APPENDICES A AND B

OF THE REPORT TO

THE INTERNATIONAL JOINT COMMISSION

ON

THE DIVISION OF THE WATERS OF

THE ST. MARY AND MILK RIVERS

FOR THE YEAR 2015

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The data contained in these appendices are the culmination of a concerted effort by personnel of the Alberta and Saskatchewan Districts of the Water Survey Division, Environment and Climate Change Canada and the United States Geological Survey, Wyoming-Montana Water Science Center.

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APPENDIX A

TABLE OF CONTENTS

			Page
Table	6.	Natural Flow and Water Division of St. Mary River at International Boundary for the year 2015	1
Table	7.	Historical Summary of Computed Natural Flow – St. Mary River at International Boundary	9
Table	8.	Summary of Daily Net Change, Natural Flow, Evaporative and Net Consumptive Uses of Milk River at Eastern Crossing of the International Boundary for the year 2015	12
Table	9.	Historical Summary of March Through October Computed Natural Flow – Milk River at Eastern Crossing of International Boundary	21
Table	10.	Natural Flow of Lodge Creek at the International Boundary for the year 2015	23
Table	11.	Historical Summary of March Through October Computed Natural and Recorded Flow – Lodge Creek at International Boundary	29
Table	12.	Natural Flow of Battle Creek at the International Boundary for the year 2015	30
Table	13.	Historical Summary of March Through October Computed Natural and Recorded Flow – Battle Creek at the International Boundary	35
Table	14.	Natural Flow of Frenchman River at the International Boundary for the year 2015	36
Table	15.	Historical Summary of March Through October Computed Natural and Recorded Flow – Frenchman River at the International Boundary	40

Table 6 NATURAL FLOW AND WATER DIVISION OF ST. MARY RIVER AT INTERNATIONAL BOUNDARY

MARCH 2015

QUANTITIES IN CUBIC DECAMETRES

DAY	CHANGE IN CONTENTS OF LAKE SHERBURNE (WITH 1 DAY LAG)	DIVERTED BY ST. MARY CANAL	TOTAL USED BY UNITED STATES	ST.MARY RIVER NATURAL FLOW AT INTERNATIONAL BOUNDARY	NATURAL FLOW AT INTERNATIONAL BOUNDARY	SHARES OF NATURAL FLOW		FLOW IN EXCESS OR DEFICIT (-) OF CANADIAN SHARE
						UNITED STATES	CANADA	
1	-352	0	-352	1 150	798	399	399	751
2	-369	0	-369	1 199	830	415	415	784
3	-267	0	-267	1 125	858	429	429	696
4	-286	0	-286	1 076	790	395	395	681
5	-389	0	-389	1 299	910	455	455	844
6	-428	0	-428	1 299	871	436	435	864
7	-389	0	-389	1 260	871	435	436	824
8	-345	0	-345	1 240	895	448	447	793
9	-343	0	-343	1 231	888	444	444	787
10	-245	0	-245	1 145	900	450	450	695
11	-59	0	-59	1 174	1 115	557	558	616
12	-142	0	-142	1 133	991	496	495	638
13	-161	0	-161	1 123	962	481	481	642
14	-122	0	-122	1 089	967	483	484	605
15	-39	0	-39	1 231	1 192	596	596	635
S.TOTAL	-3 936	0	-3 936	17 774	13 838	6 919	6 919	10 855
MEAN	-262	0.0	-262	1 185	923	461	461	724
16	1 052	0	1 052	1 825	2 877	1 439	1 438	387
17	1 446	0	1 446	2 544	3 990	1 995	1 995	549
18	431	0	431	3 303	3 734	1 867	1 867	1 436
19	-22	0	-22	3 743	3 721	1 860	1 861	1 882
20	-347	0	-347	3 939	3 592	1 796	1 796	2 143
21	-409	0	-409	3 915	3 506	1 753	1 753	2 162
22	-306	0	-306	3 817	3 511	1 756	1 755	2 062
23	-550	0	-550	3 621	3 071	1 535	1 536	2 085
24	-426	0	-426	3 499	3 073	1 537	1 536	1 963
25	-626	0	-626	3 401	2 775	1 387	1 388	2 013
26	-384	0	-384	3 181	2 797	1 399	1 398	1 783
27	-301	0	-301	2 838	2 537	1 268	1 269	1 569
28	-159	0	-159	2 667	2 508	1 254	1 254	1 413
29	259	0	259	2 667	2 926	1 463	1 463	1 204
30	401	0	401	2 691	3 092	1 546	1 546	1 145
31	161	125	286	2 569	2 855	1 428	1 427	1 142
S.TOTAL	220	125	345	50 220	50 565	25 283	25 282	24 938
MEAN	13.8	7.8	21.6	3 139	3 160	1 580	1 580	1 559
TOTAL	-3 716	125	-3 591	67 994	64 403	32 202	32 201	35 793
MEAN	-120	4.0	-116	2 193	2 078	1 039	1 039	1 155

APPROVED BY FIELD REPRESENTATIVES FOR THE UNITED STATES AND CANADA

Table 6 (Continued)

NATURAL FLOW AND WATER DIVISION OF ST. MARY RIVER AT INTERNATIONAL BOUNDARY

APRIL 2015

QUANTITIES IN CUBIC DECAMETRES

DAY	CHANGE IN CONTENTS OF LAKE SHERBURNE (WITH 1 DAY LAG)	DIVERTED BY ST. MARY CANAL	TOTAL USED BY UNITED STATES	ST.MARY RIVER NATURAL FLOW AT INTERNATIONAL BOUNDARY	NATURAL FLOW AT INTERNATIONAL BOUNDARY	SHARES OF NATURAL FLOW		FLOW IN EXCESS OR DEFICIT (-) OF CANADIAN SHARE
						UNITED STATES	CANADA	
1	303	438	741	2 363	3 104	1 145	1 959	404
2	245	443	688	2 368	3 056	1 121	1 935	433
3	100	443	543	2 354	2 897	1 041	1 856	498
4	0	443	443	2 280	2 723	954	1 769	511
5	-39	440	401	2 155	2 556	871	1 685	470
6	-103	440	337	2 102	2 439	812	1 627	475
7	-122	440	318	2 053	2 371	778	1 593	460
8	-120	438	318	1 943	2 261	723	1 538	405
9	-223	438	215	1 837	2 052	619	1 433	404
10	-242	435	193	1 766	1 959	572	1 387	379
11	-181	435	254	1 713	1 967	576	1 391	322
12	-139	433	294	1 605	1 899	542	1 357	248
13	-223	431	208	1 497	1 705	445	1 260	237
14	-340	431	91	1 429	1 520	380	1 140	289
15	-240	428	188	1 390	1 578	394	1 184	206
S.TOTAL	-1 324	6 556	5 232	28 855	34 087	10 973	23 114	5 741
MEAN	-88.3	437	349	1 924	2 272	732	1 541	383
16	-262	428	166	1 351	1 517	379	1 138	213
17	-298	428	130	1 275	1 405	351	1 054	221
18	-198	428	230	1 248	1 478	370	1 108	140
19	-220	426	206	1 284	1 490	372	1 118	166
20	-176	428	252	1 289	1 541	385	1 156	133
21	-139	426	287	1 280	1 567	392	1 175	105
22	-100	428	328	1 287	1 615	404	1 211	76
23	139	428	567	1 351	1 918	552	1 366	-15
24	-81	431	350	1 429	1 779	482	1 297	132
25	61	428	489	1 468	1 957	571	1 386	82
26	-81	428	347	1 507	1 854	520	1 334	173
27	-39	431	392	1 541	1 933	559	1 374	167
28	-159	431	272	1 495	1 767	476	1 291	204
29	-117	431	314	1 495	1 809	497	1 312	183
30	100	433	533	1 554	2 087	636	1 451	103
S.TOTAL	-1 570	6 433	4 863	20 854	25 717	6 946	18 771	2 083
MEAN	-105	429	324	1 390	1 714	463	1 251	139
TOTAL	-2 894	12 989	10 095	49 709	59 804	17 919	41 885	7 824
MEAN	-96.5	433	337	1 657	1 993	597	1 396	261

APPROVED BY FIELD REPRESENTATIVES FOR THE UNITED STATES AND CANADA

Table 6 (Continued)

