APPENDIX B - CHEMISTRY, FLOW, FISH DISTRIBUTION, AND PERMITTED POINT SOURCES DATA FOR THE FLATHEAD – STILLWATER TMDL PLANNING AREA

Table B-1. Recent Surface Water Nutrients, Chlorophyll-*a*, and Flow Data, Ashley Creek Watershed

Organization ID	Waterbody Name	Site ID	Latitude	Longitude	Collection Date	Flow (cfs)	NN (mg/L)	TN (mg/L)	TP (mg/L)	Chl-*a* (mg/m2)
MTWTRSHD_WQX	Ashley Creek (lower)	AC-9	48.164417	-114.301967	7/24/2003	6.2	2.56	3.91	0.079	-
MTWTRSHD_WQX	Ashley Creek (lower)	AC-9	48.164417	-114.301967	9/17/2003	7.67	3.93	5	0.068	-
MTWTRSHD_WQX	Ashley Creek (lower)	AC-9	48.164417	-114.301967	9/21/2004	11.66	2.26	3.13	0.062	-
MTWTRSHD_WQX	Ashley Creek (lower)	AC-9	48.164417	-114.301967	6/30/2005	49.82	0.74	1.52	0.074	-
MTWTRSHD_WQX	Ashley Creek (lower)	AC-9	48.164417	-114.301967	7/13/2005	-	0.94	1.72	0.069	-
MTWTRSHD_WQX	Ashley Creek (lower)	AC-9	48.164417	-114.301967	7/27/2005	13.48	2	3.33	0.074	-
MTWTRSHD_WQX	Ashley Creek (lower)	AC-9	48.164417	-114.301967	8/10/2005	9.58	2.98	3.87	0.055	-
MTWTRSHD_WQX	Ashley Creek (lower)	AC-9	48.164417	-114.301967	8/31/2005	7.5	3.77	5.11	0.087	-
MTWTRSHD_WQX	Ashley Creek (lower)	AC-9	48.164417	-114.301967	7/5/2004	27.83	-	-	-	-
MTWTRSHD_WQX	Ashley Creek (lower)	AC-9	48.164417	-114.301967	9/21/2005	10.87	2.87	C 4.7	0.037	69
MDEQ_WQ_WQX	Ashley Creek (lower)	C11AHLYC01	48.1464	-114.27334	8/2/2004	E 0-	0.69	1.69	0.075	-
MDEQ_WQ_WQX	Ashley Creek (lower)	C11AHLYC01	48.1464	-114.27334	7/30/2008	20.702	-	-	0.036	-
MDEQ_WQ_WQX	Ashley Creek (lower)	C11AHLYC01	48.1464	-114.27334	8/13/2008	5.985	-	-	0.034	-
MDEQ_WQ_WQX	Ashley Creek (lower)	C11AHLYC01	48.1464	-114.27334	9/6/2008	4.18-	-	-	0.019	-
MDEQ_WQ_WQX	Ashley Creek (lower)	C11AHLYC01	48.1464	-114.27334	10/1/2008	2.81	-	-	0.021	-
MDEQ_WQ_WQX	Ashley Creek (lower)	C11AHLYC02	48.16434	-114.29966	8/2/2004	E 5	1.91	2.81	0.086	-
MDEQ_WQ_WQX	Ashley Creek (lower)	C11AHLYC03	48.17543	-114.30929	8/2/2004	E 3	0.03	0.83	0.057	-
USGS	Ashley Creek (lower)	12367800	48.16384648	-114.3012402	7/13/2007	21	-	-	-	-
USGS	Ashley Creek (lower)	12367800	48.16384648	-114.3012402	7/16/2007	17	-	-	0.075	-
USGS	Ashley Creek (lower)	12367800	48.16384648	-114.3012402	8/6/2007	11	-	-	0.042	-
USGS	Ashley Creek (lower)	12367800	48.16384648	-114.3012402	8/7/2007	9.2	-	-	-	-
USGS	Ashley Creek (lower)	12367800	48.16384648	-114.3012402	9/19/2007	11	-	-	-	-
USGS	Ashley Creek (lower)	12367800	48.16384648	-114.3012402	7/14/2008	46	-	-	0.043	-
USGS	Ashley Creek (lower)	12367800	48.16384648	-114.3012402	8/26/2008	13	-	-	0.089	-
USGS	Ashley Creek (lower)	12367800	48.16384648	-114.3012402	8/29/2008	8.8	-	-	-	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-5	48.14945	-114.433	7/24/2003	6.48 t-	< 0.01	0.805	0.037	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-5	48.14945	-114.433	9/17/2003	4.43 t	< 0.01	1.055	0.025	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-5	48.14945	-114.433	7/5/2004	23.15 t	< 0.01	0.795	0.024	-

Table B-1. Recent Surface Water Nutrients, Chlorophyll-*a*, and Flow Data, Ashley Creek Watershed

