	0.00466	0.236	56.7	1.121	41
65	8b	>120	5	361.9	G4 Fair-Poor	0.628	227.4	B4	0.00466	1.687	225.7	0.624	16
66	8b	>120	4	84.5	G4 Fair	1.218	103.0	B4	0.00466	0.394	102.6	1.213	25
67	8b	>120	4	129.5	G4 Fair	0.279	36.1	B4	0.00466	0.603	35.5	0.274	48
68	8b	>120	2	47.0	G4 Poor	1.421	66.7	B4	0.00466	0.219	66.5	1.417	38
69	8b	>120	2	52.8	B4 Fair	0.034	1.8	B4	0.00466	0.246	1.5	0.029	69
101	8b	>120	2	1179.1	F4 Poor	0.416	490.2	C4	0.00633	7.464	482.8	0.409	8
102	8b	>120	3	4195.5	F4 Poor	0.624	2616.4	C4	0.00633	26.558	2589.9	0.617	1
103	8b	>120	0	1439.7	D Deposition4 Poor	0.000	0.0	C4	0.00633	9.113	0.0	0.000	74
104	8b	>120	4	1628.9	F4 Poor	0.831	1354.4	C4	0.00633	10.311	1344.1	0.825	2
105	8b	>120	2	2274.5	F4 Poor	0.416	945.6	C4	0.00633	14.398	931.2	0.409	3
106	8b	>120	0	2420.2	D Deposition4 Poor	0.000	0.0	C4	0.00633	15.320	0.0	0.000	75

Upper Fountain Creek Sediment Loading FlowSed Model Results

USGS 07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.

Flow Duration USGS Gage | 2 yr 2 hr | Poor Pre Fire

56 years in record

Percent Time	DMF (cfs)
1	1.9
0.9	5.3
0.8	6.4
0.7	7.6
0.6	8.6
0.5	9.8
0.4	11
0.3	14
0.2	17
0.1	28
0.05	43
0.04	50
0.03	62
0.02	77
0.015	94
0.01	120
0.009	123
0.008	128
0.007	131
0.006	137
0.005	145
0.0025	176
0.001	212
0.0005	345
0.0001	758
0.00005	813
0.00001	#N/A

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	99.00	9.747806717	300.0182303
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	1.900	0.025%	0.050%	0.183										
90.0%	5.300	5.000%	10.000%	36.500	3.60	0.036	0.099	0.288	0.072	30.41	131.40	10.53	1109.80	1120.32
80.0%	6.400	5.000%	10.000%	36.500	5.85	0.059	0.099	0.469	0.073	30.76	213.53	17.11	1122.72	1139.83
70.0%	7.600	5.000%	10.00%	36.500	7.00	0.071	0.099	0.561	0.074	31.03	255.50	20.48	1132.76	1153.24
60.0%	8.600	5.000%	10.00%	36.500	8.10	0.082	0.099	0.650	0.074	31.36	295.65	23.71	1144.75	1168.46
50.0%	9.800	5.000%	10.00%	36.500	9.20	0.093	0.099	0.738	0.075	31.76	335.80	26.94	1159.21	1186.16
40.0%	11.000	5.000%	10.00%	36.500	10.40	0.105	0.099	0.835	0.077	32.27	379.60	30.49	1177.95	1208.43
30.0%	14.000	5.000%	10.00%	36.500	12.50	0.126	0.099	1.006	0.079	33.39	456.25	36.73	1218.59	1255.31
20.0%	17.000	5.000%	10.00%	36.500	15.50	0.157	0.100	1.255	0.084	35.48	565.75	45.80	1295.18	1340.99
10.0%	28.000	5.000%	10.00%	36.500	22.50	0.227	0.103	1.877	0.102	42.96	821.25	68.50	1567.88	1636.39
5.0%	43.000	2.500%	5.00%	18.250	35.50	0.359	0.121	3.466	0.161	67.83	647.88	63.25	1237.91	1301.16
4.0%	50.000	0.500%	1.00%	3.650	46.50	0.470	0.157	5.911	0.241	101.65	169.73	21.57	371.01	392.58
3.0%	62.000	0.500%	1.00%	3.650	56.00	0.566	0.213	9.683	0.336	141.32	204.40	35.34	515.84	551.18
2.0%	77.000	0.500%	1.00%	3.650	69.50	0.702	0.351	19.782	0.512	215.86	253.68	72.20	787.89	860.09
1.50%	94.000	0.250%	0.50%	1.825	85.50	0.864	0.638	44.170	0.793	334.00	156.04	80.61	609.54	690.15
1.00%	120.000	0.250%	0.50%	1.825	107.00	1.081	1.323	114.696	1.301	547.97	195.28	209.32	1000.05	1209.37
0.90%	123.000	0.050%	0.10%	0.365	121.50	1.227	2.048	201.581	1.735	730.58	44.35	73.58	266.66	340.24
0.80%	128.000	0.050%	0.10%	0.365	125.50	1.268	2.293	233.152	1.868	786.64	45.81	85.10	287.12	372.22
0.70%	131.000	0.050%	0.10%	0.365	129.50	1.308	2.560	268.588	2.007	845.21	47.27	98.03	308.50	406.54
0.60%	137.000	0.050%	0.10%	0.365	134.00	1.354	2.888	313.493	2.170	914.15	48.91	114.43	333.66	448.09
0.50%	145.000	0.050%	0.10%	0.365	141.00	1.424	3.459	395.115	2.440	1027.89	51.47	144.22	375.18	519.40
0.25%	176.000	0.125%	0.25%	0.913	160.50	1.621	5.497	714.673	3.294	1387.64	146.46	652.14	1266.23	1918.36
0.10%	212.000	0.075%	0.15%	0.548	194.00	1.960	10.900	1712.936	5.129	2160.42	106.22	937.83	1182.83	2120.66
0.05%	345.000	0.025%	0.05%	0.183	278.50	2.813	40.651	9170.9	12.017	5061.68	50.83	1673.69	923.76	2597.45
0.01%	758.000	0.020%	0.04%	0.146	551.50	5.571	494.089	220730.2	60.685	25560.50	80.52	32226.61	3731.83	35958.45
0.005%	813.000	0.003%	0.01%	0.018	785.50	7.934	1802.0	1146632.5	140.581	59212.94	14.34	20926.04	1080.64	22006.68
0.001%														
				50.000%	100.000%	365.00			Annual Totals:		5,717.9 (cfs) 11,341.4 (acre-ft)	57694.3 (tons/yr)	25207.5 (tons/yr)	82901.8 (tons/yr)

USGS 07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.

Flow Duration USGS Gage

56 years in record

Percent Time	DMF (cfs)
1	1.9
0.9	5.3
0.8	6.4
0.7	7.6
0.6	8.6
0.5	9.8
0.4	11
0.3	14
0.2	17
0.1	28
0.05	43
0.04	50
0.03	62
0.02	77
0.015	94
0.01	120
0.009	123
0.008	128
0.007	131
0.006	137
0.005	145
0.0025	176
0.001	212
0.0005	345
0.0001	758
0.00005	813
0.00001	#N/A

Good-Fair Pre Fire

Stream: Location: Date:

Observer Gage Station #: Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	98.99806913	0.068631126	156.6992913
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension- less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	1.900													
90.0%	5.300	5.000%	10.000%	36.500	3.60	0.036	0.064	0.10	0.000	0.00	131.4	3.55	0.00	3.55
80.0%	6.400	5.000%	10.000%	36.500	5.85	0.059	0.065	0.16	0.000	0.00	213.5	5.84	0.00	5.84
70.0%	7.600	5.000%	10.000%	36.500	7.00	0.071	0.065	0.19	0.000	0.00	255.5	7.05	0.00	7.05
60.0%	8.600	5.000%	10.000%	36.500	8.10	0.082	0.066	0.23	0.000	0.00	295.7	8.24	0.00	8.24
50.0%	9.800	5.000%	10.000%	36.500	9.20	0.093	0.067	0.26	0.000	0.00	335.8	9.47	0.00	9.47
40.0%	11.000	5.000%	10.000%	36.500	10.40	0.105	0.068	0.30	0.000	0.00	379.6	10.87	0.00	10.87
30.0%	14.000	5.000%	10.000%	36.500	12.50	0.126	0.070	0.37	0.000	0.00	456.3	13.51	0.00	13.51
20.0%	17.000	5.000%	10.000%	36.500	15.50	0.157	0.074	0.49	0.006	0.02	565.8	17.79	0.66	18.45
10.0%	28.000	5.000%	10.000%	36.500	22.50	0.227	0.090	0.86	0.028	0.08	821.3	31.24	3.04	34.27
5.0%	43.000	2.500%	5.000%	18.250	35.50	0.359	0.142	2.14	0.096	0.28	647.9	39.05	5.18	44.23
4.0%	50.000	0.500%	1.000%	3.650	46.50	0.470	0.215	4.22	0.182	0.54	169.7	15.42	1.97	17.39
3.0%	62.000	0.500%	1.000%	3.650	56.00	0.566	0.300	7.11	0.279	0.83	204.4	25.95	3.02	28.97
2.0%	77.000	0.500%	1.000%	3.650	69.50	0.702	0.461	13.57	0.455	1.35	253.7	49.52	4.93	54.45
1.50%	94.000	0.250%	0.500%	1.825	85.50	0.864	0.719	26.00	0.724	2.15	156.0	47.45	3.92	51.37
1.00%	120.000	0.250%	0.500%	1.825	107.00	1.081	1.188	53.79	1.191	3.53	195.3	98.17	6.45	104.61
0.90%	123.000	0.050%	0.100%	0.365	121.50	1.227	1.591	81.78	1.577	4.68	44.3	29.85	1.71	31.56
0.80%	128.000	0.050%	0.100%	0.365	125.50	1.268	1.715	91.05	1.694	5.02	45.8	33.23	1.83	35.07
0.70%	131.000	0.050%	0.100%	0.365	129.50	1.308	1.844	101.06	1.816	5.39	47.3	36.89	1.97	38.85
0.60%	137.000	0.050%	0.100%	0.365	134.00	1.354	1.997	113.23	1.958	5.81	48.9	41.33	2.12	43.45
0.50%	145.000	0.050%	0.100%	0.365	141.00	1.424	2.249	134.19	2.191	6.50	51.5	48.98	2.37	51.35
0.25%	176.000	0.125%	0.250%	0.913	160.50	1.621	3.050	207.10	2.914	8.64	146.5	188.98	7.89	196.86
0.10%	212.000	0.075%	0.150%	0.548	194.00	1.960	4.778	392.15	4.422	13.11	106.2	214.70	7.18	221.88
0.05%	345.000	0.025%	0.050%	0.183	278.50	2.813	11.325	1334.42	9.785	29.02	50.8	243.53	5.30	248.83
0.01%	758.000	0.020%	0.040%	0.146	551.50	5.571	58.440	13636.10	43.814	129.93	80.5	1990.87	18.97	2009.84
0.005%	813.000	0.003%	0.005%	0.018	785.50	7.934	136.896	45495.33	95.170	282.23	14.3	830.29	5.15	835.44
0.001%														
			0.500	1.000	364.982									

Annual Totals:	5,717.9 (cfs) / 11,341.4 (acre-ft)	4041.8 (tons/yr)	83.6 (tons/yr)	4125.4 (tons/yr)

Flow Duration JUF020
48 hour, 2 day duration

Percent Time	2 yr 2 hr	10 yr 2 hr	100 yr 2 hr	100 yr 24 h
1.0	0.0	0.0	0.0	0.0
0.9	0.0	0.0	0.0	0.0
0.8	0.0	0.0	0.0	0.0
0.7	0.0	0.0	0.0	0.0
0.6	0.0	0.0	0.0	0.0
0.5	0.0	0.0	0.0	0.1
0.4	0.0	0.0	0.0	3.3
0.3	0.0	0.0	0.0	32.2
0.2	0.0	0.0	0.0	72.3
0.1	0.5	1.7	6.6	142.6
0.05	11.3	36.9	132.3	339.5
0.04	20.7	64.9	227.7	448.0
0.03	35.0	105.8	360.0	621.1
0.02	47.7	144.4	490.6	813.1
0.02	53.1	161.1	542.2	904.2
0.01	58.8	177.3	600.1	995.8
0.009	59.8	180.6	609.7	1014.6
0.008	60.8	182.3	615.9	1023.7
0.007	61.6	185.4	625.6	1039.1
0.006	62.4	188.5	632.1	1048.9
0.005	63.4	190.4	640.6	1061.0
0.0025	64.6	194.3	652.7	1078.7
0.0010	65.0	195.5	656.0	1082.9
0.0005	65.0	195.5	656.3	1083.3
0.00010	#N/A	#N/A	#N/A	#N/A
0.00005	#N/A	#N/A	#N/A	#N/A
0.00001	#N/A	#N/A	#N/A	#N/A

JUF020 2 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observers:	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	9.99	1.280925224	172.7767188
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension- less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.000	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
80.0%	0.000	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
70.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
60.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
50.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
40.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
30.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
20.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
10.0%	0.500	5.000%	10.00%	0.200	0.25	0.025	0.099	0.012	0.072	3.98	0.05	0.00	0.80	0.80
5.0%	11.300	2.500%	5.00%	0.100	5.90	0.590	0.233	0.641	0.364	20.13	0.59	0.06	2.01	2.08
4.0%	20.700	0.500%	1.00%	0.020	16.00	1.601	5.252	39.202	3.199	177.05	0.32	0.78	3.54	4.32
3.0%	35.000	0.500%	1.00%	0.020	27.85	2.786	39.257	510.024	11.749	650.28	0.56	10.20	13.01	23.21
2.0%	47.700	0.500%	1.00%	0.020	41.35	4.137	166.398	3209.755	29.951	1657.77	0.83	64.20	33.16	97.35
1.50%	53.100	0.250%	0.50%	0.010	50.40	5.043	343.181	8068.695	47.902	2651.34	0.50	80.69	26.51	107.20
1.00%	58.800	0.250%	0.50%	0.010	55.95	5.598	502.911	13126.238	61.386	3397.62	0.56	131.26	33.98	165.24
0.90%	59.800	0.050%	0.10%	0.002	59.30	5.933	622.130	17210.168	70.475	3900.72	0.12	34.42	7.80	42.22
0.80%	60.800	0.050%	0.10%	0.002	60.30	6.033	661.380	18604.481	73.330	4058.75	0.12	37.21	8.12	45.33
0.70%	61.600	0.050%	0.10%	0.002	61.20	6.123	698.217	19933.825	75.956	4204.10	0.12	39.87	8.41	48.28
0.60%	62.400	0.050%	0.10%	0.002	62.00	6.203	732.192	21177.066	78.336	4335.79	0.12	42.35	8.67	51.03
0.50%	63.400	0.050%	0.10%	0.002	62.90	6.293	771.834	22647.656	81.064	4486.77	0.13	45.30	8.97	54.27
0.25%	64.600	0.125%	0.25%	0.005	64.00	6.403	822.375	24552.684	84.471	4675.38	0.32	122.76	23.38	146.14
0.10%	65.000	0.075%	0.15%	0.003	64.80	6.483	860.613	26015.496	87.001	4815.39	0.19	78.05	14.45	92.49
0.05%	65.000	0.025%	0.05%	0.001	65.00	6.503	870.371	26391.674	87.640	4850.76	0.07	26.39	4.85	31.24
0.01%														
0.005%														
0.001%														

50.000% 100.000% 2.00

Storm Totals:	4.6 (cfs) / 9.1 (acre-ft)	713.5 (tons/storm)	197.6 (tons/storm)	911.2 (tons/storm)

.

JUF020 2 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	9.99	0.025100671	7.854962186
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.000	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
80.0%	0.000	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
70.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
60.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
50.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
40.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
30.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
20.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
10.0%	0.500	5.000%	10.00%	0.20	0.25	0.025	0.064	0.00	0.000	0.00	0.1	0.00	0.00	0.00
5.0%	11.300	2.500%	5.00%	0.10	5.90	0.590	0.326	0.04	0.308	0.33	0.6	0.00	0.03	0.04
4.0%	20.700	0.500%	1.00%	0.02	16.00	1.601	2.960	1.00	2.834	3.07	0.3	0.02	0.06	0.08
3.0%	35.000	0.500%	1.00%	0.02	27.85	2.786	11.069	6.54	9.581	10.39	0.6	0.13	0.21	0.34
2.0%	47.700	0.500%	1.00%	0.02	41.35	4.137	28.574	25.06	22.810	24.74	0.8	0.50	0.49	1.00
1.50%	53.100	0.250%	0.50%	0.01	50.40	5.043	45.986	49.16	35.213	38.19	0.5	0.49	0.38	0.87
1.00%	58.800	0.250%	0.50%	0.01	55.95	5.598	59.125	70.16	44.281	48.03	0.6	0.70	0.48	1.18
0.90%	59.800	0.050%	0.10%	0.00	59.30	5.933	68.004	85.53	50.305	54.56	0.1	0.17	0.11	0.28
0.80%	60.800	0.050%	0.10%	0.00	60.30	6.033	70.796	90.54	52.184	56.60	0.1	0.18	0.11	0.29
0.70%	61.600	0.050%	0.10%	0.00	61.20	6.123	73.366	95.23	53.908	58.47	0.1	0.19	0.12	0.31
0.60%	62.400	0.050%	0.10%	0.00	62.00	6.203	75.695	99.53	55.466	60.16	0.1	0.20	0.12	0.32
0.50%	63.400	0.050%	0.10%	0.00	62.90	6.293	78.366	104.54	57.247	62.09	0.1	0.21	0.12	0.33
0.25%	64.600	0.125%	0.25%	0.01	64.00	6.403	81.705	110.90	59.466	64.50	0.3	0.55	0.32	0.88
0.10%	65.000	0.075%	0.15%	0.00	64.80	6.483	84.184	115.69	61.108	66.28	0.2	0.35	0.20	0.55
0.05%	65.000	0.025%	0.05%	0.00	65.00	6.503	84.811	116.92	61.523	66.73	0.1	0.12	0.07	0.18
0.01%														
0.005%														
0.001%														
									Storm Totals:		4.6 (cfs) / 9.1 (acre-ft)	3.8 (tons/storm)	2.8 (tons/storm)	6.6 (tons/storm)

.

JUF020 10 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observers:	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	9.99	1.280925224	172.7767188
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension- less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.000	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
80.0%	0.000	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
70.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
60.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
50.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
40.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
30.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
20.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
10.0%	1.700	5.000%	10.00%	0.200	0.85	0.085	0.099	0.039	0.075	4.14	0.17	0.01	0.83	0.83
5.0%	36.900	2.500%	5.00%	0.100	19.30	1.931	10.3	93.0	5.0	274.3	1.93	9.30	27.43	36.73
4.0%	64.900	0.500%	1.00%	0.020	50.90	5.093	355.8	8448.4	49.0	2714.2	1.02	168.97	54.28	223.25
3.0%	105.800	0.500%	1.00%	0.020	85.35	8.539	2357.7	93874.9	167.4	9264.9	1.71	1877.50	185.30	2062.80
2.0%	144.400	0.500%	1.00%	0.020	125.10	12.516	9551.6	557417.4	415.3	22986.4	2.50	11148.35	459.73	11608.08
1.50%	161.100	0.250%	0.50%	0.010	152.75	15.283	19833.3	1413269.3	667.6	36949.1	1.53	14132.69	369.49	14502.18
1.00%	177.300	0.250%	0.50%	0.010	169.20	16.929	28835.2	2276004.0	851.3	47117.9	1.69	22760.04	471.18	23231.22
0.90%	180.600	0.050%	0.10%	0.002	178.95	17.904	35395.8	2954829.8	972.6	53829.7	0.36	5909.66	107.66	6017.32
0.80%	182.300	0.050%	0.10%	0.002	181.45	18.154	37239.0	3152130.1	1005.2	55634.5	0.36	6304.26	111.27	6415.53
0.70%	185.400	0.050%	0.10%	0.002	183.85	18.394	39073.2	3351131.1	1037.1	57399.7	0.37	6702.26	114.80	6817.06
0.60%	188.500	0.050%	0.10%	0.002	186.95	18.704	41538.4	3622632.2	1079.1	59727.1	0.37	7245.26	119.45	7364.72
0.50%	190.400	0.050%	0.10%	0.002	189.45	18.955	43607.3	3853919.4	1113.7	61643.1	0.38	7707.84	123.29	7831.12
0.25%	194.300	0.125%	0.25%	0.005	192.35	19.245	46099.9	4136573.1	1154.7	63909.8	0.96	20682.87	319.55	21002.41
0.10%	195.500	0.075%	0.15%	0.003	194.90	19.500	48375.7	4398337.0	1191.4	65942.2	0.58	13195.01	197.83	13392.84
0.05%	195.500	0.025%	0.05%	0.001	195.50	19.560	48922.9	4461777.3	1200.1	66425.8	0.20	4461.78	66.43	4528.20
0.01%														
0.005%														
0.001%														

Storm Totals:	14.1 (cfs) / 28.0 (acre-ft)	122306 (tons/storm)	2728.5 (tons/storm)	125034.3 (tons/storm)

50.000% 100.000% 2.00

.

JUF020 10 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	9.99	0.025100671	7.854962186
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.000	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
80.0%	0.000	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
70.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
60.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
50.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
40.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
30.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
20.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
10.0%	1.700	5.000%	10.00%	0.20	0.85	0.085	0.066	0.00	0.000	0.00	0.2	0.00	0.00	0.00
5.0%	36.900	2.500%	5.00%	0.10	19.30	1.931	4.613	1.89	4.281	4.64	1.9	0.19	0.46	0.65
4.0%	64.900	0.500%	1.00%	0.02	50.90	5.093	47.091	50.84	35.983	39.03	1.0	1.02	0.78	1.80
3.0%	105.800	0.500%	1.00%	0.02	85.35	8.539	163.379	295.74	111.807	121.27	1.7	5.91	2.43	8.34
2.0%	144.400	0.500%	1.00%	0.02	125.10	12.516	410.238	1088.43	258.603	280.48	2.5	21.77	5.61	27.38
1.50%	161.100	0.250%	0.50%	0.01	152.75	15.283	663.568	2149.68	400.698	434.60	1.5	21.50	4.35	25.84
1.00%	177.300	0.250%	0.50%	0.01	169.20	16.929	848.906	3046.27	501.449	543.87	1.7	30.46	5.44	35.90
0.90%	180.600	0.050%	0.10%	0.00	178.95	17.904	971.533	3687.20	567.001	614.97	0.4	7.37	1.23	8.60
0.80%	182.300	0.050%	0.10%	0.00	181.45	18.154	1004.543	3865.75	584.517	633.97	0.4	7.73	1.27	9.00
0.70%	185.400	0.050%	0.10%	0.00	183.85	18.394	1036.841	4042.81	601.605	652.50	0.4	8.09	1.31	9.39
0.60%	188.500	0.050%	0.10%	0.00	186.95	18.704	1079.447	4279.91	624.074	676.87	0.4	8.56	1.35	9.91
0.50%	190.400	0.050%	0.10%	0.00	189.45	18.955	1114.539	4478.14	642.521	696.88	0.4	8.96	1.39	10.35
0.25%	194.300	0.125%	0.25%	0.01	192.35	19.245	1156.072	4716.12	664.287	720.49	1.0	23.58	3.60	27.18
0.10%	195.500	0.075%	0.15%	0.00	194.90	19.500	1193.328	4932.64	683.752	741.60	0.6	14.80	2.22	17.02
0.05%	195.500	0.025%	0.05%	0.00	195.50	19.560	1202.194	4984.59	688.376	746.61	0.2	4.98	0.75	5.73
0.01%														
0.005%														
0.001%														
									Storm Totals:		14.1 (cfs) / 28.0 (acre-ft)	164.9 (tons/storm)	32.2 (tons/storm)	197.1 (tons/storm)

.

JUF020 100 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observers:	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	9.99	1.280925224	172.7767188
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension- less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.000	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
80.0%	0.000	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
70.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
60.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
50.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
40.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
30.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
20.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
10.0%	6.600	5.000%	10.00%	0.200	3.30	0.330	0.115	0.177	0.145	8.03	0.66	0.04	1.61	1.64
5.0%	132.300	2.500%	5.00%	0.100	69.45	6.949	1109.0	35928.9	102.6	5677.1	6.95	3592.89	567.71	4160.60
4.0%	227.700	0.500%	1.00%	0.020	180.00	18.009	36161.7	3036477.3	986.2	54583.6	3.60	60729.55	1091.67	61821.22
3.0%	360.000	0.500%	1.00%	0.020	293.85	29.400	217308.8	29788735.1	3161.7	174998.6	5.88	595774.70	3499.97	599274.67
2.0%	490.600	0.500%	1.00%	0.020	425.30	42.552	840623.9	166780814.4	7614.2	421439.4	8.51	3335616.29	8428.79	3344045.08
1.50%	542.200	0.250%	0.50%	0.010	516.40	51.666	1710101.6	411961981.5	12078.2	668513.0	5.16	4119619.82	6685.13	4126304.95
1.00%	600.100	0.250%	0.50%	0.010	571.15	57.144	2472601.9	658799653.7	15347.5	849464.0	5.71	6587996.54	8494.64	6596491.18
0.90%	609.700	0.050%	0.10%	0.002	604.90	60.521	3050601.7	860831370.6	17591.7	973680.3	1.21	1721662.74	1947.36	1723610.10
0.80%	615.900	0.050%	0.10%	0.002	612.80	61.311	3198929.1	914476083.0	18142.8	1004181.7	1.23	1828952.17	2008.36	1830960.53
0.70%	625.600	0.050%	0.10%	0.002	620.75	62.106	3353417.2	971076178.6	18707.3	1035427.6	1.24	1942152.36	2070.86	1944223.21
0.60%	632.100	0.050%	0.10%	0.002	628.85	62.917	3516324.8	1031537546.3	19292.8	1067834.9	1.26	2063075.09	2135.67	2065210.76
0.50%	640.600	0.050%	0.10%	0.002	636.35	63.667	3672223.6	1090119610.5	19844.3	1098358.8	1.27	2180239.22	2196.72	2182435.94
0.25%	652.700	0.125%	0.25%	0.005	646.65	64.698	3894432.5	1174795965.6	20616.4	1141092.7	3.23	5873979.83	5705.46	5879685.29
0.10%	656.000	0.075%	0.15%	0.003	654.35	65.468	4066815.4	1241405167.5	21204.8	1173658.3	1.96	3724215.50	3520.97	3727736.48
0.05%	656.300	0.025%	0.05%	0.001	656.15	65.648	4107898.8	1257395375.8	21343.7	1181347.7	0.66	1257395.38	1181.35	1258576.72
0.01%														
0.005%														
0.001%														

50.000% 100.000% 2.00

Storm Totals:	48.5 (cfs)	35295002 (tons/storm)	49536.3 (tons/storm)	35344538.4 (tons/storm)
	96.2 (acre-ft)			

.

JUF020 100 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	9.99	0.025100671	7.854962186
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.000	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
80.0%	0.000	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
70.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
60.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
50.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
40.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
30.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
20.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
10.0%	6.600	5.000%	10.00%	0.20	3.30	0.330	0.128	0.01	0.078	0.08	0.7	0.00	0.02	0.02
5.0%	132.300	2.500%	5.00%	0.10	69.45	6.949	99.465	146.50	71.140	77.16	6.9	14.65	7.72	22.37
4.0%	227.700	0.500%	1.00%	0.02	180.00	18.009	985.3	3761.5	574.3	622.9	3.6	75.2	12.5	87.7
3.0%	360.000	0.500%	1.00%	0.02	293.85	29.400	3207.9	19991.6	1682.4	1824.7	5.9	399.8	36.5	436.3
2.0%	490.600	0.500%	1.00%	0.02	425.30	42.552	7815.2	70492.7	3784.8	4105.0	8.5	1409.9	82.1	1492.0
1.50%	542.200	0.250%	0.50%	0.01	516.40	51.666	12472.5	136599.3	5792.7	6282.8	5.2	1366.0	62.8	1428.8
1.00%	600.100	0.250%	0.50%	0.01	571.15	57.144	15898.6	192582.7	7225.3	7836.5	5.7	1925.8	78.4	2004.2
0.90%	609.700	0.050%	0.10%	0.00	604.90	60.521	18256.2	234208.5	8194.7	8887.9	1.2	468.4	17.8	486.2
0.80%	615.900	0.050%	0.10%	0.00	612.80	61.311	18835.8	244799.2	8431.2	9144.4	1.2	489.6	18.3	507.9
0.70%	625.600	0.050%	0.10%	0.00	620.75	62.106	19429.7	255794.2	8672.9	9406.6	1.2	511.6	18.8	530.4
0.60%	632.100	0.050%	0.10%	0.00	628.85	62.917	20046.0	267350.9	8923.0	9677.9	1.3	534.7	19.4	554.1
0.50%	640.600	0.050%	0.10%	0.00	636.35	63.667	20626.6	278376.1	9158.0	9932.8	1.3	556.8	19.9	576.6
0.25%	652.700	0.125%	0.25%	0.01	646.65	64.698	21439.9	294035.8	9486.2	10288.8	3.2	1470.2	51.4	1521.6
0.10%	656.000	0.075%	0.15%	0.00	654.35	65.468	22060.0	306141.8	9735.7	10559.3	2.0	918.4	31.7	950.1
0.05%	656.300	0.025%	0.05%	0.00	656.15	65.648	22206.4	309021.8	9794.5	10623.1	0.7	309.0	10.6	319.6
0.01%														
0.005%														
0.001%														
									Storm Totals:		48.5 (cfs) / 96.2 (acre-ft)	10450 (tons/storm)	468 (tons/storm)	10918 (tons/storm)

.

JUF020 100 yr 24 hr Poor Pre Fire

Stream:	Location:	Date:
Observers:	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	9.99	1.280925224	172.7767188
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension- less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00	0.025%	0.050%	0.001										
90.0%	0.00	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
80.0%	0.00	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
70.0%	0.00	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
60.0%	0.00	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
50.0%	0.10	5.000%	10.00%	0.200	0.05	0.005	0.099	0.002	0.072	3.97	0.01	0.00	0.79	0.80
40.0%	3.30	5.000%	10.00%	0.200	1.70	0.170	0.100	0.080	0.087	4.81	0.34	0.02	0.96	0.98
30.0%	32.20	5.000%	10.00%	0.200	17.75	1.776	7.633	63.202	4.074	225.48	3.55	12.64	45.10	57.74
20.0%	72.30	5.000%	10.00%	0.200	52.25	5.228	391.555	9543.947	52.182	2888.21	10.45	1908.79	577.64	2486.43
10.0%	142.60	5.000%	10.00%	0.200	107.45	10.750	5475.167	274443.409	289.321	16013.57	21.49	54888.68	3202.71	58091.40
5.0%	339.50	2.500%	5.00%	0.100	241.05	24.117	105277.5	11838367.1	1974.5	109284.2	24.11	1183836.71	10928.42	1194765.13
4.0%	448.00	0.500%	1.00%	0.020	393.75	39.395	634041.1	116462722.8	6339.5	350880.8	7.88	2329254.46	7017.62	2336272.07
3.0%	621.10	0.500%	1.00%	0.020	534.55	53.482	1940504.3	483895875.8	13111.9	725726.0	10.69	9677917.52	14514.52	9692432.04
2.0%	813.10	0.500%	1.00%	0.020	717.10	71.746	5685536.8	1901954773.5	26361.7	1459088.8	14.34	38039095.47	29181.78	38068277.25
1.50%	904.20	0.250%	0.50%	0.010	858.65	85.908	10991036.5	4402545071.0	40453.6	2239056.2	8.59	44025450.71	22390.56	44047841.27
1.00%	995.80	0.250%	0.50%	0.010	950.00	95.048	15910943.7	7051289258.6	51443.9	2847354.7	9.50	70512892.59	28473.55	70541366.13
0.90%	1014.60	0.050%	0.10%	0.002	1005.20	100.571	19563524.2	9173784988.9	58836.0	3256503.4	2.01	18347569.98	6513.01	18354082.98
0.80%	1023.70	0.050%	0.10%	0.002	1019.15	101.967	20575410.4	9782178920.9	60795.7	3364965.1	2.04	19564357.84	6729.93	19571087.77
0.70%	1039.10	0.050%	0.10%	0.002	1031.40	103.192	21494884.9	10342159659.0	62547.2	3461910.9	2.06	20684319.32	6923.82	20691243.14
0.60%	1048.90	0.050%	0.10%	0.002	1044.00	104.453	22471413.5	10944095551.6	64378.9	3563294.6	2.09	21888191.10	7126.59	21895317.69
0.50%	1061.00	0.050%	0.10%	0.002	1054.95	105.548	23345904.4	11489246976.7	65995.7	3652781.6	2.11	22978493.95	7305.56	22985799.52
0.25%	1078.70	0.125%	0.25%	0.005	1069.85	107.039	24575237.6	12265057877.8	68233.1	3776619.7	5.35	61325289.39	18883.10	61344172.49
0.10%	1082.90	0.075%	0.15%	0.003	1080.80	108.135	25508178.7	12860971420.4	69905.0	3869156.3	3.24	38582914.26	11607.47	38594521.73
0.05%	1083.30	0.025%	0.05%	0.001	1083.10	108.365	25707361.9	12988980184.9	70259.2	3888758.3	1.08	12988980.18	3888.76	12992868.94
0.01%														
0.005%														
0.001%														
		50.000%	100.000%	2.00										
									Storm Totals:		130.9 (cfs) 259.7 (acre-ft)	382185374 (tons/storm)	185311.9 (tons/storm)	382370685.5 (tons/storm)

.

JUF020 100 yr 24 h Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	9.99	0.025100671	7.854962186
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00													
90.0%	0.00	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
80.0%	0.00	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
70.0%	0.00	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
60.0%	0.00	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
50.0%	0.10	5.000%	10.00%	0.20	0.05	0.005	0.064	0.00	0.000	0.00	0.0	0.00	0.00	0.00
40.0%	3.30	5.000%	10.00%	0.20	1.70	0.170	0.077	0.00	0.010	0.01	0.3	0.00	0.00	0.00
30.0%	32.20	5.000%	10.00%	0.20	17.75	1.776	3.783	1.42	3.561	3.86	3.6	0.28	0.77	1.06
20.0%	72.30	5.000%	10.00%	0.20	52.25	5.228	50.152	55.58	38.110	41.33	10.5	11.12	8.27	19.38
10.0%	142.60	5.000%	10.00%	0.20	107.45	10.750	284.435	648.18	185.261	200.93	21.5	129.64	40.19	169.82
5.0%	339.50	2.500%	5.00%	0.10	241.05	24.117	1990.874	10177.91	1089.671	1181.86	24.1	1017.79	118.19	1135.98
4.0%	448.00	0.500%	1.00%	0.02	393.75	39.395	6491.1	54205.9	3196.2	3466.6	7.9	1084.1	69.3	1153.4
3.0%	621.10	0.500%	1.00%	0.02	534.55	53.482	13554.6	153667.8	6248.6	6777.2	10.7	3073.4	135.5	3208.9
2.0%	813.10	0.500%	1.00%	0.02	717.10	71.746	27503.6	418289.6	11900.8	12907.6	14.3	8365.8	258.2	8623.9
1.50%	904.20	0.250%	0.50%	0.01	858.65	85.908	42444.5	772939.9	17666.2	19160.7	8.6	7729.4	191.6	7921.0
1.00%	995.80	0.250%	0.50%	0.01	950.00	95.048	54146.8	1090948.0	22050.9	23916.4	9.5	10909.5	239.2	11148.6
0.90%	1014.60	0.050%	0.10%	0.00	1005.20	100.571	62036.9	1322545.6	24958.4	27069.9	2.0	2645.1	54.1	2699.2
0.80%	1023.70	0.050%	0.10%	0.00	1019.15	101.967	64130.8	1386157.7	25724.2	27900.5	2.0	2772.3	55.8	2828.1
0.70%	1039.10	0.050%	0.10%	0.00	1031.40	103.192	66003.1	1443774.6	26407.1	28641.2	2.1	2887.5	57.3	2944.8
0.60%	1048.90	0.050%	0.10%	0.00	1044.00	104.453	67961.9	1504782.3	27119.7	29414.0	2.1	3009.6	58.8	3068.4
0.50%	1061.00	0.050%	0.10%	0.00	1054.95	105.548	69691.4	1559261.2	27747.4	30094.8	2.1	3118.5	60.2	3178.7
0.25%	1078.70	0.125%	0.25%	0.01	1069.85	107.039	72085.7	1635611.2	28614.0	31034.8	5.3	8178.1	155.2	8333.2
0.10%	1082.90	0.075%	0.15%	0.00	1080.80	108.135	73875.6	1693378.3	29260.2	31735.6	3.2	5080.1	95.2	5175.3
0.05%	1083.30	0.025%	0.05%	0.00	1083.10	108.365	74254.8	1705692.6	29396.9	31883.9	1.1	1705.7	31.9	1737.6
0.01%														
0.005%														
0.001%														
									Storm Totals:		130.9 (cfs) / 259.7 (acre-ft)	61718 (tons/storm)	1630 (tons/storm)	63348 (tons/storm)

.

Flow Duration JUF030

48 hour, 2 day duration

	2 yr 2 hr	10 yr 2 hr	100 yr 2 hr	100 yr 24 h
1	0	0	0	0
0.9	0	0	0	0
0.8	0	0	0	0
0.7	0	0	0	0
0.6	0	0	0	0
0.5	0	0	0	0.1
0.4	0	0	0	3.5
0.3	0	0	0	47.3
0.2	0	0	0	117.3
0.1	0.8	2.6	8.9	227.6
0.05	15.4	53.1	193	531
0.04	28.1	93.8	337.6	704
0.03	46.4	152.7	546.4	973.7
0.02	64.6	211	753.3	1296.6
0.015	72.4	237	852.8	1472.4
0.01	80.1	264.2	947.2	1644.2
0.009	81.4	268.3	964.9	1667
0.008	82.6	272	974	1687.7
0.007	83.6	275.3	989.5	1706.1
0.006	84.7	278.6	1004.2	1729.6
0.005	85.8	282.3	1013.7	1749
0.0025	87.3	287	1030.6	1774.1
0.001	87.8	288.4	1036.6	1782.7
0.0005	87.8	288.5	1036.7	1783
0.0001	#N/A	#N/A	#N/A	#N/A
0.00005	#N/A	#N/A	#N/A	#N/A
0.00001	#N/A	#N/A	#N/A	#N/A

JUF030 2 yr 2 hr Poor Pre Fire

Stream:			Location:					Date:
Observer			Gage Station #:			Stream Type:		Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	14.49	1.77945397	188.9316862
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.000	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
80.0%	0.000	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
70.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
60.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
50.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
40.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
30.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
20.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
10.0%	0.800	5.000%	10.00%	0.200	0.40	0.028	0.099	0.020	0.072	5.54	0.08	0.00	1.11	1.11
5.0%	15.400	2.500%	5.00%	0.100	8.10	0.559	0.209	0.862	0.328	25.23	0.81	0.09	2.52	2.61
4.0%	28.100	0.500%	1.00%	0.020	21.75	1.501	4.170	46.271	2.755	211.83	0.44	0.93	4.24	5.16
3.0%	46.400	0.500%	1.00%	0.020	37.25	2.571	29.256	555.921	9.713	746.81	0.75	11.12	14.94	26.05
2.0%	64.600	0.500%	1.00%	0.020	55.50	3.830	125.518	3553.6	24.947	1918.20	1.11	71.07	38.36	109.44
1.50%	72.400	0.250%	0.50%	0.010	68.50	4.727	270.986	9469.0	41.096	3159.89	0.69	94.69	31.60	126.29
1.00%	80.100	0.250%	0.50%	0.010	76.25	5.262	401.069	15600.1	53.001	4075.29	0.76	156.00	40.75	196.75
0.90%	81.400	0.050%	0.10%	0.002	80.75	5.573	494.673	20376.5	60.731	4669.63	0.16	40.75	9.34	50.09
0.80%	82.600	0.050%	0.10%	0.002	82.00	5.659	523.267	21888.0	62.987	4843.09	0.16	43.78	9.69	53.46
0.70%	83.600	0.050%	0.10%	0.002	83.10	5.735	549.408	23289.7	65.012	4998.79	0.17	46.58	10.00	56.58
0.60%	84.700	0.050%	0.10%	0.002	84.15	5.807	575.233	24692.6	66.980	5150.08	0.17	49.39	10.30	59.69
0.50%	85.800	0.050%	0.10%	0.002	85.25	5.883	603.224	26232.6	69.077	5311.38	0.17	52.47	10.62	63.09
0.25%	87.300	0.125%	0.25%	0.005	86.55	5.973	637.564	28148.8	71.605	5505.75	0.43	140.74	27.53	168.27
0.10%	87.800	0.075%	0.15%	0.003	87.55	6.042	664.931	29696.2	73.586	5658.02	0.26	89.09	16.97	106.06
0.05%	87.800	0.025%	0.05%	0.001	87.80	6.059	671.903	30093.3	74.086	5696.46	0.09	30.09	5.70	35.79
0.01%														
0.005%														
0.001%														

50.000% 100.000% 2.00

Storm Totals:	6.2 (cfs)	826.8 (tons/storm)	233.7 (tons/storm)	1060.4 (tons/storm)
	12.4 (acre-ft)			

JUF030 2 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer	Gage Station #:		Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	14.49	0.029542162	12.75558889
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.000	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
80.0%	0.000	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
70.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
60.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
50.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
40.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
30.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
20.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
10.0%	0.800	5.000%	10.00%	0.20	0.40	0.028	0.064	0.00	0.000	0.00	0.1	0.00	0.00	0.00
5.0%	15.400	2.500%	5.00%	0.10	8.10	0.559	0.293	0.08	0.272	0.35	0.8	0.01	0.03	0.04
4.0%	28.100	0.500%	1.00%	0.02	21.75	1.501	2.544	1.91	2.459	3.14	0.4	0.04	0.06	0.10
3.0%	46.400	0.500%	1.00%	0.02	37.25	2.571	9.127	11.71	8.027	10.25	0.7	0.23	0.20	0.44
2.0%	64.600	0.500%	1.00%	0.02	55.50	3.830	23.742	45.38	19.260	24.59	1.1	0.91	0.49	1.40
1.50%	72.400	0.250%	0.50%	0.01	68.50	4.727	39.372	92.88	30.562	39.01	0.7	0.93	0.39	1.32
1.00%	80.100	0.250%	0.50%	0.01	76.25	5.262	50.950	133.80	38.663	49.35	0.8	1.34	0.49	1.83
0.90%	81.400	0.050%	0.10%	0.00	80.75	5.573	58.486	162.65	43.845	55.97	0.2	0.33	0.11	0.44
0.80%	82.600	0.050%	0.10%	0.00	82.00	5.659	60.688	171.39	45.347	57.89	0.2	0.34	0.12	0.46
0.70%	83.600	0.050%	0.10%	0.00	83.10	5.735	62.665	179.35	46.692	59.60	0.2	0.36	0.12	0.48
0.60%	84.700	0.050%	0.10%	0.00	84.15	5.807	64.587	187.18	47.996	61.27	0.2	0.37	0.12	0.50
0.50%	85.800	0.050%	0.10%	0.00	85.25	5.883	66.637	195.65	49.383	63.04	0.2	0.39	0.13	0.52
0.25%	87.300	0.125%	0.25%	0.01	86.55	5.973	69.109	206.00	51.050	65.17	0.4	1.03	0.33	1.36
0.10%	87.800	0.075%	0.15%	0.00	87.55	6.042	71.046	214.22	52.352	66.83	0.3	0.64	0.20	0.84
0.05%	87.800	0.025%	0.05%	0.00	87.80	6.059	71.535	216.31	52.681	67.25	0.1	0.22	0.07	0.28
0.01%														
0.005%														
0.001%														
									Storm Totals:		6.2 (cfs) / 12.4 (acre-ft)	7.1 (tons/storm)	2.9 (tons/storm)	10.0 (tons/storm)

JUF030 10 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	14.49	1.77945397	188.9316862
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.000	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
80.0%	0.000	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
70.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
60.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
50.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
40.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
30.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
20.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
10.0%	2.600	5.000%	10.00%	0.200	1.30	0.090	0.099	0.066	0.075	5.78	0.26	0.01	1.16	1.17
5.0%	53.100	2.500%	5.00%	0.100	27.85	1.922	10.2	144.3	4.9	376.8	2.79	14.43	37.68	52.12
4.0%	93.800	0.500%	1.00%	0.020	73.45	5.069	349.8	13105.2	48.5	3729.0	1.47	262.10	74.58	336.68
3.0%	152.700	0.500%	1.00%	0.020	123.25	8.506	2323.8	146103.2	165.8	12750.2	2.47	2922.06	255.00	3177.07
2.0%	211.000	0.500%	1.00%	0.020	181.85	12.550	9644.8	894692.4	417.9	32134.7	3.64	17893.85	642.69	18536.54
1.50%	237.000	0.250%	0.50%	0.010	224.00	15.458	20680.3	2363048.4	686.0	52742.9	2.24	23630.48	527.43	24157.91
1.00%	264.200	0.250%	0.50%	0.010	250.60	17.294	31179.5	3985833.8	895.6	68865.5	2.51	39858.34	688.66	40546.99
0.90%	268.300	0.050%	0.10%	0.002	266.25	18.374	38916.4	5285553.2	1034.3	79531.2	0.53	10571.11	159.06	10730.17
0.80%	272.000	0.050%	0.10%	0.002	270.15	18.643	41043.1	5656055.1	1070.7	82328.4	0.54	11312.11	164.66	11476.77
0.70%	275.300	0.050%	0.10%	0.002	273.65	18.885	43022.5	6005644.7	1104.0	84886.5	0.55	12011.29	169.77	12181.06
0.60%	278.600	0.050%	0.10%	0.002	276.95	19.113	44951.5	6350588.3	1135.9	87340.0	0.55	12701.18	174.68	12875.86
0.50%	282.300	0.050%	0.10%	0.002	280.45	19.354	47065.3	6733245.5	1170.3	89986.6	0.56	13466.49	179.97	13646.46
0.25%	287.000	0.125%	0.25%	0.005	284.65	19.644	49696.1	7216086.2	1212.4	93223.1	1.42	36080.43	466.12	36546.55
0.10%	288.400	0.075%	0.15%	0.003	287.70	19.854	51672.4	7583447.2	1243.5	95615.0	0.86	22750.34	286.85	23037.19
0.05%	288.500	0.025%	0.05%	0.001	288.45	19.906	52166.9	7675991.9	1251.2	96208.6	0.29	7675.99	96.21	7772.20
0.01%														
0.005%														
0.001%														

		50.000%	100.000%	2.00										

Storm Totals:	20.7 (cfs)	211150	3924.5	215074.7
	41.0 (acre-ft)	(tons/storm)	(tons/storm)	(tons/storm)

.

JUF030 10 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	14.49	0.029542162	12.75558889
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.000	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
80.0%	0.000	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
70.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
60.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
50.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
40.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
30.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
20.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
10.0%	2.600	5.000%	10.00%	0.20	1.30	0.090	0.066	0.00	0.000	0.00	0.3	0.00	0.00	0.00
5.0%	53.100	2.500%	5.00%	0.10	27.85	1.922	4.562	4.38	4.237	5.41	2.8	0.44	0.54	0.98
4.0%	93.800	0.500%	1.00%	0.02	73.45	5.069	46.565	117.79	35.616	45.47	1.5	2.36	0.91	3.27
3.0%	152.700	0.500%	1.00%	0.02	123.25	8.506	161.829	686.92	110.840	141.49	2.5	13.74	2.83	16.57
2.0%	211.000	0.500%	1.00%	0.02	181.85	12.550	412.869	2585.77	260.113	332.04	3.6	51.72	6.64	58.36
1.50%	237.000	0.250%	0.50%	0.01	224.00	15.458	682.085	5262.00	410.868	524.48	2.2	52.62	5.24	57.86
1.00%	264.200	0.250%	0.50%	0.01	250.60	17.294	893.722	7713.44	525.498	670.81	2.5	77.13	6.71	83.84
0.90%	268.300	0.050%	0.10%	0.00	266.25	18.374	1034.100	9482.36	600.156	766.11	0.5	18.96	1.53	20.50
0.80%	272.000	0.050%	0.10%	0.00	270.15	18.643	1070.957	9964.18	619.603	790.93	0.5	19.93	1.58	21.51
0.70%	275.300	0.050%	0.10%	0.00	273.65	18.885	1104.679	10411.08	637.343	813.58	0.5	20.82	1.63	22.45
0.60%	278.600	0.050%	0.10%	0.00	276.95	19.113	1137.035	10845.25	654.319	835.25	0.6	21.69	1.67	23.36
0.50%	282.300	0.050%	0.10%	0.00	280.45	19.354	1171.950	11319.54	672.589	858.57	0.6	22.64	1.72	24.36
0.25%	287.000	0.125%	0.25%	0.01	284.65	19.644	1214.666	11907.83	694.876	887.02	1.4	59.54	4.44	63.97
0.10%	288.400	0.075%	0.15%	0.00	287.70	19.854	1246.248	12348.34	711.307	908.00	0.9	37.05	2.72	39.77
0.05%	288.500	0.025%	0.05%	0.00	288.45	19.906	1254.087	12458.41	715.380	913.19	0.3	12.46	0.91	13.37
0.01%														
0.005%														
0.001%														
									Storm Totals:		20.7 (cfs) / 41.0 (acre-ft)	411.1 (tons/storm)	39.1 (tons/storm)	450.2 (tons/storm)

JUF030 100 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	14.49	1.77945397	188.9316862
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.000	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
80.0%	0.000	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
70.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
60.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
50.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
40.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
30.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
20.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
10.0%	8.900	5.000%	10.00%	0.200	4.45	0.307	0.111	0.252	0.134	10.27	0.89	0.05	2.05	2.10
5.0%	193.000	2.500%	5.00%	0.100	100.95	6.967	1119.6	57654.7	103.2	7935.5	10.10	5765.47	793.55	6559.02
4.0%	337.600	0.500%	1.00%	0.020	265.30	18.309	38410.7	5198259.9	1025.6	78858.4	5.31	103965.20	1577.17	105542.36
3.0%	546.400	0.500%	1.00%	0.020	442.00	30.503	248654.7	56064447.6	3451.0	265348.1	8.84	1121288.95	5306.96	1126595.91
2.0%	753.300	0.500%	1.00%	0.020	649.85	44.847	1018778.4	337723596.3	8627.0	663333.8	13.00	6754471.93	13266.68	6767738.60
1.50%	852.800	0.250%	0.50%	0.010	803.05	55.419	2210291.7	905442240.9	14269.0	1097148.5	8.03	9054422.41	10971.49	9065393.89
1.00%	947.200	0.250%	0.50%	0.010	900.00	62.110	3354052.2	1539858753.2	18709.6	1438587.0	9.00	15398587.53	14385.87	15412973.40
0.90%	964.900	0.050%	0.10%	0.002	956.05	65.978	4183839.4	2040441625.4	21599.2	1660768.5	1.91	4080883.25	3321.54	4084204.79
0.80%	974.000	0.050%	0.10%	0.002	969.45	66.902	4402435.1	2177142922.1	22325.8	1716638.2	1.94	4354285.84	3433.28	4357719.12
0.70%	989.500	0.050%	0.10%	0.002	981.75	67.751	4610285.2	2308858249.4	23005.1	1768866.6	1.96	4617716.50	3537.73	4621254.23
0.60%	1004.200	0.050%	0.10%	0.002	996.85	68.793	4875093.5	2479027419.4	23855.2	1834227.8	1.99	4958054.84	3668.46	4961723.29
0.50%	1013.700	0.050%	0.10%	0.002	1008.95	69.628	5095132.7	2622368411.0	24549.3	1887597.4	2.02	5244736.82	3775.19	5248512.02
0.25%	1030.600	0.125%	0.25%	0.005	1022.15	70.539	5343311.7	2786080783.9	25319.6	1946832.5	5.11	13930403.92	9734.16	13940138.08
0.10%	1036.600	0.075%	0.15%	0.003	1033.60	71.329	5565603.5	2934494704.0	25999.1	1999075.2	3.10	8803484.11	5997.23	8809481.34
0.05%	1036.700	0.025%	0.05%	0.001	1036.65	71.540	5625932.4	2975056553.4	26181.8	2013126.7	1.04	2975056.55	2013.13	2977069.68
0.01%														
0.005%														
0.001%														
											Storm Totals:	74.2 (cfs) 147.2 (acre-ft)	81403123 (tons/storm)	81784.5 (tons/storm)	81484907.9 (tons/storm)

50.000% 100.000% 2.00

.

JUF030 100 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	14.49	0.029542162	12.75558889
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.000	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
80.0%	0.000	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
70.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
60.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
50.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
40.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
30.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
20.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
10.0%	8.900	5.000%	10.00%	0.20	4.45	0.307	0.118	0.02	0.065	0.08	0.9	0.00	0.02	0.02
5.0%	193.000	2.500%	5.00%	0.10	100.95	6.967	100.090	347.99	71.547	91.33	10.1	34.80	9.13	43.93
4.0%	337.600	0.500%	1.00%	0.02	265.30	18.309	1025.2	9367.5	595.5	760.1	5.3	187.4	15.2	202.6
3.0%	546.400	0.500%	1.00%	0.02	442.00	30.503	3505.4	53360.5	1823.9	2328.2	8.8	1067.2	46.6	1113.8
2.0%	753.300	0.500%	1.00%	0.02	649.85	44.847	8869.3	198502.8	4246.9	5421.2	13.0	3970.1	108.4	4078.5
1.50%	852.800	0.250%	0.50%	0.01	803.05	55.419	14767.3	408420.0	6755.6	8623.6	8.0	4084.2	86.2	4170.4
1.00%	947.200	0.250%	0.50%	0.01	900.00	62.110	19432.1	602319.7	8673.9	11072.3	9.0	6023.2	110.7	6133.9
0.90%	964.900	0.050%	0.10%	0.00	956.05	65.978	22475.8	740047.2	9902.6	12640.9	1.9	1480.1	25.3	1505.4
0.80%	974.000	0.050%	0.10%	0.00	969.45	66.902	23242.0	776002.4	10209.5	13032.6	1.9	1552.0	26.1	1578.1
0.70%	989.500	0.050%	0.10%	0.00	981.75	67.751	23958.6	810077.0	10495.7	13398.0	2.0	1620.2	26.8	1646.9
0.60%	1004.200	0.050%	0.10%	0.00	996.85	68.793	24855.7	853337.5	10853.0	13854.0	2.0	1706.7	27.7	1734.4
0.50%	1013.700	0.050%	0.10%	0.00	1008.95	69.628	25588.6	889161.8	11144.0	14225.5	2.0	1778.3	28.5	1806.8
0.25%	1030.600	0.125%	0.25%	0.01	1022.15	70.539	26402.4	929440.7	11466.2	14636.8	5.1	4647.2	73.2	4720.4
0.10%	1036.600	0.075%	0.15%	0.00	1033.60	71.329	27120.3	965409.4	11749.7	14998.7	3.1	2896.2	45.0	2941.2
0.05%	1036.700	0.025%	0.05%	0.00	1036.65	71.540	27313.5	975154.0	11825.9	15096.0	1.0	975.2	15.1	990.3
0.01%														
0.005%														
0.001%														
									Storm Totals:		74.2 (cfs) 147.2 (acre-ft)	32023 (tons/storm)	644 (tons/storm)	32667 (tons/storm)

.

JUF030 100 yr 24 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	14.49	1.77945397	188.9316862
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00	0.025%	0.050%	0.001										
90.0%	0.00	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
80.0%	0.00	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
70.0%	0.00	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
60.0%	0.00	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
50.0%	0.10	5.000%	10.00%	0.200	0.05	0.003	0.099	0.003	0.072	5.52	0.01	0.00	1.10	1.10
40.0%	3.50	5.000%	10.00%	0.200	1.80	0.124	0.099	0.091	0.079	6.07	0.36	0.02	1.21	1.23
30.0%	47.30	5.000%	10.00%	0.200	25.40	1.753	7.282	94.346	3.952	303.84	5.08	18.87	60.77	79.64
20.0%	117.30	5.000%	10.00%	0.200	82.30	5.680	530.305	22263.521	63.536	4885.27	16.46	4452.70	977.05	5429.76
10.0%	227.60	5.000%	10.00%	0.200	172.45	11.901	7942.414	698689.590	368.399	28326.28	34.49	139737.92	5665.26	145403.17
5.0%	531.00	2.500%	5.00%	0.100	379.30	26.176	142067.6	27488205.5	2398.9	184450.6	37.93	2748820.55	18445.06	2767265.61
4.0%	704.00	0.500%	1.00%	0.020	617.50	42.614	845156.5	266221225.5	7640.9	587510.2	12.35	5324424.51	11750.20	5336174.71
3.0%	973.70	0.500%	1.00%	0.020	838.85	57.890	2592730.4	1109456383.7	15827.9	1217008.1	16.78	22189127.67	24340.16	22213467.84
2.0%	1296.60	0.500%	1.00%	0.020	1135.15	78.338	7842171.2	4541069359.2	32487.2	2497944.1	22.70	90821387.18	49958.88	90871346.07
1.50%	1472.40	0.250%	0.50%	0.010	1384.50	95.545	16217630.5	11453782331.1	52085.9	4004897.4	13.85	114537823.31	40048.97	114577872.29
1.00%	1644.20	0.250%	0.50%	0.010	1558.30	107.539	24998084.2	19871303740.9	68993.6	5304931.1	15.58	198713037.41	53049.31	198766086.72
0.90%	1667.00	0.050%	0.10%	0.002	1655.60	114.254	31199981.2	26349860138.9	79678.2	6126471.0	3.31	52699720.28	12252.94	52711973.22
0.80%	1687.70	0.050%	0.10%	0.002	1677.35	115.755	32726122.5	28001855420.2	82189.1	6319533.1	3.35	56003710.84	12639.07	56016349.91
0.70%	1706.10	0.050%	0.10%	0.002	1696.90	117.104	34143550.1	29555171941.8	84484.6	6496035.3	3.39	59110343.88	12992.07	59123335.95
0.60%	1729.60	0.050%	0.10%	0.002	1717.85	118.550	35711447.1	31294012563.5	86985.2	6688310.7	3.44	62588025.13	13376.62	62601401.75
0.50%	1749.00	0.050%	0.10%	0.002	1739.30	120.030	37370313.6	33156585821.3	89589.4	6888549.3	3.48	66313171.64	13777.10	66326948.74
0.25%	1774.10	0.125%	0.25%	0.005	1761.55	121.566	39149495.6	35179503859.0	92337.9	7099880.5	8.81	175897519.30	35499.40	175933018.70
0.10%	1782.70	0.075%	0.15%	0.003	1778.40	122.729	40537243.6	36774961690.2	94451.4	7262389.0	5.34	110324885.07	21787.17	110346672.24
0.05%	1783.00	0.025%	0.05%	0.001	1782.85	123.036	40909628.0	37205650411.0	95014.2	7305662.6	1.78	37205650.41	7305.66	37212956.07
0.01%														
0.005%														
0.001%														

50.000% 100.000% 2.00

Storm Totals:	208.5 (cfs) / 413.5 (acre-ft)	1054621857 (tons/storm)	333928.0 (tons/storm)	1054955784.7 (tons/storm)

.

JUF030 100 yr 24 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	14.49	0.029542162	12.75558889
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00													
90.0%	0.00	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
80.0%	0.00	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
70.0%	0.00	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
60.0%	0.00	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
50.0%	0.10	5.000%	10.00%	0.20	0.05	0.003	0.064	0.00	0.000	0.00	0.0	0.00	0.00	0.00
40.0%	3.50	5.000%	10.00%	0.20	1.80	0.124	0.070	0.00	0.000	0.00	0.4	0.00	0.00	0.00
30.0%	47.30	5.000%	10.00%	0.20	25.40	1.753	3.667	3.21	3.460	4.42	5.1	0.64	0.88	1.53
20.0%	117.30	5.000%	10.00%	0.20	82.30	5.680	61.223	173.53	45.712	58.35	16.5	34.71	11.67	46.38
10.0%	227.60	5.000%	10.00%	0.20	172.45	11.901	363.333	2157.91	231.533	295.56	34.5	431.58	59.11	490.69
5.0%	531.00	2.500%	5.00%	0.10	379.30	26.176	2425.031	31678.49	1304.076	1664.67	37.9	3167.85	166.47	3334.32
4.0%	704.00	0.500%	1.00%	0.02	617.50	42.614	7842.9	166793.7	3797.0	4846.9	12.4	3335.9	96.9	3432.8
3.0%	973.70	0.500%	1.00%	0.02	838.85	57.890	16402.9	473881.4	7433.6	9489.2	16.8	9477.6	189.8	9667.4
2.0%	1296.60	0.500%	1.00%	0.02	1135.15	78.338	33987.7	1328739.5	14430.5	18420.8	22.7	26574.8	368.4	26943.2
1.50%	1472.40	0.250%	0.50%	0.01	1384.50	95.545	54831.5	2614493.6	22304.7	28472.3	13.8	26144.9	284.7	26429.7
1.00%	1644.20	0.250%	0.50%	0.01	1558.30	107.539	72899.8	3912384.9	28908.1	36901.7	15.6	39123.8	369.0	39492.9
0.90%	1667.00	0.050%	0.10%	0.00	1655.60	114.254	84349.0	4809499.6	33014.3	42143.3	3.3	9619.0	84.3	9703.3
0.80%	1687.70	0.050%	0.10%	0.00	1677.35	115.755	87042.7	5028288.6	33972.9	43366.9	3.4	10056.6	86.7	10143.3
0.70%	1706.10	0.050%	0.10%	0.00	1696.90	117.104	89506.2	5230866.7	34847.2	44483.1	3.4	10461.7	89.0	10550.7
0.60%	1729.60	0.050%	0.10%	0.00	1717.85	118.550	92190.9	5454281.0	35797.6	45696.3	3.4	10908.6	91.4	11000.0
0.50%	1749.00	0.050%	0.10%	0.00	1739.30	120.030	94987.8	5689928.2	36785.1	46956.8	3.5	11379.9	93.9	11473.8
0.25%	1774.10	0.125%	0.25%	0.01	1761.55	121.566	97940.9	5941872.4	37824.9	48284.1	8.8	29709.4	241.4	29950.8
0.10%	1782.70	0.075%	0.15%	0.00	1778.40	122.729	100212.5	6137841.6	38622.9	49302.7	5.3	18413.5	147.9	18561.4
0.05%	1783.00	0.025%	0.05%	0.00	1782.85	123.036	100817.5	6190348.6	38835.1	49573.7	1.8	6190.3	49.6	6239.9
0.01%														
0.005%														
0.001%														
									Storm Totals:		208.5 (cfs) / 413.5 (acre-ft)	215031 (tons/storm)	2431 (tons/storm)	217462 (tons/storm)

.

Flow Duration JUF040
48 hour, 2 day duration

	2 yr 2 hr	10 yr 2 hr	100 yr 2 hr	100 yr 24 h
1	0	0	0	0
0.9	0	0	0	0
0.8	0	0	0	0
0.7	0	0	0	0
0.6	0	0	0	0
0.5	0	0	0	0.4
0.4	0	0	0	6.7
0.3	0	0	0	76.3
0.2	0	0	0	216.6
0.1	1.7	8.3	36.9	447.9
0.05	21.6	93.6	399.6	1042.1
0.04	36	148.7	610.3	1327
0.03	55.8	217	864.4	1683.7
0.02	73.5	274.4	1081.2	2010.2
0.015	80.3	297.3	1160.7	2147.9
0.01	87	316.9	1232.3	2273.6
0.009	88.2	320.6	1245.5	2294.4
0.008	88.7	322.8	1252.7	2310.1
0.007	89.9	325.8	1263.2	2325.5
0.006	90.9	329	1273.2	2343.8
0.005	91.5	331.7	1281.7	2359.9
0.0025	93	335.8	1294.4	2381.3
0.001	93.5	336.9	1297.9	2387.3
0.0005	93.5	337	1298.1	2387.9
0.0001	#N/A	#N/A	#N/A	#N/A
0.00005	#N/A	#N/A	#N/A	#N/A
0.00001	#N/A	#N/A	#N/A	#N/A

JUF040 2 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	23.85	2.765455013	212.995921
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.000	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
80.0%	0.000	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
70.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
60.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
50.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
40.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
30.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
20.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
10.0%	1.700	5.000%	10.00%	0.200	0.85	0.036	0.099	0.048	0.072	8.62	0.17	0.01	1.72	1.73
5.0%	21.600	2.500%	5.00%	0.100	11.65	0.489	0.166	1.111	0.258	30.82	1.17	0.11	3.08	3.19
4.0%	36.000	0.500%	1.00%	0.020	28.80	1.208	1.937	32.077	1.672	199.81	0.58	0.64	4.00	4.64
3.0%	55.800	0.500%	1.00%	0.020	45.90	1.925	10.214	269.606	4.918	587.68	0.92	5.39	11.75	17.15
2.0%	73.500	0.500%	1.00%	0.020	64.65	2.711	35.519	1320.6	11.012	1315.87	1.29	26.41	26.32	52.73
1.50%	80.300	0.250%	0.50%	0.010	76.90	3.225	66.931	2960.0	16.598	1983.33	0.77	29.60	19.83	49.43
1.00%	87.000	0.250%	0.50%	0.010	83.65	3.508	91.024	4378.8	20.257	2420.57	0.84	43.79	24.21	67.99
0.90%	88.200	0.050%	0.10%	0.002	87.60	3.673	107.747	5428.0	22.596	2700.18	0.18	10.86	5.40	16.26
0.80%	88.700	0.050%	0.10%	0.002	88.45	3.709	111.618	5677.6	23.120	2762.68	0.18	11.36	5.53	16.88
0.70%	89.900	0.050%	0.10%	0.002	89.30	3.745	115.590	5936.2	23.650	2826.01	0.18	11.87	5.65	17.52
0.60%	90.900	0.050%	0.10%	0.002	90.40	3.791	120.881	6284.4	24.346	2909.21	0.18	12.57	5.82	18.39
0.50%	91.500	0.050%	0.10%	0.002	91.20	3.824	124.838	6547.5	24.860	2970.61	0.18	13.10	5.94	19.04
0.25%	93.000	0.125%	0.25%	0.005	92.25	3.868	130.174	6906.0	25.543	3052.32	0.46	34.53	15.26	49.79
0.10%	93.500	0.075%	0.15%	0.003	93.25	3.910	135.408	7261.6	26.205	3131.34	0.28	21.78	9.39	31.18
0.05%	93.500	0.025%	0.05%	0.001	93.50	3.921	136.740	7352.6	26.372	3151.28	0.09	7.35	3.15	10.50
0.01%														
0.005%														
0.001%														

50.000% 100.000% 2.00

Storm Totals:	7.5 (cfs)	229.4 (tons/storm)	147.1 (tons/storm)	376.4 (tons/storm)
	14.8 (acre-ft)			

.

JUF040 2 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	23.85	0.036757378	24.44037238
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.000	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
80.0%	0.000	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
70.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
60.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
50.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
40.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
30.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
20.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
10.0%	1.700	5.000%	10.00%	0.20	0.85	0.036	0.064	0.00	0.000	0.00	0.2	0.00	0.00	0.00
5.0%	21.600	2.500%	5.00%	0.10	11.65	0.489	0.230	0.18	0.199	0.32	1.2	0.02	0.03	0.05
4.0%	36.000	0.500%	1.00%	0.02	28.80	1.208	1.533	2.91	1.522	2.42	0.6	0.06	0.05	0.11
3.0%	55.800	0.500%	1.00%	0.02	45.90	1.925	4.578	13.87	4.251	6.75	0.9	0.28	0.14	0.41
2.0%	73.500	0.500%	1.00%	0.02	64.65	2.711	10.365	44.22	9.022	14.33	1.3	0.88	0.29	1.17
1.50%	80.300	0.250%	0.50%	0.01	76.90	3.225	15.710	79.72	13.204	20.97	0.8	0.80	0.21	1.01
1.00%	87.000	0.250%	0.50%	0.01	83.65	3.508	19.224	106.12	15.882	25.22	0.8	1.06	0.25	1.31
0.90%	88.200	0.050%	0.10%	0.00	87.60	3.673	21.476	124.15	17.574	27.91	0.2	0.25	0.06	0.30
0.80%	88.700	0.050%	0.10%	0.00	88.45	3.709	21.980	128.29	17.950	28.51	0.2	0.26	0.06	0.31
0.70%	89.900	0.050%	0.10%	0.00	89.30	3.745	22.491	132.54	18.331	29.11	0.2	0.27	0.06	0.32
0.60%	90.900	0.050%	0.10%	0.00	90.40	3.791	23.162	138.17	18.830	29.91	0.2	0.28	0.06	0.34
0.50%	91.500	0.050%	0.10%	0.00	91.20	3.824	23.658	142.38	19.198	30.49	0.2	0.28	0.06	0.35
0.25%	93.000	0.125%	0.25%	0.01	92.25	3.868	24.317	148.03	19.686	31.27	0.5	0.74	0.16	0.90
0.10%	93.500	0.075%	0.15%	0.00	93.25	3.910	24.955	153.56	20.157	32.02	0.3	0.46	0.10	0.56
0.05%	93.500	0.025%	0.05%	0.00	93.50	3.921	25.116	154.97	20.276	32.20	0.1	0.15	0.03	0.19
0.01%														
0.005%														
0.001%														
									Storm Totals:		7.5 (cfs) / 14.8 (acre-ft)	5.8 (tons/storm)	1.5 (tons/storm)	7.3 (tons/storm)

.

JUF040 10 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observers:	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	23.85	2.765455013	212.995921
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.000	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
80.0%	0.000	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
70.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
60.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
50.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
40.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
30.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
20.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
10.0%	8.300	5.000%	10.00%	0.200	4.15	0.174	0.100	0.240	0.088	10.49	0.83	0.05	2.10	2.15
5.0%	93.600	2.500%	5.00%	0.100	50.95	2.137	14.9	437.1	6.3	750.8	5.10	43.71	75.08	118.79
4.0%	148.700	0.500%	1.00%	0.020	121.15	5.080	352.7	24572.2	48.8	5826.5	2.42	491.44	116.53	607.97
3.0%	217.000	0.500%	1.00%	0.020	182.85	7.668	1590.1	167203.6	129.6	15487.5	3.66	3344.07	309.75	3653.82
2.0%	274.400	0.500%	1.00%	0.020	245.70	10.303	4686.9	662254.5	261.5	31252.1	4.91	13245.09	625.04	13870.13
1.50%	297.300	0.250%	0.50%	0.010	285.85	11.987	8154.5	1340513.6	374.8	44782.1	2.86	13405.14	447.82	13852.96
1.00%	316.900	0.250%	0.50%	0.010	307.10	12.878	10600.9	1872228.4	444.4	53103.2	3.07	18722.28	531.03	19253.32
0.90%	320.600	0.050%	0.10%	0.002	318.75	13.367	12148.2	2226876.3	485.5	58017.0	0.64	4453.75	116.03	4569.79
0.80%	322.800	0.050%	0.10%	0.002	321.70	13.490	12564.6	2324534.6	496.3	59301.4	0.64	4649.07	118.60	4767.67
0.70%	325.800	0.050%	0.10%	0.002	324.30	13.599	12940.2	2413366.4	505.9	60446.9	0.65	4826.73	120.89	4947.63
0.60%	329.000	0.050%	0.10%	0.002	327.40	13.729	13398.6	2522742.1	517.4	61829.3	0.65	5045.48	123.66	5169.14
0.50%	331.700	0.050%	0.10%	0.002	330.35	13.853	13845.6	2630404.4	528.6	63161.7	0.66	5260.81	126.32	5387.13
0.25%	335.800	0.125%	0.25%	0.005	333.75	13.996	14374.2	2758930.9	541.6	64717.8	1.67	13794.65	323.59	14118.24
0.10%	336.900	0.075%	0.15%	0.003	336.35	14.105	14788.2	2860502.3	551.7	65922.6	1.01	8581.51	197.77	8779.27
0.05%	337.000	0.025%	0.05%	0.001	336.95	14.130	14885.0	2884353.4	554.0	66202.4	0.34	2884.35	66.20	2950.56
0.01%														
0.005%														
0.001%														
		50.000%	100.000%	2.00										
									Storm Totals:		29.1 (cfs) / 57.7 (acre-ft)	98748 (tons/storm)	3300.4 (tons/storm)	102048.6 (tons/storm)

.

JUF040 10 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observers:	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	23.85	0.036757378	24.44037238
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.000	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
80.0%	0.000	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
70.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
60.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
50.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
40.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
30.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
20.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
10.0%	8.300	5.000%	10.00%	0.20	4.15	0.174	0.077	0.02	0.011	0.02	0.8	0.00	0.00	0.01
5.0%	93.600	2.500%	5.00%	0.10	50.95	2.137	5.869	19.73	5.347	8.49	5.1	1.97	0.85	2.82
4.0%	148.700	0.500%	1.00%	0.02	121.15	5.080	46.820	374.30	35.794	56.85	2.4	7.49	1.14	8.62
3.0%	217.000	0.500%	1.00%	0.02	182.85	7.668	126.075	1521.23	88.292	140.23	3.7	30.42	2.80	33.23
2.0%	274.400	0.500%	1.00%	0.02	245.70	10.303	256.775	4163.22	168.779	268.07	4.9	83.26	5.36	88.63
1.50%	297.300	0.250%	0.50%	0.01	285.85	11.987	369.690	6973.45	235.219	373.60	2.9	69.73	3.74	73.47
1.00%	316.900	0.250%	0.50%	0.01	307.10	12.878	439.370	8903.93	275.274	437.21	3.1	89.04	4.37	93.41
0.90%	320.600	0.050%	0.10%	0.00	318.75	13.367	480.586	10108.65	298.695	474.41	0.6	20.22	0.95	21.17
0.80%	322.800	0.050%	0.10%	0.00	321.70	13.490	491.367	10431.07	304.790	484.09	0.6	20.86	0.97	21.83
0.70%	325.800	0.050%	0.10%	0.00	324.30	13.599	500.985	10721.20	310.218	492.72	0.6	21.44	0.99	22.43
0.60%	329.000	0.050%	0.10%	0.00	327.40	13.729	512.596	11074.53	316.759	503.10	0.7	22.15	1.01	23.16
0.50%	331.700	0.050%	0.10%	0.00	330.35	13.853	523.789	11418.33	323.051	513.10	0.7	22.84	1.03	23.86
0.25%	335.800	0.125%	0.25%	0.01	333.75	13.996	536.866	11823.84	330.387	524.75	1.7	59.12	2.62	61.74
0.10%	336.900	0.075%	0.15%	0.00	336.35	14.105	546.993	12140.73	336.058	533.76	1.0	36.42	1.60	38.02
0.05%	337.000	0.025%	0.05%	0.00	336.95	14.130	549.346	12214.70	337.374	535.85	0.3	12.21	0.54	12.75
0.01%														
0.005%														
0.001%														
									Storm Totals:		29.1 (cfs) / 57.7 (acre-ft)	497.2 (tons/storm)	28.0 (tons/storm)	525.1 (tons/storm)

.