NATURAL FLOW AND WATER DIVISION OF ST. MARY RIVER AT INTERNATIONAL BOUNDARY

MAY 2015
QUANTITIES IN CUBIC DECAMETRES

DAY	CHANGE IN CONTENTS OF LAKE SHERBURNE (WITH 1 DAY LAG)	DIVERTED BY ST. MARY CANAL	TOTAL USED BY UNITED STATES	ST.MARY RIVER NATURAL FLOW AT INTERNATIONAL BOUNDARY	ST.MARY RIVER NATURAL FLOW AT INTERNATIONAL BOUNDARY	SHARES OF NATURAL FLOW		FLOW IN EXCESS OR DEFICIT (-) OF CANADIAN SHARE
						UNITED STATES	CANADA	
1	257	435	692	1 715	2 407	796	1 611	104
2	117	435	552	1 774	2 326	756	1 570	204
3	179	438	617	1 908	2 525	855	1 670	238
4	240	511	751	1 977	2 728	957	1 771	206
5	78	717	795	1 999	2 794	990	1 804	195
6	0	778	778	2 119	2 897	1 041	1 856	263
7	-117	991	874	2 141	3 015	1 100	1 915	226
8	-298	1 179	881	2 241	3 122	1 154	1 968	273
9	-279	1 218	939	2 307	3 246	1 216	2 030	277
10	-475	1 243	768	2 266	3 034	1 110	1 924	342
11	-572	1 248	676	2 263	2 939	1 062	1 877	386
12	-333	1 245	912	2 229	3 141	1 163	1 978	251
13	-411	1 238	827	2 102	2 929	1 057	1 872	230
14	-450	1 236	786	1 994	2 780	983	1 797	197
15	-504	1 231	727	1 955	2 682	934	1 748	207
S.TOTAL	-2 568	14 143	11 575	30 990	42 565	15 174	27 391	3 599
MEAN	-171	943	772	2 066	2 838	1 012	1 826	240
16	-506	1 236	730	2 009	2 739	962	1 777	232
17	-423	1 243	820	2 381	3 201	1 193	2 008	373
18	-465	1 236	771	2 349	3 120	1 153	1 967	382
19	-404	1 245	841	2 077	2 918	1 052	1 866	211
20	-306	1 331	1 025	1 815	2 840	1 013	1 827	-12
21	-345	1 421	1 076	1 558	2 634	910	1 724	-166
22	-399	1 500	1 101	1 578	2 679	932	1 747	-169
23	-306	1 512	1 206	1 791	2 997	1 091	1 906	-115
24	-56	1 522	1 466	2 121	3 587	1 386	2 201	-80
25	95	1 495	1 590	2 471	4 061	1 623	2 438	33
26	171	1 490	1 661	2 838	4 499	1 842	2 657	181
27	210	1 463	1 673	3 254	4 927	2 056	2 871	383
28	247	1 446	1 693	3 572	5 265	2 225	3 040	532
29	191	1 448	1 639	3 817	5 456	2 321	3 135	682
30	191	1 453	1 644	3 988	5 632	2 409	3 223	765
31	191	1 458	1 649	4 282	5 931	2 558	3 373	909
S.TOTAL	-1 914	22 499	20 585	41 901	62 486	24 726	37 760	4 141
MEAN	-120	1 406	1 287	2 619	3 905	1 545	2 360	259
TOTAL	-4 482	36 642	32 160	72 891	105 051	39 900	65 151	7 740
MEAN	-145	1 182	1 037	2 351	3 389	1 287	2 102	250

APPROVED BY FIELD REPRESENTATIVES FOR THE UNITED STATES AND CANADA

Table 6 (Continued)

NATURAL FLOW AND WATER DIVISION OF ST. MARY RIVER AT INTERNATIONAL BOUNDARY

JUNE 2015

QUANTITIES IN CUBIC DECAMETRES

DAY	CHANGE IN CONTENTS OF LAKE SHERBURNE (WITH 1 DAY LAG)	DIVERTED BY ST. MARY CANAL	TOTAL USED BY UNITED STATES	ST.MARY RIVER NATURAL FLOW AT INTERNATIONAL BOUNDARY	NATURAL FLOW AT INTERNATIONAL BOUNDARY	SHARES OF NATURAL FLOW		FLOW IN EXCESS OR DEFICIT (-) OF CANADIAN SHARE
						UNITED STATES	CANADA	
1	423	1 458	1 881	4 624	6 505	2 845	3 660	964
2	656	1 446	2 102	6 532	8 634	3 910	4 724	1 808
3	1 769	1 421	3 190	7 756	10 946	5 066	5 880	1 876
4	2 148	1 441	3 589	7 046	10 635	4 910	5 725	1 321
5	1 377	1 463	2 840	6 532	9 372	4 279	5 093	1 439
6	903	1 448	2 351	6 019	8 370	3 778	4 592	1 427
7	790	1 443	2 233	5 505	7 738	3 462	4 276	1 229
8	790	1 451	2 241	5 285	7 526	3 356	4 170	1 115
9	898	1 448	2 346	5 334	7 680	3 433	4 247	1 087
10	1 214	1 458	2 672	5 480	8 152	3 669	4 483	997
11	991	1 461	2 452	5 431	7 883	3 534	4 349	1 082
12	394	1 456	1 850	5 285	7 135	3 160	3 975	1 310
13	665	1 456	2 121	5 113	7 234	3 210	4 024	1 089
14	147	1 443	1 590	4 697	6 287	2 736	3 551	1 146
15	64	1 443	1 507	4 208	5 715	2 450	3 265	943
S.TOTAL	13 229	21 736	34 965	84 847	119 812	53 798	66 014	18 833
MEAN	882	1 449	2 331	5 656	7 987	3 587	4 401	1 256
16	-64	1 451	1 387	3 670	5 057	2 121	2 936	734
17	22	1 446	1 468	3 156	4 624	1 905	2 719	437
18	0	1 443	1 443	2 814	4 257	1 721	2 536	278
19	61	1 453	1 514	2 520	4 034	1 610	2 424	96
20	-20	1 448	1 428	2 327	3 755	1 470	2 285	42
21	-83	1 453	1 370	2 168	3 538	1 362	2 176	-8
22	61	1 451	1 512	2 062	3 574	1 380	2 194	-132
23	-83	1 448	1 365	1 899	3 264	1 225	2 039	-140
24	-83	1 453	1 370	1 771	3 141	1 163	1 978	-207
25	-105	1 456	1 351	1 666	3 017	1 101	1 916	-250
26	-125	1 465	1 340	1 576	2 916	1 051	1 865	-289
27	-103	1 465	1 362	1 561	2 923	1 054	1 869	-308
28	-125	1 468	1 343	1 578	2 921	1 053	1 868	-290
29	-125	1 465	1 340	1 642	2 982	1 084	1 898	-256
30	-230	1 448	1 218	1 771	2 989	1 087	1 902	-131
S.TOTAL	-1 002	21 813	20 811	32 181	52 992	20 387	32 605	-424
MEAN	-66.8	1 454	1 387	2 145	3 533	1 359	2 174	-28.3
TOTAL	12 227	43 549	55 776	117 028	172 804	74 185	98 619	18 409
MEAN	408	1 452	1 859	3 901	5 760	2 473	3 287	614

APPROVED BY FIELD REPRESENTATIVES FOR THE UNITED STATES AND CANADA

Table 6 (Continued)

NATURAL FLOW AND WATER DIVISION OF ST. MARY RIVER AT INTERNATIONAL BOUNDARY

JULY 2015

QUANTITIES IN CUBIC DECAMETRES

DAY	CHANGE IN CONTENTS OF LAKE SHERBURNE (WITH 1 DAY LAG)	DIVERTED BY ST. MARY CANAL	TOTAL USED BY UNITED STATES	ST.MARY RIVER NATURAL FLOW AT INTERNATIONAL BOUNDARY	NATURAL FLOW AT INTERNATIONAL BOUNDARY	SHARES OF NATURAL FLOW		FLOW IN EXCESS OR DEFICIT (-) OF CANADIAN SHARE
						UNITED STATES	CANADA	
1	-269	1 451	1 182	1 837	3 019	1 102	1 917	-80
2	-413	1 458	1 045	1 935	2 980	1 083	1 897	38
3	-619	1 458	839	1 957	2 796	991	1 805	152
4	-658	1 453	795	1 911	2 706	946	1 760	151
5	-717	1 461	744	2 055	2 799	992	1 807	248
6	-489	1 436	947	2 016	2 963	1 074	1 889	127
7	-692	1 443	751	1 830	2 581	883	1 698	132
8	-749	1 443	694	1 681	2 375	780	1 595	86
9	-766	1 453	687	1 539	2 226	706	1 520	19
10	-842	1 446	604	1 419	2 023	604	1 419	0
11	-820	1 441	621	1 380	2 001	593	1 408	-28
12	-891	1 441	550	1 365	1 915	550	1 365	0
13	-908	1 443	535	1 280	1 815	500	1 315	-35
14	-1 035	1 463	428	1 255	1 683	434	1 249	6
15	-1 089	1 453	364	1 351	1 715	450	1 265	86
S.TOTAL	-10 957	21 743	10 786	24 811	35 597	11 688	23 909	902
MEAN	-730	1 450	719	1 654	2 373	779	1 594	60.1
16	-1 272	1 463	191	1 404	1 595	399	1 196	208
17	-1 221	1 465	244	1 451	1 695	440	1 255	196
18	-1 135	1 461	326	1 421	1 747	466	1 281	140
19	-1 236	1 453	217	1 338	1 555	389	1 166	172
20	-1 189	1 448	259	1 292	1 551	388	1 163	129
21	-1 194	1 441	247	1 253	1 500	375	1 125	128
22	-1 125	1 441	316	1 194	1 510	378	1 132	62
23	-1 258	1 446	188	1 125	1 313	328	985	140
24	-1 275	1 441	166	1 072	1 238	310	928	144
25	-1 138	1 439	301	1 042	1 343	336	1 007	35
26	-1 209	1 448	239	959	1 198	300	898	61
27	-1 221	1 451	230	930	1 160	290	870	60
28	-1 189	1 448	259	922	1 181	295	886	36
29	-1 162	1 446	284	871	1 155	289	866	5
30	-1 265	1 441	176	807	983	246	737	70
31	-1 140	1 439	299	758	1 057	264	793	-35
S.TOTAL	-19 229	23 171	3 942	17 839	21 781	5 493	16 288	1 551
MEAN	-1 202	1 448	246	1 115	1 361	343	1 018	96.9
TOTAL	-30 186	44 914	14 728	42 650	57 378	17 181	40 197	2 453
MEAN	-974	1 449	475	1 376	1 851	554	1 297	79.1

APPROVED BY FIELD REPRESENTATIVES FOR THE UNITED STATES AND CANADA

Table 6 (Continued)