Organization ID	Waterbody Name	Site ID	Latitude	Longitude	Collection Date	Flow (cfs)	NN (mg/L)	TN (mg/L)	TP (mg/L)	Chl-*a* (mg/m2)
MTWTRSHD_WQX	Ashley Creek (middle)	AC-5	48.14945	-114.433	9/21/2004	6.93 t	< 0.01	0.735	0.018	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-5	48.14945	-114.433	6/30/2005	34.58	< 0.01	0.665	0.035	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-5	48.14945	-114.433	7/13/2005	-	< 0.01	0.745	0.034	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-5	48.14945	-114.433	7/27/2005	12.90 t	< 0.01	0.745	0.032	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-5	48.14945	-114.433	8/10/2005	7.62 t	< 0.01	0.865	0.029	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-5	48.14945	-114.433	8/31/2005	7.50 t	< 0.01	0.935	0.025	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-5	48.14945	-114.433	9/21/2005	10.49 t	< 0.01	C 1.7	0.019	57
MTWTRSHD_WQX	Ashley Creek (middle)	AC-6	48.18218	-114.412	7/24/2003	5.52 t	< 0.01	0.725	0.04	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-6	48.18218	-114.412	9/17/2003	4.33 tt	0.01	1.08	0.028	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-6	48.18218	-114.412	7/5/2004	24.88 t	< 0.01	0.845	0.03	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-6	48.18218	-114.412	9/21/2004	12.74 t	< 0.01	0.605	0.018	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-6	48.18218	-114.412	6/30/2005	41.71 t	< 0.01	0.755	0.04	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-6	48.18218	-114.412	7/13/2005	-	< 0.01	0.605	0.037	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-6	48.18218	-114.412	7/27/2005	11.34 t	< 0.01	0.755	0.034	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-6	48.18218	-114.412	8/10/2005	7.17 t	0.01	0.825	0.028	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-6	48.18218	-114.412	8/31/2005	8.73 t	< 0.01	0.825	0.025	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-6	48.18218	-114.412	9/21/2005	13.28 t	< 0.01	C 1.7	0.025	49
MTWTRSHD_WQX	Ashley Creek (middle)	AC-7	48.19518	-114.373	7/24/2003	4.15 t	0.01	0.71	0.044	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-7	48.19518	-114.373	9/17/2003	5.37 t	0.01	0.91	0.022	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-7	48.19518	-114.373	7/5/2004	25.51 t	< 0.01	0.945	0.032	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-7	48.19518	-114.373	9/21/2004	10.91 t	< 0.01	0.595	0.022	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-7	48.19518	-114.373	6/30/2005	40.46 t	< 0.01	0.755	0.039	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-7	48.19518	-114.373	7/13/2005	-	< 0.01	0.805	0.039	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-7	48.19518	-114.373	7/27/2005	14.16 t	0.01	0.585	0.039	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-7	48.19518	-114.373	9/21/2005	10.53 t	< 0.01	C 1.7	0.021	50
MTWTRSHD_WQX	Ashley Creek (middle)	AC-8	48.18235	-114.323	7/24/2003	3.13 t	< 0.01	0.665	0.059	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-8	48.18235	-114.323	9/17/2003	2.00 t	< 0.01	0.885	0.033	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-8	48.18235	-114.323	7/5/2004	18.84 t	< 0.01	0.795	0.035	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-8	48.18235	-114.323	9/21/2004	-	0.07	0.565	0.034	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-8	48.18235	-114.323	6/30/2005	46.36 t	< 0.01	0.795	0.047	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-8	48.18235	-114.323	7/13/2005		< 0.01	0.695	0.055	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-8	48.18235	-114.323	7/27/2005	10.14 t	< 0.01	0.845	0.039	-

Table B-1. Recent Surface Water Nutrients, Chlorophyll-*a*, and Flow Data, Ashley Creek Watershed

