APPENDIX F - SEDIMENT TOTAL MAXIMUM DAILY LOAD ESTIMATES

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F1.0 INTRODUCTION

The approaches used to estimate sediment loading from bank erosion, roads, and upland sources each use a modeling framework that estimates annual loads (BEHI, WEPP, and USLE respectively; **Appendices B-D**). The preferred approach for calculating daily sediment loads is to use a nearby water quality gage with a long-term dataset for flow and suspended sediment, and to distribute the annual loads estimated from these other methods over the course of a year based on the discharge-total suspended sediment relationship.

The only current stream gauges in the Madison TPA are on the Madison River, which is largely affected by a series of impoundments. Further, the impaired subwatersheds are much smaller in area than the Madison River gauge at West Yellowstone, which is above most of these impoundments. Therefore, an approach was used whereby the daily discharge near the mouth of Jack Creek was estimated using a relationship between the West Yellowstone Gauge (06037500) and a now discontinued gauge on Jack Creek (06040300) during the time period when both gauges were operational: 1983-1984 (**Figure F-1**). A stream flow-total suspended sediment relationship was developed using flow and total suspended solids data collected for Cherry and Jack Creek by Montana DEQ in multiple seasons during 1976-1977; this relationship was similar for both creeks (**Figure F-2**). This allowed for a prediction of the proportion of annual sediment load leaving Jack Creek as total suspended solids on any given day according to the calculations described in the following section.

This daily proportion was multiplied by the annual load estimated for each watershed estimated from the sources assessment in the Madison TPA to obtain a daily load. It was assumed that the relationship between flow and the relative amount of suspended throughout the year has not changed from the 1976-1977 time period, even though the total sediment load may have changed. In addition, in order to estimate Total Maximum Daily Loads it was assumed that the effects of discharge on the proportion of the sediment load are relatively the same across the subwatersheds.

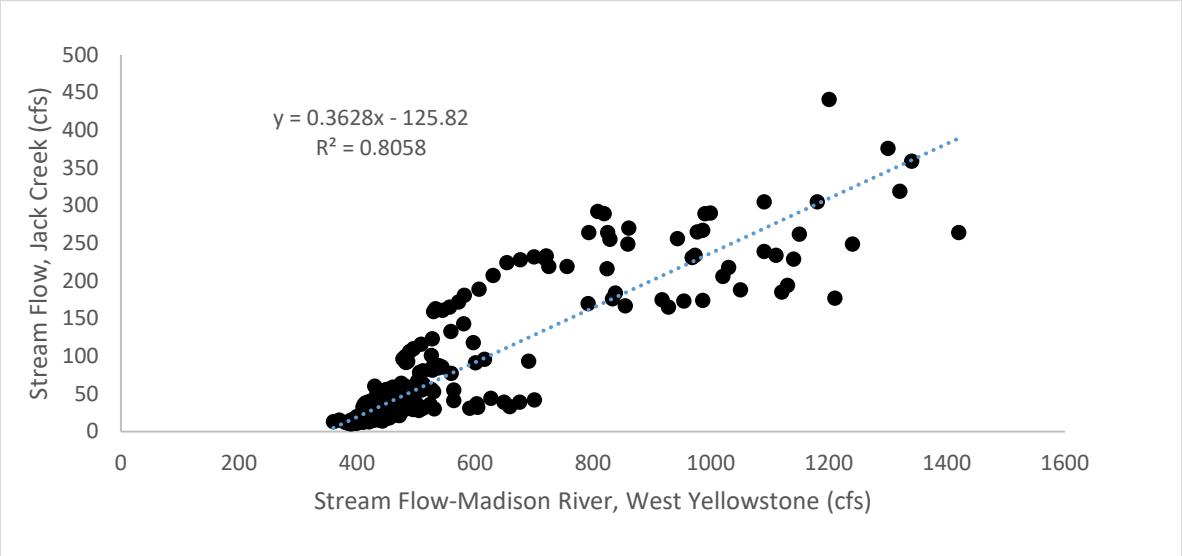

Figure F-1. Relationship between daily mean stream flow at Madison River, West Yellowstone Gauge and Jack Creek gauge (1983-1984)

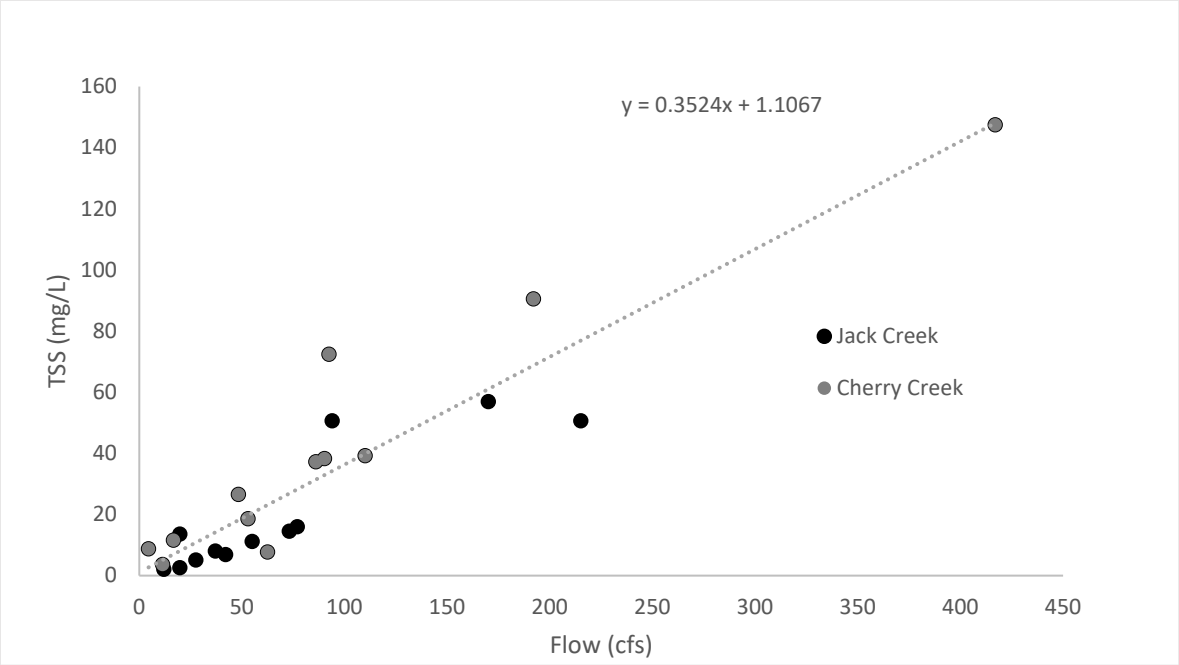

Figure F-2. Relationship between measured stream flow at Cherry Creek and Jack Creek and TSS during field surveys by Montana DEQ in 1976 and 1977

F2.0 CALCULATIONS

1. Estimate Jack Creek Daily Mean Flow (using relationship from 1983-1984 data (Figure F-1) and average daily streamflow statistics for West Yellowstone gauge):

   Daily Mean Stream Flow-Jack Creek (cfs) = 0.3628 * (Daily Average Mean Stream Flow at West Yellowstone River (cfs))-125.82

2. Estimate Daily TSS concentration of Jack Creek using discharge-TSS relationship from 1976-1977 data (Figure F-2):

   TSS Jack Creek (mg/L) =0.3524 * Streamflow (cfs) + 1.11

3. Estimate Daily TSS Load of Jack Creek by multiplying result of step 1 (Daily Mean Stream Flow) by result of step 2 for each day (Estimate daily TSS concentration), and converting to tons per day:

   Daily TSS Load (Jack Creek) (tons) = (Daily Mean Stream Flow (cfs) * 28.32 L/cf * 86400 s/day) * TSS concentration Jack Creek (mg/L)* 1 ton/100000000 mg

4. Divide the total TSS load estimated for each day by the sum of the TSS load across all days to obtain daily load proportion for Jack Creek:

   Daily Load Proportion (Jack Creek) = Daily TSS Load (Tons)/Annual TSS Load (Tons)

5. To determine daily loads for another subwatershed, multiply the estimated combined load from roads, upland sources, and bank erosion by the daily proportion estimated for Jack Creek, assuming the relative proportions are similar:
6. Daily Load =Annual $Load_{Roads+Bank\ Erosion\ +\ Upland}$ (Tons) * Daily Load Proportion

Table F-1. Historical data collected at Jack Creek was used to estimate the proportion of sediment load for each day of the year for a typical subwatershed in the Madison TPA

Day of Year	Flow *Madison River* cfs	Estimated Flow *Jack Creek* cfs	Estimated TSS *Jack Creek* (mg/L)	Daily Water Volume *Jack Creek* (Liters per Day)	Daily Sediment Load *Jack Creek* (mg per Day)	Daily Sediment Load *Jack Creek* (Tons per Day)	Daily Load Proportion *Jack Creek* (Proportion of Annual)
1/1	408	22.2024	8.9	54325898	485175130	0.5	0.00024
1/2	408	22.2024	8.9	54325898	485175130	0.5	0.00024
1/3	414	24.3792	9.7	59652197	578502833	0.6	0.00029
1/4	405	21.114	8.5	51662749	441575648	0.4	0.00022
1/5	406	21.4768	8.7	52550465	455881818	0.5	0.00023
1/6	405	21.114	8.5	51662749	441575648	0.4	0.00022
1/7	407	21.8396	8.8	53438182	470414979	0.5	0.00023
1/8	410	22.928	9.2	56101331	515376403	0.5	0.00026
1/9	406	21.4768	8.7	52550465	455881818	0.5	0.00023
1/10	404	20.7512	8.4	50775032	427496468	0.4	0.00021
1/11	403	20.3884	8.3	49887316	413644279	0.4	0.00021
1/12	398	18.5744	7.7	45448733	347788187	0.3	0.00017
1/13	399	18.9372	7.8	46336450	360505424	0.4	0.00018
1/14	401	19.6628	8.0	48111883	386620871	0.4	0.00019
1/15	403	20.3884	8.3	49887316	413644279	0.4	0.00021
1/16	402	20.0256	8.2	48999599	400019079	0.4	0.00020
1/17	402	20.0256	8.2	48999599	400019079	0.4	0.00020
1/18	401	19.6628	8.0	48111883	386620871	0.4	0.00019
1/19	401	19.6628	8.0	48111883	386620871	0.4	0.00019
1/20	401	19.6628	8.0	48111883	386620871	0.4	0.00019
1/21	401	19.6628	8.0	48111883	386620871	0.4	0.00019
1/22	401	19.6628	8.0	48111883	386620871	0.4	0.00019
1/23	402	20.0256	8.2	48999599	400019079	0.4	0.00020
1/24	401	19.6628	8.0	48111883	386620871	0.4	0.00019
1/25	402	20.0256	8.2	48999599	400019079	0.4	0.00020
1/26	400	19.3	7.9	47224166	373449652	0.4	0.00019
1/27	399	18.9372	7.8	46336450	360505424	0.4	0.00018
1/28	400	19.3	7.9	47224166	373449652	0.4	0.00019
1/29	397	18.2116	7.5	44561017	335297940	0.3	0.00017
1/30	397	18.2116	7.5	44561017	335297940	0.3	0.00017