NATURAL FLOW AND WATER DIVISION OF ST. MARY RIVER AT INTERNATIONAL BOUNDARY

AUGUST 2015

QUANTITIES IN CUBIC DECAMETRES

DAY	CHANGE IN CONTENTS OF LAKE SHERBURNE (WITH 1 DAY LAG)	DIVERTED BY ST. MARY CANAL	TOTAL USED BY UNITED STATES	ST.MARY RIVER AT INTERNATIONAL BOUNDARY	NATURAL FLOW AT INTERNATIONAL BOUNDARY	SHARES OF NATURAL FLOW		FLOW IN EXCESS OR DEFICIT (-) OF CANADIAN SHARE
						UNITED STATES	CANADA	
1	-1 140	1 441	301	705	1 006	252	754	-49
2	-1 157	1 448	291	646	937	234	703	-57
3	-1 130	1 448	318	643	961	240	721	-78
4	-1 133	1 453	320	678	998	250	748	-70
5	-1 326	1 465	139	714	853	213	640	74
6	-1 382	1 470	88	741	829	207	622	119
7	-1 262	1 468	206	717	923	231	692	25
8	-1 250	1 461	211	678	889	222	667	11
9	-1 191	1 458	267	641	908	227	681	-40
10	-1 248	1 453	205	617	822	206	616	1
11	-1 177	1 451	274	587	861	215	646	-59
12	-1 150	1 448	298	555	853	213	640	-85
13	-1 121	1 446	325	531	856	214	642	-111
14	-1 147	1 443	296	514	810	202	608	-94
15	-1 094	1 451	357	570	927	232	695	-125
S.TOTAL	-17 908	21 804	3 896	9 537	13 433	3 358	10 075	-538
MEAN	-1 194	1 454	260	636	896	224	672	-35.9
16	-1 064	1 448	384	553	937	234	703	-150
17	-1 089	1 451	362	577	939	235	704	-127
18	-1 133	1 448	315	572	887	222	665	-93
19	-1 214	1 453	239	602	841	210	631	-29
20	-1 250	1 451	201	582	783	196	587	-5
21	-1 228	1 448	220	550	770	192	578	-28
22	-1 250	1 448	198	555	753	188	565	-10
23	-1 216	1 446	230	538	768	192	576	-38
24	-1 191	1 429	238	497	735	184	551	-54
25	-1 106	1 326	220	509	729	182	547	-38
26	-910	1 108	198	590	788	197	591	-1
27	-707	815	108	746	854	214	640	106
28	-582	484	-98	937	839	210	629	308
29	-362	279	-83	898	815	204	611	287
30	-93	250	157	798	955	239	716	82
31	-39	237	198	815	1 013	253	760	55
S.TOTAL	-14 434	17 521	3 087	10 319	13 406	3 352	10 054	265
MEAN	-902	1 095	193	645	838	210	628	16.6
TOTAL	-32 342	39 325	6 983	19 856	26 839	6 710	20 129	-273
MEAN	-1 043	1 269	225	641	866	216	649	-8.8

APPROVED BY FIELD REPRESENTATIVES FOR THE UNITED STATES AND CANADA

Table 6 (Continued)

NATURAL FLOW AND WATER DIVISION OF ST. MARY RIVER AT INTERNATIONAL BOUNDARY

SEPTEMBER 2015
QUANTITIES IN CUBIC DECAMETRES

DAY	CHANGE IN CONTENTS OF LAKE SHERBURNE (WITH 1 DAY LAG)	DIVERTED BY ST. MARY CANAL	TOTAL USED BY UNITED STATES	ST.MARY RIVER NATURAL FLOW AT INTERNATIONAL BOUNDARY	ST.MARY RIVER NATURAL FLOW AT INTERNATIONAL BOUNDARY	SHARES OF NATURAL FLOW UNITED STATES	SHARES OF NATURAL FLOW CANADA	FLOW IN EXCESS OR DEFICIT (-) OF CANADIAN SHARE
1	-32	201	169	673	842	210	632	41
2	-51	181	130	604	734	184	550	54
3	93	154	247	531	778	194	584	-53
4	154	135	289	484	773	193	580	-96
5	154	132	286	526	812	203	609	-83
6	228	137	365	521	886	222	664	-143
7	237	132	369	502	871	218	653	-151
8	210	127	337	475	812	203	609	-134
9	230	108	338	514	852	213	639	-125
10	105	0	105	546	651	163	488	58
11	201	0	201	541	742	186	556	-15
12	169	0	169	543	712	178	534	9
13	203	0	203	548	751	188	563	-15
14	169	0	169	548	717	179	538	10
15	206	0	206	572	778	194	584	-12
S.TOTAL	2 276	1 307	3 583	8 128	11 711	2 928	8 783	-655
MEAN	152	87.1	239	542	781	195	586	-43.7
16	257	0	257	585	842	210	632	-47
17	174	0	174	592	766	192	574	18
18	161	0	161	590	751	188	563	27
19	196	0	196	602	798	200	598	4
20	208	0	208	585	793	198	595	-10
21	174	0	174	587	761	190	571	16
22	56	0	56	570	626	156	470	100
23	186	0	186	550	736	184	552	-2
24	166	0	166	543	709	177	532	11
25	201	0	201	538	739	185	554	-16
26	166	0	166	536	702	176	526	10
27	179	0	179	536	715	179	536	0
28	122	0	122	524	646	162	484	40
29	135	0	135	514	649	162	487	27
30	144	0	144	504	648	162	486	18
S.TOTAL	2 525	0	2 525	8 356	10 881	2 721	8 160	196
MEAN	168	0.0	168	557	725	181	544	13.1
TOTAL	4 801	1 307	6 108	16 484	22 592	5 649	16 943	-459
MEAN	160	43.6	204	549	753	188	565	-15.3

APPROVED BY FIELD REPRESENTATIVES FOR THE UNITED STATES AND CANADA

Table 6 (Continued)

NATURAL FLOW AND WATER DIVISION OF ST. MARY RIVER AT INTERNATIONAL BOUNDARY

OCTOBER 2015
QUANTITIES IN CUBIC DECAMETRES

DAY	CHANGE IN CONTENTS OF LAKE SHERBURNE (WITH 1 DAY LAG)	DIVERTED BY ST. MARY CANAL	TOTAL USED BY UNITED STATES	ST.MARY RIVER NATURAL FLOW AT INTERNATIONAL BOUNDARY	NATURAL FLOW AT INTERNATIONAL BOUNDARY	SHARES OF NATURAL FLOW		FLOW IN EXCESS OR DEFICIT (-) OF CANADIAN SHARE
						UNITED STATES	CANADA	
1	100	0	100	487	587	147	440	47
2	147	0	147	472	619	155	464	8
3	78	0	78	482	560	140	420	62
4	137	0	137	497	634	158	476	21
5	135	0	135	470	605	151	454	16
6	91	0	91	450	541	135	406	44
7	159	0	159	438	597	149	448	-10
8	34	0	34	455	489	122	367	88
9	69	0	69	431	500	125	375	56
10	137	0	137	428	565	141	424	4
11	115	0	115	462	577	144	433	29
12	240	0	240	450	690	172	518	-68
13	34	0	34	453	487	122	365	88
14	161	0	161	445	606	152	454	-9
15	93	0	93	428	521	130	391	37
S.TOTAL	1 730	0	1 730	6 848	8 578	2 143	6 435	413
MEAN	115	0.0	115	457	572	143	429	27.5
16	115	0	115	431	546	136	410	21
17	127	0	127	413	540	135	405	8
18	115	0	115	406	521	130	391	15
19	130	0	130	404	534	134	400	4
20	115	0	115	399	514	128	386	13
21	93	0	93	411	504	126	378	33
22	152	0	152	401	553	138	415	-14
23	59	0	59	389	448	112	336	53
24	71	0	71	377	448	112	336	41
25	69	0	69	365	434	108	326	39
26	95	0	95	360	455	114	341	19
27	81	0	81	365	446	112	334	31
28	71	0	71	360	431	108	323	37
29	105	0	105	360	465	116	349	11
30	95	0	95	357	452	113	339	18
31	59	0	59	365	424	106	318	47
S.TOTAL	1 552	0	1 552	6 163	7 715	1 928	5 787	376
MEAN	97.0	0.0	97.0	385	482	121	362	23.5
TOTAL	3 282	0	3 282	13 011	16 293	4 071	12 222	789
MEAN	106	0.0	106	420	526	131	394	25.5

NATURAL FLOW OF ST. MARY RIVER

APPROVED BY:

John M. Kilpatrick
FOR THE UNITED STATES

FOR CANADA

Table 7: HISTORICAL SUMMARY OF COMPUTED NATURAL FLOW
ST. MARY AT INTERNATIONAL BOUNDARY
(VALUES IN CUBIC DECAMETRES)

Period	Computed Natural Flow		Share April to October	
	Non - Irrigation Season (Nov to Mar)	Irrigation Season (Apr to Oct)	United States	Canada
1902 - 1903	71,500	1,033,000	434,300	599,100
1903 - 1904	118,900	684,800	270,100	414,700
1904 - 1905	48,260	569,700	212,400	357,300
1905 - 1906	63,640	630,700	236,000	394,700
1906 - 1907	153,100	969,500	402,800	566,700
1907 - 1908	77,020	1,123,000	485,500	637,800
1908 - 1909	80,520	968,900	408,500	560,300
1909 - 1910	108,200	679,700	257,700	422,000
1910 - 1911	120,100	802,800	318,700	484,200
1911 - 1912	72,890	623,900	234,600	389,300
1912 - 1913	85,860	849,600	346,400	503,200
1913 - 1914	72,240	654,100	245,200	409,000
1914 - 1915	103,600	654,100	243,400	410,800
1915 - 1916	135,400	973,300	405,600	567,700
1916 - 1917	72,560	807,400	330,300	477,000
1917 - 1918	112,600	631,300	239,900	391,400
1918 - 1919	61,290	476,500	175,900	300,600
1919 - 1920	75,270	715,400	280,700	434,700
1920 - 1921	88,960	784,700	315,400	469,300
1921 - 1922	79,750	698,000	281,800	416,200
1922 - 1923	58,210	719,400	283,500	435,900
1923 - 1924	63,410	641,600	250,900	390,700
1924 - 1925	96,980	889,000	364,500	524,500
1925 - 1926	60,690	458,700	152,700	306,000
1926 - 1927	92,310	1,154,000	495,100	658,700
1927 - 1928	138,300	905,900	373,400	532,400
1928 - 1929	81,460	527,300	200,300	327,000
1929 - 1930	64,600	660,600	258,100	402,500
1930 - 1931	47,930	461,400	165,500	295,900
1931 - 1932	103,300	636,300	249,700	386,500
1932 - 1933	83,250	793,400	322,000	471,500
1933 - 1934	207,600	775,900	318,000	458,000
1934 - 1935	168,500	576,700	221,500	355,300
1935 - 1936	37,010	511,700	194,400	317,300
1936 - 1937	41,960	617,600	246,800	370,800
1937 - 1938	80,500	705,500	284,000	421,600
1938 - 1939	73,220	497,100	184,700	312,400
1939 - 1940	46,650	449,100	157,700	291,400

Continued ...