JUF040 100 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observers:	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	23.85	2.765455013	212.995921
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.000	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
80.0%	0.000	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
70.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
60.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
50.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
40.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
30.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
20.0%	0.000	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
10.0%	36.900	5.000%	10.00%	0.200	18.45	0.774	0.459	4.872	0.627	74.93	3.69	0.97	14.99	15.96
5.0%	399.600	2.500%	5.00%	0.100	218.25	9.152	3038.3	381346.8	197.4	23583.5	21.83	38134.68	2358.35	40493.04
4.0%	610.300	0.500%	1.00%	0.020	504.95	21.175	65398.8	18991223.9	1449.2	173170.0	10.10	379824.48	3463.40	383287.88
3.0%	864.400	0.500%	1.00%	0.020	737.35	30.920	261337.2	110817914.0	3564.4	425923.6	14.75	2216358.28	8518.47	2224876.75
2.0%	1081.200	0.500%	1.00%	0.020	972.80	40.794	720379.5	403013825.4	6887.7	823044.4	19.46	8060276.51	16460.89	8076737.39
1.50%	1160.700	0.250%	0.50%	0.010	1120.95	47.006	1210094.1	780082336.0	9647.6	1152839.2	11.21	7800823.36	11528.39	7812351.75
1.00%	1232.300	0.250%	0.50%	0.010	1196.50	50.174	1536263.3	1057093545.8	11265.6	1346188.7	11.97	10570935.46	13461.89	10584397.34
0.90%	1245.500	0.050%	0.10%	0.002	1238.90	51.952	1745029.3	1243294571.1	12237.9	1462370.5	2.48	2486589.14	2924.74	2489513.88
0.80%	1252.700	0.050%	0.10%	0.002	1249.10	52.380	1798176.3	1291708530.9	12478.8	1491153.9	2.50	2583417.06	2982.31	2586399.37
0.70%	1263.200	0.050%	0.10%	0.002	1257.95	52.751	1845233.7	1334903335.9	12690.0	1516391.5	2.52	2669806.67	3032.78	2672839.45
0.60%	1273.200	0.050%	0.10%	0.002	1268.20	53.181	1900846.5	1386340321.1	12937.1	1545928.6	2.54	2772680.64	3091.86	2775772.50
0.50%	1281.700	0.050%	0.10%	0.002	1277.45	53.569	1952070.3	1434083410.5	13162.6	1572867.8	2.55	2868166.82	3145.74	2871312.56
0.25%	1294.400	0.125%	0.25%	0.005	1288.05	54.013	2011995.1	1490372001.2	13423.7	1604070.6	6.44	7451860.01	8020.35	7459880.36
0.10%	1297.900	0.075%	0.15%	0.003	1296.15	54.353	2058679.3	1534542803.7	13625.3	1628154.0	3.89	4603628.41	4884.46	4608512.87
0.05%	1298.100	0.025%	0.05%	0.001	1298.00	54.431	2069451.2	1544773900.0	13671.5	1633683.7	1.30	1544773.90	1633.68	1546407.58
0.01%														
0.005%														
0.001%														

		50.000%	100.000%	2.00										

Storm Totals:	117.2 (cfs)	56047276 (tons/storm)	85522.3 (tons/storm)	56132798.7 (tons/storm)
	232.5 (acre-ft)			

.

JUF040 100 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observers:	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	23.85	0.036757378	24.44037238
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.000	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
80.0%	0.000	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
70.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
60.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
50.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
40.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
30.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
20.0%	0.000	5.000%	10.00%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
10.0%	36.900	5.000%	10.00%	0.20	18.45	0.774	0.566	0.69	0.566	0.90	3.7	0.14	0.18	0.32
5.0%	399.600	2.500%	5.00%	0.10	218.25	9.152	193.049	2780.32	130.162	206.73	21.8	278.03	20.67	298.71
4.0%	610.300	0.500%	1.00%	0.02	504.95	21.175	1455.3	48491.6	819.2	1301.1	10.1	969.8	26.0	995.9
3.0%	864.400	0.500%	1.00%	0.02	737.35	30.920	3622.0	176237.8	1879.1	2984.5	14.7	3524.8	59.7	3584.4
2.0%	1081.200	0.500%	1.00%	0.02	972.80	40.794	7060.1	453218.9	3450.4	5480.1	19.5	9064.4	109.6	9174.0
1.50%	1160.700	0.250%	0.50%	0.01	1120.95	47.006	9933.1	734756.2	4708.3	7478.1	11.2	7347.6	74.8	7422.3
1.00%	1232.300	0.250%	0.50%	0.01	1196.50	50.174	11622.8	917684.9	5432.3	8628.0	12.0	9176.8	86.3	9263.1
0.90%	1245.500	0.050%	0.10%	0.00	1238.90	51.952	12639.6	1033337.1	5863.4	9312.7	2.5	2066.7	18.6	2085.3
0.80%	1252.700	0.050%	0.10%	0.00	1249.10	52.380	12891.7	1062623.7	5969.7	9481.6	2.5	2125.2	19.0	2144.2
0.70%	1263.200	0.050%	0.10%	0.00	1257.95	52.751	13112.8	1088505.2	6062.9	9629.6	2.5	2177.0	19.3	2196.3
0.60%	1273.200	0.050%	0.10%	0.00	1268.20	53.181	13371.6	1119034.0	6171.7	9802.5	2.5	2238.1	19.6	2257.7
0.50%	1281.700	0.050%	0.10%	0.00	1277.45	53.569	13607.7	1147099.3	6270.9	9960.0	2.6	2294.2	19.9	2314.1
0.25%	1294.400	0.125%	0.25%	0.01	1288.05	54.013	13881.3	1179868.0	6385.6	10142.1	6.4	5899.3	50.7	5950.1
0.10%	1297.900	0.075%	0.15%	0.00	1296.15	54.353	14092.4	1205350.0	6473.9	10282.5	3.9	3616.1	30.8	3646.9
0.05%	1298.100	0.025%	0.05%	0.00	1298.00	54.431	14140.9	1211224.1	6494.2	10314.7	1.3	1211.2	10.3	1221.5
0.01%														
0.005%														
0.001%														
									Storm Totals:		117.2 (cfs) / 232.5 (acre-ft)	51989 (tons/storm)	565 (tons/storm)	52555 (tons/storm)

.

JUF040 100 yr 24 hr Poor Pre Fire

Stream:	Location:	Date:
Observers:	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	23.85	2.765455013	212.995921
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00	0.025%	0.050%	0.001										
90.0%	0.00	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
80.0%	0.00	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
70.0%	0.00	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
60.0%	0.00	5.000%	10.00%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
50.0%	0.40	5.000%	10.00%	0.200	0.20	0.008	0.099	0.011	0.072	8.58	0.04	0.00	1.72	1.72
40.0%	6.70	5.000%	10.00%	0.200	3.55	0.149	0.100	0.204	0.083	9.90	0.71	0.04	1.98	2.02
30.0%	76.30	5.000%	10.00%	0.200	41.50	1.740	7.094	169.317	3.886	464.32	8.30	33.86	92.86	126.73
20.0%	216.60	5.000%	10.00%	0.200	146.45	6.141	705.832	59446.429	76.493	9140.58	29.29	11889.29	1828.12	13717.40
10.0%	447.90	5.000%	10.00%	0.200	332.25	13.933	14139.254	2701634.133	535.825	64028.58	66.45	540326.83	12805.72	553132.54
5.0%	1042.10	2.500%	5.00%	0.100	745.00	31.241	271395.7	116277140.5	3652.9	436503.3	74.50	11627714.05	43650.33	11671364.38
4.0%	1327.00	0.500%	1.00%	0.020	1184.55	49.673	1480863.3	1008796150.0	11000.0	1314447.0	23.69	20175923.00	26288.94	20202211.94
3.0%	1683.70	0.500%	1.00%	0.020	1505.35	63.126	3559251.2	3081280061.8	19445.5	2323649.1	30.11	61625601.24	46472.98	61672074.22
2.0%	2010.20	0.500%	1.00%	0.020	1846.95	77.451	7522157.4	7989739253.9	31619.6	3778394.0	36.94	159794785.08	75567.88	159870352.96
1.50%	2147.90	0.250%	0.50%	0.010	2079.05	87.184	11599809.5	13869181812.0	41895.5	5006317.2	20.79	138691818.12	50063.17	138741881.29
1.00%	2273.60	0.250%	0.50%	0.010	2210.75	92.706	14522907.9	18464105225.4	48481.8	5793344.6	22.11	184641052.25	57933.45	184698985.70
0.90%	2294.40	0.050%	0.10%	0.002	2284.00	95.778	16362591.6	21492317157.1	52387.9	6260111.4	4.57	42984634.31	12520.22	42997154.54
0.80%	2310.10	0.050%	0.10%	0.002	2302.25	96.543	16846085.2	22304193528.2	53388.5	6379675.1	4.60	44608387.06	12759.35	44621146.41
0.70%	2325.50	0.050%	0.10%	0.002	2317.80	97.195	17266169.3	23014789308.9	54249.7	6482585.4	4.64	46029578.62	12965.17	46042543.79
0.60%	2343.80	0.050%	0.10%	0.002	2334.65	97.902	17729911.3	23804737488.7	55191.9	6595177.5	4.67	47609474.98	13190.35	47622665.33
0.50%	2359.90	0.050%	0.10%	0.002	2351.85	98.623	18212554.2	24632899118.9	56163.4	6711268.3	4.70	49265798.24	13422.54	49279220.77
0.25%	2381.30	0.125%	0.25%	0.005	2370.60	99.409	18749492.1	25561294222.9	57233.7	6839159.8	11.85	127806471.11	34195.80	127840666.91
0.10%	2387.30	0.075%	0.15%	0.003	2384.30	99.984	19149021.7	26256844964.6	58023.1	6933491.2	7.15	78770534.89	20800.47	78791335.37
0.05%	2387.90	0.025%	0.05%	0.001	2387.60	100.122	19246175.7	26426586425.2	58214.2	6956325.3	2.39	26426586.43	6956.33	26433542.75
0.01%														
0.005%														
0.001%														
		50.000%	100.000%	2.00										

Storm Totals:	357.5 (cfs) / 709.1 (acre-ft)	1040610609 (tons/storm)	441517.4 (tons/storm)	1041052126.8 (tons/storm)

.

Flow Duration JUF110
48 hour, 2 day duration

	2 yr 2 hr	10 yr 2 hr	100 yr 2 hr	100 yr 24 h
1	0	0	0	0
0.9	0.3	2.6	14	0
0.8	0.4	3	16	17.5
0.7	0.4	3.4	18.2	66.3
0.6	0.5	3.9	20.7	69.1
0.5	0.5	4.4	23.6	71.9
0.4	0.6	5	26.8	75.5
0.3	0.7	5.7	30.6	153.8
0.2	0.8	6.5	34.8	402.2
0.1	4.6	21.3	91.7	739.3
0.05	32.5	148.8	615.6	1604.2
0.04	42.5	200.1	884.2	1998.3
0.03	62	273.3	1207.5	2472.3
0.02	85.3	362.3	1552.7	2972.2
0.015	96.4	403.8	1702.6	3224.7
0.01	108.1	438.9	1839.9	3480.3
0.009	110	445.2	1864.3	3529.1
0.008	110.9	448.1	1877.3	3552.3
0.007	112.6	453.7	1898.2	3588.4
0.006	114.1	458.1	1918.4	3614.9
0.005	115.1	460.9	1935.2	3649
0.0025	117	467.1	1958.4	3689
0.001	117.6	468.8	1965.9	3701.4
0.0005	117.7	468.8	1966.4	3702
0.0001	#N/A	#N/A	#N/A	#N/A
0.00005	#N/A	#N/A	#N/A	#N/A
0.00001	#N/A	#N/A	#N/A	#N/A

JUF110 2 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	45.01	4.852124574	248.1783077
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.300	5.000%	10.000%	0.200	0.15	0.003	0.099	0.010	0.072	15.05	0.03	0.00	3.01	3.01
80.0%	0.400	5.000%	10.000%	0.200	0.35	0.008	0.099	0.023	0.072	15.06	0.07	0.00	3.01	3.02
70.0%	0.400	5.000%	10.00%	0.200	0.40	0.009	0.099	0.027	0.072	15.06	0.08	0.01	3.01	3.02
60.0%	0.500	5.000%	10.00%	0.200	0.45	0.010	0.099	0.030	0.072	15.06	0.09	0.01	3.01	3.02
50.0%	0.500	5.000%	10.00%	0.200	0.50	0.011	0.099	0.033	0.072	15.06	0.10	0.01	3.01	3.02
40.0%	0.600	5.000%	10.00%	0.200	0.55	0.012	0.099	0.036	0.072	15.06	0.11	0.01	3.01	3.02
30.0%	0.700	5.000%	10.00%	0.200	0.65	0.014	0.099	0.043	0.072	15.06	0.13	0.01	3.01	3.02
20.0%	0.800	5.000%	10.00%	0.200	0.75	0.017	0.099	0.050	0.072	15.07	0.15	0.01	3.01	3.02
10.0%	4.600	5.000%	10.00%	0.200	2.70	0.060	0.099	0.179	0.073	15.32	0.54	0.04	3.06	3.10
5.0%	32.500	2.500%	5.00%	0.100	18.55	0.412	0.135	1.676	0.196	41.10	1.86	0.17	4.11	4.28
4.0%	42.500	0.500%	1.00%	0.020	37.50	0.833	0.571	14.356	0.734	153.87	0.75	0.29	3.08	3.36
3.0%	62.000	0.500%	1.00%	0.020	52.25	1.161	1.689	59.136	1.528	320.46	1.05	1.18	6.41	7.59
2.0%	85.300	0.500%	1.00%	0.020	73.65	1.636	5.683	280.458	3.366	705.75	1.47	5.61	14.12	19.72
1.50%	96.400	0.250%	0.50%	0.010	90.85	2.018	12.135	738.713	5.498	1152.62	0.91	7.39	11.53	18.91
1.00%	108.100	0.250%	0.50%	0.010	102.25	2.272	18.648	1277.663	7.258	1521.72	1.02	12.78	15.22	27.99
0.90%	110.000	0.050%	0.10%	0.002	109.05	2.423	23.575	1722.698	8.447	1770.91	0.22	3.45	3.54	6.99
0.80%	110.900	0.050%	0.10%	0.002	110.45	2.454	24.697	1827.836	8.704	1824.97	0.22	3.66	3.65	7.31
0.70%	112.600	0.050%	0.10%	0.002	111.75	2.483	25.773	1929.925	8.948	1876.02	0.22	3.86	3.75	7.61
0.60%	114.100	0.050%	0.10%	0.002	113.35	2.518	27.144	2061.677	9.253	1939.99	0.23	4.12	3.88	8.00
0.50%	115.100	0.050%	0.10%	0.002	114.60	2.546	28.251	2169.450	9.496	1990.84	0.23	4.34	3.98	8.32
0.25%	117.000	0.125%	0.25%	0.005	116.05	2.578	29.577	2299.969	9.781	2050.78	0.58	11.50	10.25	21.75
0.10%	117.600	0.075%	0.15%	0.003	117.30	2.606	30.755	2417.374	10.032	2103.29	0.35	7.25	6.31	13.56
0.05%	117.700	0.025%	0.05%	0.001	117.65	2.614	31.091	2451.077	10.103	2118.14	0.12	2.45	2.12	4.57
0.01%														
0.005%														
0.001%														
		50.000%	100.000%	2.00										
										Storm Totals:	10.5 (cfs) 20.9 (acre-ft)	68.1 (tons/storm)	119.1 (tons/storm)	187.2 (tons/storm)

.

JUF110 2 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer	Gage Station #:		Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	45.01	0.048568988	56.00402471
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.300	5.000%	10.000%	0.20	0.15	0.003	0.064	0.00	0.000	0.00	0.0	0.00	0.00	0.00
80.0%	0.400	5.000%	10.000%	0.20	0.35	0.008	0.064	0.00	0.000	0.00	0.1	0.00	0.00	0.00
70.0%	0.400	5.000%	10.00%	0.20	0.40	0.009	0.064	0.00	0.000	0.00	0.1	0.00	0.00	0.00
60.0%	0.500	5.000%	10.00%	0.20	0.45	0.010	0.064	0.00	0.000	0.00	0.1	0.00	0.00	0.00
50.0%	0.500	5.000%	10.00%	0.20	0.50	0.011	0.064	0.00	0.000	0.00	0.1	0.00	0.00	0.00
40.0%	0.600	5.000%	10.00%	0.20	0.55	0.012	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
30.0%	0.700	5.000%	10.00%	0.20	0.65	0.014	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
20.0%	0.800	5.000%	10.00%	0.20	0.75	0.017	0.064	0.01	0.000	0.00	0.2	0.00	0.00	0.00
10.0%	4.600	5.000%	10.00%	0.20	2.70	0.060	0.065	0.03	0.000	0.00	0.5	0.01	0.00	0.01
5.0%	32.500	2.500%	5.00%	0.10	18.55	0.412	0.174	0.49	0.134	0.28	1.9	0.05	0.03	0.08
4.0%	42.500	0.500%	1.00%	0.02	37.50	0.833	0.664	3.77	0.668	1.40	0.8	0.08	0.03	0.10
3.0%	62.000	0.500%	1.00%	0.02	52.25	1.161	1.399	11.06	1.395	2.93	1.0	0.22	0.06	0.28
2.0%	85.300	0.500%	1.00%	0.02	73.65	1.636	3.117	34.71	2.974	6.24	1.5	0.69	0.12	0.82
1.50%	96.400	0.250%	0.50%	0.01	90.85	2.018	5.126	70.42	4.719	9.90	0.9	0.70	0.10	0.80
1.00%	108.100	0.250%	0.50%	0.01	102.25	2.272	6.793	105.03	6.119	12.84	1.0	1.05	0.13	1.18
0.90%	110.000	0.050%	0.10%	0.00	109.05	2.423	7.922	130.63	7.048	14.79	0.2	0.26	0.03	0.29
0.80%	110.900	0.050%	0.10%	0.00	110.45	2.454	8.167	136.40	7.248	15.21	0.2	0.27	0.03	0.30
0.70%	112.600	0.050%	0.10%	0.00	111.75	2.483	8.399	141.92	7.437	15.61	0.2	0.28	0.03	0.32
0.60%	114.100	0.050%	0.10%	0.00	113.35	2.518	8.689	148.93	7.673	16.10	0.2	0.30	0.03	0.33
0.50%	115.100	0.050%	0.10%	0.00	114.60	2.546	8.920	154.57	7.860	16.50	0.2	0.31	0.03	0.34
0.25%	117.000	0.125%	0.25%	0.01	116.05	2.578	9.192	161.31	8.080	16.96	0.6	0.81	0.08	0.89
0.10%	117.600	0.075%	0.15%	0.00	117.30	2.606	9.431	167.28	8.272	17.36	0.4	0.50	0.05	0.55
0.05%	117.700	0.025%	0.05%	0.00	117.65	2.614	9.498	168.98	8.327	17.48	0.1	0.17	0.02	0.19
0.01%														
0.005%														
0.001%														
									Storm Totals:		**10.5** (cfs) / **20.9** (acre-ft)	**5.7** (tons/storm)	**0.8** (tons/storm)	**6.5** (tons/storm)

.

JUF110 10 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	45.01	4.852124574	248.1783077
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	2.600	5.000%	10.000%	0.200	1.30	0.029	0.099	0.086	0.072	15.10	0.26	0.02	3.02	3.04
80.0%	3.000	5.000%	10.000%	0.200	2.80	0.062	0.099	0.186	0.073	15.34	0.56	0.04	3.07	3.11
70.0%	3.400	5.000%	10.00%	0.200	3.20	0.071	0.099	0.212	0.074	15.45	0.64	0.04	3.09	3.13
60.0%	3.900	5.000%	10.00%	0.200	3.65	0.081	0.099	0.242	0.074	15.60	0.73	0.05	3.12	3.17
50.0%	4.400	5.000%	10.00%	0.200	4.15	0.092	0.099	0.275	0.075	15.79	0.83	0.06	3.16	3.21
40.0%	5.000	5.000%	10.00%	0.200	4.70	0.104	0.099	0.312	0.077	16.05	0.94	0.06	3.21	3.27
30.0%	5.700	5.000%	10.00%	0.200	5.35	0.119	0.099	0.356	0.078	16.41	1.07	0.07	3.28	3.35
20.0%	6.500	5.000%	10.00%	0.200	6.10	0.136	0.100	0.407	0.081	16.91	1.22	0.08	3.38	3.46
10.0%	21.300	5.000%	10.00%	0.200	13.90	0.309	0.111	1.038	0.134	28.17	2.78	0.21	5.63	5.84
5.0%	148.800	2.500%	5.00%	0.100	85.05	1.890	9.6	544.4	4.7	987.5	8.51	54.44	98.75	153.20
4.0%	200.100	0.500%	1.00%	0.020	174.45	3.876	131.1	15323.5	25.7	5379.8	3.49	306.47	107.60	414.07
3.0%	273.300	0.500%	1.00%	0.020	236.70	5.259	400.2	63472.1	52.9	11096.3	4.73	1269.44	221.93	1491.37
2.0%	362.300	0.500%	1.00%	0.020	317.80	7.061	1175.9	250413.1	106.5	22338.7	6.36	5008.26	446.77	5455.04
1.50%	403.800	0.250%	0.50%	0.010	383.05	8.510	2328.7	597710.9	166.0	34813.5	3.83	5977.11	348.14	6325.24
1.00%	438.900	0.250%	0.50%	0.010	421.35	9.361	3300.2	931773.3	208.2	43661.3	4.21	9317.73	436.61	9754.35
0.90%	445.200	0.050%	0.10%	0.002	442.05	9.821	3933.2	1165058.4	233.4	48932.1	0.88	2330.12	97.86	2427.98
0.80%	448.100	0.050%	0.10%	0.002	446.65	9.923	4085.1	1222626.7	239.2	50150.8	0.89	2445.25	100.30	2545.56
0.70%	453.700	0.050%	0.10%	0.002	450.90	10.018	4229.1	1277778.3	244.6	51292.3	0.90	2555.56	102.58	2658.14
0.60%	458.100	0.050%	0.10%	0.002	455.90	10.129	4403.2	1345143.8	251.1	52654.4	0.91	2690.29	105.31	2795.60
0.50%	460.900	0.050%	0.10%	0.002	459.50	10.209	4531.8	1395350.2	255.9	53647.9	0.92	2790.70	107.30	2898.00
0.25%	467.100	0.125%	0.25%	0.005	464.00	10.309	4696.3	1460165.1	261.9	54904.9	2.32	7300.83	274.52	7575.35
0.10%	468.800	0.075%	0.15%	0.003	467.95	10.397	4844.3	1518985.6	267.2	56022.2	1.40	4556.96	168.07	4725.02
0.05%	468.800	0.025%	0.05%	0.001	468.80	10.416	4876.5	1531883.0	268.4	56264.4	0.47	1531.88	56.26	1588.15
0.01%														
0.005%														
0.001%														

		50.000%	100.000%	2.00							Storm Totals:	48.9 (cfs) / 96.9 (acre-ft)	48136 (tons/storm)	2703.0 (tons/storm)	50838.6 (tons/storm)

.

JUF110 10 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer	Gage Station #:		Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	45.01	0.048568988	56.00402471
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	2.600	5.000%	10.000%	0.20	1.30	0.029	0.064	0.01	0.000	0.00	0.3	0.00	0.00	0.00
80.0%	3.000	5.000%	10.000%	0.20	2.80	0.062	0.065	0.03	0.000	0.00	0.6	0.01	0.00	0.01
70.0%	3.400	5.000%	10.00%	0.20	3.20	0.071	0.065	0.03	0.000	0.00	0.6	0.01	0.00	0.01
60.0%	3.900	5.000%	10.00%	0.20	3.65	0.081	0.066	0.04	0.000	0.00	0.7	0.01	0.00	0.01
50.0%	4.400	5.000%	10.00%	0.20	4.15	0.092	0.067	0.04	0.000	0.00	0.8	0.01	0.00	0.01
40.0%	5.000	5.000%	10.00%	0.20	4.70	0.104	0.068	0.05	0.000	0.00	0.9	0.01	0.00	0.01
30.0%	5.700	5.000%	10.00%	0.20	5.35	0.119	0.069	0.06	0.000	0.00	1.1	0.01	0.00	0.01
20.0%	6.500	5.000%	10.00%	0.20	6.10	0.136	0.071	0.07	0.001	0.00	1.2	0.01	0.00	0.01
10.0%	21.300	5.000%	10.00%	0.20	13.90	0.309	0.119	0.25	0.066	0.14	2.8	0.05	0.03	0.08
5.0%	148.800	2.500%	5.00%	0.10	85.05	1.890	4.382	56.36	4.082	8.57	8.5	5.64	0.86	6.49
4.0%	200.100	0.500%	1.00%	0.02	174.45	3.876	24.429	644.41	19.769	41.49	3.5	12.89	0.83	13.72
3.0%	273.300	0.500%	1.00%	0.02	236.70	5.259	50.876	1820.92	38.611	81.03	4.7	36.42	1.62	38.04
2.0%	362.300	0.500%	1.00%	0.02	317.80	7.061	103.375	4967.66	73.683	154.64	6.4	99.35	3.09	102.45
1.50%	403.800	0.250%	0.50%	0.01	383.05	8.510	162.051	9386.20	110.979	232.91	3.8	93.86	2.33	96.19
1.00%	438.900	0.250%	0.50%	0.01	421.35	9.361	203.844	12987.47	136.775	287.04	4.2	129.87	2.87	132.75
0.90%	445.200	0.050%	0.10%	0.00	442.05	9.821	228.796	15293.37	151.944	318.88	0.9	30.59	0.64	31.22
0.80%	448.100	0.050%	0.10%	0.00	446.65	9.923	234.571	15842.54	155.433	326.20	0.9	31.69	0.65	32.34
0.70%	453.700	0.050%	0.10%	0.00	450.90	10.018	239.981	16362.17	158.695	333.05	0.9	32.72	0.67	33.39
0.60%	458.100	0.050%	0.10%	0.00	455.90	10.129	246.439	16988.79	162.580	341.20	0.9	33.98	0.68	34.66
0.50%	460.900	0.050%	0.10%	0.00	459.50	10.209	251.151	17450.32	165.409	347.14	0.9	34.90	0.69	35.59
0.25%	467.100	0.125%	0.25%	0.01	464.00	10.309	257.114	18039.61	168.982	354.64	2.3	90.20	1.77	91.97
0.10%	468.800	0.075%	0.15%	0.00	467.95	10.397	262.416	18568.35	172.153	361.29	1.4	55.71	1.08	56.79
0.05%	468.800	0.025%	0.05%	0.00	468.80	10.416	263.566	18683.55	172.839	362.73	0.5	18.68	0.36	19.05
0.01%														
0.005%														
0.001%														
									Storm Totals:		48.9 (cfs) / 96.9 (acre-ft)	706.6 (tons/storm)	18.2 (tons/storm)	724.8 (tons/storm)

.

JUF110 100 yr 2 hr Poor Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	45.01	4.852124574	248.1783077
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	14.000	5.000%	10.000%	0.200	7.00	0.156	0.100	0.469	0.084	17.62	1.40	0.09	3.52	3.62
80.0%	16.000	5.000%	10.000%	0.200	15.00	0.333	0.115	1.160	0.147	30.77	3.00	0.23	6.15	6.39
70.0%	18.200	5.000%	10.00%	0.200	17.10	0.380	0.126	1.439	0.174	36.52	3.42	0.29	7.30	7.59
60.0%	20.700	5.000%	10.00%	0.200	19.45	0.432	0.142	1.846	0.211	44.21	3.89	0.37	8.84	9.21
50.0%	23.600	5.000%	10.00%	0.200	22.15	0.492	0.168	2.489	0.261	54.76	4.43	0.50	10.95	11.45
40.0%	26.800	5.000%	10.00%	0.200	25.20	0.560	0.209	3.533	0.329	69.01	5.04	0.71	13.80	14.51
30.0%	30.600	5.000%	10.00%	0.200	28.70	0.638	0.276	5.317	0.422	88.56	5.74	1.06	17.71	18.78
20.0%	34.800	5.000%	10.00%	0.200	32.70	0.727	0.385	8.438	0.550	115.29	6.54	1.69	23.06	24.75
10.0%	91.700	5.000%	10.00%	0.200	63.25	1.405	3.298	139.781	2.366	496.03	12.65	27.96	99.21	127.16
5.0%	615.600	2.500%	5.00%	0.100	353.65	7.857	1738.7	412016.8	137.3	28796.6	35.37	41201.68	2879.66	44081.34
4.0%	884.200	0.500%	1.00%	0.020	749.90	16.661	27201.7	13668716.6	819.6	171846.8	15.00	273374.33	3436.94	276811.27
3.0%	1207.500	0.500%	1.00%	0.020	1045.85	23.236	91874.9	64386369.8	1807.3	378918.0	20.92	1287727.40	7578.36	1295305.76
2.0%	1552.700	0.500%	1.00%	0.020	1380.10	30.662	253449.2	234384551.5	3494.1	732570.9	27.60	4687691.03	14651.42	4702342.45
1.50%	1702.600	0.250%	0.50%	0.010	1627.65	36.162	463510.8	505531743.2	5172.0	1084362.0	16.28	5055317.43	10843.62	5066161.05
1.00%	1839.900	0.250%	0.50%	0.010	1771.25	39.353	631559.2	749586031.9	6323.3	1325748.7	17.71	7495860.32	13257.49	7509117.81
0.90%	1864.300	0.050%	0.10%	0.002	1852.10	41.149	743604.8	922856508.5	7031.1	1474150.1	3.70	1845713.02	2948.30	1848661.32
0.80%	1877.300	0.050%	0.10%	0.002	1870.80	41.564	771447.0	967077025.2	7201.1	1509778.2	3.74	1934154.05	3019.56	1937173.61
0.70%	1898.200	0.050%	0.10%	0.002	1887.75	41.941	797331.4	1008581308.8	7357.1	1542498.8	3.78	2017162.62	3085.00	2020247.62
0.60%	1918.400	0.050%	0.10%	0.002	1908.30	42.398	829552.9	1060762919.0	7548.9	1582715.0	3.82	2121525.84	3165.43	2124691.27
0.50%	1935.200	0.050%	0.10%	0.002	1926.80	42.809	859360.2	1109531097.5	7724.1	1619433.3	3.85	2219062.20	3238.87	2222301.06
0.25%	1958.400	0.125%	0.25%	0.005	1946.80	43.253	892451.8	1164216349.9	7916.0	1659678.6	9.73	5821081.75	8298.39	5829380.14
0.10%	1965.900	0.075%	0.15%	0.003	1962.15	43.594	918470.3	1207605056.3	8065.2	1690955.8	5.89	3622815.17	5072.87	3627888.04
0.05%	1966.400	0.025%	0.05%	0.001	1966.15	43.683	925339.9	1219117433.9	8104.4	1699161.7	1.97	1219117.43	1699.16	1220816.60
0.01%														
0.005%														
0.001%														
										Storm Totals:	215.5 (cfs) 427.4 (acre-ft)	39641837 (tons/storm)	83365.6 (tons/storm)	39725202.8 (tons/storm)

50.000% 100.000% 2.00

.

JUF110 100 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer	Gage Station #:		Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	45.01	0.048568988	56.00402471
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	14.000	5.000%	10.000%	0.20	7.00	0.156	0.074	0.08	0.006	0.01	1.4	0.02	0.00	0.02
80.0%	16.000	5.000%	10.000%	0.20	15.00	0.333	0.130	0.29	0.080	0.17	3.0	0.06	0.03	0.09
70.0%	18.200	5.000%	10.00%	0.20	17.10	0.380	0.154	0.40	0.110	0.23	3.4	0.08	0.05	0.13
60.0%	20.700	5.000%	10.00%	0.20	19.45	0.432	0.187	0.55	0.150	0.31	3.9	0.11	0.06	0.17
50.0%	23.600	5.000%	10.00%	0.20	22.15	0.492	0.233	0.78	0.203	0.43	4.4	0.16	0.09	0.24
40.0%	26.800	5.000%	10.00%	0.20	25.20	0.560	0.294	1.12	0.273	0.57	5.0	0.22	0.11	0.34
30.0%	30.600	5.000%	10.00%	0.20	28.70	0.638	0.379	1.65	0.367	0.77	5.7	0.33	0.15	0.48
20.0%	34.800	5.000%	10.00%	0.20	32.70	0.727	0.496	2.45	0.492	1.03	6.5	0.49	0.21	0.70
10.0%	91.700	5.000%	10.00%	0.20	63.25	1.405	2.180	20.85	2.127	4.46	12.7	4.17	0.89	5.06
5.0%	615.600	2.500%	5.00%	0.10	353.65	7.857	133.708	7150.12	93.149	195.49	35.4	715.01	19.55	734.56
4.0%	884.200	0.500%	1.00%	0.02	749.90	16.661	816.9	92635.2	484.2	1016.2	15.0	1852.7	20.3	1873.0
3.0%	1207.500	0.500%	1.00%	0.02	1045.85	23.236	1820.2	287852.4	1004.3	2107.6	20.9	5757.0	42.2	5799.2
2.0%	1552.700	0.500%	1.00%	0.02	1380.10	30.662	3549.7	740774.7	1844.9	3871.8	27.6	14815.5	77.4	14892.9
1.50%	1702.600	0.250%	0.50%	0.01	1627.65	36.162	5281.5	1299882.9	2649.1	5559.5	16.3	12998.8	55.6	13054.4
1.00%	1839.900	0.250%	0.50%	0.01	1771.25	39.353	6474.4	1734041.2	3188.7	6692.0	17.7	17340.4	66.9	17407.3
0.90%	1864.300	0.050%	0.10%	0.00	1852.10	41.149	7209.1	2018976.6	3516.6	7380.2	3.7	4038.0	14.8	4052.7
0.80%	1877.300	0.050%	0.10%	0.00	1870.80	41.564	7385.7	2089306.9	3594.9	7544.5	3.7	4178.6	15.1	4193.7
0.70%	1898.200	0.050%	0.10%	0.00	1887.75	41.941	7547.9	2154535.5	3666.7	7695.3	3.8	4309.1	15.4	4324.5
0.60%	1918.400	0.050%	0.10%	0.00	1908.30	42.398	7747.3	2235532.1	3754.8	7880.2	3.8	4471.1	15.8	4486.8
0.50%	1935.200	0.050%	0.10%	0.00	1926.80	42.809	7929.4	2310268.2	3835.1	8048.6	3.9	4620.5	16.1	4636.6
0.25%	1958.400	0.125%	0.25%	0.01	1946.80	43.253	8129.1	2393031.5	3923.0	8233.0	9.7	11965.2	41.2	12006.3
0.10%	1965.900	0.075%	0.15%	0.00	1962.15	43.594	8284.4	2457957.1	3991.1	8376.0	5.9	7373.9	25.1	7399.0
0.05%	1966.400	0.025%	0.05%	0.00	1966.15	43.683	8325.1	2475078.1	4009.0	8413.5	2.0	2475.1	8.4	2483.5
0.01%														
0.005%														
0.001%														
											215.5 (cfs)	96916	435	97352
											427.4 (acre-ft)	(tons/storm)	(tons/storm)	(tons/storm)

Storm Totals:

.

JUF110 100 yr 24 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	45.01	4.852124574	248.1783077
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00	0.025%	0.050%	0.001										
90.0%	0.00	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
80.0%	17.50	5.000%	10.000%	0.200	8.75	0.194	0.101	0.593	0.093	19.42	1.75	0.12	3.88	4.00
70.0%	66.30	5.000%	10.00%	0.200	41.90	0.931	0.808	22.683	0.934	195.76	8.38	4.54	39.15	43.69
60.0%	69.10	5.000%	10.00%	0.200	67.70	1.504	4.202	190.609	2.768	580.41	13.54	38.12	116.08	154.20
50.0%	71.90	5.000%	10.00%	0.200	70.50	1.566	4.858	229.473	3.041	637.58	14.10	45.89	127.52	173.41
40.0%	75.50	5.000%	10.00%	0.200	73.70	1.637	5.697	281.334	3.371	706.87	14.74	56.27	141.37	197.64
30.0%	153.80	5.000%	10.00%	0.200	114.65	2.547	28.296	2173.851	9.505	1992.89	22.93	434.77	398.58	833.35
20.0%	402.20	5.000%	10.00%	0.200	278.00	6.176	720.738	134260.987	77.538	16256.65	55.60	26852.20	3251.33	30103.53
10.0%	739.30	5.000%	10.00%	0.200	570.75	12.681	10018.388	3831522.353	428.376	89813.46	114.15	766304.47	17962.69	784267.16
5.0%	1604.20	2.500%	5.00%	0.100	1171.75	26.033	139259.7	109342231.1	2368.0	496470.0	117.18	10934223.11	49647.00	10983870.12
4.0%	1998.30	0.500%	1.00%	0.020	1801.25	40.019	671588.5	810596707.5	6580.9	1379750.7	36.03	16211934.15	27595.01	16239529.16
3.0%	2472.30	0.500%	1.00%	0.020	2235.30	49.663	1479713.8	2216364267.8	10994.4	2305097.6	44.71	44327285.36	46101.95	44373387.31
2.0%	2972.20	0.500%	1.00%	0.020	2722.25	60.482	3043403.5	5551561183.6	17564.7	3682629.4	54.45	111031223.67	73652.59	111104876.26
1.50%	3224.70	0.250%	0.50%	0.010	3098.45	68.840	4887149.9	10146768046.5	23893.5	5009511.4	30.98	101467680.46	50095.11	101517775.58
1.00%	3480.30	0.250%	0.50%	0.010	3352.50	74.484	6520521.7	14648013016.8	28816.2	6041616.3	33.53	146480130.17	60416.16	146540546.33
0.90%	3529.10	0.050%	0.10%	0.002	3504.70	77.866	7670707.3	18014152846.5	32023.9	6714139.4	7.01	36028305.69	13428.28	36041733.97
0.80%	3552.30	0.050%	0.10%	0.002	3540.70	78.665	7962970.1	18892603096.6	32811.4	6879248.7	7.08	37785206.19	13758.50	37798964.69
0.70%	3588.40	0.050%	0.10%	0.002	3570.35	79.324	8209689.7	19641068893.6	33468.3	7016982.7	7.14	39282137.79	14033.97	39296171.75
0.60%	3614.90	0.050%	0.10%	0.002	3601.65	80.020	8476117.5	20456251734.9	34170.0	7164100.6	7.20	40912503.47	14328.20	40926831.67
0.50%	3649.00	0.050%	0.10%	0.002	3631.95	80.693	8739965.3	21270473212.5	34857.4	7308205.5	7.26	42540946.43	14616.41	42555562.84
0.25%	3689.00	0.125%	0.25%	0.005	3669.00	81.516	9070642.1	22300434661.1	35708.6	7486676.6	18.35	111502173.31	37433.38	111539606.69
0.10%	3701.40	0.075%	0.15%	0.003	3695.20	82.098	9309904.2	23052113241.0	36317.8	7614391.0	11.09	69156339.72	22843.17	69179182.90
0.05%	3702.00	0.025%	0.05%	0.001	3701.70	82.242	9369966.0	23241642566.8	36469.8	7646269.7	3.70	23241642.57	7646.27	23249288.84
0.01%														
0.005%														
0.001%														
									Storm Totals:		630.9 (cfs) 1,251.4 (acre-ft)	831695468 (tons/storm)	467636.6 (tons/storm)	832163105.1 (tons/storm)

50.000% 100.000% 2.00

.

JUF110 100 yr 24 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer	Gage Station #:		Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	45.01	0.048568988	56.00402471
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00													
90.0%	0.00	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
80.0%	17.50	5.000%	10.000%	0.20	8.75	0.194	0.082	0.11	0.017	0.03	1.8	0.02	0.01	0.03
70.0%	66.30	5.000%	10.00%	0.20	41.90	0.931	0.848	5.38	0.855	1.79	8.4	1.08	0.36	1.43
60.0%	69.10	5.000%	10.00%	0.20	67.70	1.504	2.556	26.17	2.470	5.18	13.5	5.23	1.04	6.27
50.0%	71.90	5.000%	10.00%	0.20	70.50	1.566	2.812	29.98	2.701	5.67	14.1	6.00	1.13	7.13
40.0%	75.50	5.000%	10.00%	0.20	73.70	1.637	3.122	34.79	2.978	6.25	14.7	6.96	1.25	8.21
30.0%	153.80	5.000%	10.00%	0.20	114.65	2.547	8.929	154.80	7.868	16.51	22.9	30.96	3.30	34.26
20.0%	402.20	5.000%	10.00%	0.20	278.00	6.176	74.914	3149.12	54.944	115.31	55.6	629.82	23.06	652.89
10.0%	739.30	5.000%	10.00%	0.20	570.75	12.681	423.327	36534.60	266.106	558.47	114.2	7306.92	111.69	7418.61
5.0%	1604.20	2.500%	5.00%	0.10	1171.75	26.033	2393.375	424061.41	1288.567	2704.27	117.2	42406.14	270.43	42676.57
4.0%	1998.30	0.500%	1.00%	0.02	1801.25	40.019	6741.6	1836205.5	3308.3	6943.1	36.0	36724.1	138.9	36863.0
3.0%	2472.30	0.500%	1.00%	0.02	2235.30	49.663	11339.3	3832717.5	5311.5	11147.1	44.7	76654.4	222.9	76877.3
2.0%	2972.20	0.500%	1.00%	0.02	2722.25	60.482	18227.9	7503205.9	8183.1	17173.5	54.4	150064.1	343.5	150407.6
1.50%	3224.70	0.250%	0.50%	0.01	3098.45	68.840	24896.2	11664344.8	10869.1	22810.6	31.0	116643.4	228.1	116871.6
1.00%	3480.30	0.250%	0.50%	0.01	3352.50	74.484	30099.7	15258564.1	12919.4	27113.6	33.5	152585.6	271.1	152856.8
0.90%	3529.10	0.050%	0.10%	0.00	3504.70	77.866	33496.7	17751558.2	14240.6	29886.2	7.0	35503.1	59.8	35562.9
0.80%	3552.30	0.050%	0.10%	0.00	3540.70	78.665	34331.5	18380797.3	14563.3	30563.5	7.1	36761.6	61.1	36822.7
0.70%	3588.40	0.050%	0.10%	0.00	3570.35	79.324	35028.0	18910750.4	14832.1	31127.6	7.1	37821.5	62.3	37883.8
0.60%	3614.90	0.050%	0.10%	0.00	3601.65	80.020	35772.1	19481814.2	15118.7	31729.1	7.2	38963.6	63.5	39027.1
0.50%	3649.00	0.050%	0.10%	0.00	3631.95	80.693	36501.3	20046137.8	15399.0	32317.4	7.3	40092.3	64.6	40156.9
0.25%	3689.00	0.125%	0.25%	0.01	3669.00	81.516	37404.5	20751756.0	15745.6	33044.7	18.3	103758.8	165.2	103924.0
0.10%	3701.40	0.075%	0.15%	0.00	3695.20	82.098	38051.1	21261207.0	15993.2	33564.4	11.1	63783.6	100.7	63884.3
0.05%	3702.00	0.025%	0.05%	0.00	3701.70	82.242	38212.5	21388952.5	16055.0	33694.0	3.7	21389.0	33.7	21422.6
0.01%														
0.005%														
0.001%														
									Storm Totals:		**630.9** (cfs) **1,251.4** (acre-ft)	**961138** (tons/storm)	**2228** (tons/storm)	**963366** (tons/storm)

.

Flow Duration JUF130
48 hour, 2 day duration

	2 yr 2 hr	10 yr 2 hr	100 yr 2 hr	100 yr 24 h
1	0	0	0	0
0.9	0.4	3.2	17.1	0
0.8	0.4	3.6	19.2	17.3
0.7	0.5	4	21.6	80.9
0.6	0.5	4.5	24.3	84.5
0.5	0.6	5.1	27.4	88.3
0.4	0.7	5.8	30.9	92.7
0.3	0.8	6.5	34.8	170.4
0.2	0.9	7.3	39.3	431
0.1	4.8	22.7	98.1	777.5
0.05	35.7	158.7	652.2	1674.8
0.04	43.8	213.3	924.8	2085
0.03	63.1	279.8	1242.9	2570.2
0.02	86.5	369.9	1600.6	3088
0.015	97.9	411.6	1757.6	3351.3
0.01	110.2	450.7	1899.2	3602.5
0.009	112.2	456.3	1924.3	3644
0.008	113.1	461.2	1936.3	3670.4
0.007	115	465.5	1958.9	3713
0.006	116.6	469.9	1979.4	3747.4
0.005	117.9	474.3	1992.1	3768.7
0.0025	119.8	480	2016.8	3815.5
0.001	120.4	481.4	2025.7	3826.3
0.0005	120.5	481.6	2025.9	3827.1
0.0001	#N/A	#N/A	#N/A	#N/A
0.00005	#N/A	#N/A	#N/A	#N/A
0.00001	#N/A	#N/A	#N/A	#N/A

JUF130 2 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	48.88	5.219563508	253.1536392
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.400	5.000%	10.000%	0.200	0.20	0.004	0.099	0.014	0.072	16.19	0.04	0.00	3.24	3.24
80.0%	0.400	5.000%	10.000%	0.200	0.40	0.008	0.099	0.027	0.072	16.20	0.08	0.01	3.24	3.24
70.0%	0.500	5.000%	10.00%	0.200	0.45	0.009	0.099	0.030	0.072	16.20	0.09	0.01	3.24	3.25
60.0%	0.500	5.000%	10.00%	0.200	0.50	0.010	0.099	0.034	0.072	16.20	0.10	0.01	3.24	3.25
50.0%	0.600	5.000%	10.00%	0.200	0.55	0.011	0.099	0.037	0.072	16.20	0.11	0.01	3.24	3.25
40.0%	0.700	5.000%	10.00%	0.200	0.65	0.013	0.099	0.044	0.072	16.20	0.13	0.01	3.24	3.25
30.0%	0.800	5.000%	10.00%	0.200	0.75	0.015	0.099	0.051	0.072	16.20	0.15	0.01	3.24	3.25
20.0%	0.900	5.000%	10.00%	0.200	0.85	0.017	0.099	0.057	0.072	16.21	0.17	0.01	3.24	3.25
10.0%	4.800	5.000%	10.00%	0.200	2.85	0.058	0.099	0.193	0.073	16.46	0.57	0.04	3.29	3.33
5.0%	35.700	2.500%	5.00%	0.100	20.25	0.414	0.136	1.876	0.198	44.56	2.03	0.19	4.46	4.64
4.0%	43.800	0.500%	1.00%	0.020	39.75	0.813	0.531	14.435	0.697	157.17	0.80	0.29	3.14	3.43
3.0%	63.100	0.500%	1.00%	0.020	53.45	1.094	1.377	50.295	1.336	301.21	1.07	1.01	6.02	7.03
2.0%	86.500	0.500%	1.00%	0.020	74.80	1.530	4.469	228.491	2.881	649.83	1.50	4.57	13.00	17.57
1.50%	97.900	0.250%	0.50%	0.010	92.20	1.886	9.493	598.236	4.691	1057.93	0.92	5.98	10.58	16.56
1.00%	110.200	0.250%	0.50%	0.010	104.05	2.129	14.720	1046.891	6.229	1404.82	1.04	10.47	14.05	24.52
0.90%	112.200	0.050%	0.10%	0.002	111.20	2.275	18.745	1424.763	7.283	1642.48	0.22	2.85	3.28	6.13
0.80%	113.100	0.050%	0.10%	0.002	112.65	2.305	19.650	1513.038	7.508	1693.35	0.23	3.03	3.39	6.41
0.70%	115.000	0.050%	0.10%	0.002	114.05	2.333	20.554	1602.303	7.730	1743.32	0.23	3.20	3.49	6.69
0.60%	116.600	0.050%	0.10%	0.002	115.80	2.369	21.726	1719.660	8.012	1806.99	0.23	3.44	3.61	7.05
0.50%	117.900	0.050%	0.10%	0.002	117.25	2.399	22.734	1821.936	8.250	1860.75	0.23	3.64	3.72	7.37
0.25%	119.800	0.125%	0.25%	0.005	118.85	2.432	23.885	1940.288	8.518	1921.15	0.59	9.70	9.61	19.31
0.10%	120.400	0.075%	0.15%	0.003	120.10	2.457	24.813	2036.893	8.731	1969.13	0.36	6.11	5.91	12.02
0.05%	120.500	0.025%	0.05%	0.001	120.45	2.464	25.077	2064.610	8.791	1982.68	0.12	2.06	1.98	4.05
0.01%														
0.005%														
0.001%														
									Storm Totals:		11.0 (cfs) 21.8 (acre-ft)	56.6 (tons/storm)	115.4 (tons/storm)	172.1 (tons/storm)

50.000% 100.000% 2.00

.

JUF130 2 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	48.88	0.05035835	62.37001276
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.400	5.000%	10.000%	0.20	0.20	0.004	0.064	0.00	0.000	0.00	0.0	0.00	0.00	0.00
80.0%	0.400	5.000%	10.000%	0.20	0.40	0.008	0.064	0.00	0.000	0.00	0.1	0.00	0.00	0.00
70.0%	0.500	5.000%	10.00%	0.20	0.45	0.009	0.064	0.00	0.000	0.00	0.1	0.00	0.00	0.00
60.0%	0.500	5.000%	10.00%	0.20	0.50	0.010	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
50.0%	0.600	5.000%	10.00%	0.20	0.55	0.011	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
40.0%	0.700	5.000%	10.00%	0.20	0.65	0.013	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
30.0%	0.800	5.000%	10.00%	0.20	0.75	0.015	0.064	0.01	0.000	0.00	0.2	0.00	0.00	0.00
20.0%	0.900	5.000%	10.00%	0.20	0.85	0.017	0.064	0.01	0.000	0.00	0.2	0.00	0.00	0.00
10.0%	4.800	5.000%	10.00%	0.20	2.85	0.058	0.065	0.03	0.000	0.00	0.6	0.01	0.00	0.01
5.0%	35.700	2.500%	5.00%	0.10	20.25	0.414	0.175	0.60	0.136	0.29	2.0	0.06	0.03	0.09
4.0%	43.800	0.500%	1.00%	0.02	39.75	0.813	0.630	4.22	0.633	1.38	0.8	0.08	0.03	0.11
3.0%	63.100	0.500%	1.00%	0.02	53.45	1.094	1.220	10.98	1.222	2.66	1.1	0.22	0.05	0.27
2.0%	86.500	0.500%	1.00%	0.02	74.80	1.530	2.662	33.53	2.566	5.58	1.5	0.67	0.11	0.78
1.50%	97.900	0.250%	0.50%	0.01	92.20	1.886	4.364	67.75	4.066	8.85	0.9	0.68	0.09	0.77
1.00%	110.200	0.250%	0.50%	0.01	104.05	2.129	5.818	101.93	5.304	11.54	1.0	1.02	0.12	1.13
0.90%	112.200	0.050%	0.10%	0.00	111.20	2.275	6.816	127.64	6.138	13.36	0.2	0.26	0.03	0.28
0.80%	113.100	0.050%	0.10%	0.00	112.65	2.305	7.030	133.37	6.315	13.74	0.2	0.27	0.03	0.29
0.70%	115.000	0.050%	0.10%	0.00	114.05	2.333	7.241	139.07	6.489	14.12	0.2	0.28	0.03	0.31
0.60%	116.600	0.050%	0.10%	0.00	115.80	2.369	7.509	146.43	6.709	14.60	0.2	0.29	0.03	0.32
0.50%	117.900	0.050%	0.10%	0.00	117.25	2.399	7.735	152.73	6.895	15.00	0.2	0.31	0.03	0.34
0.25%	119.800	0.125%	0.25%	0.01	118.85	2.432	7.990	159.91	7.104	15.46	0.6	0.80	0.08	0.88
0.10%	120.400	0.075%	0.15%	0.00	120.10	2.457	8.192	165.69	7.269	15.82	0.4	0.50	0.05	0.54
0.05%	120.500	0.025%	0.05%	0.00	120.45	2.464	8.249	167.33	7.316	15.92	0.1	0.17	0.02	0.18
0.01%														
0.005%														
0.001%														
									Storm Totals:		11.0 (cfs) / 21.8 (acre-ft)	5.6 (tons/storm)	0.7 (tons/storm)	6.3 (tons/storm)

.

JUF130 10 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	48.88	5.219563508	253.1536392
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	3.200	5.000%	10.000%	0.200	1.60	0.033	0.099	0.108	0.072	16.26	0.32	0.02	3.25	3.27
80.0%	3.600	5.000%	10.000%	0.200	3.40	0.070	0.099	0.230	0.074	16.60	0.68	0.05	3.32	3.37
70.0%	4.000	5.000%	10.00%	0.200	3.80	0.078	0.099	0.257	0.074	16.73	0.76	0.05	3.35	3.40
60.0%	4.500	5.000%	10.00%	0.200	4.25	0.087	0.099	0.288	0.075	16.89	0.85	0.06	3.38	3.43
50.0%	5.100	5.000%	10.00%	0.200	4.80	0.098	0.099	0.325	0.076	17.12	0.96	0.07	3.42	3.49
40.0%	5.800	5.000%	10.00%	0.200	5.45	0.111	0.099	0.370	0.077	17.45	1.09	0.07	3.49	3.56
30.0%	6.500	5.000%	10.00%	0.200	6.15	0.126	0.099	0.418	0.079	17.86	1.23	0.08	3.57	3.66
20.0%	7.300	5.000%	10.00%	0.200	6.90	0.141	0.100	0.470	0.082	18.39	1.38	0.09	3.68	3.77
10.0%	22.700	5.000%	10.00%	0.200	15.00	0.307	0.111	1.139	0.133	30.09	3.00	0.23	6.02	6.25
5.0%	158.700	2.500%	5.00%	0.100	90.70	1.856	8.9	554.6	4.5	1018.1	9.07	55.46	101.81	157.27
4.0%	213.300	0.500%	1.00%	0.020	186.00	3.805	122.6	15583.1	24.6	5540.6	3.72	311.66	110.81	422.47
3.0%	279.800	0.500%	1.00%	0.020	246.55	5.044	343.6	57896.6	47.9	10811.5	4.93	1157.93	216.23	1374.16
2.0%	369.900	0.500%	1.00%	0.020	324.85	6.646	942.3	209227.6	92.3	20811.7	6.50	4184.55	416.23	4600.79
1.50%	411.600	0.250%	0.50%	0.010	390.75	7.994	1852.2	494679.0	143.1	32275.9	3.91	4946.79	322.76	5269.55
1.00%	450.700	0.250%	0.50%	0.010	431.15	8.821	2654.7	782335.0	180.8	40776.4	4.31	7823.35	407.76	8231.11
0.90%	456.300	0.050%	0.10%	0.002	453.50	9.278	3193.9	990033.6	203.9	45979.7	0.91	1980.07	91.96	2072.03
0.80%	461.200	0.050%	0.10%	0.002	458.75	9.385	3331.3	1044572.9	209.5	47254.7	0.92	2089.15	94.51	2183.66
0.70%	465.500	0.050%	0.10%	0.002	463.35	9.479	3455.2	1094274.1	214.5	48388.5	0.93	2188.55	96.78	2285.33
0.60%	469.900	0.050%	0.10%	0.002	467.70	9.568	3575.3	1142964.9	219.4	49475.1	0.94	2285.93	98.95	2384.88
0.50%	474.300	0.050%	0.10%	0.002	472.10	9.658	3700.0	1193930.1	224.3	50588.4	0.94	2387.86	101.18	2489.04
0.25%	480.000	0.125%	0.25%	0.005	477.15	9.762	3846.8	1254606.0	230.0	51883.8	2.39	6273.03	259.42	6532.45
0.10%	481.400	0.075%	0.15%	0.003	480.70	9.834	3952.6	1298689.4	234.1	52805.9	1.44	3896.07	158.42	4054.49
0.05%	481.600	0.025%	0.05%	0.001	481.50	9.851	3976.7	1308789.6	235.1	53015.0	0.48	1308.79	53.01	1361.80
0.01%														
0.005%														
0.001%														
											51.6 (cfs)	40890	2563.3	43453.2
											102.4 (acre-ft)	(tons/storm)	(tons/storm)	(tons/storm)

Storm Totals:

50.000% 100.000% 2.00

.

JUF130 10 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	48.88	0.05035835	62.37001276
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	3.200	5.000%	10.000%	0.20	1.60	0.033	0.064	0.02	0.000	0.00	0.3	0.00	0.00	0.00
80.0%	3.600	5.000%	10.000%	0.20	3.40	0.070	0.065	0.04	0.000	0.00	0.7	0.01	0.00	0.01
70.0%	4.000	5.000%	10.00%	0.20	3.80	0.078	0.066	0.04	0.000	0.00	0.8	0.01	0.00	0.01
60.0%	4.500	5.000%	10.00%	0.20	4.25	0.087	0.066	0.05	0.000	0.00	0.9	0.01	0.00	0.01
50.0%	5.100	5.000%	10.00%	0.20	4.80	0.098	0.067	0.05	0.000	0.00	1.0	0.01	0.00	0.01
40.0%	5.800	5.000%	10.00%	0.20	5.45	0.111	0.068	0.06	0.000	0.00	1.1	0.01	0.00	0.01
30.0%	6.500	5.000%	10.00%	0.20	6.15	0.126	0.070	0.07	0.000	0.00	1.2	0.01	0.00	0.01
20.0%	7.300	5.000%	10.00%	0.20	6.90	0.141	0.072	0.08	0.003	0.01	1.4	0.02	0.00	0.02
10.0%	22.700	5.000%	10.00%	0.20	15.00	0.307	0.118	0.30	0.065	0.14	3.0	0.06	0.03	0.09
5.0%	158.700	2.500%	5.00%	0.10	90.70	1.856	4.197	64.11	3.922	8.53	9.1	6.41	0.85	7.26
4.0%	213.300	0.500%	1.00%	0.02	186.00	3.805	23.375	732.14	18.988	41.32	3.7	14.64	0.83	15.47
3.0%	279.800	0.500%	1.00%	0.02	246.55	5.044	46.020	1910.68	35.236	76.67	4.9	38.21	1.53	39.75
2.0%	369.900	0.500%	1.00%	0.02	324.85	6.646	89.359	4888.32	64.522	140.40	6.5	97.77	2.81	100.57
1.50%	411.600	0.250%	0.50%	0.01	390.75	7.994	139.388	9172.02	96.747	210.52	3.9	91.72	2.11	93.83
1.00%	450.700	0.250%	0.50%	0.01	431.15	8.821	176.644	12825.26	120.047	261.22	4.3	128.25	2.61	130.86
0.90%	456.300	0.050%	0.10%	0.00	453.50	9.278	199.501	15235.65	134.118	291.84	0.9	30.47	0.58	31.05
0.80%	461.200	0.050%	0.10%	0.00	458.75	9.385	205.107	15845.13	137.546	299.30	0.9	31.69	0.60	32.29
0.70%	465.500	0.050%	0.10%	0.00	463.35	9.479	210.094	16393.13	140.589	305.92	0.9	32.79	0.61	33.40
0.60%	469.900	0.050%	0.10%	0.00	467.70	9.568	214.874	16923.54	143.500	312.25	0.9	33.85	0.62	34.47
0.50%	474.300	0.050%	0.10%	0.00	472.10	9.658	219.774	17472.28	146.477	318.73	0.9	34.94	0.64	35.58
0.25%	480.000	0.125%	0.25%	0.01	477.15	9.762	225.477	18117.44	149.935	326.26	2.4	90.59	1.63	92.22
0.10%	481.400	0.075%	0.15%	0.00	480.70	9.834	229.537	18580.92	152.393	331.60	1.4	55.74	0.99	56.74
0.05%	481.600	0.025%	0.05%	0.00	481.50	9.851	230.458	18686.51	152.949	332.82	0.5	18.69	0.33	19.02
0.01%														
0.005%														
0.001%														
									Storm Totals:		51.6 (cfs) 102.4 (acre-ft)	705.9 (tons/storm)	16.8 (tons/storm)	722.7 (tons/storm)

.

JUF130 100 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	48.88	5.219563508	253.1536392
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	17.100	5.000%	10.000%	0.200	8.55	0.175	0.100	0.587	0.088	19.85	1.71	0.12	3.97	4.09
80.0%	19.200	5.000%	10.000%	0.200	18.15	0.371	0.123	1.532	0.169	38.06	3.63	0.31	7.61	7.92
70.0%	21.600	5.000%	10.00%	0.200	20.40	0.417	0.137	1.904	0.200	45.06	4.08	0.38	9.01	9.39
60.0%	24.300	5.000%	10.00%	0.200	22.95	0.470	0.157	2.460	0.241	54.39	4.59	0.49	10.88	11.37
50.0%	27.400	5.000%	10.00%	0.200	25.85	0.529	0.188	3.330	0.297	66.88	5.17	0.67	13.38	14.04
40.0%	30.900	5.000%	10.00%	0.200	29.15	0.596	0.238	4.740	0.371	83.64	5.83	0.95	16.73	17.68
30.0%	34.800	5.000%	10.00%	0.200	32.85	0.672	0.314	7.053	0.469	105.79	6.57	1.41	21.16	22.57
20.0%	39.300	5.000%	10.00%	0.200	37.05	0.758	0.433	10.970	0.601	135.46	7.41	2.19	27.09	29.29
10.0%	98.100	5.000%	10.00%	0.200	68.70	1.406	3.300	154.967	2.367	533.81	13.74	30.99	106.76	137.76
5.0%	652.200	2.500%	5.00%	0.100	375.15	7.675	1595.7	409157.7	129.9	29298.0	37.52	40915.77	2929.80	43845.57
4.0%	924.800	0.500%	1.00%	0.020	788.50	16.132	24171.0	13026981.1	759.1	171204.8	15.77	260539.62	3424.10	263963.72
3.0%	1242.900	0.500%	1.00%	0.020	1083.85	22.174	77419.0	57354153.1	1617.1	364708.5	21.68	1147083.06	7294.17	1154377.23
2.0%	1600.600	0.500%	1.00%	0.020	1421.75	29.087	208965.9	203070372.0	3082.3	695183.4	28.44	4061407.44	13903.67	4075311.11
1.50%	1757.600	0.250%	0.50%	0.010	1679.10	34.352	384105.2	440833622.0	4577.6	1032420.7	16.79	4408336.22	10324.21	4418660.43
1.00%	1899.200	0.250%	0.50%	0.010	1828.40	37.406	524582.3	655590662.6	5605.1	1264151.5	18.28	6555906.63	12641.51	6568548.14
0.90%	1924.300	0.050%	0.10%	0.002	1911.75	39.112	617520.6	806919957.7	6231.6	1405467.7	3.82	1613839.92	2810.94	1616650.85
0.80%	1936.300	0.050%	0.10%	0.002	1930.30	39.491	639729.2	844051523.3	6376.3	1438103.2	3.86	1688103.05	2876.21	1690979.25
0.70%	1958.900	0.050%	0.10%	0.002	1947.60	39.845	660959.2	879877824.0	6513.0	1468931.4	3.90	1759755.65	2937.86	1762693.51
0.60%	1979.400	0.050%	0.10%	0.002	1969.15	40.286	688115.2	926163984.1	6685.7	1507863.7	3.94	1852327.97	3015.73	1855343.70
0.50%	1992.100	0.050%	0.10%	0.002	1985.75	40.626	709579.4	963104774.4	6820.4	1538256.4	3.97	1926209.55	3076.51	1929286.06
0.25%	2016.800	0.125%	0.25%	0.005	2004.45	41.008	734337.2	1006094375.6	6974.1	1572915.5	10.02	5030471.88	7864.58	5038336.46
0.10%	2025.700	0.075%	0.15%	0.003	2021.25	41.352	757109.5	1045987965.9	7113.8	1604435.3	6.06	3137963.90	4813.31	3142777.20
0.05%	2025.900	0.025%	0.05%	0.001	2025.80	41.445	763364.3	1057003338.2	7152.0	1613034.3	2.03	1057003.34	1613.03	1058616.37
0.01%														
0.005%														
0.001%														
									Storm Totals:		228.8 (cfs) 453.8 (acre-ft)	34539901 (tons/storm)	79742.2 (tons/storm)	34619643.7 (tons/storm)

50.000% 100.000% 2.00

.

JUF130 100 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	48.88	0.05035835	62.37001276
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	17.100	5.000%	10.000%	0.20	8.55	0.175	0.078	0.11	0.011	0.02	1.7	0.02	0.00	0.03
80.0%	19.200	5.000%	10.000%	0.20	18.15	0.371	0.149	0.46	0.104	0.23	3.6	0.09	0.05	0.14
70.0%	21.600	5.000%	10.00%	0.20	20.40	0.417	0.177	0.61	0.138	0.30	4.1	0.12	0.06	0.18
60.0%	24.300	5.000%	10.00%	0.20	22.95	0.470	0.215	0.83	0.182	0.40	4.6	0.17	0.08	0.25
50.0%	27.400	5.000%	10.00%	0.20	25.85	0.529	0.265	1.15	0.239	0.52	5.2	0.23	0.10	0.33
40.0%	30.900	5.000%	10.00%	0.20	29.15	0.596	0.332	1.63	0.315	0.69	5.8	0.33	0.14	0.46
30.0%	34.800	5.000%	10.00%	0.20	32.85	0.672	0.422	2.33	0.413	0.90	6.6	0.47	0.18	0.65
20.0%	39.300	5.000%	10.00%	0.20	37.05	0.758	0.542	3.38	0.541	1.18	7.4	0.68	0.24	0.91
10.0%	98.100	5.000%	10.00%	0.20	68.70	1.406	2.181	25.23	2.128	4.63	13.7	5.05	0.93	5.97
5.0%	652.200	2.500%	5.00%	0.10	375.15	7.675	126.366	7983.17	88.477	192.53	37.5	798.32	19.25	817.57
4.0%	924.800	0.500%	1.00%	0.02	788.50	16.132	755.8	100360.8	451.1	981.6	15.8	2007.2	19.6	2026.8
3.0%	1242.900	0.500%	1.00%	0.02	1083.85	22.174	1626.2	296816.7	906.3	1972.2	21.7	5936.3	39.4	5975.8
2.0%	1600.600	0.500%	1.00%	0.02	1421.75	29.087	3126.2	748489.6	1643.4	3576.0	28.4	14969.8	71.5	15041.3
1.50%	1757.600	0.250%	0.50%	0.01	1679.10	34.352	4667.0	1319648.6	2366.9	5150.4	16.8	13196.5	51.5	13248.0
1.00%	1899.200	0.250%	0.50%	0.01	1828.40	37.406	5729.8	1764223.0	2853.0	6208.2	18.3	17642.2	62.1	17704.3
0.90%	1924.300	0.050%	0.10%	0.00	1911.75	39.112	6379.3	2053719.7	3146.0	6845.7	3.8	4107.4	13.7	4121.1
0.80%	1936.300	0.050%	0.10%	0.00	1930.30	39.491	6529.4	2122439.6	3213.4	6992.2	3.9	4244.9	14.0	4258.9
0.70%	1958.900	0.050%	0.10%	0.00	1947.60	39.845	6671.2	2187978.4	3276.9	7130.4	3.9	4376.0	14.3	4390.2
0.60%	1979.400	0.050%	0.10%	0.00	1969.15	40.286	6850.4	2271602.1	3356.9	7304.5	3.9	4543.2	14.6	4557.8
0.50%	1992.100	0.050%	0.10%	0.00	1985.75	40.626	6990.3	2337538.6	3419.3	7440.2	4.0	4675.1	14.9	4690.0
0.25%	2016.800	0.125%	0.25%	0.01	2004.45	41.008	7149.9	2413423.5	3490.3	7594.8	10.0	12067.1	38.0	12105.1
0.10%	2025.700	0.075%	0.15%	0.00	2021.25	41.352	7295.1	2483067.9	3554.7	7735.0	6.1	7449.2	23.2	7472.4
0.05%	2025.900	0.025%	0.05%	0.00	2025.80	41.445	7334.7	2502171.6	3572.3	7773.3	2.0	2502.2	7.8	2509.9
0.01%														
0.005%														
0.001%														
									Storm Totals:		228.8 (cfs) 453.8 (acre-ft)	98523 (tons/storm)	406 (tons/storm)	98928 (tons/storm)

.

JUF130 100 yr 24 hr Poor Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	48.88	5.219563508	253.1536392
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00	0.025%	0.050%	0.001										
90.0%	0.00	5.000%	10.000%	0.200	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
80.0%	17.30	5.000%	10.000%	0.200	8.65	0.177	0.101	0.594	0.088	19.95	1.73	0.12	3.99	4.11
70.0%	80.90	5.000%	10.00%	0.200	49.10	1.005	1.036	34.753	1.105	249.13	9.82	6.95	49.83	56.78
60.0%	84.50	5.000%	10.00%	0.200	82.70	1.692	6.409	362.289	3.639	820.63	16.54	72.46	164.13	236.58
50.0%	88.30	5.000%	10.00%	0.200	86.40	1.768	7.505	443.222	4.030	908.84	17.28	88.64	181.77	270.41
40.0%	92.70	5.000%	10.00%	0.200	90.50	1.852	8.874	548.954	4.491	1012.84	18.10	109.79	202.57	312.36
30.0%	170.40	5.000%	10.00%	0.200	131.55	2.691	34.585	3109.789	10.824	2441.13	26.31	621.96	488.23	1110.18
20.0%	431.00	5.000%	10.00%	0.200	300.70	6.152	710.306	145991.312	76.808	17322.99	60.14	29198.26	3464.60	32662.86
10.0%	777.50	5.000%	10.00%	0.200	604.25	12.362	9127.911	3769953.714	403.241	90945.97	120.85	753990.74	18189.19	772179.94
5.0%	1674.80	2.500%	5.00%	0.100	1226.15	25.085	121584.0	101898524.4	2168.1	488987.9	122.62	10189852.44	48898.79	10238751.23
4.0%	2085.00	0.500%	1.00%	0.020	1879.90	38.460	580703.0	746168244.3	5987.7	1350442.8	37.60	14923364.89	27008.86	14950373.74
3.0%	2570.20	0.500%	1.00%	0.020	2327.60	47.619	1268856.9	2018686727.1	9949.4	2243962.2	46.55	40373734.54	44879.24	40418613.78
2.0%	3088.00	0.500%	1.00%	0.020	2829.10	57.879	2591051.8	5010399301.7	15821.2	3568273.9	56.58	100207986.03	71365.48	100279351.51
1.50%	3351.30	0.250%	0.50%	0.010	3219.65	65.869	4158788.8	9152157180.2	21515.1	4852461.2	32.20	91521571.80	48524.61	91570096.41
1.00%	3602.50	0.250%	0.50%	0.010	3476.90	71.132	5509563.9	13093548630.6	25828.7	5825338.6	34.77	130935486.31	58253.39	130993739.69
0.90%	3644.00	0.050%	0.10%	0.002	3623.25	74.127	6406718.6	15866527486.6	28488.5	6425211.8	7.25	31733054.97	12850.42	31745905.40
0.80%	3670.40	0.050%	0.10%	0.002	3657.20	74.821	6629123.3	16571153849.4	29127.1	6569254.0	7.31	33142307.70	13138.51	33155446.21
0.70%	3713.00	0.050%	0.10%	0.002	3691.70	75.527	6860825.4	17312138147.0	29784.6	6717528.5	7.38	34624276.29	13435.06	34637711.35
0.60%	3747.40	0.050%	0.10%	0.002	3730.20	76.315	7126278.4	18169494321.7	30528.3	6885262.2	7.46	36338988.64	13770.52	36352759.17
0.50%	3768.70	0.050%	0.10%	0.002	3758.05	76.884	7322897.4	18810201282.5	31072.9	7008093.0	7.52	37620402.57	14016.19	37634418.75
0.25%	3815.50	0.125%	0.25%	0.005	3792.10	77.581	7568609.3	19617506504.2	31746.3	7159981.0	18.96	98087532.52	35799.90	98123332.43
0.10%	3826.30	0.075%	0.15%	0.003	3820.90	78.170	7781067.0	20321359887.6	32322.5	7289925.2	11.46	60964079.66	21869.78	60985949.44
0.05%	3827.10	0.025%	0.05%	0.001	3826.70	78.289	7824372.2	20465476428.9	32439.2	7316258.4	3.83	20465476.43	7316.26	20472792.69
0.01%														
0.005%														
0.001%														
									Storm Totals:		672.3 (cfs) 1,333.4 (acre-ft)	741912204 (tons/storm)	453871.3 (tons/storm)	742366075.0 (tons/storm)

50.000% 100.000% 2.00

.

JUF130 100 yr 24 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer	Gage Station #:		Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	48.88	0.05035835	62.37001276
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00													
90.0%	0.00	5.000%	10.000%	0.20	0.00	0.000	0.000	0.00	0.000	0.00	0.0	0.00	0.00	0.00
80.0%	17.30	5.000%	10.000%	0.20	8.65	0.177	0.078	0.11	0.011	0.02	1.7	0.02	0.00	0.03
70.0%	80.90	5.000%	10.00%	0.20	49.10	1.005	1.006	8.32	1.013	2.20	9.8	1.66	0.44	2.10
60.0%	84.50	5.000%	10.00%	0.20	82.70	1.692	3.373	46.97	3.201	6.97	16.5	9.39	1.39	10.79
50.0%	88.30	5.000%	10.00%	0.20	86.40	1.768	3.741	54.43	3.525	7.67	17.3	10.89	1.53	12.42
40.0%	92.70	5.000%	10.00%	0.20	90.50	1.852	4.175	63.63	3.903	8.49	18.1	12.73	1.70	14.43
30.0%	170.40	5.000%	10.00%	0.20	131.55	2.691	10.186	225.64	8.878	19.32	26.3	45.13	3.86	48.99
20.0%	431.00	5.000%	10.00%	0.20	300.70	6.152	74.199	3757.24	54.466	118.52	60.1	751.45	23.70	775.15
10.0%	777.50	5.000%	10.00%	0.20	604.25	12.362	398.170	40515.88	251.666	547.62	120.9	8103.18	109.52	8212.70
5.0%	1674.80	2.500%	5.00%	0.10	1226.15	25.085	2188.816	451952.12	1187.893	2584.84	122.6	45195.21	258.48	45453.70
4.0%	2085.00	0.500%	1.00%	0.02	1879.90	38.460	6126.3	1939419.4	3032.2	6598.1	37.6	38788.4	132.0	38920.3
3.0%	2570.20	0.500%	1.00%	0.02	2327.60	47.619	10248.0	4016878.9	4844.0	10540.5	46.6	80337.6	210.8	80548.4
2.0%	3088.00	0.500%	1.00%	0.02	2829.10	57.879	16395.9	7811309.5	7430.8	16169.2	56.6	156226.2	323.4	156549.6
1.50%	3351.30	0.250%	0.50%	0.01	3219.65	65.869	22387.1	12137968.3	9867.1	21470.5	32.2	121379.7	214.7	121594.4
1.00%	3602.50	0.250%	0.50%	0.01	3476.90	71.132	26940.3	15773699.9	11678.7	25412.7	34.8	157737.0	254.1	157991.1
0.90%	3644.00	0.050%	0.10%	0.00	3623.25	74.127	29752.8	18153753.0	12783.8	27817.4	7.2	36307.5	55.6	36363.1
0.80%	3670.40	0.050%	0.10%	0.00	3657.20	74.821	30428.7	18740113.8	13048.0	28392.2	7.3	37480.2	56.8	37537.0
0.70%	3713.00	0.050%	0.10%	0.00	3691.70	75.527	31124.7	19349556.4	13319.4	28982.8	7.4	38699.1	58.0	38757.1
0.60%	3747.40	0.050%	0.10%	0.00	3730.20	76.315	31912.2	20046046.1	13625.9	29649.7	7.5	40092.1	59.3	40151.4
0.50%	3768.70	0.050%	0.10%	0.00	3758.05	76.884	32489.1	20560783.0	13850.0	30137.3	7.5	41121.6	60.3	41181.8
0.25%	3815.50	0.125%	0.25%	0.01	3792.10	77.581	33202.6	21202716.3	14126.7	30739.4	19.0	106013.6	153.7	106167.3
0.10%	3826.30	0.075%	0.15%	0.00	3820.90	78.170	33813.2	21756620.8	14363.0	31253.7	11.5	65269.9	93.8	65363.6
0.05%	3827.10	0.025%	0.05%	0.00	3826.70	78.289	33936.9	21869395.2	14410.8	31357.8	3.8	21869.4	31.4	21900.8
0.01%														
0.005%														
0.001%														

Storm Totals:	672.3 (cfs) / 1,333.4 (acre-ft)	995452 (tons/storm)	2104 (tons/storm)	997556 (tons/storm)

.