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1/31	397	18.2116	7.5	44561017	335297940	0.3	0.00017
2/1	398	18.5744	7.7	45448733	347788187	0.3	0.00017
2/2	397	18.2116	7.5	44561017	335297940	0.3	0.00017
2/3	398	18.5744	7.7	45448733	347788187	0.3	0.00017
2/4	399	18.9372	7.8	46336450	360505424	0.4	0.00018
2/5	400	19.3	7.9	47224166	373449652	0.4	0.00019
2/6	399	18.9372	7.8	46336450	360505424	0.4	0.00018
2/7	398	18.5744	7.7	45448733	347788187	0.3	0.00017
2/8	397	18.2116	7.5	44561017	335297940	0.3	0.00017
2/9	397	18.2116	7.5	44561017	335297940	0.3	0.00017
2/10	399	18.9372	7.8	46336450	360505424	0.4	0.00018
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2/15	398	18.5744	7.7	45448733	347788187	0.3	0.00017
2/16	397	18.2116	7.5	44561017	335297940	0.3	0.00017
2/17	397	18.2116	7.5	44561017	335297940	0.3	0.00017
2/18	398	18.5744	7.7	45448733	347788187	0.3	0.00017
2/19	397	18.2116	7.5	44561017	335297940	0.3	0.00017
2/20	397	18.2116	7.5	44561017	335297940	0.3	0.00017
2/21	398	18.5744	7.7	45448733	347788187	0.3	0.00017
2/22	398	18.5744	7.7	45448733	347788187	0.3	0.00017
2/23	398	18.5744	7.7	45448733	347788187	0.3	0.00017
2/24	397	18.2116	7.5	44561017	335297940	0.3	0.00017
2/25	398	18.5744	7.7	45448733	347788187	0.3	0.00017
2/26	397	18.2116	7.5	44561017	335297940	0.3	0.00017
2/27	397	18.2116	7.5	44561017	335297940	0.3	0.00017
2/28	397	18.2116	7.5	44561017	335297940	0.3	0.00017
2/29	395	17.486	7.3	42785584	310998416	0.3	0.00015
3/1	396	17.8488	7.4	43673301	323034683	0.3	0.00016
3/2	397	18.2116	7.5	44561017	335297940	0.3	0.00017
3/3	398	18.5744	7.7	45448733	347788187	0.3	0.00017
3/4	398	18.5744	7.7	45448733	347788187	0.3	0.00017

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3/6	398	18.5744	7.7	45448733	347788187	0.3	0.00017
3/7	398	18.5744	7.7	45448733	347788187	0.3	0.00017
3/8	400	19.3	7.9	47224166	373449652	0.4	0.00019
3/9	400	19.3	7.9	47224166	373449652	0.4	0.00019
3/10	402	20.0256	8.2	48999599	400019079	0.4	0.00020
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3/13	402	20.0256	8.2	48999599	400019079	0.4	0.00020
3/14	404	20.7512	8.4	50775032	427496468	0.4	0.00021
3/15	404	20.7512	8.4	50775032	427496468	0.4	0.00021
3/16	405	21.114	8.5	51662749	441575648	0.4	0.00022
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3/21	410	22.928	9.2	56101331	515376403	0.5	0.00026
3/22	412	23.6536	9.4	57876764	546485637	0.5	0.00027
3/23	414	24.3792	9.7	59652197	578502833	0.6	0.00029
3/24	413	24.0164	9.6	58764480	562380740	0.6	0.00028
3/25	413	24.0164	9.6	58764480	562380740	0.6	0.00028
3/26	414	24.3792	9.7	59652197	578502833	0.6	0.00029
3/27	414	24.3792	9.7	59652197	578502833	0.6	0.00029
3/28	416	25.1048	10.0	61427630	611427991	0.6	0.00030
3/29	418	25.8304	10.2	63203063	645261110	0.6	0.00032
3/30	417	25.4676	10.1	62315346	628231055	0.6	0.00031
3/31	420	26.556	10.5	64978495	680002191	0.7	0.00034
4/1	424	28.0072	11.0	68529361	752208236	0.8	0.00037
4/2	428	29.4584	11.5	72080227	828046128	0.8	0.00041
4/3	430	30.184	11.7	73855660	867327016	0.9	0.00043
4/4	433	31.2724	12.1	76518809	927950776	0.9	0.00046
4/5	438	33.0864	12.8	80957392	1033530183	1.0	0.00052
4/6	443	34.9004	13.4	85395974	1144784350	1.1	0.00057
4/7	444	35.2632	13.5	86283690	1167716155	1.2	0.00058

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4/8	449	37.0772	14.2	90722273	1285780033	1.3	0.00064
4/9	450	37.44	14.3	91609989	1310073780	1.3	0.00065
4/10	449	37.0772	14.2	90722273	1285780033	1.3	0.00064
4/11	452	38.1656	14.6	93385422	1359342244	1.4	0.00068
4/12	459	40.7052	15.5	99599437	1538932067	1.5	0.00077
4/13	465	42.882	16.2	104925736	1701718826	1.7	0.00085
4/14	476	46.8728	17.6	114690617	2021384817	2.0	0.00101
4/15	482	49.0496	18.4	120016916	2207324594	2.2	0.00110
4/16	487	50.8636	19.0	124455498	2368516643	2.4	0.00118
4/17	497	54.4916	20.3	133332662	2707925021	2.7	0.00135
4/18	508	58.4824	21.7	143097543	3107491624	3.1	0.00155
4/19	516	61.3848	22.7	150199275	3415336786	3.4	0.00170
4/20	523	63.9244	23.6	156413290	3696618297	3.7	0.00184
4/21	534	67.9152	25.0	166178171	4161104148	4.2	0.00207
4/22	543	71.1804	26.2	174167619	4561567159	4.6	0.00227
4/23	559	76.9852	28.2	188371083	5318899477	5.3	0.00265
4/24	558	76.6224	28.1	187483366	5269863780	5.3	0.00263
4/25	560	77.348	28.4	189258799	5368162166	5.4	0.00268
4/26	568	80.2504	29.4	196360531	5770435324	5.8	0.00288
4/27	569	80.6132	29.5	197248247	5821740925	5.8	0.00290
4/28	578	83.8784	30.7	205237695	6293705905	6.3	0.00314
4/29	587	87.1436	31.8	213227143	6784057106	6.8	0.00338
4/30	589	87.8692	32.1	215002576	6895520933	6.9	0.00344
5/1	603	92.9484	33.9	227430607	7701190648	7.7	0.00384
5/2	608	94.7624	34.5	231869189	7999711875	8.0	0.00399
5/3	622	99.8416	36.3	244297219	8865761030	8.9	0.00442
5/4	645	108.186	39.2	264714698	10385140475	10.4	0.00518
5/5	663	114.7164	41.5	280693594	11657979490	11.7	0.00581
5/6	681	121.2468	43.8	296672490	13004363386	13.0	0.00648
5/7	706	130.3168	47.0	318865401	14996348346	15.0	0.00747
5/8	723	136.4844	49.2	333956581	16431933684	16.4	0.00819
5/9	746	144.8288	52.1	354374060	18478611772	18.5	0.00921
5/10	765	151.722	54.6	371240672	20259915004	20.3	0.01010
5/11	773	154.6244	55.6	378342404	21034452378	21.0	0.01048

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5/12	787	159.7036	57.4	390770434	22424849301	22.4	0.01117
5/13	806	166.5968	59.8	407637047	24382978036	24.4	0.01215
5/14	816	170.2248	61.1	416514211	25446485712	25.4	0.01268
5/15	838	178.2064	63.9	436043973	27866103211	27.9	0.01389
5/16	878	192.7184	69.0	471552632	32546875820	32.5	0.01622
5/17	912	205.0536	73.4	501734991	36811086430	36.8	0.01834
5/18	924	209.4072	74.9	512387589	38378751283	38.4	0.01912
5/19	932	212.3096	75.9	519489320	39442020415	39.4	0.01965
5/20	945	217.026	77.6	531029634	41200816941	41.2	0.02053
5/21	961	222.8308	79.6	545233097	43418151356	43.4	0.02164
5/22	970	226.096	80.8	553222545	44690938381	44.7	0.02227
5/23	970	226.096	80.8	553222545	44690938381	44.7	0.02227
5/24	978	228.9984	81.8	560324277	45837739972	45.8	0.02284
5/25	977	228.6356	81.7	559436561	45693595307	45.7	0.02277
5/26	975	227.91	81.4	557661128	45405986948	45.4	0.02263
5/27	976	228.2728	81.6	558548844	45549677632	45.5	0.02270
5/28	981	230.0868	82.2	562987426	46271535909	46.3	0.02306
5/29	991	233.7148	83.5	571864591	47732276743	47.7	0.02379
5/30	977	228.6356	81.7	559436561	45693595307	45.7	0.02277
5/31	961	222.8308	79.6	545233097	43418151356	43.4	0.02164
6/1	953	219.9284	78.6	538131366	42302220457	42.3	0.02108
6/2	953	219.9284	78.6	538131366	42302220457	42.3	0.02108
6/3	939	214.8492	76.8	525703335	40384297901	40.4	0.02012
6/4	930	211.584	75.7	517713887	39174841190	39.2	0.01952
6/5	923	209.0444	74.8	511499872	38246864098	38.2	0.01906
6/6	924	209.4072	74.9	512387589	38378751283	38.4	0.01912
6/7	922	208.6816	74.6	510612156	38115203904	38.1	0.01899
6/8	923	209.0444	74.8	511499872	38246864098	38.2	0.01906
6/9	916	206.5048	73.9	505285857	37330009535	37.3	0.01860
6/10	906	202.8768	72.6	496408692	36039511484	36.0	0.01796
6/11	879	193.0812	69.1	472440348	32668548438	32.7	0.01628
6/12	847	181.4716	65.1	444033422	28887611890	28.9	0.01440
6/13	832	176.0296	63.1	430717675	27195311991	27.2	0.01355
6/14	818	170.9504	61.3	418289644	25661911132	25.7	0.01279

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6/15	810	168.048	60.3	411187913	24805657222	24.8	0.01236
6/16	809	167.6852	60.2	410300196	24699646940	24.7	0.01231
6/17	790	160.792	57.8	393433584	22728579754	22.7	0.01133
6/18	767	152.4476	54.8	373016105	20452187405	20.5	0.01019
6/19	749	145.9172	52.5	357037209	18754422408	18.8	0.00935
6/20	729	138.6612	50.0	339282880	16954273197	17.0	0.00845
6/21	714	133.2192	48.1	325967133	15663746263	15.7	0.00781
6/22	700	128.14	46.3	313539103	14505333504	14.5	0.00723
6/23	685	122.698	44.3	300223356	13313547384	13.3	0.00663
6/24	670	117.256	42.4	286907609	12172834098	12.2	0.00607
6/25	657	112.5396	40.8	275367295	11225528165	11.2	0.00559
6/26	646	108.5488	39.4	265602414	10453924336	10.5	0.00521
6/27	639	106.0092	38.5	259388399	9977204111	10.0	0.00497
6/28	624	100.5672	36.5	246072652	8993114184	9.0	0.00448
6/29	602	92.5856	33.7	226542890	7642167374	7.6	0.00381
6/30	589	87.8692	32.1	215002576	6895520933	6.9	0.00344
7/1	583	85.6924	31.3	209676278	6563853335	6.6	0.00327
7/2	570	80.976	29.6	198135964	5873273517	5.9	0.00293
7/3	564	78.7992	28.9	192809665	5567482822	5.6	0.00277
7/4	551	74.0828	27.2	181269351	4932969626	4.9	0.00246
7/5	541	70.4548	25.9	172392186	4470986446	4.5	0.00223
7/6	537	69.0036	25.4	168841321	4292548905	4.3	0.00214
7/7	525	64.65	23.9	158188723	3779027356	3.8	0.00188
7/8	519	62.4732	23.1	152862424	3534524063	3.5	0.00176
7/9	512	59.9336	22.2	146648409	3259598282	3.3	0.00162
7/10	509	58.8452	21.8	143985260	3145177803	3.1	0.00157
7/11	506	57.7568	21.5	141322111	3032800237	3.0	0.00151
7/12	500	55.58	20.7	135995812	2814173846	2.8	0.00140
7/13	495	53.766	20.1	131557230	2638227422	2.6	0.00131
7/14	485	50.138	18.8	122680065	2303358852	2.3	0.00115
7/15	479	47.9612	18.0	117353766	2113333249	2.1	0.00105
7/16	473	45.7844	17.2	112027468	1931479298	1.9	0.00096
7/17	469	44.3332	16.7	108476602	1814783139	1.8	0.00090
7/18	465	42.882	16.2	104925736	1701718826	1.7	0.00085