Table 7 (continued): HISTORICAL SUMMARY OF COMPUTED NATURAL FLOW
ST. MARY RIVER AT INTERNATIONAL BOUNDARY
(VALUES IN CUBIC DECAMETRES)

Period	Computed Natural Flow		Share April to October	
	Non - Irrigation Season (Nov to Mar)	Irrigation Season (Apr to Oct)	United States	Canada
1940 - 1941	40,510	413,000	135,500	277,500
1941 - 1942	116,300	660,700	255,000	405,700
1942 - 1943	78,160	833,600	343,100	490,500
1943 - 1944	44,830	392,400	131,800	260,600
1944 - 1945	57,320	623,800	246,800	377,000
1945 - 1946	94,750	660,600	255,200	405,400
1946 - 1947	107,100	770,900	303,300	467,600
1947 - 1948	88,050	894,300	378,600	515,700
1948 - 1949	43,690	563,300	210,000	353,200
1949 - 1950	118,600	945,800	395,700	550,200
1950 - 1951	174,400	1,092,000	459,300	632,600
1951 - 1952	102,200	637,800	246,800	391,000
1952 - 1953	77,150	970,700	414,800	556,000
1953 - 1954	77,240	981,700	410,300	571,400
1954 - 1955	97,770	727,400	293,100	434,300
1955 - 1956	109,800	804,700	326,700	478,000
1956 - 1957	73,220	672,600	272,900	399,700
1957 - 1958	72,180	654,600	254,200	400,400
1958 - 1959	115,300	881,600	355,200	526,400
1959 - 1960	117,700	595,700	227,300	368,400
1960 - 1961	72,160	699,100	276,000	423,100
1961 - 1962	74,860	611,000	230,000	381,000
1962 - 1963	122,700	629,900	248,000	381,800
1963 - 1964	54,720	942,300	396,500	545,800
1964 - 1965	83,860	828,000	333,900	494,100
1965 - 1966	87,680	712,100	279,600	432,500
1966 - 1967	81,470	840,500	354,000	486,500
1967 - 1968	116,600	720,900	281,200	439,700
1968 - 1969	97,360	669,700	262,000	407,700
1969 - 1970	66,380	738,700	305,600	433,100
1970 - 1971	83,120	850,900	351,400	499,500
1971 - 1972	106,600	928,700	382,500	546,100
1972 - 1973	67,390	501,800	189,000	312,800
1973 - 1974	130,500	849,900	353,700	496,200
1974 - 1975	50,050	1,024,000	437,100	586,600
1975 - 1976	148,600	716,600	282,600	434,000
1976 - 1977	46,900	406,500	131,300	275,200
1977 - 1978	72,760	766,600	303,500	463,200
1978 - 1979	75,210	611,700	240,200	371,500
1979 - 1980	45,120	680,000	264,900	415,100

Continued ...

Table 7 (continued): HISTORICAL SUMMARY OF COMPUTED NATURAL FLOW
ST. MARY RIVER AT INTERNATIONAL BOUNDARY
(VALUES IN CUBIC DECAMETRES)

Period			Computed Natural Flow		Share April to October	
			Non - Irrigation Season (Nov to Mar)	Irrigation Season (Apr to Oct)	United States	Canada
1980	-	1981	134,200	674,700	270,700	404,000
1981	-	1982	57,200	685,900	274,300	411,600
1982	-	1983	60,010	517,900	193,800	324,100
1983	-	1984	83,050	534,200	195,800	338,400
1984	-	1985	50,470	670,800	254,800	416,000
1985	-	1986	165,000	589,500	216,000	373,500
1986	-	1987	86,590	600,800	228,200	372,600
1987	-	1988	39,370	496,000	182,200	313,800
1988	-	1989	80,730	775,300	308,400	466,900
1989	-	1990	196,800	738,300	289,800	448,500
1990	-	1991	138,000	905,000	381,000	524,000
1991	-	1992	59,160	478,300	164,400	313,900
1992	-	1993	75,110	629,700	235,100	394,600
1993	-	1994	79,800	534,500	202,300	332,200
1994	-	1995	92,460	877,700	365,200	512,600
1995	-	1996	234,500	781,800	314,300	467,500
1996	-	1997	94,070	917,200	378,000	539,100
1997	-	1998	62,430	631,900	252,300	379,500
1998	-	1999	60,620	698,100	274,500	423,600
1999	-	2000	157,900	548,300	203,700	344,500
2000	-	2001	32,490	417,900	156,300	261,700
2001	-	2002	69,030	981,100	419,600	561,500
2002	-	2003	69,690	534,000	201,500	332,500
2003	-	2004	61,950	639,400	239,500	399,900
2004	-	2005	119,800	591,500	222,900	368,700
2005	-	2006	106,200	657,300	263,100	394,200
2006	-	2007	233,900	501,700	183,900	317,800
2007	-	2008	69,840	796,000	331,400	464,600
2008	-	2009	56,750	547,900	207,600	340,300
2009	-	2010	74,750	724,700	286,300	438,400
2010	-	2011	105,800	936,600	394,800	541,800
2011	-	2012	76,090	783,300	320,700	462,600
2012	-	2013	154,200	698,400	273,800	424,600
2013	-	2014	68,970	884,700	367,700	517,000
2014	-	2015	201,500	460,800	165,600	295,100
AVERAGE 1903	-	2014	90,580	712,500	283,200	429,300

Table 8:

Summary of Daily Net Change, Natural Flow, Evaporative and Net Consumptive Uses of Milk River at Eastern Crossing of International Boundary March, 2015

Date at Eastern Crossing	Natural Flow at Western Crossing	East to West Net Change	Incremental Evaporative Trans. Loss	Total Consumptive Use		Natural Flow at Eastern Crossing	Share		Excess / Deficit to U.S.	Cumulative Excess / Deficit to U.S.
				U.S.	Canada		U.S.	Canada		
	C9,T2	C10,T2	C8,T4	C3,T3	C8,T3				(9-6)	
1	2	3	4	5	6	7	8	9	10	11
Accumulated deficit including carry over from previous division period										#N/A
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
Mar 01	0.0	-	12.4	0.0	0.0	*587.2*	293.6	293.6	293.6	293.6
Mar 02	0.0	-	12.8	0.0	0.0	*611.6*	305.8	305.8	305.8	599.4
Mar 03	0.0	-	13.5	0.0	0.0	*648.3*	324.2	324.1	324.1	923.5
Mar 04	0.0	-	13.7	0.0	0.0	*660.6*	330.3	330.3	330.3	1253.8
Mar 05	0.0	-	13.7	0.0	0.0	*660.6*	330.3	330.3	330.3	1584.1
Mar 06	143.0	-	8.4	0.0	0.0	*648.3*	324.2	324.1	324.1	1908.2
Mar 07	122.3	-	8.4	0.0	0.0	*636.1*	318.0	318.1	318.1	2226.3
Mar 08	119.9	-	9.4	0.0	0.0	*685.0*	342.5	342.5	342.5	2568.8
Mar 09	124.2	-	9.3	0.0	0.0	*685.0*	342.5	342.5	342.5	2911.3
Mar 10	132.3	-	9.4	0.0	0.0	*685.0*	342.5	342.5	342.5	3253.8
Mar 11	143.5	-	9.2	0.0	0.0	*685.0*	342.5	342.5	342.5	3596.3
Mar 12	151.7	-	12.2	0.0	0.0	*978.6*	489.3	489.3	489.3	4085.6
Mar 13	167.8	-	14.1	0.0	0.0	*1394.5*	697.2	697.3	697.3	4782.9
Mar 14	214.8	-	12.0	0.0	0.0	*1255.1*	627.6	627.5	627.5	5410.4
Mar 15	277.1	-	8.8	0.0	0.0	*1012.9*	506.4	506.5	506.5	5916.9
15 day Total	*1596.6*	*0.0*	*167.3*	*0.0*	*0.0*	*11833.8*	*5916.9*	*5916.9*	*5916.9*	
Accumulated deficit including carry over from previous division period										#N/A
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
Mar 16	389.2	-	5.0	0.0	0.0	*873.4*	*436.7*	*436.7*	*436.7*	*436.7*
Mar 17	508.6	-	2.3	0.0	0.0	*924.8*	*462.4*	*462.4*	*462.4*	*899.1*
Mar 18	501.0	-	2.6	0.0	0.0	*954.2*	*477.1*	*477.1*	*477.1*	*1376.2*
Mar 19	405.2	-	3.8	0.0	0.0	*734.0*	*367.0*	*367.0*	*367.0*	*1743.2*
Mar 20	373.5	-	4.4	0.0	0.0	*677.7*	*338.8*	*338.9*	*338.9*	*2082.1*
Mar 21	419.3	-	4.1	0.0	0.0	*839.2*	*419.6*	*419.6*	*419.6*	*2501.7*
Mar 22	664.2	-	1.2	0.0	0.0	*849.0*	*424.5*	*424.5*	*424.5*	*2926.2*
Mar 23	669.6	-	0.4	0.0	0.0	*714.4*	*357.2*	*357.2*	*357.2*	*3283.4*
Mar 24	535.5	-	1.1	0.0	0.0	*687.5*	*343.8*	*343.7*	*343.7*	*3627.1*
Mar 25	584.3	-	1.6	0.0	0.0	*814.7*	*407.4*	*407.3*	*407.3*	*4034.4*
Mar 26	643.1	-	0.8	0.0	0.0	*743.8*	*371.9*	*371.9*	*371.9*	*4406.3*
Mar 27	578.6	-	0.6	0.0	0.0	*658.1*	*329.0*	*329.1*	*329.1*	*4735.4*
Mar 28	492.5	-	0.7	0.0	0.0	*587.2*	*293.6*	*293.6*	*293.6*	*5029.0*
Mar 29	428.5	-	2.2	0.0	0.0	*560.3*	*280.2*	*280.1*	*280.1*	*5309.1*
Mar 30	380.5	-	2.6	0.0	0.0	*521.1*	*260.6*	*260.5*	*260.5*	*5569.6*
Mar 31	348.7	-	2.2	0.0	0.0	*472.2*	*236.1*	*236.1*	*236.1*	*5805.7*
16 day Total	*7922.3*	*0.0*	*35.6*	*0.0*	*0.0*	*11611.6*	*5805.9*	*5805.7*	*5805.7*	
Accumulated deficit including carry over from previous division period										#N/A
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
Mar Totals	*9518.9*	*0.0*	*202.9*	*0.0*	*0.0*	*23445.4*	*11722.8*	*11722.6*	*11722.6*	

All figures in cubic decametres.