Flow Duration JUF140
48 hour, 2 day duration

	2 yr 2 hr	10 yr 2 hr	100 yr 2 hr	100 yr 24 h
1	0	0	0	0
0.9	0.4	3.2	17.2	0.6
0.8	0.4	3.6	19.3	33
0.7	0.5	4.1	21.8	81.4
0.6	0.6	4.6	24.5	85
0.5	0.6	5.2	27.6	88.8
0.4	0.7	5.8	31.1	93.7
0.3	0.8	6.6	35.1	206.3
0.2	0.9	7.4	39.6	515
0.1	9.4	32.5	121.8	954.8
0.05	82.3	257.4	884	2103.3
0.04	88.4	336.1	1232.8	2623.2
0.03	94.5	398	1622.5	3208.7
0.02	100.3	440.1	1987.3	3831.3
0.015	109.4	496.5	2188.5	4156
0.01	127.6	554.3	2387.1	4502.6
0.009	130.5	563.9	2421	4550
0.008	133.2	571.6	2436.9	4592.8
0.007	135.8	578.8	2466.3	4632
0.006	138.8	584.4	2484.4	4680.6
0.005	141.1	590.3	2502.8	4717.1
0.0025	144.3	599.4	2534.1	4766.3
0.001	145.2	601.9	2542.6	4783.5
0.0005	145.2	601.9	2542.9	4784
0.0001	#N/A	#N/A	#N/A	#N/A
0.00005	#N/A	#N/A	#N/A	#N/A
0.00001	#N/A	#N/A	#N/A	#N/A

JUF140 2 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	52.53	5.56330338	257.5822093
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.400	5.000%	10.000%	0.200	0.20	0.004	0.099	0.014	0.072	17.26	0.04	0.00	3.45	3.45
80.0%	0.400	5.000%	10.000%	0.200	0.40	0.008	0.099	0.028	0.072	17.26	0.08	0.01	3.45	3.46
70.0%	0.500	5.000%	10.00%	0.200	0.45	0.009	0.099	0.031	0.072	17.26	0.09	0.01	3.45	3.46
60.0%	0.600	5.000%	10.00%	0.200	0.55	0.010	0.099	0.038	0.072	17.26	0.11	0.01	3.45	3.46
50.0%	0.600	5.000%	10.00%	0.200	0.60	0.011	0.099	0.041	0.072	17.27	0.12	0.01	3.45	3.46
40.0%	0.700	5.000%	10.00%	0.200	0.65	0.012	0.099	0.045	0.072	17.27	0.13	0.01	3.45	3.46
30.0%	0.800	5.000%	10.00%	0.200	0.75	0.014	0.099	0.052	0.072	17.27	0.15	0.01	3.45	3.46
20.0%	0.900	5.000%	10.00%	0.200	0.85	0.016	0.099	0.058	0.072	17.27	0.17	0.01	3.45	3.47
10.0%	9.400	5.000%	10.00%	0.200	5.15	0.098	0.099	0.355	0.076	18.24	1.03	0.07	3.65	3.72
5.0%	82.300	2.500%	5.00%	0.100	45.85	0.873	0.659	21.012	0.811	195.02	4.59	2.10	19.50	21.60
4.0%	88.400	0.500%	1.00%	0.020	85.35	1.625	5.540	328.825	3.311	795.94	1.71	6.58	15.92	22.50
3.0%	94.500	0.500%	1.00%	0.020	91.45	1.741	7.103	451.760	3.889	934.80	1.83	9.04	18.70	27.73
2.0%	100.300	0.500%	1.00%	0.020	97.40	1.854	8.920	604.229	4.506	1083.13	1.95	12.08	21.66	33.75
1.50%	109.400	0.250%	0.50%	0.010	104.85	1.996	11.651	849.561	5.355	1287.24	1.05	8.50	12.87	21.37
1.00%	127.600	0.250%	0.50%	0.010	118.50	2.256	18.176	1497.914	7.139	1716.07	1.19	14.98	17.16	32.14
0.90%	130.500	0.050%	0.10%	0.002	129.05	2.457	24.796	2225.465	8.727	2097.89	0.26	4.45	4.20	8.65
0.80%	133.200	0.050%	0.10%	0.002	131.85	2.510	26.814	2458.792	9.180	2206.81	0.26	4.92	4.41	9.33
0.70%	135.800	0.050%	0.10%	0.002	134.50	2.560	28.832	2696.951	9.621	2312.87	0.27	5.39	4.63	10.02
0.60%	138.800	0.050%	0.10%	0.002	137.30	2.614	31.082	2967.937	10.101	2428.11	0.27	5.94	4.86	10.79
0.50%	141.100	0.050%	0.10%	0.002	139.95	2.664	33.326	3243.710	10.567	2540.20	0.28	6.49	5.08	11.57
0.25%	144.300	0.125%	0.25%	0.005	142.70	2.716	35.779	3550.807	11.064	2659.65	0.71	17.75	13.30	31.05
0.10%	145.200	0.075%	0.15%	0.003	144.75	2.755	37.690	3794.256	11.443	2750.78	0.43	11.38	8.25	19.64
0.05%	145.200	0.025%	0.05%	0.001	145.20	2.764	38.120	3849.411	11.527	2771.03	0.15	3.85	2.77	6.62
0.01%														
0.005%														
0.001%														

Storm Totals:	16.9 (cfs) / 33.4 (acre-ft)	113.6 (tons/storm)	184.6 (tons/storm)	298.2 (tons/storm)

50.000% 100.000% 2.00

.

JUF140 2 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	52.53	0.05197561	68.5216043
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.400	5.000%	10.000%	0.20	0.20	0.004	0.064	0.00	0.000	0.00	0.0	0.00	0.00	0.00
80.0%	0.400	5.000%	10.000%	0.20	0.40	0.008	0.064	0.00	0.000	0.00	0.1	0.00	0.00	0.00
70.0%	0.500	5.000%	10.00%	0.20	0.45	0.009	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
60.0%	0.600	5.000%	10.00%	0.20	0.55	0.010	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
50.0%	0.600	5.000%	10.00%	0.20	0.60	0.011	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
40.0%	0.700	5.000%	10.00%	0.20	0.65	0.012	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
30.0%	0.800	5.000%	10.00%	0.20	0.75	0.014	0.064	0.01	0.000	0.00	0.2	0.00	0.00	0.00
20.0%	0.900	5.000%	10.00%	0.20	0.85	0.016	0.064	0.01	0.000	0.00	0.2	0.00	0.00	0.00
10.0%	9.400	5.000%	10.00%	0.20	5.15	0.098	0.067	0.06	0.000	0.00	1.0	0.01	0.00	0.01
5.0%	82.300	2.500%	5.00%	0.10	45.85	0.873	0.736	6.24	0.741	1.66	4.6	0.62	0.17	0.79
4.0%	88.400	0.500%	1.00%	0.02	85.35	1.625	3.065	48.40	2.928	6.58	1.7	0.97	0.13	1.10
3.0%	94.500	0.500%	1.00%	0.02	91.45	1.741	3.608	61.05	3.408	7.65	1.8	1.22	0.15	1.37
2.0%	100.300	0.500%	1.00%	0.02	97.40	1.854	4.189	75.49	3.915	8.79	1.9	1.51	0.18	1.69
1.50%	109.400	0.250%	0.50%	0.01	104.85	1.996	4.991	96.81	4.604	10.34	1.0	0.97	0.10	1.07
1.00%	127.600	0.250%	0.50%	0.01	118.50	2.256	6.680	146.45	6.025	13.53	1.2	1.46	0.14	1.60
0.90%	130.500	0.050%	0.10%	0.00	129.05	2.457	8.189	195.51	7.266	16.32	0.3	0.39	0.03	0.42
0.80%	133.200	0.050%	0.10%	0.00	131.85	2.510	8.620	210.26	7.617	17.11	0.3	0.42	0.03	0.45
0.70%	135.800	0.050%	0.10%	0.00	134.50	2.560	9.040	224.94	7.957	17.87	0.3	0.45	0.04	0.49
0.60%	138.800	0.050%	0.10%	0.00	137.30	2.614	9.496	241.23	8.325	18.70	0.3	0.48	0.04	0.52
0.50%	141.100	0.050%	0.10%	0.00	139.95	2.664	9.941	257.39	8.682	19.50	0.3	0.51	0.04	0.55
0.25%	144.300	0.125%	0.25%	0.01	142.70	2.716	10.415	274.96	9.061	20.35	0.7	1.37	0.10	1.48
0.10%	145.200	0.075%	0.15%	0.00	144.75	2.755	10.777	288.60	9.349	21.00	0.4	0.87	0.06	0.93
0.05%	145.200	0.025%	0.05%	0.00	145.20	2.764	10.857	291.66	9.413	21.14	0.1	0.29	0.02	0.31
0.01%														
0.005%														
0.001%														
									Storm Totals:		16.9 (cfs) / 33.4 (acre-ft)	11.6 (tons/storm)	1.2 (tons/storm)	12.8 (tons/storm)

.

JUF140 10 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	52.53	5.56330338	257.5822093
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	3.200	5.000%	10.000%	0.200	1.60	0.030	0.099	0.110	0.072	17.32	0.32	0.02	3.46	3.49
80.0%	3.600	5.000%	10.000%	0.200	3.40	0.065	0.099	0.234	0.073	17.63	0.68	0.05	3.53	3.57
70.0%	4.100	5.000%	10.00%	0.200	3.85	0.073	0.099	0.265	0.074	17.75	0.77	0.05	3.55	3.60
60.0%	4.600	5.000%	10.00%	0.200	4.35	0.083	0.099	0.300	0.075	17.92	0.87	0.06	3.58	3.64
50.0%	5.200	5.000%	10.00%	0.200	4.90	0.093	0.099	0.338	0.075	18.13	0.98	0.07	3.63	3.69
40.0%	5.800	5.000%	10.00%	0.200	5.50	0.105	0.099	0.379	0.077	18.41	1.10	0.08	3.68	3.76
30.0%	6.600	5.000%	10.00%	0.200	6.20	0.118	0.099	0.428	0.078	18.79	1.24	0.09	3.76	3.84
20.0%	7.400	5.000%	10.00%	0.200	7.00	0.133	0.099	0.484	0.080	19.30	1.40	0.10	3.86	3.96
10.0%	32.500	5.000%	10.00%	0.200	19.95	0.380	0.126	1.742	0.174	41.85	3.99	0.35	8.37	8.72
5.0%	257.400	2.500%	5.00%	0.100	144.95	2.759	37.9	3818.7	11.5	2759.8	14.50	381.87	275.98	657.85
4.0%	336.100	0.500%	1.00%	0.020	296.75	5.649	519.9	107303.7	62.7	15078.7	5.94	2146.07	301.57	2447.65
3.0%	398.000	0.500%	1.00%	0.020	367.05	6.987	1131.8	288905.9	103.9	24984.2	7.34	5778.12	499.68	6277.80
2.0%	440.100	0.500%	1.00%	0.020	419.05	7.977	1837.7	535579.0	142.4	34227.1	8.38	10711.58	684.54	11396.12
1.50%	496.500	0.250%	0.50%	0.010	468.30	8.915	2759.6	898775.4	185.4	44569.6	4.68	8987.75	445.70	9433.45
1.00%	554.300	0.250%	0.50%	0.010	525.40	10.002	4204.0	1536162.0	243.7	58583.8	5.25	15361.62	585.84	15947.46
0.90%	563.900	0.050%	0.10%	0.002	559.10	10.643	5277.8	2052226.4	282.5	67911.4	1.12	4104.45	135.82	4240.28
0.80%	571.600	0.050%	0.10%	0.002	567.75	10.808	5582.8	2204394.9	293.0	70435.1	1.14	4408.79	140.87	4549.66
0.70%	578.800	0.050%	0.10%	0.002	575.20	10.950	5855.6	2342432.4	302.2	72651.6	1.15	4684.86	145.30	4830.17
0.60%	584.400	0.050%	0.10%	0.002	581.60	11.071	6097.5	2466355.6	310.3	74587.5	1.16	4932.71	149.17	5081.89
0.50%	590.300	0.050%	0.10%	0.002	587.35	11.181	6321.0	2582030.5	317.6	76352.0	1.17	5164.06	152.70	5316.77
0.25%	599.400	0.125%	0.25%	0.005	594.85	11.324	6621.4	2739267.5	327.3	78689.5	2.97	13696.34	393.45	14089.79
0.10%	601.900	0.075%	0.15%	0.003	600.65	11.434	6860.7	2865941.5	335.0	80525.3	1.80	8597.82	241.58	8839.40
0.05%	601.900	0.025%	0.05%	0.001	601.90	11.458	6913.1	2893834.6	336.6	80924.2	0.60	2893.83	80.92	2974.76
0.01%														
0.005%														
0.001%														
									Storm Totals:		68.6 (cfs) 136.0 (acre-ft)	91851 (tons/storm)	4270.6 (tons/storm)	96121.3 (tons/storm)

50.000% 100.000% 2.00

.

JUF140 10 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer	Gage Station #:		Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	52.53	0.05197561	68.5216043
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	3.200	5.000%	10.000%	0.20	1.60	0.030	0.064	0.02	0.000	0.00	0.3	0.00	0.00	0.00
80.0%	3.600	5.000%	10.000%	0.20	3.40	0.065	0.065	0.04	0.000	0.00	0.7	0.01	0.00	0.01
70.0%	4.100	5.000%	10.00%	0.20	3.85	0.073	0.065	0.05	0.000	0.00	0.8	0.01	0.00	0.01
60.0%	4.600	5.000%	10.00%	0.20	4.35	0.083	0.066	0.05	0.000	0.00	0.9	0.01	0.00	0.01
50.0%	5.200	5.000%	10.00%	0.20	4.90	0.093	0.067	0.06	0.000	0.00	1.0	0.01	0.00	0.01
40.0%	5.800	5.000%	10.00%	0.20	5.50	0.105	0.068	0.07	0.000	0.00	1.1	0.01	0.00	0.01
30.0%	6.600	5.000%	10.00%	0.20	6.20	0.118	0.069	0.08	0.000	0.00	1.2	0.02	0.00	0.02
20.0%	7.400	5.000%	10.00%	0.20	7.00	0.133	0.071	0.09	0.001	0.00	1.4	0.02	0.00	0.02
10.0%	32.500	5.000%	10.00%	0.20	19.95	0.380	0.154	0.57	0.110	0.25	4.0	0.11	0.05	0.16
5.0%	257.400	2.500%	5.00%	0.10	144.95	2.759	10.812	289.95	9.378	21.06	14.5	29.00	2.11	31.10
4.0%	336.100	0.500%	1.00%	0.02	296.75	5.649	60.433	3317.84	45.173	101.45	5.9	66.36	2.03	68.39
3.0%	398.000	0.500%	1.00%	0.02	367.05	6.987	100.804	6845.34	72.012	161.73	7.3	136.91	3.23	140.14
2.0%	440.100	0.500%	1.00%	0.02	419.05	7.977	138.672	10750.96	96.295	216.26	8.4	215.02	4.33	219.34
1.50%	496.500	0.250%	0.50%	0.01	468.30	8.915	181.206	15699.61	122.868	275.94	4.7	157.00	2.76	159.76
1.00%	554.300	0.250%	0.50%	0.01	525.40	10.002	239.045	23235.97	158.131	355.14	5.3	232.36	3.55	235.91
0.90%	563.900	0.050%	0.10%	0.00	559.10	10.643	277.646	28719.20	181.229	407.02	1.1	57.44	0.81	58.25
0.80%	571.600	0.050%	0.10%	0.00	567.75	10.808	288.102	30261.85	187.435	420.95	1.1	60.52	0.84	61.37
0.70%	578.800	0.050%	0.10%	0.00	575.20	10.950	297.290	31636.65	192.871	433.16	1.2	63.27	0.87	64.14
0.60%	584.400	0.050%	0.10%	0.00	581.60	11.071	305.318	32852.44	197.609	443.80	1.2	65.70	0.89	66.59
0.50%	590.300	0.050%	0.10%	0.00	587.35	11.181	312.637	33972.59	201.918	453.48	1.2	67.95	0.91	68.85
0.25%	599.400	0.125%	0.25%	0.01	594.85	11.324	322.337	35473.86	207.616	466.28	3.0	177.37	2.33	179.70
0.10%	601.900	0.075%	0.15%	0.00	600.65	11.434	329.957	36666.54	212.081	476.31	1.8	110.00	1.43	111.43
0.05%	601.900	0.025%	0.05%	0.00	601.90	11.458	331.613	36927.25	213.050	478.48	0.6	36.93	0.48	37.41
0.01%														
0.005%														
0.001%														
									Storm Totals:		68.6 (cfs) 136.0 (acre-ft)	1476.0 (tons/storm)	26.6 (tons/storm)	1502.6 (tons/storm)

.

JUF140 100 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	52.53	5.56330338	257.5822093
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	17.200	5.000%	10.000%	0.200	8.60	0.164	0.100	0.599	0.086	20.59	1.72	0.12	4.12	4.24
80.0%	19.300	5.000%	10.000%	0.200	18.25	0.347	0.118	1.500	0.155	37.16	3.65	0.30	7.43	7.73
70.0%	21.800	5.000%	10.00%	0.200	20.55	0.391	0.129	1.838	0.182	43.64	4.11	0.37	8.73	9.10
60.0%	24.500	5.000%	10.00%	0.200	23.15	0.441	0.145	2.332	0.217	52.28	4.63	0.47	10.46	10.92
50.0%	27.600	5.000%	10.00%	0.200	26.05	0.496	0.170	3.074	0.265	63.62	5.21	0.61	12.72	13.34
40.0%	31.100	5.000%	10.00%	0.200	29.35	0.559	0.208	4.254	0.328	78.82	5.87	0.85	15.76	16.61
30.0%	35.100	5.000%	10.00%	0.200	33.10	0.630	0.269	6.190	0.413	99.19	6.62	1.24	19.84	21.08
20.0%	39.600	5.000%	10.00%	0.200	37.35	0.711	0.363	9.439	0.526	126.44	7.47	1.89	25.29	27.18
10.0%	121.800	5.000%	10.00%	0.200	80.70	1.536	4.531	254.315	2.907	698.85	16.14	50.86	139.77	190.63
5.0%	884.000	2.500%	5.00%	0.100	502.90	9.573	3581.9	1252790.7	219.6	52796.4	50.29	125279.07	5279.64	130558.71
4.0%	1232.800	0.500%	1.00%	0.020	1058.40	20.148	54522.8	40133582.7	1287.7	309543.8	21.17	802671.65	6190.88	808862.53
3.0%	1622.500	0.500%	1.00%	0.020	1427.65	27.177	162984.1	161825357.5	2622.8	630491.1	28.55	3236507.15	12609.82	3249116.97
2.0%	1987.300	0.500%	1.00%	0.020	1804.90	34.358	384367.0	482479531.6	4579.6	1100899.0	36.10	9649590.63	22017.98	9671608.61
1.50%	2188.500	0.250%	0.50%	0.010	2087.90	39.746	654940.4	951023198.8	6474.4	1556391.9	20.88	9510231.99	15563.92	9525795.91
1.00%	2387.100	0.250%	0.50%	0.010	2287.80	43.551	915155.0	1456103842.8	8046.3	1934250.6	22.88	14561038.43	19342.51	14580380.93
0.90%	2421.000	0.050%	0.10%	0.002	2404.05	45.764	1097125.3	1834338015.9	9052.4	2176118.7	4.81	3668676.03	4352.24	3673028.27
0.80%	2436.900	0.050%	0.10%	0.002	2428.95	46.238	1139280.2	1924548048.0	9276.9	2230081.1	4.86	3849096.10	4460.16	3853556.26
0.70%	2466.300	0.050%	0.10%	0.002	2451.60	46.669	1178637.1	2009598795.3	9483.9	2279833.7	4.90	4019197.59	4559.67	4023757.26
0.60%	2484.400	0.050%	0.10%	0.002	2475.35	47.121	1220957.0	2101922025.3	9703.7	2332686.8	4.95	4203844.05	4665.37	4208509.42
0.50%	2502.800	0.050%	0.10%	0.002	2493.60	47.469	1254218.5	2175101987.5	9874.7	2373777.8	4.99	4350203.98	4747.56	4354951.53
0.25%	2534.100	0.125%	0.25%	0.005	2518.45	47.942	1300561.4	2277948028.3	10110.2	2430398.6	12.59	11389740.14	12151.99	11401892.13
0.10%	2542.600	0.075%	0.15%	0.003	2538.35	48.320	1338560.3	2363029108.4	10301.2	2476299.3	7.62	7089087.33	7428.90	7096516.22
0.05%	2542.900	0.025%	0.05%	0.001	2542.75	48.404	1347069.8	2382173436.4	10343.7	2486515.4	2.54	2382173.44	2486.52	2384659.95
0.01%														
0.005%														
0.001%														

Storm Totals:	282.5 (cfs) / 560.4 (acre-ft)	78837394 (tons/storm)	126101.3 (tons/storm)	78963495.5 (tons/storm)

50.000% 100.000% 2.00

.

JUF140 100 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	52.53	0.05197561	68.5216043
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	17.200	5.000%	10.000%	0.20	8.60	0.164	0.076	0.12	0.008	0.02	1.7	0.02	0.00	0.03
80.0%	19.300	5.000%	10.000%	0.20	18.25	0.347	0.137	0.46	0.088	0.20	3.7	0.09	0.04	0.13
70.0%	21.800	5.000%	10.00%	0.20	20.55	0.391	0.161	0.61	0.118	0.27	4.1	0.12	0.05	0.18
60.0%	24.500	5.000%	10.00%	0.20	23.15	0.441	0.193	0.83	0.157	0.35	4.6	0.17	0.07	0.24
50.0%	27.600	5.000%	10.00%	0.20	26.05	0.496	0.236	1.14	0.206	0.46	5.2	0.23	0.09	0.32
40.0%	31.100	5.000%	10.00%	0.20	29.35	0.559	0.293	1.59	0.272	0.61	5.9	0.32	0.12	0.44
30.0%	35.100	5.000%	10.00%	0.20	33.10	0.630	0.370	2.27	0.357	0.80	6.6	0.45	0.16	0.61
20.0%	39.600	5.000%	10.00%	0.20	37.35	0.711	0.474	3.27	0.469	1.05	7.5	0.65	0.21	0.87
10.0%	121.800	5.000%	10.00%	0.20	80.70	1.536	2.686	40.11	2.588	5.81	16.1	8.02	1.16	9.18
5.0%	884.000	2.500%	5.00%	0.10	502.90	9.573	215.135	20016.28	143.658	322.64	50.3	2001.63	32.26	2033.89
4.0%	1232.800	0.500%	1.00%	0.02	1058.40	20.148	1291.1	252810.6	734.6	1649.7	21.2	5056.2	33.0	5089.2
3.0%	1622.500	0.500%	1.00%	0.02	1427.65	27.177	2654.5	701121.9	1416.0	3180.1	28.6	14022.4	63.6	14086.0
2.0%	1987.300	0.500%	1.00%	0.02	1804.90	34.358	4669.1	1559126.5	2367.9	5317.9	36.1	31182.5	106.4	31288.9
1.50%	2188.500	0.250%	0.50%	0.01	2087.90	39.746	6631.1	2561471.7	3258.9	7319.1	20.9	25614.7	73.2	25687.9
1.00%	2387.100	0.250%	0.50%	0.01	2287.80	43.551	8264.7	3498119.9	3982.5	8944.1	22.9	34981.2	89.4	35070.6
0.90%	2421.000	0.050%	0.10%	0.00	2404.05	45.764	9312.6	4141939.7	4439.7	9971.0	4.8	8283.9	19.9	8303.8
0.80%	2436.900	0.050%	0.10%	0.00	2428.95	46.238	9546.6	4289997.2	4541.2	10198.9	4.9	8580.0	20.4	8600.4
0.70%	2466.300	0.050%	0.10%	0.00	2451.60	46.669	9762.4	4427889.1	4634.6	10408.6	4.9	8855.8	20.8	8876.6
0.60%	2484.400	0.050%	0.10%	0.00	2475.35	47.121	9991.7	4575810.9	4733.6	10631.0	5.0	9151.6	21.3	9172.9
0.50%	2502.800	0.050%	0.10%	0.00	2493.60	47.469	10170.1	4691824.2	4810.5	10803.6	5.0	9383.6	21.6	9405.3
0.25%	2534.100	0.125%	0.25%	0.01	2518.45	47.942	10415.9	4853114.3	4916.2	11041.1	12.6	24265.6	55.2	24320.8
0.10%	2542.600	0.075%	0.15%	0.00	2538.35	48.320	10615.2	4985070.6	5001.8	11233.4	7.6	14955.2	33.7	14988.9
0.05%	2542.900	0.025%	0.05%	0.00	2542.75	48.404	10659.6	5014585.4	5020.8	11276.1	2.5	5014.6	11.3	5025.9
0.01%														
0.005%														
0.001%														

Storm Totals:	282.5 (cfs) / 560.4 (acre-ft)	201359 (tons/storm)	604 (tons/storm)	201963 (tons/storm)

JUF140 100 yr 24 hr Poor Pre Fire

Stream:		Location:		Date:
Observer	Gage Station #:		Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	52.53	5.56330338	257.5822093
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00	0.025%	0.050%	0.001										
90.0%	0.60	5.000%	10.000%	0.200	0.30	0.006	0.099	0.021	0.072	17.26	0.06	0.00	3.45	3.46
80.0%	33.00	5.000%	10.000%	0.200	16.80	0.320	0.113	1.322	0.140	33.60	3.36	0.26	6.72	6.98
70.0%	81.40	5.000%	10.00%	0.200	57.20	1.089	1.357	53.981	1.323	317.99	11.44	10.80	63.60	74.39
60.0%	85.00	5.000%	10.00%	0.200	83.20	1.584	5.055	292.482	3.120	750.11	16.64	58.50	150.02	208.52
50.0%	88.80	5.000%	10.00%	0.200	86.90	1.654	5.910	357.179	3.453	829.97	17.38	71.44	165.99	237.43
40.0%	93.70	5.000%	10.00%	0.200	91.25	1.737	7.047	447.226	3.869	930.04	18.25	89.45	186.01	275.45
30.0%	206.30	5.000%	10.00%	0.200	150.00	2.855	42.924	4477.902	12.448	2992.38	30.00	895.58	598.48	1494.06
20.0%	515.00	5.000%	10.00%	0.200	360.65	6.865	1061.211	266175.105	99.678	23961.71	72.13	53235.02	4792.34	58027.36
10.0%	954.80	5.000%	10.00%	0.200	734.90	13.990	14352.121	7335402.974	541.052	130063.58	146.98	1467080.59	26012.72	1493093.31
5.0%	2103.30	2.500%	5.00%	0.100	1529.05	29.107	209499.6	222784219.4	3087.5	742194.3	152.91	22278421.94	74219.43	22352641.37
4.0%	2623.20	0.500%	1.00%	0.020	2363.25	44.987	1030518.7	1693733814.2	8691.5	2089349.2	47.27	33874676.28	41786.98	33916463.27
3.0%	3208.70	0.500%	1.00%	0.020	2915.95	55.509	2223382.9	4508934831.7	14323.9	3443321.9	58.32	90178696.63	68866.44	90247563.07
2.0%	3831.30	0.500%	1.00%	0.020	3520.00	67.007	4427754.8	10839415362.9	22409.2	5386949.1	70.40	216788307.26	107738.98	216896046.24
1.50%	4156.00	0.250%	0.50%	0.010	3993.65	76.024	7027434.3	19518499173.4	30252.5	7272405.1	39.94	195184991.73	72724.05	195257715.78
1.00%	4502.60	0.250%	0.50%	0.010	4329.30	82.413	9441396.8	28427165767.4	36650.2	8810351.3	43.29	284271657.67	88103.51	284359761.19
0.90%	4550.00	0.050%	0.10%	0.002	4526.30	86.163	11110889.3	34976132285.6	40739.6	9793413.4	9.05	69952264.57	19586.83	69971851.40
0.80%	4592.80	0.050%	0.10%	0.002	4571.40	87.022	11521368.5	36629662564.5	41711.2	10026977.2	9.14	73259325.13	20053.95	73279379.08
0.70%	4632.00	0.050%	0.10%	0.002	4612.40	87.802	11903994.4	38185572500.3	42606.0	10242080.2	9.22	76371145.00	20484.16	76391629.16
0.60%	4680.60	0.050%	0.10%	0.002	4656.30	88.638	12323833.0	39908590195.9	43576.4	10475335.3	9.31	79817180.39	20950.67	79838131.06
0.50%	4717.10	0.050%	0.10%	0.002	4698.85	89.448	12740930.6	41636322220.5	44528.9	10704326.6	9.40	83272644.44	21408.65	83294053.09
0.25%	4766.30	0.125%	0.25%	0.005	4741.70	90.264	13171242.0	43435060512.1	45500.3	10937836.5	23.71	217175302.56	54689.18	217229991.74
0.10%	4783.50	0.075%	0.15%	0.003	4774.90	90.896	13511832.7	44870216655.1	46261.3	11120769.2	14.32	134610649.97	33362.31	134644012.27
0.05%	4784.00	0.025%	0.05%	0.001	4783.75	91.064	13603692.5	45258995319.3	46465.4	11169829.8	4.78	45258995.32	11169.83	45270165.15
0.01%														
0.005%														
0.001%														

		50.000%	100.000%	2.00										
										Storm Totals:	817.3 (cfs) 1,621.1 (acre-ft)	1623815701 (tons/storm)	687124.3 (tons/storm)	1624502824.9 (tons/storm)

.

JUF140 100 yr 24 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	52.53	0.05197561	68.5216043
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00													
90.0%	0.60	5.000%	10.000%	0.20	0.30	0.006	0.064	0.00	0.000	0.00	0.1	0.00	0.00	0.00
80.0%	33.00	5.000%	10.000%	0.20	16.80	0.320	0.123	0.38	0.072	0.16	3.4	0.08	0.03	0.11
70.0%	81.40	5.000%	10.00%	0.20	57.20	1.089	1.208	12.79	1.211	2.72	11.4	2.56	0.54	3.10
60.0%	85.00	5.000%	10.00%	0.20	83.20	1.584	2.886	44.43	2.768	6.22	16.6	8.89	1.24	10.13
50.0%	88.80	5.000%	10.00%	0.20	86.90	1.654	3.198	51.42	3.046	6.84	17.4	10.28	1.37	11.65
40.0%	93.70	5.000%	10.00%	0.20	91.25	1.737	3.590	60.60	3.392	7.62	18.3	12.12	1.52	13.64
30.0%	206.30	5.000%	10.00%	0.20	150.00	2.855	11.737	325.70	10.110	22.71	30.0	65.14	4.54	69.68
20.0%	515.00	5.000%	10.00%	0.20	360.65	6.865	96.625	6447.16	69.287	155.61	72.1	1289.43	31.12	1320.55
10.0%	954.80	5.000%	10.00%	0.20	734.90	13.990	536.322	72919.79	330.083	741.32	147.0	14583.96	148.26	14732.22
5.0%	2103.30	2.500%	5.00%	0.10	1529.05	29.107	3131.498	885859.90	1645.892	3696.45	152.9	88585.99	369.65	88955.64
4.0%	2623.20	0.500%	1.00%	0.02	2363.25	44.987	8936.4	3907200.5	4276.2	9603.7	47.3	78144.0	192.1	78336.1
3.0%	3208.70	0.500%	1.00%	0.02	2915.95	55.509	14824.8	7997599.4	6779.6	15226.0	58.3	159952.0	304.5	160256.5
2.0%	3831.30	0.500%	1.00%	0.02	3520.00	67.007	23329.9	15193112.6	10244.7	23008.2	70.4	303862.3	460.2	304322.4
1.50%	4156.00	0.250%	0.50%	0.01	3993.65	76.024	31620.2	23362828.8	13512.3	30346.9	39.9	233628.3	303.5	233931.8
1.00%	4502.60	0.250%	0.50%	0.01	4329.30	82.413	38404.0	30759926.3	16128.2	36221.8	43.3	307599.3	362.2	307961.5
0.90%	4550.00	0.050%	0.10%	0.00	4526.30	86.163	42748.6	35797830.6	17781.4	39934.6	9.1	71595.7	79.9	71675.5
0.80%	4592.80	0.050%	0.10%	0.00	4571.40	87.022	43781.7	37028260.9	18172.2	40812.3	9.1	74056.5	81.6	74138.1
0.70%	4632.00	0.050%	0.10%	0.00	4612.40	87.802	44733.4	38172497.6	18531.5	41619.3	9.2	76345.0	83.2	76428.2
0.60%	4680.60	0.050%	0.10%	0.00	4656.30	88.638	45765.8	39425126.8	18920.5	42492.9	9.3	78850.3	85.0	78935.2
0.50%	4717.10	0.050%	0.10%	0.00	4698.85	89.448	46779.5	40666687.7	19301.7	43349.1	9.4	81333.4	86.7	81420.1
0.25%	4766.30	0.125%	0.25%	0.01	4741.70	90.264	47813.6	41944669.0	19689.8	44220.7	23.7	209723.3	221.1	209944.4
0.10%	4783.50	0.075%	0.15%	0.00	4774.90	90.896	48623.9	42954159.3	19993.4	44902.5	14.3	128862.5	134.7	128997.2
0.05%	4784.00	0.025%	0.05%	0.00	4783.75	91.064	48841.2	43226126.3	20074.7	45085.2	4.8	43226.1	45.1	43271.2
0.01%														
0.005%														
0.001%														

Storm Totals:	817.3 (cfs)	1951737	2998	1954735
	1,621.1 (acre-ft)	(tons/storm)	(tons/storm)	(tons/storm)

.

Flow Duration JUF150
48 hour, 2 day duration

	2 yr 2 hr	10 yr 2 hr	100 yr 2 hr	100 yr 24 h
1	0	0	0	0
0.9	0.4	3.3	17.3	2.7
0.8	0.4	3.7	19.5	78.8
0.7	0.5	4.1	21.9	82.3
0.6	0.6	4.6	24.7	85.9
0.5	0.6	5.2	27.8	89.7
0.4	0.7	5.9	31.3	96.8
0.3	0.8	6.6	35.4	273.8
0.2	0.9	7.5	39.9	614.5
0.1	14.9	43.8	150.4	1172
0.05	117.2	366.8	1238.6	2723
0.04	140.1	517.9	1780.9	3374.2
0.03	161.7	643.5	2422.7	4175.5
0.02	204.2	708.7	2861.5	4998.1
0.015	245.3	730.5	2927	5253.8
0.01	300.7	801.9	2981.9	5383
0.009	310.2	824.6	2988.9	5413.4
0.008	316.8	836.2	2991.3	5442.3
0.007	329.1	859	2993.4	5469
0.006	336.2	881.1	2996.5	5514.2
0.005	346.6	901.3	3021	5537.3
0.0025	363.4	933	3052.3	5596.7
0.001	368.5	943.1	3059.7	5612.9
0.0005	368.5	943.9	3060.5	5613.6
0.0001	#N/A	#N/A	#N/A	#N/A
0.00005	#N/A	#N/A	#N/A	#N/A
0.00001	#N/A	#N/A	#N/A	#N/A

JUF150 2 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	55.08	5.801264254	260.5325529
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.400	5.000%	10.000%	0.200	0.20	0.004	0.099	0.014	0.072	18.00	0.04	0.00	3.60	3.60
80.0%	0.400	5.000%	10.000%	0.200	0.40	0.007	0.099	0.028	0.072	18.00	0.08	0.01	3.60	3.61
70.0%	0.500	5.000%	10.00%	0.200	0.45	0.008	0.099	0.031	0.072	18.00	0.09	0.01	3.60	3.61
60.0%	0.600	5.000%	10.00%	0.200	0.55	0.010	0.099	0.038	0.072	18.00	0.11	0.01	3.60	3.61
50.0%	0.600	5.000%	10.00%	0.200	0.60	0.011	0.099	0.042	0.072	18.00	0.12	0.01	3.60	3.61
40.0%	0.700	5.000%	10.00%	0.200	0.65	0.012	0.099	0.045	0.072	18.00	0.13	0.01	3.60	3.61
30.0%	0.800	5.000%	10.00%	0.200	0.75	0.014	0.099	0.052	0.072	18.01	0.15	0.01	3.60	3.61
20.0%	0.900	5.000%	10.00%	0.200	0.85	0.015	0.099	0.059	0.072	18.01	0.17	0.01	3.60	3.61
10.0%	14.900	5.000%	10.00%	0.200	7.90	0.143	0.100	0.554	0.082	20.53	1.58	0.11	4.11	4.22
5.0%	117.200	2.500%	5.00%	0.100	66.05	1.199	1.890	87.809	1.646	412.49	6.61	8.78	41.25	50.03
4.0%	140.100	0.500%	1.00%	0.020	128.65	2.336	20.635	1867.394	7.749	1942.52	2.57	37.35	38.85	76.20
3.0%	161.700	0.500%	1.00%	0.020	150.90	2.740	36.912	3918.209	11.290	2829.99	3.02	78.36	56.60	134.96
2.0%	204.200	0.500%	1.00%	0.020	182.95	3.322	74.582	9598.254	17.803	4462.78	3.66	191.97	89.26	281.22
1.50%	245.300	0.250%	0.50%	0.010	224.75	4.081	158.243	25017.832	28.991	7267.26	2.25	250.18	72.67	322.85
1.00%	300.700	0.250%	0.50%	0.010	273.00	4.957	322.282	61890.546	45.989	11528.10	2.73	618.91	115.28	734.19
0.90%	310.200	0.050%	0.10%	0.002	305.45	5.546	486.035	104432.023	60.041	15050.57	0.61	208.86	30.10	238.97
0.80%	316.800	0.050%	0.10%	0.002	313.50	5.692	534.561	117885.484	63.866	16009.51	0.63	235.77	32.02	267.79
0.70%	329.100	0.050%	0.10%	0.002	322.95	5.864	595.911	135376.301	68.533	17179.29	0.65	270.75	34.36	305.11
0.60%	336.200	0.050%	0.10%	0.002	332.65	6.040	664.050	155386.694	73.522	18430.05	0.67	310.77	36.86	347.63
0.50%	346.600	0.050%	0.10%	0.002	341.40	6.199	730.220	175364.951	78.199	19602.27	0.68	350.73	39.20	389.93
0.25%	363.400	0.125%	0.25%	0.005	355.00	6.445	842.403	210365.316	85.801	21507.99	1.78	1051.83	107.54	1159.37
0.10%	368.500	0.075%	0.15%	0.003	365.95	6.644	941.433	242346.536	92.221	23117.34	1.10	727.04	69.35	796.39
0.05%	368.500	0.025%	0.05%	0.001	368.50	6.691	965.657	250314.500	93.755	23501.82	0.37	250.31	23.50	273.82
0.01%														
0.005%														
0.001%														
											Storm Totals:			
											29.8 (cfs)	4591.8 (tons/storm)	819.8 (tons/storm)	5411.5 (tons/storm)
											59.1 (acre-ft)			

50.000% 100.000% 2.00

.

JUF150 2 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	55.08	0.053065832	72.8878624
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.400	5.000%	10.000%	0.20	0.20	0.004	0.064	0.00	0.000	0.00	0.0	0.00	0.00	0.00
80.0%	0.400	5.000%	10.000%	0.20	0.40	0.007	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
70.0%	0.500	5.000%	10.00%	0.20	0.45	0.008	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
60.0%	0.600	5.000%	10.00%	0.20	0.55	0.010	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
50.0%	0.600	5.000%	10.00%	0.20	0.60	0.011	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
40.0%	0.700	5.000%	10.00%	0.20	0.65	0.012	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
30.0%	0.800	5.000%	10.00%	0.20	0.75	0.014	0.064	0.01	0.000	0.00	0.2	0.00	0.00	0.00
20.0%	0.900	5.000%	10.00%	0.20	0.85	0.015	0.064	0.01	0.000	0.00	0.2	0.00	0.00	0.00
10.0%	14.900	5.000%	10.00%	0.20	7.90	0.143	0.072	0.11	0.003	0.01	1.6	0.02	0.00	0.02
5.0%	117.200	2.500%	5.00%	0.10	66.05	1.199	1.508	19.60	1.499	3.44	6.6	1.96	0.34	2.30
4.0%	140.100	0.500%	1.00%	0.02	128.65	2.336	7.259	183.79	6.504	14.91	2.6	3.68	0.30	3.97
3.0%	161.700	0.500%	1.00%	0.02	150.90	2.740	10.630	315.68	9.233	21.17	3.0	6.31	0.42	6.74
2.0%	204.200	0.500%	1.00%	0.02	182.95	3.322	16.867	607.27	14.091	32.31	3.7	12.15	0.65	12.79
1.50%	245.300	0.250%	0.50%	0.01	224.75	4.081	27.646	1222.79	22.133	50.75	2.2	12.23	0.51	12.74
1.00%	300.700	0.250%	0.50%	0.01	273.00	4.957	44.125	2370.66	33.910	77.76	2.7	23.71	0.78	24.48
0.90%	310.200	0.050%	0.10%	0.00	305.45	5.546	57.812	3475.19	43.384	99.48	0.6	6.95	0.20	7.15
0.80%	316.800	0.050%	0.10%	0.00	313.50	5.692	61.546	3797.15	45.931	105.32	0.6	7.59	0.21	7.80
0.70%	329.100	0.050%	0.10%	0.00	322.95	5.864	66.105	4201.34	49.023	112.41	0.6	8.40	0.22	8.63
0.60%	336.200	0.050%	0.10%	0.00	332.65	6.040	70.984	4646.93	52.311	119.95	0.7	9.29	0.24	9.53
0.50%	346.600	0.050%	0.10%	0.00	341.40	6.199	75.560	5076.65	55.376	126.98	0.7	10.15	0.25	10.41
0.25%	363.400	0.125%	0.25%	0.01	355.00	6.445	83.008	5799.21	60.330	138.33	1.8	29.00	0.69	29.69
0.10%	368.500	0.075%	0.15%	0.00	365.95	6.644	89.305	6431.54	64.486	147.87	1.1	19.29	0.44	19.74
0.05%	368.500	0.025%	0.05%	0.00	368.50	6.691	90.810	6585.51	65.476	150.14	0.4	6.59	0.15	6.74
0.01%														
0.005%														
0.001%														
									Storm Totals:		29.8 (cfs) / 59.1 (acre-ft)	157.3 (tons/storm)	5.4 (tons/storm)	162.7 (tons/storm)

JUF150 10 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	55.08	5.801264254	260.5325529
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	3.300	5.000%	10.000%	0.200	1.65	0.030	0.099	0.115	0.072	18.06	0.33	0.02	3.61	3.63
80.0%	3.700	5.000%	10.000%	0.200	3.50	0.064	0.099	0.244	0.073	18.36	0.70	0.05	3.67	3.72
70.0%	4.100	5.000%	10.00%	0.200	3.90	0.071	0.099	0.271	0.074	18.47	0.78	0.05	3.69	3.75
60.0%	4.600	5.000%	10.00%	0.200	4.35	0.079	0.099	0.303	0.074	18.61	0.87	0.06	3.72	3.78
50.0%	5.200	5.000%	10.00%	0.200	4.90	0.089	0.099	0.341	0.075	18.81	0.98	0.07	3.76	3.83
40.0%	5.900	5.000%	10.00%	0.200	5.55	0.101	0.099	0.387	0.076	19.09	1.11	0.08	3.82	3.90
30.0%	6.600	5.000%	10.00%	0.200	6.25	0.113	0.099	0.436	0.078	19.45	1.25	0.09	3.89	3.98
20.0%	7.500	5.000%	10.00%	0.200	7.05	0.128	0.099	0.493	0.080	19.93	1.41	0.10	3.99	4.08
10.0%	43.800	5.000%	10.00%	0.200	25.65	0.466	0.155	2.799	0.238	59.64	5.13	0.56	11.93	12.49
5.0%	366.800	2.500%	5.00%	0.100	205.30	3.727	113.7	16413.7	23.4	5863.8	20.53	1641.37	586.38	2227.75
4.0%	517.900	0.500%	1.00%	0.020	442.35	8.031	1883.9	586213.7	144.7	36271.4	8.85	11724.27	725.43	12449.70
3.0%	643.500	0.500%	1.00%	0.020	580.70	10.543	5099.1	2082903.9	276.3	69248.9	11.61	41658.08	1384.98	43043.06
2.0%	708.700	0.500%	1.00%	0.020	676.10	12.275	8896.1	4230922.1	396.6	99406.4	13.52	84618.44	1988.13	86606.57
1.50%	730.500	0.250%	0.50%	0.010	719.60	13.065	11175.9	5657190.2	459.9	115286.5	7.20	56571.90	1152.86	57724.77
1.00%	801.900	0.250%	0.50%	0.010	766.20	13.911	14060.3	7578135.6	533.9	133828.9	7.66	75781.36	1338.29	77119.65
0.90%	824.600	0.050%	0.10%	0.002	813.25	14.766	17486.2	10003354.4	615.1	154194.5	1.63	20006.71	308.39	20315.10
0.80%	836.200	0.050%	0.10%	0.002	830.40	15.077	18873.7	11024813.3	646.4	162036.0	1.66	22049.63	324.07	22373.70
0.70%	859.000	0.050%	0.10%	0.002	847.60	15.389	20344.0	12129781.8	678.7	170127.7	1.70	24259.56	340.26	24599.82
0.60%	881.100	0.050%	0.10%	0.002	870.05	15.797	22386.1	13700854.3	722.2	181034.4	1.74	27401.71	362.07	27763.78
0.50%	901.300	0.050%	0.10%	0.002	891.20	16.181	24442.4	15323055.0	764.6	191670.5	1.78	30646.11	383.34	31029.45
0.25%	933.000	0.125%	0.25%	0.005	917.15	16.652	27149.0	17515418.4	818.6	205203.5	4.59	87577.09	1026.02	88603.11
0.10%	943.100	0.075%	0.15%	0.003	938.05	17.032	29482.2	19454119.7	863.7	216493.7	2.81	58362.36	649.48	59011.84
0.05%	943.900	0.025%	0.05%	0.001	943.50	17.130	30113.8	19986337.1	875.6	219495.5	0.94	19986.34	219.50	20205.83
0.01%														
0.005%														
0.001%														

50.000% 100.000% 2.00

Storm Totals:	98.8 (cfs) / 195.9 (acre-ft)	562286 (tons/storm)	10831.3 (tons/storm)	573117.3 (tons/storm)

JUF150 10 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	55.08	0.053065832	72.8878624
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	3.300	5.000%	10.000%	0.20	1.65	0.030	0.064	0.02	0.000	0.00	0.3	0.00	0.00	0.00
80.0%	3.700	5.000%	10.000%	0.20	3.50	0.064	0.065	0.04	0.000	0.00	0.7	0.01	0.00	0.01
70.0%	4.100	5.000%	10.00%	0.20	3.90	0.071	0.065	0.05	0.000	0.00	0.8	0.01	0.00	0.01
60.0%	4.600	5.000%	10.00%	0.20	4.35	0.079	0.066	0.06	0.000	0.00	0.9	0.01	0.00	0.01
50.0%	5.200	5.000%	10.00%	0.20	4.90	0.089	0.066	0.06	0.000	0.00	1.0	0.01	0.00	0.01
40.0%	5.900	5.000%	10.00%	0.20	5.55	0.101	0.067	0.07	0.000	0.00	1.1	0.01	0.00	0.01
30.0%	6.600	5.000%	10.00%	0.20	6.25	0.113	0.069	0.08	0.000	0.00	1.3	0.02	0.00	0.02
20.0%	7.500	5.000%	10.00%	0.20	7.05	0.128	0.070	0.10	0.000	0.00	1.4	0.02	0.00	0.02
10.0%	43.800	5.000%	10.00%	0.20	25.65	0.466	0.212	1.07	0.178	0.41	5.1	0.21	0.08	0.30
5.0%	366.800	2.500%	5.00%	0.10	205.30	3.727	22.243	898.68	18.146	41.61	20.5	89.87	4.16	94.03
4.0%	517.900	0.500%	1.00%	0.02	442.35	8.031	140.957	12270.78	97.739	224.11	8.8	245.42	4.48	249.90
3.0%	643.500	0.500%	1.00%	0.02	580.70	10.543	271.421	31018.03	177.525	407.06	11.6	620.36	8.14	628.50
2.0%	708.700	0.500%	1.00%	0.02	676.10	12.275	391.485	52088.94	247.815	568.23	13.5	1041.78	11.36	1053.14
1.50%	730.500	0.250%	0.50%	0.01	719.60	13.065	454.913	64422.65	284.129	651.50	7.2	644.23	6.51	650.74
1.00%	801.900	0.250%	0.50%	0.01	766.20	13.911	529.120	79783.86	326.044	747.61	7.7	797.84	7.48	805.31
0.90%	824.600	0.050%	0.10%	0.00	813.25	14.766	610.778	97752.22	371.564	851.99	1.6	195.50	1.70	197.21
0.80%	836.200	0.050%	0.10%	0.00	830.40	15.077	642.259	104958.24	388.964	891.88	1.7	209.92	1.78	211.70
0.70%	859.000	0.050%	0.10%	0.00	847.60	15.389	674.765	112554.39	406.851	932.90	1.7	225.11	1.87	226.97
0.60%	881.100	0.050%	0.10%	0.00	870.05	15.797	718.612	123043.18	430.856	987.94	1.7	246.09	1.98	248.06
0.50%	901.300	0.050%	0.10%	0.00	891.20	16.181	761.404	133539.37	454.158	1041.37	1.8	267.08	2.08	269.16
0.25%	933.000	0.125%	0.25%	0.01	917.15	16.652	815.897	147263.29	483.662	1109.03	4.6	736.32	5.55	741.86
0.10%	943.100	0.075%	0.15%	0.00	938.05	17.032	861.394	159018.26	508.161	1165.20	2.8	477.05	3.50	480.55
0.05%	943.900	0.025%	0.05%	0.00	943.50	17.130	873.496	162189.24	514.658	1180.10	0.9	162.19	1.18	163.37
0.01%														
0.005%														
0.001%														
									Storm Totals:		98.8 (cfs) 195.9 (acre-ft)	5959.1 (tons/storm)	61.9 (tons/storm)	6020.9 (tons/storm)

.

JUF150 100 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	55.08	5.801264254	260.5325529
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	17.300	5.000%	10.000%	0.200	8.65	0.157	0.100	0.608	0.084	21.14	1.73	0.12	4.23	4.35
80.0%	19.500	5.000%	10.000%	0.200	18.40	0.334	0.116	1.496	0.147	36.90	3.68	0.30	7.38	7.68
70.0%	21.900	5.000%	10.00%	0.200	20.70	0.376	0.125	1.814	0.172	43.01	4.14	0.36	8.60	8.96
60.0%	24.700	5.000%	10.00%	0.200	23.30	0.423	0.138	2.269	0.204	51.14	4.66	0.45	10.23	10.68
50.0%	27.800	5.000%	10.00%	0.200	26.25	0.477	0.160	2.956	0.247	61.99	5.25	0.59	12.40	12.99
40.0%	31.300	5.000%	10.00%	0.200	29.55	0.537	0.193	4.018	0.304	76.29	5.91	0.80	15.26	16.06
30.0%	35.400	5.000%	10.00%	0.200	33.35	0.606	0.246	5.768	0.382	95.72	6.67	1.15	19.14	20.30
20.0%	39.900	5.000%	10.00%	0.200	37.65	0.684	0.328	8.685	0.485	121.69	7.53	1.74	24.34	26.07
10.0%	150.400	5.000%	10.00%	0.200	95.15	1.728	6.909	462.463	3.820	957.52	19.03	92.49	191.50	284.00
5.0%	1238.600	2.500%	5.00%	0.100	694.50	12.610	9814.5	4794735.3	422.7	105957.2	69.45	479473.53	10595.72	490069.25
4.0%	1780.900	0.500%	1.00%	0.020	1509.75	27.411	168188.9	178619174.5	2676.9	671024.2	30.20	3572383.49	13420.48	3585803.98
3.0%	2422.700	0.500%	1.00%	0.020	2101.80	38.161	564346.0	834377531.4	5877.5	1473340.3	42.04	16687550.63	29466.81	16717017.43
2.0%	2861.500	0.500%	1.00%	0.020	2642.10	47.971	1303454.4	2422539365.2	10124.8	2538015.9	52.84	48450787.30	50760.32	48501547.62
1.50%	2927.000	0.250%	0.50%	0.010	2894.25	52.549	1819465.8	3704296082.6	12574.6	3152096.2	28.94	37042960.83	31520.96	37074481.79
1.00%	2981.900	0.250%	0.50%	0.010	2954.45	53.642	1961812.8	4077180684.0	13205.2	3310190.2	29.54	40771806.84	33101.90	40804908.74
0.90%	2988.900	0.050%	0.10%	0.002	2985.40	54.204	2038063.7	4280022484.3	13536.5	3393218.4	5.97	8560044.97	6786.44	8566831.41
0.80%	2991.300	0.050%	0.10%	0.002	2990.10	54.289	2049828.5	4311506120.6	13587.2	3405931.2	5.98	8623012.24	6811.86	8629824.10
0.70%	2993.400	0.050%	0.10%	0.002	2992.35	54.330	2055478.1	4326642303.7	13611.5	3412026.9	5.98	8653284.61	6824.05	8660108.66
0.60%	2996.500	0.050%	0.10%	0.002	2994.95	54.377	2062020.5	4344184945.3	13639.6	3419078.6	5.99	8688369.89	6838.16	8695208.05
0.50%	3021.000	0.050%	0.10%	0.002	3008.75	54.628	2096999.2	4438233272.4	13789.5	3456648.4	6.02	8876466.54	6913.30	8883379.84
0.25%	3052.300	0.125%	0.25%	0.005	3036.65	55.134	2169031.5	4633256634.8	14095.4	3533332.3	15.18	23166283.17	17666.66	23183949.84
0.10%	3059.700	0.075%	0.15%	0.003	3056.00	55.486	2220034.0	4772420755.2	14309.9	3587089.6	9.17	14317262.27	10761.27	14328023.53
0.05%	3060.500	0.025%	0.05%	0.001	3060.10	55.560	2230951.6	4802324657.3	14355.5	3598540.5	3.06	4802324.66	3598.54	4805923.20
0.01%														
0.005%														
0.001%														

50.000% 100.000% 2.00

Storm Totals:	369.0 (cfs) / 731.8 (acre-ft)	232692109 (tons/storm)	235359.6 (tons/storm)	232927468.5 (tons/storm)

JUF150 100 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	55.08	0.053065832	72.8878624
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	17.300	5.000%	10.000%	0.20	8.65	0.157	0.074	0.13	0.006	0.01	1.7	0.03	0.00	0.03
80.0%	19.500	5.000%	10.000%	0.20	18.40	0.334	0.130	0.47	0.080	0.18	3.7	0.09	0.04	0.13
70.0%	21.900	5.000%	10.00%	0.20	20.70	0.376	0.152	0.62	0.107	0.25	4.1	0.12	0.05	0.17
60.0%	24.700	5.000%	10.00%	0.20	23.30	0.423	0.181	0.83	0.142	0.33	4.7	0.17	0.07	0.23
50.0%	27.800	5.000%	10.00%	0.20	26.25	0.477	0.220	1.14	0.188	0.43	5.3	0.23	0.09	0.31
40.0%	31.300	5.000%	10.00%	0.20	29.55	0.537	0.272	1.58	0.248	0.57	5.9	0.32	0.11	0.43
30.0%	35.400	5.000%	10.00%	0.20	33.35	0.606	0.342	2.25	0.326	0.75	6.7	0.45	0.15	0.60
20.0%	39.900	5.000%	10.00%	0.20	37.65	0.684	0.437	3.24	0.429	0.98	7.5	0.65	0.20	0.84
10.0%	150.400	5.000%	10.00%	0.20	95.15	1.728	3.543	66.35	3.351	7.68	19.0	13.27	1.54	14.81
5.0%	1238.600	2.500%	5.00%	0.10	694.50	12.610	417.636	57080.62	262.846	602.70	69.5	5708.06	60.27	5768.33
4.0%	1780.900	0.500%	1.00%	0.02	1509.75	27.411	2710.0	805175.7	1442.9	3308.5	30.2	16103.5	66.2	16169.7
3.0%	2422.700	0.500%	1.00%	0.02	2101.80	38.161	6012.1	2486795.0	2980.8	6834.8	42.0	49735.9	136.7	49872.6
2.0%	2861.500	0.500%	1.00%	0.02	2642.10	47.971	10431.1	5423745.7	4922.8	11287.8	52.8	108474.9	225.8	108700.7
1.50%	2927.000	0.250%	0.50%	0.01	2894.25	52.549	12992.0	7399977.0	6012.0	13785.4	28.9	73999.8	137.9	74137.6
1.00%	2981.900	0.250%	0.50%	0.01	2954.45	53.642	13652.4	7937876.0	6289.6	14421.9	29.5	79378.8	144.2	79523.0
0.90%	2988.900	0.050%	0.10%	0.00	2985.40	54.204	13999.4	8224902.1	6435.0	14755.3	6.0	16449.8	29.5	16479.3
0.80%	2991.300	0.050%	0.10%	0.00	2990.10	54.289	14052.5	8269121.3	6457.2	14806.3	6.0	16538.2	29.6	16567.9
0.70%	2993.400	0.050%	0.10%	0.00	2992.35	54.330	14078.0	8290349.5	6467.9	14830.7	6.0	16580.7	29.7	16610.4
0.60%	2996.500	0.050%	0.10%	0.00	2994.95	54.377	14107.5	8314927.7	6480.2	14859.0	6.0	16629.9	29.7	16659.6
0.50%	3021.000	0.050%	0.10%	0.00	3008.75	54.628	14264.6	8446243.9	6545.9	15009.6	6.0	16892.5	30.0	16922.5
0.25%	3052.300	0.125%	0.25%	0.01	3036.65	55.134	14585.2	8716196.4	6679.7	15316.5	15.2	43581.0	76.6	43657.6
0.10%	3059.700	0.075%	0.15%	0.00	3056.00	55.486	14810.1	8906964.2	6773.4	15531.3	9.2	26720.9	46.6	26767.5
0.05%	3060.500	0.025%	0.05%	0.00	3060.10	55.560	14858.0	8947760.7	6793.4	15577.0	3.1	8947.8	15.6	8963.3
0.01%														
0.005%														
0.001%														
									Storm Totals:		369.0 (cfs) 731.8 (acre-ft)	495757 (tons/storm)	1060 (tons/storm)	496817 (tons/storm)

.

JUF150 100 yr 24 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	55.08	5.801264254	260.5325529
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00	0.025%	0.050%	0.001										
90.0%	2.70	5.000%	10.000%	0.200	1.35	0.025	0.099	0.094	0.072	18.04	0.27	0.02	3.61	3.63
80.0%	78.80	5.000%	10.000%	0.200	40.75	0.740	0.405	11.605	0.571	143.15	8.15	2.32	28.63	30.95
70.0%	82.30	5.000%	10.00%	0.200	80.55	1.462	3.801	215.386	2.594	650.31	16.11	43.08	130.06	173.14
60.0%	85.90	5.000%	10.00%	0.200	84.10	1.527	4.434	262.319	2.867	718.58	16.82	52.46	143.72	196.18
50.0%	89.70	5.000%	10.00%	0.200	87.80	1.594	5.174	319.545	3.168	794.08	17.56	63.91	158.82	222.73
40.0%	96.80	5.000%	10.00%	0.200	93.25	1.693	6.425	421.445	3.644	913.53	18.65	84.29	182.71	267.00
30.0%	273.80	5.000%	10.00%	0.200	185.30	3.364	78.143	10185.699	18.349	4599.70	37.06	2037.14	919.94	2957.08
20.0%	614.50	5.000%	10.00%	0.200	444.15	8.064	1912.128	597409.918	146.099	36623.05	88.83	119481.98	7324.61	126806.59
10.0%	1172.00	5.000%	10.00%	0.200	893.25	16.218	24648.786	15487963.436	768.812	192720.16	178.65	3097592.69	38544.03	3136136.72
5.0%	2723.00	2.500%	5.00%	0.100	1947.50	35.359	426954.5	584904369.2	4903.2	1229095.7	194.75	58490436.92	122909.57	58613346.49
4.0%	3374.20	0.500%	1.00%	0.020	3048.60	55.351	2200427.4	4718818173.9	14227.6	3566475.7	60.97	94376363.48	71329.51	94447692.99
3.0%	4175.50	0.500%	1.00%	0.020	3774.85	68.537	4809052.3	12769825283.0	23644.7	5927080.0	75.50	255396505.66	118541.60	255515047.26
2.0%	4998.10	0.500%	1.00%	0.020	4586.80	83.279	9809522.5	31650708029.9	37572.4	9418363.3	91.74	633014160.60	188367.27	633202527.86
1.50%	5253.80	0.250%	0.50%	0.010	5125.95	93.068	14731531.4	53118771410.6	48933.1	12266192.1	51.26	531187714.11	122661.92	531310376.03
1.00%	5383.00	0.250%	0.50%	0.010	5318.40	96.563	16858392.6	63070012980.6	53413.8	13389386.4	53.18	630700129.81	133893.86	630834023.67
0.90%	5413.40	0.050%	0.10%	0.002	5398.20	98.011	17802560.8	67601636098.9	55338.8	13871911.9	10.80	135203272.20	27743.82	135231016.02
0.80%	5442.30	0.050%	0.10%	0.002	5427.85	98.550	18162965.1	69349022777.4	56064.0	14053721.9	10.86	138698045.55	28107.44	138726153.00
0.70%	5469.00	0.050%	0.10%	0.002	5455.65	99.055	18505671.1	71019416452.2	56749.1	14225435.0	10.91	142038832.90	28450.87	142067283.77
0.60%	5514.20	0.050%	0.10%	0.002	5491.60	99.707	18955784.1	73226185186.9	57642.0	14449281.8	10.98	146452370.37	28898.56	146481268.94
0.50%	5537.30	0.050%	0.10%	0.002	5525.75	100.327	19390678.8	75371993673.7	58497.8	14663798.2	11.05	150743987.35	29327.60	150773314.94
0.25%	5596.70	0.125%	0.25%	0.005	5567.00	101.076	19925606.1	78029445634.6	59541.2	14925359.3	27.84	390147228.17	74626.80	390221854.97
0.10%	5612.90	0.075%	0.15%	0.003	5604.80	101.763	20425136.7	80528730055.5	60506.8	15167399.9	16.81	241586190.17	45502.20	241631692.37
0.05%	5613.60	0.025%	0.05%	0.001	5613.25	101.916	20538036.8	81095932346.5	60723.9	15221815.5	5.61	81095932.35	15221.82	81111154.16
0.01%														
0.005%														
0.001%														

		50.000%	100.000%	2.00										

Storm Totals:	1,014.4 (cfs)	3632350528 (tons/storm)	1083019.0 (tons/storm)	3633433546.5 (tons/storm)
	2,012.0 (acre-ft)			

.

JUF150 100 yr 24 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer	Gage Station #:		Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	55.08	0.053065832	72.8878624
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00													
90.0%	2.70	5.000%	10.000%	0.20	1.35	0.025	0.064	0.02	0.000	0.00	0.3	0.00	0.00	0.00
80.0%	78.80	5.000%	10.000%	0.20	40.75	0.740	0.515	4.13	0.512	1.17	8.2	0.83	0.23	1.06
70.0%	82.30	5.000%	10.00%	0.20	80.55	1.462	2.393	37.94	2.322	5.32	16.1	7.59	1.06	8.65
60.0%	85.90	5.000%	10.00%	0.20	84.10	1.527	2.648	43.83	2.554	5.86	16.8	8.77	1.17	9.94
50.0%	89.70	5.000%	10.00%	0.20	87.80	1.594	2.931	50.64	2.808	6.44	17.6	10.13	1.29	11.42
40.0%	96.80	5.000%	10.00%	0.20	93.25	1.693	3.378	62.00	3.206	7.35	18.7	12.40	1.47	13.87
30.0%	273.80	5.000%	10.00%	0.20	185.30	3.364	17.391	634.20	14.491	33.23	37.1	126.84	6.65	133.49
20.0%	614.50	5.000%	10.00%	0.20	444.15	8.064	142.342	12441.75	98.613	226.12	88.8	2488.35	45.22	2533.57
10.0%	1172.00	5.000%	10.00%	0.20	893.25	16.218	765.629	134589.22	456.452	1046.63	178.7	26917.84	209.33	27127.17
5.0%	2723.00	2.500%	5.00%	0.10	1947.50	35.359	5003.520	1917662.22	2521.797	5782.42	194.8	191766.22	578.24	192344.46
4.0%	3374.20	0.500%	1.00%	0.02	3048.60	55.351	14723.9	8833664.3	6737.5	15449.0	61.0	176673.3	309.0	176982.3
3.0%	4175.50	0.500%	1.00%	0.02	3774.85	68.537	24633.6	18299802.0	10764.6	24683.1	75.5	365996.0	493.7	366489.7
2.0%	4998.10	0.500%	1.00%	0.02	4586.80	83.279	39383.2	35549992.6	16502.2	37839.1	91.7	710999.9	756.8	711756.6
1.50%	5253.80	0.250%	0.50%	0.01	5125.95	93.068	51470.2	51921724.6	21056.2	48281.4	51.3	519217.2	482.8	519700.1
1.00%	5383.00	0.250%	0.50%	0.01	5318.40	96.563	56248.1	58871848.0	22828.7	52345.7	53.2	588718.5	523.5	589241.9
0.90%	5413.40	0.050%	0.10%	0.00	5398.20	98.011	58302.3	61937509.4	23586.6	54083.5	10.8	123875.0	108.2	123983.2
0.80%	5442.30	0.050%	0.10%	0.00	5427.85	98.550	59076.6	63104756.9	23871.6	54737.1	10.9	126209.5	109.5	126319.0
0.70%	5469.00	0.050%	0.10%	0.00	5455.65	99.055	59808.0	64213213.9	24140.6	55353.7	10.9	128426.4	110.7	128537.1
0.60%	5514.20	0.050%	0.10%	0.00	5491.60	99.707	60761.6	65666941.6	24490.8	56156.7	11.0	131333.9	112.3	131446.2
0.50%	5537.30	0.050%	0.10%	0.00	5525.75	100.327	61675.6	67069274.8	24826.0	56925.4	11.1	134138.5	113.9	134252.4
0.25%	5596.70	0.125%	0.25%	0.01	5567.00	101.076	62790.3	68791221.3	25234.2	57861.4	27.8	343956.1	289.3	344245.4
0.10%	5612.90	0.075%	0.15%	0.00	5604.80	101.763	63822.1	70396367.3	25611.5	58726.4	16.8	211189.1	176.2	211365.3
0.05%	5613.60	0.025%	0.05%	0.00	5613.25	101.916	64054.1	70758775.6	25696.2	58920.8	5.6	70758.8	58.9	70817.7
0.01%														
0.005%														
0.001%														
									Storm Totals:		1,014.4 (cfs) / 2,012.0 (acre-ft)	3852831 (tons/storm)	4489 (tons/storm)	3857321 (tons/storm)

.

Flow Duration JUF190
48 hour, 2 day duration

	2 yr 2 hr	10 yr 2 hr	100 yr 2 hr	100 yr 24 h
1	0	0	0	0
0.9	0.4	3.3	17.3	1.9
0.8	0.4	3.7	19.5	79
0.7	0.5	4.1	21.9	82.5
0.6	0.6	4.7	24.7	86.2
0.5	0.6	5.2	27.9	90
0.4	0.7	5.9	31.4	98.6
0.3	0.8	6.7	35.4	320.5
0.2	1	7.6	40	771
0.1	17.5	48.1	162	1464.9
0.05	129.3	419.1	1446.3	3373.5
0.04	167.5	614.6	2144.6	4246.6
0.03	194.1	846.3	3014.5	5368.3
0.02	264.1	903	3775.1	6625.9
0.015	315.1	954	3900.3	7157.3
0.01	379	1063.3	3954.8	7464.9
0.009	393.2	1087.7	3966	7497.5
0.008	400.3	1108.4	3971.2	7513.2
0.007	414.2	1133.3	3975.5	7531.5
0.006	423	1155.3	3986	7553.8
0.005	433.6	1174.2	4016.3	7574.4
0.0025	452.6	1209.8	4053.3	7615.3
0.001	458.2	1218.7	4069.2	7634.7
0.0005	458.4	1219.5	4069.5	7634.9
0.0001	#N/A	#N/A	#N/A	#N/A
0.00005	#N/A	#N/A	#N/A	#N/A
0.00001	#N/A	#N/A	#N/A	#N/A

JUF190 2 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	63.30	6.561812953	269.4075993
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.400	5.000%	10.000%	0.200	0.20	0.003	0.099	0.014	0.072	20.36	0.04	0.00	4.07	4.07
80.0%	0.400	5.000%	10.000%	0.200	0.40	0.006	0.099	0.029	0.072	20.36	0.08	0.01	4.07	4.08
70.0%	0.500	5.000%	10.00%	0.200	0.45	0.007	0.099	0.032	0.072	20.36	0.09	0.01	4.07	4.08
60.0%	0.600	5.000%	10.00%	0.200	0.55	0.009	0.099	0.040	0.072	20.36	0.11	0.01	4.07	4.08
50.0%	0.600	5.000%	10.00%	0.200	0.60	0.009	0.099	0.043	0.072	20.36	0.12	0.01	4.07	4.08
40.0%	0.700	5.000%	10.00%	0.200	0.65	0.010	0.099	0.047	0.072	20.36	0.13	0.01	4.07	4.08
30.0%	0.800	5.000%	10.00%	0.200	0.75	0.012	0.099	0.054	0.072	20.37	0.15	0.01	4.07	4.08
20.0%	1.000	5.000%	10.00%	0.200	0.90	0.014	0.099	0.065	0.072	20.37	0.18	0.01	4.07	4.09
10.0%	17.500	5.000%	10.00%	0.200	9.25	0.146	0.100	0.671	0.082	23.35	1.85	0.13	4.67	4.80
5.0%	129.300	2.500%	5.00%	0.100	73.40	1.160	1.682	89.818	1.524	432.23	7.34	8.98	43.22	52.21
4.0%	167.500	0.500%	1.00%	0.020	148.40	2.344	20.909	2257.058	7.816	2216.03	2.97	45.14	44.32	89.46
3.0%	194.100	0.500%	1.00%	0.020	180.80	2.856	42.962	5650.170	12.455	3531.49	3.62	113.00	70.63	183.63
2.0%	264.100	0.500%	1.00%	0.020	229.10	3.619	102.036	17004.004	21.813	6184.69	4.58	340.08	123.69	463.77
1.50%	315.100	0.250%	0.50%	0.010	289.60	4.575	240.380	50637.395	38.022	10780.60	2.90	506.37	107.81	614.18
1.00%	379.000	0.250%	0.50%	0.010	347.05	5.482	466.000	117639.154	58.423	16564.90	3.47	1176.39	165.65	1342.04
0.90%	393.200	0.050%	0.10%	0.002	386.10	6.099	688.330	193316.951	75.256	21337.91	0.77	386.63	42.68	429.31
0.80%	400.300	0.050%	0.10%	0.002	396.75	6.268	760.378	219442.150	80.280	22762.38	0.79	438.88	45.52	484.41
0.70%	414.200	0.050%	0.10%	0.002	407.25	6.433	836.628	247837.678	85.419	24219.30	0.81	495.68	48.44	544.11
0.60%	423.000	0.050%	0.10%	0.002	418.60	6.613	925.144	281696.967	91.182	25853.41	0.84	563.39	51.71	615.10
0.50%	433.600	0.050%	0.10%	0.002	428.30	6.766	1006.024	313422.473	96.281	27299.22	0.86	626.84	54.60	681.44
0.25%	452.600	0.125%	0.25%	0.005	443.10	7.000	1139.166	367166.050	104.373	29593.58	2.22	1835.83	147.97	1983.80
0.10%	458.200	0.075%	0.15%	0.003	455.40	7.194	1259.197	417119.390	111.388	31582.51	1.37	1251.36	94.75	1346.11
0.05%	458.400	0.025%	0.05%	0.001	458.30	7.240	1288.784	429638.974	113.081	32062.39	0.46	429.64	32.06	461.70
0.01%														
0.005%														
0.001%														
									Storm Totals:		35.7 (cfs) 70.9 (acre-ft)	8218.4 (tons/storm)	1110.3 (tons/storm)	9328.7 (tons/storm)

50.000% 100.000% 2.00

.

JUF190 2 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	63.30	0.056406808	87.41025104
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.400	5.000%	10.000%	0.20	0.20	0.003	0.064	0.00	0.000	0.00	0.0	0.00	0.00	0.00
80.0%	0.400	5.000%	10.000%	0.20	0.40	0.006	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
70.0%	0.500	5.000%	10.00%	0.20	0.45	0.007	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
60.0%	0.600	5.000%	10.00%	0.20	0.55	0.009	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
50.0%	0.600	5.000%	10.00%	0.20	0.60	0.009	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
40.0%	0.700	5.000%	10.00%	0.20	0.65	0.010	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
30.0%	0.800	5.000%	10.00%	0.20	0.75	0.012	0.064	0.01	0.000	0.00	0.2	0.00	0.00	0.00
20.0%	1.000	5.000%	10.00%	0.20	0.90	0.014	0.064	0.01	0.000	0.00	0.2	0.00	0.00	0.00
10.0%	17.500	5.000%	10.00%	0.20	9.25	0.146	0.073	0.16	0.004	0.01	1.9	0.03	0.00	0.03
5.0%	129.300	2.500%	5.00%	0.10	73.40	1.160	1.396	24.18	1.391	3.39	7.3	2.42	0.34	2.76
4.0%	167.500	0.500%	1.00%	0.02	148.40	2.344	7.322	256.46	6.556	15.98	3.0	5.13	0.32	5.45
3.0%	194.100	0.500%	1.00%	0.02	180.80	2.856	11.743	501.09	10.115	24.65	3.6	10.02	0.49	10.51
2.0%	264.100	0.500%	1.00%	0.02	229.10	3.619	20.722	1120.41	17.009	41.46	4.6	22.41	0.83	23.24
1.50%	315.100	0.250%	0.50%	0.01	289.60	4.575	36.389	2487.13	28.442	69.32	2.9	24.87	0.69	25.56
1.00%	379.000	0.250%	0.50%	0.01	347.05	5.482	56.234	4605.91	42.303	103.11	3.5	46.06	1.03	47.09
0.90%	393.200	0.050%	0.10%	0.00	386.10	6.099	72.681	6622.84	53.449	130.27	0.8	13.25	0.26	13.51
0.80%	400.300	0.050%	0.10%	0.00	396.75	6.268	77.599	7266.06	56.736	138.28	0.8	14.53	0.28	14.81
0.70%	414.200	0.050%	0.10%	0.00	407.25	6.433	82.634	7942.25	60.081	146.44	0.8	15.88	0.29	16.18
0.60%	423.000	0.050%	0.10%	0.00	418.60	6.613	88.285	8721.94	63.815	155.54	0.8	17.44	0.31	17.75
0.50%	433.600	0.050%	0.10%	0.00	428.30	6.766	93.290	9429.90	67.103	163.55	0.9	18.86	0.33	19.19
0.25%	452.600	0.125%	0.25%	0.01	443.10	7.000	101.238	10586.97	72.294	176.21	2.2	52.93	0.88	53.82
0.10%	458.200	0.075%	0.15%	0.00	455.40	7.194	108.135	11622.13	76.769	187.11	1.4	34.87	0.56	35.43
0.05%	458.400	0.025%	0.05%	0.00	458.30	7.240	109.800	11876.23	77.845	189.73	0.5	11.88	0.19	12.07
0.01%														
0.005%														
0.001%														
									Storm Totals:		35.7 (cfs) 70.9 (acre-ft)	290.6 (tons/storm)	6.8 (tons/storm)	297.4 (tons/storm)

.