Table F-1. Historical data collected at Jack Creek was used to estimate the proportion of sediment load for each day of the year for a typical subwatershed in the Madison TPA

Day of Year	Flow *Madison River* cfs	Estimated Flow *Jack Creek* cfs	Estimated TSS *Jack Creek* (mg/L)	Daily Water Volume *Jack Creek* (Liters per Day)	Daily Sediment Load *Jack Creek* (mg per Day)	Daily Sediment Load *Jack Creek* (Tons per Day)	Daily Load Proportion *Jack Creek* (Proportion of Annual)
7/19	460	41.068	15.6	100487154	1565495718	1.6	0.00078
7/20	460	41.068	15.6	100487154	1565495718	1.6	0.00078
7/21	462	41.7936	15.8	102262587	1619303990	1.6	0.00081
7/22	461	41.4308	15.7	101374870	1592286359	1.6	0.00079
7/23	460	41.068	15.6	100487154	1565495718	1.6	0.00078
7/24	458	40.3424	15.3	98711721	1512595407	1.5	0.00075
7/25	457	39.9796	15.2	97824004	1486485737	1.5	0.00074
7/26	454	38.8912	14.8	95160855	1409518670	1.4	0.00070
7/27	451	37.8028	14.4	92497706	1334594517	1.3	0.00067
7/28	450	37.44	14.3	91609989	1310073780	1.3	0.00065
7/29	452	38.1656	14.6	93385422	1359342244	1.4	0.00068
7/30	456	39.6168	15.1	96936288	1460603058	1.5	0.00073
7/31	450	37.44	14.3	91609989	1310073780	1.3	0.00065
8/1	448	36.7144	14.0	89834556	1261713276	1.3	0.00063
8/2	444	35.2632	13.5	86283690	1167716155	1.2	0.00058
8/3	442	34.5376	13.3	84508257	1122079536	1.1	0.00056
8/4	442	34.5376	13.3	84508257	1122079536	1.1	0.00056
8/5	441	34.1748	13.1	83620541	1099601712	1.1	0.00055
8/6	438	33.0864	12.8	80957392	1033530183	1.0	0.00052
8/7	432	30.9096	12.0	75631093	907515866	0.9	0.00045
8/8	431	30.5468	11.9	74743376	887307946	0.9	0.00044
8/9	430	30.184	11.7	73855660	867327016	0.9	0.00043
8/10	431	30.5468	11.9	74743376	887307946	0.9	0.00044
8/11	431	30.5468	11.9	74743376	887307946	0.9	0.00044
8/12	427	29.0956	11.4	71192511	808746169	0.8	0.00040
8/13	427	29.0956	11.4	71192511	808746169	0.8	0.00040
8/14	425	28.37	11.1	69417078	770827224	0.8	0.00038
8/15	424	28.0072	11.0	68529361	752208236	0.8	0.00037
8/16	424	28.0072	11.0	68529361	752208236	0.8	0.00037
8/17	423	27.6444	10.8	67641645	733816239	0.7	0.00037
8/18	421	26.9188	10.6	65866212	697713216	0.7	0.00035
8/19	424	28.0072	11.0	68529361	752208236	0.8	0.00037
8/20	428	29.4584	11.5	72080227	828046128	0.8	0.00041
8/21	426	28.7328	11.2	70304794	789673201	0.8	0.00039

Table F-1. Historical data collected at Jack Creek was used to estimate the proportion of sediment load for each day of the year for a typical subwatershed in the Madison TPA

Day of Year	Flow *Madison River* cfs	Estimated Flow *Jack Creek* cfs	Estimated TSS *Jack Creek* (mg/L)	Daily Water Volume *Jack Creek* (Liters per Day)	Daily Sediment Load *Jack Creek* (mg per Day)	Daily Sediment Load *Jack Creek* (Tons per Day)	Daily Load Proportion *Jack Creek* (Proportion of Annual)
8/22	426	28.7328	11.2	70304794	789673201	0.8	0.00039
8/23	422	27.2816	10.7	66753928	715651233	0.7	0.00036
8/24	422	27.2816	10.7	66753928	715651233	0.7	0.00036
8/25	419	26.1932	10.3	64090779	662518155	0.7	0.00033
8/26	419	26.1932	10.3	64090779	662518155	0.7	0.00033
8/27	417	25.4676	10.1	62315346	628231055	0.6	0.00031
8/28	416	25.1048	10.0	61427630	611427991	0.6	0.00030
8/29	417	25.4676	10.1	62315346	628231055	0.6	0.00031
8/30	419	26.1932	10.3	64090779	662518155	0.7	0.00033
8/31	421	26.9188	10.6	65866212	697713216	0.7	0.00035
9/1	419	26.1932	10.3	64090779	662518155	0.7	0.00033
9/2	419	26.1932	10.3	64090779	662518155	0.7	0.00033
9/3	419	26.1932	10.3	64090779	662518155	0.7	0.00033
9/4	416	25.1048	10.0	61427630	611427991	0.6	0.00030
9/5	417	25.4676	10.1	62315346	628231055	0.6	0.00031
9/6	421	26.9188	10.6	65866212	697713216	0.7	0.00035
9/7	422	27.2816	10.7	66753928	715651233	0.7	0.00036
9/8	417	25.4676	10.1	62315346	628231055	0.6	0.00031
9/9	423	27.6444	10.8	67641645	733816239	0.7	0.00037
9/10	425	28.37	11.1	69417078	770827224	0.8	0.00038
9/11	420	26.556	10.5	64978495	680002191	0.7	0.00034
9/12	421	26.9188	10.6	65866212	697713216	0.7	0.00035
9/13	420	26.556	10.5	64978495	680002191	0.7	0.00034
9/14	419	26.1932	10.3	64090779	662518155	0.7	0.00033
9/15	421	26.9188	10.6	65866212	697713216	0.7	0.00035
9/16	418	25.8304	10.2	63203063	645261110	0.6	0.00032
9/17	418	25.8304	10.2	63203063	645261110	0.6	0.00032
9/18	422	27.2816	10.7	66753928	715651233	0.7	0.00036
9/19	427	29.0956	11.4	71192511	808746169	0.8	0.00040
9/20	430	30.184	11.7	73855660	867327016	0.9	0.00043
9/21	430	30.184	11.7	73855660	867327016	0.9	0.00043
9/22	429	29.8212	11.6	72967944	847573077	0.8	0.00042
9/23	425	28.37	11.1	69417078	770827224	0.8	0.00038
9/24	426	28.7328	11.2	70304794	789673201	0.8	0.00039

Table F-1. Historical data collected at Jack Creek was used to estimate the proportion of sediment load for each day of the year for a typical subwatershed in the Madison TPA

Day of Year	Flow *Madison River* cfs	Estimated Flow *Jack Creek* cfs	Estimated TSS *Jack Creek* (mg/L)	Daily Water Volume *Jack Creek* (Liters per Day)	Daily Sediment Load *Jack Creek* (mg per Day)	Daily Sediment Load *Jack Creek* (Tons per Day)	Daily Load Proportion *Jack Creek* (Proportion of Annual)
9/25	424	28.0072	11.0	68529361	752208236	0.8	0.00037
9/26	422	27.2816	10.7	66753928	715651233	0.7	0.00036
9/27	423	27.6444	10.8	67641645	733816239	0.7	0.00037
9/28	428	29.4584	11.5	72080227	828046128	0.8	0.00041
9/29	425	28.37	11.1	69417078	770827224	0.8	0.00038
9/30	428	29.4584	11.5	72080227	828046128	0.8	0.00041
10/1	428	29.4584	11.5	72080227	828046128	0.8	0.00041
10/2	430	30.184	11.7	73855660	867327016	0.9	0.00043
10/3	433	31.2724	12.1	76518809	927950776	0.9	0.00046
10/4	428	29.4584	11.5	72080227	828046128	0.8	0.00041
10/5	429	29.8212	11.6	72967944	847573077	0.8	0.00042
10/6	433	31.2724	12.1	76518809	927950776	0.9	0.00046
10/7	436	32.3608	12.5	79181959	990617449	1.0	0.00049
10/8	434	31.6352	12.3	77406526	948612677	0.9	0.00047
10/9	430	30.184	11.7	73855660	867327016	0.9	0.00043
10/10	432	30.9096	12.0	75631093	907515866	0.9	0.00045
10/11	435	31.998	12.4	78294242	969501568	1.0	0.00048
10/12	433	31.2724	12.1	76518809	927950776	0.9	0.00046
10/13	430	30.184	11.7	73855660	867327016	0.9	0.00043
10/14	428	29.4584	11.5	72080227	828046128	0.8	0.00041
10/15	433	31.2724	12.1	76518809	927950776	0.9	0.00046
10/16	437	32.7236	12.6	80069675	1011960321	1.0	0.00050
10/17	431	30.5468	11.9	74743376	887307946	0.9	0.00044
10/18	429	29.8212	11.6	72967944	847573077	0.8	0.00042
10/19	428	29.4584	11.5	72080227	828046128	0.8	0.00041
10/20	431	30.5468	11.9	74743376	887307946	0.9	0.00044
10/21	427	29.0956	11.4	71192511	808746169	0.8	0.00040
10/22	428	29.4584	11.5	72080227	828046128	0.8	0.00041
10/23	431	30.5468	11.9	74743376	887307946	0.9	0.00044
10/24	430	30.184	11.7	73855660	867327016	0.9	0.00043
10/25	429	29.8212	11.6	72967944	847573077	0.8	0.00042
10/26	429	29.8212	11.6	72967944	847573077	0.8	0.00042
10/27	430	30.184	11.7	73855660	867327016	0.9	0.00043
10/28	431	30.5468	11.9	74743376	887307946	0.9	0.00044

Table F-1. Historical data collected at Jack Creek was used to estimate the proportion of sediment load for each day of the year for a typical subwatershed in the Madison TPA