Five day lag period is applied between west and east to determine natural flow at Eastern Crossing.

Grey areas indicate natural flow equal to the recorded flow at the gauge (11AA031) Milk River at Eastern Crossing plus United States and Canadian consumptive use.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

Table 8 (Continued) Summary of Daily
Net Change, Natural Flow, Evaporative and Net Consumptive Uses of Milk River at Eastern Crossing of International Boundary
April, 2015

Date at Eastern Crossing	Natural Flow at Western Crossing	East to West Net Change	Incremental Evaporative Trans. Loss	Total Consumptive Use		Natural Flow at Eastern Crossing	Share		Excess / Deficit to U.S.	Cumulative Excess / Deficit to U.S.
				U.S.	Canada		U.S.	Canada		
	C9,T2	C10,T2	C8,T4	C3,T3	C8,T3				(9-6)	
1	2	3	4	5	6	7	8	9	10	11
Accumulated deficit including carry over from previous division period										#N/A
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
Apr 01	337.6	-	2.8	0.0	0.0	437.9	328.4	109.5	109.5	109.5
Apr 02	334.9	-	2.3	0.0	0.0	440.4	330.3	110.1	110.1	219.6
Apr 03	342.5	-	2.3	0.0	0.0	447.7	335.8	111.9	111.9	331.5
Apr 04	353.4	-	1.8	0.0	0.0	447.7	335.8	111.9	111.9	443.4
Apr 05	333.7	-	0.7	0.0	0.0	437.9	328.4	109.5	109.5	552.9
Apr 06	301.0	-	1.0	0.0	0.0	433.0	324.8	108.2	108.2	661.1
Apr 07	287.5	-43.8	10.2	0.0	0.0	253.9	190.4	63.5	63.5	724.6
Apr 08	288.8	141.6	12.8	0.0	0.0	443.2	332.4	110.8	110.8	835.4
Apr 09	285.5	140.9	15.3	0.0	0.0	441.7	331.3	110.4	110.4	945.8
Apr 10	277.1	113.0	18.6	0.0	0.0	408.7	306.5	102.2	102.2	1048.0
Apr 11	268.8	83.4	24.0	0.0	0.0	376.2	282.2	94.0	94.0	1142.0
Apr 12	265.8	35.3	17.3	0.0	0.0	318.4	238.8	79.6	79.6	1221.6
Apr 13	275.0	40.7	14.9	0.0	0.0	330.6	248.0	82.6	82.6	1304.2
Apr 14	298.6	12.2	13.8	0.0	0.0	324.6	243.4	81.2	81.2	1385.4
Apr 15	299.0	6.9	18.8	0.0	0.0	324.7	243.5	81.2	81.2	1466.6
15 day Total	*4549.2*	*530.2*	*156.6*	*0.0*	*0.0*	*5866.6*	*4400.0*	*1466.6*	*1466.6*	
Accumulated deficit including carry over from previous division period										#N/A
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
Apr 16	274.6	-4.4	17.5	0.0	0.0	287.7	215.8	71.9	71.9	71.9
Apr 17	250.7	7.3	22.0	0.0	0.0	280.0	210.0	70.0	70.0	141.9
Apr 18	240.6	-0.4	16.6	0.0	0.0	256.8	192.6	64.2	64.2	206.1
Apr 19	247.1	-14.0	14.7	0.0	0.0	247.8	185.9	61.9	61.9	268.0
Apr 20	241.9	-17.3	17.6	0.0	0.0	242.2	181.6	60.6	60.6	328.6
Apr 21	236.8	3.0	21.4	0.0	0.0	261.2	195.9	65.3	65.3	393.9
Apr 22	238.7	17.9	21.0	0.0	0.0	277.6	208.2	69.4	69.4	463.3
Apr 23	246.5	-8.3	20.5	0.0	0.0	258.7	194.0	64.7	64.7	528.0
Apr 24	244.2	-25.8	18.0	0.0	0.0	236.4	177.3	59.1	59.1	587.1
Apr 25	250.7	-50.5	18.1	0.0	0.0	218.3	163.7	54.6	54.6	641.7
Apr 26	246.2	-45.9	7.0	0.0	0.0	207.3	155.5	51.8	51.8	693.5
Apr 27	228.4	-49.7	20.3	0.0	0.0	199.0	149.2	49.8	49.8	743.3
Apr 28	211.6	-49.8	24.3	0.0	0.0	186.1	139.6	46.5	46.5	789.8
Apr 29	203.7	-46.6	24.8	0.0	0.0	181.9	136.4	45.5	45.5	835.3
Apr 30	197.9	-49.2	27.6	0.0	0.0	176.3	132.2	44.1	44.1	879.4
15 day Total	*3559.6*	*-333.7*	*291.4*	*0.0*	*0.0*	*3517.3*	*2637.9*	*879.4*	*879.4*	
Accumulated deficit including carry over from previous division period										#N/A
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
Apr Totals	*8108.8*	*196.5*	*448.0*	*0.0*	*0.0*	*9383.9*	*7037.9*	*2346.0*	*2346.0*	

All figures in cubic decametres.

Five day lag period is applied between west and east to determine natural flow at Eastern Crossing.

Grey areas indicate natural flow equal to the recorded flow at the gauge (11AA031) Milk River at Eastern Crossing plus United States and Canadian consumptive use.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

Table 8 (Continued) Summary of Daily
Net Change, Natural Flow, Evaporative and Net Consumptive Uses of Milk River at Eastern Crossing of International Boundary
May, 2015

Date at Eastern Crossing	Natural Flow at Western Crossing	East to West Net Change	Incremental Evaporative Trans. Loss	Total Consumptive Use		Natural Flow at Eastern Crossing	Share		Excess / Deficit to U.S.	Cumulative Excess / Deficit to U.S.
				U.S.	Canada		U.S.	Canada		
	C9,T2	C10,T2	C8,T4	C3,T3	C8,T3				(9-6)	
1	2	3	4	5	6	7	8	9	10	11
Accumulated deficit including carry over from previous division period										#N/A
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
May 01	193.0	-62.6	23.0	0.0	0.0	153.4	115.0	38.4	38.4	38.4
May 02	188.8	-70.5	21.8	0.0	0.0	140.1	105.1	35.0	35.0	73.4
May 03	189.9	-58.0	22.2	0.0	0.0	154.1	115.6	38.5	38.5	111.9
May 04	197.1	-65.0	24.4	0.0	0.0	156.5	117.4	39.1	39.1	151.0
May 05	187.6	-68.8	22.1	0.0	0.0	140.9	105.7	35.2	35.2	186.2
May 06	176.0	-42.1	20.2	0.0	0.0	154.1	115.6	38.5	38.5	224.7
May 07	168.3	-22.4	17.9	0.0	0.0	163.8	122.8	41.0	41.0	265.7
May 08	162.5	-81.8	15.9	0.0	0.0	96.6	72.4	24.2	24.2	289.9
May 09	155.7	-92.4	19.8	0.0	0.0	83.1	62.3	20.8	20.8	310.7
May 10	154.3	-62.4	23.3	0.0	0.0	115.2	86.4	28.8	28.8	339.5
May 11	153.5	-59.5	33.2	0.0	0.0	127.2	95.4	31.8	31.8	371.3
May 12	152.7	109.4	31.6	0.0	0.0	293.7	220.3	73.4	73.4	444.7
May 13	156.0	216.5	13.7	0.0	0.0	386.2	289.6	96.6	96.6	541.3
May 14	169.2	168.1	18.6	0.0	0.0	355.9	266.9	89.0	89.0	630.3
May 15	194.0	273.9	16.6	0.0	0.0	484.5	363.4	121.1	121.1	751.4
15 day Total	*2598.6*	*82.4*	*324.3*	*0.0*	*0.0*	*3005.3*	*2253.9*	*751.4*	*751.4*	
Accumulated deficit including carry over from previous division period										#N/A
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
May 16	225.0	311.6	15.6	100.2	61.3	713.7	535.3	178.4	117.1	117.1
May 17	217.9	329.5	31.8	100.2	61.3	740.7	555.5	185.2	123.9	241.0
May 18	215.3	311.9	49.2	100.2	61.3	737.9	553.4	184.5	123.2	364.2
May 19	256.0	274.9	51.8	100.2	61.3	744.2	558.2	186.0	124.7	488.9
May 20	280.0	312.6	54.5	100.2	61.3	808.6	606.4	202.2	140.9	629.8
May 21	361.6	416.1	54.3	100.2	61.3	993.5	745.1	248.4	187.1	816.9
May 22	516.5	87.0	35.7	100.2	61.3	800.7	600.5	200.2	138.9	955.8
May 23	703.0	-348.9	33.3	100.2	61.3	548.9	411.7	137.2	75.9	1031.7
May 24	564.7	-171.7	20.7	100.2	61.3	575.2	431.4	143.8	82.5	1114.2
May 25	387.0	93.1	42.5	100.2	61.3	684.1	513.1	171.0	109.7	1223.9
May 26	311.4	185.7	37.0	100.2	61.3	695.6	521.7	173.9	112.6	1336.5
May 27	266.9	107.4	46.7	100.2	61.3	582.5	436.9	145.6	84.3	1420.8
May 28	237.4	-19.8	29.0	100.2	61.3	408.1	306.1	102.0	40.7	1461.5
May 29	217.9	85.9	58.7	100.2	61.3	524.0	393.0	131.0	69.7	1531.2
May 30	206.8	109.0	38.3	100.2	61.3	515.6	386.7	128.9	67.6	1598.8
May 31	216.8	107.5	63.8	100.2	61.3	549.6	412.2	137.4	76.1	1674.9
16 day Total	*5184.2*	*2191.8*	*662.9*	*1603.2*	*980.8*	*10622.9*	*7967.2*	*2655.7*	*1674.9*	
Accumulated deficit including carry over from previous division period										#N/A
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
May Totals	*7782.8*	*2274.2*	*987.2*	*1603.2*	*980.8*	*13628.2*	*10221.1*	*3407.1*	*2426.3*	