JUF190 10 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	63.30	6.561812953	269.4075993
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	3.300	5.000%	10.000%	0.200	1.65	0.026	0.099	0.119	0.072	20.41	0.33	0.02	4.08	4.11
80.0%	3.700	5.000%	10.000%	0.200	3.50	0.055	0.099	0.252	0.073	20.66	0.70	0.05	4.13	4.18
70.0%	4.100	5.000%	10.00%	0.200	3.90	0.062	0.099	0.281	0.073	20.74	0.78	0.06	4.15	4.20
60.0%	4.700	5.000%	10.00%	0.200	4.40	0.070	0.099	0.317	0.074	20.87	0.88	0.06	4.17	4.24
50.0%	5.200	5.000%	10.00%	0.200	4.95	0.078	0.099	0.356	0.074	21.04	0.99	0.07	4.21	4.28
40.0%	5.900	5.000%	10.00%	0.200	5.55	0.088	0.099	0.400	0.075	21.25	1.11	0.08	4.25	4.33
30.0%	6.700	5.000%	10.00%	0.200	6.30	0.100	0.099	0.454	0.076	21.56	1.26	0.09	4.31	4.40
20.0%	7.600	5.000%	10.00%	0.200	7.15	0.113	0.099	0.516	0.078	21.98	1.43	0.10	4.40	4.50
10.0%	48.100	5.000%	10.00%	0.200	27.85	0.440	0.145	2.929	0.217	61.50	5.57	0.59	12.30	12.89
5.0%	419.100	2.500%	5.00%	0.100	233.60	3.690	109.6	18615.7	22.8	6476.4	23.36	1861.57	647.64	2509.22
4.0%	614.600	0.500%	1.00%	0.020	516.85	8.165	2000.9	752246.1	150.5	42663.1	10.34	15044.92	853.26	15898.18
3.0%	846.300	0.500%	1.00%	0.020	730.45	11.539	7093.9	3769183.8	342.3	97062.9	14.61	75383.68	1941.26	77324.93
2.0%	903.000	0.500%	1.00%	0.020	874.65	13.817	13714.3	8725338.7	525.3	148943.8	17.49	174506.77	2978.88	177485.65
1.50%	954.000	0.250%	0.50%	0.010	928.50	14.668	17065.4	11525813.4	605.5	171671.1	9.29	115258.13	1716.71	116974.85
1.00%	1063.300	0.250%	0.50%	0.010	1008.65	15.934	23104.0	16951259.5	737.2	209010.9	10.09	169512.60	2090.11	171602.70
0.90%	1087.700	0.050%	0.10%	0.002	1075.50	16.990	29218.9	22858490.6	858.6	243453.1	2.15	45716.98	486.91	46203.89
0.80%	1108.400	0.050%	0.10%	0.002	1098.05	17.346	31523.7	25178680.1	902.0	255762.1	2.20	50357.36	511.52	50868.88
0.70%	1133.300	0.050%	0.10%	0.002	1120.85	17.706	33985.6	27708703.5	947.2	268566.5	2.24	55417.41	537.13	55954.54
0.60%	1155.300	0.050%	0.10%	0.002	1144.30	18.077	36660.5	30514883.3	995.0	282115.6	2.29	61029.77	564.23	61594.00
0.50%	1174.200	0.050%	0.10%	0.002	1164.75	18.400	39115.3	33139999.2	1037.8	294247.7	2.33	66280.00	588.50	66868.49
0.25%	1209.800	0.125%	0.25%	0.005	1192.00	18.830	42569.2	36910101.6	1096.4	310875.9	5.96	184550.51	1554.38	186104.89
0.10%	1218.700	0.075%	0.15%	0.003	1214.25	19.182	45549.5	40231441.6	1145.7	324847.2	3.64	120694.32	974.54	121668.87
0.05%	1219.500	0.025%	0.05%	0.001	1219.10	19.258	46218.8	40985603.2	1156.6	327939.9	1.22	40985.60	327.94	41313.54
0.01%														
0.005%														
0.001%														
									Storm Totals:		120.2 (cfs) 238.5 (acre-ft)	1176601 (tons/storm)	15819.0 (tons/storm)	1192419.8 (tons/storm)

50.000% 100.000% 2.00

.

JUF190 10 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	63.30	0.056406808	87.41025104
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	3.300	5.000%	10.000%	0.20	1.65	0.026	0.064	0.02	0.000	0.00	0.3	0.00	0.00	0.00
80.0%	3.700	5.000%	10.000%	0.20	3.50	0.055	0.064	0.05	0.000	0.00	0.7	0.01	0.00	0.01
70.0%	4.100	5.000%	10.00%	0.20	3.90	0.062	0.065	0.06	0.000	0.00	0.8	0.01	0.00	0.01
60.0%	4.700	5.000%	10.00%	0.20	4.40	0.070	0.065	0.07	0.000	0.00	0.9	0.01	0.00	0.01
50.0%	5.200	5.000%	10.00%	0.20	4.95	0.078	0.066	0.08	0.000	0.00	1.0	0.02	0.00	0.02
40.0%	5.900	5.000%	10.00%	0.20	5.55	0.088	0.066	0.09	0.000	0.00	1.1	0.02	0.00	0.02
30.0%	6.700	5.000%	10.00%	0.20	6.30	0.100	0.067	0.10	0.000	0.00	1.3	0.02	0.00	0.02
20.0%	7.600	5.000%	10.00%	0.20	7.15	0.113	0.068	0.12	0.000	0.00	1.4	0.02	0.00	0.02
10.0%	48.100	5.000%	10.00%	0.20	27.85	0.440	0.193	1.27	0.156	0.38	5.6	0.25	0.08	0.33
5.0%	419.100	2.500%	5.00%	0.10	233.60	3.690	21.713	1197.05	17.750	43.26	23.4	119.70	4.33	124.03
4.0%	614.600	0.500%	1.00%	0.02	516.85	8.165	146.656	17889.12	101.332	246.98	10.3	357.78	4.94	362.72
3.0%	846.300	0.500%	1.00%	0.02	730.45	11.539	337.296	58147.06	216.373	527.37	14.6	1162.94	10.55	1173.49
2.0%	903.000	0.500%	1.00%	0.02	874.65	13.817	520.514	107446.67	321.211	782.90	17.5	2148.93	15.66	2164.59
1.50%	954.000	0.250%	0.50%	0.01	928.50	14.668	601.063	131712.89	366.179	892.50	9.3	1317.13	8.93	1326.05
1.00%	1063.300	0.250%	0.50%	0.01	1008.65	15.934	733.699	174656.52	439.086	1070.20	10.1	1746.57	10.70	1757.27
0.90%	1087.700	0.050%	0.10%	0.00	1075.50	16.990	856.323	217357.21	505.436	1231.92	2.2	434.71	2.46	437.18
0.80%	1108.400	0.050%	0.10%	0.00	1098.05	17.346	900.203	233286.10	528.967	1289.27	2.2	466.57	2.58	469.15
0.70%	1133.300	0.050%	0.10%	0.00	1120.85	17.706	945.880	250212.81	553.352	1348.71	2.2	500.43	2.70	503.12
0.60%	1155.300	0.050%	0.10%	0.00	1144.30	18.077	994.243	268508.92	579.057	1411.36	2.3	537.02	2.82	539.84
0.50%	1174.200	0.050%	0.10%	0.00	1164.75	18.400	1037.575	285219.06	601.993	1467.26	2.3	570.44	2.93	573.37
0.25%	1209.800	0.125%	0.25%	0.01	1192.00	18.830	1097.004	308610.35	633.310	1543.59	6.0	1543.05	7.72	1550.77
0.10%	1218.700	0.075%	0.15%	0.00	1214.25	19.182	1146.969	328689.61	659.522	1607.48	3.6	986.07	4.82	990.89
0.05%	1219.500	0.025%	0.05%	0.00	1219.10	19.258	1158.034	333185.89	665.313	1621.59	1.2	333.19	1.62	334.81
0.01%														
0.005%														
0.001%														
									Storm Totals:		120.2 (cfs) 238.5 (acre-ft)	12224.9 (tons/storm)	82.8 (tons/storm)	12307.7 (tons/storm)

.

JUF190 100 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	63.30	6.561812953	269.4075993
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	17.300	5.000%	10.000%	0.200	8.65	0.137	0.100	0.626	0.081	22.91	1.73	0.13	4.58	4.71
80.0%	19.500	5.000%	10.000%	0.200	18.40	0.291	0.109	1.458	0.126	35.72	3.68	0.29	7.14	7.43
70.0%	21.900	5.000%	10.00%	0.200	20.70	0.327	0.114	1.721	0.143	40.68	4.14	0.34	8.14	8.48
60.0%	24.700	5.000%	10.00%	0.200	23.30	0.368	0.123	2.079	0.167	47.28	4.66	0.42	9.46	9.87
50.0%	27.900	5.000%	10.00%	0.200	26.30	0.415	0.136	2.601	0.198	56.26	5.26	0.52	11.25	11.77
40.0%	31.400	5.000%	10.00%	0.200	29.65	0.468	0.156	3.372	0.240	68.10	5.93	0.67	13.62	14.29
30.0%	35.400	5.000%	10.00%	0.200	33.40	0.528	0.188	4.560	0.295	83.73	6.68	0.91	16.75	17.66
20.0%	40.000	5.000%	10.00%	0.200	37.70	0.596	0.237	6.505	0.370	104.87	7.54	1.30	20.97	22.27
10.0%	162.000	5.000%	10.00%	0.200	101.00	1.596	5.190	381.296	3.174	900.00	20.20	76.26	180.00	256.26
5.0%	1446.300	2.500%	5.00%	0.100	804.15	12.703	10084.0	5898516.6	430.2	121976.0	80.42	589851.66	12197.60	602049.26
4.0%	2144.600	0.500%	1.00%	0.020	1795.45	28.363	190554.8	248866739.9	2903.1	823125.8	35.91	4977334.80	16462.52	4993797.31
3.0%	3014.500	0.500%	1.00%	0.020	2579.55	40.750	717528.1	1346345371.5	6869.9	1947876.8	51.59	26926907.43	38957.54	26965864.96
2.0%	3775.100	0.500%	1.00%	0.020	3394.80	53.628	1959966.8	4839901317.0	13197.2	3741868.5	67.90	96798026.34	74837.37	96872863.71
1.50%	3900.300	0.250%	0.50%	0.010	3837.70	60.625	3069837.8	8569590378.1	17663.7	5008296.8	38.38	85695903.78	50082.97	85745986.75
1.00%	3954.800	0.250%	0.50%	0.010	3927.55	62.044	3341111.3	9545227319.2	18662.7	5291544.9	39.28	95452273.19	52915.45	95505188.64
0.90%	3966.000	0.050%	0.10%	0.002	3960.40	62.563	3444504.5	9922918222.8	19035.9	5397362.3	7.92	19845836.45	10794.72	19856631.17
0.80%	3971.200	0.050%	0.10%	0.002	3968.60	62.693	3470671.8	10019002408.2	19129.7	5423965.8	7.94	20038004.82	10847.93	20048852.75
0.70%	3975.500	0.050%	0.10%	0.002	3973.35	62.768	3485895.6	10074994206.3	19184.2	5439411.1	7.95	20149988.41	10878.82	20160867.23
0.60%	3986.000	0.050%	0.10%	0.002	3980.75	62.884	3509709.3	10162712885.8	19269.2	5463523.9	7.96	20325425.77	10927.05	20336352.82
0.50%	4016.300	0.050%	0.10%	0.002	4001.15	63.207	3575970.0	10407641074.8	19504.8	5530317.2	8.00	20815282.15	11060.63	20826342.78
0.25%	4053.300	0.125%	0.25%	0.005	4034.80	63.738	3687247.6	10821760633.3	19897.0	5641522.3	20.17	54108803.17	28207.61	54137010.78
0.10%	4069.200	0.075%	0.15%	0.003	4061.25	64.156	3776465.3	11156265068.6	20208.5	5729834.8	12.18	33468795.21	17189.50	33485984.71
0.05%	4069.500	0.025%	0.05%	0.001	4069.35	64.284	3804098.0	11260310115.7	20304.4	5757038.4	4.07	11260310.12	5757.04	11266067.15
0.01%														
0.005%														
0.001%														

50.000% 100.000% 2.00

Storm Totals:	449.5 (cfs) / 891.5 (acre-ft)	510452824 (tons/storm)	351388.7 (tons/storm)	510804212.8 (tons/storm)

.

JUF190 100 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	63.30	0.056406808	87.41025104
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	17.300	5.000%	10.000%	0.20	8.65	0.137	0.071	0.15	0.002	0.00	1.7	0.03	0.00	0.03
80.0%	19.500	5.000%	10.000%	0.20	18.40	0.291	0.111	0.48	0.056	0.14	3.7	0.10	0.03	0.12
70.0%	21.900	5.000%	10.00%	0.20	20.70	0.327	0.127	0.62	0.076	0.19	4.1	0.12	0.04	0.16
60.0%	24.700	5.000%	10.00%	0.20	23.30	0.368	0.148	0.81	0.102	0.25	4.7	0.16	0.05	0.21
50.0%	27.900	5.000%	10.00%	0.20	26.30	0.415	0.176	1.09	0.136	0.33	5.3	0.22	0.07	0.29
40.0%	31.400	5.000%	10.00%	0.20	29.65	0.468	0.214	1.50	0.181	0.44	5.9	0.30	0.09	0.39
30.0%	35.400	5.000%	10.00%	0.20	33.40	0.528	0.264	2.08	0.238	0.58	6.7	0.42	0.12	0.53
20.0%	40.000	5.000%	10.00%	0.20	37.70	0.596	0.331	2.95	0.314	0.77	7.5	0.59	0.15	0.74
10.0%	162.000	5.000%	10.00%	0.20	101.00	1.596	2.937	70.01	2.813	6.86	20.2	14.00	1.37	15.37
5.0%	1446.300	2.500%	5.00%	0.10	804.15	12.703	425.149	80687.09	267.149	651.13	80.4	8068.71	65.11	8133.82
4.0%	2144.600	0.500%	1.00%	0.02	1795.45	28.363	2942.1	1246685.3	1555.0	3790.1	35.9	24933.7	75.8	25009.5
3.0%	3014.500	0.500%	1.00%	0.02	2579.55	40.750	7041.7	4286957.4	3442.2	8389.7	51.6	85739.1	167.8	85906.9
2.0%	3775.100	0.500%	1.00%	0.02	3394.80	53.628	13643.9	10931503.5	6286.1	15321.3	67.9	218630.1	306.4	218936.5
1.50%	3900.300	0.250%	0.50%	0.01	3837.70	60.625	18331.9	16603715.4	8225.6	20048.5	38.4	166037.2	200.5	166237.6
1.00%	3954.800	0.250%	0.50%	0.01	3927.55	62.044	19382.7	17966480.5	8653.8	21092.2	39.3	179664.8	210.9	179875.7
0.90%	3966.000	0.050%	0.10%	0.00	3960.40	62.563	19775.5	18483859.1	8813.3	21481.0	7.9	36967.7	43.0	37010.7
0.80%	3971.200	0.050%	0.10%	0.00	3968.60	62.693	19874.3	18614630.4	8853.4	21578.7	7.9	37229.3	43.2	37272.4
0.70%	3975.500	0.050%	0.10%	0.00	3973.35	62.768	19931.6	18690680.3	8876.6	21635.4	7.9	37381.4	43.3	37424.6
0.60%	3986.000	0.050%	0.10%	0.00	3980.75	62.884	20021.1	18809595.2	8912.9	21723.8	8.0	37619.2	43.4	37662.6
0.50%	4016.300	0.050%	0.10%	0.00	4001.15	63.207	20269.1	19140181.9	9013.4	21968.7	8.0	38280.4	43.9	38324.3
0.25%	4053.300	0.125%	0.25%	0.01	4034.80	63.738	20682.1	19694427.4	9180.5	22375.9	20.2	98472.1	111.9	98584.0
0.10%	4069.200	0.075%	0.15%	0.00	4061.25	64.156	21010.2	20137969.5	9312.9	22698.8	12.2	60413.9	68.1	60482.0
0.05%	4069.500	0.025%	0.05%	0.00	4069.35	64.284	21111.2	20275198.6	9353.7	22798.2	4.1	20275.2	22.8	20298.0
0.01%														
0.005%														
0.001%														
									Storm Totals:		449.5 (cfs) / 891.5 (acre-ft)	1049729 (tons/storm)	1448 (tons/storm)	1051177 (tons/storm)

.

JUF190 100 yr 24 hr Poor Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	63.30	6.561812953	269.4075993
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00	0.025%	0.050%	0.001										
90.0%	1.90	5.000%	10.000%	0.200	0.95	0.015	0.099	0.068	0.072	20.37	0.19	0.01	4.07	4.09
80.0%	79.00	5.000%	10.000%	0.200	40.45	0.639	0.278	8.175	0.424	120.27	8.09	1.64	24.05	25.69
70.0%	82.50	5.000%	10.00%	0.200	80.75	1.276	2.344	137.680	1.894	537.12	16.15	27.54	107.42	134.96
60.0%	86.20	5.000%	10.00%	0.200	84.35	1.332	2.732	167.654	2.093	593.58	16.87	33.53	118.72	152.25
50.0%	90.00	5.000%	10.00%	0.200	88.10	1.392	3.187	204.224	2.314	656.03	17.62	40.84	131.21	172.05
40.0%	98.60	5.000%	10.00%	0.200	94.30	1.490	4.059	278.442	2.707	767.57	18.86	55.69	153.51	209.20
30.0%	320.50	5.000%	10.00%	0.200	209.55	3.310	73.650	11226.282	17.659	5006.90	41.91	2245.26	1001.38	3246.64
20.0%	771.00	5.000%	10.00%	0.200	545.75	8.621	2441.615	969269.628	171.234	48551.02	109.15	193853.93	9710.20	203564.13
10.0%	1464.90	5.000%	10.00%	0.200	1117.95	17.660	33664.977	27376271.727	941.390	266917.76	223.59	5475254.35	53383.55	5528637.90
5.0%	3373.50	2.500%	5.00%	0.100	2419.20	38.216	567354.7	998389551.2	5897.9	1672262.6	241.92	99838955.12	167226.26	100006181.38
4.0%	4246.60	0.500%	1.00%	0.020	3810.05	60.188	2989681.4	8285699654.1	17362.7	4922943.5	76.20	165713993.08	98458.87	165812451.95
3.0%	5368.30	0.500%	1.00%	0.020	4807.45	75.944	7000446.2	24480151713.1	30177.0	8556250.6	96.15	489603034.26	171125.01	489774159.27
2.0%	6625.90	0.500%	1.00%	0.020	5997.10	94.737	15721237.8	68580655697.5	51044.5	14472958.1	119.94	1371613113.95	289459.16	1371902573.11
1.50%	7157.30	0.250%	0.50%	0.010	6891.60	108.868	26146445.8	131070914413.1	71036.5	20141395.1	68.92	1310709144.13	201413.95	1310910558.08
1.00%	7464.90	0.250%	0.50%	0.010	7311.10	115.494	32457296.3	172611080208.7	81749.8	23179004.0	73.11	1726110802.09	231790.04	1726342592.13
0.90%	7497.50	0.050%	0.10%	0.002	7481.20	118.182	35306967.0	192134468347.5	86343.8	24481583.8	14.96	384268936.70	48963.17	384317899.86
0.80%	7513.20	0.050%	0.10%	0.002	7505.35	118.563	35725791.3	195041223674.9	87007.9	24669868.7	15.01	390082447.35	49339.74	390131787.09
0.70%	7531.50	0.050%	0.10%	0.002	7522.35	118.832	36022773.1	197108015117.2	87477.1	24802910.2	15.04	394216030.23	49605.82	394265636.05
0.60%	7553.80	0.050%	0.10%	0.002	7542.65	119.152	36379749.7	199598497644.0	88039.4	24962320.8	15.09	399196995.29	49924.64	399246919.93
0.50%	7574.40	0.050%	0.10%	0.002	7564.10	119.491	36759735.1	202256850787.9	88635.7	25131405.2	15.13	404513701.58	50262.81	404563964.39
0.25%	7615.30	0.125%	0.25%	0.005	7594.85	119.977	37309489.6	206116194367.9	89494.7	25374953.3	37.97	1030580971.84	126874.77	1030707846.61
0.10%	7634.70	0.075%	0.15%	0.003	7625.00	120.453	37854294.5	209956154769.6	90341.5	25615071.4	22.88	629868464.31	76845.21	629945309.52
0.05%	7634.90	0.025%	0.05%	0.001	7634.80	120.608	38032616.8	211216323478.6	90617.8	25693401.9	7.63	211216323.48	25693.40	211242016.88
0.01%														
0.005%														
0.001%														

Storm Totals:	1,272.4 (cfs) / 2,523.8 (acre-ft)	9013204426 (tons/storm)	1701617.0 (tons/storm)	9014906043.2 (tons/storm)

50.000% 100.000% 2.00

.

JUF190 100 yr 24 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	63.30	0.056406808	87.41025104
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00													
90.0%	1.90	5.000%	10.000%	0.20	0.95	0.015	0.064	0.01	0.000	0.00	0.2	0.00	0.00	0.00
80.0%	79.00	5.000%	10.000%	0.20	40.45	0.639	0.381	3.63	0.368	0.90	8.1	0.73	0.18	0.91
70.0%	82.50	5.000%	10.00%	0.20	80.75	1.276	1.740	33.16	1.718	4.19	16.2	6.63	0.84	7.47
60.0%	86.20	5.000%	10.00%	0.20	84.35	1.332	1.925	38.33	1.891	4.61	16.9	7.67	0.92	8.59
50.0%	90.00	5.000%	10.00%	0.20	88.10	1.392	2.131	44.31	2.082	5.07	17.6	8.86	1.01	9.88
40.0%	98.60	5.000%	10.00%	0.20	94.30	1.490	2.499	55.62	2.418	5.89	18.9	11.12	1.18	12.30
30.0%	320.50	5.000%	10.00%	0.20	209.55	3.310	16.728	827.30	13.985	34.09	41.9	165.46	6.82	172.28
20.0%	771.00	5.000%	10.00%	0.20	545.75	8.621	167.181	21533.08	114.174	278.28	109.2	4306.62	55.66	4362.27
10.0%	1464.90	5.000%	10.00%	0.20	1117.95	17.660	939.997	248013.18	550.217	1341.07	223.6	49602.64	268.21	49870.85
5.0%	3373.50	2.500%	5.00%	0.10	2419.20	38.216	6033.226	3444669.14	2990.267	7288.29	241.9	344466.91	728.83	345195.74
4.0%	4246.60	0.500%	1.00%	0.02	3810.05	60.188	18015.4	16199493.4	8096.2	19733.1	76.2	323989.9	394.7	324384.5
3.0%	5368.30	0.500%	1.00%	0.02	4807.45	75.944	31540.2	35785334.8	13481.2	32858.2	96.1	715706.7	657.2	716363.9
2.0%	6625.90	0.500%	1.00%	0.02	5997.10	94.737	53720.9	76034570.6	21893.0	53360.6	119.9	1520691.4	1067.2	1521758.6
1.50%	7157.30	0.250%	0.50%	0.01	6891.60	108.868	75087.2	122127086.0	29696.8	72381.1	68.9	1221270.9	723.8	1221994.7
1.00%	7464.90	0.250%	0.50%	0.01	7311.10	115.494	86571.4	149376792.2	33805.3	82395.1	73.1	1493767.9	824.0	1494591.9
0.90%	7497.50	0.050%	0.10%	0.00	7481.20	118.182	91502.2	161558217.9	35554.1	86657.3	15.0	323116.4	173.3	323289.8
0.80%	7513.20	0.050%	0.10%	0.00	7505.35	118.563	92215.3	163342754.9	35806.2	87271.9	15.0	326685.5	174.5	326860.1
0.70%	7531.50	0.050%	0.10%	0.00	7522.35	118.832	92719.1	164607273.5	35984.3	87706.0	15.0	329214.5	175.4	329390.0
0.60%	7553.80	0.050%	0.10%	0.00	7542.65	119.152	93322.9	166126300.4	36197.6	88225.8	15.1	332252.6	176.5	332429.1
0.50%	7574.40	0.050%	0.10%	0.00	7564.10	119.491	93963.4	167742115.2	36423.7	88777.0	15.1	335484.2	177.6	335661.8
0.25%	7615.30	0.125%	0.25%	0.01	7594.85	119.977	94886.0	170077820.5	36749.2	89570.3	38.0	850389.1	447.9	850837.0
0.10%	7634.70	0.075%	0.15%	0.00	7625.00	120.453	95795.8	172390172.8	37069.9	90351.9	22.9	517170.5	271.1	517441.6
0.05%	7634.90	0.025%	0.05%	0.00	7634.80	120.608	96092.6	173146542.1	37174.5	90606.7	7.6	173146.5	90.6	173237.1
0.01%														
0.005%														
0.001%														
									Storm Totals:		1,272.4 (cfs) 2,523.8 (acre-ft)	8861463 (tons/storm)	6417 (tons/storm)	8867880 (tons/storm)

.

Flow Duration JUF240
48 hour, 2 day duration

	2 yr 2 hr	10 yr 2 hr	100 yr 2 hr	100 yr 24 h
1	0	0	0	0
0.9	0.6	4	20.5	1.5
0.8	0.6	4.4	22.9	88.3
0.7	0.7	4.9	25.5	92
0.6	0.7	5.5	28.4	95.8
0.5	0.8	6.1	31.7	99.7
0.4	0.9	6.8	35.5	110.1
0.3	1	7.6	39.7	380.4
0.2	1.2	8.7	44.4	935.5
0.1	24.8	63.2	195.7	1790.4
0.05	165.8	511.5	1729.9	4104.3
0.04	193.9	718.7	2557.3	5186.3
0.03	235.4	993.9	3631.6	6638.7
0.02	331.9	1088.2	4554.2	8160.8
0.015	390.8	1201.8	4706	8745
0.01	464.6	1334.2	4782.7	9200.6
0.009	475.8	1362	4830.5	9260.5
0.008	485.6	1375.8	4867.2	9283.7
0.007	495.3	1402.5	4909.1	9317.2
0.006	507.8	1427.2	4947.7	9336.3
0.005	514	1448.5	4980.2	9346.7
0.0025	530	1482.3	5021.1	9368.1
0.001	535.5	1493.3	5033.6	9375
0.0005	535.9	1493.5	5034.6	9375.2
0.0001	#N/A	#N/A	#N/A	#N/A
0.00005	#N/A	#N/A	#N/A	#N/A
0.00001	#N/A	#N/A	#N/A	#N/A

JUF240 2 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	72.58	7.40640678	278.4249882
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.600	5.000%	10.000%	0.200	0.30	0.004	0.099	0.022	0.072	22.98	0.06	0.00	4.60	4.60
80.0%	0.600	5.000%	10.000%	0.200	0.60	0.008	0.099	0.045	0.072	22.98	0.12	0.01	4.60	4.61
70.0%	0.700	5.000%	10.00%	0.200	0.65	0.009	0.099	0.048	0.072	22.98	0.13	0.01	4.60	4.61
60.0%	0.700	5.000%	10.00%	0.200	0.70	0.010	0.099	0.052	0.072	22.98	0.14	0.01	4.60	4.61
50.0%	0.800	5.000%	10.00%	0.200	0.75	0.010	0.099	0.056	0.072	22.98	0.15	0.01	4.60	4.61
40.0%	0.900	5.000%	10.00%	0.200	0.85	0.012	0.099	0.063	0.072	22.99	0.17	0.01	4.60	4.61
30.0%	1.000	5.000%	10.00%	0.200	0.95	0.013	0.099	0.071	0.072	22.99	0.19	0.01	4.60	4.61
20.0%	1.200	5.000%	10.00%	0.200	1.10	0.015	0.099	0.082	0.072	22.99	0.22	0.02	4.60	4.62
10.0%	24.800	5.000%	10.00%	0.200	13.00	0.179	0.101	0.983	0.089	28.46	2.60	0.20	5.69	5.89
5.0%	165.800	2.500%	5.00%	0.100	95.30	1.313	2.594	185.847	2.024	647.69	9.53	18.58	64.77	83.35
4.0%	193.900	0.500%	1.00%	0.020	179.85	2.478	25.586	3459.317	8.906	2850.17	3.60	69.19	57.00	126.19
3.0%	235.400	0.500%	1.00%	0.020	214.65	2.957	48.786	7872.201	13.524	4327.98	4.29	157.44	86.56	244.00
2.0%	331.900	0.500%	1.00%	0.020	283.65	3.908	135.101	28808.038	26.166	8373.97	5.67	576.16	167.48	743.64
1.50%	390.800	0.250%	0.50%	0.010	361.35	4.978	327.490	88960.791	46.470	14871.70	3.61	889.61	148.72	1038.32
1.00%	464.600	0.250%	0.50%	0.010	427.70	5.893	606.761	195087.389	69.340	22191.00	4.28	1950.87	221.91	2172.78
0.90%	475.800	0.050%	0.10%	0.002	470.20	6.478	858.106	303316.084	86.836	27790.23	0.94	606.63	55.58	662.21
0.80%	485.600	0.050%	0.10%	0.002	480.70	6.623	930.320	336185.007	91.513	29286.98	0.96	672.37	58.57	730.94
0.70%	495.300	0.050%	0.10%	0.002	490.45	6.757	1001.239	369151.318	95.984	30717.75	0.98	738.30	61.44	799.74
0.60%	507.800	0.050%	0.10%	0.002	501.55	6.910	1086.671	409717.187	101.225	32394.98	1.00	819.43	64.79	884.22
0.50%	514.000	0.050%	0.10%	0.002	510.90	7.039	1162.644	446534.018	105.765	33848.05	1.02	893.07	67.70	960.76
0.25%	530.000	0.125%	0.25%	0.005	522.00	7.192	1257.764	493561.936	111.306	35621.25	2.61	2467.81	178.11	2645.92
0.10%	535.500	0.075%	0.15%	0.003	532.75	7.340	1355.157	542731.619	116.829	37388.77	1.60	1628.19	112.17	1740.36
0.05%	535.900	0.025%	0.05%	0.001	535.70	7.381	1382.815	556874.905	118.371	37882.50	0.54	556.87	37.88	594.76
0.01%														
0.005%														
0.001%														
									Storm Totals:		44.4 (cfs) / 88.1 (acre-ft)	12044.8 (tons/storm)	1425.1 (tons/storm)	13470.0 (tons/storm)

50.000% 100.000% 2.00

.

JUF240 2 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	72.58	0.059895383	104.5000155
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.600	5.000%	10.000%	0.20	0.30	0.004	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
80.0%	0.600	5.000%	10.000%	0.20	0.60	0.008	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
70.0%	0.700	5.000%	10.00%	0.20	0.65	0.009	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
60.0%	0.700	5.000%	10.00%	0.20	0.70	0.010	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
50.0%	0.800	5.000%	10.00%	0.20	0.75	0.010	0.064	0.01	0.000	0.00	0.2	0.00	0.00	0.00
40.0%	0.900	5.000%	10.00%	0.20	0.85	0.012	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
30.0%	1.000	5.000%	10.00%	0.20	0.95	0.013	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
20.0%	1.200	5.000%	10.00%	0.20	1.10	0.015	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
10.0%	24.800	5.000%	10.00%	0.20	13.00	0.179	0.078	0.29	0.012	0.03	2.6	0.06	0.01	0.06
5.0%	165.800	2.500%	5.00%	0.10	95.30	1.313	1.860	50.03	1.831	4.74	9.5	5.00	0.47	5.48
4.0%	193.900	0.500%	1.00%	0.02	179.85	2.478	8.359	424.17	7.405	19.16	3.6	8.48	0.38	8.87
3.0%	235.400	0.500%	1.00%	0.02	214.65	2.957	12.765	773.09	10.919	28.26	4.3	15.46	0.57	16.03
2.0%	331.900	0.500%	1.00%	0.02	283.65	3.908	24.918	1994.24	20.130	52.10	5.7	39.88	1.04	40.93
1.50%	390.800	0.250%	0.50%	0.01	361.35	4.978	44.593	4546.47	34.238	88.61	3.6	45.46	0.89	46.35
1.00%	464.600	0.250%	0.50%	0.01	427.70	5.893	66.894	8072.49	49.556	128.26	4.3	80.72	1.28	82.01
0.90%	475.800	0.050%	0.10%	0.00	470.20	6.478	84.023	11147.06	61.001	157.88	0.9	22.29	0.32	22.61
0.80%	485.600	0.050%	0.10%	0.00	480.70	6.623	88.610	12018.11	64.029	165.71	1.0	24.04	0.33	24.37
0.70%	495.300	0.050%	0.10%	0.00	490.45	6.757	92.997	12869.02	66.912	173.17	1.0	25.74	0.35	26.08
0.60%	507.800	0.050%	0.10%	0.00	501.55	6.910	98.144	13888.61	70.278	181.89	1.0	27.78	0.36	28.14
0.50%	514.000	0.050%	0.10%	0.00	510.90	7.039	102.606	14790.69	73.184	189.41	1.0	29.58	0.38	29.96
0.25%	530.000	0.125%	0.25%	0.01	522.00	7.192	108.054	15914.46	76.716	198.55	2.6	79.57	0.99	80.57
0.10%	535.500	0.075%	0.15%	0.00	532.75	7.340	113.488	17059.06	80.224	207.63	1.6	51.18	0.62	51.80
0.05%	535.900	0.025%	0.05%	0.00	535.70	7.381	115.007	17383.05	81.201	210.16	0.5	17.38	0.21	17.59
0.01%														
0.005%														
0.001%														
									Storm Totals:		44.4 (cfs) / 88.1 (acre-ft)	472.7 (tons/storm)	8.2 (tons/storm)	480.9 (tons/storm)

.

JUF240 10 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	72.58	7.40640678	278.4249882
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	4.000	5.000%	10.000%	0.200	2.00	0.028	0.099	0.149	0.072	23.04	0.40	0.03	4.61	4.64
80.0%	4.400	5.000%	10.000%	0.200	4.20	0.058	0.099	0.312	0.073	23.35	0.84	0.06	4.67	4.73
70.0%	4.900	5.000%	10.00%	0.200	4.65	0.064	0.099	0.346	0.073	23.45	0.93	0.07	4.69	4.76
60.0%	5.500	5.000%	10.00%	0.200	5.20	0.072	0.099	0.387	0.074	23.60	1.04	0.08	4.72	4.80
50.0%	6.100	5.000%	10.00%	0.200	5.80	0.080	0.099	0.432	0.074	23.78	1.16	0.09	4.76	4.84
40.0%	6.800	5.000%	10.00%	0.200	6.45	0.089	0.099	0.480	0.075	24.01	1.29	0.10	4.80	4.90
30.0%	7.600	5.000%	10.00%	0.200	7.20	0.099	0.099	0.536	0.076	24.32	1.44	0.11	4.86	4.97
20.0%	8.700	5.000%	10.00%	0.200	8.15	0.112	0.099	0.608	0.077	24.79	1.63	0.12	4.96	5.08
10.0%	63.200	5.000%	10.00%	0.200	35.95	0.495	0.169	4.577	0.264	84.52	7.19	0.92	16.90	17.82
5.0%	511.500	2.500%	5.00%	0.100	287.35	3.959	141.7	30600.0	27.0	8635.2	28.74	3060.00	863.52	3923.53
4.0%	718.700	0.500%	1.00%	0.020	615.10	8.474	2292.9	1060223.7	164.4	52608.3	12.30	21204.47	1052.17	22256.64
3.0%	993.900	0.500%	1.00%	0.020	856.30	11.798	7692.9	4952112.4	360.8	115480.2	17.13	99042.25	2309.60	101351.85
2.0%	1088.200	0.500%	1.00%	0.020	1041.05	14.343	15723.2	12305053.2	574.1	183725.9	20.82	246101.06	3674.52	249775.58
1.50%	1201.800	0.250%	0.50%	0.010	1145.00	15.775	22273.1	19171554.4	719.8	230366.0	11.45	191715.54	2303.66	194019.20
1.00%	1334.200	0.250%	0.50%	0.010	1268.00	17.470	32353.7	30840013.9	917.4	293597.1	12.68	308400.14	2935.97	311336.11
0.90%	1362.000	0.050%	0.10%	0.002	1348.10	18.573	40482.1	41025794.5	1061.2	339615.4	2.70	82051.59	679.23	82730.82
0.80%	1375.800	0.050%	0.10%	0.002	1368.90	18.860	42814.8	44059290.3	1100.5	352203.6	2.74	88118.58	704.41	88822.99
0.70%	1402.500	0.050%	0.10%	0.002	1389.15	19.139	45178.2	47179120.9	1139.6	364714.7	2.78	94358.24	729.43	95087.67
0.60%	1427.200	0.050%	0.10%	0.002	1414.85	19.493	48312.4	51385581.2	1190.4	380958.4	2.83	102771.16	761.92	103533.08
0.50%	1448.500	0.050%	0.10%	0.002	1437.85	19.810	51248.8	55394806.6	1236.9	395844.4	2.88	110789.61	791.69	111581.30
0.25%	1482.300	0.125%	0.25%	0.005	1465.40	20.189	54934.2	60516150.3	1294.0	414112.0	7.33	302580.75	2070.56	304651.31
0.10%	1493.300	0.075%	0.15%	0.003	1487.80	20.498	58069.7	64948100.4	1341.5	429317.7	4.46	194844.30	1287.95	196132.25
0.05%	1493.500	0.025%	0.05%	0.001	1493.40	20.575	58873.5	66094912.7	1353.5	433168.8	1.49	66094.91	433.17	66528.08
0.01%														
0.005%														
0.001%														

		50.000%	100.000%	2.00										

Storm Totals:	146.2 (cfs) / 290.1 (acre-ft)	1911134 (tons/storm)	20652.8 (tons/storm)	1931787.0 (tons/storm)

.

JUF240 10 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	72.58	0.059895383	104.5000155
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	4.000	5.000%	10.000%	0.20	2.00	0.028	0.064	0.04	0.000	0.00	0.4	0.01	0.00	0.01
80.0%	4.400	5.000%	10.000%	0.20	4.20	0.058	0.065	0.08	0.000	0.00	0.8	0.02	0.00	0.02
70.0%	4.900	5.000%	10.00%	0.20	4.65	0.064	0.065	0.09	0.000	0.00	0.9	0.02	0.00	0.02
60.0%	5.500	5.000%	10.00%	0.20	5.20	0.072	0.065	0.10	0.000	0.00	1.0	0.02	0.00	0.02
50.0%	6.100	5.000%	10.00%	0.20	5.80	0.080	0.066	0.11	0.000	0.00	1.2	0.02	0.00	0.02
40.0%	6.800	5.000%	10.00%	0.20	6.45	0.089	0.066	0.12	0.000	0.00	1.3	0.02	0.00	0.02
30.0%	7.600	5.000%	10.00%	0.20	7.20	0.099	0.067	0.14	0.000	0.00	1.4	0.03	0.00	0.03
20.0%	8.700	5.000%	10.00%	0.20	8.15	0.112	0.068	0.16	0.000	0.00	1.6	0.03	0.00	0.03
10.0%	63.200	5.000%	10.00%	0.20	35.95	0.495	0.235	2.39	0.206	0.53	7.2	0.48	0.11	0.58
5.0%	511.500	2.500%	5.00%	0.10	287.35	3.959	25.706	2084.14	20.710	53.60	28.7	208.41	5.36	213.77
4.0%	718.700	0.500%	1.00%	0.02	615.10	8.474	160.407	27838.77	109.953	284.57	12.3	556.78	5.69	562.47
3.0%	993.900	0.500%	1.00%	0.02	856.30	11.798	355.782	85958.63	227.146	587.87	17.1	1719.17	11.76	1730.93
2.0%	1088.200	0.500%	1.00%	0.02	1041.05	14.343	569.515	167284.89	348.635	902.30	20.8	3345.70	18.05	3363.74
1.50%	1201.800	0.250%	0.50%	0.01	1145.00	15.775	716.222	231384.03	429.551	1111.71	11.5	2313.84	11.12	2324.96
1.00%	1334.200	0.250%	0.50%	0.01	1268.00	17.470	915.733	327618.53	537.270	1390.50	12.7	3276.19	13.90	3290.09
0.90%	1362.000	0.050%	0.10%	0.00	1348.10	18.573	1061.299	403682.71	614.513	1590.41	2.7	807.37	3.18	810.55
0.80%	1375.800	0.050%	0.10%	0.00	1368.90	18.860	1101.165	425308.85	635.497	1644.72	2.7	850.62	3.29	853.91
0.70%	1402.500	0.050%	0.10%	0.00	1389.15	19.139	1140.806	447137.38	656.295	1698.54	2.8	894.27	3.40	897.67
0.60%	1427.200	0.050%	0.10%	0.00	1414.85	19.493	1192.299	475965.94	683.215	1768.21	2.8	951.93	3.54	955.47
0.50%	1448.500	0.050%	0.10%	0.00	1437.85	19.810	1239.515	502857.97	707.807	1831.86	2.9	1005.72	3.66	1009.38
0.25%	1482.300	0.125%	0.25%	0.01	1465.40	20.189	1297.487	536462.37	737.888	1909.71	7.3	2682.31	9.55	2691.86
0.10%	1493.300	0.075%	0.15%	0.00	1487.80	20.498	1345.768	564930.41	762.848	1974.31	4.5	1694.79	5.92	1700.71
0.05%	1493.500	0.025%	0.05%	0.00	1493.40	20.575	1358.000	572210.80	769.159	1990.65	1.5	572.21	1.99	574.20
0.01%														
0.005%														
0.001%														
									Storm Totals:		146.2 (cfs) / 290.1 (acre-ft)	20879.9 (tons/storm)	100.5 (tons/storm)	20980.5 (tons/storm)

.

JUF240 100 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	72.58	7.40640678	278.4249882
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	20.500	5.000%	10.000%	0.200	10.25	0.141	0.100	0.768	0.082	26.09	2.05	0.15	5.22	5.37
80.0%	22.900	5.000%	10.000%	0.200	21.70	0.299	0.110	1.795	0.130	41.51	4.34	0.36	8.30	8.66
70.0%	25.500	5.000%	10.00%	0.200	24.20	0.333	0.115	2.100	0.147	47.00	4.84	0.42	9.40	9.82
60.0%	28.400	5.000%	10.00%	0.200	26.95	0.371	0.123	2.501	0.169	54.00	5.39	0.50	10.80	11.30
50.0%	31.700	5.000%	10.00%	0.200	30.05	0.414	0.135	3.060	0.197	63.17	6.01	0.61	12.63	13.25
40.0%	35.500	5.000%	10.00%	0.200	33.60	0.463	0.154	3.888	0.236	75.39	6.72	0.78	15.08	15.85
30.0%	39.700	5.000%	10.00%	0.200	37.60	0.518	0.182	5.142	0.286	91.45	7.52	1.03	18.29	19.32
20.0%	44.400	5.000%	10.00%	0.200	42.05	0.579	0.224	7.078	0.351	112.31	8.41	1.42	22.46	23.88
10.0%	195.700	5.000%	10.00%	0.200	120.05	1.654	5.906	533.043	3.451	1104.52	24.01	106.61	220.90	327.51
5.0%	1729.900	2.500%	5.00%	0.100	962.80	13.265	11813.3	8550251.2	476.8	152584.4	96.28	855025.12	15258.44	870283.56
4.0%	2557.300	0.500%	1.00%	0.020	2143.60	29.533	220934.6	356024227.5	3195.9	1022791.9	42.87	7120484.55	20455.84	7140940.39
3.0%	3631.600	0.500%	1.00%	0.020	3094.45	42.633	846552.0	1969287259.3	7649.1	2447945.4	61.89	39385745.19	48958.91	39434704.09
2.0%	4554.200	0.500%	1.00%	0.020	4092.90	56.389	2355215.2	7246590254.5	14870.1	4758884.1	81.86	144931805.09	95177.68	145026982.77
1.50%	4706.000	0.250%	0.50%	0.010	4630.10	63.791	3698314.5	12872597338.7	19935.8	6380072.5	46.30	128725973.39	63800.72	128789774.11
1.00%	4782.700	0.250%	0.50%	0.010	4744.35	65.365	4043331.0	14420754558.9	21125.1	6760695.8	47.44	144207545.59	67606.96	144275152.55
0.90%	4830.500	0.050%	0.10%	0.002	4806.60	66.222	4240859.1	15323705736.9	21790.0	6973475.8	9.61	30647411.47	13946.95	30661358.43
0.80%	4867.200	0.050%	0.10%	0.002	4848.85	66.804	4378857.9	15961421920.3	22248.1	7120073.1	9.70	31922843.84	14240.15	31937083.99
0.70%	4909.100	0.050%	0.10%	0.002	4888.15	67.346	4510124.0	16573147037.3	22679.1	7258023.3	9.78	33146294.07	14516.05	33160810.12
0.60%	4947.700	0.050%	0.10%	0.002	4928.40	67.900	4647503.6	17218592972.1	23125.6	7400900.2	9.86	34437185.94	14801.80	34451987.74
0.50%	4980.200	0.050%	0.10%	0.002	4963.95	68.390	4771348.3	17804939107.4	23524.1	7528437.3	9.93	35609878.21	15056.87	35624935.09
0.25%	5021.100	0.125%	0.25%	0.005	5000.65	68.896	4901697.2	18426587584.1	23939.6	7661426.1	25.00	92132937.92	38307.13	92171245.05
0.10%	5033.600	0.075%	0.15%	0.003	5027.35	69.264	4998141.1	18889462944.1	24244.6	7759027.0	15.08	56668388.83	23277.08	56691665.91
0.05%	5034.600	0.025%	0.05%	0.001	5034.10	69.357	5022739.7	19007915304.8	24322.1	7783814.8	5.03	19007915.30	7783.81	19015699.12
0.01%														
0.005%														
0.001%														
									Storm Totals:		539.9 (cfs) 1,070.9 (acre-ft)	798799546 (tons/storm)	453511.5 (tons/storm)	799253057.9 (tons/storm)

50.000% 100.000% 2.00

.

JUF240 100 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	72.58	0.059895383	104.5000155
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	20.500	5.000%	10.000%	0.20	10.25	0.141	0.072	0.21	0.003	0.01	2.1	0.04	0.00	0.04
80.0%	22.900	5.000%	10.000%	0.20	21.70	0.299	0.115	0.70	0.060	0.16	4.3	0.14	0.03	0.17
70.0%	25.500	5.000%	10.00%	0.20	24.20	0.333	0.130	0.89	0.080	0.21	4.8	0.18	0.04	0.22
60.0%	28.400	5.000%	10.00%	0.20	26.95	0.371	0.149	1.14	0.104	0.27	5.4	0.23	0.05	0.28
50.0%	31.700	5.000%	10.00%	0.20	30.05	0.414	0.175	1.48	0.135	0.35	6.0	0.30	0.07	0.37
40.0%	35.500	5.000%	10.00%	0.20	33.60	0.463	0.210	1.99	0.176	0.46	6.7	0.40	0.09	0.49
30.0%	39.700	5.000%	10.00%	0.20	37.60	0.518	0.255	2.70	0.228	0.59	7.5	0.54	0.12	0.66
20.0%	44.400	5.000%	10.00%	0.20	42.05	0.579	0.314	3.73	0.295	0.76	8.4	0.75	0.15	0.90
10.0%	195.700	5.000%	10.00%	0.20	120.05	1.654	3.197	108.29	3.045	7.88	24.0	21.66	1.58	23.23
5.0%	1729.900	2.500%	5.00%	0.10	962.80	13.265	471.825	128173.31	293.732	760.20	96.3	12817.33	76.02	12893.35
4.0%	2557.300	0.500%	1.00%	0.02	2143.60	29.533	3243.0	1961409.6	1699.2	4397.6	42.9	39228.2	88.0	39316.1
3.0%	3631.600	0.500%	1.00%	0.02	3094.45	42.633	7851.5	6855096.7	3800.8	9836.7	61.9	137101.9	196.7	137298.7
2.0%	4554.200	0.500%	1.00%	0.02	4092.90	56.389	15397.7	17781411.2	7017.7	18162.3	81.9	355628.2	363.2	355991.5
1.50%	4706.000	0.250%	0.50%	0.01	4630.10	63.791	20723.0	27072129.8	9197.0	23802.5	46.3	270721.3	238.0	270959.3
1.00%	4782.700	0.250%	0.50%	0.01	4744.35	65.365	21976.0	29417510.7	9702.0	25109.4	47.4	294175.1	251.1	294426.2
0.90%	4830.500	0.050%	0.10%	0.00	4806.60	66.222	22676.9	30754048.3	9983.3	25837.6	9.6	61508.1	51.7	61559.8
0.80%	4867.200	0.050%	0.10%	0.00	4848.85	66.804	23160.0	31685253.2	10176.7	26338.2	9.7	63370.5	52.7	63423.2
0.70%	4909.100	0.050%	0.10%	0.00	4888.15	67.346	23614.7	32569162.6	10358.5	26808.6	9.8	65138.3	53.6	65191.9
0.60%	4947.700	0.050%	0.10%	0.00	4928.40	67.900	24085.7	33492355.0	10546.4	27295.0	9.9	66984.7	54.6	67039.3
0.50%	4980.200	0.050%	0.10%	0.00	4963.95	68.390	24506.3	34322991.0	10714.0	27728.7	9.9	68646.0	55.5	68701.4
0.25%	5021.100	0.125%	0.25%	0.01	5000.65	68.896	24944.9	35195659.3	10888.5	28180.2	25.0	175978.3	140.9	176119.2
0.10%	5033.600	0.075%	0.15%	0.00	5027.35	69.264	25266.9	35840313.6	11016.4	28511.2	15.1	107520.9	85.5	107606.5
0.05%	5034.600	0.025%	0.05%	0.00	5034.10	69.357	25348.7	36004599.8	11048.8	28595.2	5.0	36004.6	28.6	36033.2
0.01%														
0.005%														
0.001%														
									Storm Totals:		539.9 (cfs) 1,070.9 (acre-ft)	1754848 (tons/storm)	1738 (tons/storm)	1756586 (tons/storm)

JUF240 100 yr 24 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	72.58	7.40640678	278.4249882
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00	0.025%	0.050%	0.001										
90.0%	1.50	5.000%	10.000%	0.200	0.75	0.010	0.099	0.056	0.072	22.98	0.15	0.01	4.60	4.61
80.0%	88.30	5.000%	10.000%	0.200	44.90	0.619	0.258	8.702	0.398	127.38	8.98	1.74	25.48	27.22
70.0%	92.00	5.000%	10.00%	0.200	90.15	1.242	2.135	144.698	1.782	570.41	18.03	28.94	114.08	143.02
60.0%	95.80	5.000%	10.00%	0.200	93.90	1.294	2.463	173.833	1.956	626.10	18.78	34.77	125.22	159.99
50.0%	99.70	5.000%	10.00%	0.200	97.75	1.347	2.837	208.471	2.145	686.55	19.55	41.69	137.31	179.00
40.0%	110.10	5.000%	10.00%	0.200	104.90	1.445	3.644	287.358	2.524	807.80	20.98	57.47	161.56	219.03
30.0%	380.40	5.000%	10.00%	0.200	245.25	3.379	79.383	14635.597	18.538	5932.62	49.05	2927.12	1186.52	4113.64
20.0%	935.50	5.000%	10.00%	0.200	657.95	9.065	2933.534	1450961.727	192.913	61737.98	131.59	290192.35	12347.60	302539.94
10.0%	1790.40	5.000%	10.00%	0.200	1362.95	18.778	42137.787	43174132.485	1089.194	348575.55	272.59	8634826.50	69715.11	8704541.61
5.0%	4104.30	2.500%	5.00%	0.100	2947.35	40.607	708368.7	1569506216.6	6812.8	2180320.1	294.74	156950621.66	218032.01	157168653.67
4.0%	5186.30	0.500%	1.00%	0.020	4645.30	64.000	3742932.9	13070668035.8	20091.7	6429975.2	92.91	261413360.72	128599.50	261541960.22
3.0%	6638.70	0.500%	1.00%	0.020	5912.50	81.459	9047306.8	40212626934.8	35648.9	11408745.2	118.25	804252538.70	228174.90	804480713.60
2.0%	8160.80	0.500%	1.00%	0.020	7399.75	101.949	20562401.7	114383362842.7	60770.7	19448490.4	148.00	2287667256.85	388969.81	2288056226.66
1.50%	8745.00	0.250%	0.50%	0.010	8452.90	116.459	33459745.4	212618151289.7	83381.4	26684619.6	84.53	2126181512.90	266846.20	2126448359.09
1.00%	9200.60	0.250%	0.50%	0.010	8972.80	123.621	41626717.8	280783853530.6	96093.0	30752707.3	89.73	2807838535.31	307527.07	2808146062.38
0.90%	9260.50	0.050%	0.10%	0.002	9230.55	127.173	46171754.1	320387767933.2	102785.1	32894396.5	18.46	640775535.87	65788.79	640841324.66
0.80%	9283.70	0.050%	0.10%	0.002	9272.10	127.745	46936786.7	327162437759.6	103888.4	33247478.5	18.54	654324875.52	66494.96	654391370.48
0.70%	9317.20	0.050%	0.10%	0.002	9300.45	128.136	47464035.4	331849063207.3	104645.1	33489644.3	18.60	663698126.41	66979.29	663765105.70
0.60%	9336.30	0.050%	0.10%	0.002	9326.75	128.498	47956994.8	336243788468.4	105349.9	33715210.0	18.65	672487576.94	67430.42	672555007.36
0.50%	9346.70	0.050%	0.10%	0.002	9341.50	128.701	48235087.1	338728438085.7	105746.4	33842099.5	18.68	677456876.17	67684.20	677524560.37
0.25%	9368.10	0.125%	0.25%	0.005	9357.40	128.920	48536171.7	341422931862.1	106174.7	33979191.5	46.79	1707114659.31	169895.96	1707284555.27
0.10%	9375.00	0.075%	0.15%	0.003	9371.55	129.115	48805264.6	343834991682.3	106556.8	34101464.8	28.11	1031504975.05	102304.39	1031607279.44
0.05%	9375.20	0.025%	0.05%	0.001	9375.10	129.164	48872945.3	344442232116.9	106652.8	34132181.1	9.38	344442232.12	34132.18	344476364.30
0.01%														
0.005%														
0.001%														
									Storm Totals:		1,545.1 (cfs) 3,064.6 (acre-ft)	14845036794 (tons/storm)	2262677.2 (tons/storm)	14847299471.3 (tons/storm)

50.000% 100.000% 2.00

.

JUF240 100 yr 24 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	72.58	0.059895383	104.5000155
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00													
90.0%	1.50	5.000%	10.000%	0.20	0.75	0.010	0.064	0.01	0.000	0.00	0.2	0.00	0.00	0.00
80.0%	88.30	5.000%	10.000%	0.20	44.90	0.619	0.357	4.52	0.342	0.89	9.0	0.90	0.18	1.08
70.0%	92.00	5.000%	10.00%	0.20	90.15	1.242	1.635	41.60	1.620	4.19	18.0	8.32	0.84	9.16
60.0%	95.80	5.000%	10.00%	0.20	93.90	1.294	1.798	47.62	1.772	4.59	18.8	9.52	0.92	10.44
50.0%	99.70	5.000%	10.00%	0.20	97.75	1.347	1.974	54.44	1.936	5.01	19.6	10.89	1.00	11.89
40.0%	110.10	5.000%	10.00%	0.20	104.90	1.445	2.328	68.90	2.262	5.86	21.0	13.78	1.17	14.95
30.0%	380.40	5.000%	10.00%	0.20	245.25	3.379	17.572	1215.94	14.629	37.86	49.1	243.19	7.57	250.76
20.0%	935.50	5.000%	10.00%	0.20	657.95	9.065	188.643	35019.76	127.453	329.86	131.6	7003.95	65.97	7069.92
10.0%	1790.40	5.000%	10.00%	0.20	1362.95	18.778	1089.674	419040.97	629.455	1629.08	272.6	83808.19	325.82	84134.01
5.0%	4104.30	2.500%	5.00%	0.10	2947.35	40.607	6982.427	5806551.16	3415.758	8840.25	294.7	580655.12	884.03	581539.14
4.0%	5186.30	0.500%	1.00%	0.02	4645.30	64.000	20887.2	27376256.3	9263.3	23974.2	92.9	547525.1	479.5	548004.6
3.0%	6638.70	0.500%	1.00%	0.02	5912.50	81.459	37341.2	62292968.8	15721.3	40688.0	118.3	1245859.4	813.8	1246673.1
2.0%	8160.80	0.500%	1.00%	0.02	7399.75	101.949	64104.1	133839112.7	25714.5	66551.1	148.0	2676782.3	1331.0	2678113.3
1.50%	8745.00	0.250%	0.50%	0.01	8452.90	116.459	88322.2	210647184.8	34427.3	89100.5	84.5	2106471.8	891.0	2107362.9
1.00%	9200.60	0.250%	0.50%	0.01	8972.80	123.621	101977.3	258173479.8	39241.7	101560.5	89.7	2581734.8	1015.6	2582750.4
0.90%	9260.50	0.050%	0.10%	0.00	9230.55	127.173	109176.0	284337910.9	41756.0	108067.9	18.5	568675.8	216.1	568892.0
0.80%	9283.70	0.050%	0.10%	0.00	9272.10	127.745	110363.4	288724168.5	42169.3	109137.5	18.5	577448.3	218.3	577666.6
0.70%	9317.20	0.050%	0.10%	0.00	9300.45	128.136	111177.8	291744257.0	42452.6	109870.6	18.6	583488.5	219.7	583708.3
0.60%	9336.30	0.050%	0.10%	0.00	9326.75	128.498	111936.6	294565858.1	42716.3	110553.1	18.7	589131.7	221.1	589352.8
0.50%	9346.70	0.050%	0.10%	0.00	9341.50	128.701	112363.4	296156726.2	42864.5	110936.9	18.7	592313.5	221.9	592535.3
0.25%	9368.10	0.125%	0.25%	0.01	9357.40	128.920	112824.6	297878417.2	43024.7	111351.3	46.8	1489392.1	556.8	1489948.8
0.10%	9375.00	0.075%	0.15%	0.00	9371.55	129.115	113235.9	299416551.0	43167.5	111720.9	28.1	898249.7	335.2	898584.8
0.05%	9375.20	0.025%	0.05%	0.00	9375.10	129.164	113339.3	299803322.0	43203.4	111813.8	9.4	299803.3	111.8	299915.1
0.01%														
0.005%														
0.001%														
									Storm Totals:		1,545.1 (cfs) 3,064.6 (acre-ft)	15428630 (tons/storm)	7919 (tons/storm)	15436549 (tons/storm)

.

Flow Duration JUF250
48 hour, 2 day duration

	2 yr 2 hr	10 yr 2 hr	100 yr 2 hr	100 yr 24 h
1	0	0	0	0
0.9	0.6	4	20.6	0.9
0.8	0.6	4.5	22.9	88.5
0.7	0.7	5	25.5	92.1
0.6	0.7	5.5	28.5	95.9
0.5	0.8	6.2	31.8	99.9
0.4	0.9	6.9	35.5	111.7
0.3	1	7.7	39.8	405.3
0.2	1.2	8.7	44.6	986.6
0.1	27.3	68.7	206.6	1896.8
0.05	178.2	565.8	1876.7	4387.3
0.04	202.3	799.3	2742.5	5532.8
0.03	277.9	1036.3	3918.4	7088.7
0.02	363.6	1187	4894.7	8728.7
0.015	430	1318.5	4954.7	9264
0.01	516.7	1480	5250.9	9652.8
0.009	530.6	1512.1	5311.9	9687.4
0.008	540.4	1532.7	5341.3	9715.9
0.007	551.4	1558.5	5397.3	9743.6
0.006	560.5	1587	5448.5	9773.3
0.005	570.6	1613.1	5495.2	9804.8
0.0025	583	1652	5589.1	9880.3
0.001	587.4	1664	5616.3	9902.5
0.0005	587.5	1665.4	5619.4	9903.5
0.0001	#N/A	#N/A	#N/A	#N/A
0.00005	#N/A	#N/A	#N/A	#N/A
0.00001	#N/A	#N/A	#N/A	#N/A

JUF250 2 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	74.22	7.55380933	279.9209438
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.600	5.000%	10.000%	0.200	0.30	0.004	0.099	0.022	0.072	23.44	0.06	0.00	4.69	4.69
80.0%	0.600	5.000%	10.000%	0.200	0.60	0.008	0.099	0.045	0.072	23.44	0.12	0.01	4.69	4.70
70.0%	0.700	5.000%	10.00%	0.200	0.65	0.009	0.099	0.049	0.072	23.44	0.13	0.01	4.69	4.70
60.0%	0.700	5.000%	10.00%	0.200	0.70	0.009	0.099	0.052	0.072	23.44	0.14	0.01	4.69	4.70
50.0%	0.800	5.000%	10.00%	0.200	0.75	0.010	0.099	0.056	0.072	23.44	0.15	0.01	4.69	4.70
40.0%	0.900	5.000%	10.00%	0.200	0.85	0.011	0.099	0.064	0.072	23.44	0.17	0.01	4.69	4.70
30.0%	1.000	5.000%	10.00%	0.200	0.95	0.013	0.099	0.071	0.072	23.45	0.19	0.01	4.69	4.70
20.0%	1.200	5.000%	10.00%	0.200	1.10	0.015	0.099	0.082	0.072	23.45	0.22	0.02	4.69	4.71
10.0%	27.300	5.000%	10.00%	0.200	14.25	0.192	0.101	1.089	0.092	30.03	2.85	0.22	6.01	6.22
5.0%	178.200	2.500%	5.00%	0.100	102.75	1.384	3.128	242.923	2.286	746.14	10.28	24.29	74.61	98.91
4.0%	202.300	0.500%	1.00%	0.020	190.25	2.563	28.958	4163.753	9.648	3149.26	3.81	83.28	62.99	146.26
3.0%	277.900	0.500%	1.00%	0.020	240.10	3.235	67.720	12288.740	16.724	5458.72	4.80	245.77	109.17	354.95
2.0%	363.600	0.500%	1.00%	0.020	320.75	4.322	195.214	47323.421	33.220	10843.08	6.42	946.47	216.86	1163.33
1.50%	430.000	0.250%	0.50%	0.010	396.80	5.346	425.110	127488.786	55.042	17965.74	3.97	1274.89	179.66	1454.55
1.00%	516.700	0.250%	0.50%	0.010	473.35	6.378	810.535	289970.134	83.680	27313.04	4.73	2899.70	273.13	3172.83
0.90%	530.600	0.050%	0.10%	0.002	523.65	7.056	1172.828	464167.473	106.366	34717.75	1.05	928.33	69.44	997.77
0.80%	540.400	0.050%	0.10%	0.002	535.50	7.215	1272.891	515168.972	112.173	36613.30	1.07	1030.34	73.23	1103.56
0.70%	551.400	0.050%	0.10%	0.002	545.90	7.355	1365.698	563464.963	117.418	38325.22	1.09	1126.93	76.65	1203.58
0.60%	560.500	0.050%	0.10%	0.002	555.95	7.491	1459.962	613446.180	122.619	40022.76	1.11	1226.89	80.05	1306.94
0.50%	570.600	0.050%	0.10%	0.002	565.55	7.620	1554.338	664378.566	127.709	41684.25	1.13	1328.76	83.37	1412.13
0.25%	583.000	0.125%	0.25%	0.005	576.80	7.772	1670.489	728228.915	133.828	43681.35	2.88	3641.14	218.41	3859.55
0.10%	587.400	0.075%	0.15%	0.003	585.20	7.885	1761.235	778970.052	138.505	45207.94	1.76	2336.91	135.62	2472.53
0.05%	587.500	0.025%	0.05%	0.001	587.45	7.915	1786.138	793021.693	139.773	45622.02	0.59	793.02	45.62	838.64
0.01%														
0.005%														
0.001%														
									Storm Totals:		48.7 (cfs) 96.6 (acre-ft)	17887.0 (tons/storm)	1742.3 (tons/storm)	19629.4 (tons/storm)

50.000% 100.000% 2.00

.

JUF250 2 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	74.22	0.060483252	107.5818335
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.600	5.000%	10.000%	0.20	0.30	0.004	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
80.0%	0.600	5.000%	10.000%	0.20	0.60	0.008	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
70.0%	0.700	5.000%	10.00%	0.20	0.65	0.009	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
60.0%	0.700	5.000%	10.00%	0.20	0.70	0.009	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
50.0%	0.800	5.000%	10.00%	0.20	0.75	0.010	0.064	0.01	0.000	0.00	0.2	0.00	0.00	0.00
40.0%	0.900	5.000%	10.00%	0.20	0.85	0.011	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
30.0%	1.000	5.000%	10.00%	0.20	0.95	0.013	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
20.0%	1.200	5.000%	10.00%	0.20	1.10	0.015	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
10.0%	27.300	5.000%	10.00%	0.20	14.25	0.192	0.081	0.34	0.016	0.04	2.9	0.07	0.01	0.08
5.0%	178.200	2.500%	5.00%	0.10	102.75	1.384	2.105	62.83	2.058	5.38	10.3	6.28	0.54	6.82
4.0%	202.300	0.500%	1.00%	0.02	190.25	2.563	9.066	500.98	7.978	20.85	3.8	10.02	0.42	10.44
3.0%	277.900	0.500%	1.00%	0.02	240.10	3.235	15.831	1104.09	13.297	34.75	4.8	22.08	0.70	22.78
2.0%	363.600	0.500%	1.00%	0.02	320.75	4.322	31.737	2956.85	25.104	65.61	6.4	59.14	1.31	60.45
1.50%	430.000	0.250%	0.50%	0.01	396.80	5.346	52.938	6101.58	40.036	104.63	4.0	61.02	1.05	62.06
1.00%	516.700	0.250%	0.50%	0.01	473.35	6.378	80.929	11127.29	58.951	154.07	4.7	111.27	1.54	112.81
0.90%	530.600	0.050%	0.10%	0.00	523.65	7.056	103.196	15696.70	73.567	192.27	1.0	31.39	0.38	31.78
0.80%	540.400	0.050%	0.10%	0.00	535.50	7.215	108.907	16940.23	77.268	201.94	1.1	33.88	0.40	34.28
0.70%	551.400	0.050%	0.10%	0.00	545.90	7.355	114.068	18087.61	80.597	210.64	1.1	36.18	0.42	36.60
0.60%	560.500	0.050%	0.10%	0.00	555.95	7.491	119.189	19247.53	83.887	219.24	1.1	38.50	0.44	38.93
0.50%	570.600	0.050%	0.10%	0.00	565.55	7.620	124.204	20403.69	87.097	227.63	1.1	40.81	0.46	41.26
0.25%	583.000	0.125%	0.25%	0.01	576.80	7.772	130.235	21820.04	90.942	237.68	2.9	109.10	1.19	110.29
0.10%	587.400	0.075%	0.15%	0.00	585.20	7.885	134.848	22921.90	93.872	245.33	1.8	68.77	0.74	69.50
0.05%	587.500	0.025%	0.05%	0.00	587.45	7.915	136.099	23223.58	94.665	247.41	0.6	23.22	0.25	23.47
0.01%														
0.005%														
0.001%														
									Storm Totals:		48.7 (cfs) 96.6 (acre-ft)	651.7 (tons/storm)	9.8 (tons/storm)	661.6 (tons/storm)

.

JUF250 10 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	74.22	7.55380933	279.9209438
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	4.000	5.000%	10.000%	0.200	2.00	0.027	0.099	0.149	0.072	23.50	0.40	0.03	4.70	4.73
80.0%	4.500	5.000%	10.000%	0.200	4.25	0.057	0.099	0.318	0.073	23.81	0.85	0.06	4.76	4.83
70.0%	5.000	5.000%	10.00%	0.200	4.75	0.064	0.099	0.355	0.073	23.92	0.95	0.07	4.78	4.86
60.0%	5.500	5.000%	10.00%	0.200	5.25	0.071	0.099	0.393	0.074	24.05	1.05	0.08	4.81	4.89
50.0%	6.200	5.000%	10.00%	0.200	5.85	0.079	0.099	0.438	0.074	24.23	1.17	0.09	4.85	4.93
40.0%	6.900	5.000%	10.00%	0.200	6.55	0.088	0.099	0.490	0.075	24.48	1.31	0.10	4.90	4.99
30.0%	7.700	5.000%	10.00%	0.200	7.30	0.098	0.099	0.547	0.076	24.78	1.46	0.11	4.96	5.07
20.0%	8.700	5.000%	10.00%	0.200	8.20	0.110	0.099	0.615	0.077	25.21	1.64	0.12	5.04	5.16
10.0%	68.700	5.000%	10.00%	0.200	38.70	0.521	0.184	5.380	0.289	94.37	7.74	1.08	18.87	19.95
5.0%	565.800	2.500%	5.00%	0.100	317.25	4.275	187.5	44966.1	32.4	10564.5	31.73	4496.61	1056.45	5553.06
4.0%	799.300	0.500%	1.00%	0.020	682.55	9.197	3092.7	1595408.7	199.6	65165.0	13.65	31908.17	1303.30	33211.47
3.0%	1036.300	0.500%	1.00%	0.020	917.80	12.366	9139.6	6339769.1	403.6	131727.3	18.36	126795.38	2634.55	129429.93
2.0%	1187.000	0.500%	1.00%	0.020	1111.65	14.978	18425.8	15480790.7	636.4	207719.9	22.23	309615.81	4154.40	313770.21
1.50%	1318.500	0.250%	0.50%	0.010	1252.75	16.880	28530.8	27013282.3	845.4	275952.2	12.53	270132.82	2759.52	272892.34
1.00%	1480.000	0.250%	0.50%	0.010	1399.25	18.853	42762.0	45222319.9	1099.6	358925.6	13.99	452223.20	3589.26	455812.46
0.90%	1512.100	0.050%	0.10%	0.002	1496.05	20.158	54620.4	61759001.3	1289.2	420784.6	2.99	123518.00	841.57	124359.57
0.80%	1532.700	0.050%	0.10%	0.002	1522.40	20.513	58223.7	66992758.4	1343.8	438615.9	3.04	133985.52	877.23	134862.75
0.70%	1558.500	0.050%	0.10%	0.002	1545.60	20.825	61536.6	71883578.3	1393.0	454671.5	3.09	143767.16	909.34	144676.50
0.60%	1587.000	0.050%	0.10%	0.002	1572.75	21.191	65585.1	77958545.4	1451.9	473886.8	3.15	155917.09	947.77	156864.86
0.50%	1613.100	0.050%	0.10%	0.002	1600.05	21.559	69847.6	84466481.2	1512.5	493674.4	3.20	168932.96	987.35	169920.31
0.25%	1652.000	0.125%	0.25%	0.005	1632.55	21.997	75180.5	92762215.5	1586.5	517844.8	8.16	463811.08	2589.22	466400.30
0.10%	1664.000	0.075%	0.15%	0.003	1658.00	22.340	79558.5	99694317.8	1646.0	537240.8	4.97	299082.95	1611.72	300694.68
0.05%	1665.400	0.025%	0.05%	0.001	1664.70	22.430	80741.2	101585195.1	1661.8	542415.9	1.66	101585.20	542.42	102127.61
0.01%														
0.005%														
0.001%														

50.000% 100.000% 2.00

Storm Totals:	159.3 (cfs) / 316.0 (acre-ft)	2785774 (tons/storm)	24861.8 (tons/storm)	2810635.5 (tons/storm)

JUF250 10 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	74.22	0.060483252	107.5818335
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	4.000	5.000%	10.000%	0.20	2.00	0.027	0.064	0.04	0.000	0.00	0.4	0.01	0.00	0.01
80.0%	4.500	5.000%	10.000%	0.20	4.25	0.057	0.065	0.08	0.000	0.00	0.9	0.02	0.00	0.02
70.0%	5.000	5.000%	10.00%	0.20	4.75	0.064	0.065	0.09	0.000	0.00	1.0	0.02	0.00	0.02
60.0%	5.500	5.000%	10.00%	0.20	5.25	0.071	0.065	0.10	0.000	0.00	1.1	0.02	0.00	0.02
50.0%	6.200	5.000%	10.00%	0.20	5.85	0.079	0.066	0.11	0.000	0.00	1.2	0.02	0.00	0.02
40.0%	6.900	5.000%	10.00%	0.20	6.55	0.088	0.066	0.13	0.000	0.00	1.3	0.03	0.00	0.03
30.0%	7.700	5.000%	10.00%	0.20	7.30	0.098	0.067	0.14	0.000	0.00	1.5	0.03	0.00	0.03
20.0%	8.700	5.000%	10.00%	0.20	8.20	0.110	0.068	0.16	0.000	0.00	1.6	0.03	0.00	0.03
10.0%	68.700	5.000%	10.00%	0.20	38.70	0.521	0.258	2.90	0.232	0.61	7.7	0.58	0.12	0.70
5.0%	565.800	2.500%	5.00%	0.10	317.25	4.275	30.911	2848.46	24.507	64.05	31.7	284.85	6.40	291.25
4.0%	799.300	0.500%	1.00%	0.02	682.55	9.197	195.317	38723.77	131.554	343.81	13.7	774.48	6.88	781.35
3.0%	1036.300	0.500%	1.00%	0.02	917.80	12.366	398.505	106239.24	251.859	658.23	18.4	2124.78	13.16	2137.95
2.0%	1187.000	0.500%	1.00%	0.02	1111.65	14.978	632.185	204133.72	383.404	1002.02	22.2	4082.67	20.04	4102.71
1.50%	1318.500	0.250%	0.50%	0.01	1252.75	16.880	842.996	306755.60	498.269	1302.22	12.5	3067.56	13.02	3080.58
1.00%	1480.000	0.250%	0.50%	0.01	1399.25	18.853	1100.272	447196.27	635.028	1659.63	14.0	4471.96	16.60	4488.56
0.90%	1512.100	0.050%	0.10%	0.00	1496.05	20.158	1292.603	561712.46	735.359	1921.85	3.0	1123.42	3.84	1127.27
0.80%	1532.700	0.050%	0.10%	0.00	1522.40	20.513	1348.116	596154.33	764.060	1996.86	3.0	1192.31	3.99	1196.30
0.70%	1558.500	0.050%	0.10%	0.00	1545.60	20.825	1398.126	627691.34	789.826	2064.20	3.1	1255.38	4.13	1259.51
0.60%	1587.000	0.050%	0.10%	0.00	1572.75	21.191	1458.008	666073.86	820.570	2144.54	3.1	1332.15	4.29	1336.44
0.50%	1613.100	0.050%	0.10%	0.00	1600.05	21.559	1519.708	706311.50	852.129	2227.02	3.2	1412.62	4.45	1417.08
0.25%	1652.000	0.125%	0.25%	0.01	1632.55	21.997	1595.117	756417.61	890.545	2327.42	8.2	3782.09	11.64	3793.73
0.10%	1664.000	0.075%	0.15%	0.00	1658.00	22.340	1655.664	797369.14	921.273	2407.73	5.0	2392.11	7.22	2399.33
0.05%	1665.400	0.025%	0.05%	0.00	1664.70	22.430	1671.823	808405.18	929.456	2429.12	1.7	808.41	2.43	810.83
0.01%														
0.005%														
0.001%														
									Storm Totals:		159.3 (cfs) 316.0 (acre-ft)	28105.5 (tons/storm)	118.2 (tons/storm)	28223.8 (tons/storm)

JUF250 100 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	74.22	7.55380933	279.9209438
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	20.600	5.000%	10.000%	0.200	10.30	0.139	0.100	0.775	0.081	26.49	2.06	0.16	5.30	5.45
80.0%	22.900	5.000%	10.000%	0.200	21.75	0.293	0.109	1.796	0.127	41.46	4.35	0.36	8.29	8.65
70.0%	25.500	5.000%	10.00%	0.200	24.20	0.326	0.114	2.088	0.143	46.67	4.84	0.42	9.33	9.75
60.0%	28.500	5.000%	10.00%	0.200	27.00	0.364	0.122	2.483	0.164	53.58	5.40	0.50	10.72	11.21
50.0%	31.800	5.000%	10.00%	0.200	30.15	0.406	0.133	3.031	0.192	62.62	6.03	0.61	12.52	13.13
40.0%	35.500	5.000%	10.00%	0.200	33.65	0.453	0.150	3.812	0.228	74.31	6.73	0.76	14.86	15.62
30.0%	39.800	5.000%	10.00%	0.200	37.65	0.507	0.176	5.003	0.275	89.88	7.53	1.00	17.98	18.98
20.0%	44.600	5.000%	10.00%	0.200	42.20	0.569	0.216	6.878	0.339	110.58	8.44	1.38	22.12	23.49
10.0%	206.600	5.000%	10.00%	0.200	125.60	1.692	6.415	608.928	3.641	1188.29	25.12	121.79	237.66	359.44
5.0%	1876.700	2.500%	5.00%	0.100	1041.65	14.035	14523.6	11433902.0	545.2	177966.9	104.17	1143390.20	17796.69	1161186.89
4.0%	2742.500	0.500%	1.00%	0.020	2309.60	31.120	267551.6	467028662.0	3619.2	1181304.8	46.19	9340573.24	23626.10	9364199.33
3.0%	3918.400	0.500%	1.00%	0.020	3330.45	44.874	1021091.4	2570198675.0	8639.7	2820014.1	66.61	51403973.50	56400.28	51460373.78
2.0%	4894.700	0.500%	1.00%	0.020	4406.55	59.374	2844353.5	9472866733.6	16809.6	5486647.0	88.13	189457334.67	109732.94	189567067.61
1.50%	4954.700	0.250%	0.50%	0.010	4924.70	66.355	4272125.7	15900945950.2	21894.3	7146285.5	49.25	159009459.50	71462.86	159080922.36
1.00%	5250.900	0.250%	0.50%	0.010	5102.80	68.755	4865168.5	18763142937.6	23823.6	7776022.6	51.03	187631429.38	77760.23	187709189.60
0.90%	5311.900	0.050%	0.10%	0.002	5281.40	71.161	5517790.7	22024874473.0	25853.8	8438669.9	10.56	44049748.95	16877.34	44066626.29
0.80%	5341.300	0.050%	0.10%	0.002	5326.60	71.770	5692555.4	22916933831.4	26382.9	8611366.0	10.65	45833867.66	17222.73	45851090.39
0.70%	5397.300	0.050%	0.10%	0.002	5369.30	72.346	5861316.4	23785483861.3	26888.4	8776375.0	10.74	47570967.72	17552.75	47588520.47
0.60%	5448.500	0.050%	0.10%	0.002	5422.90	73.068	6078267.6	24912113343.4	27530.9	8986078.5	10.85	49824226.69	17972.16	49842198.84
0.50%	5495.200	0.050%	0.10%	0.002	5471.85	73.728	6281442.4	25977223229.4	28125.3	9180100.1	10.94	51954446.46	18360.20	51972806.66
0.25%	5589.100	0.125%	0.25%	0.005	5542.15	74.675	6581808.1	27569104047.3	28991.9	9462955.5	27.71	137845520.24	47314.78	137892835.01
0.10%	5616.300	0.075%	0.15%	0.003	5602.70	75.491	6848766.8	29000728306.8	29750.5	9710576.2	16.81	87002184.92	29131.73	87031316.65
0.05%	5619.400	0.025%	0.05%	0.001	5617.85	75.695	6916773.4	29367896616.8	29942.1	9773112.6	5.62	29367896.62	9773.11	29377669.73
0.01%														
0.005%														
0.001%														

Storm Totals:	579.8 (cfs)	1091435147	531322.7	1091966469.4
	1,149.9 (acre-ft)	(tons/storm)	(tons/storm)	(tons/storm)

50.000% 100.000% 2.00

.