Day of Year	Flow *Madison River* cfs	Estimated Flow *Jack Creek* cfs	Estimated TSS *Jack Creek* (mg/L)	Daily Water Volume *Jack Creek* (Liters per Day)	Daily Sediment Load *Jack Creek* (mg per Day)	Daily Sediment Load *Jack Creek* (Tons per Day)	Daily Load Proportion *Jack Creek* (Proportion of Annual)
10/29	431	30.5468	11.9	74743376	887307946	0.9	0.00044
10/30	428	29.4584	11.5	72080227	828046128	0.8	0.00041
10/31	432	30.9096	12.0	75631093	907515866	0.9	0.00045
11/1	427	29.0956	11.4	71192511	808746169	0.8	0.00040
11/2	424	28.0072	11.0	68529361	752208236	0.8	0.00037
11/3	426	28.7328	11.2	70304794	789673201	0.8	0.00039
11/4	427	29.0956	11.4	71192511	808746169	0.8	0.00040
11/5	427	29.0956	11.4	71192511	808746169	0.8	0.00040
11/6	425	28.37	11.1	69417078	770827224	0.8	0.00038
11/7	426	28.7328	11.2	70304794	789673201	0.8	0.00039
11/8	424	28.0072	11.0	68529361	752208236	0.8	0.00037
11/9	426	28.7328	11.2	70304794	789673201	0.8	0.00039
11/10	429	29.8212	11.6	72967944	847573077	0.8	0.00042
11/11	425	28.37	11.1	69417078	770827224	0.8	0.00038
11/12	422	27.2816	10.7	66753928	715651233	0.7	0.00036
11/13	424	28.0072	11.0	68529361	752208236	0.8	0.00037
11/14	422	27.2816	10.7	66753928	715651233	0.7	0.00036
11/15	422	27.2816	10.7	66753928	715651233	0.7	0.00036
11/16	421	26.9188	10.6	65866212	697713216	0.7	0.00035
11/17	419	26.1932	10.3	64090779	662518155	0.7	0.00033
11/18	419	26.1932	10.3	64090779	662518155	0.7	0.00033
11/19	420	26.556	10.5	64978495	680002191	0.7	0.00034
11/20	421	26.9188	10.6	65866212	697713216	0.7	0.00035
11/21	422	27.2816	10.7	66753928	715651233	0.7	0.00036
11/22	419	26.1932	10.3	64090779	662518155	0.7	0.00033
11/23	418	25.8304	10.2	63203063	645261110	0.6	0.00032
11/24	418	25.8304	10.2	63203063	645261110	0.6	0.00032
11/25	419	26.1932	10.3	64090779	662518155	0.7	0.00033
11/26	417	25.4676	10.1	62315346	628231055	0.6	0.00031
11/27	418	25.8304	10.2	63203063	645261110	0.6	0.00032
11/28	419	26.1932	10.3	64090779	662518155	0.7	0.00033
11/29	415	24.742	9.8	60539913	594851917	0.6	0.00030
11/30	416	25.1048	10.0	61427630	611427991	0.6	0.00030
12/1	417	25.4676	10.1	62315346	628231055	0.6	0.00031

Table F-1. Historical data collected at Jack Creek was used to estimate the proportion of sediment load for each day of the year for a typical subwatershed in the Madison TPA

Day of Year	Flow *Madison River* cfs	Estimated Flow *Jack Creek* cfs	Estimated TSS *Jack Creek* (mg/L)	Daily Water Volume *Jack Creek* (Liters per Day)	Daily Sediment Load *Jack Creek* (mg per Day)	Daily Sediment Load *Jack Creek* (Tons per Day)	Daily Load Proportion *Jack Creek* (Proportion of Annual)
12/2	419	26.1932	10.3	64090779	662518155	0.7	0.00033
12/3	420	26.556	10.5	64978495	680002191	0.7	0.00034
12/4	417	25.4676	10.1	62315346	628231055	0.6	0.00031
12/5	415	24.742	9.8	60539913	594851917	0.6	0.00030
12/6	415	24.742	9.8	60539913	594851917	0.6	0.00030
12/7	416	25.1048	10.0	61427630	611427991	0.6	0.00030
12/8	414	24.3792	9.7	59652197	578502833	0.6	0.00029
12/9	414	24.3792	9.7	59652197	578502833	0.6	0.00029
12/10	415	24.742	9.8	60539913	594851917	0.6	0.00030
12/11	414	24.3792	9.7	59652197	578502833	0.6	0.00029
12/12	414	24.3792	9.7	59652197	578502833	0.6	0.00029
12/13	416	25.1048	10.0	61427630	611427991	0.6	0.00030
12/14	414	24.3792	9.7	59652197	578502833	0.6	0.00029
12/15	413	24.0164	9.6	58764480	562380740	0.6	0.00028
12/16	412	23.6536	9.4	57876764	546485637	0.5	0.00027
12/17	411	23.2908	9.3	56989047	530817525	0.5	0.00026
12/18	409	22.5652	9.1	55213614	500162271	0.5	0.00025
12/19	411	23.2908	9.3	56989047	530817525	0.5	0.00026
12/20	409	22.5652	9.1	55213614	500162271	0.5	0.00025
12/21	409	22.5652	9.1	55213614	500162271	0.5	0.00025
12/22	411	23.2908	9.3	56989047	530817525	0.5	0.00026
12/23	415	24.742	9.8	60539913	594851917	0.6	0.00030
12/24	413	24.0164	9.6	58764480	562380740	0.6	0.00028
12/25	412	23.6536	9.4	57876764	546485637	0.5	0.00027
12/26	409	22.5652	9.1	55213614	500162271	0.5	0.00025
12/27	408	22.2024	8.9	54325898	485175130	0.5	0.00024
12/28	411	23.2908	9.3	56989047	530817525	0.5	0.00026
12/29	411	23.2908	9.3	56989047	530817525	0.5	0.00026
12/30	410	22.928	9.2	56101331	515376403	0.5	0.00026
12/31	409	22.5652	9.1	55213614	500162271	0.5	0.00025

F3.0 SEDIMENT TOTAL MAXIMUM DAILY LOADS

To estimate total maximum daily loads, the daily load proportion was multiplied by the current estimated annual load for each subwatershed after implementing BMPs as described in Section 5.7 of the main TMDL document.

Table F-2. Estimated Total Maximum Daily Load for sediment impaired watersheds in Madison TPA (in Tons)

Day	Antelope	Bear	Blaine Spring	Cherry	Elk	Hot Springs	Moore Creek	North Meadow	Red Canyon	Ruby	South Meadow	Watkins	Wigwam
1/1	0.4	1.2	0.4	1.4	0.8	0.7	0.5	0.6	0.2	0.5	0.3	0.1	0.3
1/2	0.4	1.2	0.4	1.4	0.8	0.7	0.5	0.6	0.2	0.5	0.3	0.1	0.3
1/3	0.5	1.5	0.4	1.7	1.0	0.8	0.6	0.7	0.2	0.6	0.4	0.1	0.3
1/4	0.4	1.1	0.3	1.3	0.7	0.6	0.5	0.6	0.2	0.4	0.3	0.1	0.2
1/5	0.4	1.2	0.4	1.3	0.8	0.6	0.5	0.6	0.2	0.4	0.3	0.1	0.2
1/6	0.4	1.1	0.3	1.3	0.7	0.6	0.5	0.6	0.2	0.4	0.3	0.1	0.2
1/7	0.4	1.2	0.4	1.4	0.8	0.7	0.5	0.6	0.2	0.5	0.3	0.1	0.2
1/8	0.4	1.3	0.4	1.5	0.9	0.7	0.6	0.6	0.2	0.5	0.4	0.1	0.3
1/9	0.4	1.2	0.4	1.3	0.8	0.6	0.5	0.6	0.2	0.4	0.3	0.1	0.2
1/10	0.3	1.1	0.3	1.2	0.7	0.6	0.5	0.5	0.1	0.4	0.3	0.1	0.2
1/11	0.3	1.0	0.3	1.2	0.7	0.6	0.5	0.5	0.1	0.4	0.3	0.1	0.2
1/12	0.3	0.9	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
1/13	0.3	0.9	0.3	1.1	0.6	0.5	0.4	0.5	0.1	0.3	0.2	0.1	0.2
1/14	0.3	1.0	0.3	1.1	0.6	0.5	0.4	0.5	0.1	0.4	0.3	0.1	0.2
1/15	0.3	1.0	0.3	1.2	0.7	0.6	0.5	0.5	0.1	0.4	0.3	0.1	0.2
1/16	0.3	1.0	0.3	1.2	0.7	0.6	0.4	0.5	0.1	0.4	0.3	0.1	0.2
1/17	0.3	1.0	0.3	1.2	0.7	0.6	0.4	0.5	0.1	0.4	0.3	0.1	0.2
1/18	0.3	1.0	0.3	1.1	0.6	0.5	0.4	0.5	0.1	0.4	0.3	0.1	0.2
1/19	0.3	1.0	0.3	1.1	0.6	0.5	0.4	0.5	0.1	0.4	0.3	0.1	0.2
1/20	0.3	1.0	0.3	1.1	0.6	0.5	0.4	0.5	0.1	0.4	0.3	0.1	0.2
1/21	0.3	1.0	0.3	1.1	0.6	0.5	0.4	0.5	0.1	0.4	0.3	0.1	0.2
1/22	0.3	1.0	0.3	1.1	0.6	0.5	0.4	0.5	0.1	0.4	0.3	0.1	0.2
1/23	0.3	1.0	0.3	1.2	0.7	0.6	0.4	0.5	0.1	0.4	0.3	0.1	0.2
1/24	0.3	1.0	0.3	1.1	0.6	0.5	0.4	0.5	0.1	0.4	0.3	0.1	0.2
1/25	0.3	1.0	0.3	1.2	0.7	0.6	0.4	0.5	0.1	0.4	0.3	0.1	0.2
1/26	0.3	0.9	0.3	1.1	0.6	0.5	0.4	0.5	0.1	0.4	0.3	0.1	0.2
1/27	0.3	0.9	0.3	1.1	0.6	0.5	0.4	0.5	0.1	0.3	0.2	0.1	0.2
1/28	0.3	0.9	0.3	1.1	0.6	0.5	0.4	0.5	0.1	0.4	0.3	0.1	0.2
1/29	0.3	0.8	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
1/30	0.3	0.8	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
1/31	0.3	0.8	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/1	0.3	0.9	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2

Table F-2. Estimated Total Maximum Daily Load for sediment impaired watersheds in Madison TPA (in Tons)