All figures in cubic decametres.

Five day lag period is applied between west and east to determine natural flow at Eastern Crossing.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

Table 8 (Continued) Summary of Daily
Net Change, Natural Flow, Evaporative and Net Consumptive Uses of Milk River at Eastern Crossing of International Boundary
June, 2015

Date at Eastern Crossing	Natural Flow at Western Crossing	East to West Net Change	Incremental Evaporative Trans. Loss	Total Consumptive Use		Natural Flow at Eastern Crossing	Share		Excess / Deficit to U.S.	Cumulative Excess / Deficit to U.S.
				U.S.	Canada		U.S.	Canada		
	C9,T2	C10,T2	C8,T4	C3,T3	C8,T3				(9-6)	
1	2	3	4	5	6	7	8	9	10	11
Accumulated deficit including carry over from previous division period										#N/A
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
Jun 01	224.3	199.7	73.4	100.2	63.9	661.5	496.1	165.4	101.5	101.5
Jun 02	233.2	323.8	25.5	100.2	63.9	746.6	560.0	186.6	122.7	224.2
Jun 03	286.0	333.3	47.7	100.2	63.9	831.1	623.3	207.8	143.9	368.1
Jun 04	310.8	315.8	30.4	100.2	63.9	821.1	615.8	205.3	141.4	509.5
Jun 05	363.1	386.9	52.7	100.2	63.9	966.8	725.1	241.7	177.8	687.3
Jun 06	333.8	912.1	76.8	100.2	63.9	1486.8	1115.1	371.7	307.8	995.1
Jun 07	377.6	439.1	61.5	100.2	63.9	1042.3	781.7	260.6	196.7	1191.8
Jun 08	1079.7	-468.1	79.1	100.2	63.9	854.8	641.1	213.7	149.8	1341.6
Jun 09	1051.1	-587.8	59.1	100.2	63.9	686.5	514.9	171.6	107.7	1449.3
Jun 10	566.0	-221.7	53.8	100.2	63.9	562.2	421.6	140.6	76.7	1526.0
Jun 11	396.0	-203.8	53.0	100.2	63.9	409.3	307.0	102.3	38.4	1564.4
Jun 12	316.9	-275.8	62.5	100.2	63.9	267.7	200.8	66.9	3.0	1567.4
Jun 13	267.6	-318.8	49.9	100.2	63.9	162.8	122.1	40.7	-23.2	1544.2
Jun 14	227.7	-357.1	46.9	100.2	63.9	81.6	61.2	20.4	-43.5	1500.7
Jun 15	202.1	-253.1	48.1	100.2	63.9	161.2	120.9	40.3	-23.6	1477.1
15 day Total	*6235.9*	*224.5*	*820.4*	*1503.0*	*958.5*	*9742.3*	*7306.7*	*2435.6*	*1477.1*	
Accumulated deficit including carry over from previous division period										#N/A
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
Jun 16	180.7	-235.1	59.6	14.7	24.2	44.1	33.1	11.0	-13.2	-13.2
Jun 17	166.8	-220.3	41.1	14.7	24.2	26.5	19.9	6.6	-17.6	-30.8
Jun 18	174.8	-269.0	51.9	14.7	24.2	0.0	0.0	0.0	-24.2	-55.0
Jun 19	163.9	-270.5	49.6	14.7	24.2	0.0	0.0	0.0	-24.2	-79.2
Jun 20	159.4	-282.2	54.7	14.7	24.2	0.0	0.0	0.0	-24.2	-103.4
Jun 21	155.6	-300.8	59.1	14.7	24.2	0.0	0.0	0.0	-24.2	-127.6
Jun 22	150.6	-286.8	56.2	14.7	24.2	0.0	0.0	0.0	-24.2	-151.8
Jun 23	151.1	-281.2	58.8	14.7	24.2	0.0	0.0	0.0	-24.2	-176.0
Jun 24	145.2	-292.4	67.9	14.7	24.2	0.0	0.0	0.0	-24.2	-200.2
Jun 25	136.7	-311.2	54.4	14.7	24.2	0.0	0.0	0.0	-24.2	-224.4
Jun 26	125.5	-289.9	77.5	14.7	24.2	0.0	0.0	0.0	-24.2	-248.6
Jun 27	118.1	-346.0	81.2	14.7	24.2	0.0	0.0	0.0	-24.2	-272.8
Jun 28	108.1	-348.1	81.6	14.7	24.2	0.0	0.0	0.0	-24.2	-297.0
Jun 29	103.4	-350.4	71.0	14.7	24.2	0.0	0.0	0.0	-24.2	-321.2
Jun 30	98.2	-353.7	83.0	14.7	24.2	0.0	0.0	0.0	-24.2	-345.4
15 day Total	*2138.1*	*-4437.6*	*947.6*	*220.5*	*363.0*	*70.6*	*53.0*	*17.6*	*-345.4*	
Accumulated deficit including carry over from previous division period										-345.4
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
Jun Totals	*8374.0*	*-4213.1*	*1768.0*	*1723.5*	*1321.5*	*9812.9*	*7359.7*	*2453.2*	*1131.7*	

All figures in cubic decametres.

Five day lag period is applied between west and east to determine natural flow at Eastern Crossing.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

Table 8 (Continued) Summary of Daily
Net Change, Natural Flow, Evaporative and Net Consumptive Uses of Milk River at Eastern Crossing of International Boundary
July, 2015

Date at Eastern Crossing	Natural Flow at Western Crossing	East to West Net Change	Incremental Evaporative Trans. Loss	Total Consumptive Use		Natural Flow at Eastern Crossing	Share		Excess / Deficit to U.S.	Cumulative Excess / Deficit to U.S.
				U.S.	Canada		U.S.	Canada		
	C9,T2	C10,T2	C8,T4	C3,T3	C8,T3				(9-6)	
1	2	3	4	5	6	7	8	9	10	11
Accumulated deficit including carry over from previous division period										-345.4
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
Jul 01	88.2	-338.5	47.9	26.8	44.1	0.0	0.0	0.0	-44.1	-44.1
Jul 02	81.7	-331.6	69.4	26.8	44.1	0.0	0.0	0.0	-44.1	-88.2
Jul 03	76.0	-328.3	74.3	26.8	44.1	0.0	0.0	0.0	-44.1	-132.3
Jul 04	70.3	-314.4	78.4	26.8	44.1	0.0	0.0	0.0	-44.1	-176.4
Jul 05	66.9	-111.9	25.6	26.8	44.1	51.5	38.6	12.9	-31.2	-207.6
Jul 06	63.9	30.2	74.1	26.8	44.1	239.1	179.3	59.8	15.7	-191.9
Jul 07	60.5	-14.0	43.0	26.8	44.1	160.4	120.3	40.1	-4.0	-195.9
Jul 08	59.0	79.5	85.0	26.8	44.1	294.4	220.8	73.6	29.5	-166.4
Jul 09	56.4	19.3	86.5	26.8	44.1	233.1	174.8	58.3	14.2	-152.2
Jul 10	113.4	-223.5	79.6	26.8	44.1	40.4	30.3	10.1	-34.0	-186.2
Jul 11	91.6	-269.6	37.6	26.8	44.1	0.0	0.0	0.0	-44.1	-230.3
Jul 12	88.2	62.5	67.7	26.8	44.1	289.3	217.0	72.3	28.2	-202.1
Jul 13	112.8	-290.5	76.0	26.8	44.1	0.0	0.0	0.0	-44.1	-246.2
Jul 14	101.0	-276.5	50.2	26.8	44.1	0.0	0.0	0.0	-44.1	-290.3
Jul 15	85.9	-266.0	62.7	26.8	44.1	0.0	0.0	0.0	-44.1	-334.4
15 day Total	*1215.8*	*-2573.3*	*958.0*	*402.0*	*661.5*	*1308.2*	*981.1*	*327.1*	*-334.4*	
Accumulated deficit including carry over from previous division period										-679.8
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
Jul 16	78.3	-291.0	47.2	26.8	44.1	0.0	0.0	0.0	-44.1	-44.1
Jul 17	71.1	-323.7	36.3	26.8	44.1	0.0	0.0	0.0	-44.1	-88.2
Jul 18	63.9	-232.9	75.7	26.8	44.1	0.0	0.0	0.0	-44.1	-132.3
Jul 19	60.2	-166.8	72.4	26.8	44.1	36.7	27.5	9.2	-34.9	-167.2
Jul 20	60.8	-54.1	74.9	26.8	44.1	152.5	114.4	38.1	-6.0	-173.2
Jul 21	56.3	71.3	89.3	26.8	44.1	287.8	215.8	72.0	27.9	-145.3
Jul 22	71.4	-97.2	55.6	26.8	44.1	100.7	75.5	25.2	-18.9	-164.2
Jul 23	85.1	-211.6	49.2	26.8	44.1	0.0	0.0	0.0	-44.1	-208.3
Jul 24	65.4	-187.3	76.2	26.8	44.1	25.2	18.9	6.3	-37.8	-246.1
Jul 25	69.2	-275.2	71.1	26.8	44.1	0.0	0.0	0.0	-44.1	-290.2
Jul 26	76.9	-336.1	61.1	26.8	44.1	0.0	0.0	0.0	-44.1	-334.3
Jul 27	70.6	-306.4	14.1	26.8	44.1	0.0	0.0	0.0	-44.1	-378.4
Jul 28	59.0	-121.7	74.3	26.8	44.1	82.5	61.9	20.6	-23.5	-401.9
Jul 29	54.8	-172.1	82.6	26.8	44.1	36.2	27.2	9.0	-35.1	-437.0
Jul 30	51.2	-209.3	78.1	26.8	44.1	0.0	0.0	0.0	-44.1	-481.1
Jul 31	48.5	-234.2	80.3	26.8	44.1	0.0	0.0	0.0	-44.1	-525.2
16 day Total	*1042.7*	*-3148.3*	*1038.4*	*428.8*	*705.6*	*721.6*	*541.2*	*180.4*	*-525.2*	*-525.2*
Accumulated deficit including carry over from previous division period										-1205
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
Jul Totals	*2258.5*	*-5721.6*	*1996.4*	*830.8*	*1367.1*	*2029.8*	*1522.3*	*507.5*	*-859.6*	