JUF250 100 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	74.22	0.060483252	107.5818335
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	20.600	5.000%	10.000%	0.20	10.30	0.139	0.072	0.21	0.002	0.01	2.1	0.04	0.00	0.04
80.0%	22.900	5.000%	10.000%	0.20	21.75	0.293	0.112	0.71	0.057	0.15	4.4	0.14	0.03	0.17
70.0%	25.500	5.000%	10.00%	0.20	24.20	0.326	0.126	0.89	0.076	0.20	4.8	0.18	0.04	0.22
60.0%	28.500	5.000%	10.00%	0.20	27.00	0.364	0.145	1.14	0.099	0.26	5.4	0.23	0.05	0.28
50.0%	31.800	5.000%	10.00%	0.20	30.15	0.406	0.170	1.49	0.129	0.34	6.0	0.30	0.07	0.37
40.0%	35.500	5.000%	10.00%	0.20	33.65	0.453	0.202	1.98	0.168	0.44	6.7	0.40	0.09	0.48
30.0%	39.800	5.000%	10.00%	0.20	37.65	0.507	0.245	2.68	0.218	0.57	7.5	0.54	0.11	0.65
20.0%	44.600	5.000%	10.00%	0.20	42.20	0.569	0.303	3.71	0.283	0.74	8.4	0.74	0.15	0.89
10.0%	206.600	5.000%	10.00%	0.20	125.60	1.692	3.375	123.13	3.203	8.37	25.1	24.63	1.67	26.30
5.0%	1876.700	2.500%	5.00%	0.10	1041.65	14.035	540.531	163547.84	332.441	868.83	104.2	16354.78	86.88	16441.67
4.0%	2742.500	0.500%	1.00%	0.02	2309.60	31.120	3678.5	2467808.6	1905.7	4980.6	46.2	49356.2	99.6	49455.8
3.0%	3918.400	0.500%	1.00%	0.02	3330.45	44.874	8882.5	8592967.8	4252.7	11114.3	66.6	171859.4	222.3	172081.6
2.0%	4894.700	0.500%	1.00%	0.02	4406.55	59.374	17434.1	22315205.6	7858.0	20536.6	88.1	446304.1	410.7	446714.8
1.50%	4954.700	0.250%	0.50%	0.01	4924.70	66.355	22786.8	32596169.8	10027.3	26206.3	49.2	325961.7	262.1	326223.8
1.00%	5250.900	0.250%	0.50%	0.01	5102.80	68.755	24822.4	36792171.9	10839.8	28329.5	51.0	367921.7	283.3	368205.0
0.90%	5311.900	0.050%	0.10%	0.00	5281.40	71.161	26966.7	41369481.7	11689.1	30549.4	10.6	82739.0	61.1	82800.1
0.80%	5341.300	0.050%	0.10%	0.00	5326.60	71.770	27525.9	42588760.3	11909.6	31125.6	10.7	85177.5	62.3	85239.8
0.70%	5397.300	0.050%	0.10%	0.00	5369.30	72.346	28060.4	43763721.3	12120.0	31675.4	10.7	87527.4	63.4	87590.8
0.60%	5448.500	0.050%	0.10%	0.00	5422.90	73.068	28739.8	45270807.1	12386.9	32372.9	10.8	90541.6	64.7	90606.4
0.50%	5495.200	0.050%	0.10%	0.00	5471.85	73.728	29368.6	46678854.1	12633.4	33017.2	10.9	93357.7	66.0	93423.7
0.25%	5589.100	0.125%	0.25%	0.01	5542.15	74.675	30285.6	48754779.5	12992.1	33954.5	27.7	243773.9	169.8	243943.7
0.10%	5616.300	0.075%	0.15%	0.00	5602.70	75.491	31088.7	50594370.9	13305.4	34773.3	16.8	151783.1	104.3	151887.4
0.05%	5619.400	0.025%	0.05%	0.00	5617.85	75.695	31291.5	51062207.1	13384.4	34979.9	5.6	51062.2	35.0	51097.2
0.01%														
0.005%														
0.001%														
									Storm Totals:		579.8 (cfs) 1,149.9 (acre-ft)	2263747 (tons/storm)	1994 (tons/storm)	2265741 (tons/storm)

.

JUF250 100 yr 24 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	74.22	7.55380933	279.9209438
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00	0.025%	0.050%	0.001										
90.0%	0.90	5.000%	10.000%	0.200	0.45	0.006	0.099	0.034	0.072	23.44	0.09	0.01	4.69	4.69
80.0%	88.50	5.000%	10.000%	0.200	44.70	0.602	0.243	8.210	0.378	123.36	8.94	1.64	24.67	26.31
70.0%	92.10	5.000%	10.00%	0.200	90.30	1.217	1.987	135.626	1.701	555.07	18.06	27.13	111.01	138.14
60.0%	95.90	5.000%	10.00%	0.200	94.00	1.267	2.286	162.418	1.864	608.32	18.80	32.48	121.66	154.15
50.0%	99.90	5.000%	10.00%	0.200	97.90	1.319	2.637	195.112	2.046	667.67	19.58	39.02	133.53	172.56
40.0%	111.70	5.000%	10.00%	0.200	105.80	1.426	3.470	277.499	2.445	798.18	21.16	55.50	159.64	215.14
30.0%	405.30	5.000%	10.00%	0.200	258.50	3.483	88.696	17328.612	19.919	6501.64	51.70	3465.72	1300.33	4766.05
20.0%	986.60	5.000%	10.00%	0.200	695.95	9.377	3320.721	1746664.838	209.088	68246.35	139.19	349332.97	13649.27	362982.24
10.0%	1896.80	5.000%	10.00%	0.200	1441.70	19.425	47703.534	51978603.919	1180.612	385351.94	288.34	10395720.78	77070.39	10472791.17
5.0%	4387.30	2.500%	5.00%	0.100	3142.05	42.336	825142.9	1959482571.4	7522.9	2455459.8	314.21	195948257.14	245545.98	196193803.12
4.0%	5532.80	0.500%	1.00%	0.020	4960.05	66.832	4385406.8	16439745718.9	22269.7	7268831.1	99.20	328794914.38	145376.62	328940291.00
3.0%	7088.70	0.500%	1.00%	0.020	6310.75	85.031	10585775.9	50489704566.1	39478.1	12885670.2	126.22	1009794091.32	257713.40	1010051804.73
2.0%	8728.70	0.500%	1.00%	0.020	7908.70	106.562	24176474.4	144509776540.9	67511.7	22035841.3	158.17	2890195530.82	440716.83	2890636247.64
1.50%	9264.00	0.250%	0.50%	0.010	8996.35	121.217	38739601.7	263402960797.8	91708.6	29933712.1	89.96	2634029607.98	299337.12	2634328945.10
1.00%	9652.80	0.250%	0.50%	0.010	9458.40	127.442	46531095.8	332629003328.7	103304.1	33718466.1	94.58	3326290033.29	337184.66	3326627217.95
0.90%	9687.40	0.050%	0.10%	0.002	9670.10	130.295	50456637.3	368763922769.1	108885.5	35540252.1	19.34	737527845.54	71080.50	737598926.04
0.80%	9715.90	0.050%	0.10%	0.002	9701.65	130.720	51061605.0	374402916209.3	109731.9	35816519.3	19.40	748805832.42	71633.04	748877465.46
0.70%	9743.60	0.050%	0.10%	0.002	9729.75	131.098	51604842.1	379482098266.3	110489.0	36063620.7	19.46	758964196.53	72127.24	759036323.77
0.60%	9773.30	0.050%	0.10%	0.002	9758.45	131.485	52164001.6	384725434300.7	111265.3	36317014.8	19.52	769450868.60	72634.03	769523502.63
0.50%	9804.80	0.050%	0.10%	0.002	9789.05	131.897	52765014.5	390378388251.4	112096.5	36588317.0	19.58	780756776.50	73176.63	780829953.14
0.25%	9880.30	0.125%	0.25%	0.005	9842.55	132.618	53827872.9	400418381500.7	113558.4	37065465.5	49.21	2002091907.50	185327.33	2002277234.83
0.10%	9902.50	0.075%	0.15%	0.003	9891.40	133.277	54811862.9	409761815243.7	114902.8	37504273.5	29.67	1229285445.73	112512.82	1229397958.55
0.05%	9903.50	0.025%	0.05%	0.001	9903.00	133.433	55047429.7	412005470751.2	115223.4	37608913.3	9.90	412005470.75	37608.91	412043079.66
0.01%														
0.005%														
0.001%														

		50.000%	100.000%	2.00										
											Storm Totals:	1,634.3 (cfs) / 3,241.6 (acre-ft)	17834689454 (tons/storm)	2514550.3 (tons/storm)	17837204004.1 (tons/storm)

.

JUF250 100 yr 24 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	74.22	0.060483252	107.5818335
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00													
90.0%	0.90	5.000%	10.000%	0.20	0.45	0.006	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
80.0%	88.50	5.000%	10.000%	0.20	44.70	0.602	0.339	4.40	0.322	0.84	8.9	0.88	0.17	1.05
70.0%	92.10	5.000%	10.00%	0.20	90.30	1.217	1.559	40.90	1.548	4.04	18.1	8.18	0.81	8.99
60.0%	95.90	5.000%	10.00%	0.20	94.00	1.267	1.711	46.72	1.691	4.42	18.8	9.34	0.88	10.23
50.0%	99.90	5.000%	10.00%	0.20	97.90	1.319	1.881	53.48	1.850	4.83	19.6	10.70	0.97	11.66
40.0%	111.70	5.000%	10.00%	0.20	105.80	1.426	2.254	69.28	2.195	5.74	21.2	13.86	1.15	15.00
30.0%	405.30	5.000%	10.00%	0.20	258.50	3.483	18.900	1419.14	15.636	40.87	51.7	283.83	8.17	292.00
20.0%	986.60	5.000%	10.00%	0.20	695.95	9.377	204.678	41376.25	137.284	358.79	139.2	8275.25	71.76	8347.01
10.0%	1896.80	5.000%	10.00%	0.20	1441.70	19.425	1182.387	495150.63	678.041	1772.05	288.3	99030.13	354.41	99384.54
5.0%	4387.30	2.500%	5.00%	0.10	3142.05	42.336	7720.181	7046010.44	3742.862	9781.90	314.2	704601.04	978.19	705579.23
4.0%	5532.80	0.500%	1.00%	0.02	4960.05	66.832	23182.8	33400601.6	10185.9	26620.5	99.2	668012.0	532.4	668544.4
3.0%	7088.70	0.500%	1.00%	0.02	6310.75	85.031	41407.8	75904155.9	17272.8	45142.3	126.2	1518083.1	902.8	1518986.0
2.0%	8728.70	0.500%	1.00%	0.02	7908.70	106.562	71313.7	163825125.0	28334.9	74052.6	158.2	3276502.5	1481.1	3277983.6
1.50%	9264.00	0.250%	0.50%	0.01	8996.35	121.217	97264.7	254170004.0	37587.1	98233.1	90.0	2541700.0	982.3	2542682.4
1.00%	9652.80	0.250%	0.50%	0.01	9458.40	127.442	109734.5	301483593.7	41950.5	109636.8	94.6	3014835.9	1096.4	3015932.3
0.90%	9687.40	0.050%	0.10%	0.00	9670.10	130.295	115743.6	325110177.1	44037.0	115090.0	19.3	650220.4	230.2	650450.5
0.80%	9715.90	0.050%	0.10%	0.00	9701.65	130.720	116655.2	328739851.8	44352.7	115915.0	19.4	657479.7	231.8	657711.5
0.70%	9743.60	0.050%	0.10%	0.00	9729.75	131.098	117470.6	331996647.0	44634.9	116652.5	19.5	663993.3	233.3	664226.6
0.60%	9773.30	0.050%	0.10%	0.00	9758.45	131.485	118306.9	335346449.0	44924.1	117408.4	19.5	670692.9	234.8	670927.7
0.50%	9804.80	0.050%	0.10%	0.00	9789.05	131.897	119202.4	338944246.7	45233.6	118217.2	19.6	677888.5	236.4	678124.9
0.25%	9880.30	0.125%	0.25%	0.01	9842.55	132.618	120777.5	345299910.3	45777.5	119638.7	49.2	1726499.6	598.2	1727097.7
0.10%	9902.50	0.075%	0.15%	0.00	9891.40	133.277	122226.3	351176299.5	46277.2	120944.6	29.7	1053528.9	362.8	1053891.7
0.05%	9903.50	0.025%	0.05%	0.00	9903.00	133.433	122571.8	352582029.1	46396.3	121255.9	9.9	352582.0	121.3	352703.3
0.01%														
0.005%														
0.001%														
									Storm Totals:		1,634.3 (cfs) / 3,241.6 (acre-ft)	18284252 (tons/storm)	8660 (tons/storm)	18292912 (tons/storm)

.

Flow Duration JUF260
48 hour, 2 day duration

	2 yr 2 hr	10 yr 2 hr	100 yr 2 hr	100 yr 24 h
1	0	0	0	0
0.9	0.6	4	20.6	2.4
0.8	0.6	4.5	23	88.8
0.7	0.7	5	25.6	92.5
0.6	0.8	5.5	28.6	96.3
0.5	0.8	6.2	31.9	100.3
0.4	0.9	6.9	35.6	116.3
0.3	1	7.7	39.9	449.2
0.2	1.3	8.9	44.8	1061
0.1	34.5	82.2	231.6	2050
0.05	191.5	633.3	2069.1	4716.9
0.04	236.5	918.2	3056.8	6002.7
0.03	359.9	1136.1	4418.6	7715
0.02	504.5	1430.9	5372.6	9645.9
0.015	545.8	1576	5655	10231.8
0.01	626.7	1807.9	6249.7	10601.3
0.009	644.7	1851.6	6352.2	10678.9
0.008	661.8	1882.8	6456.2	10718.4
0.007	677.6	1925.1	6561.2	10789.9
0.006	691.5	1958.1	6652	10833.2
0.005	702.6	1990.1	6717.4	10884.9
0.0025	716.3	2037.9	6854.1	10966.4
0.001	719.7	2046.5	6893.6	10988.2
0.0005	719.8	2047.4	6895.2	10990.5
0.0001	#N/A	#N/A	#N/A	#N/A
0.00005	#N/A	#N/A	#N/A	#N/A
0.00001	#N/A	#N/A	#N/A	#N/A

JUF260 2 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	76.18	7.730250804	281.6839177
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.600	5.000%	10.000%	0.200	0.30	0.004	0.099	0.023	0.072	23.98	0.06	0.00	4.80	4.80
80.0%	0.600	5.000%	10.000%	0.200	0.60	0.008	0.099	0.045	0.072	23.99	0.12	0.01	4.80	4.81
70.0%	0.700	5.000%	10.00%	0.200	0.65	0.009	0.099	0.049	0.072	23.99	0.13	0.01	4.80	4.81
60.0%	0.800	5.000%	10.00%	0.200	0.75	0.010	0.099	0.056	0.072	23.99	0.15	0.01	4.80	4.81
50.0%	0.800	5.000%	10.00%	0.200	0.80	0.011	0.099	0.060	0.072	23.99	0.16	0.01	4.80	4.81
40.0%	0.900	5.000%	10.00%	0.200	0.85	0.011	0.099	0.064	0.072	23.99	0.17	0.01	4.80	4.81
30.0%	1.000	5.000%	10.00%	0.200	0.95	0.012	0.099	0.071	0.072	23.99	0.19	0.01	4.80	4.81
20.0%	1.300	5.000%	10.00%	0.200	1.15	0.015	0.099	0.087	0.072	24.00	0.23	0.02	4.80	4.82
10.0%	34.500	5.000%	10.00%	0.200	17.90	0.235	0.104	1.409	0.104	34.90	3.58	0.28	6.98	7.26
5.0%	191.500	2.500%	5.00%	0.100	113.00	1.483	3.998	343.611	2.681	895.40	11.30	34.36	89.54	123.90
4.0%	236.500	0.500%	1.00%	0.020	214.00	2.809	40.441	6581.995	11.977	4000.54	4.28	131.64	80.01	211.65
3.0%	359.900	0.500%	1.00%	0.020	298.20	3.914	135.928	30827.874	26.270	8774.78	5.96	616.56	175.50	792.05
2.0%	504.500	0.500%	1.00%	0.020	432.20	5.673	528.229	173633.298	63.374	21168.50	8.64	3472.67	423.37	3896.04
1.50%	545.800	0.250%	0.50%	0.010	525.15	6.894	1077.277	430265.455	100.656	33621.38	5.25	4302.65	336.21	4638.87
1.00%	626.700	0.250%	0.50%	0.010	586.25	7.696	1611.434	718490.560	130.736	43668.99	5.86	7184.91	436.69	7621.60
0.90%	644.700	0.050%	0.10%	0.002	635.70	8.345	2167.156	1047775.549	158.474	52934.16	1.27	2095.55	105.87	2201.42
0.80%	661.800	0.050%	0.10%	0.002	653.25	8.575	2394.220	1189513.395	169.068	56472.80	1.31	2379.03	112.95	2491.97
0.70%	677.600	0.050%	0.10%	0.002	669.70	8.791	2622.304	1335638.961	179.360	59910.72	1.34	2671.28	119.82	2791.10
0.60%	691.500	0.050%	0.10%	0.002	684.55	8.986	2841.406	1479327.098	188.956	63115.83	1.37	2958.65	126.23	3084.89
0.50%	702.600	0.050%	0.10%	0.002	697.05	9.150	3035.900	1609448.897	197.258	65889.04	1.39	3218.90	131.78	3350.68
0.25%	716.300	0.125%	0.25%	0.005	709.45	9.313	3238.222	1747246.924	205.699	68708.57	3.55	8736.23	343.54	9079.78
0.10%	719.700	0.075%	0.15%	0.003	718.00	9.425	3383.316	1847535.821	211.639	70692.68	2.15	5542.61	212.08	5754.69
0.05%	719.800	0.025%	0.05%	0.001	719.75	9.448	3413.586	1868608.785	212.867	71102.82	0.72	1868.61	71.10	1939.71
0.01%														
0.005%														
0.001%														
										Storm Totals:	59.2 (cfs) 117.4 (acre-ft)	45214.0 (tons/storm)	2810.1 (tons/storm)	48024.1 (tons/storm)

50.000% 100.000% 2.00

.

JUF260 2 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	76.18	0.061179377	111.3084842
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.600	5.000%	10.000%	0.20	0.30	0.004	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
80.0%	0.600	5.000%	10.000%	0.20	0.60	0.008	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
70.0%	0.700	5.000%	10.00%	0.20	0.65	0.009	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
60.0%	0.800	5.000%	10.00%	0.20	0.75	0.010	0.064	0.01	0.000	0.00	0.2	0.00	0.00	0.00
50.0%	0.800	5.000%	10.00%	0.20	0.80	0.011	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
40.0%	0.900	5.000%	10.00%	0.20	0.85	0.011	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
30.0%	1.000	5.000%	10.00%	0.20	0.95	0.012	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
20.0%	1.300	5.000%	10.00%	0.20	1.15	0.015	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
10.0%	34.500	5.000%	10.00%	0.20	17.90	0.235	0.092	0.50	0.031	0.08	3.6	0.10	0.02	0.12
5.0%	191.500	2.500%	5.00%	0.10	113.00	1.483	2.474	84.03	2.396	6.33	11.3	8.40	0.63	9.04
4.0%	236.500	0.500%	1.00%	0.02	214.00	2.809	11.286	725.87	9.754	25.79	4.3	14.52	0.52	15.03
3.0%	359.900	0.500%	1.00%	0.02	298.20	3.914	25.018	2242.10	20.203	53.41	6.0	44.84	1.07	45.91
2.0%	504.500	0.500%	1.00%	0.02	432.20	5.673	61.066	7931.85	45.604	120.56	8.6	158.64	2.41	161.05
1.50%	545.800	0.250%	0.50%	0.01	525.15	6.894	97.585	15401.37	69.913	184.82	5.3	154.01	1.85	155.86
1.00%	626.700	0.250%	0.50%	0.01	586.25	7.696	127.187	22408.77	89.001	235.28	5.9	224.09	2.35	226.44
0.90%	644.700	0.050%	0.10%	0.00	635.70	8.345	154.565	29529.37	106.298	281.01	1.3	59.06	0.56	59.62
0.80%	661.800	0.050%	0.10%	0.00	653.25	8.575	165.038	32400.81	112.841	298.30	1.3	64.80	0.60	65.40
0.70%	677.600	0.050%	0.10%	0.00	669.70	8.791	175.222	35266.39	119.166	315.02	1.3	70.53	0.63	71.16
0.60%	691.500	0.050%	0.10%	0.00	684.55	8.986	184.723	38003.05	125.038	330.55	1.4	76.01	0.66	76.67
0.50%	702.600	0.050%	0.10%	0.00	697.05	9.150	192.949	40420.21	130.100	343.93	1.4	80.84	0.69	81.53
0.25%	716.300	0.125%	0.25%	0.01	709.45	9.313	201.317	42923.44	135.230	357.49	3.5	214.62	1.79	216.40
0.10%	719.700	0.075%	0.15%	0.00	718.00	9.425	207.208	44711.97	138.829	367.00	2.2	134.14	1.10	135.24
0.05%	719.800	0.025%	0.05%	0.00	719.75	9.448	208.426	45084.43	139.573	368.97	0.7	45.08	0.37	45.45
0.01%														
0.005%														
0.001%														
									Storm Totals:		59.2 (cfs) / 117.4 (acre-ft)	1349.7 (tons/storm)	15.2 (tons/storm)	1364.9 (tons/storm)

JUF260 10 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	76.18	7.730250804	281.6839177
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	4.000	5.000%	10.000%	0.200	2.00	0.026	0.099	0.150	0.072	24.04	0.40	0.03	4.81	4.84
80.0%	4.500	5.000%	10.000%	0.200	4.25	0.056	0.099	0.320	0.073	24.34	0.85	0.06	4.87	4.93
70.0%	5.000	5.000%	10.00%	0.200	4.75	0.062	0.099	0.357	0.073	24.45	0.95	0.07	4.89	4.96
60.0%	5.500	5.000%	10.00%	0.200	5.25	0.069	0.099	0.395	0.074	24.57	1.05	0.08	4.91	4.99
50.0%	6.200	5.000%	10.00%	0.200	5.85	0.077	0.099	0.440	0.074	24.75	1.17	0.09	4.95	5.04
40.0%	6.900	5.000%	10.00%	0.200	6.55	0.086	0.099	0.493	0.075	24.98	1.31	0.10	5.00	5.10
30.0%	7.700	5.000%	10.00%	0.200	7.30	0.096	0.099	0.550	0.076	25.28	1.46	0.11	5.06	5.17
20.0%	8.900	5.000%	10.00%	0.200	8.30	0.109	0.099	0.626	0.077	25.74	1.66	0.13	5.15	5.27
10.0%	82.200	5.000%	10.00%	0.200	45.55	0.598	0.239	8.288	0.373	124.49	9.11	1.66	24.90	26.56
5.0%	633.300	2.500%	5.00%	0.100	357.75	4.696	264.5	71975.8	40.5	13514.2	35.78	7197.58	1351.42	8548.99
4.0%	918.200	0.500%	1.00%	0.020	775.75	10.183	4490.3	2649230.5	254.4	84960.5	15.52	52984.61	1699.21	54683.82
3.0%	1136.100	0.500%	1.00%	0.020	1027.15	13.483	12541.3	9797200.9	495.7	165564.4	20.54	195944.02	3311.29	199255.31
2.0%	1430.900	0.500%	1.00%	0.020	1283.50	16.849	28339.5	27663955.3	841.8	281166.6	25.67	553279.11	5623.33	558902.44
1.50%	1576.000	0.250%	0.50%	0.010	1503.45	19.736	50552.2	57803593.5	1225.9	409495.8	15.03	578035.93	4094.96	582130.89
1.00%	1807.900	0.250%	0.50%	0.010	1691.95	22.210	77882.7	100220004.0	1623.4	542238.1	16.92	1002200.04	5422.38	1007622.42
0.90%	1851.600	0.050%	0.10%	0.002	1829.75	24.019	103720.0	144337769.9	1955.4	653163.1	3.66	288675.54	1306.33	289981.87
0.80%	1882.800	0.050%	0.10%	0.002	1867.20	24.511	111701.3	158626188.3	2051.9	685390.5	3.73	317252.38	1370.78	318623.16
0.70%	1925.100	0.050%	0.10%	0.002	1903.95	24.993	119958.4	173704832.7	2149.2	717893.0	3.81	347409.67	1435.79	348845.45
0.60%	1958.100	0.050%	0.10%	0.002	1941.60	25.487	128868.7	190297488.7	2251.6	752099.4	3.88	380594.98	1504.20	382099.18
0.50%	1990.100	0.050%	0.10%	0.002	1974.10	25.914	136938.8	205599267.5	2342.3	782371.3	3.95	411198.54	1564.74	412763.28
0.25%	2037.900	0.125%	0.25%	0.005	2014.00	26.438	147341.3	225688656.5	2456.4	820485.5	10.07	1128443.28	4102.43	1132545.71
0.10%	2046.500	0.075%	0.15%	0.003	2042.20	26.808	155031.7	240793362.9	2538.9	848058.7	6.13	722380.09	2544.18	724924.26
0.05%	2047.400	0.025%	0.05%	0.001	2046.95	26.870	156355.2	243413839.4	2553.0	852755.2	2.05	243413.84	852.76	244266.59
0.01%														
0.005%														
0.001%														
		50.000%	100.000%		2.00									
										Storm Totals:	184.7 (cfs) 366.3 (acre-ft)	6229012 (tons/storm)	36248.3 (tons/storm)	6265260.2 (tons/storm)

.

JUF260 10 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	76.18	0.061179377	111.3084842
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	4.000	5.000%	10.000%	0.20	2.00	0.026	0.064	0.04	0.000	0.00	0.4	0.01	0.00	0.01
80.0%	4.500	5.000%	10.000%	0.20	4.25	0.056	0.064	0.08	0.000	0.00	0.9	0.02	0.00	0.02
70.0%	5.000	5.000%	10.00%	0.20	4.75	0.062	0.065	0.09	0.000	0.00	1.0	0.02	0.00	0.02
60.0%	5.500	5.000%	10.00%	0.20	5.25	0.069	0.065	0.10	0.000	0.00	1.1	0.02	0.00	0.02
50.0%	6.200	5.000%	10.00%	0.20	5.85	0.077	0.066	0.12	0.000	0.00	1.2	0.02	0.00	0.02
40.0%	6.900	5.000%	10.00%	0.20	6.55	0.086	0.066	0.13	0.000	0.00	1.3	0.03	0.00	0.03
30.0%	7.700	5.000%	10.00%	0.20	7.30	0.096	0.067	0.15	0.000	0.00	1.5	0.03	0.00	0.03
20.0%	8.900	5.000%	10.00%	0.20	8.30	0.109	0.068	0.17	0.000	0.00	1.7	0.03	0.00	0.03
10.0%	82.200	5.000%	10.00%	0.20	45.55	0.598	0.334	4.57	0.317	0.84	9.1	0.91	0.17	1.08
5.0%	633.300	2.500%	5.00%	0.10	357.75	4.696	38.753	4166.58	30.123	79.63	35.8	416.66	7.96	424.62
4.0%	918.200	0.500%	1.00%	0.02	775.75	10.183	249.634	58199.29	164.499	434.86	15.5	1163.99	8.70	1172.68
3.0%	1136.100	0.500%	1.00%	0.02	1027.15	13.483	490.766	151495.82	304.451	804.83	20.5	3029.92	16.10	3046.01
2.0%	1430.900	0.500%	1.00%	0.02	1283.50	16.849	839.272	323735.68	496.264	1311.90	25.7	6474.71	26.24	6500.95
1.50%	1576.000	0.250%	0.50%	0.01	1503.45	19.736	1228.399	555035.33	702.025	1855.85	15.0	5550.35	18.56	5568.91
1.00%	1807.900	0.250%	0.50%	0.01	1691.95	22.210	1632.625	830168.25	909.593	2404.56	16.9	8301.68	24.05	8325.73
0.90%	1851.600	0.050%	0.10%	0.00	1829.75	24.019	1971.437	1084093.24	1079.980	2854.99	3.7	2168.19	5.71	2173.90
0.80%	1882.800	0.050%	0.10%	0.00	1867.20	24.511	2070.021	1161602.78	1129.046	2984.70	3.7	2323.21	5.97	2329.17
0.70%	1925.100	0.050%	0.10%	0.00	1903.95	24.993	2169.509	1241392.05	1178.349	3115.04	3.8	2482.78	6.23	2489.01
0.60%	1958.100	0.050%	0.10%	0.00	1941.60	25.487	2274.276	1327073.64	1230.051	3251.71	3.9	2654.15	6.50	2660.65
0.50%	1990.100	0.050%	0.10%	0.00	1974.10	25.914	2367.045	1404325.35	1275.653	3372.27	3.9	2808.65	6.74	2815.40
0.25%	2037.900	0.125%	0.25%	0.01	2014.00	26.438	2483.914	1503447.04	1332.876	3523.54	10.1	7517.24	17.62	7534.85
0.10%	2046.500	0.075%	0.15%	0.00	2042.20	26.808	2568.507	1576416.74	1374.144	3632.63	6.1	4729.25	10.90	4740.15
0.05%	2047.400	0.025%	0.05%	0.00	2046.95	26.870	2582.919	1588949.25	1381.163	3651.19	2.0	1588.95	3.65	1592.60
0.01%														
0.005%														
0.001%														
									Storm Totals:		184.7 (cfs) 366.3 (acre-ft)	51210.8 (tons/storm)	165.1 (tons/storm)	51375.9 (tons/storm)

.

JUF260 100 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	76.18	7.730250804	281.6839177
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	20.600	5.000%	10.000%	0.200	10.30	0.135	0.100	0.780	0.081	26.92	2.06	0.16	5.38	5.54
80.0%	23.000	5.000%	10.000%	0.200	21.80	0.286	0.108	1.797	0.124	41.42	4.36	0.36	8.28	8.64
70.0%	25.600	5.000%	10.00%	0.200	24.30	0.319	0.113	2.088	0.139	46.55	4.86	0.42	9.31	9.73
60.0%	28.600	5.000%	10.00%	0.200	27.10	0.356	0.120	2.471	0.159	53.23	5.42	0.49	10.65	11.14
50.0%	31.900	5.000%	10.00%	0.200	30.25	0.397	0.130	2.997	0.186	61.97	6.05	0.60	12.39	12.99
40.0%	35.600	5.000%	10.00%	0.200	33.75	0.443	0.146	3.741	0.219	73.26	6.75	0.75	14.65	15.40
30.0%	39.900	5.000%	10.00%	0.200	37.75	0.496	0.169	4.866	0.264	88.30	7.55	0.97	17.66	18.63
20.0%	44.800	5.000%	10.00%	0.200	42.35	0.556	0.206	6.648	0.325	108.51	8.47	1.33	21.70	23.03
10.0%	231.600	5.000%	10.00%	0.200	138.20	1.814	8.244	866.493	4.282	1430.24	27.64	173.30	286.05	459.35
5.0%	2069.100	2.500%	5.00%	0.100	1150.35	15.101	18982.3	16607551.4	648.8	216721.1	115.04	1660755.14	21672.11	1682427.25
4.0%	3056.800	0.500%	1.00%	0.020	2562.95	33.644	355918.7	693772035.2	4356.5	1455165.0	51.26	13875440.70	29103.30	13904544.00
3.0%	4418.600	0.500%	1.00%	0.020	3737.70	49.065	1415566.4	4024023473.0	10682.4	3568175.7	74.75	80480469.46	71363.51	80551832.97
2.0%	5372.600	0.500%	1.00%	0.020	4895.60	64.265	3799885.1	14148233137.2	20289.8	6777292.3	97.91	282964662.74	135545.85	283100208.59
1.50%	5655.000	0.250%	0.50%	0.010	5513.80	72.380	5871375.0	24621621174.8	26918.4	8991383.7	55.14	246216211.75	89913.84	246306125.58
1.00%	6249.700	0.250%	0.50%	0.010	5952.35	78.137	7768830.6	35169802289.8	32289.4	10785453.4	59.52	351698022.90	107854.53	351805877.43
0.90%	6352.200	0.050%	0.10%	0.002	6300.95	82.713	9567473.1	45848918988.7	36967.4	12348007.9	12.60	91697837.98	24696.02	91722533.99
0.80%	6456.200	0.050%	0.10%	0.002	6404.20	84.068	10153729.6	49455693459.2	38423.7	12834447.3	12.81	98911386.92	25668.89	98937055.81
0.70%	6561.200	0.050%	0.10%	0.002	6508.70	85.440	10773233.0	53329329317.4	39930.9	13337896.9	13.02	106658658.63	26675.79	106685334.43
0.60%	6652.000	0.050%	0.10%	0.002	6606.60	86.725	11378109.9	57170758343.2	41373.5	13819760.6	13.21	114341516.69	27639.52	114369156.21
0.50%	6717.400	0.050%	0.10%	0.002	6684.70	87.750	11878054.8	60388335950.0	42545.7	14211290.2	13.37	120776671.90	28422.58	120805094.48
0.25%	6854.100	0.125%	0.25%	0.005	6785.75	89.077	12548364.5	64760590203.1	44090.5	14727300.9	33.93	323802951.02	73636.50	323876587.52
0.10%	6893.600	0.075%	0.15%	0.003	6873.85	90.233	13154839.7	68771963891.6	45463.5	15185905.0	20.62	206315891.67	45557.72	206361449.39
0.05%	6895.200	0.025%	0.05%	0.001	6894.40	90.503	13299312.2	69735107528.8	45787.3	15294051.1	6.89	69735107.53	15294.05	69750401.58
0.01%														
0.005%														
0.001%														

Storm Totals:	653.2 (cfs) / 1,295.7 (acre-ft)	2109135763 (tons/storm)	723430.3 (tons/storm)	2109859193.7 (tons/storm)

50.000% 100.000% 2.00

.

JUF260 100 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	76.18	0.061179377	111.3084842
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	20.600	5.000%	10.000%	0.20	10.30	0.135	0.071	0.22	0.001	0.00	2.1	0.04	0.00	0.04
80.0%	23.000	5.000%	10.000%	0.20	21.80	0.286	0.109	0.72	0.054	0.14	4.4	0.14	0.03	0.17
70.0%	25.600	5.000%	10.00%	0.20	24.30	0.319	0.123	0.90	0.071	0.19	4.9	0.18	0.04	0.22
60.0%	28.600	5.000%	10.00%	0.20	27.10	0.356	0.141	1.15	0.094	0.25	5.4	0.23	0.05	0.28
50.0%	31.900	5.000%	10.00%	0.20	30.25	0.397	0.164	1.49	0.122	0.32	6.1	0.30	0.06	0.36
40.0%	35.600	5.000%	10.00%	0.20	33.75	0.443	0.195	1.98	0.159	0.42	6.8	0.40	0.08	0.48
30.0%	39.900	5.000%	10.00%	0.20	37.75	0.496	0.236	2.67	0.206	0.54	7.6	0.53	0.11	0.64
20.0%	44.800	5.000%	10.00%	0.20	42.35	0.556	0.290	3.70	0.269	0.71	8.5	0.74	0.14	0.88
10.0%	231.600	5.000%	10.00%	0.20	138.20	1.814	3.978	165.24	3.732	9.87	27.6	33.05	1.97	35.02
5.0%	2069.100	2.500%	5.00%	0.10	1150.35	15.101	644.689	222880.57	390.304	1031.79	115.0	22288.06	103.18	22391.24
4.0%	3056.800	0.500%	1.00%	0.02	2562.95	33.644	4438.7	3418907.0	2261.2	5977.7	51.3	68378.1	119.6	68497.7
3.0%	4418.600	0.500%	1.00%	0.02	3737.70	49.065	11013.3	12371292.3	5172.3	13673.3	74.8	247425.8	273.5	247699.3
2.0%	5372.600	0.500%	1.00%	0.02	4895.60	64.265	21095.9	31038100.3	9347.5	24710.7	97.9	620762.0	494.2	621256.2
1.50%	5655.000	0.250%	0.50%	0.01	5513.80	72.380	28092.1	46550791.7	12132.5	32072.9	55.1	465507.9	320.7	465828.6
1.00%	6249.700	0.250%	0.50%	0.01	5952.35	78.137	33778.2	60425013.7	14349.5	37933.7	59.5	604250.1	379.3	604629.5
0.90%	6352.200	0.050%	0.10%	0.00	6300.95	82.713	38740.8	73361212.7	16256.9	42976.2	12.6	146722.4	86.0	146808.4
0.80%	6456.200	0.050%	0.10%	0.00	6404.20	84.068	40287.4	77540138.9	16846.8	44535.6	12.8	155080.3	89.1	155169.3
0.70%	6561.200	0.050%	0.10%	0.00	6508.70	85.440	41889.0	81938149.1	17455.5	46144.7	13.0	163876.3	92.3	163968.6
0.60%	6652.000	0.050%	0.10%	0.00	6606.60	86.725	43422.6	86215632.3	18036.4	47680.4	13.2	172431.3	95.4	172526.6
0.50%	6717.400	0.050%	0.10%	0.00	6684.70	87.750	44669.3	89739298.8	18507.3	48925.2	13.4	179478.6	97.9	179576.4
0.25%	6854.100	0.125%	0.25%	0.01	6785.75	89.077	46312.9	94447879.2	19126.3	50561.7	33.9	472239.4	252.8	472492.2
0.10%	6893.600	0.075%	0.15%	0.00	6873.85	90.233	47774.4	98693210.2	19675.1	52012.3	20.6	296079.6	156.0	296235.7
0.05%	6895.200	0.025%	0.05%	0.00	6894.40	90.503	48119.1	99702520.9	19804.3	52353.9	6.9	99702.5	52.4	99754.9
0.01%														
0.005%														
0.001%														
									Storm Totals:		653.2 (cfs) 1,295.7 (acre-ft)	3714258 (tons/storm)	2615 (tons/storm)	3716873 (tons/storm)

.

JUF260 100 yr 24 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	76.18	7.730250804	281.6839177
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00	0.025%	0.050%	0.001										
90.0%	2.40	5.000%	10.000%	0.200	1.20	0.016	0.099	0.090	0.072	24.00	0.24	0.02	4.80	4.82
80.0%	88.80	5.000%	10.000%	0.200	45.60	0.599	0.240	8.317	0.373	124.75	9.12	1.66	24.95	26.61
70.0%	92.50	5.000%	10.00%	0.200	90.65	1.190	1.840	126.844	1.617	540.05	18.13	25.37	108.01	133.38
60.0%	96.30	5.000%	10.00%	0.200	94.40	1.239	2.118	152.075	1.773	592.25	18.88	30.41	118.45	148.86
50.0%	100.30	5.000%	10.00%	0.200	98.30	1.290	2.441	182.461	1.945	649.65	19.66	36.49	129.93	166.42
40.0%	116.30	5.000%	10.00%	0.200	108.30	1.422	3.437	283.081	2.430	811.69	21.66	56.62	162.34	218.96
30.0%	449.20	5.000%	10.00%	0.200	282.75	3.712	111.902	24063.853	23.158	7735.19	56.55	4812.77	1547.04	6359.81
20.0%	1061.00	5.000%	10.00%	0.200	755.10	9.912	4068.174	2336306.254	238.558	79683.98	151.02	467261.25	15936.80	483198.05
10.0%	2050.00	5.000%	10.00%	0.200	1555.50	20.419	57256.356	67735998.734	1329.251	444001.97	311.10	13547199.75	88800.39	13636000.14
5.0%	4716.90	2.500%	5.00%	0.100	3383.45	44.415	983327.1	2530367295.4	8430.8	2816085.0	338.35	253036729.54	281608.50	253318338.04
4.0%	6002.70	0.500%	1.00%	0.020	5359.80	70.358	5293284.6	21577426663.9	25165.4	8405843.2	107.20	431548533.28	168116.86	431716650.14
3.0%	7715.00	0.500%	1.00%	0.020	6858.85	90.036	13050107.8	68075559661.3	45228.0	15107246.8	137.18	1361511193.23	302144.94	1361813338.16
2.0%	9645.90	0.500%	1.00%	0.020	8680.45	113.948	30895599.5	203969242689.9	79172.3	26445454.7	173.61	4079384853.80	528909.09	4079913762.89
1.50%	10231.80	0.250%	0.50%	0.010	9938.85	130.467	50701813.5	383252896423.6	109229.0	36485120.2	99.39	3832528964.24	364851.20	3832893815.44
1.00%	10601.30	0.250%	0.50%	0.010	10416.55	136.738	60203581.9	476949118594.8	122124.8	40792615.3	104.17	4769491185.95	407926.15	4769899112.10
0.90%	10678.90	0.050%	0.10%	0.002	10640.10	139.673	65067620.1	526546158274.2	128447.5	42904576.2	21.28	1053092316.55	85809.15	1053178125.70
0.80%	10718.40	0.050%	0.10%	0.002	10698.65	140.441	66387346.3	540181996025.2	130134.1	43467946.5	21.40	1080363992.05	86935.89	1080450927.94
0.70%	10789.90	0.050%	0.10%	0.002	10754.15	141.170	67656181.6	553362072697.8	131744.7	44005904.3	21.51	1106724145.40	88011.81	1106812157.20
0.60%	10833.20	0.050%	0.10%	0.002	10811.55	141.923	68986898.5	567257697794.5	133422.4	44566315.2	21.62	1134515395.59	89132.63	1134604528.22
0.50%	10884.90	0.050%	0.10%	0.002	10859.05	142.547	70102400.1	578962635065.1	134820.1	45033179.3	21.72	1157925270.13	90066.36	1158015336.49
0.25%	10966.40	0.125%	0.25%	0.005	10925.65	143.421	71688448.7	595692706619.9	136794.1	45692523.5	54.63	2978463533.10	228462.62	2978691995.72
0.10%	10988.20	0.075%	0.15%	0.003	10977.30	144.099	72936299.8	608926783135.3	138336.4	46207688.1	32.93	1826780349.41	138623.06	1826918972.47
0.05%	10990.50	0.025%	0.05%	0.001	10989.35	144.257	73229680.4	612047263521.0	138697.6	46328358.1	10.99	612047263.52	46328.36	612093591.88
0.01%														
0.005%														
0.001%														

		50.000%	100.000%	2.00										

Storm Totals:	1,772.3 (cfs)	25691433150	3013759.3	25694446909.4
	3,515.4 (acre-ft)	(tons/storm)	(tons/storm)	(tons/storm)

.

JUF260 100 yr 24 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	76.18	0.061179377	111.3084842
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00													
90.0%	2.40	5.000%	10.000%	0.20	1.20	0.016	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
80.0%	88.80	5.000%	10.000%	0.20	45.60	0.599	0.335	4.58	0.318	0.84	9.1	0.92	0.17	1.08
70.0%	92.50	5.000%	10.00%	0.20	90.65	1.190	1.481	40.36	1.473	3.89	18.1	8.07	0.78	8.85
60.0%	96.30	5.000%	10.00%	0.20	94.40	1.239	1.627	46.15	1.611	4.26	18.9	9.23	0.85	10.08
50.0%	100.30	5.000%	10.00%	0.20	98.30	1.290	1.787	52.79	1.762	4.66	19.7	10.56	0.93	11.49
40.0%	116.30	5.000%	10.00%	0.20	108.30	1.422	2.240	72.90	2.182	5.77	21.7	14.58	1.15	15.73
30.0%	449.20	5.000%	10.00%	0.20	282.75	3.712	22.017	1870.91	17.978	47.52	56.6	374.18	9.50	383.69
20.0%	1061.00	5.000%	10.00%	0.20	755.10	9.912	233.932	53086.81	155.048	409.88	151.0	10617.36	81.98	10699.34
10.0%	2050.00	5.000%	10.00%	0.20	1555.50	20.419	1333.331	623304.11	756.426	1999.66	311.1	124660.82	399.93	125060.75
5.0%	4716.90	2.500%	5.00%	0.10	3383.45	44.415	8664.918	8810818.68	4157.701	10991.14	338.3	881081.87	1099.11	882180.98
4.0%	6002.70	0.500%	1.00%	0.02	5359.80	70.358	26239.4	42266309.3	11401.7	30141.2	107.2	845326.2	602.8	845929.0
3.0%	7715.00	0.500%	1.00%	0.02	6858.85	90.036	47523.7	97961060.7	19581.1	51763.8	137.2	1959221.2	1035.3	1960256.5
2.0%	9645.90	0.500%	1.00%	0.02	8680.45	113.948	83806.5	218631069.0	32820.9	86764.1	173.6	4372621.4	1735.3	4374356.7
1.50%	10231.80	0.250%	0.50%	0.01	9938.85	130.467	116113.5	346825309.1	44165.1	116753.3	99.4	3468253.1	1167.5	3469420.6
1.00%	10601.30	0.250%	0.50%	0.01	10416.55	136.738	130012.9	407007544.2	48954.0	129412.8	104.2	4070075.4	1294.1	4071369.6
0.90%	10678.90	0.050%	0.10%	0.00	10640.10	139.673	136835.0	437557343.8	51287.4	135581.3	21.3	875114.7	271.2	875385.9
0.80%	10718.40	0.050%	0.10%	0.00	10698.65	140.441	138655.6	445818772.6	51908.3	137222.8	21.4	891637.5	274.4	891912.0
0.70%	10789.90	0.050%	0.10%	0.00	10754.15	141.170	140394.3	453751028.8	52500.6	138788.6	21.5	907502.1	277.6	907779.6
0.60%	10833.20	0.050%	0.10%	0.00	10811.55	141.923	142205.9	462059212.7	53117.1	140418.2	21.6	924118.4	280.8	924399.3
0.50%	10884.90	0.050%	0.10%	0.00	10859.05	142.547	143715.3	469015265.6	53630.2	141774.6	21.7	938030.5	283.5	938314.1
0.25%	10966.40	0.125%	0.25%	0.01	10925.65	143.421	145847.4	478892549.7	54354.1	143688.4	54.6	2394462.7	718.4	2395181.2
0.10%	10988.20	0.075%	0.15%	0.00	10977.30	144.099	147513.6	486653147.3	54919.2	145182.2	32.9	1459959.4	435.5	1460395.0
0.05%	10990.50	0.025%	0.05%	0.00	10989.35	144.257	147903.9	488476405.8	55051.5	145531.9	11.0	488476.4	145.5	488621.9
0.01%														
0.005%														
0.001%														
									Storm Totals:		1,772.3 (cfs) 3,515.4 (acre-ft)	24611577 (tons/storm)	10117 (tons/storm)	24621693 (tons/storm)

.

Flow Duration JUF340
48 hour, 2 day
duration

	2 yr 2 hr	10 yr 2 hr	100 yr 2 hr	100 yr 24 h
1	0	0	0	0
0.9	0.7	4.3	21.2	2
0.8	0.7	4.8	23.7	90.9
0.7	0.8	5.5	26.6	95.6
0.6	0.9	6.2	29.9	101.8
0.5	1.1	7.1	34	111.1
0.4	1.3	8.2	39	141.1
0.3	1.5	9.9	45.9	545.8
0.2	2.1	13.1	58	1382.2
0.1	39	103	300.8	2668.3
0.05	214.3	755.4	2507.4	5989.2
0.04	287.2	1077.6	3744.1	7563.2
0.03	418.4	1346.3	5328.4	9757.9
0.02	582.9	1740.8	6523.3	12155.6
0.015	634.5	1907.1	6966.8	12947
0.01	688.3	2122.3	7637.2	13507.7
0.009	713.4	2164.6	7750.9	13584
0.008	721.7	2185.3	7807.1	13649.8
0.007	744.2	2229.3	7919.1	13715.6
0.006	757	2262.8	8026.4	13805.2
0.005	767	2294.1	8121.9	13852.1
0.0025	780.2	2335.7	8242.3	13971.4
0.001	783.9	2342.7	8276	13999.4
0.0005	784	2343.2	8277	14002.5
0.0001	#N/A	#N/A	#N/A	#N/A
0.00005	#N/A	#N/A	#N/A	#N/A
0.00001	#N/A	#N/A	#N/A	#N/A

JUF340 2 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	89.46	8.912014987	292.7936623
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.700	5.000%	10.000%	0.200	0.35	0.004	0.099	0.027	0.072	27.65	0.07	0.01	5.53	5.54
80.0%	0.700	5.000%	10.000%	0.200	0.70	0.008	0.099	0.055	0.072	27.65	0.14	0.01	5.53	5.54
70.0%	0.800	5.000%	10.00%	0.200	0.75	0.008	0.099	0.059	0.072	27.65	0.15	0.01	5.53	5.54
60.0%	0.900	5.000%	10.00%	0.200	0.85	0.010	0.099	0.066	0.072	27.66	0.17	0.01	5.53	5.54
50.0%	1.100	5.000%	10.00%	0.200	1.00	0.011	0.099	0.078	0.072	27.66	0.20	0.02	5.53	5.55
40.0%	1.300	5.000%	10.00%	0.200	1.20	0.013	0.099	0.094	0.072	27.66	0.24	0.02	5.53	5.55
30.0%	1.500	5.000%	10.00%	0.200	1.40	0.016	0.099	0.109	0.072	27.67	0.28	0.02	5.53	5.56
20.0%	2.100	5.000%	10.00%	0.200	1.80	0.020	0.099	0.141	0.072	27.69	0.36	0.03	5.54	5.57
10.0%	39.000	5.000%	10.00%	0.200	20.55	0.230	0.103	1.676	0.103	39.57	4.11	0.34	7.91	8.25
5.0%	214.300	2.500%	5.00%	0.100	126.65	1.416	3.386	338.992	2.407	926.73	12.67	33.90	92.67	126.57
4.0%	287.200	0.500%	1.00%	0.020	250.75	2.803	40.109	7950.823	11.913	4587.63	5.02	159.02	91.75	250.77
3.0%	418.400	0.500%	1.00%	0.020	352.80	3.944	139.658	38951.093	26.735	10295.34	7.06	779.02	205.91	984.93
2.0%	582.900	0.500%	1.00%	0.020	500.65	5.596	502.380	198834.521	61.344	23622.68	10.01	3976.69	472.45	4449.14
1.50%	634.500	0.250%	0.50%	0.010	608.70	6.804	1026.891	494143.584	97.573	37574.32	6.09	4941.44	375.74	5317.18
1.00%	688.300	0.250%	0.50%	0.010	661.40	7.393	1391.426	727528.285	118.850	45767.56	6.61	7275.28	457.68	7732.96
0.90%	713.400	0.050%	0.10%	0.002	700.85	7.834	1719.959	952946.587	136.388	52521.42	1.40	1905.89	105.04	2010.94
0.80%	721.700	0.050%	0.10%	0.002	717.55	8.021	1874.722	1063443.729	144.237	55543.84	1.44	2126.89	111.09	2237.98
0.70%	744.200	0.050%	0.10%	0.002	732.95	8.193	2026.185	1174029.313	151.701	58418.20	1.47	2348.06	116.84	2464.90
0.60%	757.000	0.050%	0.10%	0.002	750.60	8.390	2210.499	1311669.021	160.525	61816.35	1.50	2623.34	123.63	2746.97
0.50%	767.000	0.050%	0.10%	0.002	762.00	8.518	2335.837	1407093.474	166.379	64070.58	1.52	2814.19	128.14	2942.33
0.25%	780.200	0.125%	0.25%	0.005	773.60	8.647	2468.596	1509704.468	172.461	66412.53	3.87	7548.52	332.06	7880.58
0.10%	783.900	0.075%	0.15%	0.003	782.05	8.742	2568.696	1588081.186	176.971	68149.27	2.35	4764.24	204.45	4968.69
0.05%	784.000	0.025%	0.05%	0.001	783.95	8.763	2591.604	1606136.355	177.994	68543.36	0.78	1606.14	68.54	1674.68
0.01%														
0.005%														
0.001%														

Storm Totals:	67.5 (cfs)	42903.1 (tons/storm)	2938.2 (tons/storm)	45841.2 (tons/storm)
	133.9 (acre-ft)			

50.000% 100.000% 2.00

.

JUF340 2 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	89.46	0.06564867	137.2931855
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimensionless Streamflow	Dimensionless Suspended Sediment Discharge	Suspended Sediment Discharge	Dimensionless Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.700	5.000%	10.000%	0.20	0.35	0.004	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
80.0%	0.700	5.000%	10.000%	0.20	0.70	0.008	0.064	0.02	0.000	0.00	0.1	0.00	0.00	0.00
70.0%	0.800	5.000%	10.00%	0.20	0.75	0.008	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
60.0%	0.900	5.000%	10.00%	0.20	0.85	0.010	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
50.0%	1.100	5.000%	10.00%	0.20	1.00	0.011	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
40.0%	1.300	5.000%	10.00%	0.20	1.20	0.013	0.064	0.03	0.000	0.00	0.2	0.01	0.00	0.01
30.0%	1.500	5.000%	10.00%	0.20	1.40	0.016	0.064	0.03	0.000	0.00	0.3	0.01	0.00	0.01
20.0%	2.100	5.000%	10.00%	0.20	1.80	0.020	0.064	0.04	0.000	0.00	0.4	0.01	0.00	0.01
10.0%	39.000	5.000%	10.00%	0.20	20.55	0.230	0.091	0.69	0.029	0.08	4.1	0.14	0.02	0.15
5.0%	214.300	2.500%	5.00%	0.10	126.65	1.416	2.218	104.12	2.162	6.13	12.7	10.41	0.61	11.03
4.0%	287.200	0.500%	1.00%	0.02	250.75	2.803	11.226	1043.43	9.706	27.53	5.0	20.87	0.55	21.42
3.0%	418.400	0.500%	1.00%	0.02	352.80	3.944	25.467	3330.59	20.534	58.25	7.1	66.61	1.16	67.78
2.0%	582.900	0.500%	1.00%	0.02	500.65	5.596	59.084	10965.13	44.253	125.53	10.0	219.30	2.51	221.81
1.50%	634.500	0.250%	0.50%	0.01	608.70	6.804	94.558	21336.07	67.934	192.71	6.1	213.36	1.93	215.29
1.00%	688.300	0.250%	0.50%	0.01	661.40	7.393	115.478	28312.29	81.504	231.20	6.6	283.12	2.31	285.43
0.90%	713.400	0.050%	0.10%	0.00	700.85	7.834	132.760	34490.92	92.547	262.53	1.4	68.98	0.53	69.51
0.80%	721.700	0.050%	0.10%	0.00	717.55	8.021	140.504	37372.52	97.452	276.44	1.4	74.75	0.55	75.30
0.70%	744.200	0.050%	0.10%	0.00	732.95	8.193	147.873	40176.89	102.098	289.62	1.5	80.35	0.58	80.93
0.60%	757.000	0.050%	0.10%	0.00	750.60	8.390	156.592	43570.26	107.568	305.14	1.5	87.14	0.61	87.75
0.50%	767.000	0.050%	0.10%	0.00	762.00	8.518	162.379	45866.68	111.183	315.39	1.5	91.73	0.63	92.36
0.25%	780.200	0.125%	0.25%	0.01	773.60	8.647	168.394	48289.87	114.929	326.02	3.9	241.45	1.63	243.08
0.10%	783.900	0.075%	0.15%	0.00	782.05	8.742	172.857	50111.03	117.700	333.88	2.3	150.33	1.00	151.33
0.05%	784.000	0.025%	0.05%	0.00	783.95	8.763	173.869	50527.10	118.328	335.66	0.8	50.53	0.34	50.86
0.01%														
0.005%														
0.001%														
									Storm Totals:		67.5 (cfs) / 133.9 (acre-ft)	1659.1 (tons/storm)	15.0 (tons/storm)	1674.1 (tons/storm)

.

JUF340 10 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	89.46	8.912014987	292.7936623
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	4.300	5.000%	10.000%	0.200	2.15	0.024	0.099	0.168	0.072	27.71	0.43	0.03	5.54	5.57
80.0%	4.800	5.000%	10.000%	0.200	4.55	0.051	0.099	0.356	0.073	27.98	0.91	0.07	5.60	5.67
70.0%	5.500	5.000%	10.00%	0.200	5.15	0.058	0.099	0.403	0.073	28.09	1.03	0.08	5.62	5.70
60.0%	6.200	5.000%	10.00%	0.200	5.85	0.065	0.099	0.458	0.073	28.25	1.17	0.09	5.65	5.74
50.0%	7.100	5.000%	10.00%	0.200	6.65	0.074	0.099	0.520	0.074	28.46	1.33	0.10	5.69	5.80
40.0%	8.200	5.000%	10.00%	0.200	7.65	0.086	0.099	0.599	0.075	28.79	1.53	0.12	5.76	5.88
30.0%	9.900	5.000%	10.00%	0.200	9.05	0.101	0.099	0.709	0.076	29.35	1.81	0.14	5.87	6.01
20.0%	13.100	5.000%	10.00%	0.200	11.50	0.129	0.099	0.904	0.080	30.65	2.30	0.18	6.13	6.31
10.0%	103.000	5.000%	10.00%	0.200	58.05	0.649	0.288	13.225	0.437	168.38	11.61	2.64	33.68	36.32
5.0%	755.400	2.500%	5.00%	0.100	429.20	4.798	286.0	97048.3	42.6	16390.0	42.92	9704.83	1639.00	11343.84
4.0%	1077.600	0.500%	1.00%	0.020	916.50	10.245	4589.9	3325530.1	258.0	99355.1	18.33	66510.60	1987.10	68497.70
3.0%	1346.300	0.500%	1.00%	0.020	1211.95	13.547	12759.2	12224608.1	501.2	193023.4	24.24	244492.16	3860.47	248352.63
2.0%	1740.800	0.500%	1.00%	0.020	1543.55	17.254	30913.6	37722085.0	890.7	342984.3	30.87	754441.70	6859.69	761301.39
1.50%	1907.100	0.250%	0.50%	0.010	1823.95	20.388	56937.4	82098711.0	1324.4	510024.8	18.24	820987.11	5100.25	826087.36
1.00%	2122.300	0.250%	0.50%	0.010	2014.70	22.520	81932.7	130494757.1	1677.7	646063.7	20.15	1304947.57	6460.64	1311408.21
0.90%	2164.600	0.050%	0.10%	0.002	2143.45	23.959	102776.8	174154178.1	1943.9	748559.9	4.29	348308.36	1497.12	349805.48
0.80%	2185.300	0.050%	0.10%	0.002	2174.95	24.311	108412.2	186403013.1	2012.5	774975.1	4.35	372806.03	1549.95	374355.98
0.70%	2229.300	0.050%	0.10%	0.002	2207.30	24.673	114430.0	199676435.7	2084.3	802657.1	4.41	399352.87	1605.31	400958.19
0.60%	2262.800	0.050%	0.10%	0.002	2246.05	25.106	121953.7	216540820.8	2172.4	836558.8	4.49	433081.64	1673.12	434754.76
0.50%	2294.100	0.050%	0.10%	0.002	2278.45	25.468	128515.1	231483012.3	2247.6	865530.5	4.56	462966.02	1731.06	464697.09
0.25%	2335.700	0.125%	0.25%	0.005	2314.90	25.876	136199.2	249248381.3	2334.0	898808.7	11.57	1246241.91	4494.04	1250735.95
0.10%	2342.700	0.075%	0.15%	0.003	2339.20	26.147	141504.0	261674534.6	2392.7	921399.1	7.02	785023.60	2764.20	787787.80
0.05%	2343.200	0.025%	0.05%	0.001	2342.95	26.189	142335.8	263634694.7	2401.8	924914.3	2.34	263634.69	924.91	264559.61
0.01%														
0.005%														
0.001%														

Storm Totals:	219.9 (cfs) / 436.2 (acre-ft)	7512503 (tons/storm)	42226.4 (tons/storm)	7554729.0 (tons/storm)

50.000% 100.000% 2.00

.

JUF340 10 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer	Gage Station #:		Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	89.46	0.06564867	137.2931855
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	4.300	5.000%	10.000%	0.20	2.15	0.024	0.064	0.05	0.000	0.00	0.4	0.01	0.00	0.01
80.0%	4.800	5.000%	10.000%	0.20	4.55	0.051	0.064	0.11	0.000	0.00	0.9	0.02	0.00	0.02
70.0%	5.500	5.000%	10.00%	0.20	5.15	0.058	0.065	0.12	0.000	0.00	1.0	0.02	0.00	0.02
60.0%	6.200	5.000%	10.00%	0.20	5.85	0.065	0.065	0.14	0.000	0.00	1.2	0.03	0.00	0.03
50.0%	7.100	5.000%	10.00%	0.20	6.65	0.074	0.065	0.16	0.000	0.00	1.3	0.03	0.00	0.03
40.0%	8.200	5.000%	10.00%	0.20	7.65	0.086	0.066	0.19	0.000	0.00	1.5	0.04	0.00	0.04
30.0%	9.900	5.000%	10.00%	0.20	9.05	0.101	0.067	0.23	0.000	0.00	1.8	0.05	0.00	0.05
20.0%	13.100	5.000%	10.00%	0.20	11.50	0.129	0.070	0.30	0.000	0.00	2.3	0.06	0.00	0.06
10.0%	103.000	5.000%	10.00%	0.20	58.05	0.649	0.393	8.45	0.381	1.08	11.6	1.69	0.22	1.91
5.0%	755.400	2.500%	5.00%	0.10	429.20	4.798	40.795	6490.56	31.568	89.55	42.9	649.06	8.95	658.01
4.0%	1077.600	0.500%	1.00%	0.02	916.50	10.245	253.265	86044.12	166.677	472.81	18.3	1720.88	9.46	1730.34
3.0%	1346.300	0.500%	1.00%	0.02	1211.95	13.547	496.363	222995.90	307.611	872.59	24.2	4459.92	17.45	4477.37
2.0%	1740.800	0.500%	1.00%	0.02	1543.55	17.254	888.698	508495.96	522.807	1483.04	30.9	10169.92	29.66	10199.58
1.50%	1907.100	0.250%	0.50%	0.01	1823.95	20.388	1328.438	898187.43	753.898	2138.57	18.2	8981.87	21.39	9003.26
1.00%	2122.300	0.250%	0.50%	0.01	2014.70	22.520	1688.021	1260669.01	937.652	2659.82	20.1	12606.69	26.60	12633.29
0.90%	2164.600	0.050%	0.10%	0.00	2143.45	23.959	1959.618	1557032.17	1074.083	3046.83	4.3	3114.06	6.09	3120.16
0.80%	2185.300	0.050%	0.10%	0.00	2174.95	24.311	2029.696	1636413.61	1109.002	3145.88	4.3	3272.83	6.29	3279.12
0.70%	2229.300	0.050%	0.10%	0.00	2207.30	24.673	2103.169	1720870.55	1145.496	3249.40	4.4	3441.74	6.50	3448.24
0.60%	2262.800	0.050%	0.10%	0.00	2246.05	25.106	2193.194	1826035.85	1190.057	3375.81	4.5	3652.07	6.75	3658.82
0.50%	2294.100	0.050%	0.10%	0.00	2278.45	25.468	2270.167	1917388.09	1228.027	3483.52	4.6	3834.78	6.97	3841.74
0.25%	2335.700	0.125%	0.25%	0.01	2314.90	25.876	2358.623	2023967.09	1271.519	3606.89	11.6	10119.84	18.03	10137.87
0.10%	2342.700	0.075%	0.15%	0.00	2339.20	26.147	2418.694	2097302.69	1300.973	3690.44	7.0	6291.91	11.07	6302.98
0.05%	2343.200	0.025%	0.05%	0.00	2342.95	26.189	2428.044	2108784.71	1305.551	3703.43	2.3	2108.78	3.70	2112.49
0.01%														
0.005%														
0.001%														
									Storm Totals:		219.9 (cfs) 436.2 (acre-ft)	74426.3 (tons/storm)	179.1 (tons/storm)	74605.4 (tons/storm)

JUF340 100 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	89.46	8.912014987	292.7936623
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	21.200	5.000%	10.000%	0.200	10.60	0.118	0.099	0.832	0.078	30.12	2.12	0.17	6.02	6.19
80.0%	23.700	5.000%	10.000%	0.200	22.45	0.251	0.105	1.859	0.110	42.36	4.49	0.37	8.47	8.84
70.0%	26.600	5.000%	10.00%	0.200	25.15	0.281	0.108	2.143	0.122	46.92	5.03	0.43	9.38	9.81
60.0%	29.900	5.000%	10.00%	0.200	28.25	0.316	0.112	2.512	0.138	53.05	5.65	0.50	10.61	11.11
50.0%	34.000	5.000%	10.00%	0.200	31.95	0.357	0.120	3.036	0.160	61.68	6.39	0.61	12.34	12.94
40.0%	39.000	5.000%	10.00%	0.200	36.50	0.408	0.134	3.854	0.193	74.36	7.30	0.77	14.87	15.64
30.0%	45.900	5.000%	10.00%	0.200	42.45	0.475	0.159	5.340	0.245	94.53	8.49	1.07	18.91	19.97
20.0%	58.000	5.000%	10.00%	0.200	51.95	0.581	0.225	9.240	0.352	135.74	10.39	1.85	27.15	29.00
10.0%	300.800	5.000%	10.00%	0.200	179.40	2.005	11.850	1680.641	5.414	2084.84	35.88	336.13	416.97	753.10
5.0%	2507.400	2.500%	5.00%	0.100	1404.10	15.695	21861.6	24266423.8	711.2	273858.6	140.41	2426642.38	27385.86	2454028.24
4.0%	3744.100	0.500%	1.00%	0.020	3125.75	34.939	408684.9	1009876479.3	4765.8	1835268.5	62.52	20197529.59	36705.37	20234234.96
3.0%	5328.400	0.500%	1.00%	0.020	4536.25	50.706	1596633.3	5725687103.6	11551.3	4448264.7	90.73	114513742.07	88965.29	114602707.37
2.0%	6523.300	0.500%	1.00%	0.020	5925.85	66.239	4244686.0	19884819637.3	21802.8	8395994.4	118.52	397696392.75	167919.89	397864312.63
1.50%	6966.800	0.250%	0.50%	0.010	6745.05	75.395	6817225.6	36351160303.5	29661.4	11422271.0	67.45	363511603.04	114222.71	363625825.75
1.00%	7637.200	0.250%	0.50%	0.010	7302.00	81.621	9113486.8	52608005018.4	35818.1	13793124.0	73.02	526080050.18	137931.24	526217981.42
0.90%	7750.900	0.050%	0.10%	0.002	7694.05	86.003	11035501.6	67123179100.5	40559.8	15619110.6	15.39	134246358.20	31238.22	134277596.42
0.80%	7807.100	0.050%	0.10%	0.002	7779.00	86.953	11487909.3	70646427307.1	41632.5	16032180.5	15.56	141292854.61	32064.36	141324918.98
0.70%	7919.100	0.050%	0.10%	0.002	7863.10	87.893	11948919.3	74275889489.0	42710.4	16447283.0	15.73	148551778.98	32894.57	148584673.54
0.60%	8026.400	0.050%	0.10%	0.002	7972.75	89.119	12569995.5	79226178002.8	44139.9	16997750.4	15.95	158452356.01	33995.50	158486351.51
0.50%	8121.900	0.050%	0.10%	0.002	8074.15	90.252	13164917.9	84031169056.5	45486.1	17516167.4	16.15	168062338.11	35032.33	168097370.45
0.25%	8242.300	0.125%	0.25%	0.005	8182.10	91.459	13820481.0	89395030335.8	46945.1	18078012.5	40.91	446975151.68	90390.06	447065541.74
0.10%	8276.000	0.075%	0.15%	0.003	8259.15	92.320	14302678.4	93385223950.4	48002.9	18485330.9	24.78	280155671.85	55455.99	280211127.84
0.05%	8277.000	0.025%	0.05%	0.001	8276.50	92.514	14412922.8	94302719553.6	48242.9	18577776.0	8.28	94302719.55	18577.78	94321297.33
0.01%														
0.005%														
0.001%														

		50.000%	100.000%	2.00										

Storm Totals:	791.1 (cfs) / 1,569.2 (acre-ft)	2996465531 (tons/storm)	903303.9 (tons/storm)	2997368834.8 (tons/storm)

.