Day	Antelope	Bear	Blaine Spring	Cherry	Elk	Hot Springs	Moore Creek	North Meadow	Red Canyon	Ruby	South Meadow	Watkins	Wigwam
2/2	0.3	0.8	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/3	0.3	0.9	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/4	0.3	0.9	0.3	1.1	0.6	0.5	0.4	0.5	0.1	0.3	0.2	0.1	0.2
2/5	0.3	0.9	0.3	1.1	0.6	0.5	0.4	0.5	0.1	0.4	0.3	0.1	0.2
2/6	0.3	0.9	0.3	1.1	0.6	0.5	0.4	0.5	0.1	0.3	0.2	0.1	0.2
2/7	0.3	0.9	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/8	0.3	0.8	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/9	0.3	0.8	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/10	0.3	0.9	0.3	1.1	0.6	0.5	0.4	0.5	0.1	0.3	0.2	0.1	0.2
2/11	0.3	0.9	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/12	0.3	0.9	0.3	1.1	0.6	0.5	0.4	0.5	0.1	0.3	0.2	0.1	0.2
2/13	0.3	0.9	0.3	1.1	0.6	0.5	0.4	0.5	0.1	0.3	0.2	0.1	0.2
2/14	0.3	0.9	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/15	0.3	0.9	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/16	0.3	0.8	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/17	0.3	0.8	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/18	0.3	0.9	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/19	0.3	0.8	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/20	0.3	0.8	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/21	0.3	0.9	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/22	0.3	0.9	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/23	0.3	0.9	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/24	0.3	0.8	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/25	0.3	0.9	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/26	0.3	0.8	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/27	0.3	0.8	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/28	0.3	0.8	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
2/29	0.3	0.8	0.2	0.9	0.5	0.4	0.3	0.4	0.1	0.3	0.2	0.1	0.2
3/1	0.3	0.8	0.2	0.9	0.5	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
3/2	0.3	0.8	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
3/3	0.3	0.9	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
3/4	0.3	0.9	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
3/5	0.3	0.9	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
3/6	0.3	0.9	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
3/7	0.3	0.9	0.3	1.0	0.6	0.5	0.4	0.4	0.1	0.3	0.2	0.1	0.2
3/8	0.3	0.9	0.3	1.1	0.6	0.5	0.4	0.5	0.1	0.4	0.3	0.1	0.2
3/9	0.3	0.9	0.3	1.1	0.6	0.5	0.4	0.5	0.1	0.4	0.3	0.1	0.2
3/10	0.3	1.0	0.3	1.2	0.7	0.6	0.4	0.5	0.1	0.4	0.3	0.1	0.2

Table F-2. Estimated Total Maximum Daily Load for sediment impaired watersheds in Madison TPA (in Tons)

Day	Antelope	Bear	Blaine Spring	Cherry	Elk	Hot Springs	Moore Creek	North Meadow	Red Canyon	Ruby	South Meadow	Watkins	Wigwam
3/11	0.4	1.2	0.4	1.3	0.8	0.6	0.5	0.6	0.2	0.4	0.3	0.1	0.2
3/12	0.3	1.1	0.3	1.2	0.7	0.6	0.5	0.5	0.1	0.4	0.3	0.1	0.2
3/13	0.3	1.0	0.3	1.2	0.7	0.6	0.4	0.5	0.1	0.4	0.3	0.1	0.2
3/14	0.3	1.1	0.3	1.2	0.7	0.6	0.5	0.5	0.1	0.4	0.3	0.1	0.2
3/15	0.3	1.1	0.3	1.2	0.7	0.6	0.5	0.5	0.1	0.4	0.3	0.1	0.2
3/16	0.4	1.1	0.3	1.3	0.7	0.6	0.5	0.6	0.2	0.4	0.3	0.1	0.2
3/17	0.4	1.2	0.4	1.4	0.8	0.7	0.5	0.6	0.2	0.5	0.3	0.1	0.3
3/18	0.4	1.2	0.4	1.4	0.8	0.7	0.5	0.6	0.2	0.5	0.3	0.1	0.2
3/19	0.4	1.2	0.4	1.3	0.8	0.6	0.5	0.6	0.2	0.4	0.3	0.1	0.2
3/20	0.4	1.2	0.4	1.4	0.8	0.7	0.5	0.6	0.2	0.5	0.3	0.1	0.3
3/21	0.4	1.3	0.4	1.5	0.9	0.7	0.6	0.6	0.2	0.5	0.4	0.1	0.3
3/22	0.4	1.4	0.4	1.6	0.9	0.8	0.6	0.7	0.2	0.5	0.4	0.1	0.3
3/23	0.5	1.5	0.4	1.7	1.0	0.8	0.6	0.7	0.2	0.6	0.4	0.1	0.3
3/24	0.5	1.4	0.4	1.6	0.9	0.8	0.6	0.7	0.2	0.5	0.4	0.1	0.3
3/25	0.5	1.4	0.4	1.6	0.9	0.8	0.6	0.7	0.2	0.5	0.4	0.1	0.3
3/26	0.5	1.5	0.4	1.7	1.0	0.8	0.6	0.7	0.2	0.6	0.4	0.1	0.3
3/27	0.5	1.5	0.4	1.7	1.0	0.8	0.6	0.7	0.2	0.6	0.4	0.1	0.3
3/28	0.5	1.5	0.5	1.8	1.0	0.9	0.7	0.8	0.2	0.6	0.4	0.1	0.3
3/29	0.5	1.6	0.5	1.9	1.1	0.9	0.7	0.8	0.2	0.6	0.4	0.1	0.3
3/30	0.5	1.6	0.5	1.8	1.1	0.9	0.7	0.8	0.2	0.6	0.4	0.1	0.3
3/31	0.5	1.7	0.5	2.0	1.1	1.0	0.7	0.9	0.2	0.7	0.5	0.2	0.4
4/1	0.6	1.9	0.6	2.2	1.3	1.1	0.8	0.9	0.3	0.7	0.5	0.2	0.4
4/2	0.7	2.1	0.6	2.4	1.4	1.2	0.9	1.0	0.3	0.8	0.6	0.2	0.4
4/3	0.7	2.2	0.7	2.5	1.5	1.2	1.0	1.1	0.3	0.8	0.6	0.2	0.5
4/4	0.7	2.3	0.7	2.7	1.6	1.3	1.0	1.2	0.3	0.9	0.6	0.2	0.5
4/5	0.8	2.6	0.8	3.0	1.7	1.5	1.1	1.3	0.4	1.0	0.7	0.2	0.5
4/6	0.9	2.9	0.9	3.3	1.9	1.6	1.3	1.4	0.4	1.1	0.8	0.3	0.6
4/7	0.9	3.0	0.9	3.4	2.0	1.6	1.3	1.5	0.4	1.1	0.8	0.3	0.6
4/8	1.0	3.3	1.0	3.7	2.2	1.8	1.4	1.6	0.5	1.2	0.9	0.3	0.7
4/9	1.1	3.3	1.0	3.8	2.2	1.8	1.4	1.6	0.5	1.3	0.9	0.3	0.7
4/10	1.0	3.3	1.0	3.7	2.2	1.8	1.4	1.6	0.5	1.2	0.9	0.3	0.7
4/11	1.1	3.4	1.1	4.0	2.3	1.9	1.5	1.7	0.5	1.3	0.9	0.3	0.7
4/12	1.2	3.9	1.2	4.5	2.6	2.2	1.7	1.9	0.5	1.5	1.1	0.4	0.8
4/13	1.4	4.3	1.3	5.0	2.9	2.4	1.9	2.1	0.6	1.6	1.2	0.4	0.9
4/14	1.6	5.1	1.6	5.9	3.4	2.9	2.2	2.5	0.7	1.9	1.4	0.5	1.1
4/15	1.8	5.6	1.7	6.4	3.7	3.1	2.4	2.8	0.8	2.1	1.5	0.5	1.2
4/16	1.9	6.0	1.8	6.9	4.0	3.3	2.6	3.0	0.8	2.3	1.6	0.5	1.2
4/17	2.2	6.9	2.1	7.9	4.5	3.8	3.0	3.4	0.9	2.6	1.9	0.6	1.4

Table F-2. Estimated Total Maximum Daily Load for sediment impaired watersheds in Madison TPA (in Tons)

Day	Antelope	Bear	Blaine Spring	Cherry	Elk	Hot Springs	Moore Creek	North Meadow	Red Canyon	Ruby	South Meadow	Watkins	Wigwam
4/18	2.5	7.9	2.4	9.1	5.2	4.4	3.4	3.9	1.1	3.0	2.1	0.7	1.6
4/19	2.7	8.6	2.6	10.0	5.7	4.8	3.8	4.3	1.2	3.3	2.4	0.8	1.8
4/20	3.0	9.4	2.9	10.8	6.2	5.2	4.1	4.7	1.3	3.5	2.6	0.8	1.9
4/21	3.3	10.5	3.2	12.1	7.0	5.9	4.6	5.2	1.5	4.0	2.9	1.0	2.2
4/22	3.7	11.5	3.5	13.3	7.6	6.4	5.0	5.7	1.6	4.4	3.2	1.0	2.4
4/23	4.3	13.5	4.1	15.5	8.9	7.5	5.9	6.7	1.9	5.1	3.7	1.2	2.8
4/24	4.2	13.3	4.1	15.4	8.8	7.4	5.8	6.6	1.8	5.0	3.6	1.2	2.8
4/25	4.3	13.6	4.2	15.6	9.0	7.6	5.9	6.8	1.9	5.1	3.7	1.2	2.8
4/26	4.6	14.6	4.5	16.8	9.7	8.1	6.4	7.3	2.0	5.5	4.0	1.3	3.0
4/27	4.7	14.7	4.5	17.0	9.8	8.2	6.4	7.3	2.0	5.6	4.0	1.3	3.1
4/28	5.1	15.9	4.9	18.3	10.5	8.9	6.9	7.9	2.2	6.0	4.4	1.4	3.3
4/29	5.5	17.2	5.3	19.8	11.4	9.6	7.5	8.5	2.4	6.5	4.7	1.6	3.6
4/30	5.5	17.5	5.3	20.1	11.5	9.7	7.6	8.7	2.4	6.6	4.8	1.6	3.6
5/1	6.2	19.5	6.0	22.4	12.9	10.9	8.5	9.7	2.7	7.4	5.3	1.8	4.0
5/2	6.4	20.3	6.2	23.3	13.4	11.3	8.8	10.1	2.8	7.7	5.5	1.8	4.2
5/3	7.1	22.4	6.9	25.8	14.8	12.5	9.8	11.2	3.1	8.5	6.1	2.0	4.7
5/4	8.4	26.3	8.0	30.3	17.4	14.6	11.4	13.1	3.6	9.9	7.2	2.4	5.5
5/5	9.4	29.5	9.0	34.0	19.5	16.4	12.8	14.7	4.1	11.2	8.1	2.7	6.1
5/6	10.5	32.9	10.1	37.9	21.8	18.3	14.3	16.4	4.6	12.5	9.0	3.0	6.8
5/7	12.1	38.0	11.6	43.7	25.1	21.1	16.5	18.9	5.3	14.4	10.4	3.4	7.9
5/8	13.2	41.6	12.7	47.9	27.5	23.2	18.1	20.7	5.8	15.7	11.4	3.8	8.6
5/9	14.9	46.8	14.3	53.8	30.9	26.1	20.3	23.3	6.5	17.7	12.8	4.2	9.7
5/10	16.3	51.3	15.7	59.0	33.9	28.6	22.3	25.5	7.1	19.4	14.0	4.6	10.6
5/11	16.9	53.2	16.3	61.3	35.2	29.7	23.2	26.5	7.4	20.1	14.5	4.8	11.0
5/12	18.0	56.8	17.4	65.3	37.6	31.6	24.7	28.2	7.9	21.5	15.5	5.1	11.8

Table F-2. Estimated Total Maximum Daily Load for sediment impaired watersheds in Madison TPA (in Tons)