Organization ID	Waterbody Name	Site ID	Latitude	Longitude	Collection Date	Flow (cfs)	NN (mg/L)	TN (mg/L)	TP (mg/L)	Chl-*a* (mg/m2)
MTWTRSHD_WQX	Ashley Creek (middle)	AC-8	48.18235	-114.323	8/10/2005	4.02 t	< 0.01	0.725	0.05	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-8	48.18235	-114.323	8/31/2005	3.12 t	< 0.01	0.755	0.032	-
MTWTRSHD_WQX	Ashley Creek (middle)	AC-8	48.18235	-114.323	9/21/2005	-	< 0.01	C 1.5	0.025	11
MDEQ_WQ_WQX	Ashley Creek (middle)	C11AHLYC04	48.1467	-114.436	7/3/2007	24.390 t	-	-	0.017	-
MDEQ_WQ_WQX	Ashley Creek (middle)	C11AHLYC04	48.1467	-114.436	8/1/2007	4.247 t	-	-	< 0.001	-
MDEQ_WQ_WQX	Ashley Creek (middle)	C11AHLYC04	48.1467	-114.436	9/19/2007	2.553 t	-	-	0.026	-
MDEQ_WQ_WQX	Ashley Creek (middle)	C11AHLYC05	48.1493	-114.433	5/7/2008	-	-	-	0.015	-
MDEQ_WQ_WQX	Ashley Creek (middle)	C11AHLYC05	48.1493	-114.433	7/2/2008	54.17 t	-	-	0.02	-
MDEQ_WQ_WQX	Ashley Creek (middle)	C11AHLYC05	48.1493	-114.433	7/14/2008	36.68 t	-	-	0.015	-
MDEQ_WQ_WQX	Ashley Creek (middle)	C11AHLYC05	48.1493	-114.433	7/28/2008	14.296 t	-	-	0.015	-
MDEQ_WQ_WQX	Ashley Creek (middle)	C11AHLYC05	48.1493	-114.433	8/13/2008	3.984 t	-	-	0.017	-
MDEQ_WQ_WQX	Ashley Creek (middle)	C11AHLYC05	48.1493	-114.433	9/5/2008	0.06 t	-	-	0.017	-
MDEQ_WQ_WQX	Ashley Creek (middle)	C11AHLYC05	48.1493	-114.433	10/1/2008	-	-	-	0.02	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-1	48.18005	-114.618	7/24/2003	10.18	< 0.01	0.285	0.017	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-1	48.18005	-114.618	9/17/2003	4.31	< 0.01	0.305	0.009	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-1	48.18005	-114.618	7/5/2004	7.67	< 0.01	0.445	0.008	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-1	48.18005	-114.618	9/21/2004	12.19	< 0.01	0.055	0.01	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-1	48.18005	-114.618	6/30/2005	5.83	< 0.01	0.115	0.017	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-1	48.18005	-114.618	7/13/2005	-	< 0.01	0.115	0.011	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-1	48.18005	-114.618	7/27/2005	12.36	< 0.01	0.115	0.012	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-1	48.18005	-114.618	8/10/2005	8.25	< 0.01	0.355	0.011	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-1	48.18005	-114.618	8/31/2005	7.79	< 0.01	0.265	0.01	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-1	48.18005	-114.618	9/21/2005	6.46	< 0.01	C 1.5	0.011	43
MTWTRSHD_WQX	Ashley Creek (upper)	AC-2	48.16775	-114.604	7/24/2003	13.25	< 0.01	0.055	0.015	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-2	48.16775	-114.604	9/17/2003	5.58	< 0.01	0.255	0.009	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-2	48.16775	-114.604	7/5/2004	8.48	< 0.01	0.465	0.011	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-2	48.16775	-114.604	9/21/2004	6.31	< 0.01	0.055	0.008	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-2	48.16775	-114.604	6/30/2005	5.33	< 0.01	0.225	0.018	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-2	48.16775	-114.604	7/13/2005	-	< 0.01	0.115	0.014	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-2	48.16775	-114.604	7/27/2005	12.36	< 0.01	0.115	0.012	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-2	48.16775	-114.604	8/10/2005	7.52	< 0.01	0.345	0.011	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-2	48.16775	-114.604	8/31/2005	7.78	< 0.01	0.265	0.01	-

Table B-1. Recent Surface Water Nutrients, Chlorophyll-*a*, and Flow Data, Ashley Creek Watershed

Organization ID	Waterbody Name	Site ID	Latitude	Longitude	Collection Date	Flow (cfs)	NN (mg/L)	TN (mg/L)	TP (mg/L)	Chl-*a* (mg/m2)
MTWTRSHD_WQX	Ashley Creek (upper)	AC-2	48.16775	-114.604	9/21/2005	6.34	< 0.01	C 1.4	0.009	34
MTWTRSHD_WQX	Ashley Creek (upper)	AC-3	48.10033	-114.562	7/24/2003	7.33	0.02	0.07	0.017	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-3	48.10033	-114.562	9/17/2003	5.4	0.01	0.45	0.024	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-3	48.10033	-114.562	7/5/2004	-	< 0.01	0.049	0.013	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-3	48.10033	-114.562	9/21/2004	7.67	< 0.01	0.275	0.012	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-3	48.10033	-114.562	6/30/2005	10.82	0.01	0.29	0.021	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-3	48.10033	-114.562	7/13/2005	-	< 0.01	0.285	0.016	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-3	48.10033	-114.562	7/27/2005	11.86	0.01	0.37	0.016	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-3	48.10033	-114.562	8/10/2005	7.32	0.03	0.27	0.014	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-3	48.10033	-114.562	8/31/2005	6.9	< 0.01	0.385	0.017	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-3	48.10033	-114.562	7/5/2004	12.65	-	-	-	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-3	48.10033	-114.562	9/21/2005	7.5	< 0.01	C 1.4	0.009	74
MTWTRSHD_WQX	Ashley Creek (upper)	AC-4	48.1055	-114.459	7/24/2003	-	< 0.01	0.255	0.032	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-4	48.1055	-114.459	9/17/2003	-	< 0.01	0.375	0.03	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-4	48.1055	-114.459	7/5/2004	-	< 0.01	0.565	0.03	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-4	48.1055	-114.459	9/21/2004	-	< 0.01	0.325	0.017	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-4	48.1055	-114.459	6/30/2005	-	< 0.01	0.385	0.048	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-4	48.1055	-114.459	7/13/2005	-	< 0.01	-	0.028	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-4	48.1055	-114.459	7/27/2005	-	< 0.01	0.335	0.025	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-4	48.1055	-114.459	8/10/2005	-	< 0.01	0.335	0.023	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-4	48.1055	-114.459	8/31/2005	-	< 0.01	0.365	0.018	-
MTWTRSHD_WQX	Ashley Creek (upper)	AC-4	48.1055	-114.459	9/21/2005	-	< 0.01	C 1.3	0.015	-
MDEQ_WQ_WQX	Spring Creek	C11SPRGC01	48.2059	-114.35	7/18/2012	7.67	0.43	0.43	0.007	-
MDEQ_WQ_WQX	Spring Creek	C11SPRGC01	48.2059	-114.35	9/17/2012	6.5	0.39	0.47	< 0.003	-
MDEQ_WQ_WQX	Spring Creek	C11SPRGC01	48.2059	-114.35	6/6/2012	7.81	-	-	-	-
MDEQ_WQ_WQX	Spring Creek	C11SPRGC02	48.2191	-114.37	7/18/2012	8.11	0.35	0.52	0.006	-
MDEQ_WQ_WQX	Spring Creek	C11SPRGC02	48.2191	-114.37	9/18/2012	6.85	0.47	0.52	0.004	-
MDEQ_WQ_WQX	Spring Creek	C11SPRGC30	48.19832	-114.331	8/15/2005	E 1.5	-	-	-	-
MDEQ_WQ_WQX	Spring Creek	C11SPRGC30	48.19832	-114.331	8/8/2007	-	0.164	0.25	0.02	-
MDEQ_WQ_WQX	Spring Creek	C11SPRGC30	48.19832	-114.331	7/17/2012	E 8	0.34	0.36	0.014	-
MDEQ_WQ_WQX	Spring Creek	C11SPRGC30	48.19832	-114.331	9/17/2012	6.79	0.47	0.63	0.009	-
MDEQ_WQ_WQX	Spring Creek	C11SPRGC30	48.19832	-114.331	8/15/2005	-	< 0.01	C 0.5	0.037	-
MDEQ_WQ_WQX	Spring Creek	C11SPRGC31	48.22517	-114.383	8/15/2005	E 1	-	-	-	-