All figures in cubic decametres.

Five day lag period is applied between west and east to determine natural flow at Eastern Crossing.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

Table 8 (Continued) Summary of Daily
Net Change, Natural Flow, Evaporative and Net Consumptive Uses of Milk River at Eastern Crossing of International Boundary
August, 2015

Date at Eastern Crossing	Natural Flow at Western Crossing	East to West Net Change	Incremental Evaporative Trans. Loss	Total Consumptive Use		Natural Flow at Eastern Crossing	Share		Excess / Deficit to U.S.	Cumulative Excess / Deficit to U.S.
				U.S.	Canada		U.S.	Canada		
	C9,T2	C10,T2	C8,T4	C3,T3	C8,T3				(9-6)	
1	2	3	4	5	6	7	8	9	10	11
Accumulated deficit including carry over from previous division period										-1205
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
Aug 01	48.6	-254.9	32.1	21.6	36.3	0.0	0.0	0.0	-36.3	-36.3
Aug 02	53.0	-273.1	76.2	21.6	36.3	0.0	0.0	0.0	-36.3	-72.6
Aug 03	46.1	-261.8	80.3	21.6	36.3	0.0	0.0	0.0	-36.3	-108.9
Aug 04	42.0	-238.5	50.8	21.6	36.3	0.0	0.0	0.0	-36.3	-145.2
Aug 05	41.9	-198.5	48.9	21.6	36.3	0.0	0.0	0.0	-36.3	-181.5
Aug 06	37.3	-200.8	65.7	21.6	36.3	0.0	0.0	0.0	-36.3	-217.8
Aug 07	35.9	-207.2	73.6	21.6	36.3	0.0	0.0	0.0	-36.3	-254.1
Aug 08	37.7	-213.8	63.7	21.6	36.3	0.0	0.0	0.0	-36.3	-290.4
Aug 09	38.5	-218.9	76.7	21.6	36.3	0.0	0.0	0.0	-36.3	-326.7
Aug 10	38.6	-198.8	75.1	21.6	36.3	0.0	0.0	0.0	-36.3	-363.0
Aug 11	38.4	-243.1	73.8	21.6	36.3	0.0	0.0	0.0	-36.3	-399.3
Aug 12	37.7	-217.3	53.1	21.6	36.3	0.0	0.0	0.0	-36.3	-435.6
Aug 13	37.3	-223.1	73.9	21.6	36.3	0.0	0.0	0.0	-36.3	-471.9
Aug 14	34.6	-238.3	60.7	21.6	36.3	0.0	0.0	0.0	-36.3	-508.2
Aug 15	34.6	-226.5	47.4	21.6	36.3	0.0	0.0	0.0	-36.3	-544.5
15 day Total	*602.2*	*-3414.6*	*952.0*	*324.0*	*544.5*	*0.0*	*0.0*	*0.0*	*-544.5*	
Accumulated deficit including carry over from previous division period										-1749.5
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
Aug 16	34.5	-228.0	32.0	21.6	36.3	0.0	0.0	0.0	-36.3	-36.3
Aug 17	31.9	-221.9	38.8	21.6	36.3	0.0	0.0	0.0	-36.3	-72.6
Aug 18	34.3	-156.0	51.1	21.6	36.3	0.0	0.0	0.0	-36.3	-108.9
Aug 19	34.3	-94.8	66.9	21.6	36.3	64.3	48.2	16.1	-20.2	-129.1
Aug 20	39.1	-89.5	37.1	21.6	36.3	44.6	33.4	11.2	-25.1	-154.2
Aug 21	36.7	-122.2	29.1	21.6	36.3	1.5	1.1	0.4	-35.9	-190.1
Aug 22	39.1	-175.0	48.6	21.6	36.3	0.0	0.0	0.0	-36.3	-226.4
Aug 23	36.7	-154.5	57.7	21.6	36.3	0.0	0.0	0.0	-36.3	-262.7
Aug 24	36.7	-151.7	48.7	21.6	36.3	0.0	0.0	0.0	-36.3	-299.0
Aug 25	34.4	-107.5	59.4	21.6	36.3	44.2	33.2	11.0	-25.3	-324.3
Aug 26	36.8	-83.9	56.3	21.6	36.3	67.1	50.3	16.8	-19.5	-343.8
Aug 27	44.0	-113.2	45.4	21.6	36.3	34.1	25.6	8.5	-27.8	-371.6
Aug 28	39.1	-118.6	46.6	21.6	36.3	25.0	18.8	6.2	-30.1	-401.7
Aug 29	34.3	-134.5	64.5	21.6	36.3	22.2	16.6	5.6	-30.7	-432.4
Aug 30	34.5	-211.0	58.3	21.6	36.3	0.0	0.0	0.0	-36.3	-468.7
Aug 31	31.9	-334.0	64.6	21.6	36.3	0.0	0.0	0.0	-36.3	-505.0
16 day Total	*578.3*	*-2496.3*	*805.1*	*345.6*	*580.8*	*303.0*	*227.2*	*75.8*	*-505.0*	
Accumulated deficit including carry over from previous division period										-2254.5
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
Aug Totals	*1180.5*	*-5910.9*	*1757.1*	*669.6*	*1125.3*	*303.0*	*227.2*	*75.8*	*-1049.5*	

All figures in cubic decametres.

Five day lag period is applied between west and east to determine natural flow at Eastern Crossing.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

Table 8 (Continued) Summary of Daily
Net Change, Natural Flow, Evaporative and Net Consumptive Uses of Milk River at Eastern Crossing of International Boundary
September, 2015

Date at Eastern Crossing	Natural Flow at Western Crossing	East to West Net Change	Incremental Evaporative Trans. Loss	Total Consumptive Use		Natural Flow at Eastern Crossing	Share		Excess / Deficit to U.S.	Cumulative Excess / Deficit to U.S.
				U.S.	Canada		U.S.	Canada		
	C9,T2	C10,T2	C8,T4	C3,T3	C8,T3				(9-6)	
1	2	3	4	5	6	7	8	9	10	11
Accumulated deficit including carry over from previous division period										-2254.5
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
Sep 01	34.3	-325.3	61.1	14.7	24.2	0.0	0.0	0.0	-24.2	-24.2
Sep 02	31.8	-215.8	36.5	14.7	24.2	0.0	0.0	0.0	-24.2	-48.4
Sep 03	31.8	-83.2	20.9	14.7	24.2	8.4	6.3	2.1	-22.1	-70.5
Sep 04	34.3	31.3	4.3	14.7	24.2	108.8	81.6	27.2	3.0	-67.5
Sep 05	34.3	99.5	4.1	14.7	24.2	176.8	132.6	44.2	20.0	-47.5
Sep 06	34.3	327.1	16.9	14.7	24.2	417.2	312.9	104.3	80.1	32.6
Sep 07	34.3	232.2	16.8	14.7	24.2	322.2	241.6	80.6	56.4	89.0
Sep 08	34.3	209.9	21.1	14.7	24.2	304.2	228.2	76.0	51.8	140.8
Sep 09	39.1	154.6	12.5	14.7	24.2	245.1	183.8	61.3	37.1	177.9
Sep 10	56.7	110.9	17.7	14.7	24.2	224.2	168.1	56.1	31.9	209.8
Sep 11	76.9	60.8	16.8	14.7	24.2	193.4	145.0	48.4	24.2	234.0
Sep 12	48.1	71.2	17.9	14.7	24.2	176.1	132.1	44.0	19.8	253.8
Sep 13	42.2	53.0	14.9	14.7	24.2	149.0	111.8	37.2	13.0	266.8
Sep 14	51.9	33.3	6.7	14.7	24.2	130.8	98.1	32.7	8.5	275.3
Sep 15	57.5	81.2	4.7	14.7	24.2	182.3	136.7	45.6	21.4	296.7
15 day Total	*641.8*	*840.7*	*272.9*	*220.5*	*363.0*	*2638.5*	*1978.8*	*659.7*	*296.7*	
Accumulated deficit including carry over from previous division period										-2254.5
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
Sep 16	51.1	-	1.2	0.0	0.0	276.5	207.4	69.1	69.1	69.1
Sep 17	45.5	-	9.1	0.0	0.0	261.8	196.4	65.4	65.4	134.5
Sep 18	39.7	-	9.0	0.0	0.0	210.4	157.8	52.6	52.6	187.1
Sep 19	40.7	-	8.8	0.0	0.0	181.0	135.8	45.2	45.2	232.3
Sep 20	43.1	-	8.3	0.0	0.0	156.6	117.4	39.2	39.2	271.5
Sep 21	43.1	-	3.1	0.0	0.0	141.9	106.4	35.5	35.5	307.0
Sep 22	43.5	-	4.9	0.0	0.0	137.0	102.8	34.2	34.2	341.2
Sep 23	43.9	-	4.0	0.0	0.0	124.8	93.6	31.2	31.2	372.4
Sep 24	42.9	-	3.3	0.0	0.0	117.4	88.1	29.3	29.3	401.7
Sep 25	41.7	-	3.4	0.0	0.0	112.5	84.4	28.1	28.1	429.8
Sep 26	45.5	-	2.4	0.0	0.0	105.2	78.9	26.3	26.3	456.1
Sep 27	46.1	-	2.8	0.0	0.0	97.9	73.4	24.5	24.5	480.6
Sep 28	46.9	-	1.9	0.0	0.0	93.0	69.8	23.2	23.2	503.8
Sep 29	44.3	-	1.8	0.0	0.0	88.1	66.1	22.0	22.0	525.8
Sep 30	42.1	-	1.7	0.0	0.0	85.6	64.2	21.4	21.4	547.2
15 day Total	*660.1*	*0.0*	*65.7*	*0.0*	*0.0*	*2189.7*	*1642.5*	*547.2*	*547.2*	
Accumulated deficit including carry over from previous division period										-1707.3
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam^3 (2000 cfs-days).										
Sep Totals	*1301.9*	*840.7*	*338.6*	*220.5*	*363.0*	*4828.2*	*3621.3*	*1206.9*	*843.9*	