Day	Antelope	Bear	Blaine Spring	Cherry	Elk	Hot Springs	Moore Creek	North Meadow	Red Canyon	Ruby	South Meadow	Watkins	Wigwam
5/13	19.6	61.7	18.9	71.1	40.8	34.4	26.8	30.7	8.6	23.4	16.9	5.6	12.8
5/14	20.5	64.4	19.7	74.2	42.6	35.9	28.0	32.0	8.9	24.4	17.6	5.8	13.4
5/15	22.4	70.5	21.6	81.2	46.7	39.3	30.7	35.1	9.8	26.7	19.3	6.4	14.6
5/16	26.2	82.4	25.2	94.8	54.5	45.9	35.8	41.0	11.4	31.2	22.5	7.4	17.1
5/17	29.6	93.2	28.5	107.3	61.7	51.9	40.5	46.4	12.9	35.3	25.4	8.4	19.3
5/18	30.9	97.2	29.7	111.8	64.3	54.1	42.2	48.3	13.5	36.8	26.5	8.8	20.2
5/19	31.7	99.8	30.5	114.9	66.1	55.6	43.4	49.7	13.8	37.8	27.3	9.0	20.7
5/20	33.1	104.3	31.9	120.1	69.0	58.1	45.4	51.9	14.5	39.5	28.5	9.4	21.6
5/21	34.9	109.9	33.6	126.5	72.7	61.2	47.8	54.7	15.2	41.6	30.0	9.9	22.8
5/22	35.9	113.1	34.6	130.2	74.9	63.0	49.2	56.3	15.7	42.8	30.9	10.2	23.5
5/23	35.9	113.1	34.6	130.2	74.9	63.0	49.2	56.3	15.7	42.8	30.9	10.2	23.5
5/24	36.9	116.0	35.5	133.6	76.8	64.6	50.5	57.7	16.1	43.9	31.7	10.5	24.1
5/25	36.8	115.7	35.4	133.2	76.5	64.4	50.3	57.5	16.0	43.8	31.6	10.5	24.0
5/26	36.5	114.9	35.1	132.3	76.0	64.0	50.0	57.2	15.9	43.5	31.4	10.4	23.8
5/27	36.6	115.3	35.3	132.7	76.3	64.2	50.1	57.4	16.0	43.6	31.5	10.4	23.9
5/28	37.2	117.1	35.8	134.8	77.5	65.3	50.9	58.3	16.2	44.3	32.0	10.6	24.3
5/29	38.4	120.8	36.9	139.1	79.9	67.3	52.5	60.1	16.7	45.7	33.0	10.9	25.1
5/30	36.8	115.7	35.4	133.2	76.5	64.4	50.3	57.5	16.0	43.8	31.6	10.5	24.0
5/31	34.9	109.9	33.6	126.5	72.7	61.2	47.8	54.7	15.2	41.6	30.0	9.9	22.8
6/1	34.0	107.1	32.7	123.3	70.8	59.7	46.6	53.3	14.8	40.5	29.2	9.7	22.2

Table F-2. Estimated Total Maximum Daily Load for sediment impaired watersheds in Madison TPA (in Tons)

Day	Antelope	Bear	Blaine Spring	Cherry	Elk	Hot Springs	Moore Creek	North Meadow	Red Canyon	Ruby	South Meadow	Watkins	Wigwam
6/2	34.0	107.1	32.7	123.3	70.8	59.7	46.6	53.3	14.8	40.5	29.2	9.7	22.2
6/3	32.5	102.2	31.3	117.7	67.6	57.0	44.5	50.9	14.2	38.7	27.9	9.2	21.2
6/4	31.5	99.2	30.3	114.2	65.6	55.2	43.1	49.3	13.7	37.5	27.1	9.0	20.6
6/5	30.8	96.8	29.6	111.5	64.1	53.9	42.1	48.2	13.4	36.6	26.4	8.7	20.1
6/6	30.9	97.2	29.7	111.8	64.3	54.1	42.2	48.3	13.5	36.8	26.5	8.8	20.2
6/7	30.7	96.5	29.5	111.1	63.8	53.8	42.0	48.0	13.4	36.5	26.3	8.7	20.0
6/8	30.8	96.8	29.6	111.5	64.1	53.9	42.1	48.2	13.4	36.6	26.4	8.7	20.1
6/9	30.0	94.5	28.9	108.8	62.5	52.6	41.1	47.0	13.1	35.8	25.8	8.5	19.6
6/10	29.0	91.2	27.9	105.0	60.4	50.8	39.7	45.4	12.6	34.5	24.9	8.2	18.9
6/11	26.3	82.7	25.3	95.2	54.7	46.1	36.0	41.1	11.5	31.3	22.6	7.5	17.2
6/12	23.2	73.1	22.4	84.2	48.4	40.7	31.8	36.4	10.1	27.7	20.0	6.6	15.2
6/13	21.9	68.8	21.0	79.3	45.5	38.4	29.9	34.2	9.5	26.0	18.8	6.2	14.3
6/14	20.6	65.0	19.9	74.8	43.0	36.2	28.2	32.3	9.0	24.6	17.7	5.9	13.5
6/15	20.0	62.8	19.2	72.3	41.5	35.0	27.3	31.2	8.7	23.8	17.1	5.7	13.0
6/16	19.9	62.5	19.1	72.0	41.4	34.8	27.2	31.1	8.7	23.7	17.1	5.6	13.0
6/17	18.3	57.5	17.6	66.2	38.1	32.1	25.0	28.6	8.0	21.8	15.7	5.2	11.9
6/18	16.4	51.8	15.8	59.6	34.3	28.8	22.5	25.8	7.2	19.6	14.1	4.7	10.7
6/19	15.1	47.5	14.5	54.7	31.4	26.4	20.6	23.6	6.6	18.0	13.0	4.3	9.9
6/20	13.6	42.9	13.1	49.4	28.4	23.9	18.7	21.3	5.9	16.2	11.7	3.9	8.9
6/21	12.6	39.7	12.1	45.6	26.2	22.1	17.2	19.7	5.5	15.0	10.8	3.6	8.2

Table F-2. Estimated Total Maximum Daily Load for sediment impaired watersheds in Madison TPA (in Tons)

Day	Antelope	Bear	Blaine Spring	Cherry	Elk	Hot Springs	Moore Creek	North Meadow	Red Canyon	Ruby	South Meadow	Watkins	Wigwam
6/22	11.7	36.7	11.2	42.3	24.3	20.5	16.0	18.3	5.1	13.9	10.0	3.3	7.6
6/23	10.7	33.7	10.3	38.8	22.3	18.8	14.7	16.8	4.7	12.8	9.2	3.0	7.0
6/24	9.8	30.8	9.4	35.5	20.4	17.2	13.4	15.3	4.3	11.7	8.4	2.8	6.4
6/25	9.0	28.4	8.7	32.7	18.8	15.8	12.4	14.1	3.9	10.8	7.8	2.6	5.9
6/26	8.4	26.5	8.1	30.5	17.5	14.7	11.5	13.2	3.7	10.0	7.2	2.4	5.5
6/27	8.0	25.3	7.7	29.1	16.7	14.1	11.0	12.6	3.5	9.6	6.9	2.3	5.2
6/28	7.2	22.8	7.0	26.2	15.1	12.7	9.9	11.3	3.2	8.6	6.2	2.1	4.7
6/29	6.1	19.3	5.9	22.3	12.8	10.8	8.4	9.6	2.7	7.3	5.3	1.7	4.0
6/30	5.5	17.5	5.3	20.1	11.5	9.7	7.6	8.7	2.4	6.6	4.8	1.6	3.6
7/1	5.3	16.6	5.1	19.1	11.0	9.3	7.2	8.3	2.3	6.3	4.5	1.5	3.4
7/2	4.7	14.9	4.5	17.1	9.8	8.3	6.5	7.4	2.1	5.6	4.1	1.3	3.1
7/3	4.5	14.1	4.3	16.2	9.3	7.9	6.1	7.0	2.0	5.3	3.8	1.3	2.9
7/4	4.0	12.5	3.8	14.4	8.3	7.0	5.4	6.2	1.7	4.7	3.4	1.1	2.6
7/5	3.6	11.3	3.5	13.0	7.5	6.3	4.9	5.6	1.6	4.3	3.1	1.0	2.3
7/6	3.5	10.9	3.3	12.5	7.2	6.1	4.7	5.4	1.5	4.1	3.0	1.0	2.3
7/7	3.0	9.6	2.9	11.0	6.3	5.3	4.2	4.8	1.3	3.6	2.6	0.9	2.0
7/8	2.8	8.9	2.7	10.3	5.9	5.0	3.9	4.5	1.2	3.4	2.4	0.8	1.9
7/9	2.6	8.3	2.5	9.5	5.5	4.6	3.6	4.1	1.1	3.1	2.3	0.7	1.7
7/10	2.5	8.0	2.4	9.2	5.3	4.4	3.5	4.0	1.1	3.0	2.2	0.7	1.7
7/11	2.4	7.7	2.3	8.8	5.1	4.3	3.3	3.8	1.1	2.9	2.1	0.7	1.6
7/12	2.3	7.1	2.2	8.2	4.7	4.0	3.1	3.5	1.0	2.7	1.9	0.6	1.5
7/13	2.1	6.7	2.0	7.7	4.4	3.7	2.9	3.3	0.9	2.5	1.8	0.6	1.4
7/14	1.9	5.8	1.8	6.7	3.9	3.2	2.5	2.9	0.8	2.2	1.6	0.5	1.2
7/15	1.7	5.3	1.6	6.2	3.5	3.0	2.3	2.7	0.7	2.0	1.5	0.5	1.1
7/16	1.6	4.9	1.5	5.6	3.2	2.7	2.1	2.4	0.7	1.8	1.3	0.4	1.0
7/17	1.5	4.6	1.4	5.3	3.0	2.6	2.0	2.3	0.6	1.7	1.3	0.4	1.0
7/18	1.4	4.3	1.3	5.0	2.9	2.4	1.9	2.1	0.6	1.6	1.2	0.4	0.9
7/19	1.3	4.0	1.2	4.6	2.6	2.2	1.7	2.0	0.5	1.5	1.1	0.4	0.8
7/20	1.3	4.0	1.2	4.6	2.6	2.2	1.7	2.0	0.5	1.5	1.1	0.4	0.8

Table F-2. Estimated Total Maximum Daily Load for sediment impaired watersheds in Madison TPA (in Tons)