Table B-1. Recent Surface Water Nutrients, Chlorophyll-*a*, and Flow Data, Ashley Creek Watershed

Organization ID	Waterbody Name	Site ID	Latitude	Longitude	Collection Date	Flow (cfs)	NN (mg/L)	TN (mg/L)	TP (mg/L)	Chl-*a* (mg/m2)
MDEQ_WQ_WQX	Spring Creek	C11SPRGC31	48.22517	-114.383	7/18/2012	E 8	0.62	0.66	0.005	-
MDEQ_WQ_WQX	Spring Creek	C11SPRGC31	48.22517	-114.383	9/18/2012	E 3	EXC	EXC	< 0.003	-
MDEQ_WQ_WQX	Spring Creek	C11SPRGC31	48.22517	-114.383	8/15/2005	-	0.81	C 1.3	0.079	-
MTWTRSHD_WQX	Spring Creek	SPC01	48.21975	-114.373	9/9/2005	0.85	0.02	C 0.6	0.005	18
MTWTRSHD_WQX	Spring Creek	SPC02	48.20611	-114.351	9/9/2005	0.51	< 0.01	C 0.6	0.012	20-
MTWTRSHD_WQX	Spring Creek	SPC03	48.19973	-114.336	9/9/2005	E 0.5	< 0.01	C 0.8	0.012	10
MTWTRSHD_WQX	Spring Creek	SPC03	48.19973	-114.336	9/9/2005	-	-0.43	C 1.3	-	-

NN = Nitrate + Nitrite, TN = Total Nitrogen, TP = Total Phosphorus, Chl-*a* = chlorophyll *a*
Duplicate flows at AC-1, AC-2, AC-3, and AC-9 from 9/21/2005 that are in the water quality assessment records (DEQ 2014b) were excluded from this table.
TN was calculated as the summation of TKN and NN for all "AC-" sites for this project, unless noted otherwise (i.e., TKN and NN are reported in STORET but not TN).
C = TN concentration is a calculated value and is reported as such in STORET.
E = An estimated flow value.
EXC = DEQ excluded these result values from the water quality assessment record (Montana Department of Environmental Quality, Water Quality Planning Bureau, 2014)
t = Flow record was included in STORET but was excluded from the water quality assessment record (Montana Department of Environmental Quality, Water Quality Planning Bureau, 2014).
tt = Flow record was included in STORET (as 433 cfs) but was excluded from the water quality assessment record (Montana Department of Environmental Quality, Water Quality Planning Bureau, 2014). It is assumed to be 4.33 cfs.