JUF340 100 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer	Gage Station #:		Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	89.46	0.06564867	137.2931855
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	21.200	5.000%	10.000%	0.20	10.60	0.118	0.069	0.27	0.000	0.00	2.1	0.05	0.00	0.05
80.0%	23.700	5.000%	10.000%	0.20	22.45	0.251	0.097	0.81	0.038	0.11	4.5	0.16	0.02	0.18
70.0%	26.600	5.000%	10.00%	0.20	25.15	0.281	0.107	1.00	0.051	0.15	5.0	0.20	0.03	0.23
60.0%	29.900	5.000%	10.00%	0.20	28.25	0.316	0.122	1.27	0.070	0.20	5.7	0.25	0.04	0.29
50.0%	34.000	5.000%	10.00%	0.20	31.95	0.357	0.142	1.68	0.095	0.27	6.4	0.34	0.05	0.39
40.0%	39.000	5.000%	10.00%	0.20	36.50	0.408	0.171	2.32	0.131	0.37	7.3	0.46	0.07	0.54
30.0%	45.900	5.000%	10.00%	0.20	42.45	0.475	0.218	3.44	0.186	0.53	8.5	0.69	0.11	0.79
20.0%	58.000	5.000%	10.00%	0.20	51.95	0.581	0.315	6.07	0.297	0.84	10.4	1.21	0.17	1.38
10.0%	300.800	5.000%	10.00%	0.20	179.40	2.005	5.047	335.62	4.652	13.19	35.9	67.12	2.64	69.76
5.0%	2507.400	2.500%	5.00%	0.10	1404.10	15.695	707.486	368238.23	424.778	1204.96	140.4	36823.82	120.50	36944.32
4.0%	3744.100	0.500%	1.00%	0.02	3125.75	34.939	4861.5	5633013.9	2456.6	6968.5	62.5	112660.3	139.4	112799.6
3.0%	5328.400	0.500%	1.00%	0.02	4536.25	50.706	11921.4	20046455.3	5559.2	15769.7	90.7	400929.1	315.4	401244.5
2.0%	6523.300	0.500%	1.00%	0.02	5925.85	66.239	22690.4	49843144.6	9988.7	28334.7	118.5	996862.9	566.7	997429.6
1.50%	6966.800	0.250%	0.50%	0.01	6745.05	75.395	30994.4	77496210.7	13268.6	37638.8	67.5	774962.1	376.4	775338.5
1.00%	7637.200	0.250%	0.50%	0.01	7302.00	81.621	37520.7	101560731.9	15790.1	44791.5	73.0	1015607.3	447.9	1016055.2
0.90%	7750.900	0.050%	0.10%	0.00	7694.05	86.003	42557.5	121379010.8	17709.0	50234.6	15.4	242758.0	100.5	242858.5
0.80%	7807.100	0.050%	0.10%	0.00	7779.00	86.953	43698.0	126007942.4	18140.6	51458.9	15.6	252015.9	102.9	252118.8
0.70%	7919.100	0.050%	0.10%	0.00	7863.10	87.893	44844.5	130712070.0	18573.4	52686.8	15.7	261424.1	105.4	261529.5
0.60%	8026.400	0.050%	0.10%	0.00	7972.75	89.119	46365.5	137029973.9	19146.1	54311.3	15.9	274059.9	108.6	274168.6
0.50%	8121.900	0.050%	0.10%	0.00	8074.15	90.252	47798.5	143061798.1	19684.1	55837.6	16.1	286123.6	111.7	286235.3
0.25%	8242.300	0.125%	0.25%	0.01	8182.10	91.459	49352.2	149686897.0	20265.9	57487.7	40.9	748434.5	287.4	748721.9
0.10%	8276.000	0.075%	0.15%	0.00	8259.15	92.320	50478.9	154546193.6	20686.7	58681.6	24.8	463638.6	176.0	463814.6
0.05%	8277.000	0.025%	0.05%	0.00	8276.50	92.514	50734.7	155655582.2	20782.1	58952.2	8.3	155655.6	59.0	155714.5
0.01%														
0.005%														
0.001%														
									Storm Totals:		791.1 (cfs) / 1,569.2 (acre-ft)	6022026 (tons/storm)	3021 (tons/storm)	6025047 (tons/storm)

.

JUF340 100 yr 24 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	89.46	8.912014987	292.7936623
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00	0.025%	0.050%	0.001										
90.0%	2.00	5.000%	10.000%	0.200	1.00	0.011	0.099	0.078	0.072	27.66	0.20	0.02	5.53	5.55
80.0%	90.90	5.000%	10.000%	0.200	46.45	0.519	0.183	6.706	0.287	110.49	9.29	1.34	22.10	23.44
70.0%	95.60	5.000%	10.00%	0.200	93.25	1.042	1.171	86.335	1.199	461.90	18.65	17.27	92.38	109.65
60.0%	101.80	5.000%	10.00%	0.200	98.70	1.103	1.419	110.708	1.362	524.67	19.74	22.14	104.93	127.08
50.0%	111.10	5.000%	10.00%	0.200	106.45	1.190	1.839	154.793	1.617	622.51	21.29	30.96	124.50	155.46
40.0%	141.10	5.000%	10.00%	0.200	126.10	1.410	3.334	332.343	2.383	917.48	25.22	66.47	183.50	249.96
30.0%	545.80	5.000%	10.00%	0.200	343.45	3.839	126.595	34371.929	25.086	9660.23	68.69	6874.39	1932.05	8806.43
20.0%	1382.20	5.000%	10.00%	0.200	964.00	10.775	5522.002	4208225.736	290.926	112032.23	192.80	841645.15	22406.45	864051.59
10.0%	2668.30	5.000%	10.00%	0.200	2025.25	22.638	83513.517	133709064.644	1698.662	654134.78	405.05	26741812.93	130826.96	26872639.88
5.0%	5989.20	2.500%	5.00%	0.100	4328.75	48.386	1345244.9	4603512104.1	10334.6	3979713.6	432.88	460351210.41	397971.36	460749181.77
4.0%	7563.20	0.500%	1.00%	0.020	6776.20	75.744	6933132.2	37139934550.1	29988.1	11548067.9	135.52	742798691.00	230961.36	743029652.36
3.0%	9757.90	0.500%	1.00%	0.020	8660.55	96.807	17014915.7	116493236578.4	53735.5	20692908.4	173.21	2329864731.57	413858.17	2330278589.74
2.0%	12155.60	0.500%	1.00%	0.020	10956.75	122.473	40229667.8	348460563475.6	93985.2	36192588.9	219.14	6969211269.51	723851.78	6969935121.29
1.50%	12947.00	0.250%	0.50%	0.010	12551.30	140.297	66138281.1	656246575361.7	129816.7	49990893.3	125.51	6562465753.62	499908.93	6562965662.55
1.00%	13507.70	0.250%	0.50%	0.010	13227.35	147.854	80134596.4	837950443941.5	147059.5	56630880.7	132.27	8379504439.42	566308.81	8380070748.22
0.90%	13584.00	0.050%	0.10%	0.002	13545.85	151.414	87423869.8	936185099453.5	155617.2	59926360.5	27.09	1872370198.91	119852.72	1872490051.63
0.80%	13649.80	0.050%	0.10%	0.002	13616.90	152.208	89113442.9	959283351048.5	157564.6	60676268.6	27.23	1918566702.10	121352.54	1918688054.63
0.70%	13715.60	0.050%	0.10%	0.002	13682.70	152.944	90699219.0	981071790803.8	159380.6	61375588.0	27.37	1962143581.61	122751.18	1962266332.78
0.60%	13805.20	0.050%	0.10%	0.002	13760.40	153.812	92598074.6	1007299111792.1	161540.6	62207364.3	27.52	2014598223.58	124414.73	2014722638.31
0.50%	13852.10	0.050%	0.10%	0.002	13828.65	154.575	94289676.5	1030788030512.2	163451.8	62943335.1	27.66	2061576061.02	125886.67	2061701947.69
0.25%	13971.40	0.125%	0.25%	0.005	13911.75	155.504	96379526.8	1059966135827.4	165796.4	63846217.7	69.56	5299830679.14	319231.09	5300149910.23
0.10%	13999.40	0.075%	0.15%	0.003	13985.40	156.327	98259679.6	1086364767128.4	167890.5	64652659.6	41.96	3259094301.39	193957.98	3259288259.36
0.05%	14002.50	0.025%	0.05%	0.001	14000.95	156.501	98660025.3	1092003834529.0	168334.6	64823676.8	14.00	1092003834.53	64823.68	1092068658.21
0.01%														
0.005%														
0.001%														

Storm Totals:	2,241.8 (cfs) / 4,446.7 (acre-ft)	44951970148 (tons/storm)	4180829.4 (tons/storm)	44956150977.8 (tons/storm)

50.000% 100.000% 2.00

.

JUF340 100 yr 24 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	89.46	0.06564867	137.2931855
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00													
90.0%	2.00	5.000%	10.000%	0.20	1.00	0.011	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
80.0%	90.90	5.000%	10.000%	0.20	46.45	0.519	0.256	4.41	0.230	0.65	9.3	0.88	0.13	1.01
70.0%	95.60	5.000%	10.00%	0.20	93.25	1.042	1.094	37.82	1.099	3.12	18.7	7.56	0.62	8.19
60.0%	101.80	5.000%	10.00%	0.20	98.70	1.103	1.245	45.56	1.246	3.54	19.7	9.11	0.71	9.82
50.0%	111.10	5.000%	10.00%	0.20	106.45	1.190	1.481	58.45	1.473	4.18	21.3	11.69	0.84	12.53
40.0%	141.10	5.000%	10.00%	0.20	126.10	1.410	2.195	102.62	2.141	6.07	25.2	20.52	1.21	21.74
30.0%	545.80	5.000%	10.00%	0.20	343.45	3.839	23.876	3039.71	19.359	54.92	68.7	607.94	10.98	618.93
20.0%	1382.20	5.000%	10.00%	0.20	964.00	10.775	286.034	102213.15	186.209	528.21	192.8	20442.63	105.64	20548.27
10.0%	2668.30	5.000%	10.00%	0.20	2025.25	22.638	1709.389	1283311.89	948.453	2690.46	405.1	256662.38	538.09	257200.47
5.0%	5989.20	2.500%	5.00%	0.10	4328.75	48.386	10650.072	17089438.88	5016.750	14230.91	432.9	1708943.89	1423.09	1710366.98
4.0%	7563.20	0.500%	1.00%	0.02	6776.20	75.744	31340.2	78722886.6	13403.4	38021.0	135.5	1574457.7	760.4	1575218.2
3.0%	9757.90	0.500%	1.00%	0.02	8660.55	96.807	56591.3	181680303.6	22955.5	65117.5	173.2	3633606.1	1302.3	3634908.4
2.0%	12155.60	0.500%	1.00%	0.02	10956.75	122.473	99711.4	404985191.4	38447.0	109061.7	219.1	8099703.8	2181.2	8101885.1
1.50%	12947.00	0.250%	0.50%	0.01	12551.30	140.297	138312.9	643523307.6	51791.5	146915.9	125.5	6435233.1	1469.2	6436702.2
1.00%	13507.70	0.250%	0.50%	0.01	13227.35	147.854	156941.7	769527212.0	58106.1	164828.4	132.3	7695272.1	1648.3	7696920.4
0.90%	13584.00	0.050%	0.10%	0.00	13545.85	151.414	166198.2	834536668.0	61218.4	173657.0	27.1	1669073.3	347.3	1669420.6
0.80%	13649.80	0.050%	0.10%	0.00	13616.90	152.208	168305.6	849551059.0	61924.7	175660.6	27.2	1699102.1	351.3	1699453.4
0.70%	13715.60	0.050%	0.10%	0.00	13682.70	152.944	170271.1	863625331.1	62582.8	177527.4	27.4	1727250.7	355.1	1727605.7
0.60%	13805.20	0.050%	0.10%	0.00	13760.40	153.812	172609.2	880456159.3	63364.8	179745.6	27.5	1760912.3	359.5	1761271.8
0.50%	13852.10	0.050%	0.10%	0.00	13828.65	154.575	174678.4	895430055.7	64056.0	181706.4	27.7	1790860.1	363.4	1791223.5
0.25%	13971.40	0.125%	0.25%	0.01	13911.75	155.504	177217.3	913903863.7	64903.2	184109.5	69.6	4569519.3	920.5	4570439.9
0.10%	13999.40	0.075%	0.15%	0.00	13985.40	156.327	179485.3	930500556.0	65659.0	186253.6	42.0	2791501.7	558.8	2792060.4
0.05%	14002.50	0.025%	0.05%	0.00	14000.95	156.501	179966.4	934031710.8	65819.2	186708.1	14.0	934031.7	186.7	934218.4
0.01%														
0.005%														
0.001%														
									Storm Totals:		2,241.8 (cfs) 4,446.7 (acre-ft)	46367231 (tons/storm)	12885 (tons/storm)	46380116 (tons/storm)

.

Flow Duration JUF350
48 hour, 2 day duration

	2 yr 2 hr	10 yr 2 hr	100 yr 2 hr	100 yr 24 h
1	0	0	0	0
0.9	0.7	4.3	21.2	5.1
0.8	0.7	4.9	23.7	91.6
0.7	0.8	5.5	26.6	96.5
0.6	0.9	6.2	30	102.8
0.5	1.1	7.1	34	112.9
0.4	1.3	8.2	39	152.1
0.3	1.5	9.9	46	622.2
0.2	2.2	13.3	58.2	1499.2
0.1	41.9	107.9	311.2	2890.9
0.05	240.2	852.6	2761.7	6524.6
0.04	372.7	1264.3	4214.6	8290.1
0.03	584.1	1679	6279.5	10756.3
0.02	831.6	2300.2	7889.3	13638
0.015	963.2	2594.3	8728.6	14754
0.01	1043.6	2907.8	9835.9	15746.2
0.009	1048.6	2958.3	10036.8	15931.8
0.008	1050.7	3017.2	10165	16027.7
0.007	1052.3	3081.5	10337.1	16193.2
0.006	1073.7	3139.2	10495.7	16321.8
0.005	1099.4	3185.3	10644.4	16398.9
0.0025	1142.2	3257.4	10839.3	16556.1
0.001	1155	3274.8	10882.9	16594.2
0.0005	1155.2	3275.3	10887.7	16596.5
0.0001	#N/A	#N/A	#N/A	#N/A
0.00005	#N/A	#N/A	#N/A	#N/A
0.00001	#N/A	#N/A	#N/A	#N/A

JUF350 2 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	91.87	9.124229883	294.6732688
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.700	5.000%	10.000%	0.200	0.35	0.004	0.099	0.028	0.072	28.31	0.07	0.01	5.66	5.67
80.0%	0.700	5.000%	10.000%	0.200	0.70	0.008	0.099	0.055	0.072	28.31	0.14	0.01	5.66	5.67
70.0%	0.800	5.000%	10.00%	0.200	0.75	0.008	0.099	0.059	0.072	28.31	0.15	0.01	5.66	5.67
60.0%	0.900	5.000%	10.00%	0.200	0.85	0.009	0.099	0.067	0.072	28.31	0.17	0.01	5.66	5.68
50.0%	1.100	5.000%	10.00%	0.200	1.00	0.011	0.099	0.079	0.072	28.32	0.20	0.02	5.66	5.68
40.0%	1.300	5.000%	10.00%	0.200	1.20	0.013	0.099	0.094	0.072	28.32	0.24	0.02	5.66	5.68
30.0%	1.500	5.000%	10.00%	0.200	1.40	0.015	0.099	0.110	0.072	28.33	0.28	0.02	5.67	5.69
20.0%	2.200	5.000%	10.00%	0.200	1.85	0.020	0.099	0.146	0.072	28.35	0.37	0.03	5.67	5.70
10.0%	41.900	5.000%	10.00%	0.200	22.05	0.240	0.104	1.822	0.106	41.85	4.41	0.36	8.37	8.74
5.0%	240.200	2.500%	5.00%	0.100	141.05	1.535	4.521	507.385	2.903	1144.52	14.11	50.74	114.45	165.19
4.0%	372.700	0.500%	1.00%	0.020	306.45	3.336	75.728	18463.745	17.980	7088.74	6.13	369.27	141.77	511.05
3.0%	584.100	0.500%	1.00%	0.020	478.40	5.207	385.981	146913.297	51.699	20382.64	9.57	2938.27	407.65	3345.92
2.0%	831.600	0.500%	1.00%	0.020	707.85	7.705	1618.303	911392.622	131.098	51686.30	14.16	18227.85	1033.73	19261.58
1.50%	963.200	0.250%	0.50%	0.010	897.40	9.768	3855.542	2752808.269	230.383	90830.36	8.97	27528.08	908.30	28436.39
1.00%	1043.600	0.250%	0.50%	0.010	1003.40	10.922	5800.953	4631033.972	300.390	118430.96	10.03	46310.34	1184.31	47494.65
0.90%	1048.600	0.050%	0.10%	0.002	1046.10	11.386	6756.518	5623421.691	331.665	130761.73	2.09	11246.84	261.52	11508.37
0.80%	1050.700	0.050%	0.10%	0.002	1049.65	11.425	6840.792	5712883.890	334.347	131818.84	2.10	11425.77	263.64	11689.41
0.70%	1052.300	0.050%	0.10%	0.002	1051.50	11.445	6885.011	5759945.924	335.749	132371.69	2.10	11519.89	264.74	11784.64
0.60%	1073.700	0.050%	0.10%	0.002	1063.00	11.570	7164.559	6059366.486	344.542	135838.41	2.13	12118.73	271.68	12390.41
0.50%	1099.400	0.050%	0.10%	0.002	1086.55	11.827	7762.644	6710639.467	362.961	143100.29	2.17	13421.28	286.20	13707.48
0.25%	1142.200	0.125%	0.25%	0.005	1120.80	12.199	8696.141	7754596.538	390.746	154054.81	5.60	38772.98	770.27	39543.26
0.10%	1155.000	0.075%	0.15%	0.003	1148.60	12.502	9511.750	8692280.981	414.176	163292.34	3.45	26076.84	489.88	26566.72
0.05%	1155.200	0.025%	0.05%	0.001	1155.10	12.573	9710.190	8923840.732	419.769	165497.25	1.16	8923.84	165.50	9089.34
0.01%														
0.005%														
0.001%														

50.000%	100.000%	2.00

Storm Totals:	89.8 (cfs) / 178.1 (acre-ft)	228931.2 (tons/storm)	6617.3 (tons/storm)	235548.6 (tons/storm)

.

JUF350 2 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	91.87	0.066418854	142.142052
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.700	5.000%	10.000%	0.20	0.35	0.004	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
80.0%	0.700	5.000%	10.000%	0.20	0.70	0.008	0.064	0.02	0.000	0.00	0.1	0.00	0.00	0.00
70.0%	0.800	5.000%	10.00%	0.20	0.75	0.008	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
60.0%	0.900	5.000%	10.00%	0.20	0.85	0.009	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
50.0%	1.100	5.000%	10.00%	0.20	1.00	0.011	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
40.0%	1.300	5.000%	10.00%	0.20	1.20	0.013	0.064	0.03	0.000	0.00	0.2	0.01	0.00	0.01
30.0%	1.500	5.000%	10.00%	0.20	1.40	0.015	0.064	0.03	0.000	0.00	0.3	0.01	0.00	0.01
20.0%	2.200	5.000%	10.00%	0.20	1.85	0.020	0.064	0.05	0.000	0.00	0.4	0.01	0.00	0.01
10.0%	41.900	5.000%	10.00%	0.20	22.05	0.240	0.094	0.79	0.033	0.09	4.4	0.16	0.02	0.18
5.0%	240.200	2.500%	5.00%	0.10	141.05	1.535	2.683	145.21	2.585	7.42	14.1	14.52	0.74	15.26
4.0%	372.700	0.500%	1.00%	0.02	306.45	3.336	17.036	2003.67	14.220	40.81	6.1	40.07	0.82	40.89
3.0%	584.100	0.500%	1.00%	0.02	478.40	5.207	49.681	9121.56	37.784	108.44	9.6	182.43	2.17	184.60
2.0%	831.600	0.500%	1.00%	0.02	707.85	7.705	127.544	34648.64	89.228	256.08	14.2	692.97	5.12	698.09
1.50%	963.200	0.250%	0.50%	0.01	897.40	9.768	225.812	77771.44	150.138	430.89	9.0	777.71	4.31	782.02
1.00%	1043.600	0.250%	0.50%	0.01	1003.40	10.922	295.462	113779.17	191.791	550.43	10.0	1137.79	5.50	1143.30
0.90%	1048.600	0.050%	0.10%	0.00	1046.10	11.386	326.652	131142.86	210.146	603.11	2.1	262.29	1.21	263.49
0.80%	1050.700	0.050%	0.10%	0.00	1049.65	11.425	329.328	132665.78	211.713	607.61	2.1	265.33	1.22	266.55
0.70%	1052.300	0.050%	0.10%	0.00	1051.50	11.445	330.727	133464.35	212.532	609.96	2.1	266.93	1.22	268.15
0.60%	1073.700	0.050%	0.10%	0.00	1063.00	11.570	339.504	138504.80	217.663	624.68	2.1	277.01	1.25	278.26
0.50%	1099.400	0.050%	0.10%	0.00	1086.55	11.827	357.900	149244.20	228.378	655.43	2.2	298.49	1.31	299.80
0.25%	1142.200	0.125%	0.25%	0.01	1120.80	12.199	385.672	165894.90	244.462	701.60	5.6	829.47	3.51	832.98
0.10%	1155.000	0.075%	0.15%	0.00	1148.60	12.502	409.112	180342.35	257.957	740.32	3.4	541.03	2.22	543.25
0.05%	1155.200	0.025%	0.05%	0.00	1155.10	12.573	414.710	183844.34	261.169	749.54	1.2	183.84	0.75	184.59
0.01%														
0.005%														
0.001%														
									Storm Totals:		89.8 (cfs) 178.1 (acre-ft)	5770.1 (tons/storm)	31.4 (tons/storm)	5801.5 (tons/storm)

JUF350 10 yr 2 hr Poor Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	91.87	9.124229883	294.6732688
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	4.300	5.000%	10.000%	0.200	2.15	0.023	0.099	0.169	0.072	28.36	0.43	0.03	5.67	5.71
80.0%	4.900	5.000%	10.000%	0.200	4.60	0.050	0.099	0.362	0.073	28.63	0.92	0.07	5.73	5.80
70.0%	5.500	5.000%	10.00%	0.200	5.20	0.057	0.099	0.409	0.073	28.74	1.04	0.08	5.75	5.83
60.0%	6.200	5.000%	10.00%	0.200	5.85	0.064	0.099	0.460	0.073	28.89	1.17	0.09	5.78	5.87
50.0%	7.100	5.000%	10.00%	0.200	6.65	0.072	0.099	0.524	0.074	29.09	1.33	0.10	5.82	5.92
40.0%	8.200	5.000%	10.00%	0.200	7.65	0.083	0.099	0.603	0.075	29.40	1.53	0.12	5.88	6.00
30.0%	9.900	5.000%	10.00%	0.200	9.05	0.099	0.099	0.713	0.076	29.94	1.81	0.14	5.99	6.13
20.0%	13.300	5.000%	10.00%	0.200	11.60	0.126	0.099	0.917	0.079	31.25	2.32	0.18	6.25	6.43
10.0%	107.900	5.000%	10.00%	0.200	60.60	0.660	0.300	14.459	0.452	178.12	12.12	2.89	35.62	38.52
5.0%	852.600	2.500%	5.00%	0.100	480.25	5.227	391.5	149578.4	52.2	20570.2	48.03	14957.84	2057.02	17014.87
4.0%	1264.300	0.500%	1.00%	0.020	1058.45	11.521	7053.0	5939474.0	341.0	134460.6	21.17	118789.48	2689.21	121478.69
3.0%	1679.000	0.500%	1.00%	0.020	1471.65	16.018	23555.7	27580738.9	746.5	294309.3	29.43	551614.78	5886.19	557500.96
2.0%	2300.200	0.500%	1.00%	0.020	1989.60	21.656	71004.0	112396576.7	1528.7	602703.3	39.79	2247931.53	12054.07	2259985.60
1.50%	2594.300	0.250%	0.50%	0.010	2447.25	26.637	151451.1	294886847.5	2500.7	985906.7	24.47	2948868.47	9859.07	2958727.54
1.00%	2907.800	0.250%	0.50%	0.010	2751.05	29.944	232393.2	508658570.6	3302.6	1302094.3	27.51	5086585.71	13020.94	5099606.65
0.90%	2958.300	0.050%	0.10%	0.002	2933.05	31.925	293778.7	685558132.0	3845.9	1516272.1	5.87	1371116.26	3032.54	1374148.81
0.80%	3017.200	0.050%	0.10%	0.002	2987.75	32.520	314328.0	747191232.2	4018.6	1584358.0	5.98	1494382.46	3168.72	1497551.18
0.70%	3081.500	0.050%	0.10%	0.002	3049.35	33.191	338698.1	821721342.0	4218.3	1663114.4	6.10	1643442.68	3326.23	1646768.91
0.60%	3139.200	0.050%	0.10%	0.002	3110.35	33.855	364156.0	901158565.5	4421.7	1743293.2	6.22	1802317.13	3486.59	1805803.72
0.50%	3185.300	0.050%	0.10%	0.002	3162.25	34.420	386887.3	973386141.4	4599.1	1813238.6	6.32	1946772.28	3626.48	1950398.76
0.25%	3257.400	0.125%	0.25%	0.005	3221.35	35.063	414008.3	1061088209.8	4806.1	1894835.1	16.11	5305441.05	9474.18	5314915.22
0.10%	3274.800	0.075%	0.15%	0.003	3266.10	35.550	435443.9	1131530282.0	4966.3	1958007.6	9.80	3394590.85	5874.02	3400464.87
0.05%	3275.300	0.025%	0.05%	0.001	3275.05	35.648	439825.9	1146049039.8	4998.7	1970786.2	3.28	1146049.04	1970.79	1148019.83
0.01%														
0.005%														
0.001%														
									Storm Totals:		272.7 (cfs) 541.0 (acre-ft)	29072863 (tons/storm)	79608.5 (tons/storm)	29152471.8 (tons/storm)

50.000% 100.000% 2.00

.

JUF350 10 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	91.87	0.066418854	142.142052
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	4.300	5.000%	10.000%	0.20	2.15	0.023	0.064	0.05	0.000	0.00	0.4	0.01	0.00	0.01
80.0%	4.900	5.000%	10.000%	0.20	4.60	0.050	0.064	0.11	0.000	0.00	0.9	0.02	0.00	0.02
70.0%	5.500	5.000%	10.00%	0.20	5.20	0.057	0.065	0.13	0.000	0.00	1.0	0.03	0.00	0.03
60.0%	6.200	5.000%	10.00%	0.20	5.85	0.064	0.065	0.15	0.000	0.00	1.2	0.03	0.00	0.03
50.0%	7.100	5.000%	10.00%	0.20	6.65	0.072	0.065	0.17	0.000	0.00	1.3	0.03	0.00	0.03
40.0%	8.200	5.000%	10.00%	0.20	7.65	0.083	0.066	0.19	0.000	0.00	1.5	0.04	0.00	0.04
30.0%	9.900	5.000%	10.00%	0.20	9.05	0.099	0.067	0.23	0.000	0.00	1.8	0.05	0.00	0.05
20.0%	13.300	5.000%	10.00%	0.20	11.60	0.126	0.070	0.31	0.000	0.00	2.3	0.06	0.00	0.06
10.0%	107.900	5.000%	10.00%	0.20	60.60	0.660	0.406	9.44	0.396	1.14	12.1	1.89	0.23	2.12
5.0%	852.600	2.500%	5.00%	0.10	480.25	5.227	50.145	9242.25	38.105	109.36	48.0	924.22	10.94	935.16
4.0%	1264.300	0.500%	1.00%	0.02	1058.45	11.521	336.015	136494.74	215.625	618.83	21.2	2729.89	12.38	2742.27
3.0%	1679.000	0.500%	1.00%	0.02	1471.65	16.018	743.110	419704.61	444.211	1274.87	29.4	8394.09	25.50	8419.59
2.0%	2300.200	0.500%	1.00%	0.02	1989.60	21.656	1536.221	1173021.39	860.556	2469.76	39.8	23460.43	49.40	23509.82
1.50%	2594.300	0.250%	0.50%	0.01	2447.25	26.637	2529.305	2375559.15	1355.035	3888.89	24.5	23755.59	38.89	23794.48
1.00%	2907.800	0.250%	0.50%	0.01	2751.05	29.944	3352.732	3539840.03	1751.438	5026.56	27.5	35398.40	50.27	35448.67
0.90%	2958.300	0.050%	0.10%	0.00	2933.05	31.925	3912.051	4403624.48	2015.598	5784.68	5.9	8807.25	11.57	8818.82
0.80%	3017.200	0.050%	0.10%	0.00	2987.75	32.520	4090.081	4689887.90	2098.947	6023.89	6.0	9379.78	12.05	9391.82
0.70%	3081.500	0.050%	0.10%	0.00	3049.35	33.191	4296.137	5027727.62	2195.014	6299.60	6.1	10055.46	12.60	10068.05
0.60%	3139.200	0.050%	0.10%	0.00	3110.35	33.855	4506.047	5378873.30	2292.454	6579.25	6.2	10757.75	13.16	10770.91
0.50%	3185.300	0.050%	0.10%	0.00	3162.25	34.420	4689.270	5690989.15	2377.174	6822.39	6.3	11381.98	13.64	11395.62
0.25%	3257.400	0.125%	0.25%	0.01	3221.35	35.063	4903.130	6061745.20	2475.687	7105.12	16.1	30308.73	35.53	30344.25
0.10%	3274.800	0.075%	0.15%	0.00	3266.10	35.550	5068.786	6353598.09	2551.730	7323.36	9.8	19060.79	21.97	19082.76
0.05%	3275.300	0.025%	0.05%	0.00	3275.05	35.648	5102.303	6413137.62	2567.089	7367.44	3.3	6413.14	7.37	6420.51
0.01%														
0.005%														
0.001%														
									Storm Totals:		272.7 (cfs) 541.0 (acre-ft)	200829.7 (tons/storm)	315.5 (tons/storm)	201145.1 (tons/storm)

JUF350 100 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	91.87	9.124229883	294.6732688
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	21.200	5.000%	10.000%	0.200	10.60	0.115	0.099	0.837	0.078	30.68	2.12	0.17	6.14	6.30
80.0%	23.700	5.000%	10.000%	0.200	22.45	0.244	0.104	1.861	0.108	42.45	4.49	0.37	8.49	8.86
70.0%	26.600	5.000%	10.00%	0.200	25.15	0.274	0.107	2.140	0.119	46.83	5.03	0.43	9.37	9.79
60.0%	30.000	5.000%	10.00%	0.200	28.30	0.308	0.111	2.506	0.134	52.82	5.66	0.50	10.56	11.07
50.0%	34.000	5.000%	10.00%	0.200	32.00	0.348	0.118	3.013	0.155	61.14	6.40	0.60	12.23	12.83
40.0%	39.000	5.000%	10.00%	0.200	36.50	0.397	0.130	3.785	0.186	73.20	7.30	0.76	14.64	15.40
30.0%	46.000	5.000%	10.00%	0.200	42.50	0.463	0.154	5.200	0.235	92.76	8.50	1.04	18.55	19.59
20.0%	58.200	5.000%	10.00%	0.200	52.10	0.567	0.215	8.892	0.337	132.91	10.42	1.78	26.58	28.36
10.0%	311.200	5.000%	10.00%	0.200	184.70	2.010	11.959	1757.432	5.446	2147.17	36.94	351.49	429.43	780.92
5.0%	2761.700	2.500%	5.00%	0.100	1536.45	16.724	27578.5	33712711.0	827.0	326051.7	153.65	3371271.10	32605.17	3403876.27
4.0%	4214.600	0.500%	1.00%	0.020	3488.15	37.967	553928.8	1537282343.7	5806.8	2289390.0	69.76	30745646.87	45787.80	30791434.67
3.0%	6279.500	0.500%	1.00%	0.020	5247.05	57.112	2467561.5	10301197001.7	15327.1	6042847.9	104.94	206023940.03	120856.96	206144796.99
2.0%	7889.300	0.500%	1.00%	0.020	7084.40	77.111	7402138.3	41721967017.5	31290.9	12336690.6	141.69	834439340.35	246733.81	834686074.16
1.50%	8728.600	0.250%	0.50%	0.010	8308.95	90.440	13265315.7	87693669132.4	45711.2	18022000.1	83.09	876936691.32	180220.00	877116911.33
1.00%	9835.900	0.250%	0.50%	0.010	9282.25	101.034	19894889.2	146926215384.0	59481.6	23451091.8	92.82	1469262153.84	234510.92	1469496664.76
0.90%	10036.800	0.050%	0.10%	0.002	9936.35	108.153	25524156.5	201782168651.2	69933.4	27571817.6	19.87	403564337.30	55143.64	403619480.94
0.80%	10165.000	0.050%	0.10%	0.002	10100.90	109.944	27105145.6	217829312649.3	72718.0	28669650.6	20.20	435658625.30	57339.30	435715964.60
0.70%	10337.100	0.050%	0.10%	0.002	10251.05	111.579	28608800.0	233331030276.5	75314.0	29693141.6	20.50	466662060.55	59386.28	466721446.84
0.60%	10495.700	0.050%	0.10%	0.002	10416.40	113.378	30333821.0	251390738404.5	78234.0	30844377.0	20.83	502781476.81	61688.75	502843165.56
0.50%	10644.400	0.050%	0.10%	0.002	10570.05	115.051	32003401.4	269139650791.6	81005.2	31936957.3	21.14	538279301.58	63873.91	538343175.50
0.25%	10839.300	0.125%	0.25%	0.005	10741.85	116.921	33948188.8	290135050250.5	84170.2	33184767.4	53.71	1450675251.25	165923.84	1450841175.09
0.10%	10882.900	0.075%	0.15%	0.003	10861.10	118.219	35347648.0	305449092357.0	86408.5	34067228.0	32.58	916347277.07	102201.68	916449478.76
0.05%	10887.700	0.025%	0.05%	0.001	10885.30	118.482	35636683.2	308632874446.8	86866.9	34247949.4	10.89	308632874.45	34247.95	308667122.40
0.01%														
0.005%														
0.001%														

50.000% 100.000% 2.00

Storm Totals:	932.5 (cfs) / 1,849.7 (acre-ft)	8443380605 (tons/storm)	1461056.0 (tons/storm)	8444841661.0 (tons/storm)

JUF350 100 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	91.87	0.066418854	142.142052
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	21.200	5.000%	10.000%	0.20	10.60	0.115	0.069	0.28	0.000	0.00	2.1	0.06	0.00	0.06
80.0%	23.700	5.000%	10.000%	0.20	22.45	0.244	0.095	0.82	0.035	0.10	4.5	0.16	0.02	0.18
70.0%	26.600	5.000%	10.00%	0.20	25.15	0.274	0.105	1.01	0.048	0.14	5.0	0.20	0.03	0.23
60.0%	30.000	5.000%	10.00%	0.20	28.30	0.308	0.118	1.28	0.065	0.19	5.7	0.26	0.04	0.29
50.0%	34.000	5.000%	10.00%	0.20	32.00	0.348	0.137	1.68	0.089	0.26	6.4	0.34	0.05	0.39
40.0%	39.000	5.000%	10.00%	0.20	36.50	0.397	0.165	2.31	0.123	0.35	7.3	0.46	0.07	0.53
30.0%	46.000	5.000%	10.00%	0.20	42.50	0.463	0.209	3.41	0.176	0.50	8.5	0.68	0.10	0.78
20.0%	58.200	5.000%	10.00%	0.20	52.10	0.567	0.301	6.03	0.281	0.81	10.4	1.21	0.16	1.37
10.0%	311.200	5.000%	10.00%	0.20	184.70	2.010	5.077	359.89	4.677	13.42	36.9	71.98	2.68	74.66
5.0%	2761.700	2.500%	5.00%	0.10	1536.45	16.724	824.369	486100.87	488.234	1401.21	153.6	48610.09	140.12	48750.21
4.0%	4214.600	0.500%	1.00%	0.02	3488.15	37.967	5938.9	7950328.0	2947.7	8459.6	69.8	159006.6	169.2	159175.8
3.0%	6279.500	0.500%	1.00%	0.02	5247.05	57.112	15877.3	31972568.3	7216.4	20710.9	104.9	639451.4	414.2	639865.6
2.0%	7889.300	0.500%	1.00%	0.02	7084.40	77.111	32720.1	88961826.0	13939.6	40006.1	141.7	1779236.5	800.1	1780036.6
1.50%	8728.600	0.250%	0.50%	0.01	8308.95	90.440	48038.1	153185771.3	19774.0	56750.5	83.1	1531857.7	567.5	1532425.2
1.00%	9835.900	0.250%	0.50%	0.01	9282.25	101.034	62726.6	223455679.0	25210.9	72354.2	92.8	2234556.8	723.5	2235280.3
0.90%	10036.800	0.050%	0.10%	0.00	9936.35	108.153	73906.0	281833758.4	29271.2	84007.0	19.9	563667.5	168.0	563835.5
0.80%	10165.000	0.050%	0.10%	0.00	10100.90	109.944	76888.3	298061909.0	30344.7	87088.0	20.2	596123.8	174.2	596298.0
0.70%	10337.100	0.050%	0.10%	0.00	10251.05	111.579	79669.9	313436153.7	31342.6	89952.0	20.5	626872.3	179.9	627052.2
0.60%	10495.700	0.050%	0.10%	0.00	10416.40	113.378	82800.3	331005915.5	32461.9	93164.4	20.8	662011.8	186.3	662198.2
0.50%	10644.400	0.050%	0.10%	0.00	10570.05	115.051	85772.6	347945908.5	33521.2	96204.5	21.1	695891.8	192.4	696084.2
0.25%	10839.300	0.125%	0.25%	0.01	10741.85	116.921	89168.8	367602267.4	34727.6	99666.7	53.7	1838011.3	498.3	1838509.7
0.10%	10882.900	0.075%	0.15%	0.00	10861.10	118.219	91571.6	381698986.2	35578.6	102109.1	32.6	1145097.0	306.3	1145403.3
0.05%	10887.700	0.025%	0.05%	0.00	10885.30	118.482	92063.8	384605621.9	35752.7	102608.7	10.9	384605.6	102.6	384708.2
0.01%														
0.005%														
0.001%														
									Storm Totals:		932.5 (cfs) 1,849.7 (acre-ft)	12905076 (tons/storm)	4626 (tons/storm)	12909702 (tons/storm)

.

JUF350 100 yr 24 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	91.87	9.124229883	294.6732688
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00	0.025%	0.050%	0.001										
90.0%	5.10	5.000%	10.000%	0.200	2.55	0.028	0.099	0.201	0.072	28.39	0.51	0.04	5.68	5.72
80.0%	91.60	5.000%	10.000%	0.200	48.35	0.526	0.187	7.188	0.294	115.89	9.67	1.44	23.18	24.62
70.0%	96.50	5.000%	10.00%	0.200	94.05	1.024	1.103	82.508	1.152	454.23	18.81	16.50	90.85	107.35
60.0%	102.80	5.000%	10.00%	0.200	99.65	1.085	1.339	106.176	1.311	517.00	19.93	21.24	103.40	124.64
50.0%	112.90	5.000%	10.00%	0.200	107.85	1.174	1.755	150.625	1.568	618.07	21.57	30.12	123.61	153.74
40.0%	152.10	5.000%	10.00%	0.200	132.50	1.442	3.617	381.283	2.512	990.34	26.50	76.26	198.07	274.32
30.0%	622.20	5.000%	10.00%	0.200	387.15	4.214	177.988	54824.366	31.288	12335.64	77.43	10964.87	2467.13	13432.00
20.0%	1499.20	5.000%	10.00%	0.200	1060.70	11.545	7108.001	5998526.297	342.773	135140.91	212.14	1199705.26	27028.18	1226733.44
10.0%	2890.90	5.000%	10.00%	0.200	2195.05	23.892	101728.768	177661247.941	1930.966	761298.59	439.01	35532249.59	152259.72	35684509.31
5.0%	6524.60	2.500%	5.00%	0.100	4707.75	51.242	1659290.7	6214989016.7	11843.8	4669515.7	470.78	621498901.67	466951.57	621965853.23
4.0%	8290.10	0.500%	1.00%	0.020	7407.35	80.626	8713540.9	51352553337.3	34788.9	13715785.0	148.15	1027051066.75	274315.70	1027325382.45
3.0%	10756.30	0.500%	1.00%	0.020	9523.20	103.656	21850676.8	165558812746.1	63217.9	24924153.9	190.46	3311176254.92	498483.08	3311674738.00
2.0%	13638.00	0.500%	1.00%	0.020	12197.15	132.761	54040281.0	524421475844.0	113849.3	44885996.2	243.94	10488429516.88	897719.92	10489327236.80
1.50%	14754.00	0.250%	0.50%	0.010	14196.00	154.518	94161550.6	1063516169158.9	163307.4	64385251.0	141.96	10635161691.59	643852.51	10635805544.10
1.00%	15746.20	0.250%	0.50%	0.010	15250.10	165.991	122375088.7	1484807717355.3	193621.1	76336670.3	152.50	14848077173.55	763366.70	14848840540.26
0.90%	15931.80	0.050%	0.10%	0.002	15839.00	172.401	140573064.0	1771472336181.8	211870.1	83531481.6	31.68	3542944672.36	167062.96	3543111735.33
0.80%	16027.70	0.050%	0.10%	0.002	15979.75	173.933	145198055.5	1846015256211.3	216373.2	85306851.1	31.96	3692030512.42	170613.70	3692201126.12
0.70%	16193.20	0.050%	0.10%	0.002	16110.45	175.356	149590912.4	1917420592805.6	220603.9	86974853.8	32.22	3834841185.61	173949.71	3835015135.32
0.60%	16321.80	0.050%	0.10%	0.002	16257.50	176.956	154647875.8	2000332663744.9	225420.7	88873923.3	32.52	4000665327.49	177747.85	4000843075.34
0.50%	16398.90	0.050%	0.10%	0.002	16360.35	178.076	158257874.9	2059977253683.1	228825.6	90216316.6	32.72	4119954507.37	180432.63	4120134940.00
0.25%	16556.10	0.125%	0.25%	0.005	16477.50	179.351	162443965.4	2129606715648.0	232739.9	91759574.3	82.39	10648033578.24	458797.87	10648492376.11
0.10%	16594.20	0.075%	0.15%	0.003	16575.15	180.414	165994276.7	2189047001999.7	236032.1	93057554.0	49.73	6567141006.00	279172.66	6567420178.66
0.05%	16596.50	0.025%	0.05%	0.001	16595.35	180.634	166735677.4	2201503901675.5	236716.5	93327374.8	16.60	2201503901.68	93327.37	2201597229.05
0.01%														
0.005%														
0.001%														
		50.000%	100.000%	2.00										
										Storm Totals:	2,483.2 (cfs) / 4,925.4 (acre-ft)	79575252362 (tons/storm)	5428094.1 (tons/storm)	79580680455.9 (tons/storm)

.

JUF350 100 yr 24 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	91.87	0.066418854	142.142052
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00													
90.0%	5.10	5.000%	10.000%	0.20	2.55	0.028	0.064	0.06	0.000	0.00	0.5	0.01	0.00	0.01
80.0%	91.60	5.000%	10.000%	0.20	48.35	0.526	0.262	4.87	0.237	0.68	9.7	0.97	0.14	1.11
70.0%	96.50	5.000%	10.00%	0.20	94.05	1.024	1.050	37.91	1.056	3.03	18.8	7.58	0.61	8.19
60.0%	102.80	5.000%	10.00%	0.20	99.65	1.085	1.198	45.81	1.200	3.44	19.9	9.16	0.69	9.85
50.0%	112.90	5.000%	10.00%	0.20	107.85	1.174	1.436	59.43	1.430	4.10	21.6	11.89	0.82	12.71
40.0%	152.10	5.000%	10.00%	0.20	132.50	1.442	2.316	117.79	2.252	6.46	26.5	23.56	1.29	24.85
30.0%	622.20	5.000%	10.00%	0.20	387.15	4.214	29.867	4437.69	23.751	68.16	77.4	887.54	13.63	901.17
20.0%	1499.20	5.000%	10.00%	0.20	1060.70	11.545	337.738	137486.13	216.631	621.72	212.1	27497.23	124.34	27621.57
10.0%	2890.90	5.000%	10.00%	0.20	2195.05	23.892	1946.442	1639729.85	1067.506	3063.70	439.0	327945.97	612.74	328558.71
5.0%	6524.60	2.500%	5.00%	0.10	4707.75	51.242	12227.334	22091821.28	5688.962	16327.09	470.8	2209182.13	1632.71	2210814.84
4.0%	8290.10	0.500%	1.00%	0.02	7407.35	80.626	36428.6	103559859.2	15371.1	44114.4	148.1	2071197.2	882.3	2072079.5
3.0%	10756.30	0.500%	1.00%	0.02	9523.20	103.656	66720.2	243852247.0	26668.2	76536.7	190.5	4877044.9	1530.7	4878575.7
2.0%	13638.00	0.500%	1.00%	0.02	12197.15	132.761	121091.0	566835027.9	45885.7	131690.0	243.9	11336700.6	2633.8	11339334.4
1.50%	14754.00	0.250%	0.50%	0.01	14196.00	154.518	174522.1	950829730.8	64003.9	183688.4	142.0	9508297.3	1836.9	9510134.2
1.00%	15746.20	0.250%	0.50%	0.01	15250.10	165.991	207381.9	1213751885.6	74889.3	214929.3	152.5	12137518.9	2149.3	12139668.1
0.90%	15931.80	0.050%	0.10%	0.00	15839.00	172.401	227197.2	1381074170.3	81377.5	233550.1	31.7	2762148.3	467.1	2762615.4
0.80%	16027.70	0.050%	0.10%	0.00	15979.75	173.933	232090.2	1423354940.8	82971.7	238125.3	32.0	2846709.9	476.3	2847186.1
0.70%	16193.20	0.050%	0.10%	0.00	16110.45	175.356	236688.6	1463428235.3	84467.1	242417.2	32.2	2926856.5	484.8	2927341.3
0.60%	16321.80	0.050%	0.10%	0.00	16257.50	176.956	241925.5	1509460246.0	86167.0	247295.8	32.5	3018920.5	494.6	3019415.1
0.50%	16398.90	0.050%	0.10%	0.00	16360.35	178.076	245628.1	1542257788.6	87366.9	250739.5	32.7	3084515.6	501.5	3085017.1
0.25%	16556.10	0.125%	0.25%	0.01	16477.50	179.351	249885.7	1580225229.1	88744.7	254693.6	82.4	7901126.1	1273.5	7902399.6
0.10%	16594.20	0.075%	0.15%	0.00	16575.15	180.414	253467.3	1612373685.8	89902.1	258015.2	49.7	4837121.1	774.0	4837895.1
0.05%	16596.50	0.025%	0.05%	0.00	16595.35	180.634	254211.9	1619081176.8	90142.5	258705.2	16.6	1619081.2	258.7	1619339.9
0.01%														
0.005%														
0.001%														
									Storm Totals:		2,483.2 (cfs) 4,925.4 (acre-ft)	71492804 (tons/storm)	16150 (tons/storm)	71508954 (tons/storm)

.

Flow Duration JUF390
48 hour, 2 day duration

	2 yr 2 hr	10 yr 2 hr	100 yr 2 hr	100 yr 24 h
1	0	0	0	0
0.9	0.7	4.3	21.3	5.6
0.8	0.7	4.9	23.8	91.8
0.7	0.8	5.5	26.7	96.8
0.6	0.9	6.2	30.1	103.2
0.5	1.1	7.1	34.1	113.6
0.4	1.3	8.3	39.2	156.8
0.3	1.5	10	46.2	673.9
0.2	2.2	13.5	58.7	1624.2
0.1	47.9	119	336.9	3136
0.05	266.9	934.2	2971.3	7057.8
0.04	427.1	1385.3	4675.4	8948.6
0.03	670.4	1909.8	6954.5	11761.9
0.02	953.9	2638.4	8936.9	14863.8
0.015	1090.9	3024.4	10131.7	16278.7
0.01	1216.9	3415.5	11466.2	17655.2
0.009	1221.2	3460.9	11735.4	17894
0.008	1223.4	3499.6	11995.8	18046.1
0.007	1230.4	3567.8	12239.5	18240.2
0.006	1233.7	3614.6	12447.1	18406.7
0.005	1235.5	3676.2	12615.3	18523
0.0025	1286.3	3783.3	12899.1	18729.5
0.001	1304.7	3810.2	12967.5	18785
0.0005	1305.8	3812	12971.2	18787
0.0001	#N/A	#N/A	#N/A	#N/A
0.00005	#N/A	#N/A	#N/A	#N/A
0.00001	#N/A	#N/A	#N/A	#N/A

JUF390 2 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	95.76	9.465466153	297.6299697
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.700	5.000%	10.000%	0.200	0.35	0.004	0.099	0.028	0.072	29.37	0.07	0.01	5.87	5.88
80.0%	0.700	5.000%	10.000%	0.200	0.70	0.007	0.099	0.056	0.072	29.37	0.14	0.01	5.87	5.89
70.0%	0.800	5.000%	10.00%	0.200	0.75	0.008	0.099	0.060	0.072	29.37	0.15	0.01	5.87	5.89
60.0%	0.900	5.000%	10.00%	0.200	0.85	0.009	0.099	0.068	0.072	29.37	0.17	0.01	5.87	5.89
50.0%	1.100	5.000%	10.00%	0.200	1.00	0.010	0.099	0.079	0.072	29.37	0.20	0.02	5.87	5.89
40.0%	1.300	5.000%	10.00%	0.200	1.20	0.013	0.099	0.095	0.072	29.38	0.24	0.02	5.88	5.89
30.0%	1.500	5.000%	10.00%	0.200	1.40	0.015	0.099	0.111	0.072	29.38	0.28	0.02	5.88	5.90
20.0%	2.200	5.000%	10.00%	0.200	1.85	0.019	0.099	0.147	0.072	29.40	0.37	0.03	5.88	5.91
10.0%	47.900	5.000%	10.00%	0.200	25.05	0.262	0.106	2.128	0.114	46.61	5.01	0.43	9.32	9.75
5.0%	266.900	2.500%	5.00%	0.100	157.40	1.644	5.775	730.404	3.401	1391.10	15.74	73.04	139.11	212.15
4.0%	427.100	0.500%	1.00%	0.020	347.00	3.623	102.485	28577.888	21.875	8946.91	6.94	571.56	178.94	750.50
3.0%	670.400	0.500%	1.00%	0.020	548.75	5.730	547.804	241568.424	64.889	26539.69	10.98	4831.37	530.79	5362.16
2.0%	953.900	0.500%	1.00%	0.020	812.15	8.481	2299.075	1500478.462	164.674	67352.01	16.24	30009.57	1347.04	31356.61
1.50%	1090.900	0.250%	0.50%	0.010	1022.40	10.676	5338.092	4385785.068	284.595	116400.30	10.22	43857.85	1164.00	45021.85
1.00%	1216.900	0.250%	0.50%	0.010	1153.90	12.049	8311.012	7706594.152	379.416	155182.32	11.54	77065.94	1551.82	78617.76
0.90%	1221.200	0.050%	0.10%	0.002	1219.05	12.730	10160.904	9953923.167	432.325	176822.02	2.44	19907.85	353.64	20261.49
0.80%	1223.400	0.050%	0.10%	0.002	1222.30	12.764	10260.374	10078163.786	435.069	177944.52	2.44	20156.33	355.89	20512.22
0.70%	1230.400	0.050%	0.10%	0.002	1226.90	12.812	10402.369	10256090.312	438.971	179540.34	2.45	20512.18	359.08	20871.26
0.60%	1233.700	0.050%	0.10%	0.002	1232.05	12.865	10563.030	10458207.897	443.363	181336.77	2.46	20916.42	362.67	21279.09
0.50%	1235.500	0.050%	0.10%	0.002	1234.60	12.892	10643.245	10559436.446	445.547	182230.10	2.47	21118.87	364.46	21483.33
0.25%	1286.300	0.125%	0.25%	0.005	1260.90	13.167	11496.605	11649054.060	468.438	191592.48	6.30	58245.27	957.96	59203.23
0.10%	1304.700	0.075%	0.15%	0.003	1295.50	13.528	12693.672	13214937.452	499.570	204325.47	3.89	39644.81	612.98	40257.79
0.05%	1305.800	0.025%	0.05%	0.001	1305.25	13.630	13046.737	13684724.231	508.553	207999.48	1.31	13684.72	208.00	13892.72
0.01%														
0.005%														
0.001%														
									Storm Totals:		102.1 (cfs) 202.4 (acre-ft)	370596.3 (tons/storm)	8542.7 (tons/storm)	379139.1 (tons/storm)

50.000% 100.000% 2.00

.

JUF390 2 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	95.76	0.067638585	150.0515543
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.700	5.000%	10.000%	0.20	0.35	0.004	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
80.0%	0.700	5.000%	10.000%	0.20	0.70	0.007	0.064	0.02	0.000	0.00	0.1	0.00	0.00	0.00
70.0%	0.800	5.000%	10.00%	0.20	0.75	0.008	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
60.0%	0.900	5.000%	10.00%	0.20	0.85	0.009	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
50.0%	1.100	5.000%	10.00%	0.20	1.00	0.010	0.064	0.03	0.000	0.00	0.2	0.01	0.00	0.01
40.0%	1.300	5.000%	10.00%	0.20	1.20	0.013	0.064	0.03	0.000	0.00	0.2	0.01	0.00	0.01
30.0%	1.500	5.000%	10.00%	0.20	1.40	0.015	0.064	0.04	0.000	0.00	0.3	0.01	0.00	0.01
20.0%	2.200	5.000%	10.00%	0.20	1.85	0.019	0.064	0.05	0.000	0.00	0.4	0.01	0.00	0.01
10.0%	47.900	5.000%	10.00%	0.20	25.05	0.262	0.100	1.02	0.042	0.12	5.0	0.20	0.02	0.23
5.0%	266.900	2.500%	5.00%	0.10	157.40	1.644	3.150	200.87	3.003	8.78	15.7	20.09	0.88	20.96
4.0%	427.100	0.500%	1.00%	0.02	347.00	3.623	20.782	2921.55	17.054	49.84	6.9	58.43	1.00	59.43
3.0%	670.400	0.500%	1.00%	0.02	548.75	5.730	62.545	13904.96	46.610	136.23	11.0	278.10	2.72	280.82
2.0%	953.900	0.500%	1.00%	0.02	812.15	8.481	160.693	52873.34	110.131	321.88	16.2	1057.47	6.44	1063.90
1.50%	1090.900	0.250%	0.50%	0.01	1022.40	10.676	279.728	115867.35	182.467	533.29	10.2	1158.67	5.33	1164.01
1.00%	1216.900	0.250%	0.50%	0.01	1153.90	12.049	374.344	175002.27	237.914	695.34	11.5	1750.02	6.95	1756.98
0.90%	1221.200	0.050%	0.10%	0.00	1219.05	12.730	427.280	211027.31	268.368	784.35	2.4	422.05	1.57	423.62
0.80%	1223.400	0.050%	0.10%	0.00	1222.30	12.764	430.029	212950.90	269.940	788.94	2.4	425.90	1.58	427.48
0.70%	1230.400	0.050%	0.10%	0.00	1226.90	12.812	433.936	215694.65	272.173	795.47	2.5	431.39	1.59	432.98
0.60%	1233.700	0.050%	0.10%	0.00	1232.05	12.865	438.336	218795.99	274.684	802.81	2.5	437.59	1.61	439.20
0.50%	1235.500	0.050%	0.10%	0.00	1234.60	12.892	440.524	220343.21	275.933	806.46	2.5	440.69	1.61	442.30
0.25%	1286.300	0.125%	0.25%	0.01	1260.90	13.167	463.462	236755.05	288.987	844.61	6.3	1183.78	4.22	1188.00
0.10%	1304.700	0.075%	0.15%	0.00	1295.50	13.528	494.683	259638.11	306.663	896.27	3.9	778.91	2.69	781.60
0.05%	1305.800	0.025%	0.05%	0.00	1305.25	13.630	503.696	266358.46	311.747	911.13	1.3	266.36	0.91	267.27
0.01%														
0.005%														
0.001%														
									Storm Totals:		102.1 (cfs) 202.4 (acre-ft)	8709.7 (tons/storm)	39.1 (tons/storm)	8748.8 (tons/storm)

.

JUF390 10 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	95.76	9.465466153	297.6299697
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	4.300	5.000%	10.000%	0.200	2.15	0.022	0.099	0.171	0.072	29.42	0.43	0.03	5.88	5.92
80.0%	4.900	5.000%	10.000%	0.200	4.60	0.048	0.099	0.366	0.073	29.67	0.92	0.07	5.93	6.01
70.0%	5.500	5.000%	10.00%	0.200	5.20	0.054	0.099	0.413	0.073	29.78	1.04	0.08	5.96	6.04
60.0%	6.200	5.000%	10.00%	0.200	5.85	0.061	0.099	0.465	0.073	29.91	1.17	0.09	5.98	6.07
50.0%	7.100	5.000%	10.00%	0.200	6.65	0.069	0.099	0.529	0.074	30.10	1.33	0.11	6.02	6.13
40.0%	8.300	5.000%	10.00%	0.200	7.70	0.080	0.099	0.613	0.074	30.41	1.54	0.12	6.08	6.20
30.0%	10.000	5.000%	10.00%	0.200	9.15	0.096	0.099	0.728	0.076	30.94	1.83	0.15	6.19	6.33
20.0%	13.500	5.000%	10.00%	0.200	11.75	0.123	0.099	0.938	0.079	32.22	2.35	0.19	6.44	6.63
10.0%	119.000	5.000%	10.00%	0.200	66.25	0.692	0.338	18.004	0.497	203.43	13.25	3.60	40.69	44.29
5.0%	934.200	2.500%	5.00%	0.100	526.60	5.499	471.2	199382.2	58.8	24066.2	52.66	19938.22	2406.62	22344.84
4.0%	1385.300	0.500%	1.00%	0.020	1159.75	12.110	8466.2	7890318.4	384.0	157058.7	23.20	157806.37	3141.17	160947.54
3.0%	1909.800	0.500%	1.00%	0.020	1647.55	17.204	30590.7	40501234.3	884.6	361807.7	32.95	810024.69	7236.15	817260.84
2.0%	2638.400	0.500%	1.00%	0.020	2274.10	23.747	99481.4	181799198.5	1903.1	778391.2	45.48	3635983.97	15567.82	3651551.79
1.50%	3024.400	0.250%	0.50%	0.010	2831.40	29.566	221844.2	504765558.8	3204.5	1310632.4	28.31	5047655.59	13106.32	5060761.91
1.00%	3415.500	0.250%	0.50%	0.010	3219.95	33.624	355136.6	918935456.7	4350.2	1779262.3	32.20	9189354.57	17792.62	9207147.19
0.90%	3460.900	0.050%	0.10%	0.002	3438.20	35.903	451451.5	1247333707.0	5084.2	2079439.9	6.88	2494667.41	4158.88	2498826.29
0.80%	3499.600	0.050%	0.10%	0.002	3480.25	36.342	471984.9	1320015229.4	5233.2	2140406.0	6.96	2640030.46	4280.81	2644311.27
0.70%	3567.800	0.050%	0.10%	0.002	3533.70	36.900	499054.4	1417156946.0	5426.3	2219377.5	7.07	2834313.89	4438.76	2838752.65
0.60%	3614.600	0.050%	0.10%	0.002	3591.20	37.500	529416.1	1527837421.2	5638.6	2306189.3	7.18	3055674.84	4612.38	3060287.22
0.50%	3676.200	0.050%	0.10%	0.002	3645.40	38.066	559243.7	1638274661.8	5843.0	2389790.6	7.29	3276549.32	4779.58	3281328.90
0.25%	3783.300	0.125%	0.25%	0.005	3729.75	38.947	608067.2	1822517466.7	6169.5	2523341.0	18.65	9112587.33	12616.71	9125204.04
0.10%	3810.200	0.075%	0.15%	0.003	3796.75	39.647	648998.9	1980142214.6	6436.2	2632430.5	11.39	5940426.64	7897.29	5948323.94
0.05%	3812.000	0.025%	0.05%	0.001	3811.10	39.797	658019.3	2015252278.6	6494.2	2656143.5	3.81	2015252.28	2656.14	2017908.42
0.01%														
0.005%														
0.001%														
									Storm Totals:		307.9 (cfs) 610.7 (acre-ft)	50230270 (tons/storm)	104780.4 (tons/storm)	50335050.5 (tons/storm)

50.000% 100.000% 2.00

.

JUF390 10 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer	Gage Station #:		Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	95.76	0.067638585	150.0515543
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	4.300	5.000%	10.000%	0.20	2.15	0.022	0.064	0.06	0.000	0.00	0.4	0.01	0.00	0.01
80.0%	4.900	5.000%	10.000%	0.20	4.60	0.048	0.064	0.12	0.000	0.00	0.9	0.02	0.00	0.02
70.0%	5.500	5.000%	10.00%	0.20	5.20	0.054	0.064	0.14	0.000	0.00	1.0	0.03	0.00	0.03
60.0%	6.200	5.000%	10.00%	0.20	5.85	0.061	0.065	0.15	0.000	0.00	1.2	0.03	0.00	0.03
50.0%	7.100	5.000%	10.00%	0.20	6.65	0.069	0.065	0.18	0.000	0.00	1.3	0.04	0.00	0.04
40.0%	8.300	5.000%	10.00%	0.20	7.70	0.080	0.066	0.21	0.000	0.00	1.5	0.04	0.00	0.04
30.0%	10.000	5.000%	10.00%	0.20	9.15	0.096	0.067	0.25	0.000	0.00	1.8	0.05	0.00	0.05
20.0%	13.500	5.000%	10.00%	0.20	11.75	0.123	0.070	0.33	0.000	0.00	2.4	0.07	0.00	0.07
10.0%	119.000	5.000%	10.00%	0.20	66.25	0.692	0.448	12.01	0.441	1.29	13.3	2.40	0.26	2.66
5.0%	934.200	2.500%	5.00%	0.10	526.60	5.499	56.642	12084.40	42.583	124.45	52.7	1208.44	12.45	1220.89
4.0%	1385.300	0.500%	1.00%	0.02	1159.75	12.110	378.931	178044.50	240.568	703.10	23.2	3560.89	14.06	3574.95
3.0%	1909.800	0.500%	1.00%	0.02	1647.55	17.204	882.577	589108.58	519.528	1518.40	33.0	11782.17	30.37	11812.54
2.0%	2638.400	0.500%	1.00%	0.02	2274.10	23.747	1918.031	1767133.86	1053.309	3078.47	45.5	35342.68	61.57	35404.25
1.50%	3024.400	0.250%	0.50%	0.01	2831.40	29.566	3251.763	3730133.27	1703.348	4978.31	28.3	37301.33	49.78	37351.12
1.00%	3415.500	0.250%	0.50%	0.01	3219.95	33.624	4432.271	5782020.86	2258.255	6600.12	32.2	57820.21	66.00	57886.21
0.90%	3460.900	0.050%	0.10%	0.00	3438.20	35.903	5190.680	7230355.78	2607.542	7620.97	6.9	14460.71	15.24	14475.95
0.80%	3499.600	0.050%	0.10%	0.00	3480.25	36.342	5344.897	7536228.00	2677.987	7826.85	7.0	15072.46	15.65	15088.11
0.70%	3567.800	0.050%	0.10%	0.00	3533.70	36.900	5544.745	7938080.58	2769.005	8092.87	7.1	15876.16	16.19	15892.35
0.60%	3614.600	0.050%	0.10%	0.00	3591.20	37.500	5764.541	8387038.02	2868.771	8384.45	7.2	16774.08	16.77	16790.84
0.50%	3676.200	0.050%	0.10%	0.00	3645.40	38.066	5976.313	8826383.00	2964.573	8664.45	7.3	17652.77	17.33	17670.09
0.25%	3783.300	0.125%	0.25%	0.01	3729.75	38.947	6314.812	9542109.10	3117.078	9110.17	18.6	47710.55	45.55	47756.10
0.10%	3810.200	0.075%	0.15%	0.00	3796.75	39.647	6591.487	10139106.09	3241.185	9472.89	11.4	30417.32	28.42	30445.74
0.05%	3812.000	0.025%	0.05%	0.00	3811.10	39.797	6651.649	10270318.71	3268.109	9551.58	3.8	10270.32	9.55	10279.87
0.01%														
0.005%														
0.001%														
									Storm Totals:		307.9 (cfs) / 610.7 (acre-ft)	315252.8 (tons/storm)	399.2 (tons/storm)	315651.9 (tons/storm)

.

JUF390 100 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	95.76	9.465466153	297.6299697
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	21.300	5.000%	10.000%	0.200	10.65	0.111	0.099	0.849	0.077	31.62	2.13	0.17	6.32	6.49
80.0%	23.800	5.000%	10.000%	0.200	22.55	0.235	0.104	1.876	0.105	42.80	4.51	0.38	8.56	8.93
70.0%	26.700	5.000%	10.00%	0.200	25.25	0.264	0.106	2.149	0.115	46.94	5.05	0.43	9.39	9.82
60.0%	30.100	5.000%	10.00%	0.200	28.40	0.297	0.110	2.503	0.129	52.60	5.68	0.50	10.52	11.02
50.0%	34.100	5.000%	10.00%	0.200	32.10	0.335	0.116	2.987	0.148	60.46	6.42	0.60	12.09	12.69
40.0%	39.200	5.000%	10.00%	0.200	36.65	0.383	0.126	3.720	0.176	71.97	7.33	0.74	14.39	15.14
30.0%	46.200	5.000%	10.00%	0.200	42.70	0.446	0.147	5.039	0.222	90.63	8.54	1.01	18.13	19.13
20.0%	58.700	5.000%	10.00%	0.200	52.45	0.548	0.201	8.459	0.316	129.26	10.49	1.69	25.85	27.54
10.0%	336.900	5.000%	10.00%	0.200	197.80	2.065	13.193	2097.017	5.803	2373.40	39.56	419.40	474.68	894.08
5.0%	2971.300	2.500%	5.00%	0.100	1654.10	17.273	31038.0	41256884.8	893.0	365236.2	165.41	4125688.48	36523.62	4162212.10
4.0%	4675.400	0.500%	1.00%	0.020	3823.35	39.925	665791.5	2045609462.3	6543.9	2676483.9	76.47	40912189.25	53529.68	40965718.92
3.0%	6954.500	0.500%	1.00%	0.020	5814.95	60.721	3087799.9	14428977556.9	17730.8	7251942.1	116.30	288579551.14	145038.84	288724589.98
2.0%	8936.900	0.500%	1.00%	0.020	7945.70	82.971	9677406.1	61791900948.3	37242.8	15232418.8	158.91	1235838018.97	304648.38	1236142667.34
1.50%	10131.700	0.250%	0.50%	0.010	9534.30	99.560	18853550.4	144451608792.8	57439.9	23493069.5	95.34	1444516087.93	234930.70	1444751018.62
1.00%	11466.200	0.250%	0.50%	0.010	10798.95	112.766	29738454.7	258071681931.8	77232.9	31588487.5	107.99	2580716819.32	315884.88	2581032704.19
0.90%	11735.400	0.050%	0.10%	0.002	11600.80	121.139	38648865.3	360300705312.5	91569.0	37451992.3	23.20	720601410.63	74903.98	720676314.61
0.80%	11995.800	0.050%	0.10%	0.002	11865.60	123.904	41976034.1	400250176273.1	96616.1	39516244.3	23.73	800500352.55	79032.49	800579385.03
0.70%	12239.500	0.050%	0.10%	0.002	12117.65	126.536	45331837.1	441430308010.0	101566.4	41540947.0	24.24	882860616.02	83081.89	882943697.91
0.60%	12447.100	0.050%	0.10%	0.002	12343.30	128.892	48497845.7	481054361204.7	106120.3	43403484.6	24.69	962108722.41	86806.97	962195529.38
0.50%	12615.300	0.050%	0.10%	0.002	12531.20	130.854	51254325.9	516135357819.1	110000.8	44990652.6	25.06	1032270715.64	89981.31	1032360696.94
0.25%	12899.100	0.125%	0.25%	0.005	12757.20	133.214	54718509.0	560957609191.8	114775.6	46943533.7	63.79	2804788045.96	234717.67	2805022763.63
0.10%	12967.500	0.075%	0.15%	0.003	12933.30	135.053	57533380.8	597956609231.7	118577.8	48498643.1	38.80	1793869827.70	145495.93	1794015323.62
0.05%	12971.200	0.025%	0.05%	0.001	12969.35	135.430	58122342.6	605761607455.1	119365.0	48820619.5	12.97	605761607.46	48820.62	605810428.07
0.01%														
0.005%														
0.001%														
									Storm Totals:		1,046.6 (cfs) 2,075.9 (acre-ft)	15197450078 (tons/storm)	1933976.9 (tons/storm)	15199384055.2 (tons/storm)

50.000% 100.000% 2.00

.

JUF390 100 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	95.76	0.067638585	150.0515543
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	21.300	5.000%	10.000%	0.20	10.65	0.111	0.068	0.29	0.000	0.00	2.1	0.06	0.00	0.06
80.0%	23.800	5.000%	10.000%	0.20	22.55	0.235	0.092	0.84	0.031	0.09	4.5	0.17	0.02	0.19
70.0%	26.700	5.000%	10.00%	0.20	25.25	0.264	0.101	1.04	0.043	0.13	5.1	0.21	0.03	0.23
60.0%	30.100	5.000%	10.00%	0.20	28.40	0.297	0.114	1.31	0.059	0.17	5.7	0.26	0.03	0.30
50.0%	34.100	5.000%	10.00%	0.20	32.10	0.335	0.131	1.70	0.081	0.24	6.4	0.34	0.05	0.39
40.0%	39.200	5.000%	10.00%	0.20	36.65	0.383	0.156	2.31	0.112	0.33	7.3	0.46	0.07	0.53
30.0%	46.200	5.000%	10.00%	0.20	42.70	0.446	0.197	3.41	0.161	0.47	8.5	0.68	0.09	0.78
20.0%	58.700	5.000%	10.00%	0.20	52.45	0.548	0.282	6.00	0.259	0.76	10.5	1.20	0.15	1.35
10.0%	336.900	5.000%	10.00%	0.20	197.80	2.065	5.414	433.90	4.964	14.51	39.6	86.78	2.90	89.68
5.0%	2971.300	2.500%	5.00%	0.10	1654.10	17.273	891.051	597129.37	524.068	1531.67	165.4	59712.94	153.17	59866.10
4.0%	4675.400	0.500%	1.00%	0.02	3823.35	39.925	6703.3	10383275.0	3291.2	9619.0	76.5	207665.5	192.4	207857.9
3.0%	6954.500	0.500%	1.00%	0.02	5814.95	60.721	18402.5	43353699.1	8254.4	24124.8	116.3	867074.0	482.5	867556.5
2.0%	8936.900	0.500%	1.00%	0.02	7945.70	82.971	39033.2	125652419.9	16368.6	47840.0	158.9	2513048.4	956.8	2514005.2
1.50%	10131.700	0.250%	0.50%	0.01	9534.30	99.560	60545.7	233870823.4	24411.5	71346.7	95.3	2338708.2	713.5	2339421.7
1.00%	11466.200	0.250%	0.50%	0.01	10798.95	112.766	81726.9	357561667.2	32078.6	93754.8	108.0	3575616.7	937.5	3576554.2
0.90%	11735.400	0.050%	0.10%	0.00	11600.80	121.139	97114.7	456433062.5	37534.3	109700.1	23.2	912866.1	219.4	913085.5
0.80%	11995.800	0.050%	0.10%	0.00	11865.60	123.904	102539.8	492931298.2	39438.7	115266.0	23.7	985862.6	230.5	986093.1
0.70%	12239.500	0.050%	0.10%	0.00	12117.65	126.536	107864.6	529543396.7	41299.1	120703.4	24.2	1059086.8	241.4	1059328.2
0.60%	12447.100	0.050%	0.10%	0.00	12343.30	128.892	112765.9	563914741.2	43004.3	125687.2	24.7	1127829.5	251.4	1128080.9
0.50%	12615.300	0.050%	0.10%	0.00	12531.20	130.854	116944.8	593714823.3	44453.0	129921.0	25.1	1187429.6	259.8	1187689.5
0.25%	12899.100	0.125%	0.25%	0.01	12757.20	133.214	122089.3	631011180.7	46230.0	135114.6	63.8	3155055.9	675.6	3155731.5
0.10%	12967.500	0.075%	0.15%	0.00	12933.30	135.053	126187.9	661197515.5	47640.9	139238.3	38.8	1983592.5	417.7	1984010.3
0.05%	12971.200	0.025%	0.05%	0.00	12969.35	135.430	127036.7	667500518.8	47932.6	140090.8	13.0	667500.5	140.1	667640.6
0.01%														
0.005%														
0.001%														
									Storm Totals:		1,046.6 (cfs) 2,075.9 (acre-ft)	20641139 (tons/storm)	5875 (tons/storm)	20647015 (tons/storm)

.

JUF390 100 yr 24 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	95.76	9.465466153	297.6299697
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00	0.025%	0.050%	0.001										
90.0%	5.60	5.000%	10.000%	0.200	2.80	0.029	0.099	0.223	0.072	29.46	0.56	0.04	5.89	5.94
80.0%	91.80	5.000%	10.000%	0.200	48.70	0.509	0.176	6.907	0.277	113.11	9.74	1.38	22.62	24.00
70.0%	96.80	5.000%	10.00%	0.200	94.30	0.985	0.970	73.483	1.057	432.25	18.86	14.70	86.45	101.15
60.0%	103.20	5.000%	10.00%	0.200	100.00	1.044	1.178	94.687	1.204	492.57	20.00	18.94	98.51	117.45
50.0%	113.60	5.000%	10.00%	0.200	108.40	1.132	1.549	134.919	1.444	590.47	21.68	26.98	118.09	145.08
40.0%	156.80	5.000%	10.00%	0.200	135.20	1.412	3.353	364.283	2.391	978.07	27.04	72.86	195.61	268.47
30.0%	673.90	5.000%	10.00%	0.200	415.35	4.337	197.774	66012.299	33.502	13702.50	83.07	13202.46	2740.50	15942.96
20.0%	1624.20	5.000%	10.00%	0.200	1149.05	11.999	8183.908	7556837.972	375.637	153636.56	229.81	1511367.59	30727.31	1542094.91
10.0%	3136.00	5.000%	10.00%	0.200	2380.10	24.854	117526.985	224788051.786	2120.823	867422.49	476.02	44957610.36	173484.50	45131094.86
5.0%	7057.80	2.500%	5.00%	0.100	5096.90	53.223	1906375.6	7808273257.8	12961.6	5301324.1	509.69	780827325.78	530132.41	781357458.19
4.0%	8948.60	0.500%	1.00%	0.020	8003.20	83.572	9936127.4	63902999538.2	37886.7	15495766.9	160.06	1278059990.76	309915.34	1278369906.10
3.0%	11761.90	0.500%	1.00%	0.020	10355.25	108.133	25506329.8	212250627647.1	69901.7	28589993.1	207.11	4245012552.94	571799.86	4245584352.81
2.0%	14863.80	0.500%	1.00%	0.020	13312.85	139.017	63956267.1	684218119259.2	127017.9	51950677.2	266.26	13684362385.18	1039013.54	13685401398.73
1.50%	16278.70	0.250%	0.50%	0.010	15571.25	162.600	113471548.3	1419877517957.3	184348.3	75398966.8	155.71	14198775179.57	753989.67	14199529169.24
1.00%	17655.20	0.250%	0.50%	0.010	16966.95	177.174	155344402.1	2118067577386.8	226079.8	92467283.4	169.67	21180675773.87	924672.83	21181600446.70
0.90%	17894.00	0.050%	0.10%	0.002	17774.60	185.608	184159012.4	2630469300754.1	252506.1	103275700.3	35.55	5260938601.51	206551.40	5261145152.91
0.80%	18046.10	0.050%	0.10%	0.002	17970.05	187.649	191677533.6	2767967089868.7	259156.6	105995770.6	35.94	5535934179.74	211991.54	5536146171.28
0.70%	18240.20	0.050%	0.10%	0.002	18143.15	189.456	198520387.2	2894397864903.8	265130.4	108439069.4	36.29	5788795729.81	216878.14	5789012607.95
0.60%	18406.70	0.050%	0.10%	0.002	18323.45	191.339	205834844.2	3030864820786.2	271436.7	111018357.6	36.65	6061729641.57	222036.72	6061951678.29
0.50%	18523.00	0.050%	0.10%	0.002	18464.85	192.815	211706698.9	3141382417850.5	276442.6	113065775.3	36.93	6282764835.70	226131.55	6282990967.25
0.25%	18729.50	0.125%	0.25%	0.005	18626.25	194.501	218556796.7	3271373782469.3	282221.3	115429318.6	93.13	16356868912.35	577146.59	16357446058.94
0.10%	18785.00	0.075%	0.15%	0.003	18757.25	195.869	224233945.2	3379955241214.7	286962.7	117368541.2	56.27	10139865723.64	352105.62	10140217829.27
0.05%	18787.00	0.025%	0.05%	0.001	18786.00	196.169	225494080.9	3404159406765.9	288009.4	117796640.2	18.79	3404159406.77	117796.64	3404277203.41
0.01%														
0.005%														
0.001%														

Storm Totals:	2,704.8 (cfs)	114245252555	6467641.4	114251720195.9
	5,365.0 (acre-ft)	(tons/storm)	(tons/storm)	(tons/storm)

50.000% 100.000% 2.00

.