Day	Antelope	Bear	Blaine Spring	Cherry	Elk	Hot Springs	Moore Creek	North Meadow	Red Canyon	Ruby	South Meadow	Watkins	Wigwam
7/21	1.3	4.1	1.3	4.7	2.7	2.3	1.8	2.0	0.6	1.6	1.1	0.4	0.9
7/22	1.3	4.0	1.2	4.6	2.7	2.2	1.8	2.0	0.6	1.5	1.1	0.4	0.8
7/23	1.3	4.0	1.2	4.6	2.6	2.2	1.7	2.0	0.5	1.5	1.1	0.4	0.8
7/24	1.2	3.8	1.2	4.4	2.5	2.1	1.7	1.9	0.5	1.4	1.0	0.3	0.8
7/25	1.2	3.8	1.2	4.3	2.5	2.1	1.6	1.9	0.5	1.4	1.0	0.3	0.8
7/26	1.1	3.6	1.1	4.1	2.4	2.0	1.6	1.8	0.5	1.3	1.0	0.3	0.7
7/27	1.1	3.4	1.0	3.9	2.2	1.9	1.5	1.7	0.5	1.3	0.9	0.3	0.7
7/28	1.1	3.3	1.0	3.8	2.2	1.8	1.4	1.6	0.5	1.3	0.9	0.3	0.7
7/29	1.1	3.4	1.1	4.0	2.3	1.9	1.5	1.7	0.5	1.3	0.9	0.3	0.7
7/30	1.2	3.7	1.1	4.3	2.4	2.1	1.6	1.8	0.5	1.4	1.0	0.3	0.8
7/31	1.1	3.3	1.0	3.8	2.2	1.8	1.4	1.6	0.5	1.3	0.9	0.3	0.7
8/1	1.0	3.2	1.0	3.7	2.1	1.8	1.4	1.6	0.4	1.2	0.9	0.3	0.7
8/2	0.9	3.0	0.9	3.4	2.0	1.6	1.3	1.5	0.4	1.1	0.8	0.3	0.6
8/3	0.9	2.8	0.9	3.3	1.9	1.6	1.2	1.4	0.4	1.1	0.8	0.3	0.6
8/4	0.9	2.8	0.9	3.3	1.9	1.6	1.2	1.4	0.4	1.1	0.8	0.3	0.6
8/5	0.9	2.8	0.9	3.2	1.8	1.6	1.2	1.4	0.4	1.1	0.8	0.3	0.6
8/6	0.8	2.6	0.8	3.0	1.7	1.5	1.1	1.3	0.4	1.0	0.7	0.2	0.5
8/7	0.7	2.3	0.7	2.6	1.5	1.3	1.0	1.1	0.3	0.9	0.6	0.2	0.5
8/8	0.7	2.2	0.7	2.6	1.5	1.3	1.0	1.1	0.3	0.8	0.6	0.2	0.5
8/9	0.7	2.2	0.7	2.5	1.5	1.2	1.0	1.1	0.3	0.8	0.6	0.2	0.5
8/10	0.7	2.2	0.7	2.6	1.5	1.3	1.0	1.1	0.3	0.8	0.6	0.2	0.5
8/11	0.7	2.2	0.7	2.6	1.5	1.3	1.0	1.1	0.3	0.8	0.6	0.2	0.5
8/12	0.7	2.0	0.6	2.4	1.4	1.1	0.9	1.0	0.3	0.8	0.6	0.2	0.4
8/13	0.7	2.0	0.6	2.4	1.4	1.1	0.9	1.0	0.3	0.8	0.6	0.2	0.4
8/14	0.6	2.0	0.6	2.2	1.3	1.1	0.8	1.0	0.3	0.7	0.5	0.2	0.4
8/15	0.6	1.9	0.6	2.2	1.3	1.1	0.8	0.9	0.3	0.7	0.5	0.2	0.4
8/16	0.6	1.9	0.6	2.2	1.3	1.1	0.8	0.9	0.3	0.7	0.5	0.2	0.4
8/17	0.6	1.9	0.6	2.1	1.2	1.0	0.8	0.9	0.3	0.7	0.5	0.2	0.4
8/18	0.6	1.8	0.5	2.0	1.2	1.0	0.8	0.9	0.2	0.7	0.5	0.2	0.4
8/19	0.6	1.9	0.6	2.2	1.3	1.1	0.8	0.9	0.3	0.7	0.5	0.2	0.4
8/20	0.7	2.1	0.6	2.4	1.4	1.2	0.9	1.0	0.3	0.8	0.6	0.2	0.4
8/21	0.6	2.0	0.6	2.3	1.3	1.1	0.9	1.0	0.3	0.8	0.5	0.2	0.4
8/22	0.6	2.0	0.6	2.3	1.3	1.1	0.9	1.0	0.3	0.8	0.5	0.2	0.4
8/23	0.6	1.8	0.6	2.1	1.2	1.0	0.8	0.9	0.3	0.7	0.5	0.2	0.4
8/24	0.6	1.8	0.6	2.1	1.2	1.0	0.8	0.9	0.3	0.7	0.5	0.2	0.4
8/25	0.5	1.7	0.5	1.9	1.1	0.9	0.7	0.8	0.2	0.6	0.5	0.2	0.3
8/26	0.5	1.7	0.5	1.9	1.1	0.9	0.7	0.8	0.2	0.6	0.5	0.2	0.3
8/27	0.5	1.6	0.5	1.8	1.1	0.9	0.7	0.8	0.2	0.6	0.4	0.1	0.3

Table F-2. Estimated Total Maximum Daily Load for sediment impaired watersheds in Madison TPA (in Tons)

Day	Antelope	Bear	Blaine Spring	Cherry	Elk	Hot Springs	Moore Creek	North Meadow	Red Canyon	Ruby	South Meadow	Watkins	Wigwam
8/28	0.5	1.5	0.5	1.8	1.0	0.9	0.7	0.8	0.2	0.6	0.4	0.1	0.3
8/29	0.5	1.6	0.5	1.8	1.1	0.9	0.7	0.8	0.2	0.6	0.4	0.1	0.3
8/30	0.5	1.7	0.5	1.9	1.1	0.9	0.7	0.8	0.2	0.6	0.5	0.2	0.3
8/31	0.6	1.8	0.5	2.0	1.2	1.0	0.8	0.9	0.2	0.7	0.5	0.2	0.4
9/1	0.5	1.7	0.5	1.9	1.1	0.9	0.7	0.8	0.2	0.6	0.5	0.2	0.3
9/2	0.5	1.7	0.5	1.9	1.1	0.9	0.7	0.8	0.2	0.6	0.5	0.2	0.3
9/3	0.5	1.7	0.5	1.9	1.1	0.9	0.7	0.8	0.2	0.6	0.5	0.2	0.3
9/4	0.5	1.5	0.5	1.8	1.0	0.9	0.7	0.8	0.2	0.6	0.4	0.1	0.3
9/5	0.5	1.6	0.5	1.8	1.1	0.9	0.7	0.8	0.2	0.6	0.4	0.1	0.3
9/6	0.6	1.8	0.5	2.0	1.2	1.0	0.8	0.9	0.2	0.7	0.5	0.2	0.4
9/7	0.6	1.8	0.6	2.1	1.2	1.0	0.8	0.9	0.3	0.7	0.5	0.2	0.4
9/8	0.5	1.6	0.5	1.8	1.1	0.9	0.7	0.8	0.2	0.6	0.4	0.1	0.3
9/9	0.6	1.9	0.6	2.1	1.2	1.0	0.8	0.9	0.3	0.7	0.5	0.2	0.4
9/10	0.6	2.0	0.6	2.2	1.3	1.1	0.8	1.0	0.3	0.7	0.5	0.2	0.4
9/11	0.5	1.7	0.5	2.0	1.1	1.0	0.7	0.9	0.2	0.7	0.5	0.2	0.4
9/12	0.6	1.8	0.5	2.0	1.2	1.0	0.8	0.9	0.2	0.7	0.5	0.2	0.4
9/13	0.5	1.7	0.5	2.0	1.1	1.0	0.7	0.9	0.2	0.7	0.5	0.2	0.4
9/14	0.5	1.7	0.5	1.9	1.1	0.9	0.7	0.8	0.2	0.6	0.5	0.2	0.3
9/15	0.6	1.8	0.5	2.0	1.2	1.0	0.8	0.9	0.2	0.7	0.5	0.2	0.4
9/16	0.5	1.6	0.5	1.9	1.1	0.9	0.7	0.8	0.2	0.6	0.4	0.1	0.3
9/17	0.5	1.6	0.5	1.9	1.1	0.9	0.7	0.8	0.2	0.6	0.4	0.1	0.3
9/18	0.6	1.8	0.6	2.1	1.2	1.0	0.8	0.9	0.3	0.7	0.5	0.2	0.4
9/19	0.7	2.0	0.6	2.4	1.4	1.1	0.9	1.0	0.3	0.8	0.6	0.2	0.4
9/20	0.7	2.2	0.7	2.5	1.5	1.2	1.0	1.1	0.3	0.8	0.6	0.2	0.5
9/21	0.7	2.2	0.7	2.5	1.5	1.2	1.0	1.1	0.3	0.8	0.6	0.2	0.5
9/22	0.7	2.1	0.7	2.5	1.4	1.2	0.9	1.1	0.3	0.8	0.6	0.2	0.4
9/23	0.6	2.0	0.6	2.2	1.3	1.1	0.8	1.0	0.3	0.7	0.5	0.2	0.4
9/24	0.6	2.0	0.6	2.3	1.3	1.1	0.9	1.0	0.3	0.8	0.5	0.2	0.4
9/25	0.6	1.9	0.6	2.2	1.3	1.1	0.8	0.9	0.3	0.7	0.5	0.2	0.4
9/26	0.6	1.8	0.6	2.1	1.2	1.0	0.8	0.9	0.3	0.7	0.5	0.2	0.4
9/27	0.6	1.9	0.6	2.1	1.2	1.0	0.8	0.9	0.3	0.7	0.5	0.2	0.4
9/28	0.7	2.1	0.6	2.4	1.4	1.2	0.9	1.0	0.3	0.8	0.6	0.2	0.4
9/29	0.6	2.0	0.6	2.2	1.3	1.1	0.8	1.0	0.3	0.7	0.5	0.2	0.4
9/30	0.7	2.1	0.6	2.4	1.4	1.2	0.9	1.0	0.3	0.8	0.6	0.2	0.4
10/1	0.7	2.1	0.6	2.4	1.4	1.2	0.9	1.0	0.3	0.8	0.6	0.2	0.4
10/2	0.7	2.2	0.7	2.5	1.5	1.2	1.0	1.1	0.3	0.8	0.6	0.2	0.5
10/3	0.7	2.3	0.7	2.7	1.6	1.3	1.0	1.2	0.3	0.9	0.6	0.2	0.5
10/4	0.7	2.1	0.6	2.4	1.4	1.2	0.9	1.0	0.3	0.8	0.6	0.2	0.4

Table F-2. Estimated Total Maximum Daily Load for sediment impaired watersheds in Madison TPA (in Tons)