Table B-2. Permitted Point Sources with Possible Sediment Contribution to Sediment-Impaired Watersheds

NPDES ID	Facility Name	Latitude	Longitude	Permit Type	Expiration	Discharge To	Project Size
MT0021938	CITY OF KALISPELL WWTP	48.17472	-114.30611	NPDES Individual Permit	8/31/2013	ASHLEY CREEK	N/A
MTR000251	WISHER'S AUTO RECYCLING	48.167778	-114.310278	MPDES Storm Water - Industrial Activity	1/31/2018	ASHLEY CREEK	22.27
MTR000419	BUILDING MATERIALS HOLDING CORP. - BMC WEST TRUSS PLANT	48.118889	-114.253611	MPDES Storm Water - Industrial Activity	1/31/2018	ASHLEY CREEK	6.3
MTR000447	UPS - KALISPELL	48.211667	-114.329444	MPDES Storm Water - Industrial Activity	1/31/2018	SPRING CREEK	4.0

Table B-2. Permitted Point Sources with Possible Sediment Contribution to Sediment-Impaired Watersheds

NPDES ID	Facility Name	Latitude	Longitude	Permit Type	Expiration	Discharge To	Project Size
MTR000465	GLACIER GOLD LLC	48.532694	-114.572639	MPDES Storm Water - Industrial Activity	1/31/2018	STILLWATER RIVER & LOWER STILLWATER LAKE	38
MTR000476	FLATHEAD COUNTY SOLID WASTE DISTRICT	48.322222	-114.341667	MPDES Storm Water - Industrial Activity	1/31/2018	STILLWATER RIVER	310
MTR000531	CITY OF KALISPELL WWTP	48.17472	-114.30611	MPDES Storm Water - Industrial Activity	1/31/2018	ASHLEY CREEK	17.04
MTR040005	CITY OF KALISPELL SMALL MS-4	48.19967	-114.3132	MPDES Storm Water - Small MS4 (Municipal Separate Storm Sewer System)	12/31/2014	FLATHEAD RIVER, ASHLEY CREEK	N/A
MTR102686	TKD SPRING PRAIRIE DEVEL THREE SPRING PRAIRIECENTER PHASE III	48.238944	-114.332611	MPDES Storm Water - Construction Activity General Permit	12/31/2017	STILLWATER RIVER	24
MTR103414	WHITEFISH HILLS FOREST SUBDIVISION	48.345556	-114.365278	MPDES Storm Water - Construction Activity General Permit	12/31/2017	BLANCHARD LAKE AND STILLWATER RIVER	19
MTR103908	MDOT - KALISPELL BYPASS US 93 BIKEPATH CONNECTION	48.14975	-114.2925	MPDES Storm Water - Construction Activity General Permit	12/31/2017	ASHLEY CREEK	9
MTR104432	MONTANA DEPT OF NATURAL RESOURCES - SPRING PRAIRIE FUTURE DEVEL	48.23639	-114.34198	MPDES Storm Water - Construction Activity General Permit	12/31/2017	STORMWATER SYSTEM	9
MTR105030	KRAMER ENTERPRISES - SONJU INDUSTRIAL FACILITY	48.2554	-114.3313	MPDES Storm Water - Construction Activity General Permit	12/31/2017	STILLWATER RIVER	2
MTR105102	LASALLE SAND & GRAVEL - FLATHEAD CO SWD OLNEY GREEN BOX CONTAINER SITE	48.49306	-114.52417	MPDES Storm Water - Construction Activity General Permit	12/31/2017	STILLWATER RIVER	3
MTR105146	SCHELLINGER CONSTRUCTION - KBP RESERVE LOOP TO US 93	48.2329	-114.3462	MPDES Storm Water - Construction Activity General Permit	12/31/2017	DETENTION POND TO STILLWATER R	49

Table B-2. Permitted Point Sources with Possible Sediment Contribution to Sediment-Impaired Watersheds

NPDES ID	Facility Name	Latitude	Longitude	Permit Type	Expiration	Discharge To	Project Size
MTR105263	NELCON INC - TOWN PUMP - KALISPELL NO 5	48.163027	-114.28973	MPDES Storm Water - Construction Activity General Permit	12/31/2017	ASHLEY CREEK	22
MTR105284	SCHELLINGER CONSTRUCTION - THE WILLOWS STORMWATER IMPROVEMENTS PROJ	48.175123	-114.283294	MPDES Storm Water - Construction Activity General Permit	12/31/2017	STILLWATER RIVER	1
MTR105434	LHC INC - KBP THREE MILE DRIVE	48.21132	-114.34599	MPDES Storm Water - Construction Activity General Permit	12/31/2017	SPRING CREEK	15
MTR105492	TOM GARWIN - GARWIN STILLWATER RESIDENCE	48.384861	-114.448472	MPDES Storm Water - Construction Activity General Permit	12/31/2017	STILLWATER RIVER	7
MTR105578	WILLOW CREEK SUBDIVISION	48.187083	-114.341167	MPDES Storm Water - Construction Activity General Permit	12/31/2017	TRIBUTARY OF ASHLEY CREEK	23

N/A = not applicable

Table B-3. MFISH Fish Presence Data for Ashley Creek

Species	Begin Mile	End Mile	Abundance	Origin
Brook Trout	0	25.3	Rare	Introduced
	26.9	29.5	Abundant	
	29.5	35.4	Abundant	
Largescale Sucker	0	25.3	Rare	Native
Longnose Sucker	0	25.3	Abundant	Native
	26.9	41.7	Common	
Mountain Whitefish	0	15.9	Rare	Native
	15.9	25.3	Common	
	26.9	29.5	Rare	
	29.5	41.7	Rare	
Northern Pike	26.9	36.8	Common	Introduced
	37.6	41.7	Rare	