JUF390 100 yr 24 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	95.76	0.067638585	150.0515543
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00													
90.0%	5.60	5.000%	10.000%	0.20	2.80	0.029	0.064	0.07	0.000	0.00	0.6	0.01	0.00	0.01
80.0%	91.80	5.000%	10.000%	0.20	48.70	0.509	0.247	4.86	0.219	0.64	9.7	0.97	0.13	1.10
70.0%	96.80	5.000%	10.00%	0.20	94.30	0.985	0.962	36.76	0.969	2.83	18.9	7.35	0.57	7.92
60.0%	103.20	5.000%	10.00%	0.20	100.00	1.044	1.099	44.51	1.104	3.23	20.0	8.90	0.65	9.55
50.0%	113.60	5.000%	10.00%	0.20	108.40	1.132	1.321	58.00	1.319	3.86	21.7	11.60	0.77	12.37
40.0%	156.80	5.000%	10.00%	0.20	135.20	1.412	2.204	120.70	2.149	6.28	27.0	24.14	1.26	25.40
30.0%	673.90	5.000%	10.00%	0.20	415.35	4.337	32.010	5386.40	25.301	73.95	83.1	1077.28	14.79	1092.07
20.0%	1624.20	5.000%	10.00%	0.20	1149.05	11.999	370.567	172508.08	235.727	688.95	229.8	34501.62	137.79	34639.41
10.0%	3136.00	5.000%	10.00%	0.20	2380.10	24.854	2140.464	2063988.76	1163.976	3401.91	476.0	412797.75	680.38	413478.13
5.0%	7057.80	2.500%	5.00%	0.10	5096.90	53.223	13397.206	27664614.13	6182.491	18069.34	509.7	2766461.41	1806.93	2768268.35
4.0%	8948.60	0.500%	1.00%	0.02	8003.20	83.572	39717.0	128778862.4	16629.5	48602.4	160.1	2575577.2	972.0	2576549.3
3.0%	11761.90	0.500%	1.00%	0.02	10355.25	108.133	73872.0	309916649.5	29258.9	85514.0	207.1	6198333.0	1710.3	6200043.3
2.0%	14863.80	0.500%	1.00%	0.02	13312.85	139.017	135292.1	729705650.0	50760.6	148356.1	266.3	14594113.0	2967.1	14597080.1
1.50%	16278.70	0.250%	0.50%	0.01	15571.25	162.600	197322.5	1244813765.6	71574.6	209188.4	155.7	12448137.7	2091.9	12450229.5
1.00%	17655.20	0.250%	0.50%	0.01	16966.95	177.174	242642.1	1667916355.6	86399.4	252516.4	169.7	16679163.6	2525.2	16681688.7
0.90%	17894.00	0.050%	0.10%	0.00	17774.60	185.608	271399.1	1954395763.8	95675.1	279626.0	35.5	3908791.5	559.3	3909350.8
0.80%	18046.10	0.050%	0.10%	0.00	17970.05	187.649	278642.6	2028621425.9	97997.2	286412.9	35.9	4057242.9	572.8	4057815.7
0.70%	18240.20	0.050%	0.10%	0.00	18143.15	189.456	285151.1	2096003357.6	100079.2	292497.7	36.3	4192006.7	585.0	4192591.7
0.60%	18406.70	0.050%	0.10%	0.00	18323.45	191.339	292023.9	2167853684.2	102273.1	298909.7	36.6	4335707.4	597.8	4336305.2
0.50%	18523.00	0.050%	0.10%	0.00	18464.85	192.815	297481.1	2225406575.5	104011.7	303991.3	36.9	4450813.2	608.0	4451421.1
0.25%	18729.50	0.125%	0.25%	0.01	18626.25	194.501	303782.4	2292409928.2	106015.8	309848.6	93.1	11462049.6	1549.2	11463598.9
0.10%	18785.00	0.075%	0.15%	0.00	18757.25	195.869	308953.7	2347831168.8	107657.8	314647.4	56.3	7043493.5	943.9	7044437.4
0.05%	18787.00	0.025%	0.05%	0.00	18786.00	196.169	310095.5	2360119707.4	108019.9	315705.9	18.8	2360119.7	315.7	2360435.4
0.01%														
0.005%														
0.001%														
									Storm Totals:		2,704.8 (cfs) 5,365.0 (acre-ft)	97520440 (tons/storm)	18642 (tons/storm)	97539081 (tons/storm)

.

Flow Duration JUF400
48 hour, 2 day duration

	2 yr 2 hr	10 yr 2 hr	100 yr 2 hr	100 yr 24 h
1	0	0	0	0
0.9	0.7	4.3	21.3	5.2
0.8	0.7	4.9	23.8	91.9
0.7	0.8	5.5	26.7	96.9
0.6	0.9	6.2	30.1	103.5
0.5	1.1	7.1	34.1	114.1
0.4	1.3	8.3	39.2	160.7
0.3	1.6	10	46.2	707.3
0.2	2.2	13.5	58.8	1704.4
0.1	48.3	122.2	341.8	3291.9
0.05	284.9	983.1	3148.9	7396.7
0.04	466.9	1497.3	4938.7	9397.4
0.03	733.1	2089.6	7552.4	12395.4
0.02	1056.2	2911.9	9881.1	15804.8
0.015	1212.1	3351.6	11187	17427
0.01	1361.9	3813.4	12899.9	19014.7
0.009	1381.5	3897.3	13202.8	19297.6
0.008	1382.6	3941.7	13356.7	19517.9
0.007	1388.4	3988	13636.5	19738.6
0.006	1394.1	4068.5	13887.5	19906.7
0.005	1399.3	4119.7	14101.9	20045.6
0.0025	1432.4	4234.6	14397.2	20308.6
0.001	1452.3	4265.6	14482	20376.9
0.0005	1453.7	4266.9	14484.2	20383.6
0.0001	#N/A	#N/A	#N/A	#N/A
0.00005	#N/A	#N/A	#N/A	#N/A
0.00001	#N/A	#N/A	#N/A	#N/A

JUF400 2 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	97.83	9.645629515	299.1598217
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	0.700	5.000%	10.000%	0.200	0.35	0.004	0.099	0.028	0.072	29.93	0.07	0.01	5.99	5.99
80.0%	0.700	5.000%	10.000%	0.200	0.70	0.007	0.099	0.056	0.072	29.93	0.14	0.01	5.99	6.00
70.0%	0.800	5.000%	10.00%	0.200	0.75	0.008	0.099	0.060	0.072	29.93	0.15	0.01	5.99	6.00
60.0%	0.900	5.000%	10.00%	0.200	0.85	0.009	0.099	0.068	0.072	29.93	0.17	0.01	5.99	6.00
50.0%	1.100	5.000%	10.00%	0.200	1.00	0.010	0.099	0.080	0.072	29.93	0.20	0.02	5.99	6.00
40.0%	1.300	5.000%	10.00%	0.200	1.20	0.012	0.099	0.096	0.072	29.94	0.24	0.02	5.99	6.01
30.0%	1.600	5.000%	10.00%	0.200	1.45	0.015	0.099	0.116	0.072	29.94	0.29	0.02	5.99	6.01
20.0%	2.200	5.000%	10.00%	0.200	1.90	0.019	0.099	0.152	0.072	29.96	0.38	0.03	5.99	6.02
10.0%	48.300	5.000%	10.00%	0.200	25.25	0.258	0.105	2.149	0.113	46.95	5.05	0.43	9.39	9.82
5.0%	284.900	2.500%	5.00%	0.100	166.60	1.703	6.562	883.016	3.694	1539.78	16.66	88.30	153.98	242.28
4.0%	466.900	0.500%	1.00%	0.020	375.90	3.843	127.014	38564.668	25.140	10477.86	7.52	771.29	209.56	980.85
3.0%	733.100	0.500%	1.00%	0.020	600.00	6.133	702.488	340452.989	76.258	31783.29	12.00	6809.06	635.67	7444.73
2.0%	1056.200	0.500%	1.00%	0.020	894.65	9.145	3029.950	2189553.732	197.007	82110.14	17.89	43791.07	1642.20	45433.28
1.50%	1212.100	0.250%	0.50%	0.010	1134.15	11.593	7217.181	6611578.020	346.184	144285.06	11.34	66115.78	1442.85	67558.63
1.00%	1361.900	0.250%	0.50%	0.010	1287.00	13.156	11462.358	11915699.081	467.531	194861.21	12.87	119156.99	1948.61	121105.60
0.90%	1381.500	0.050%	0.10%	0.002	1371.70	14.022	14472.930	16035504.367	544.006	226734.87	2.74	32071.01	453.47	32524.48
0.80%	1382.600	0.050%	0.10%	0.002	1382.05	14.128	14876.529	16607046.162	553.813	230822.40	2.76	33214.09	461.64	33675.74
0.70%	1388.400	0.050%	0.10%	0.002	1385.50	14.163	15012.861	16801072.836	557.105	232194.32	2.77	33602.15	464.39	34066.53
0.60%	1394.100	0.050%	0.10%	0.002	1391.25	14.222	15242.095	17128402.858	562.616	234491.32	2.78	34256.81	468.98	34725.79
0.50%	1399.300	0.050%	0.10%	0.002	1396.70	14.277	15461.707	17443258.025	567.869	236680.59	2.79	34886.52	473.36	35359.88
0.25%	1432.400	0.125%	0.25%	0.005	1415.85	14.473	16251.634	18585802.498	586.550	244466.82	7.08	92929.01	1222.33	94151.35
0.10%	1452.300	0.075%	0.15%	0.003	1442.35	14.744	17392.592	20262918.563	612.981	255483.12	4.33	60788.76	766.45	61555.21
0.05%	1453.700	0.025%	0.05%	0.001	1453.00	14.853	17867.121	20969459.225	623.794	259989.84	1.45	20969.46	259.99	21229.45
0.01%														
0.005%														
0.001%														

											Storm Totals:	111.7 (cfs) / 221.5 (acre-ft)	579450.9 (tons/storm)	10660.8 (tons/storm)	590111.6 (tons/storm)

50.000% 100.000% 2.00

.

JUF400 2 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	97.83	0.068273627	154.2828136
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	0.700	5.000%	10.000%	0.20	0.35	0.004	0.064	0.01	0.000	0.00	0.1	0.00	0.00	0.00
80.0%	0.700	5.000%	10.000%	0.20	0.70	0.007	0.064	0.02	0.000	0.00	0.1	0.00	0.00	0.00
70.0%	0.800	5.000%	10.00%	0.20	0.75	0.008	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
60.0%	0.900	5.000%	10.00%	0.20	0.85	0.009	0.064	0.02	0.000	0.00	0.2	0.00	0.00	0.00
50.0%	1.100	5.000%	10.00%	0.20	1.00	0.010	0.064	0.03	0.000	0.00	0.2	0.01	0.00	0.01
40.0%	1.300	5.000%	10.00%	0.20	1.20	0.012	0.064	0.03	0.000	0.00	0.2	0.01	0.00	0.01
30.0%	1.600	5.000%	10.00%	0.20	1.45	0.015	0.064	0.04	0.000	0.00	0.3	0.01	0.00	0.01
20.0%	2.200	5.000%	10.00%	0.20	1.90	0.019	0.064	0.05	0.000	0.00	0.4	0.01	0.00	0.01
10.0%	48.300	5.000%	10.00%	0.20	25.25	0.258	0.099	1.04	0.041	0.12	5.1	0.21	0.02	0.23
5.0%	284.900	2.500%	5.00%	0.10	166.60	1.703	3.426	237.73	3.247	9.58	16.7	23.77	0.96	24.73
4.0%	466.900	0.500%	1.00%	0.02	375.90	3.843	23.928	3746.74	19.398	57.22	7.5	74.93	1.14	76.08
3.0%	733.100	0.500%	1.00%	0.02	600.00	6.133	73.660	18410.56	54.105	159.62	12.0	368.21	3.19	371.40
2.0%	1056.200	0.500%	1.00%	0.02	894.65	9.145	192.700	71815.21	129.947	383.36	17.9	1436.30	7.67	1443.97
1.50%	1212.100	0.250%	0.50%	0.01	1134.15	11.593	341.143	161171.64	218.619	644.95	11.3	1611.72	6.45	1618.17
1.00%	1361.900	0.250%	0.50%	0.01	1287.00	13.156	462.553	247982.75	288.471	851.02	12.9	2479.83	8.51	2488.34
0.90%	1381.500	0.050%	0.10%	0.00	1371.70	14.022	539.289	308150.07	331.745	978.68	2.7	616.30	1.96	618.26
0.80%	1382.600	0.050%	0.10%	0.00	1382.05	14.128	549.141	316146.80	337.259	994.95	2.8	632.29	1.99	634.28
0.70%	1388.400	0.050%	0.10%	0.00	1385.50	14.163	552.448	318844.65	339.108	1000.40	2.8	637.69	2.00	639.69
0.60%	1394.100	0.050%	0.10%	0.00	1391.25	14.222	557.985	323377.15	342.202	1009.53	2.8	646.75	2.02	648.77
0.50%	1399.300	0.050%	0.10%	0.00	1396.70	14.277	563.264	327715.02	345.149	1018.22	2.8	655.43	2.04	657.47
0.25%	1432.400	0.125%	0.25%	0.01	1415.85	14.473	582.042	343283.57	355.612	1049.09	7.1	1716.42	5.25	1721.66
0.10%	1452.300	0.075%	0.15%	0.00	1442.35	14.744	608.624	365679.82	370.371	1092.63	4.3	1097.04	3.28	1100.32
0.05%	1453.700	0.025%	0.05%	0.00	1453.00	14.853	619.503	374964.55	376.394	1110.40	1.5	374.96	1.11	376.07
0.01%														
0.005%														
0.001%														
									Storm Totals:		111.7 (cfs) / 221.5 (acre-ft)	12371.9 (tons/storm)	47.6 (tons/storm)	12419.5 (tons/storm)

.

JUF400 10 yr 2 hr Poor Pre Fire

Stream:		Location:		Date:
Observer	Gage Station #:		Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	97.83	9.645629515	299.1598217
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	4.300	5.000%	10.000%	0.200	2.15	0.022	0.099	0.172	0.072	29.97	0.43	0.03	5.99	6.03
80.0%	4.900	5.000%	10.000%	0.200	4.60	0.047	0.099	0.368	0.073	30.22	0.92	0.07	6.04	6.12
70.0%	5.500	5.000%	10.00%	0.200	5.20	0.053	0.099	0.415	0.073	30.32	1.04	0.08	6.06	6.15
60.0%	6.200	5.000%	10.00%	0.200	5.85	0.060	0.099	0.467	0.073	30.45	1.17	0.09	6.09	6.18
50.0%	7.100	5.000%	10.00%	0.200	6.65	0.068	0.099	0.531	0.074	30.64	1.33	0.11	6.13	6.23
40.0%	8.300	5.000%	10.00%	0.200	7.70	0.079	0.099	0.616	0.074	30.94	1.54	0.12	6.19	6.31
30.0%	10.000	5.000%	10.00%	0.200	9.15	0.094	0.099	0.732	0.075	31.45	1.83	0.15	6.29	6.44
20.0%	13.500	5.000%	10.00%	0.200	11.75	0.120	0.099	0.942	0.078	32.69	2.35	0.19	6.54	6.73
10.0%	122.200	5.000%	10.00%	0.200	67.85	0.694	0.340	18.657	0.500	208.38	13.57	3.73	41.68	45.41
5.0%	983.100	2.500%	5.00%	0.100	552.65	5.649	520.0	232138.6	62.7	26146.8	55.27	23213.86	2614.68	25828.54
4.0%	1497.300	0.500%	1.00%	0.020	1240.20	12.678	10009.5	10027013.0	428.1	178439.1	24.80	200540.26	3568.78	204109.04
3.0%	2089.600	0.500%	1.00%	0.020	1793.45	18.333	38598.7	55915056.4	1028.9	428814.1	35.87	1118301.13	8576.28	1126877.41
2.0%	2911.900	0.500%	1.00%	0.020	2500.75	25.563	130275.2	263147399.3	2267.6	945093.9	50.02	5262947.99	18901.88	5281849.86
1.50%	3351.600	0.250%	0.50%	0.010	3131.75	32.013	296761.4	750691517.6	3871.2	1613472.9	31.32	7506915.18	16134.73	7523049.91
1.00%	3813.400	0.250%	0.50%	0.010	3582.50	36.621	485388.7	1404568485.0	5329.3	2221190.7	35.83	14045684.85	22211.91	14067896.76
0.90%	3897.300	0.050%	0.10%	0.002	3855.35	39.410	634935.9	1977245935.6	6345.3	2644626.6	7.71	3954491.87	5289.25	3959781.12
0.80%	3941.700	0.050%	0.10%	0.002	3919.50	40.066	674455.6	2135261547.9	6599.1	2750434.0	7.84	4270523.10	5500.87	4276023.96
0.70%	3988.000	0.050%	0.10%	0.002	3964.85	40.529	703451.4	2252827157.3	6782.1	2826687.6	7.93	4505654.31	5653.38	4511307.69
0.60%	4068.500	0.050%	0.10%	0.002	4028.25	41.178	745492.6	2425642360.8	7042.7	2935321.9	8.06	4851284.72	5870.64	4857155.37
0.50%	4119.700	0.050%	0.10%	0.002	4094.10	41.851	791061.2	2615987022.7	7319.5	3050674.6	8.19	5231974.05	6101.35	5238075.39
0.25%	4234.600	0.125%	0.25%	0.005	4177.15	42.700	851378.2	2872563451.8	7677.4	3199843.4	20.89	14362817.26	15999.22	14378816.48
0.10%	4265.600	0.075%	0.15%	0.003	4250.10	43.445	907057.5	3113873822.7	8000.0	3334286.5	12.75	9341621.47	10002.86	9351624.33
0.05%	4266.900	0.025%	0.05%	0.001	4266.25	43.610	919733.0	3169385700.4	8072.4	3364484.2	4.27	3169385.70	3364.48	3172750.18
0.01%														
0.005%														
0.001%														
									Storm Totals:		334.9 (cfs) 664.3 (acre-ft)	77845360 (tons/storm)	129881.3 (tons/storm)	77975241.6 (tons/storm)

50.000% 100.000% 2.00

.

JUF400 10 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	97.83	0.068273627	154.2828136
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	4.300	5.000%	10.000%	0.20	2.15	0.022	0.064	0.06	0.000	0.00	0.4	0.01	0.00	0.01
80.0%	4.900	5.000%	10.000%	0.20	4.60	0.047	0.064	0.12	0.000	0.00	0.9	0.02	0.00	0.02
70.0%	5.500	5.000%	10.00%	0.20	5.20	0.053	0.064	0.14	0.000	0.00	1.0	0.03	0.00	0.03
60.0%	6.200	5.000%	10.00%	0.20	5.85	0.060	0.065	0.16	0.000	0.00	1.2	0.03	0.00	0.03
50.0%	7.100	5.000%	10.00%	0.20	6.65	0.068	0.065	0.18	0.000	0.00	1.3	0.04	0.00	0.04
40.0%	8.300	5.000%	10.00%	0.20	7.70	0.079	0.066	0.21	0.000	0.00	1.5	0.04	0.00	0.04
30.0%	10.000	5.000%	10.00%	0.20	9.15	0.094	0.067	0.25	0.000	0.00	1.8	0.05	0.00	0.05
20.0%	13.500	5.000%	10.00%	0.20	11.75	0.120	0.069	0.34	0.000	0.00	2.4	0.07	0.00	0.07
10.0%	122.200	5.000%	10.00%	0.20	67.85	0.694	0.450	12.72	0.443	1.31	13.6	2.54	0.26	2.80
5.0%	983.100	2.500%	5.00%	0.10	552.65	5.649	60.441	13914.32	45.179	133.28	55.3	1391.43	13.33	1404.76
4.0%	1497.300	0.500%	1.00%	0.02	1240.20	12.678	423.080	218572.30	265.964	784.62	24.8	4371.45	15.69	4387.14
3.0%	2089.600	0.500%	1.00%	0.02	1793.45	18.333	1028.536	768404.71	597.215	1761.85	35.9	15368.09	35.24	15403.33
2.0%	2911.900	0.500%	1.00%	0.02	2500.75	25.563	2290.584	2386150.73	1238.079	3652.46	50.0	47723.01	73.05	47796.06
1.50%	3351.600	0.250%	0.50%	0.01	3131.75	32.013	3938.149	5137603.34	2027.837	5982.33	31.3	51376.03	59.82	51435.86
1.00%	3813.400	0.250%	0.50%	0.01	3582.50	36.621	5444.331	8124787.42	2723.310	8034.05	35.8	81247.87	80.34	81328.21
0.90%	3897.300	0.050%	0.10%	0.00	3855.35	39.410	6497.120	10434364.98	3198.908	9437.11	7.7	20868.73	18.87	20887.60
0.80%	3941.700	0.050%	0.10%	0.00	3919.50	40.066	6760.551	11038094.14	3316.791	9784.88	7.8	22076.19	19.57	22095.76
0.70%	3988.000	0.050%	0.10%	0.00	3964.85	40.529	6950.485	11479505.07	3401.528	10034.86	7.9	22959.01	20.07	22979.08
0.60%	4068.500	0.050%	0.10%	0.00	4028.25	41.178	7221.188	12117315.11	3521.944	10390.10	8.1	24234.63	20.78	24255.41
0.50%	4119.700	0.050%	0.10%	0.00	4094.10	41.851	7508.778	12805867.86	3649.429	10766.19	8.2	25611.74	21.53	25633.27
0.25%	4234.600	0.125%	0.25%	0.01	4177.15	42.700	7880.887	13713127.07	3813.736	11250.92	20.9	68565.64	56.25	68621.89
0.10%	4265.600	0.075%	0.15%	0.00	4250.10	43.445	8216.459	14546721.81	3961.314	11686.29	12.8	43640.17	35.06	43675.22
0.05%	4266.900	0.025%	0.05%	0.00	4266.25	43.610	8291.857	14735993.55	3994.398	11783.89	4.3	14735.99	11.78	14747.78
0.01%														
0.005%														
0.001%														
									Storm Totals:		334.9 (cfs) 664.3 (acre-ft)	444172.8 (tons/storm)	481.7 (tons/storm)	444654.5 (tons/storm)

JUF400 100 yr 2 hr Poor Pre Fire

Stream:		Location:		Date:
Observer	Gage Station #:		Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	97.83	9.645629515	299.1598217
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000	0.025%	0.050%	0.001										
90.0%	21.300	5.000%	10.000%	0.200	10.65	0.109	0.099	0.853	0.077	32.11	2.13	0.17	6.42	6.59
80.0%	23.800	5.000%	10.000%	0.200	22.55	0.231	0.103	1.880	0.103	42.94	4.51	0.38	8.59	8.96
70.0%	26.700	5.000%	10.00%	0.200	25.25	0.258	0.105	2.149	0.113	46.95	5.05	0.43	9.39	9.82
60.0%	30.100	5.000%	10.00%	0.200	28.40	0.290	0.109	2.498	0.126	52.44	5.68	0.50	10.49	10.99
50.0%	34.100	5.000%	10.00%	0.200	32.10	0.328	0.115	2.969	0.144	60.04	6.42	0.59	12.01	12.60
40.0%	39.200	5.000%	10.00%	0.200	36.65	0.375	0.124	3.679	0.171	71.20	7.33	0.74	14.24	14.98
30.0%	46.200	5.000%	10.00%	0.200	42.70	0.436	0.143	4.941	0.214	89.28	8.54	0.99	17.86	18.84
20.0%	58.800	5.000%	10.00%	0.200	52.50	0.537	0.193	8.201	0.305	126.92	10.50	1.64	25.38	27.02
10.0%	341.800	5.000%	10.00%	0.200	200.30	2.048	12.780	2067.734	5.685	2369.43	40.06	413.55	473.89	887.43
5.0%	3148.900	2.500%	5.00%	0.100	1745.35	17.841	34943.9	49263046.7	964.5	401979.6	174.54	4926304.67	40197.96	4966502.64
4.0%	4938.700	0.500%	1.00%	0.020	4043.80	41.336	756076.5	2469576304.4	7107.5	2962329.4	80.88	49391526.09	59246.59	49450772.68
3.0%	7552.400	0.500%	1.00%	0.020	6245.55	63.843	3709500.8	18713420817.9	19975.0	8325316.8	124.91	374268416.36	166506.34	374434922.69
2.0%	9881.100	0.500%	1.00%	0.020	8716.75	89.104	12562606.3	88450719482.5	44123.0	18389935.4	174.34	1769014389.65	367798.71	1769382188.36
1.50%	11187.000	0.250%	0.50%	0.010	10534.05	107.681	25118793.8	213727883717.6	69209.8	28845810.2	105.34	2137278837.18	288458.10	2137567295.28
1.00%	12899.900	0.250%	0.50%	0.010	12043.45	123.110	41000570.1	398848385914.7	95151.4	39657923.0	120.43	3988483859.15	396579.23	3988880438.38
0.90%	13202.800	0.050%	0.10%	0.002	13051.35	133.413	55018094.2	580000020030.6	115183.5	48007041.0	26.10	1160000040.06	96014.08	1160096054.14
0.80%	13356.700	0.050%	0.10%	0.002	13279.75	135.748	58623823.7	628826841057.7	120033.1	50028312.4	26.56	1257653682.12	100056.62	1257753738.74
0.70%	13636.500	0.050%	0.10%	0.002	13496.60	137.965	62203281.4	678117109549.9	124745.1	51992201.0	26.99	1356234219.10	103984.40	1356338203.50
0.60%	13887.500	0.050%	0.10%	0.002	13762.00	140.678	66797176.4	742517490483.6	130655.5	54455605.6	27.52	1485034980.97	108911.21	1485143892.18
0.50%	14101.900	0.050%	0.10%	0.002	13994.70	143.056	71023666.4	802848703646.5	135968.6	56670030.6	27.99	1605697407.29	113340.06	1605810747.35
0.25%	14397.200	0.125%	0.25%	0.005	14249.55	145.662	75871855.8	873270694367.9	141928.6	59154103.5	71.25	4366353471.84	295770.52	4366649242.36
0.10%	14482.000	0.075%	0.15%	0.003	14439.60	147.604	79640621.6	928874057264.0	146469.9	61046857.2	43.32	2786622171.79	183140.57	2786805312.36
0.05%	14484.200	0.025%	0.05%	0.001	14483.10	148.049	80522015.4	941983282510.2	147521.0	61484947.1	14.48	941983282.51	61484.95	942044767.46
0.01%														
0.005%														
0.001%														
										Storm Totals:	1,134.9 (cfs) 2,251.0 (acre-ft)	23282943008 (tons/storm)	2382067.6 (tons/storm)	23285325075.4 (tons/storm)

50.000% 100.000% 2.00

.

JUF400 100 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer	Gage Station #:		Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	97.83	0.068273627	154.2828136
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.000													
90.0%	21.300	5.000%	10.000%	0.20	10.65	0.109	0.068	0.30	0.000	0.00	2.1	0.06	0.00	0.06
80.0%	23.800	5.000%	10.000%	0.20	22.55	0.231	0.091	0.85	0.029	0.09	4.5	0.17	0.02	0.19
70.0%	26.700	5.000%	10.00%	0.20	25.25	0.258	0.099	1.04	0.041	0.12	5.1	0.21	0.02	0.23
60.0%	30.100	5.000%	10.00%	0.20	28.40	0.290	0.111	1.31	0.056	0.17	5.7	0.26	0.03	0.30
50.0%	34.100	5.000%	10.00%	0.20	32.10	0.328	0.127	1.70	0.077	0.23	6.4	0.34	0.05	0.39
40.0%	39.200	5.000%	10.00%	0.20	36.65	0.375	0.151	2.31	0.106	0.31	7.3	0.46	0.06	0.52
30.0%	46.200	5.000%	10.00%	0.20	42.70	0.436	0.190	3.38	0.153	0.45	8.5	0.68	0.09	0.77
20.0%	58.800	5.000%	10.00%	0.20	52.50	0.537	0.272	5.95	0.248	0.73	10.5	1.19	0.15	1.34
10.0%	341.800	5.000%	10.00%	0.20	200.30	2.048	5.303	442.47	4.869	14.37	40.1	88.49	2.87	91.37
5.0%	3148.900	2.500%	5.00%	0.10	1745.35	17.841	963.351	700403.89	562.651	1659.88	174.5	70040.39	165.99	70206.38
4.0%	4938.700	0.500%	1.00%	0.02	4043.80	41.336	7288.5	12277491.6	3551.8	10478.3	80.9	245549.8	209.6	245759.4
3.0%	7552.400	0.500%	1.00%	0.02	6245.55	63.843	20764.2	54021582.1	9213.6	27181.1	124.9	1080431.6	543.6	1080975.3
2.0%	9881.100	0.500%	1.00%	0.02	8716.75	89.104	46347.5	168291620.0	19139.4	56463.1	174.3	3365832.4	1129.3	3366961.7
1.50%	11187.000	0.250%	0.50%	0.01	10534.05	107.681	73131.3	320907589.6	28991.7	85528.4	105.3	3209075.9	855.3	3209931.2
1.00%	12899.900	0.250%	0.50%	0.01	12043.45	123.110	100965.0	506527510.1	38886.8	114720.2	120.4	5065275.1	1147.2	5066422.3
0.90%	13202.800	0.050%	0.10%	0.00	13051.35	133.413	122528.8	666154634.9	46381.5	136830.2	26.1	1332309.3	273.7	1332582.9
0.80%	13356.700	0.050%	0.10%	0.00	13279.75	135.748	127757.1	706734449.6	48180.0	142136.1	26.6	1413468.9	284.3	1413753.2
0.70%	13636.500	0.050%	0.10%	0.00	13496.60	137.965	132839.6	746849801.8	49922.1	147275.4	27.0	1493699.6	294.6	1493994.2
0.60%	13887.500	0.050%	0.10%	0.00	13762.00	140.678	139218.4	798104109.8	52100.1	153700.7	27.5	1596208.2	307.4	1596515.6
0.50%	14101.900	0.050%	0.10%	0.00	13994.70	143.056	144955.8	845046040.5	54051.5	159457.4	28.0	1690092.1	318.9	1690411.0
0.25%	14397.200	0.125%	0.25%	0.01	14249.55	145.662	151395.2	898658475.1	56233.4	165894.4	71.2	4493292.4	829.5	4494121.8
0.10%	14482.000	0.075%	0.15%	0.00	14439.60	147.604	156304.2	940171804.4	57891.2	170785.0	43.3	2820515.4	512.4	2821027.8
0.05%	14484.200	0.025%	0.05%	0.00	14483.10	148.049	157440.7	949860814.7	58274.3	171915.3	14.5	949860.8	171.9	950032.7
0.01%														
0.005%														
0.001%														
									Storm Totals:		1,134.9 (cfs) / 2,251.0 (acre-ft)	28825744 (tons/storm)	7047 (tons/storm)	28832791 (tons/storm)

.

JUF400 100 yr 24 hr Poor Pre Fire

Stream:		Location:		Date:
Observer	Gage Station #:		Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	97.83	9.645629515	299.1598217
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00	0.025%	0.050%	0.001										
90.0%	5.20	5.000%	10.000%	0.200	2.60	0.027	0.099	0.208	0.072	30.00	0.52	0.04	6.00	6.04
80.0%	91.90	5.000%	10.000%	0.200	48.55	0.496	0.170	6.662	0.265	110.46	9.71	1.33	22.09	23.42
70.0%	96.90	5.000%	10.00%	0.200	94.40	0.965	0.908	69.198	1.011	421.19	18.88	13.84	84.24	98.08
60.0%	103.50	5.000%	10.00%	0.200	100.20	1.024	1.105	89.406	1.154	480.77	20.04	17.88	96.15	114.04
50.0%	114.10	5.000%	10.00%	0.200	108.80	1.112	1.458	128.157	1.387	578.26	21.76	25.63	115.65	141.28
40.0%	160.70	5.000%	10.00%	0.200	137.40	1.405	3.292	365.356	2.363	984.90	27.48	73.07	196.98	270.05
30.0%	707.30	5.000%	10.00%	0.200	434.00	4.436	214.831	75310.227	35.349	14733.03	86.80	15062.05	2946.61	18008.65
20.0%	1704.40	5.000%	10.00%	0.200	1205.85	12.326	9031.902	8797099.676	400.481	166915.57	241.17	1759419.94	33383.11	1792803.05
10.0%	3291.90	5.000%	10.00%	0.200	2498.15	25.537	129780.298	261875160.886	2261.967	942759.85	499.63	52375032.18	188551.97	52563584.15
5.0%	7396.70	2.500%	5.00%	0.100	5344.30	54.630	2097369.1	9053838073.7	13791.1	5747949.0	534.43	905383807.37	574794.90	905958602.27
4.0%	9397.40	0.500%	1.00%	0.020	8397.05	85.836	10957261.9	74318307658.4	40372.8	16826873.2	167.94	1486366153.17	336537.46	1486702690.63
3.0%	12395.40	0.500%	1.00%	0.020	10896.40	111.385	28427648.4	250202130336.3	75003.8	31260665.3	217.93	5004042606.73	625213.31	5004667820.03
2.0%	15804.80	0.500%	1.00%	0.020	14100.10	144.134	73000578.8	831410540926.1	138415.6	57689900.1	282.00	16628210818.52	1153798.00	16629364616.52
1.50%	17427.00	0.250%	0.50%	0.010	16615.90	169.851	133112591.9	1786528873223.8	204495.2	85231093.5	166.16	17865288732.24	852310.94	17866141043.17
1.00%	19014.70	0.250%	0.50%	0.010	18220.85	186.257	186527525.1	2745229079348.8	254611.3	106118827.1	182.21	27452290793.49	1061188.27	27453351981.76
0.90%	19297.60	0.050%	0.10%	0.002	19156.15	195.818	224020679.6	3466277828023.2	286785.3	119528589.8	38.31	6932555656.05	239057.18	6932794713.23
0.80%	19517.90	0.050%	0.10%	0.002	19407.75	198.390	234976005.9	3683542936480.5	295820.6	123294382.5	38.82	7367085872.96	246588.77	7367332461.73
0.70%	19738.60	0.050%	0.10%	0.002	19628.25	200.644	244892793.0	3882617565950.2	303872.9	126650457.0	39.26	7765235131.90	253300.91	7765488432.81
0.60%	19906.70	0.050%	0.10%	0.002	19822.65	202.631	253884979.5	4065048675398.7	311076.1	129652677.1	39.65	8130097350.80	259305.35	8130356656.15
0.50%	20045.60	0.050%	0.10%	0.002	19976.15	204.200	261152953.2	4213798475101.9	316833.0	132052093.7	39.95	8427596950.20	264104.19	8427861054.39
0.25%	20308.60	0.125%	0.25%	0.005	20177.10	206.254	270894665.7	4414954472647.2	324462.1	135231813.7	100.89	22074772363.24	676159.07	22075448522.30
0.10%	20376.90	0.075%	0.15%	0.003	20342.75	207.947	279121476.0	4586379047870.8	330830.3	137885979.1	61.03	13759137143.61	413657.94	13759550801.55
0.05%	20383.60	0.025%	0.05%	0.001	20380.25	208.331	281008778.1	4625901951972.0	332281.9	138490983.3	20.38	4625901951.97	138490.98	4626040442.96
0.01%														
0.005%														
0.001%														
		50.000%	100.000%	2.00										
									Storm Totals:		2,854.9 (cfs) 5,662.8 (acre-ft)	148478114978 (tons/storm)	7319910.1 (tons/storm)	148485434888.3 (tons/storm)

.

JUF400 100 yr 24 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer	Gage Station #:		Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	97.83	0.068273627	154.2828136
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	0.00													
90.0%	5.20	5.000%	10.000%	0.20	2.60	0.027	0.064	0.07	0.000	0.00	0.5	0.01	0.00	0.01
80.0%	91.90	5.000%	10.000%	0.20	48.55	0.496	0.236	4.78	0.207	0.61	9.7	0.96	0.12	1.08
70.0%	96.90	5.000%	10.00%	0.20	94.40	0.965	0.919	36.16	0.926	2.73	18.9	7.23	0.55	7.78
60.0%	103.50	5.000%	10.00%	0.20	100.20	1.024	1.052	43.89	1.057	3.12	20.0	8.78	0.62	9.40
50.0%	114.10	5.000%	10.00%	0.20	108.80	1.112	1.268	57.49	1.269	3.74	21.8	11.50	0.75	12.25
40.0%	160.70	5.000%	10.00%	0.20	137.40	1.405	2.177	124.61	2.124	6.27	27.5	24.92	1.25	26.18
30.0%	707.30	5.000%	10.00%	0.20	434.00	4.436	33.798	6110.34	26.588	78.44	86.8	1222.07	15.69	1237.75
20.0%	1704.40	5.000%	10.00%	0.20	1205.85	12.326	395.409	198619.24	250.076	737.75	241.2	39723.85	147.55	39871.40
10.0%	3291.90	5.000%	10.00%	0.20	2498.15	25.537	2284.853	2377705.49	1235.258	3644.14	499.6	475541.10	728.83	476269.93
5.0%	7396.70	2.500%	5.00%	0.10	5344.30	54.630	14266.221	31760044.39	6546.589	19313.11	534.4	3176004.44	1931.31	3177935.75
4.0%	9397.40	0.500%	1.00%	0.02	8397.05	85.836	42358.6	148166463.9	17633.6	52021.0	167.9	2963329.3	1040.4	2964369.7
3.0%	12395.40	0.500%	1.00%	0.02	10896.40	111.385	79337.5	360116362.9	31223.5	92112.6	217.9	7202327.3	1842.3	7204169.5
2.0%	15804.80	0.500%	1.00%	0.02	14100.10	144.134	147599.1	866936533.2	54948.2	162102.8	282.0	17338730.7	3242.1	17341972.7
1.50%	17427.00	0.250%	0.50%	0.01	16615.90	169.851	219186.5	1517116773.2	78760.9	232352.8	166.2	15171167.7	2323.5	15173491.3
1.00%	19014.70	0.250%	0.50%	0.01	18220.85	186.257	273691.7	2077359018.6	96410.6	284421.3	182.2	20773590.2	2844.2	20776434.4
0.90%	19297.60	0.050%	0.10%	0.00	19156.15	195.818	308760.3	2463831264.9	107596.4	317420.5	38.3	4927662.5	634.8	4928297.4
0.80%	19517.90	0.050%	0.10%	0.00	19407.75	198.390	318618.0	2575886913.9	110719.7	326634.5	38.8	5151773.8	653.3	5152427.1
0.70%	19738.60	0.050%	0.10%	0.00	19628.25	200.644	327406.5	2677011435.1	113496.9	334827.6	39.3	5354022.9	669.7	5354692.5
0.60%	19906.70	0.050%	0.10%	0.00	19822.65	202.631	335271.0	2768465108.7	115976.5	342142.6	39.6	5536930.2	684.3	5537614.5
0.50%	20045.60	0.050%	0.10%	0.00	19976.15	204.200	341558.2	2842220661.9	117955.0	347979.4	40.0	5684441.3	696.0	5685137.3
0.25%	20308.60	0.125%	0.25%	0.01	20177.10	206.254	349892.3	2940860266.8	120572.6	355701.7	100.9	14704301.3	1778.5	14706079.8
0.10%	20376.90	0.075%	0.15%	0.00	20342.75	207.947	356850.8	3023971430.0	122754.0	362136.9	61.0	9071914.3	1086.4	9073000.7
0.05%	20383.60	0.025%	0.05%	0.00	20380.25	208.331	358437.2	3043014036.7	123250.7	363602.4	20.4	3043014.0	363.6	3043377.6
0.01%														
0.005%														
0.001%														
									Storm Totals:		2,854.9 (cfs) / 5,662.8 (acre-ft)	120615750 (tons/storm)	20686 (tons/storm)	120636436 (tons/storm)

.

Flow Duration JUF460
48 hour, 2 day duration

	2 yr 2 hr	10 yr 2 hr	100 yr 2 hr	100 yr 24 h
1	11.8	11.8	11.8	11.8
0.9	12.5	16.2	33.2	18.7
0.8	12.5	16.7	35.7	104.6
0.7	12.6	17.3	38.6	109.9
0.6	12.7	18.1	42	117
0.5	12.9	19	46.1	129.8
0.4	13.1	20.2	51.2	216
0.3	13.4	21.9	58.3	981
0.2	14.2	25.7	71.6	2162.8
0.1	95.7	201	496	4247.5
0.05	595.7	1634.5	4783.3	9798
0.04	890.8	2454.9	7555.3	12745
0.03	1289.8	3418.9	11278.6	16604.8
0.02	1718.3	4545.2	14523.8	20997.2
0.015	1895.5	5087.5	16243.3	22862.7
0.01	2023	5574.5	18161.3	24748.7
0.009	2032.8	5632	18495.2	25073.3
0.008	2033.6	5680.6	18705.6	25319
0.007	2041.4	5736.6	19010.5	25569
0.006	2044.4	5798.8	19282.2	25794.2
0.005	2051.3	5835.1	19517.1	25989.5
0.0025	2066.3	5936.2	19965.6	26277.3
0.001	2080.8	5975	20071.8	26364.2
0.0005	2081.3	5975.6	20082.1	26366.1
0.0001	#N/A	#N/A	#N/A	#N/A
0.00005	#N/A	#N/A	#N/A	#N/A
0.00001	#N/A	#N/A	#N/A	#N/A

JUF460 2 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	106.74	10.4195906	305.5047174
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.800	0.025%	0.050%	0.001										
90.0%	12.500	5.000%	10.000%	0.200	12.15	0.114	0.099	0.994	0.078	34.95	2.43	0.20	6.99	7.19
80.0%	12.500	5.000%	10.000%	0.200	12.50	0.117	0.099	1.023	0.078	35.14	2.50	0.20	7.03	7.23
70.0%	12.600	5.000%	10.00%	0.200	12.55	0.118	0.099	1.028	0.078	35.16	2.51	0.21	7.03	7.24
60.0%	12.700	5.000%	10.00%	0.200	12.65	0.119	0.099	1.036	0.078	35.22	2.53	0.21	7.04	7.25
50.0%	12.900	5.000%	10.00%	0.200	12.80	0.120	0.099	1.048	0.078	35.30	2.56	0.21	7.06	7.27
40.0%	13.100	5.000%	10.00%	0.200	13.00	0.122	0.099	1.065	0.079	35.41	2.60	0.21	7.08	7.30
30.0%	13.400	5.000%	10.00%	0.200	13.25	0.124	0.099	1.086	0.079	35.55	2.65	0.22	7.11	7.33
20.0%	14.200	5.000%	10.00%	0.200	13.80	0.129	0.099	1.132	0.080	35.88	2.76	0.23	7.18	7.40
10.0%	95.700	5.000%	10.00%	0.200	54.95	0.515	0.180	8.161	0.283	127.24	10.99	1.63	25.45	27.08
5.0%	595.700	2.500%	5.00%	0.100	345.70	3.239	67.995	19389.128	16.768	7549.46	34.57	1938.91	754.95	2693.86
4.0%	890.800	0.500%	1.00%	0.020	743.25	6.963	1117.545	685143.817	103.083	46410.99	14.87	13702.88	928.22	14631.10
3.0%	1289.800	0.500%	1.00%	0.020	1090.30	10.214	4540.821	4083777.331	256.211	115353.94	21.81	81675.55	2307.08	83982.63
2.0%	1718.300	0.500%	1.00%	0.020	1504.05	14.091	14734.982	18280731.677	550.384	247799.75	30.08	365614.63	4956.00	370570.63
1.50%	1895.500	0.250%	0.50%	0.010	1806.90	16.928	28831.515	42971772.679	851.220	383245.22	18.07	429717.73	3832.45	433550.18
1.00%	2023.000	0.250%	0.50%	0.010	1959.25	18.355	38770.547	62657558.605	1031.829	464560.79	19.59	626575.59	4645.61	631221.19
0.90%	2032.800	0.050%	0.10%	0.002	2027.90	18.998	43977.272	73562504.865	1119.851	504191.13	4.06	147125.01	1008.38	148133.39
0.80%	2033.600	0.050%	0.10%	0.002	2033.20	19.048	44399.287	74462529.086	1126.821	507329.06	4.07	148925.06	1014.66	149939.72
0.70%	2041.400	0.050%	0.10%	0.002	2037.50	19.088	44743.833	75199072.509	1132.494	509883.22	4.08	150398.15	1019.77	151417.91
0.60%	2044.400	0.050%	0.10%	0.002	2042.90	19.139	45179.265	76132125.266	1139.641	513101.30	4.09	152264.25	1026.20	153290.45
0.50%	2051.300	0.050%	0.10%	0.002	2047.85	19.185	45581.109	76995388.149	1146.216	516061.52	4.10	153990.78	1032.12	155022.90
0.25%	2066.300	0.125%	0.25%	0.005	2058.80	19.288	46479.257	78932347.323	1160.839	522644.97	10.29	394661.74	2613.22	397274.96
0.10%	2080.800	0.075%	0.15%	0.003	2073.55	19.426	47709.332	81601762.044	1180.705	531589.60	6.22	244805.29	1594.77	246400.05
0.05%	2081.300	0.025%	0.05%	0.001	2081.05	19.496	48343.785	82986003.449	1190.882	536171.48	2.08	82986.00	536.17	83522.17
0.01%														
0.005%														
0.001%														

50.000%	100.000%	2.00

Storm Totals:	209.5 (cfs)	2994384.9 (tons/storm)	27351.6 (tons/storm)	3021736.4 (tons/storm)
	415.5 (acre-ft)			

.

JUF460 2 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	106.74	0.070935948	172.8841619
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.800													
90.0%	12.500	5.000%	10.000%	0.20	12.15	0.114	0.069	0.39	0.000	0.00	2.4	0.08	0.00	0.08
80.0%	12.500	5.000%	10.000%	0.20	12.50	0.117	0.069	0.40	0.000	0.00	2.5	0.08	0.00	0.08
70.0%	12.600	5.000%	10.00%	0.20	12.55	0.118	0.069	0.40	0.000	0.00	2.5	0.08	0.00	0.08
60.0%	12.700	5.000%	10.00%	0.20	12.65	0.119	0.069	0.41	0.000	0.00	2.5	0.08	0.00	0.08
50.0%	12.900	5.000%	10.00%	0.20	12.80	0.120	0.069	0.41	0.000	0.00	2.6	0.08	0.00	0.08
40.0%	13.100	5.000%	10.00%	0.20	13.00	0.122	0.069	0.42	0.000	0.00	2.6	0.08	0.00	0.08
30.0%	13.400	5.000%	10.00%	0.20	13.25	0.124	0.070	0.43	0.000	0.00	2.7	0.09	0.00	0.09
20.0%	14.200	5.000%	10.00%	0.20	13.80	0.129	0.070	0.45	0.000	0.00	2.8	0.09	0.00	0.09
10.0%	95.700	5.000%	10.00%	0.20	54.95	0.515	0.252	6.46	0.225	0.69	11.0	1.29	0.14	1.43
5.0%	595.700	2.500%	5.00%	0.10	345.70	3.239	15.873	2561.44	13.330	40.86	34.6	256.14	4.09	260.23
4.0%	890.800	0.500%	1.00%	0.02	743.25	6.963	99.970	34683.50	71.469	219.06	14.9	693.67	4.38	698.05
3.0%	1289.800	0.500%	1.00%	0.02	1090.30	10.214	251.480	127987.81	165.606	507.61	21.8	2559.76	10.15	2569.91
2.0%	1718.300	0.500%	1.00%	0.02	1504.05	14.091	545.696	383117.74	335.332	1027.84	30.1	7662.35	20.56	7682.91
1.50%	1895.500	0.250%	0.50%	0.01	1806.90	16.928	848.834	715938.42	501.410	1536.89	18.1	7159.38	15.37	7174.75
1.00%	2023.000	0.250%	0.50%	0.01	1959.25	18.355	1031.548	943405.13	598.808	1835.43	19.6	9434.05	18.35	9452.41
0.90%	2032.800	0.050%	0.10%	0.00	2027.90	18.998	1120.754	1060903.65	645.783	1979.42	4.1	2121.81	3.96	2125.77
0.80%	2033.600	0.050%	0.10%	0.00	2033.20	19.048	1127.822	1070383.86	649.490	1990.78	4.1	2140.77	3.98	2144.75
0.70%	2041.400	0.050%	0.10%	0.00	2037.50	19.088	1133.575	1078119.20	652.506	2000.02	4.1	2156.24	4.00	2160.24
0.60%	2044.400	0.050%	0.10%	0.00	2042.90	19.139	1140.824	1087889.20	656.304	2011.67	4.1	2175.78	4.02	2179.80
0.50%	2051.300	0.050%	0.10%	0.00	2047.85	19.185	1147.493	1096899.84	659.796	2022.37	4.1	2193.80	4.04	2197.84
0.25%	2066.300	0.125%	0.25%	0.01	2058.80	19.288	1162.325	1117019.65	667.558	2046.16	10.3	5585.10	10.23	5595.33
0.10%	2080.800	0.075%	0.15%	0.00	2073.55	19.426	1182.482	1144532.05	678.091	2078.44	6.2	3433.60	6.24	3439.83
0.05%	2081.300	0.025%	0.05%	0.00	2081.05	19.496	1192.809	1158703.43	683.481	2094.97	2.1	1158.70	2.09	1160.80
0.01%														
0.005%														
0.001%														
									Storm Totals:		209.5 (cfs) 415.5 (acre-ft)	48733.1 (tons/storm)	111.6 (tons/storm)	48844.7 (tons/storm)

.

JUF460 10 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	106.74	10.4195906	305.5047174
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.800	0.025%	0.050%	0.001										
90.0%	16.200	5.000%	10.000%	0.200	14.00	0.131	0.099	1.148	0.080	36.00	2.80	0.23	7.20	7.43
80.0%	16.700	5.000%	10.000%	0.200	16.45	0.154	0.100	1.355	0.084	37.72	3.29	0.27	7.54	7.82
70.0%	17.300	5.000%	10.00%	0.200	17.00	0.159	0.100	1.402	0.085	38.16	3.40	0.28	7.63	7.91
60.0%	18.100	5.000%	10.00%	0.200	17.70	0.166	0.100	1.463	0.086	38.75	3.54	0.29	7.75	8.04
50.0%	19.000	5.000%	10.00%	0.200	18.55	0.174	0.100	1.537	0.088	39.51	3.71	0.31	7.90	8.21
40.0%	20.200	5.000%	10.00%	0.200	19.60	0.184	0.101	1.629	0.090	40.51	3.92	0.33	8.10	8.43
30.0%	21.900	5.000%	10.00%	0.200	21.05	0.197	0.101	1.759	0.093	42.02	4.21	0.35	8.40	8.76
20.0%	25.700	5.000%	10.00%	0.200	23.80	0.223	0.103	2.016	0.101	45.31	4.76	0.40	9.06	9.47
10.0%	201.000	5.000%	10.00%	0.200	113.35	1.062	1.247	116.566	1.250	563.00	22.67	23.31	112.60	135.91
5.0%	1634.500	2.500%	5.00%	0.100	917.75	8.598	2417.5	1830106.8	170.1	76599.9	91.78	183010.68	7659.99	190670.67
4.0%	2454.900	0.500%	1.00%	0.020	2044.70	19.156	45325.1	76445154.8	1142.0	514176.6	40.89	1528903.10	10283.53	1539186.63
3.0%	3418.900	0.500%	1.00%	0.020	2936.90	27.514	170510.3	413068016.8	2700.8	1216001.1	58.74	8261360.34	24320.02	8285680.36
2.0%	4545.200	0.500%	1.00%	0.020	3982.05	37.306	519439.0	1706172603.1	5569.3	2507469.1	79.64	34123452.06	50149.38	34173601.45
1.50%	5087.500	0.250%	0.50%	0.010	4816.35	45.122	1041860.1	4139130417.1	8753.5	3941097.8	48.16	41391304.17	39410.98	41430715.15
1.00%	5574.500	0.250%	0.50%	0.010	5331.00	49.944	1510556.7	6642436402.2	11142.8	5016822.4	53.31	66424364.02	50168.22	66474532.25
0.90%	5632.000	0.050%	0.10%	0.002	5603.25	52.494	1812533.4	8377370197.4	12543.4	5647423.8	11.21	16754740.39	11294.85	16766035.24
0.80%	5680.600	0.050%	0.10%	0.002	5656.30	52.991	1876118.4	8753351432.1	12827.6	5775357.4	11.31	17506702.86	11550.71	17518253.58
0.70%	5736.600	0.050%	0.10%	0.002	5708.60	53.481	1940376.1	9136865136.0	13111.3	5903110.4	11.42	18273730.27	11806.22	18285536.49
0.60%	5798.800	0.050%	0.10%	0.002	5767.70	54.035	2014896.8	9585994000.4	13436.3	6049426.1	11.54	19171988.00	12098.85	19184086.85
0.50%	5835.100	0.050%	0.10%	0.002	5816.95	54.496	2078568.2	9973355311.8	13710.6	6172944.1	11.63	19946710.62	12345.89	19959056.51
0.25%	5936.200	0.125%	0.25%	0.005	5885.65	55.140	2169810.9	10534113791.8	14098.7	6347663.0	29.43	52670568.96	31738.32	52702307.27
0.10%	5975.000	0.075%	0.15%	0.003	5955.60	55.795	2265669.4	11130219958.9	14500.3	6528470.2	17.87	33390659.88	19585.41	33410245.29
0.05%	5975.600	0.025%	0.05%	0.001	5975.30	55.980	2293212.3	11302789876.1	14614.6	6579922.5	5.98	11302789.88	6579.92	11309369.80
0.01%														
0.005%														
0.001%														

Storm Totals:	535.2 (cfs)	340930311	299168.5	341229479.5
	1,061.6 (acre-ft)	(tons/storm)	(tons/storm)	(tons/storm)

50.000% 100.000% 2.00

.

JUF460 10 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	106.74	0.070935948	172.8841619
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.800													
90.0%	16.200	5.000%	10.000%	0.20	14.00	0.131	0.071	0.46	0.000	0.00	2.8	0.09	0.00	0.09
80.0%	16.700	5.000%	10.000%	0.20	16.45	0.154	0.074	0.57	0.005	0.02	3.3	0.11	0.00	0.12
70.0%	17.300	5.000%	10.00%	0.20	17.00	0.159	0.075	0.59	0.007	0.02	3.4	0.12	0.00	0.12
60.0%	18.100	5.000%	10.00%	0.20	17.70	0.166	0.076	0.63	0.008	0.03	3.5	0.13	0.01	0.13
50.0%	19.000	5.000%	10.00%	0.20	18.55	0.174	0.077	0.67	0.011	0.03	3.7	0.13	0.01	0.14
40.0%	20.200	5.000%	10.00%	0.20	19.60	0.184	0.079	0.73	0.013	0.04	3.9	0.15	0.01	0.15
30.0%	21.900	5.000%	10.00%	0.20	21.05	0.197	0.082	0.81	0.018	0.05	4.2	0.16	0.01	0.17
20.0%	25.700	5.000%	10.00%	0.20	23.80	0.223	0.089	0.99	0.026	0.08	4.8	0.20	0.02	0.21
10.0%	201.000	5.000%	10.00%	0.20	113.35	1.062	1.141	60.39	1.145	3.51	22.7	12.08	0.70	12.78
5.0%	1634.500	2.500%	5.00%	0.10	917.75	8.598	166.093	71153.39	113.498	347.89	91.8	7115.34	34.79	7150.13
4.0%	2454.900	0.500%	1.00%	0.02	2044.70	19.156	1143.246	1091159.72	657.573	2015.55	40.9	21823.19	40.31	21863.51
3.0%	3418.900	0.500%	1.00%	0.02	2936.90	27.514	2734.547	3748810.48	1454.797	4459.16	58.7	74976.21	89.18	75065.39
2.0%	4545.200	0.500%	1.00%	0.02	3982.05	37.306	5692.802	10581610.07	2836.247	8693.50	79.6	211632.20	173.87	211806.07
1.50%	5087.500	0.250%	0.50%	0.01	4816.35	45.122	9001.060	20236280.46	4304.304	13193.31	48.2	202362.80	131.93	202494.74
1.00%	5574.500	0.250%	0.50%	0.01	5331.00	49.944	11494.374	28603091.93	5377.613	16483.15	53.3	286030.92	164.83	286195.75
0.90%	5632.000	0.050%	0.10%	0.00	5603.25	52.494	12959.376	33895578.87	5998.256	18385.51	11.2	67791.16	36.77	67827.93
0.80%	5680.600	0.050%	0.10%	0.00	5656.30	52.991	13256.860	35001936.68	6123.494	18769.38	11.3	70003.87	37.54	70041.41
0.70%	5736.600	0.050%	0.10%	0.00	5708.60	53.481	13554.011	36117394.17	6248.341	19152.05	11.4	72234.79	38.30	72273.09
0.60%	5798.800	0.050%	0.10%	0.00	5767.70	54.035	13894.442	37407850.11	6391.072	19589.54	11.5	74815.70	39.18	74854.88
0.50%	5835.100	0.050%	0.10%	0.00	5816.95	54.496	14181.915	38507840.76	6511.355	19958.23	11.6	77015.68	39.92	77055.60
0.25%	5936.200	0.125%	0.25%	0.01	5885.65	55.140	14588.680	40080155.79	6681.180	20478.77	29.4	200400.78	102.39	200503.17
0.10%	5975.000	0.075%	0.15%	0.00	5955.60	55.795	15009.775	41727144.32	6856.543	21016.28	17.9	125181.43	63.05	125244.48
0.05%	5975.600	0.025%	0.05%	0.00	5975.30	55.980	15129.634	42199479.82	6906.376	21169.03	6.0	42199.48	21.17	42220.65
0.01%														
0.005%														
0.001%														
									Storm Totals:		535.2 (cfs) 1,061.6 (acre-ft)	1533596.7 (tons/storm)	1014.0 (tons/storm)	1534610.7 (tons/storm)

.

JUF460 100 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	106.74	10.4195906	305.5047174
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.800	0.025%	0.050%	0.001										
90.0%	33.200	5.000%	10.000%	0.200	22.50	0.211	0.102	1.893	0.097	43.69	4.50	0.38	8.74	9.12
80.0%	35.700	5.000%	10.000%	0.200	34.45	0.323	0.114	3.228	0.141	63.61	6.89	0.65	12.72	13.37
70.0%	38.600	5.000%	10.00%	0.200	37.15	0.348	0.118	3.624	0.155	69.75	7.43	0.72	13.95	14.68
60.0%	42.000	5.000%	10.00%	0.200	40.30	0.378	0.125	4.155	0.173	77.74	8.06	0.83	15.55	16.38
50.0%	46.100	5.000%	10.00%	0.200	44.05	0.413	0.135	4.907	0.196	88.44	8.81	0.98	17.69	18.67
40.0%	51.200	5.000%	10.00%	0.200	48.65	0.456	0.151	6.054	0.230	103.38	9.73	1.21	20.68	21.89
30.0%	58.300	5.000%	10.00%	0.200	54.75	0.513	0.179	8.083	0.281	126.42	10.95	1.62	25.28	26.90
20.0%	71.600	5.000%	10.00%	0.200	64.95	0.608	0.249	13.314	0.385	173.55	12.99	2.66	34.71	37.37
10.0%	496.000	5.000%	10.00%	0.200	283.80	2.659	33.084	7744.808	10.517	4735.14	56.76	1548.96	947.03	2495.99
5.0%	4783.300	2.500%	5.00%	0.100	2639.65	24.730	115393.8	251252576.2	2095.7	943563.6	263.97	25125257.62	94356.36	25219613.98
4.0%	7555.300	0.500%	1.00%	0.020	6169.30	57.797	2577609.8	13117007016.6	15767.8	7099161.6	123.39	262340140.33	141983.23	262482123.56
3.0%	11278.600	0.500%	1.00%	0.020	9416.95	88.223	12113836.3	94096539163.7	43092.5	19401554.7	188.34	1881930783.27	388031.09	1882318814.37
2.0%	14523.800	0.500%	1.00%	0.020	12901.20	120.865	38330069.4	407897833391.6	91077.6	41005920.3	258.02	8157956667.83	820118.41	8158776786.24
1.50%	16243.300	0.250%	0.50%	0.010	15383.55	144.121	72976666.4	926024064626.6	138386.1	62305649.2	153.84	9260240646.27	623056.49	9260863702.76
1.00%	18161.300	0.250%	0.50%	0.010	17202.30	161.160	109838629.9	1558559221521.8	180492.0	81262984.8	172.02	15585592215.22	812629.85	15586404845.07
0.90%	18495.200	0.050%	0.10%	0.002	18328.25	171.708	138517224.0	2094143625839.1	209851.8	94481704.2	36.66	4188287251.68	188963.41	4188476215.09
0.80%	18705.600	0.050%	0.10%	0.002	18600.40	174.258	146192831.1	2243003984595.8	217335.1	97850904.5	37.20	4486007969.19	195701.81	4486203671.00
0.70%	19010.500	0.050%	0.10%	0.002	18858.05	176.672	153739961.8	2391471647521.0	224560.1	101103786.1	37.72	4782943295.04	202207.57	4783145502.61
0.60%	19282.200	0.050%	0.10%	0.002	19146.35	179.373	162516211.9	2566636519616.8	232807.2	104816894.0	38.29	5133273039.23	209633.79	5133482673.02
0.50%	19517.100	0.050%	0.10%	0.002	19399.65	181.746	170522582.2	2728710613259.6	240195.7	108143421.1	38.80	5457421226.52	216286.84	5457637513.36
0.25%	19965.600	0.125%	0.25%	0.005	19741.35	184.947	181772394.4	2959964218673.4	250375.2	112726571.0	98.71	14799821093.37	563632.85	14800384726.22
0.10%	20071.800	0.075%	0.15%	0.003	20018.70	187.545	191292478.0	3158751412981.2	258818.2	116527868.3	60.06	9476254238.94	349583.60	9476603822.55
0.05%	20082.100	0.025%	0.05%	0.001	20076.95	188.091	193337038.2	3201802087978.9	260612.1	117335521.8	20.08	3201802087.98	117335.52	3201919423.50
0.01%														
0.005%														
0.001%														

		50.000%	100.000%	2.00							Storm Totals:	1,653.2 (cfs) 3,279.1 (acre-ft)	86698997471 (tons/storm)	4924617.2 (tons/storm)	86703922087.7 (tons/storm)

.

JUF460 100 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	106.74	0.070935948	172.8841619
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.800													
90.0%	33.200	5.000%	10.000%	0.20	22.50	0.211	0.086	0.90	0.022	0.07	4.5	0.18	0.01	0.19
80.0%	35.700	5.000%	10.000%	0.20	34.45	0.323	0.125	2.01	0.074	0.23	6.9	0.40	0.05	0.45
70.0%	38.600	5.000%	10.00%	0.20	37.15	0.348	0.137	2.38	0.089	0.27	7.4	0.48	0.05	0.53
60.0%	42.000	5.000%	10.00%	0.20	40.30	0.378	0.153	2.88	0.108	0.33	8.1	0.58	0.07	0.64
50.0%	46.100	5.000%	10.00%	0.20	44.05	0.413	0.174	3.58	0.134	0.41	8.8	0.72	0.08	0.80
40.0%	51.200	5.000%	10.00%	0.20	48.65	0.456	0.204	4.64	0.170	0.52	9.7	0.93	0.10	1.03
30.0%	58.300	5.000%	10.00%	0.20	54.75	0.513	0.250	6.40	0.223	0.68	11.0	1.28	0.14	1.42
20.0%	71.600	5.000%	10.00%	0.20	64.95	0.608	0.345	10.47	0.330	1.01	13.0	2.09	0.20	2.30
10.0%	496.000	5.000%	10.00%	0.20	283.80	2.659	9.893	1310.62	8.644	26.50	56.8	262.12	5.30	267.42
5.0%	4783.300	2.500%	5.00%	0.10	2639.65	24.730	2114.811	2605775.32	1151.268	3528.80	264.0	260577.53	352.88	260930.41
4.0%	7555.300	0.500%	1.00%	0.02	6169.30	57.797	16339.9	47054797.0	7407.6	22705.4	123.4	941095.9	454.1	941550.0
3.0%	11278.600	0.500%	1.00%	0.02	9416.95	88.223	45250.9	198910143.9	18726.6	57399.7	188.3	3978202.9	1148.0	3979350.9
2.0%	14523.800	0.500%	1.00%	0.02	12901.20	120.865	96586.7	581655974.5	37348.4	114478.3	258.0	11633119.5	2289.6	11635409.1
1.50%	16243.300	0.250%	0.50%	0.01	15383.55	144.121	147567.3	1059657903.7	54937.4	168390.9	153.8	10596579.0	1683.9	10598262.9
1.00%	18161.300	0.250%	0.50%	0.01	17202.30	161.160	193141.0	1550886343.3	70192.3	215149.3	172.0	15508863.4	2151.5	15511014.9
0.90%	18495.200	0.050%	0.10%	0.00	18328.25	171.708	225004.5	1925002225.7	80662.1	247240.9	36.7	3850004.5	494.5	3850498.9
0.80%	18705.600	0.050%	0.10%	0.00	18600.40	174.258	233135.7	2024184091.3	83311.9	255362.9	37.2	4048368.2	510.7	4048878.9
0.70%	19010.500	0.050%	0.10%	0.00	18858.05	176.672	240989.6	2121358573.6	85863.5	263183.8	37.7	4242717.1	526.4	4243243.5
0.60%	19282.200	0.050%	0.10%	0.00	19146.35	179.373	249958.8	2233949772.9	88768.3	272087.6	38.3	4467899.5	544.2	4468443.7
0.50%	19517.100	0.050%	0.10%	0.00	19399.65	181.746	257997.7	2336300928.0	91364.0	280043.5	38.8	4672601.9	560.1	4673161.9
0.25%	19965.600	0.125%	0.25%	0.01	19741.35	184.947	269078.8	2479563727.6	94930.0	290974.0	98.7	12397818.6	1454.9	12399273.5
0.10%	20071.800	0.075%	0.15%	0.00	20018.70	187.545	278274.0	2600323920.3	97879.2	300013.7	60.1	7800971.8	900.0	7801871.8
0.05%	20082.100	0.025%	0.05%	0.00	20076.95	188.091	280228.2	2626204378.5	98504.8	301931.3	20.1	2626204.4	301.9	2626506.3
0.01%														
0.005%														
0.001%														
									Storm Totals:		1,653.2 (cfs) / 3,279.1 (acre-ft)	87025293 (tons/storm)	13379 (tons/storm)	87038672 (tons/storm)

.

JUF460 100 yr 24 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	106.74	10.4195906	305.5047174
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.80	0.025%	0.050%	0.001										
90.0%	18.70	5.000%	10.000%	0.200	15.25	0.143	0.100	1.253	0.082	36.83	3.05	0.25	7.37	7.62
80.0%	104.60	5.000%	10.000%	0.200	61.65	0.578	0.223	11.316	0.349	157.09	12.33	2.26	31.42	33.68
70.0%	109.90	5.000%	10.00%	0.200	107.25	1.005	1.036	91.686	1.105	497.61	21.45	18.34	99.52	117.86
60.0%	117.00	5.000%	10.00%	0.200	113.45	1.063	1.250	117.016	1.253	564.11	22.69	23.40	112.82	136.23
50.0%	129.80	5.000%	10.00%	0.200	123.40	1.156	1.665	169.494	1.514	681.75	24.68	33.90	136.35	170.25
40.0%	216.00	5.000%	10.00%	0.200	172.90	1.620	5.480	781.489	3.288	1480.24	34.58	156.30	296.05	452.35
30.0%	981.00	5.000%	10.00%	0.200	598.50	5.607	505.949	249777.045	61.626	27745.95	119.70	49955.41	5549.19	55504.60
20.0%	2162.80	5.000%	10.00%	0.200	1571.90	14.726	17316.706	22452870.892	611.243	275200.14	314.38	4490574.18	55040.03	4545614.21
10.0%	4247.50	5.000%	10.00%	0.200	3205.15	30.027	234770.416	620688091.333	3324.555	1496816.04	641.03	124137618.27	299363.21	124436981.47
5.0%	9798.00	2.500%	5.00%	0.100	7022.75	65.793	4141082.9	23988484901.3	21455.6	9659946.4	702.28	2398848490.13	965994.64	2399814484.77
4.0%	12745.00	0.500%	1.00%	0.020	11271.50	105.597	23385418.1	217424529220.2	66068.3	29745942.5	225.43	4348490584.40	594918.85	4349085503.25
3.0%	16604.80	0.500%	1.00%	0.020	14674.90	137.482	61410483.4	743360279630.3	123709.8	55697926.5	293.50	14867205592.61	1113958.53	14868319551.14
2.0%	20997.20	0.500%	1.00%	0.020	18801.00	176.137	152044996.9	2357950958674.1	222948.5	100378204.0	376.02	47159019173.48	2007564.08	47161026737.56
1.50%	22862.70	0.250%	0.50%	0.010	21929.95	205.451	267055034.8	4830811555969.3	321466.8	144734180.5	219.30	48308115559.69	1447341.81	48309562901.50
1.00%	24748.70	0.250%	0.50%	0.010	23805.70	223.024	360594965.6	7080799550965.2	390721.6	175914799.3	238.06	70807995509.65	1759147.99	70809754657.64
0.90%	25073.30	0.050%	0.10%	0.002	24911.00	233.379	425734946.5	8748067940278.2	435233.7	195955505.3	49.82	17496135880.56	391911.01	17496527791.57
0.80%	25319.00	0.050%	0.10%	0.002	25196.15	236.050	443839370.5	9224475748775.5	447170.5	201329781.8	50.39	18448951497.55	402659.56	18449354157.11
0.70%	25569.00	0.050%	0.10%	0.002	25444.00	238.372	460024509.2	9654905832709.4	457698.0	206069623.7	50.89	19309811665.42	412139.25	19310223804.67
0.60%	25794.20	0.050%	0.10%	0.002	25681.60	240.598	475938920.4	10082192456991.2	467923.7	210673542.1	51.36	20164384913.98	421347.08	20164806261.07
0.50%	25989.50	0.050%	0.10%	0.002	25891.85	242.568	490351782.3	10472551997577.9	477081.7	214796733.6	51.78	20945103995.16	429593.47	20945533588.62
0.25%	26277.30	0.125%	0.25%	0.005	26133.40	244.831	507298871.3	10935571808071.5	487730.1	219590993.3	130.67	54677859040.36	1097954.97	54678956995.32
0.10%	26364.20	0.075%	0.15%	0.003	26320.75	246.586	520733327.5	11305644336516.9	496083.2	223351778.5	78.96	33916933009.55	670055.34	33917603064.89
0.05%	26366.10	0.025%	0.05%	0.001	26365.15	247.002	523954665.6	11394772092592.0	498074.8	224248472.1	26.37	11394772092.59	224248.47	11394996341.06
0.01%														
0.005%														
0.001%														
										Storm Totals:	3,738.7 (cfs) 7,415.7 (acre-ft)	384372305387 (tons/storm)	12299471.0 (tons/storm)	384384604858.4 (tons/storm)

50.000% 100.000% 2.00

.

JUF460 100 yr 24 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	106.74	0.070935948	172.8841619
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.80													
90.0%	18.70	5.000%	10.000%	0.20	15.25	0.143	0.072	0.51	0.003	0.01	3.1	0.10	0.00	0.10
80.0%	104.60	5.000%	10.000%	0.20	61.65	0.578	0.312	8.98	0.293	0.90	12.3	1.80	0.18	1.98
70.0%	109.90	5.000%	10.00%	0.20	107.25	1.005	1.007	50.41	1.013	3.11	21.5	10.08	0.62	10.70
60.0%	117.00	5.000%	10.00%	0.20	113.45	1.063	1.144	60.57	1.148	3.52	22.7	12.11	0.70	12.82
50.0%	129.80	5.000%	10.00%	0.20	123.40	1.156	1.386	79.84	1.382	4.24	24.7	15.97	0.85	16.82
40.0%	216.00	5.000%	10.00%	0.20	172.90	1.620	3.043	245.63	2.908	8.91	34.6	49.13	1.78	50.91
30.0%	981.00	5.000%	10.00%	0.20	598.50	5.607	59.359	16583.34	44.441	136.22	119.7	3316.67	27.24	3343.91
20.0%	2162.80	5.000%	10.00%	0.20	1571.90	14.726	606.875	445290.08	369.401	1132.27	314.4	89058.02	226.45	89284.47
10.0%	4247.50	5.000%	10.00%	0.20	3205.15	30.027	3375.267	5049815.37	1762.154	5401.25	641.0	1009963.07	1080.25	1011043.33
5.0%	9798.00	2.500%	5.00%	0.10	7022.75	65.793	22324.311	73181994.52	9841.853	30166.68	702.3	7318199.45	3016.67	7321216.12
4.0%	12745.00	0.500%	1.00%	0.02	11271.50	105.597	69769.0	367082142.0	27775.5	85135.9	225.4	7341642.8	1702.7	7343345.6
3.0%	16604.80	0.500%	1.00%	0.02	14674.90	137.482	131722.7	902307972.5	49539.8	151846.5	293.5	18046159.4	3036.9	18049196.4
2.0%	20997.20	0.500%	1.00%	0.02	18801.00	176.137	239237.4	2099563751.0	85294.9	261441.0	376.0	41991275.0	5228.8	41996503.8
1.50%	22862.70	0.250%	0.50%	0.01	21929.95	205.451	346619.9	3548216125.0	119545.5	366423.9	219.3	35482161.3	3664.2	35485825.5
1.00%	24748.70	0.250%	0.50%	0.01	23805.70	223.024	422377.1	4693537471.7	143118.4	438678.2	238.1	46935374.7	4386.8	46939761.5
0.90%	25073.30	0.050%	0.10%	0.00	24911.00	233.379	471164.3	5478763047.2	158094.9	484583.4	49.8	10957526.1	969.2	10958495.3
0.80%	25319.00	0.050%	0.10%	0.00	25196.15	236.050	484258.9	5695486302.0	162090.5	496830.3	50.4	11390972.6	993.7	11391966.3
0.70%	25569.00	0.050%	0.10%	0.00	25444.00	238.372	495811.6	5888721718.6	165607.5	507610.4	50.9	11777443.4	1015.2	11778458.7
0.60%	25794.20	0.050%	0.10%	0.00	25681.60	240.598	507036.3	6078271428.2	169017.6	518063.0	51.4	12156542.9	1036.1	12157579.0
0.50%	25989.50	0.050%	0.10%	0.00	25891.85	242.568	517091.7	6249562333.5	172066.8	527409.2	51.8	12499124.7	1054.8	12500179.5
0.25%	26277.30	0.125%	0.25%	0.01	26133.40	244.831	528786.8	6450531731.4	175606.5	538259.0	130.7	32252658.7	2691.3	32255350.0
0.10%	26364.20	0.075%	0.15%	0.00	26320.75	246.586	537963.3	6609519004.8	178379.0	546757.1	79.0	19828557.0	1640.3	19830197.3
0.05%	26366.10	0.025%	0.05%	0.00	26365.15	247.002	540151.5	6647599261.5	179039.5	548781.6	26.4	6647599.3	548.8	6648148.0
0.01%														
0.005%														
0.001%														
									Storm Totals:		3,738.7 (cfs) 7,415.7 (acre-ft)	275727664 (tons/storm)	32324 (tons/storm)	275759988 (tons/storm)

.