Day	Antelope	Bear	Blaine Spring	Cherry	Elk	Hot Springs	Moore Creek	North Meadow	Red Canyon	Ruby	South Meadow	Watkins	Wigwam
10/5	0.7	2.1	0.7	2.5	1.4	1.2	0.9	1.1	0.3	0.8	0.6	0.2	0.4
10/6	0.7	2.3	0.7	2.7	1.6	1.3	1.0	1.2	0.3	0.9	0.6	0.2	0.5
10/7	0.8	2.5	0.8	2.9	1.7	1.4	1.1	1.2	0.3	0.9	0.7	0.2	0.5
10/8	0.8	2.4	0.7	2.8	1.6	1.3	1.0	1.2	0.3	0.9	0.7	0.2	0.5
10/9	0.7	2.2	0.7	2.5	1.5	1.2	1.0	1.1	0.3	0.8	0.6	0.2	0.5
10/10	0.7	2.3	0.7	2.6	1.5	1.3	1.0	1.1	0.3	0.9	0.6	0.2	0.5
10/11	0.8	2.5	0.8	2.8	1.6	1.4	1.1	1.2	0.3	0.9	0.7	0.2	0.5
10/12	0.7	2.3	0.7	2.7	1.6	1.3	1.0	1.2	0.3	0.9	0.6	0.2	0.5
10/13	0.7	2.2	0.7	2.5	1.5	1.2	1.0	1.1	0.3	0.8	0.6	0.2	0.5
10/14	0.7	2.1	0.6	2.4	1.4	1.2	0.9	1.0	0.3	0.8	0.6	0.2	0.4
10/15	0.7	2.3	0.7	2.7	1.6	1.3	1.0	1.2	0.3	0.9	0.6	0.2	0.5
10/16	0.8	2.6	0.8	2.9	1.7	1.4	1.1	1.3	0.4	1.0	0.7	0.2	0.5
10/17	0.7	2.2	0.7	2.6	1.5	1.3	1.0	1.1	0.3	0.8	0.6	0.2	0.5
10/18	0.7	2.1	0.7	2.5	1.4	1.2	0.9	1.1	0.3	0.8	0.6	0.2	0.4
10/19	0.7	2.1	0.6	2.4	1.4	1.2	0.9	1.0	0.3	0.8	0.6	0.2	0.4
10/20	0.7	2.2	0.7	2.6	1.5	1.3	1.0	1.1	0.3	0.8	0.6	0.2	0.5
10/21	0.7	2.0	0.6	2.4	1.4	1.1	0.9	1.0	0.3	0.8	0.6	0.2	0.4
10/22	0.7	2.1	0.6	2.4	1.4	1.2	0.9	1.0	0.3	0.8	0.6	0.2	0.4
10/23	0.7	2.2	0.7	2.6	1.5	1.3	1.0	1.1	0.3	0.8	0.6	0.2	0.5
10/24	0.7	2.2	0.7	2.5	1.5	1.2	1.0	1.1	0.3	0.8	0.6	0.2	0.5
10/25	0.7	2.1	0.7	2.5	1.4	1.2	0.9	1.1	0.3	0.8	0.6	0.2	0.4
10/26	0.7	2.1	0.7	2.5	1.4	1.2	0.9	1.1	0.3	0.8	0.6	0.2	0.4
10/27	0.7	2.2	0.7	2.5	1.5	1.2	1.0	1.1	0.3	0.8	0.6	0.2	0.5
10/28	0.7	2.2	0.7	2.6	1.5	1.3	1.0	1.1	0.3	0.8	0.6	0.2	0.5
10/29	0.7	2.2	0.7	2.6	1.5	1.3	1.0	1.1	0.3	0.8	0.6	0.2	0.5
10/30	0.7	2.1	0.6	2.4	1.4	1.2	0.9	1.0	0.3	0.8	0.6	0.2	0.4
10/31	0.7	2.3	0.7	2.6	1.5	1.3	1.0	1.1	0.3	0.9	0.6	0.2	0.5
11/1	0.7	2.0	0.6	2.4	1.4	1.1	0.9	1.0	0.3	0.8	0.6	0.2	0.4
11/2	0.6	1.9	0.6	2.2	1.3	1.1	0.8	0.9	0.3	0.7	0.5	0.2	0.4
11/3	0.6	2.0	0.6	2.3	1.3	1.1	0.9	1.0	0.3	0.8	0.5	0.2	0.4
11/4	0.7	2.0	0.6	2.4	1.4	1.1	0.9	1.0	0.3	0.8	0.6	0.2	0.4
11/5	0.7	2.0	0.6	2.4	1.4	1.1	0.9	1.0	0.3	0.8	0.6	0.2	0.4
11/6	0.6	2.0	0.6	2.2	1.3	1.1	0.8	1.0	0.3	0.7	0.5	0.2	0.4
11/7	0.6	2.0	0.6	2.3	1.3	1.1	0.9	1.0	0.3	0.8	0.5	0.2	0.4
11/8	0.6	1.9	0.6	2.2	1.3	1.1	0.8	0.9	0.3	0.7	0.5	0.2	0.4
11/9	0.6	2.0	0.6	2.3	1.3	1.1	0.9	1.0	0.3	0.8	0.5	0.2	0.4
11/10	0.7	2.1	0.7	2.5	1.4	1.2	0.9	1.1	0.3	0.8	0.6	0.2	0.4
11/11	0.6	2.0	0.6	2.2	1.3	1.1	0.8	1.0	0.3	0.7	0.5	0.2	0.4

Table F-2. Estimated Total Maximum Daily Load for sediment impaired watersheds in Madison TPA (in Tons)

Day	Antelope	Bear	Blaine Spring	Cherry	Elk	Hot Springs	Moore Creek	North Meadow	Red Canyon	Ruby	South Meadow	Watkins	Wigwam
11/12	0.6	1.8	0.6	2.1	1.2	1.0	0.8	0.9	0.3	0.7	0.5	0.2	0.4
11/13	0.6	1.9	0.6	2.2	1.3	1.1	0.8	0.9	0.3	0.7	0.5	0.2	0.4
11/14	0.6	1.8	0.6	2.1	1.2	1.0	0.8	0.9	0.3	0.7	0.5	0.2	0.4
11/15	0.6	1.8	0.6	2.1	1.2	1.0	0.8	0.9	0.3	0.7	0.5	0.2	0.4
11/16	0.6	1.8	0.5	2.0	1.2	1.0	0.8	0.9	0.2	0.7	0.5	0.2	0.4
11/17	0.5	1.7	0.5	1.9	1.1	0.9	0.7	0.8	0.2	0.6	0.5	0.2	0.3
11/18	0.5	1.7	0.5	1.9	1.1	0.9	0.7	0.8	0.2	0.6	0.5	0.2	0.3
11/19	0.5	1.7	0.5	2.0	1.1	1.0	0.7	0.9	0.2	0.7	0.5	0.2	0.4
11/20	0.6	1.8	0.5	2.0	1.2	1.0	0.8	0.9	0.2	0.7	0.5	0.2	0.4
11/21	0.6	1.8	0.6	2.1	1.2	1.0	0.8	0.9	0.3	0.7	0.5	0.2	0.4
11/22	0.5	1.7	0.5	1.9	1.1	0.9	0.7	0.8	0.2	0.6	0.5	0.2	0.3
11/23	0.5	1.6	0.5	1.9	1.1	0.9	0.7	0.8	0.2	0.6	0.4	0.1	0.3
11/24	0.5	1.6	0.5	1.9	1.1	0.9	0.7	0.8	0.2	0.6	0.4	0.1	0.3
11/25	0.5	1.7	0.5	1.9	1.1	0.9	0.7	0.8	0.2	0.6	0.5	0.2	0.3
11/26	0.5	1.6	0.5	1.8	1.1	0.9	0.7	0.8	0.2	0.6	0.4	0.1	0.3
11/27	0.5	1.6	0.5	1.9	1.1	0.9	0.7	0.8	0.2	0.6	0.4	0.1	0.3
11/28	0.5	1.7	0.5	1.9	1.1	0.9	0.7	0.8	0.2	0.6	0.5	0.2	0.3
11/29	0.5	1.5	0.5	1.7	1.0	0.8	0.7	0.7	0.2	0.6	0.4	0.1	0.3
11/30	0.5	1.5	0.5	1.8	1.0	0.9	0.7	0.8	0.2	0.6	0.4	0.1	0.3
12/1	0.5	1.6	0.5	1.8	1.1	0.9	0.7	0.8	0.2	0.6	0.4	0.1	0.3
12/2	0.5	1.7	0.5	1.9	1.1	0.9	0.7	0.8	0.2	0.6	0.5	0.2	0.3
12/3	0.5	1.7	0.5	2.0	1.1	1.0	0.7	0.9	0.2	0.7	0.5	0.2	0.4
12/4	0.5	1.6	0.5	1.8	1.1	0.9	0.7	0.8	0.2	0.6	0.4	0.1	0.3
12/5	0.5	1.5	0.5	1.7	1.0	0.8	0.7	0.7	0.2	0.6	0.4	0.1	0.3
12/6	0.5	1.5	0.5	1.7	1.0	0.8	0.7	0.7	0.2	0.6	0.4	0.1	0.3
12/7	0.5	1.5	0.5	1.8	1.0	0.9	0.7	0.8	0.2	0.6	0.4	0.1	0.3
12/8	0.5	1.5	0.4	1.7	1.0	0.8	0.6	0.7	0.2	0.6	0.4	0.1	0.3
12/9	0.5	1.5	0.4	1.7	1.0	0.8	0.6	0.7	0.2	0.6	0.4	0.1	0.3
12/10	0.5	1.5	0.5	1.7	1.0	0.8	0.7	0.7	0.2	0.6	0.4	0.1	0.3
12/11	0.5	1.5	0.4	1.7	1.0	0.8	0.6	0.7	0.2	0.6	0.4	0.1	0.3
12/12	0.5	1.5	0.4	1.7	1.0	0.8	0.6	0.7	0.2	0.6	0.4	0.1	0.3
12/13	0.5	1.5	0.5	1.8	1.0	0.9	0.7	0.8	0.2	0.6	0.4	0.1	0.3
12/14	0.5	1.5	0.4	1.7	1.0	0.8	0.6	0.7	0.2	0.6	0.4	0.1	0.3
12/15	0.5	1.4	0.4	1.6	0.9	0.8	0.6	0.7	0.2	0.5	0.4	0.1	0.3
12/16	0.4	1.4	0.4	1.6	0.9	0.8	0.6	0.7	0.2	0.5	0.4	0.1	0.3
12/17	0.4	1.3	0.4	1.5	0.9	0.7	0.6	0.7	0.2	0.5	0.4	0.1	0.3
12/18	0.4	1.3	0.4	1.5	0.8	0.7	0.6	0.6	0.2	0.5	0.3	0.1	0.3
12/19	0.4	1.3	0.4	1.5	0.9	0.7	0.6	0.7	0.2	0.5	0.4	0.1	0.3

Table F-2. Estimated Total Maximum Daily Load for sediment impaired watersheds in Madison TPA (in Tons)

Day	Antelope	Bear	Blaine Spring	Cherry	Elk	Hot Springs	Moore Creek	North Meadow	Red Canyon	Ruby	South Meadow	Watkins	Wigwam
12/20	0.4	1.3	0.4	1.5	0.8	0.7	0.6	0.6	0.2	0.5	0.3	0.1	0.3
12/21	0.4	1.3	0.4	1.5	0.8	0.7	0.6	0.6	0.2	0.5	0.3	0.1	0.3
12/22	0.4	1.3	0.4	1.5	0.9	0.7	0.6	0.7	0.2	0.5	0.4	0.1	0.3
12/23	0.5	1.5	0.5	1.7	1.0	0.8	0.7	0.7	0.2	0.6	0.4	0.1	0.3
12/24	0.5	1.4	0.4	1.6	0.9	0.8	0.6	0.7	0.2	0.5	0.4	0.1	0.3
12/25	0.4	1.4	0.4	1.6	0.9	0.8	0.6	0.7	0.2	0.5	0.4	0.1	0.3
12/26	0.4	1.3	0.4	1.5	0.8	0.7	0.6	0.6	0.2	0.5	0.3	0.1	0.3
12/27	0.4	1.2	0.4	1.4	0.8	0.7	0.5	0.6	0.2	0.5	0.3	0.1	0.3
12/28	0.4	1.3	0.4	1.5	0.9	0.7	0.6	0.7	0.2	0.5	0.4	0.1	0.3
12/29	0.4	1.3	0.4	1.5	0.9	0.7	0.6	0.7	0.2	0.5	0.4	0.1	0.3
12/30	0.4	1.3	0.4	1.5	0.9	0.7	0.6	0.6	0.2	0.5	0.4	0.1	0.3
12/31	0.4	1.3	0.4	1.5	0.8	0.7	0.6	0.6	0.2	0.5	0.3	0.1	0.3