Table B-3. MFISH Fish Presence Data for Ashley Creek

Species	Begin Mile	End Mile	Abundance	Origin
Northern Pike Minnow	0	25.3	Abundant	Native
	26.9	41.7	Common	
Peamouth	0	25.3	Abundant	Native
	26.9	41.7	Rare	
Rainbow Trout	0	15.9	Rare	Introduced
	15.9	25.3	Common	
	26.9	35.4	Common	
Redside Shiner	0	25.3	Abundant	Native
	26.9	41.7	Rare	
Sculpin	26.9	28.2	Common	Native
	29.5	41.7	Unknown	
Slimy Sculpin	15.9	25.3	Abundant	Native
	28.2	29.5	Common	
Westslope X Rainbow Trout	20	47	Common	Introduced
Yellow Perch	0	25.3	Common	Introduced
	26.9	29.5	Common	
	29.5	41.7	Rare	

Table B-4. MFISH Fish Presence Data for the Whitefish River

Species	Begin Mile	End Mile	Abundance	Origin
Brook Trout	0	23.7	Rare	Introduced
Bull Trout	0	23.7	Unknown	Native
Largescale Sucker	0	23.7	Abundant	Native
Longnose Sucker	0	23.7	Abundant	Native
Mountain Whitefish	0	19.4	Common	Native
	19.4	22.1	Rare	
	22.1	23.7	Rare	
Northern Pike	0	23.7	Common	Introduced
Northern Pike Minnow	0	19.4	Abundant	Native
	19.4	23.7	Common	
Peamouth	0	19.4	Abundant	Native
	19.4	23.7	Common	
Rainbow Trout	0	23.7	Rare	Introduced
Redside Shiner	0	23.7	Common	Native

Table B-4. MFISH Fish Presence Data for the Whitefish River

Species	Begin Mile	End Mile	Abundance	Origin
Slimy Sculpin	0	23.7	Unknown	Native
Westslope Cutthroat Trout	0	29.3	Rare	Native

Table B-5. Kalispell WWTP Effluent and Ashley Creek Upstream and Downstream of the Kalispell WWTP Temperature Data August 2003 – 2012

NPDES ID	Facility Name	Location	Parameter	Monitoring Location	Statistic	DMR Value (°C) [1]	DMR Value (°F) [1]	Monitoring Period
MT0021938	CITY OF KALISPELL WWTP	ASHLEY CK - UPSTREAM STATION	Temperature	Upstream Monitoring	30 Day Average	24	75.2	8/1/2003 - 8/31/2003
MT0021938	CITY OF KALISPELL WWTP	WASTEWATER TREATMENT PLANT	Temperature	Effluent Gross	30 Day Average	21.8	71.24	8/1/2003 - 8/31/2003
MT0021938	CITY OF KALISPELL WWTP	ASHLEY CK DOWNSTREAM STATION	Temperature	Downstream Monitoring	30 Day Average	23.6	74.48	8/1/2003 - 8/31/2003
MT0021938	CITY OF KALISPELL WWTP	ASHLEY CK - UPSTREAM STATION	Temperature	Upstream Monitoring	30 Day Average	21.2	70.16	8/1/2004 - 8/31/2004
MT0021938	CITY OF KALISPELL WWTP	WASTEWATER TREATMENT PLANT	Temperature	Effluent Gross	30 Day Average	20	68	8/1/2004 - 8/31/2004
MT0021938	CITY OF KALISPELL WWTP	ASHLEY CK DOWNSTREAM STATION	Temperature	Downstream Monitoring	30 Day Average	20.9	69.62	8/1/2004 - 8/31/2004
MT0021938	CITY OF KALISPELL WWTP	ASHLEY CK - UPSTREAM STATION	Temperature	Upstream Monitoring	30 Day Average	19.8	67.64	8/1/2005 - 8/31/2005
MT0021938	CITY OF KALISPELL WWTP	WASTEWATER TREATMENT PLANT	Temperature	Effluent Gross	30 Day Average	20	68	8/1/2005 - 8/31/2005
MT0021938	CITY OF KALISPELL WWTP	ASHLEY CK DOWNSTREAM STATION	Temperature	Downstream Monitoring	30 Day Average	20.6	69.08	8/1/2005 - 8/31/2005
MT0021938	CITY OF KALISPELL WWTP	ASHLEY CK - UPSTREAM STATION	Temperature	Upstream Monitoring	30 Day Average	18.3	64.94	8/1/2006 - 8/31/2006
MT0021938	CITY OF KALISPELL WWTP	WASTEWATER TREATMENT PLANT	Temperature	Effluent Gross	30 Day Average	20	68	8/1/2006 - 8/31/2006
MT0021938	CITY OF KALISPELL WWTP	ASHLEY CK DOWNSTREAM STATION	Temperature	Downstream Monitoring	30 Day Average	19.3	66.74	8/1/2006 - 8/31/2006
MT0021938	CITY OF KALISPELL WWTP	ASHLEY CK - UPSTREAM STATION	Temperature	Upstream Monitoring	30 Day Average	20.5	68.9	8/1/2007 - 8/31/2007
MT0021938	CITY OF KALISPELL WWTP	WASTEWATER TREATMENT PLANT	Temperature	Effluent Gross	30 Day Average	20.2	68.36	8/1/2007 - 8/31/2007