Flow Duration JUF470
48 hour, 2 day duration

	2 yr 2 hr	10 yr 2 hr	100 yr 2 hr	100 yr 24 h
1	11.8	11.8	11.8	11.8
0.9	12.5	16.2	33.2	18.9
0.8	12.5	16.7	35.7	104.8
0.7	12.6	17.3	38.6	110.1
0.6	12.8	18.1	42.1	117.3
0.5	12.9	19	46.2	130.5
0.4	13.1	20.2	51.3	224.8
0.3	13.4	21.9	58.5	1027.6
0.2	14.3	26	72	2231.2
0.1	104.6	213.8	519.2	4379.6
0.05	639	1735.8	4965.5	10141.2
0.04	941.3	2548.7	7815.6	13048.3
0.03	1374.6	3617.9	11809.9	17150.4
0.02	1829.4	4816.7	15286.2	21685.2
0.015	2014.9	5403.8	17181.4	23684.2
0.01	2161.8	5932.1	19295.8	25826.2
0.009	2181.6	6024.4	19667.1	26223.3
0.008	2183.7	6067.6	19875	26379.2
0.007	2187.8	6148.3	20209.1	26671.5
0.006	2192.6	6205.3	20517.6	26938.2
0.005	2198.2	6255.7	20811.3	27174.5
0.0025	2212	6346.1	21294.2	27529.3
0.001	2227.2	6381.8	21448.3	27648.6
0.0005	2227.3	6383.2	21459.5	27650.8
0.0001	#N/A	#N/A	#N/A	#N/A
0.00005	#N/A	#N/A	#N/A	#N/A
0.00001	#N/A	#N/A	#N/A	#N/A

JUF470 2 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	107.88	10.51795612	306.2862702
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.800	0.025%	0.050%	0.001										
90.0%	12.500	5.000%	10.000%	0.200	12.15	0.113	0.099	0.997	0.077	35.22	2.43	0.20	7.04	7.24
80.0%	12.500	5.000%	10.000%	0.200	12.50	0.116	0.099	1.026	0.078	35.40	2.50	0.21	7.08	7.28
70.0%	12.600	5.000%	10.00%	0.200	12.55	0.116	0.099	1.030	0.078	35.42	2.51	0.21	7.08	7.29
60.0%	12.800	5.000%	10.00%	0.200	12.70	0.118	0.099	1.043	0.078	35.50	2.54	0.21	7.10	7.31
50.0%	12.900	5.000%	10.00%	0.200	12.85	0.119	0.099	1.055	0.078	35.58	2.57	0.21	7.12	7.33
40.0%	13.100	5.000%	10.00%	0.200	13.00	0.121	0.099	1.068	0.078	35.67	2.60	0.21	7.13	7.35
30.0%	13.400	5.000%	10.00%	0.200	13.25	0.123	0.099	1.088	0.079	35.81	2.65	0.22	7.16	7.38
20.0%	14.300	5.000%	10.00%	0.200	13.85	0.128	0.099	1.139	0.080	36.16	2.77	0.23	7.23	7.46
10.0%	104.600	5.000%	10.00%	0.200	59.45	0.551	0.203	9.981	0.320	145.27	11.89	2.00	29.05	31.05
5.0%	639.000	2.500%	5.00%	0.100	371.80	3.446	85.337	26238.560	19.427	8829.26	37.18	2623.86	882.93	3506.78
4.0%	941.300	0.500%	1.00%	0.020	790.15	7.324	1344.698	878669.739	116.242	52829.93	15.80	17573.39	1056.60	18629.99
3.0%	1374.600	0.500%	1.00%	0.020	1157.95	10.734	5444.056	5213191.281	288.252	131005.10	23.16	104263.83	2620.10	106883.93
2.0%	1829.400	0.500%	1.00%	0.020	1602.00	14.850	17854.028	23653205.630	623.497	283367.69	32.04	473064.11	5667.35	478731.47
1.50%	2014.900	0.250%	0.50%	0.010	1922.15	17.818	34773.831	55275300.628	961.419	436946.37	19.22	552753.01	4369.46	557122.47
1.00%	2161.800	0.250%	0.50%	0.010	2088.35	19.358	47101.507	81344722.835	1170.911	532156.77	20.88	813447.23	5321.57	818768.80
0.90%	2181.600	0.050%	0.10%	0.002	2171.70	20.131	54353.190	97614911.277	1285.067	584038.41	4.34	195229.82	1168.08	196397.90
0.80%	2183.700	0.050%	0.10%	0.002	2182.65	20.232	55362.700	99929256.476	1300.523	591062.72	4.37	199858.51	1182.13	201040.64
0.70%	2187.800	0.050%	0.10%	0.002	2185.75	20.261	55650.955	100592221.758	1304.918	593060.18	4.37	201184.44	1186.12	202370.56
0.60%	2192.600	0.050%	0.10%	0.002	2190.20	20.302	56066.644	101549930.722	1311.242	595934.32	4.38	203099.86	1191.87	204291.73
0.50%	2198.200	0.050%	0.10%	0.002	2195.40	20.350	56555.247	102678108.629	1318.654	599303.08	4.39	205356.22	1198.61	206554.82
0.25%	2212.000	0.125%	0.25%	0.005	2205.10	20.440	57474.940	104808886.335	1332.546	605616.53	11.03	524044.43	3028.08	527072.51
0.10%	2227.200	0.075%	0.15%	0.003	2219.60	20.575	58869.938	108058663.438	1353.469	615125.71	6.66	324175.99	1845.38	326021.37
0.05%	2227.300	0.025%	0.05%	0.001	2227.25	20.646	59615.754	109804793.605	1364.584	620177.25	2.23	109804.79	620.18	110424.97
0.01%														
0.005%														
0.001%														

50.000% 100.000% 2.00

Storm Totals:	222.5 (cfs)	3926483.2 (tons/storm)	31424.5 (tons/storm)	3957907.6 (tons/storm)
	441.3 (acre-ft)			

.

JUF470 2 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	107.88	0.071267065	175.296683
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.800													
90.0%	12.500	5.000%	10.000%	0.20	12.15	0.113	0.068	0.39	0.000	0.00	2.4	0.08	0.00	0.08
80.0%	12.500	5.000%	10.000%	0.20	12.50	0.116	0.069	0.41	0.000	0.00	2.5	0.08	0.00	0.08
70.0%	12.600	5.000%	10.00%	0.20	12.55	0.116	0.069	0.41	0.000	0.00	2.5	0.08	0.00	0.08
60.0%	12.800	5.000%	10.00%	0.20	12.70	0.118	0.069	0.41	0.000	0.00	2.5	0.08	0.00	0.08
50.0%	12.900	5.000%	10.00%	0.20	12.85	0.119	0.069	0.42	0.000	0.00	2.6	0.08	0.00	0.08
40.0%	13.100	5.000%	10.00%	0.20	13.00	0.121	0.069	0.43	0.000	0.00	2.6	0.09	0.00	0.09
30.0%	13.400	5.000%	10.00%	0.20	13.25	0.123	0.070	0.44	0.000	0.00	2.7	0.09	0.00	0.09
20.0%	14.300	5.000%	10.00%	0.20	13.85	0.128	0.070	0.46	0.000	0.00	2.8	0.09	0.00	0.09
10.0%	104.600	5.000%	10.00%	0.20	59.45	0.551	0.286	8.04	0.263	0.81	11.9	1.61	0.16	1.77
5.0%	639.000	2.500%	5.00%	0.10	371.80	3.446	18.427	3242.63	15.278	47.05	37.2	324.26	4.70	328.97
4.0%	941.300	0.500%	1.00%	0.02	790.15	7.324	112.911	42226.45	79.852	245.90	15.8	844.53	4.92	849.45
3.0%	1374.600	0.500%	1.00%	0.02	1157.95	10.734	283.370	155303.45	184.629	568.56	23.2	3106.07	11.37	3117.44
2.0%	1829.400	0.500%	1.00%	0.02	1602.00	14.850	619.204	469497.95	376.229	1158.58	32.0	9389.96	23.17	9413.13
1.50%	2014.900	0.250%	0.50%	0.01	1922.15	17.818	960.262	873604.00	561.008	1727.60	19.2	8736.04	17.28	8753.32
1.00%	2161.800	0.250%	0.50%	0.01	2088.35	19.358	1172.544	1158964.09	672.900	2072.16	20.9	11589.64	20.72	11610.36
0.90%	2181.600	0.050%	0.10%	0.00	2171.70	20.131	1288.437	1324343.31	733.200	2257.85	4.3	2648.69	4.52	2653.20
0.80%	2183.700	0.050%	0.10%	0.00	2182.65	20.232	1304.139	1347241.35	741.332	2282.89	4.4	2694.48	4.57	2699.05
0.70%	2187.800	0.050%	0.10%	0.00	2185.75	20.261	1308.604	1353774.37	743.643	2290.01	4.4	2707.55	4.58	2712.13
0.60%	2192.600	0.050%	0.10%	0.00	2190.20	20.302	1315.030	1363191.50	746.967	2300.25	4.4	2726.38	4.60	2730.98
0.50%	2198.200	0.050%	0.10%	0.00	2195.40	20.350	1322.562	1374254.33	750.861	2312.24	4.4	2748.51	4.62	2753.13
0.25%	2212.000	0.125%	0.25%	0.01	2205.10	20.440	1336.679	1395060.07	758.156	2334.70	11.0	6975.30	11.67	6986.97
0.10%	2227.200	0.075%	0.15%	0.00	2219.60	20.575	1357.946	1426575.07	769.131	2368.50	6.7	4279.73	7.11	4286.83
0.05%	2227.300	0.025%	0.05%	0.00	2227.25	20.646	1369.245	1443403.05	774.956	2386.44	2.2	1443.40	2.39	1445.79
0.01%														
0.005%														
0.001%														
									Storm Totals:		222.5 (cfs) 441.3 (acre-ft)	60216.8 (tons/storm)	126.4 (tons/storm)	60343.2 (tons/storm)

.

JUF470 10 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	107.88	10.51795612	306.2862702
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.800	0.025%	0.050%	0.001										
90.0%	16.200	5.000%	10.000%	0.200	14.00	0.130	0.099	1.151	0.080	36.25	2.80	0.23	7.25	7.48
80.0%	16.700	5.000%	10.000%	0.200	16.45	0.152	0.100	1.358	0.083	37.94	3.29	0.27	7.59	7.86
70.0%	17.300	5.000%	10.00%	0.200	17.00	0.158	0.100	1.405	0.084	38.38	3.40	0.28	7.68	7.96
60.0%	18.100	5.000%	10.00%	0.200	17.70	0.164	0.100	1.466	0.086	38.95	3.54	0.29	7.79	8.08
50.0%	19.000	5.000%	10.00%	0.200	18.55	0.172	0.100	1.540	0.087	39.70	3.71	0.31	7.94	8.25
40.0%	20.200	5.000%	10.00%	0.200	19.60	0.182	0.101	1.632	0.090	40.69	3.92	0.33	8.14	8.46
30.0%	21.900	5.000%	10.00%	0.200	21.05	0.195	0.101	1.762	0.093	42.18	4.21	0.35	8.44	8.79
20.0%	26.000	5.000%	10.00%	0.200	23.95	0.222	0.103	2.033	0.100	45.61	4.79	0.41	9.12	9.53
10.0%	213.800	5.000%	10.00%	0.200	119.90	1.111	1.455	144.263	1.385	629.59	23.98	28.85	125.92	154.77
5.0%	1735.800	2.500%	5.00%	0.100	974.80	9.036	2899.5	2337422.3	191.5	87014.1	97.48	233742.23	8701.41	242443.64
4.0%	2548.700	0.500%	1.00%	0.020	2142.25	19.858	51704.5	91598808.8	1244.0	565387.5	42.85	1831976.18	11307.75	1843283.93
3.0%	3617.900	0.500%	1.00%	0.020	3083.30	28.581	195966.9	499677404.7	2956.4	1343616.9	61.67	9993548.09	26872.34	10020420.43
2.0%	4816.700	0.500%	1.00%	0.020	4217.30	39.093	616417.5	2149813300.5	6224.4	2828874.0	84.35	42996266.01	56577.48	43052843.49
1.50%	5403.800	0.250%	0.50%	0.010	5110.25	47.370	1244696.6	5260135798.9	9825.9	4465688.6	51.10	52601357.99	44656.89	52646014.87
1.00%	5932.100	0.250%	0.50%	0.010	5667.95	52.540	1818274.6	8522691447.9	12569.2	5712462.7	56.68	85226914.48	57124.63	85284039.11
0.90%	6024.400	0.050%	0.10%	0.002	5978.25	55.416	2209826.7	10925053759.7	14267.1	6484114.2	11.96	21850107.52	12968.23	21863075.75
0.80%	6067.600	0.050%	0.10%	0.002	6046.00	56.044	2302849.8	11513968992.5	14654.4	6660161.9	12.09	23027937.98	13320.32	23041258.31
0.70%	6148.300	0.050%	0.10%	0.002	6107.95	56.618	2390370.5	12074022677.1	15013.9	6823534.4	12.22	24148045.35	13647.07	24161692.42
0.60%	6205.300	0.050%	0.10%	0.002	6176.80	57.256	2490448.0	12721323797.9	15419.4	7007799.9	12.35	25442647.60	14015.60	25456663.20
0.50%	6255.700	0.050%	0.10%	0.002	6230.50	57.754	2570591.0	13244853801.7	15739.9	7153497.1	12.46	26489707.60	14306.99	26504014.60
0.25%	6346.100	0.125%	0.25%	0.005	6300.90	58.407	2678475.9	13956664176.8	16166.0	7347140.5	31.50	69783320.88	36735.70	69820056.59
0.10%	6381.800	0.075%	0.15%	0.003	6363.95	58.991	2777857.0	14619345983.8	16553.2	7523115.4	19.09	43858037.95	22569.35	43880607.30
0.05%	6383.200	0.025%	0.05%	0.001	6382.50	59.163	2807599.2	14818942785.7	16668.1	7575349.0	6.38	14818942.79	7575.35	14826518.13
0.01%														
0.005%														
0.001%														

Storm Totals:	565.8 (cfs)	442302584	340569.0	442643152.9
	1,122.3 (acre-ft)	(tons/storm)	(tons/storm)	(tons/storm)

50.000% 100.000% 2.00

.

JUF470 10 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	107.88	0.071267065	175.296683
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.800													
90.0%	16.200	5.000%	10.000%	0.20	14.00	0.130	0.070	0.47	0.000	0.00	2.8	0.09	0.00	0.09
80.0%	16.700	5.000%	10.000%	0.20	16.45	0.152	0.074	0.57	0.005	0.02	3.3	0.11	0.00	0.12
70.0%	17.300	5.000%	10.00%	0.20	17.00	0.158	0.074	0.60	0.006	0.02	3.4	0.12	0.00	0.12
60.0%	18.100	5.000%	10.00%	0.20	17.70	0.164	0.076	0.63	0.008	0.02	3.5	0.13	0.00	0.13
50.0%	19.000	5.000%	10.00%	0.20	18.55	0.172	0.077	0.68	0.010	0.03	3.7	0.14	0.01	0.14
40.0%	20.200	5.000%	10.00%	0.20	19.60	0.182	0.079	0.73	0.013	0.04	3.9	0.15	0.01	0.15
30.0%	21.900	5.000%	10.00%	0.20	21.05	0.195	0.082	0.82	0.017	0.05	4.2	0.16	0.01	0.17
20.0%	26.000	5.000%	10.00%	0.20	23.95	0.222	0.088	1.00	0.026	0.08	4.8	0.20	0.02	0.22
10.0%	213.800	5.000%	10.00%	0.20	119.90	1.111	1.266	71.87	1.267	3.90	24.0	14.37	0.78	15.15
5.0%	1735.800	2.500%	5.00%	0.10	974.80	9.036	187.202	86370.02	126.565	389.75	97.5	8637.00	38.98	8675.98
4.0%	2548.700	0.500%	1.00%	0.02	2142.25	19.858	1246.759	1264124.90	711.573	2191.25	42.8	25282.50	43.83	25326.32
3.0%	3617.900	0.500%	1.00%	0.02	3083.30	28.581	2996.837	4373372.13	1581.323	4869.61	61.7	87467.44	97.39	87564.83
2.0%	4816.700	0.500%	1.00%	0.02	4217.30	39.093	6371.760	12718366.45	3142.662	9677.67	84.3	254367.33	193.55	254560.88
1.50%	5403.800	0.250%	0.50%	0.01	5110.25	47.370	10119.175	24475113.08	4788.536	14746.06	51.1	244751.13	147.46	244898.59
1.00%	5932.100	0.250%	0.50%	0.01	5667.95	52.540	12986.381	34837870.73	6009.635	18506.37	56.7	348378.71	185.06	348563.77
0.90%	6024.400	0.050%	0.10%	0.00	5978.25	55.416	14765.222	41778372.39	6754.755	20800.93	12.0	83556.74	41.60	83598.35
0.80%	6067.600	0.050%	0.10%	0.00	6046.00	56.044	15171.457	43414310.22	6923.757	21321.36	12.1	86828.62	42.64	86871.26
0.70%	6148.300	0.050%	0.10%	0.00	6107.95	56.618	15548.571	44949350.08	7080.281	21803.37	12.2	89898.70	43.61	89942.31
0.60%	6205.300	0.050%	0.10%	0.00	6176.80	57.256	15974.055	46699923.92	7256.475	22345.95	12.4	93399.85	44.69	93444.54
0.50%	6255.700	0.050%	0.10%	0.00	6230.50	57.754	16310.586	48098321.29	7395.536	22774.18	12.5	96196.64	45.55	96242.19
0.25%	6346.100	0.125%	0.25%	0.01	6300.90	58.407	16758.002	49976091.27	7580.019	23342.29	31.5	249880.46	116.71	249997.17
0.10%	6381.800	0.075%	0.15%	0.00	6363.95	58.991	17164.730	51701267.04	7747.343	23857.56	19.1	155103.80	71.57	155175.37
0.05%	6383.200	0.025%	0.05%	0.00	6382.50	59.163	17285.480	52216738.20	7796.951	24010.32	6.4	52216.74	24.01	52240.75
0.01%														
0.005%														
0.001%														
									Storm Totals:		565.8 (cfs) 1,122.3 (acre-ft)	1875981.1 (tons/storm)	1137.5 (tons/storm)	1877118.6 (tons/storm)

.

JUF470 100 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	107.88	10.51795612	306.2862702
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.800	0.025%	0.050%	0.001										
90.0%	33.200	5.000%	10.000%	0.200	22.50	0.209	0.102	1.896	0.096	43.82	4.50	0.38	8.76	9.14
80.0%	35.700	5.000%	10.000%	0.200	34.45	0.319	0.113	3.220	0.140	63.42	6.89	0.64	12.68	13.33
70.0%	38.600	5.000%	10.00%	0.200	37.15	0.344	0.118	3.611	0.153	69.47	7.43	0.72	13.89	14.62
60.0%	42.100	5.000%	10.00%	0.200	40.35	0.374	0.124	4.142	0.170	77.46	8.07	0.83	15.49	16.32
50.0%	46.200	5.000%	10.00%	0.200	44.15	0.409	0.134	4.891	0.194	88.16	8.83	0.98	17.63	18.61
40.0%	51.300	5.000%	10.00%	0.200	48.75	0.452	0.149	6.018	0.226	102.91	9.75	1.20	20.58	21.79
30.0%	58.500	5.000%	10.00%	0.200	54.90	0.509	0.177	8.022	0.277	125.85	10.98	1.60	25.17	26.77
20.0%	72.000	5.000%	10.00%	0.200	65.25	0.605	0.245	13.234	0.381	173.17	13.05	2.65	34.63	37.28
10.0%	519.200	5.000%	10.00%	0.200	295.60	2.740	36.927	9026.962	11.292	5132.22	59.12	1805.39	1026.44	2831.84
5.0%	4965.500	2.500%	5.00%	0.100	2742.35	25.420	127633.8	289454165.1	2237.6	1016942.1	274.24	28945416.51	101694.21	29047110.73
4.0%	7815.600	0.500%	1.00%	0.020	6390.55	59.238	2820577.8	14906223253.4	16718.2	7598081.5	127.81	298124465.07	151961.63	298276426.70
3.0%	11809.900	0.500%	1.00%	0.020	9812.75	90.960	13546776.5	109930447106.3	46339.0	21060185.6	196.26	2198608942.13	421203.71	2199030145.84
2.0%	15286.200	0.500%	1.00%	0.020	13548.05	125.585	44097182.7	494059129186.4	99760.5	45339257.8	270.96	9881182583.73	906785.16	9882089368.88
1.50%	17181.400	0.250%	0.50%	0.010	16233.80	150.480	85467528.6	1147394148021.8	153345.9	69692760.8	162.34	11473941480.22	696927.61	11474638407.83
1.00%	19295.800	0.250%	0.50%	0.010	18238.60	169.064	130870439.2	1973896387392.3	202250.7	91919093.3	182.39	19738963873.92	919190.93	19739883064.86
0.90%	19667.100	0.050%	0.10%	0.002	19481.45	180.585	166570436.2	2683554963325.7	236564.1	107513851.8	38.96	5367109926.65	215027.70	5367324954.35
0.80%	19875.000	0.050%	0.10%	0.002	19771.05	183.269	175811170.1	2874534280925.7	245009.5	111352147.9	39.54	5749068561.85	222704.30	5749291266.15
0.70%	20209.100	0.050%	0.10%	0.002	20042.05	185.781	184790636.3	3062763026933.8	253068.4	115014757.6	40.08	6125526053.87	230029.52	6125756083.38
0.60%	20517.600	0.050%	0.10%	0.002	20363.35	188.760	195863262.2	3298325428091.9	262819.4	119446405.6	40.73	6596650856.18	238892.81	6596889748.99
0.50%	20811.300	0.050%	0.10%	0.002	20664.45	191.551	206670141.0	3531773796054.9	272151.8	123687792.7	41.33	7063547592.11	247375.59	7063794967.70
0.25%	21294.200	0.125%	0.25%	0.005	21052.75	195.150	221238490.7	3851774146587.8	284466.3	129284498.5	105.26	19258870732.94	646422.49	19259517155.43
0.10%	21448.300	0.075%	0.15%	0.003	21371.25	198.102	233733714.3	4130879996619.4	294803.6	133982596.4	64.11	12392639989.86	401947.79	12393041937.65
0.05%	21459.500	0.025%	0.05%	0.001	21453.90	198.869	237058232.6	4205838454882.1	297521.1	135217640.7	21.45	4205838454.88	135217.64	4205973672.52
0.01%														
0.005%														
0.001%														
										Storm Totals:	1,734.1 (cfs) 3,439.6 (acre-ft)	110379020744 (tons/storm)	5536556.4 (tons/storm)	110384557300.7 (tons/storm)

50.000% 100.000% 2.00

.

JUF470 100 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	107.88	0.071267065	175.296683
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.800													
90.0%	33.200	5.000%	10.000%	0.20	22.50	0.209	0.085	0.91	0.021	0.07	4.5	0.18	0.01	0.19
80.0%	35.700	5.000%	10.000%	0.20	34.45	0.319	0.123	2.01	0.072	0.22	6.9	0.40	0.04	0.45
70.0%	38.600	5.000%	10.00%	0.20	37.15	0.344	0.135	2.38	0.087	0.27	7.4	0.48	0.05	0.53
60.0%	42.100	5.000%	10.00%	0.20	40.35	0.374	0.151	2.88	0.106	0.33	8.1	0.58	0.07	0.64
50.0%	46.200	5.000%	10.00%	0.20	44.15	0.409	0.172	3.59	0.132	0.41	8.8	0.72	0.08	0.80
40.0%	51.300	5.000%	10.00%	0.20	48.75	0.452	0.201	4.64	0.166	0.51	9.8	0.93	0.10	1.03
30.0%	58.500	5.000%	10.00%	0.20	54.90	0.509	0.247	6.42	0.219	0.68	11.0	1.28	0.14	1.42
20.0%	72.000	5.000%	10.00%	0.20	65.25	0.605	0.341	10.54	0.325	1.00	13.1	2.11	0.20	2.31
10.0%	519.200	5.000%	10.00%	0.20	295.60	2.740	10.633	1487.64	9.235	28.44	59.1	297.53	5.69	303.22
5.0%	4965.500	2.500%	5.00%	0.10	2742.35	25.420	2259.907	2933262.87	1222.972	3766.08	274.2	293326.29	376.61	293702.90
4.0%	7815.600	0.500%	1.00%	0.02	6390.55	59.238	17338.0	52441559.0	7818.5	24076.8	127.8	1048831.2	481.5	1049312.7
3.0%	11809.900	0.500%	1.00%	0.02	9812.75	90.960	48706.6	226212294.6	20024.4	61664.0	196.3	4524245.9	1233.3	4525479.2
2.0%	15286.200	0.500%	1.00%	0.02	13548.05	125.585	105921.7	679202415.6	40621.3	125091.2	271.0	13584048.3	2501.8	13586550.1
1.50%	17181.400	0.250%	0.50%	0.01	16233.80	150.480	163740.7	1258097530.8	60393.7	185979.3	162.3	12580975.3	1859.8	12582835.1
1.00%	19295.800	0.250%	0.50%	0.01	18238.60	169.064	216749.3	1871055071.7	77963.1	240083.5	182.4	18710550.7	2400.8	18712951.6
0.90%	19667.100	0.050%	0.10%	0.00	19481.45	180.585	254046.0	2342454452.9	90088.9	277424.4	39.0	4684908.9	554.8	4685463.8
0.80%	19875.000	0.050%	0.10%	0.00	19771.05	183.269	263237.1	2463283367.4	93051.8	286548.2	39.5	4926566.7	573.1	4927139.8
0.70%	20209.100	0.050%	0.10%	0.00	20042.05	185.781	272011.5	2580279843.1	95871.6	295231.7	40.1	5160559.7	590.5	5161150.1
0.60%	20517.600	0.050%	0.10%	0.00	20363.35	188.760	282633.0	2724015684.2	99274.2	305710.0	40.7	5448031.4	611.4	5448642.8
0.50%	20811.300	0.050%	0.10%	0.00	20664.45	191.551	292803.5	2863765871.5	102521.6	315710.1	41.3	5727531.7	631.4	5728163.2
0.25%	21294.200	0.125%	0.25%	0.01	21052.75	195.150	306230.8	3051372080.0	106793.5	328865.3	105.3	15256860.4	1644.3	15258504.7
0.10%	21448.300	0.075%	0.15%	0.00	21371.25	198.102	317508.2	3211606328.7	110368.5	339874.2	64.1	9634819.0	1019.6	9635838.6
0.05%	21459.500	0.025%	0.05%	0.00	21453.90	198.869	320473.7	3254138744.9	111306.6	342763.2	21.5	3254138.7	342.8	3254481.5
0.01%														
0.005%														
0.001%														
									Storm Totals:		1,734.1 (cfs) 3,439.6 (acre-ft)	104835698 (tons/storm)	14828 (tons/storm)	104850527 (tons/storm)

.

JUF470 100 yr 24 hr Poor Pre Fire

Stream:	Location:	Date:
Observer	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	107.88	10.51795612	306.2862702
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.80	0.025%	0.050%	0.001										
90.0%	18.90	5.000%	10.000%	0.200	15.35	0.142	0.100	1.265	0.082	37.14	3.07	0.25	7.43	7.68
80.0%	104.80	5.000%	10.000%	0.200	61.85	0.573	0.219	11.213	0.344	156.38	12.37	2.24	31.28	33.52
70.0%	110.10	5.000%	10.00%	0.200	107.45	0.996	1.007	89.466	1.084	492.63	21.49	17.89	98.53	116.42
60.0%	117.30	5.000%	10.00%	0.200	113.70	1.054	1.216	114.290	1.230	558.81	22.74	22.86	111.76	134.62
50.0%	130.50	5.000%	10.00%	0.200	123.90	1.149	1.628	166.803	1.492	678.03	24.78	33.36	135.61	168.97
40.0%	224.80	5.000%	10.00%	0.200	177.65	1.647	5.814	854.162	3.416	1552.63	35.53	170.83	310.53	481.36
30.0%	1027.60	5.000%	10.00%	0.200	626.20	5.805	574.277	297389.698	66.907	30408.09	125.24	59477.94	6081.62	65559.56
20.0%	2231.20	5.000%	10.00%	0.200	1629.40	15.104	18997.013	25597899.548	649.144	295023.70	325.88	5119579.91	59004.74	5178584.65
10.0%	4379.60	5.000%	10.00%	0.200	3305.40	30.640	252763.602	690923320.224	3487.942	1585202.96	661.08	138184664.04	317040.59	138501704.64
5.0%	10141.20	2.500%	5.00%	0.100	7260.40	67.301	4499127.7	27013456799.4	22643.2	10290900.5	726.04	2701345679.94	1029090.05	2702374769.99
4.0%	13048.30	0.500%	1.00%	0.020	11594.75	107.478	24946297.1	239198676676.5	68900.7	31314048.0	231.90	4783973533.53	626280.96	4784599814.49
3.0%	17150.40	0.500%	1.00%	0.020	15099.35	139.965	65566486.4	818712566680.0	129086.5	58667338.4	301.99	16374251333.60	1173346.77	16375424680.37
2.0%	21685.20	0.500%	1.00%	0.020	19417.80	179.995	164587766.8	2642949528795.4	234730.9	106680690.0	388.36	52858990575.91	2133613.80	52861124189.71
1.50%	23684.20	0.250%	0.50%	0.010	22684.70	210.278	290737371.8	5454126340532.4	339711.0	154392166.6	226.85	54541263405.32	1543921.67	54542807326.99
1.00%	25826.20	0.250%	0.50%	0.010	24755.20	229.470	400220350.3	8193263092606.1	418104.6	190020528.3	247.55	81932630926.06	1900205.28	81934531131.34
0.90%	26223.30	0.050%	0.10%	0.002	26024.75	241.238	480588209.6	10343105909509.3	470888.4	214009769.1	52.05	20686211819.02	428019.54	20686639838.56
0.80%	26379.20	0.050%	0.10%	0.002	26301.25	243.802	499536555.3	10865130765508.4	482868.5	219454517.0	52.60	21730261531.02	438909.03	21730700440.05
0.70%	26671.50	0.050%	0.10%	0.002	26525.35	245.879	515287628.2	11303218735434.0	492706.5	223925664.7	53.05	22606437470.87	447851.33	22606885322.20
0.60%	26938.20	0.050%	0.10%	0.002	26804.85	248.470	535434595.0	11868917271669.8	505137.8	229575478.7	53.61	23737834543.34	459150.96	23738293694.30
0.50%	27174.50	0.050%	0.10%	0.002	27056.35	250.801	554047116.8	12396731672234.8	516477.5	234729140.9	54.11	24793463344.47	469458.28	24793932802.75
0.25%	27529.30	0.125%	0.25%	0.005	27351.90	253.541	576515420.8	13040364232554.1	529990.0	240870342.8	136.76	65201821162.77	1204351.71	65203025514.48
0.10%	27648.60	0.075%	0.15%	0.003	27588.95	255.738	595009172.5	13575321583179.2	540974.4	245862501.3	82.77	40725964749.54	737587.50	40726702337.04
0.05%	27650.80	0.025%	0.05%	0.001	27649.70	256.301	599817214.7	13715152560205.4	543810.4	247151425.2	27.65	13715152560.21	247151.43	13715399711.63
0.01%														
0.005%														
0.001%														
										Storm Totals:	3,867.5 (cfs) 7,671.1 (acre-ft)	446532966605 (tons/storm)	13221760.4 (tons/storm)	446546188365.3 (tons/storm)

50.000% 100.000% 2.00

.

JUF470 100 yr 24 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observer		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	107.88	0.071267065	175.296683
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.80													
90.0%	18.90	5.000%	10.000%	0.20	15.35	0.142	0.072	0.52	0.003	0.01	3.1	0.10	0.00	0.11
80.0%	104.80	5.000%	10.000%	0.20	61.85	0.573	0.308	9.01	0.288	0.89	12.4	1.80	0.18	1.98
70.0%	110.10	5.000%	10.00%	0.20	107.45	0.996	0.987	50.21	0.994	3.06	21.5	10.04	0.61	10.65
60.0%	117.30	5.000%	10.00%	0.20	113.70	1.054	1.122	60.38	1.126	3.47	22.7	12.08	0.69	12.77
50.0%	130.50	5.000%	10.00%	0.20	123.90	1.149	1.365	80.07	1.362	4.20	24.8	16.01	0.84	16.85
40.0%	224.80	5.000%	10.00%	0.20	177.65	1.647	3.164	266.05	3.016	9.29	35.5	53.21	1.86	55.07
30.0%	1027.60	5.000%	10.00%	0.20	626.20	5.805	64.517	19121.49	47.948	147.65	125.2	3824.30	29.53	3853.83
20.0%	2231.20	5.000%	10.00%	0.20	1629.40	15.104	645.017	497434.84	390.485	1202.48	325.9	99486.97	240.50	99727.46
10.0%	4379.60	5.000%	10.00%	0.20	3305.40	30.640	3543.385	5543445.68	1841.894	5672.02	661.1	1108689.14	1134.40	1109823.54
5.0%	10141.20	2.500%	5.00%	0.10	7260.40	67.301	23576.759	81018112.20	10343.343	31851.81	726.0	8101811.22	3185.18	8104996.40
4.0%	13048.30	0.500%	1.00%	0.02	11594.75	107.478	72800.3	399514221.7	28872.2	88910.4	231.9	7990284.4	1778.2	7992062.6
3.0%	17150.40	0.500%	1.00%	0.02	15099.35	139.965	137524.7	982825289.2	51522.7	158661.5	302.0	19656505.8	3173.2	19659679.0
2.0%	21685.20	0.500%	1.00%	0.02	19417.80	179.995	252051.5	2316470691.6	89444.7	275440.6	388.4	46329413.8	5508.8	46334922.6
1.50%	23684.20	0.250%	0.50%	0.01	22684.70	210.278	366557.9	3935619127.1	125790.5	387365.7	226.8	39356191.3	3873.7	39360064.9
1.00%	25826.20	0.250%	0.50%	0.01	24755.20	229.470	452381.8	5300404810.4	152346.4	469143.0	247.6	53004048.1	4691.4	53008739.5
0.90%	26223.30	0.050%	0.10%	0.00	26024.75	241.238	510291.2	6285532625.4	170005.2	523522.5	52.0	12571065.3	1047.0	12572112.3
0.80%	26379.20	0.050%	0.10%	0.00	26301.25	243.802	523446.9	6516081320.6	173991.2	535797.1	52.6	13032162.6	1071.6	13033234.2
0.70%	26671.50	0.050%	0.10%	0.00	26525.35	245.879	534253.4	6707271858.6	177258.7	545859.2	53.1	13414543.7	1091.7	13415635.4
0.60%	26938.20	0.050%	0.10%	0.00	26804.85	248.470	547912.8	6951239949.2	181380.3	558551.6	53.6	13902479.9	1117.1	13903597.0
0.50%	27174.50	0.050%	0.10%	0.00	27056.35	250.801	560376.5	7176068332.5	185133.1	570108.2	54.1	14352136.7	1140.2	14353276.9
0.25%	27529.30	0.125%	0.25%	0.01	27351.90	253.541	575233.1	7446785791.5	189596.8	583853.7	136.8	37233929.0	2919.3	37236848.2
0.10%	27648.60	0.075%	0.15%	0.00	27588.95	255.738	587313.7	7669071748.6	193218.7	595007.3	82.8	23007215.2	1785.0	23009000.3
0.05%	27650.80	0.025%	0.05%	0.00	27649.70	256.301	590433.4	7726784059.8	194152.9	597884.2	27.6	7726784.1	597.9	7727381.9
0.01%														
0.005%														
0.001%														
									Storm Totals:		3,867.5 (cfs) 7,671.1 (acre-ft)	310890665 (tons/storm)	34389 (tons/storm)	310925054 (tons/storm)

.

Flow Duration Confluence Monument Creek
48 hour, 2 day duration

	2 yr 2 hr	10 yr 2 hr	100 yr 2 hr	100 yr 24 h
1	11.8	11.8	11.8	11.8
0.9	12.5	16.2	33.3	17.6
0.8	12.6	16.7	35.8	104.9
0.7	12.6	17.4	38.7	110.3
0.6	12.8	18.1	42.2	117.6
0.5	12.9	19.1	46.3	131.4
0.4	13.1	20.3	51.5	236.5
0.3	13.4	22	58.7	1082.9
0.2	14.6	26.4	72.9	2314.9
0.1	116.2	236.5	562.4	4553
0.05	695.6	1828.8	5277.5	10565.1
0.04	1014.3	2698.4	8238.1	13690.5
0.03	1465.1	3829	12386.2	17956.9
0.02	1966	5163.1	16329.9	22732.6
0.015	2166.6	5803.7	18394.7	24907.2
0.01	2334	6391.8	20617.5	27063.3
0.009	2360.6	6484.1	21002.2	27411.6
0.008	2374.2	6557.3	21262.7	27676.6
0.007	2385.2	6622.4	21603.1	27995.8
0.006	2390.5	6703.5	21900.7	28261.4
0.005	2392.8	6759.9	22180.4	28477.7
0.0025	2418	6852.2	22670.6	28877.6
0.001	2433.3	6883.3	22821.3	28974.8
0.0005	2434.4	6884.3	22829.9	28984.9
0.0001	#N/A	#N/A	#N/A	#N/A
0.00005	#N/A	#N/A	#N/A	#N/A
0.00001	#N/A	#N/A	#N/A	#N/A

Confluence Monument Creek 2 yr 2 hr Poor Pre Fire

Stream:			Location:									Date:		
Observers:			Gage Station #:					Stream Type:				Valley Type:		

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	#N/A	#N/A	#N/A
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.800	0.025%	0.050%	0.001										
90.0%	12.500	5.000%	10.000%	0.200	12.15	#N/A	#N/A	#N/A	#N/A	#N/A	2.43	#N/A	#N/A	#N/A
80.0%	12.600	5.000%	10.000%	0.200	12.55	#N/A	#N/A	#N/A	#N/A	#N/A	2.51	#N/A	#N/A	#N/A
70.0%	12.600	5.000%	10.00%	0.200	12.60	#N/A	#N/A	#N/A	#N/A	#N/A	2.52	#N/A	#N/A	#N/A
60.0%	12.800	5.000%	10.00%	0.200	12.70	#N/A	#N/A	#N/A	#N/A	#N/A	2.54	#N/A	#N/A	#N/A
50.0%	12.900	5.000%	10.00%	0.200	12.85	#N/A	#N/A	#N/A	#N/A	#N/A	2.57	#N/A	#N/A	#N/A
40.0%	13.100	5.000%	10.00%	0.200	13.00	#N/A	#N/A	#N/A	#N/A	#N/A	2.60	#N/A	#N/A	#N/A
30.0%	13.400	5.000%	10.00%	0.200	13.25	#N/A	#N/A	#N/A	#N/A	#N/A	2.65	#N/A	#N/A	#N/A
20.0%	14.600	5.000%	10.00%	0.200	14.00	#N/A	#N/A	#N/A	#N/A	#N/A	2.80	#N/A	#N/A	#N/A
10.0%	116.200	5.000%	10.00%	0.200	65.40	#N/A	#N/A	#N/A	#N/A	#N/A	13.08	#N/A	#N/A	#N/A
5.0%	695.600	2.500%	5.00%	0.100	405.90	#N/A	#N/A	#N/A	#N/A	#N/A	40.59	#N/A	#N/A	#N/A
4.0%	1014.300	0.500%	1.00%	0.020	854.95	#N/A	#N/A	#N/A	#N/A	#N/A	17.10	#N/A	#N/A	#N/A
3.0%	1465.100	0.500%	1.00%	0.020	1239.70	#N/A	#N/A	#N/A	#N/A	#N/A	24.79	#N/A	#N/A	#N/A
2.0%	1966.000	0.500%	1.00%	0.020	1715.55	#N/A	#N/A	#N/A	#N/A	#N/A	34.31	#N/A	#N/A	#N/A
1.50%	2166.600	0.250%	0.50%	0.010	2066.30	#N/A	#N/A	#N/A	#N/A	#N/A	20.66	#N/A	#N/A	#N/A
1.00%	2334.000	0.250%	0.50%	0.010	2250.30	#N/A	#N/A	#N/A	#N/A	#N/A	22.50	#N/A	#N/A	#N/A
0.90%	2360.600	0.050%	0.10%	0.002	2347.30	#N/A	#N/A	#N/A	#N/A	#N/A	4.69	#N/A	#N/A	#N/A
0.80%	2374.200	0.050%	0.10%	0.002	2367.40	#N/A	#N/A	#N/A	#N/A	#N/A	4.73	#N/A	#N/A	#N/A
0.70%	2385.200	0.050%	0.10%	0.002	2379.70	#N/A	#N/A	#N/A	#N/A	#N/A	4.76	#N/A	#N/A	#N/A
0.60%	2390.500	0.050%	0.10%	0.002	2387.85	#N/A	#N/A	#N/A	#N/A	#N/A	4.78	#N/A	#N/A	#N/A
0.50%	2392.800	0.050%	0.10%	0.002	2391.65	#N/A	#N/A	#N/A	#N/A	#N/A	4.78	#N/A	#N/A	#N/A
0.25%	2418.000	0.125%	0.25%	0.005	2405.40	#N/A	#N/A	#N/A	#N/A	#N/A	12.03	#N/A	#N/A	#N/A
0.10%	2433.300	0.075%	0.15%	0.003	2425.65	#N/A	#N/A	#N/A	#N/A	#N/A	7.28	#N/A	#N/A	#N/A
0.05%	2434.400	0.025%	0.05%	0.001	2433.85	#N/A	#N/A	#N/A	#N/A	#N/A	2.43	#N/A	#N/A	#N/A
0.01%														
0.005%														
0.001%														
		50.000%	100.000%	2.00										
									Storm Totals:		239.1 (cfs) 474.3 (acre-ft)	#N/A (tons/storm)	#N/A (tons/storm)	#N/A (tons/storm)

.

Confluence Monument Creek 2 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observers:		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	#N/A	#N/A	#N/A
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimensionless Streamflow	Dimensionless Suspended Sediment Discharge	Suspended Sediment Discharge	Dimensionless Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.800													
90.0%	12.500	5.000%	10.000%	0.20	12.15	#N/A	#N/A	#N/A	#N/A	#N/A	2.4	#N/A	#N/A	#N/A
80.0%	12.600	5.000%	10.000%	0.20	12.55	#N/A	#N/A	#N/A	#N/A	#N/A	2.5	#N/A	#N/A	#N/A
70.0%	12.600	5.000%	10.00%	0.20	12.60	#N/A	#N/A	#N/A	#N/A	#N/A	2.5	#N/A	#N/A	#N/A
60.0%	12.800	5.000%	10.00%	0.20	12.70	#N/A	#N/A	#N/A	#N/A	#N/A	2.5	#N/A	#N/A	#N/A
50.0%	12.900	5.000%	10.00%	0.20	12.85	#N/A	#N/A	#N/A	#N/A	#N/A	2.6	#N/A	#N/A	#N/A
40.0%	13.100	5.000%	10.00%	0.20	13.00	#N/A	#N/A	#N/A	#N/A	#N/A	2.6	#N/A	#N/A	#N/A
30.0%	13.400	5.000%	10.00%	0.20	13.25	#N/A	#N/A	#N/A	#N/A	#N/A	2.7	#N/A	#N/A	#N/A
20.0%	14.600	5.000%	10.00%	0.20	14.00	#N/A	#N/A	#N/A	#N/A	#N/A	2.8	#N/A	#N/A	#N/A
10.0%	116.200	5.000%	10.00%	0.20	65.40	#N/A	#N/A	#N/A	#N/A	#N/A	13.1	#N/A	#N/A	#N/A
5.0%	695.600	2.500%	5.00%	0.10	405.90	#N/A	#N/A	#N/A	#N/A	#N/A	40.6	#N/A	#N/A	#N/A
4.0%	1014.300	0.500%	1.00%	0.02	854.95	#N/A	#N/A	#N/A	#N/A	#N/A	17.1	#N/A	#N/A	#N/A
3.0%	1465.100	0.500%	1.00%	0.02	1239.70	#N/A	#N/A	#N/A	#N/A	#N/A	24.8	#N/A	#N/A	#N/A
2.0%	1966.000	0.500%	1.00%	0.02	1715.55	#N/A	#N/A	#N/A	#N/A	#N/A	34.3	#N/A	#N/A	#N/A
1.50%	2166.600	0.250%	0.50%	0.01	2066.30	#N/A	#N/A	#N/A	#N/A	#N/A	20.7	#N/A	#N/A	#N/A
1.00%	2334.000	0.250%	0.50%	0.01	2250.30	#N/A	#N/A	#N/A	#N/A	#N/A	22.5	#N/A	#N/A	#N/A
0.90%	2360.600	0.050%	0.10%	0.00	2347.30	#N/A	#N/A	#N/A	#N/A	#N/A	4.7	#N/A	#N/A	#N/A
0.80%	2374.200	0.050%	0.10%	0.00	2367.40	#N/A	#N/A	#N/A	#N/A	#N/A	4.7	#N/A	#N/A	#N/A
0.70%	2385.200	0.050%	0.10%	0.00	2379.70	#N/A	#N/A	#N/A	#N/A	#N/A	4.8	#N/A	#N/A	#N/A
0.60%	2390.500	0.050%	0.10%	0.00	2387.85	#N/A	#N/A	#N/A	#N/A	#N/A	4.8	#N/A	#N/A	#N/A
0.50%	2392.800	0.050%	0.10%	0.00	2391.65	#N/A	#N/A	#N/A	#N/A	#N/A	4.8	#N/A	#N/A	#N/A
0.25%	2418.000	0.125%	0.25%	0.01	2405.40	#N/A	#N/A	#N/A	#N/A	#N/A	12.0	#N/A	#N/A	#N/A
0.10%	2433.300	0.075%	0.15%	0.00	2425.65	#N/A	#N/A	#N/A	#N/A	#N/A	7.3	#N/A	#N/A	#N/A
0.05%	2434.400	0.025%	0.05%	0.00	2433.85	#N/A	#N/A	#N/A	#N/A	#N/A	2.4	#N/A	#N/A	#N/A
0.01%														
0.005%														
0.001%														
									Storm Totals:		239.1 (cfs) 474.3 (acre-ft)	#N/A (tons/storm)	#N/A (tons/storm)	#N/A (tons/storm)

.

Confluence Monument Creek 10 yr 2 hr Poor Pre Fire

Stream:	Location:	Date:
Observers:	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	#N/A	#N/A	#N/A
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.800	0.025%	0.050%	0.001										
90.0%	16.200	5.000%	10.000%	0.200	14.00	#N/A	#N/A	#N/A	#N/A	#N/A	2.80	#N/A	#N/A	#N/A
80.0%	16.700	5.000%	10.000%	0.200	16.45	#N/A	#N/A	#N/A	#N/A	#N/A	3.29	#N/A	#N/A	#N/A
70.0%	17.400	5.000%	10.00%	0.200	17.05	#N/A	#N/A	#N/A	#N/A	#N/A	3.41	#N/A	#N/A	#N/A
60.0%	18.100	5.000%	10.00%	0.200	17.75	#N/A	#N/A	#N/A	#N/A	#N/A	3.55	#N/A	#N/A	#N/A
50.0%	19.100	5.000%	10.00%	0.200	18.60	#N/A	#N/A	#N/A	#N/A	#N/A	3.72	#N/A	#N/A	#N/A
40.0%	20.300	5.000%	10.00%	0.200	19.70	#N/A	#N/A	#N/A	#N/A	#N/A	3.94	#N/A	#N/A	#N/A
30.0%	22.000	5.000%	10.00%	0.200	21.15	#N/A	#N/A	#N/A	#N/A	#N/A	4.23	#N/A	#N/A	#N/A
20.0%	26.400	5.000%	10.00%	0.200	24.20	#N/A	#N/A	#N/A	#N/A	#N/A	4.84	#N/A	#N/A	#N/A
10.0%	236.500	5.000%	10.00%	0.200	131.45	#N/A	#N/A	#N/A	#N/A	#N/A	26.29	#N/A	#N/A	#N/A
5.0%	1828.800	2.500%	5.00%	0.100	1032.65	#N/A	#N/A	#N/A	#N/A	#N/A	103.27	#N/A	#N/A	#N/A
4.0%	2698.400	0.500%	1.00%	0.020	2263.60	#N/A	#N/A	#N/A	#N/A	#N/A	45.27	#N/A	#N/A	#N/A
3.0%	3829.000	0.500%	1.00%	0.020	3263.70	#N/A	#N/A	#N/A	#N/A	#N/A	65.27	#N/A	#N/A	#N/A
2.0%	5163.100	0.500%	1.00%	0.020	4496.05	#N/A	#N/A	#N/A	#N/A	#N/A	89.92	#N/A	#N/A	#N/A
1.50%	5803.700	0.250%	0.50%	0.010	5483.40	#N/A	#N/A	#N/A	#N/A	#N/A	54.83	#N/A	#N/A	#N/A
1.00%	6391.800	0.250%	0.50%	0.010	6097.75	#N/A	#N/A	#N/A	#N/A	#N/A	60.98	#N/A	#N/A	#N/A
0.90%	6484.100	0.050%	0.10%	0.002	6437.95	#N/A	#N/A	#N/A	#N/A	#N/A	12.88	#N/A	#N/A	#N/A
0.80%	6557.300	0.050%	0.10%	0.002	6520.70	#N/A	#N/A	#N/A	#N/A	#N/A	13.04	#N/A	#N/A	#N/A
0.70%	6622.400	0.050%	0.10%	0.002	6589.85	#N/A	#N/A	#N/A	#N/A	#N/A	13.18	#N/A	#N/A	#N/A
0.60%	6703.500	0.050%	0.10%	0.002	6662.95	#N/A	#N/A	#N/A	#N/A	#N/A	13.33	#N/A	#N/A	#N/A
0.50%	6759.900	0.050%	0.10%	0.002	6731.70	#N/A	#N/A	#N/A	#N/A	#N/A	13.46	#N/A	#N/A	#N/A
0.25%	6852.200	0.125%	0.25%	0.005	6806.05	#N/A	#N/A	#N/A	#N/A	#N/A	34.03	#N/A	#N/A	#N/A
0.10%	6883.300	0.075%	0.15%	0.003	6867.75	#N/A	#N/A	#N/A	#N/A	#N/A	20.60	#N/A	#N/A	#N/A
0.05%	6884.300	0.025%	0.05%	0.001	6883.80	#N/A	#N/A	#N/A	#N/A	#N/A	6.88	#N/A	#N/A	#N/A
0.01%														
0.005%														
0.001%														

	50.000%	100.000%	2.00	Storm Totals:	603.0 (cfs) 1,196.1 (acre-ft)	#N/A (tons/storm)	#N/A (tons/storm)	#N/A (tons/storm)

Confluence Monument Creek 10 yr 2 hr Good-Fair Pre Fire

Stream:	Location:	Date:
Observers:	Gage Station #:	Stream Type: Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	#N/A	#N/A	#N/A
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimensionless Streamflow	Dimensionless Suspended Sediment Discharge	Suspended Sediment Discharge	Dimensionless Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.800													
90.0%	16.200	5.000%	10.000%	0.20	14.00	#N/A	#N/A	#N/A	#N/A	#N/A	2.8	#N/A	#N/A	#N/A
80.0%	16.700	5.000%	10.000%	0.20	16.45	#N/A	#N/A	#N/A	#N/A	#N/A	3.3	#N/A	#N/A	#N/A
70.0%	17.400	5.000%	10.00%	0.20	17.05	#N/A	#N/A	#N/A	#N/A	#N/A	3.4	#N/A	#N/A	#N/A
60.0%	18.100	5.000%	10.00%	0.20	17.75	#N/A	#N/A	#N/A	#N/A	#N/A	3.6	#N/A	#N/A	#N/A
50.0%	19.100	5.000%	10.00%	0.20	18.60	#N/A	#N/A	#N/A	#N/A	#N/A	3.7	#N/A	#N/A	#N/A
40.0%	20.300	5.000%	10.00%	0.20	19.70	#N/A	#N/A	#N/A	#N/A	#N/A	3.9	#N/A	#N/A	#N/A
30.0%	22.000	5.000%	10.00%	0.20	21.15	#N/A	#N/A	#N/A	#N/A	#N/A	4.2	#N/A	#N/A	#N/A
20.0%	26.400	5.000%	10.00%	0.20	24.20	#N/A	#N/A	#N/A	#N/A	#N/A	4.8	#N/A	#N/A	#N/A
10.0%	236.500	5.000%	10.00%	0.20	131.45	#N/A	#N/A	#N/A	#N/A	#N/A	26.3	#N/A	#N/A	#N/A
5.0%	1828.800	2.500%	5.00%	0.10	1032.65	#N/A	#N/A	#N/A	#N/A	#N/A	103.3	#N/A	#N/A	#N/A
4.0%	2698.400	0.500%	1.00%	0.02	2263.60	#N/A	#N/A	#N/A	#N/A	#N/A	45.3	#N/A	#N/A	#N/A
3.0%	3829.000	0.500%	1.00%	0.02	3263.70	#N/A	#N/A	#N/A	#N/A	#N/A	65.3	#N/A	#N/A	#N/A
2.0%	5163.100	0.500%	1.00%	0.02	4496.05	#N/A	#N/A	#N/A	#N/A	#N/A	89.9	#N/A	#N/A	#N/A
1.50%	5803.700	0.250%	0.50%	0.01	5483.40	#N/A	#N/A	#N/A	#N/A	#N/A	54.8	#N/A	#N/A	#N/A
1.00%	6391.800	0.250%	0.50%	0.01	6097.75	#N/A	#N/A	#N/A	#N/A	#N/A	61.0	#N/A	#N/A	#N/A
0.90%	6484.100	0.050%	0.10%	0.00	6437.95	#N/A	#N/A	#N/A	#N/A	#N/A	12.9	#N/A	#N/A	#N/A
0.80%	6557.300	0.050%	0.10%	0.00	6520.70	#N/A	#N/A	#N/A	#N/A	#N/A	13.0	#N/A	#N/A	#N/A
0.70%	6622.400	0.050%	0.10%	0.00	6589.85	#N/A	#N/A	#N/A	#N/A	#N/A	13.2	#N/A	#N/A	#N/A
0.60%	6703.500	0.050%	0.10%	0.00	6662.95	#N/A	#N/A	#N/A	#N/A	#N/A	13.3	#N/A	#N/A	#N/A
0.50%	6759.900	0.050%	0.10%	0.00	6731.70	#N/A	#N/A	#N/A	#N/A	#N/A	13.5	#N/A	#N/A	#N/A
0.25%	6852.200	0.125%	0.25%	0.01	6806.05	#N/A	#N/A	#N/A	#N/A	#N/A	34.0	#N/A	#N/A	#N/A
0.10%	6883.300	0.075%	0.15%	0.00	6867.75	#N/A	#N/A	#N/A	#N/A	#N/A	20.6	#N/A	#N/A	#N/A
0.05%	6884.300	0.025%	0.05%	0.00	6883.80	#N/A	#N/A	#N/A	#N/A	#N/A	6.9	#N/A	#N/A	#N/A
0.01%														
0.005%														
0.001%														
									Storm Totals:		603.0 (cfs) 1,196.1 (acre-ft)	#N/A (tons/storm)	#N/A (tons/storm)	#N/A (tons/storm)

.

Confluence Monument Creek 100 yr 2 hr Poor Pre Fire

Stream:			Location:									Date:		
Observers:			Gage Station #:					Stream Type:				Valley Type:		

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	#N/A	#N/A	#N/A
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.800	0.025%	0.050%	0.001										
90.0%	33.300	5.000%	10.000%	0.200	22.55	#N/A	#N/A	#N/A	#N/A	#N/A	4.51	#N/A	#N/A	#N/A
80.0%	35.800	5.000%	10.000%	0.200	34.55	#N/A	#N/A	#N/A	#N/A	#N/A	6.91	#N/A	#N/A	#N/A
70.0%	38.700	5.000%	10.00%	0.200	37.25	#N/A	#N/A	#N/A	#N/A	#N/A	7.45	#N/A	#N/A	#N/A
60.0%	42.200	5.000%	10.00%	0.200	40.45	#N/A	#N/A	#N/A	#N/A	#N/A	8.09	#N/A	#N/A	#N/A
50.0%	46.300	5.000%	10.00%	0.200	44.25	#N/A	#N/A	#N/A	#N/A	#N/A	8.85	#N/A	#N/A	#N/A
40.0%	51.500	5.000%	10.00%	0.200	48.90	#N/A	#N/A	#N/A	#N/A	#N/A	9.78	#N/A	#N/A	#N/A
30.0%	58.700	5.000%	10.00%	0.200	55.10	#N/A	#N/A	#N/A	#N/A	#N/A	11.02	#N/A	#N/A	#N/A
20.0%	72.900	5.000%	10.00%	0.200	65.80	#N/A	#N/A	#N/A	#N/A	#N/A	13.16	#N/A	#N/A	#N/A
10.0%	562.400	5.000%	10.00%	0.200	317.65	#N/A	#N/A	#N/A	#N/A	#N/A	63.53	#N/A	#N/A	#N/A
5.0%	5277.500	2.500%	5.00%	0.100	2919.95	#N/A	#N/A	#N/A	#N/A	#N/A	292.00	#N/A	#N/A	#N/A
4.0%	8238.100	0.500%	1.00%	0.020	6757.80	#N/A	#N/A	#N/A	#N/A	#N/A	135.16	#N/A	#N/A	#N/A
3.0%	12386.200	0.500%	1.00%	0.020	10312.15	#N/A	#N/A	#N/A	#N/A	#N/A	206.24	#N/A	#N/A	#N/A
2.0%	16329.900	0.500%	1.00%	0.020	14358.05	#N/A	#N/A	#N/A	#N/A	#N/A	287.16	#N/A	#N/A	#N/A
1.50%	18394.700	0.250%	0.50%	0.010	17362.30	#N/A	#N/A	#N/A	#N/A	#N/A	173.62	#N/A	#N/A	#N/A
1.00%	20617.500	0.250%	0.50%	0.010	19506.10	#N/A	#N/A	#N/A	#N/A	#N/A	195.06	#N/A	#N/A	#N/A
0.90%	21002.200	0.050%	0.10%	0.002	20809.85	#N/A	#N/A	#N/A	#N/A	#N/A	41.62	#N/A	#N/A	#N/A
0.80%	21262.700	0.050%	0.10%	0.002	21132.45	#N/A	#N/A	#N/A	#N/A	#N/A	42.26	#N/A	#N/A	#N/A
0.70%	21603.100	0.050%	0.10%	0.002	21432.90	#N/A	#N/A	#N/A	#N/A	#N/A	42.87	#N/A	#N/A	#N/A
0.60%	21900.700	0.050%	0.10%	0.002	21751.90	#N/A	#N/A	#N/A	#N/A	#N/A	43.50	#N/A	#N/A	#N/A
0.50%	22180.400	0.050%	0.10%	0.002	22040.55	#N/A	#N/A	#N/A	#N/A	#N/A	44.08	#N/A	#N/A	#N/A
0.25%	22670.600	0.125%	0.25%	0.005	22425.50	#N/A	#N/A	#N/A	#N/A	#N/A	112.13	#N/A	#N/A	#N/A
0.10%	22821.300	0.075%	0.15%	0.003	22745.95	#N/A	#N/A	#N/A	#N/A	#N/A	68.24	#N/A	#N/A	#N/A
0.05%	22829.900	0.025%	0.05%	0.001	22825.60	#N/A	#N/A	#N/A	#N/A	#N/A	22.83	#N/A	#N/A	#N/A
0.01%														
0.005%														
0.001%														

		50.000%	100.000%	2.00							Storm Totals:	1,840.1 (cfs) / 3,649.8 (acre-ft)	#N/A (tons/storm)	#N/A (tons/storm)	#N/A (tons/storm)

.

Confluence Monument Creek 100 yr 2 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observers:	Gage Station #:		Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	#N/A	#N/A	#N/A
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimensionless Streamflow	Dimensionless Suspended Sediment Discharge	Suspended Sediment Discharge	Dimensionless Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.800													
90.0%	33.300	5.000%	10.000%	0.20	22.55	#N/A	#N/A	#N/A	#N/A	#N/A	4.5	#N/A	#N/A	#N/A
80.0%	35.800	5.000%	10.000%	0.20	34.55	#N/A	#N/A	#N/A	#N/A	#N/A	6.9	#N/A	#N/A	#N/A
70.0%	38.700	5.000%	10.00%	0.20	37.25	#N/A	#N/A	#N/A	#N/A	#N/A	7.5	#N/A	#N/A	#N/A
60.0%	42.200	5.000%	10.00%	0.20	40.45	#N/A	#N/A	#N/A	#N/A	#N/A	8.1	#N/A	#N/A	#N/A
50.0%	46.300	5.000%	10.00%	0.20	44.25	#N/A	#N/A	#N/A	#N/A	#N/A	8.9	#N/A	#N/A	#N/A
40.0%	51.500	5.000%	10.00%	0.20	48.90	#N/A	#N/A	#N/A	#N/A	#N/A	9.8	#N/A	#N/A	#N/A
30.0%	58.700	5.000%	10.00%	0.20	55.10	#N/A	#N/A	#N/A	#N/A	#N/A	11.0	#N/A	#N/A	#N/A
20.0%	72.900	5.000%	10.00%	0.20	65.80	#N/A	#N/A	#N/A	#N/A	#N/A	13.2	#N/A	#N/A	#N/A
10.0%	562.400	5.000%	10.00%	0.20	317.65	#N/A	#N/A	#N/A	#N/A	#N/A	63.5	#N/A	#N/A	#N/A
5.0%	5277.500	2.500%	5.00%	0.10	2919.95	#N/A	#N/A	#N/A	#N/A	#N/A	292.0	#N/A	#N/A	#N/A
4.0%	8238.100	0.500%	1.00%	0.02	6757.80	#N/A	#N/A	#N/A	#N/A	#N/A	135.2	#N/A	#N/A	#N/A
3.0%	12386.200	0.500%	1.00%	0.02	10312.15	#N/A	#N/A	#N/A	#N/A	#N/A	206.2	#N/A	#N/A	#N/A
2.0%	16329.900	0.500%	1.00%	0.02	14358.05	#N/A	#N/A	#N/A	#N/A	#N/A	287.2	#N/A	#N/A	#N/A
1.50%	18394.700	0.250%	0.50%	0.01	17362.30	#N/A	#N/A	#N/A	#N/A	#N/A	173.6	#N/A	#N/A	#N/A
1.00%	20617.500	0.250%	0.50%	0.01	19506.10	#N/A	#N/A	#N/A	#N/A	#N/A	195.1	#N/A	#N/A	#N/A
0.90%	21002.200	0.050%	0.10%	0.00	20809.85	#N/A	#N/A	#N/A	#N/A	#N/A	41.6	#N/A	#N/A	#N/A
0.80%	21262.700	0.050%	0.10%	0.00	21132.45	#N/A	#N/A	#N/A	#N/A	#N/A	42.3	#N/A	#N/A	#N/A
0.70%	21603.100	0.050%	0.10%	0.00	21432.90	#N/A	#N/A	#N/A	#N/A	#N/A	42.9	#N/A	#N/A	#N/A
0.60%	21900.700	0.050%	0.10%	0.00	21751.90	#N/A	#N/A	#N/A	#N/A	#N/A	43.5	#N/A	#N/A	#N/A
0.50%	22180.400	0.050%	0.10%	0.00	22040.55	#N/A	#N/A	#N/A	#N/A	#N/A	44.1	#N/A	#N/A	#N/A
0.25%	22670.600	0.125%	0.25%	0.01	22425.50	#N/A	#N/A	#N/A	#N/A	#N/A	112.1	#N/A	#N/A	#N/A
0.10%	22821.300	0.075%	0.15%	0.00	22745.95	#N/A	#N/A	#N/A	#N/A	#N/A	68.2	#N/A	#N/A	#N/A
0.05%	22829.900	0.025%	0.05%	0.00	22825.60	#N/A	#N/A	#N/A	#N/A	#N/A	22.8	#N/A	#N/A	#N/A
0.01%														
0.005%														
0.001%														
									Storm Totals:		1,840.1 (cfs) 3,649.8 (acre-ft)	#N/A (tons/storm)	#N/A (tons/storm)	#N/A (tons/storm)

.

Confluence Monument Creek 100 yr 24 hr Poor Pre Fire

Stream:		Location:		Date:
Observers:		Gage Station #:	Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Poor" Pagosa	y = 0.0718+1.0218x2.3772	#N/A	#N/A	#N/A
2. Suspended Sediment	"Poor" Pagosa	y = 0.0989+0.9213x3.659			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (2 days)	Mid-Ordinate Streamflow	Dimension-less Streamflow	Dimension-less Suspended Sediment Discharge	Suspended Sediment Discharge	Dimension-less Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow [(5)×(6)]	Suspended Sediment [(5)×(9)]	Bedload Sediment [(5)×(11)]	Suspended + Bedload Sediment [(13)+(14)]
(%)	(cfs)	(%)	(%)	(48 hours)	(cfs)	(Q/Qbkf)	(S/Sbkf)	(tons/day)	(bs/bbkf)	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.80	0.025%	0.050%	0.001										
90.0%	17.60	5.000%	10.000%	0.200	14.70	#N/A	#N/A	#N/A	#N/A	#N/A	2.94	#N/A	#N/A	#N/A
80.0%	104.90	5.000%	10.000%	0.200	61.25	#N/A	#N/A	#N/A	#N/A	#N/A	12.25	#N/A	#N/A	#N/A
70.0%	110.30	5.000%	10.00%	0.200	107.60	#N/A	#N/A	#N/A	#N/A	#N/A	21.52	#N/A	#N/A	#N/A
60.0%	117.60	5.000%	10.00%	0.200	113.95	#N/A	#N/A	#N/A	#N/A	#N/A	22.79	#N/A	#N/A	#N/A
50.0%	131.40	5.000%	10.00%	0.200	124.50	#N/A	#N/A	#N/A	#N/A	#N/A	24.90	#N/A	#N/A	#N/A
40.0%	236.50	5.000%	10.00%	0.200	183.95	#N/A	#N/A	#N/A	#N/A	#N/A	36.79	#N/A	#N/A	#N/A
30.0%	1082.90	5.000%	10.00%	0.200	659.70	#N/A	#N/A	#N/A	#N/A	#N/A	131.94	#N/A	#N/A	#N/A
20.0%	2314.90	5.000%	10.00%	0.200	1698.90	#N/A	#N/A	#N/A	#N/A	#N/A	339.78	#N/A	#N/A	#N/A
10.0%	4553.00	5.000%	10.00%	0.200	3433.95	#N/A	#N/A	#N/A	#N/A	#N/A	686.79	#N/A	#N/A	#N/A
5.0%	10565.10	2.500%	5.00%	0.100	7559.05	#N/A	#N/A	#N/A	#N/A	#N/A	755.91	#N/A	#N/A	#N/A
4.0%	13690.50	0.500%	1.00%	0.020	12127.80	#N/A	#N/A	#N/A	#N/A	#N/A	242.56	#N/A	#N/A	#N/A
3.0%	17956.90	0.500%	1.00%	0.020	15823.70	#N/A	#N/A	#N/A	#N/A	#N/A	316.47	#N/A	#N/A	#N/A
2.0%	22732.60	0.500%	1.00%	0.020	20344.75	#N/A	#N/A	#N/A	#N/A	#N/A	406.90	#N/A	#N/A	#N/A
1.50%	24907.20	0.250%	0.50%	0.010	23819.90	#N/A	#N/A	#N/A	#N/A	#N/A	238.20	#N/A	#N/A	#N/A
1.00%	27063.30	0.250%	0.50%	0.010	25985.25	#N/A	#N/A	#N/A	#N/A	#N/A	259.85	#N/A	#N/A	#N/A
0.90%	27411.60	0.050%	0.10%	0.002	27237.45	#N/A	#N/A	#N/A	#N/A	#N/A	54.47	#N/A	#N/A	#N/A
0.80%	27676.60	0.050%	0.10%	0.002	27544.10	#N/A	#N/A	#N/A	#N/A	#N/A	55.09	#N/A	#N/A	#N/A
0.70%	27995.80	0.050%	0.10%	0.002	27836.20	#N/A	#N/A	#N/A	#N/A	#N/A	55.67	#N/A	#N/A	#N/A
0.60%	28261.40	0.050%	0.10%	0.002	28128.60	#N/A	#N/A	#N/A	#N/A	#N/A	56.26	#N/A	#N/A	#N/A
0.50%	28477.70	0.050%	0.10%	0.002	28369.55	#N/A	#N/A	#N/A	#N/A	#N/A	56.74	#N/A	#N/A	#N/A
0.25%	28877.60	0.125%	0.25%	0.005	28677.65	#N/A	#N/A	#N/A	#N/A	#N/A	143.39	#N/A	#N/A	#N/A
0.10%	28974.80	0.075%	0.15%	0.003	28926.20	#N/A	#N/A	#N/A	#N/A	#N/A	86.78	#N/A	#N/A	#N/A
0.05%	28984.90	0.025%	0.05%	0.001	28979.85	#N/A	#N/A	#N/A	#N/A	#N/A	28.98	#N/A	#N/A	#N/A
0.01%														
0.005%														
0.001%														

		50.000%	100.000%	2.00							Storm Totals:	4,037.0 (cfs) / 8,007.3 (acre-ft)	#N/A (tons/storm)	#N/A (tons/storm)	#N/A (tons/storm)

.

Confluence Monument Creek 100 yr 24 hr Good-Fair Pre Fire

Stream:		Location:		Date:
Observers:	Gage Station #:		Stream Type:	Valley Type:

Equation Type	Equation Source	Equation	Bankfull Discharge (cfs)	Bankfull Bedload Sediment (lbs/s)	Bankfull Suspended Sediment (mg/l)
1. Bedload Sediment	"Good/Fair" Pagosa	$y = -0.0113+1.0139x^{2.1929}$	#N/A	#N/A	#N/A
2. Suspended Sediment	"Good/Fair" Pagosa	$y = 0.0636+0.9326x^{2.4085}$			

From Dimensional Flow-Duration Curve							From Sediment Rating Curves				Calculate	Calculate Sediment Yield		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Percentage of Time	Daily Mean Discharge	Mid-Ordinate	Time Increment (percent)	Time Increment (days)	Mid-Ordinate Streamflow	Dimensionless Streamflow	Dimensionless Suspended Sediment Discharge	Suspended Sediment Discharge	Dimensionless Bedload Discharge	Bedload Sediment Discharge	Time Adjusted Streamflow **[(5)×(6)]**	Suspended Sediment **[(5)×(9)]**	Bedload Sediment **[(5)×(11)]**	Suspended + Bedload Sediment **[(13)+(14)]**
(%)	(cfs)	(%)	(%)	(days)	(cfs)	(Q/Q_{bkf})	(S/S_{bkf})	(tons/day)	(b_s/b_{bkf})	(tons/day)	(cfs)	(tons)	(tons)	(tons)
100.0%	11.80													
90.0%	17.60	5.000%	10.000%	0.20	14.70	#N/A	#N/A	#N/A	#N/A	#N/A	2.9	#N/A	#N/A	#N/A
80.0%	104.90	5.000%	10.000%	0.20	61.25	#N/A	#N/A	#N/A	#N/A	#N/A	12.3	#N/A	#N/A	#N/A
70.0%	110.30	5.000%	10.00%	0.20	107.60	#N/A	#N/A	#N/A	#N/A	#N/A	21.5	#N/A	#N/A	#N/A
60.0%	117.60	5.000%	10.00%	0.20	113.95	#N/A	#N/A	#N/A	#N/A	#N/A	22.8	#N/A	#N/A	#N/A
50.0%	131.40	5.000%	10.00%	0.20	124.50	#N/A	#N/A	#N/A	#N/A	#N/A	24.9	#N/A	#N/A	#N/A
40.0%	236.50	5.000%	10.00%	0.20	183.95	#N/A	#N/A	#N/A	#N/A	#N/A	36.8	#N/A	#N/A	#N/A
30.0%	1082.90	5.000%	10.00%	0.20	659.70	#N/A	#N/A	#N/A	#N/A	#N/A	131.9	#N/A	#N/A	#N/A
20.0%	2314.90	5.000%	10.00%	0.20	1698.90	#N/A	#N/A	#N/A	#N/A	#N/A	339.8	#N/A	#N/A	#N/A
10.0%	4553.00	5.000%	10.00%	0.20	3433.95	#N/A	#N/A	#N/A	#N/A	#N/A	686.8	#N/A	#N/A	#N/A
5.0%	10565.10	2.500%	5.00%	0.10	7559.05	#N/A	#N/A	#N/A	#N/A	#N/A	755.9	#N/A	#N/A	#N/A
4.0%	13690.50	0.500%	1.00%	0.02	12127.80	#N/A	#N/A	#N/A	#N/A	#N/A	242.6	#N/A	#N/A	#N/A
3.0%	17956.90	0.500%	1.00%	0.02	15823.70	#N/A	#N/A	#N/A	#N/A	#N/A	316.5	#N/A	#N/A	#N/A
2.0%	22732.60	0.500%	1.00%	0.02	20344.75	#N/A	#N/A	#N/A	#N/A	#N/A	406.9	#N/A	#N/A	#N/A
1.50%	24907.20	0.250%	0.50%	0.01	23819.90	#N/A	#N/A	#N/A	#N/A	#N/A	238.2	#N/A	#N/A	#N/A
1.00%	27063.30	0.250%	0.50%	0.01	25985.25	#N/A	#N/A	#N/A	#N/A	#N/A	259.9	#N/A	#N/A	#N/A
0.90%	27411.60	0.050%	0.10%	0.00	27237.45	#N/A	#N/A	#N/A	#N/A	#N/A	54.5	#N/A	#N/A	#N/A
0.80%	27676.60	0.050%	0.10%	0.00	27544.10	#N/A	#N/A	#N/A	#N/A	#N/A	55.1	#N/A	#N/A	#N/A
0.70%	27995.80	0.050%	0.10%	0.00	27836.20	#N/A	#N/A	#N/A	#N/A	#N/A	55.7	#N/A	#N/A	#N/A
0.60%	28261.40	0.050%	0.10%	0.00	28128.60	#N/A	#N/A	#N/A	#N/A	#N/A	56.3	#N/A	#N/A	#N/A
0.50%	28477.70	0.050%	0.10%	0.00	28369.55	#N/A	#N/A	#N/A	#N/A	#N/A	56.7	#N/A	#N/A	#N/A
0.25%	28877.60	0.125%	0.25%	0.01	28677.65	#N/A	#N/A	#N/A	#N/A	#N/A	143.4	#N/A	#N/A	#N/A
0.10%	28974.80	0.075%	0.15%	0.00	28926.20	#N/A	#N/A	#N/A	#N/A	#N/A	86.8	#N/A	#N/A	#N/A
0.05%	28984.90	0.025%	0.05%	0.00	28979.85	#N/A	#N/A	#N/A	#N/A	#N/A	29.0	#N/A	#N/A	#N/A
0.01%														
0.005%														
0.001%														
									Storm Totals:		4,037.0 (cfs) 8,007.3 (acre-ft)	#N/A (tons/storm)	#N/A (tons/storm)	#N/A (tons/storm)

.