Table B-5. Kalispell WWTP Effluent and Ashley Creek Upstream and Downstream of the Kalispell WWTP Temperature Data August 2003 – 2012

NPDES ID	Facility Name	Location	Parameter	Monitoring Location	Statistic	DMR Value (°C) [1]	DMR Value (°F) [1]	Monitoring Period
MT0021938	CITY OF KALISPELL WWTP	ASHLEY CK DOWNSTREAM STATION	Temperature	Downstream Monitoring	30 Day Average	21	69.8	8/1/2007 - 8/31/2007
MT0021938	CITY OF KALISPELL WWTP	ASHLEY CK - UPSTREAM STATION	Temperature	Upstream Monitoring	30 Day Average	21.1	69.98	8/1/2008 - 8/31/2008
MT0021938	CITY OF KALISPELL WWTP	WASTEWATER TREATMENT PLANT	Temperature	Effluent Gross	30 Day Average	20.1	68.18	8/1/2008 - 8/31/2008
MT0021938	CITY OF KALISPELL WWTP	ASHLEY CK DOWNSTREAM STATION	Temperature	Downstream Monitoring	30 Day Average	21.6	70.88	8/1/2008 - 8/31/2008
MT0021938	CITY OF KALISPELL WWTP	WASTEWATER TREATMENT PLANT	Temperature	Effluent Gross	30 Day Average	20	68	8/1/2009 - 8/31/2009
MT0021938	CITY OF KALISPELL WWTP	WASTEWATER TREATMENT PLANT	Temperature	Effluent Gross	30 Day Average	19.5	67.1	8/1/2010 - 8/31/2010
MT0021938	CITY OF KALISPELL WWTP	WASTEWATER TREATMENT PLANT	Temperature	Effluent Gross	30 Day Average	19.3	66.74	8/1/2011 - 8/31/2011
MT0021938	CITY OF KALISPELL WWTP	WASTEWATER TREATMENT PLANT	Temperature	Effluent Gross	30 Day Average	19.9	67.82	8/1/2012 - 8/31/2012
"ASHLEY CK - UPSTREAM STATION" Average = 69.44°F, "WASTEWATER TREATMENT PLANT" Average = 68.18°F, "ASHLEY CK DOWNSTREAM STATION" Average = 70.16°F								

[1] DMR = discharge monitoring report

Table B-6. Kalispell WWTP Effluent Flow Data August 2003 – 2012

NPDES ID	Facility Name	Location	Parameter	Monitoring Location	Statistic	DMR Value (mgd)[1]	DMR Value (cfs) [1]	Monitoring Period
MT0021938	CITY OF KALISPELL WWTP	WASTEWATER TREATMENT PLANT	Flow	Effluent Gross	30 Day Average	2.538	3.93	8/1/2003 - 8/31/2003
MT0021938	CITY OF KALISPELL WWTP	WASTEWATER TREATMENT PLANT	Flow	Effluent Gross	30 Day Average	2.678	4.14	8/1/2004 - 8/31/2004
MT0021938	CITY OF KALISPELL WWTP	WASTEWATER TREATMENT PLANT	Flow	Effluent Gross	30 Day Average	2.765	4.28	8/1/2005 - 8/31/2005
MT0021938	CITY OF KALISPELL WWTP	WASTEWATER TREATMENT PLANT	Flow	Effluent Gross	30 Day Average	2.854	4.42	8/1/2006 - 8/31/2006

Table B-6. Kalispell WWTP Effluent Flow Data August 2003 – 2012

NPDES ID	Facility Name	Location	Parameter	Monitoring Location	Statistic	DMR Value (mgd)[1]	DMR Value (cfs)[1]	Monitoring Period
MT0021938	CITY OF KALISPELL WWTP	WASTEWATER TREATMENT PLANT	Flow	Effluent Gross	30 Day Average	2.857	4.42	8/1/2007 - 8/31/2007
MT0021938	CITY OF KALISPELL WWTP	WASTEWATER TREATMENT PLANT	Flow	Effluent Gross	30 Day Average	2.723	4.21	8/1/2008 - 8/31/2008
MT0021938	CITY OF KALISPELL WWTP	WASTEWATER TREATMENT PLANT	Flow	Effluent Gross	30 Day Average	2.6	4.02	8/1/2009 - 8/31/2009
MT0021938	CITY OF KALISPELL WWTP	WASTEWATER TREATMENT PLANT	Flow	Effluent Gross	30 Day Average	2.601	4.02	8/1/2010 - 8/31/2010
MT0021938	CITY OF KALISPELL WWTP	WASTEWATER TREATMENT PLANT	Flow	Effluent Gross	30 Day Average	2.617	4.05	8/1/2011 - 8/31/2011
MT0021938	CITY OF KALISPELL WWTP	WASTEWATER TREATMENT PLANT	Flow	Effluent Gross	30 Day Average	2.222	3.44	8/1/2012 - 8/31/2013
"WASTEWATER TREATMENT PLANT" Average = 4.1 cfs								

[1] DMR = discharge monitoring report

Table B-7. USGS August 2007-2008 Discharge Data for Station 12367800 Ashley Creek at Kalispell, MT (downstream of the Kalispell WWTP)

Date	Daily Average (cfs)	Date	Daily Average (cfs)	Date	Daily Average (cfs)
8/1/2007	14	8/22/2007	9.9	8/12/2008	14
8/2/2007	13	8/23/2007	9.8	8/13/2008	13
8/3/2007	13	8/24/2007	9.7	8/14/2008	12
8/4/2007	12	8/25/2007	9.6	8/15/2008	13
8/5/2007	11	8/26/2007	9.6	8/16/2008	12
8/6/2007	11	8/27/2007	9.7	8/17/2008	12
8/7/2007	11	8/28/2007	9.7	8/18/2008	11
8/8/2007	10	8/29/2007	9.8	8/19/2008	9.5
8/9/2007	10	8/30/2007	9.7	8/20/2008	10
8/10/2007	10	8/31/2007	9.7	8/21/2008	11
8/11/2007	9.9	8/1/2008	23	8/22/2008	10
8/12/2007	9.6	8/2/2008	21	8/23/2008	10
8/13/2007	9.7	8/3/2008	20	8/24/2008	10
8/14/2007	9.8	8/4/2008	19	8/25/2008	9.4
8/15/2007	9.7	8/5/2008	19	8/26/2008	13
8/16/2007	9.5	8/6/2008	18	8/27/2008	9

Table B-7. USGS August 2007-2008 Discharge Data for Station 12367800 Ashley Creek at Kalispell, MT (downstream of the Kalispell WWTP)

Date	Daily Average (cfs)	Date	Daily Average (cfs)	Date	Daily Average (cfs)
8/17/2007	9.5	8/7/2008	17	8/28/2008	8.6
8/18/2007	9.5	8/8/2008	15	8/29/2008	9.8
8/19/2007	9.3	8/9/2008	15	8/30/2008	8.8
8/20/2007	9.2	8/10/2008	14	8/31/2008	8.2
8/21/2007	9.5	8/11/2008	14	**Average = 11.72 cfs**	

Table B-8. Burlington Northern Santa Fe Railway Whitefish Facility effluent temperature data August 2003 – 2012

NPDES ID	Permit Name	Parameter	Monitoring Period	Value
MT0000019	Burlington Northern Santa Fe Railway	Daily Maximum Temperature (°F)	8/1/2003 – 8/31/2003	74
MT0000019	Burlington Northern Santa Fe Railway	Daily Maximum Temperature (°F)	8/1/2004 – 8/31/2004	72
MT0000019	Burlington Northern Santa Fe Railway	Daily Maximum Temperature (°F)	8/1/2005 – 8/31/2005	72
MT0000019	Burlington Northern Santa Fe Railway	Daily Maximum Temperature (°F)	8/1/2006 – 8/31/2006	70
MT0000019	Burlington Northern Santa Fe Railway	Daily Maximum Temperature (°F)	8/1/2008 – 8/31/2008	69.8
MT0000019	Burlington Northern Santa Fe Railway	Daily Maximum Temperature (°F)	8/1/2009 – 8/31/2009	77
MT0000019	Burlington Northern Santa Fe Railway	Daily Maximum Temperature (°F)	8/1/2010 – 8/31/2010	68
MT0000019	Burlington Northern Santa Fe Railway	Daily Maximum Temperature (°F)	8/1/2012 – 8/31/2012	76.8
Burlington Northern Santa Fe Railway Maximum = 76.8°F				

Table B-9. Calculating Average Flow for August 2008 – 2012 at WHTF-01

Description	Value
Average discharge for August 2008 – 2012 at USGS station 12366080	169.66 cfs
Average discharge at USGS station 12366080 on 8/12/08	139.1 cfs
Discharge measured at WHTF-01 on 8/12/08	116.6 cfs
Proportion of USGS station 12366080 discharge at WHTF-01 on 8/12/08	0.84
Average discharge for August 2008 – 2012 at WHTF-01 (169.66 cfs * 0.84)	**142.22 cfs**

Table B-10. Whitefish WWTP Effluent Temperature Data August 2008 – 2012

NPDES ID	Permit Name	Parameter Description	Monitoring Period	Value
MT0020184	City of Whitefish	Daily Maximum Temperature (°F)	8/1/2008 – 8/31/2008	72
MT0020184	City of Whitefish	Daily Maximum Temperature (°F)	8/1/2009 – 8/31/2009	74.8
MT0020184	City of Whitefish	Daily Maximum Temperature (°F)	8/1/2010 – 8/31/2010	73.2
MT0020184	City of Whitefish	Daily Maximum Temperature (°F)	8/1/2011 – 8/31/2011	73
MT0020184	City of Whitefish	Daily Maximum Temperature (°F)	8/1/2012 – 8/31/2012	73
City of Whitefish Maximum = 74.8°F				

REFERENCES

Montana Department of Environmental Quality, Water Quality Planning Bureau. 2014. 2013 Water Quality Assessment Records. Accessed 5/1/2014.