All figures in cubic decametres.

Five day lag period is applied between west and east to determine natural flow at Eastern Crossing.

Grey areas indicate natural flow equal to the recorded flow at the gauge (11AA031) Milk River at Eastern Crossing plus United States and Canadian consumptive use.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

Table 8 (Continued) Summary of Daily Net Change, Natural Flow, Evaporative and Net Consumptive Uses of Milk River at Eastern Crossing of International Boundary October, 2015

Date at Eastern Crossing	Natural Flow at Western Crossing	East to West Net Change	Incremental Evaporative Trans. Loss	Total Consumptive Use		Natural Flow at Eastern Crossing	Share		Excess / Deficit to U.S.	Cumulative Excess / Deficit to U.S.
				U.S.	Canada		U.S.	Canada		
	C9,T2	C10,T2	C8,T4	C3,T3	C8,T3				(9-6)	
1	2	3	4	5	6	7	8	9	10	11
Accumulated deficit including carry over from previous division period										-1707.3
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam³ (2000 cfs-days).										
Oct 01	38.6	-	2.0	0.0	0.0	85.6	64.2	21.4	21.4	21.4
Oct 02	51.8	-	0.5	0.0	0.0	85.6	64.2	21.4	21.4	42.8
Oct 03	54.6	-	1.1	0.0	0.0	144.3	108.2	36.1	36.1	78.9
Oct 04	54.1	-	2.3	0.0	0.0	296.0	222.0	74.0	74.0	152.9
Oct 05	52.3	-	5.1	0.0	0.0	259.3	194.5	64.8	64.8	217.7
Oct 06	50.2	-	3.5	0.0	0.0	181.0	135.8	45.2	45.2	262.9
Oct 07	50.9	-	3.4	0.0	0.0	144.3	108.2	36.1	36.1	299.0
Oct 08	58.5	-	2.3	0.0	0.0	122.3	91.7	30.6	30.6	329.6
Oct 09	62.7	-	2.7	0.0	0.0	110.1	82.6	27.5	27.5	357.1
Oct 10	59.4	-	2.4	0.0	0.0	95.4	71.6	23.8	23.8	380.9
Oct 11	61.0	-	1.5	0.0	0.0	80.7	60.5	20.2	20.2	401.1
Oct 12	63.6	-	0.6	0.0	0.0	78.3	58.7	19.6	19.6	420.7
Oct 13	64.8	-	0.5	0.0	0.0	78.3	58.7	19.6	19.6	440.3
Oct 14	62.7	-	0.5	0.0	0.0	75.8	56.8	19.0	19.0	459.3
Oct 15	61.9	-	0.3	0.0	0.0	73.4	55.0	18.4	18.4	477.7
15 day Total	*847.1*	*0.0*	*28.7*	*0.0*	*0.0*	*1910.4*	*1432.7*	*477.7*	*477.7*	
Accumulated deficit including carry over from previous division period										-1229.6
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam³ (2000 cfs-days).										
Oct 16	60.6	-	0.3	0.0	0.0	75.8	56.8	19.0	19.0	19.0
Oct 17	54.7	-	0.5	0.0	0.0	75.8	56.8	19.0	19.0	38.0
Oct 18	52.5	-	0.5	0.0	0.0	75.8	56.8	19.0	19.0	57.0
Oct 19	51.5	-	0.5	0.0	0.0	78.3	58.7	19.6	19.6	76.6
Oct 20	53.7	-	0.7	0.0	0.0	78.3	58.7	19.6	19.6	96.2
Oct 21	56.6	-	0.5	0.0	0.0	78.3	58.7	19.6	19.6	115.8
Oct 22	60.2	-	0.5	0.0	0.0	80.7	60.5	20.2	20.2	136.0
Oct 23	61.7	-	0.3	0.0	0.0	80.7	60.5	20.2	20.2	156.2
Oct 24	61.7	-	0.3	0.0	0.0	78.3	58.7	19.6	19.6	175.8
Oct 25	64.9	-	0.2	0.0	0.0	78.3	58.7	19.6	19.6	195.4
Oct 26	62.1	-	0.4	0.0	0.0	80.7	60.5	20.2	20.2	215.6
Oct 27	62.0	-	0.3	0.0	0.0	80.7	60.5	20.2	20.2	235.8
Oct 28	63.5	-	0.3	0.0	0.0	80.7	60.5	20.2	20.2	256.0
Oct 29	63.4	-	0.3	0.0	0.0	83.2	62.4	20.8	20.8	276.8
Oct 30	65.5	-	0.5	0.0	0.0	85.6	64.2	21.4	21.4	298.2
Oct 31	64.4	-	0.3	0.0	0.0	85.6	64.2	21.4	21.4	319.6
16 day Total	*959.0*	*0.0*	*6.4*	*0.0*	*0.0*	*1276.8*	*957.2*	*319.6*	*319.6*	
Accumulated deficit including carry over from previous division period										-910
Note: Eligible June 01 to September 15 accumulated carry over is 4900 dam³ (2000 cfs-days).										
Oct Totals	*1806.1*	*0.0*	*35.1*	*0.0*	*0.0*	*3187.2*	*2389.9*	*797.3*	*797.3*	

All figures in cubic decametres.

Five day lag period is applied between west and east to determine natural flow at Eastern Crossing.

Grey areas indicate natural flow equal to the recorded flow at the gauge (11AA031) Milk River at Eastern Crossing plus United States and Canadian consumptive use.

Approved by: _____ For Canada _____ For The United States

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Table 9: HISTORICAL SUMMARY OF MARCH – OCTOBER COMPUTED NATURAL FLOW MILK RIVER AT EASTERN CROSSING OF INTERNATIONAL BOUNDARY

(VALUES IN CUBIC DECAMETRES)

YEAR	COMPUTED NATURAL FLOW	UNITED STATES SHARE	CANADIAN SHARE	YEAR	COMPUTED NATURAL FLOW	UNITED STATES SHARE	CANADIAN SHARE
				1941	31,230	21,500	9,730
1912	140,600	93,500	47,060	1942	105,500	75,880	29,610
1913	156,000	109,700	46,310	1943	143,500	98,570	44,880
1914	85,080	59,420	25,650	1944	27,940	19,940	8,000
1915	172,100	121,300	50,770	1945	53,840	36,160	17,680
1916	279,900	187,800	92,050	1946	51,470	35,060	16,410
1917	270,300	174,300	96,000	1947	203,600	128,600	75,020
1918	79,710	55,670	24,040	1948	253,700	167,800	85,970
1919	33,800	24,100	9,700	1949	69,920	49,710	20,200
1920	212,700	135,200	77,520	1950	149,100	106,100	42,960
1921	70,180	50,360	19,820	1951	342,400	226,300	116,000
1922	107,500	76,500	31,040	1952	249,000	154,300	94,720
1923	101,400	72,610	28,800	1953	316,700	200,200	116,600
1924	89,170	63,320	25,850	1954	181,800*	127,200	54,610
1925	148,900	100,700	48,240	1955	197,300	133,700*	63,580
1926	30,240	21,220	9,020	1956	138,900	97,270	41,600
1927	449,200	280,800	168,400	1957	129,300	88,470	40,810
1928	273,000	177,700	95,300	1958	139,200	89,690	49,550
1929	183,400	122,800	60,570	1959	159,600	105,100	54,490
1930	131,000	87,900	43,070	1960	121,300	76,290	45,010
1931	36,720	25,050	11,670	1961	46,770	32,760	14,010
1932	94,350	64,710	29,650	1962	72,190	48,500	23,690
1933	117,200	80,590	36,580	1963	34,260	23,630	10,630
1934	116,700	79,580	37,080	1964	154,100	104,300	49,750
1935	97,570	64,590	32,980	1965	283,600	181,200	102,500*
1936	79,920	50,220	29,700	1966	146,500	98,500	48,020
1937	111,600	78,980	32,660	1967	309,000	193,200	115,800
1938	133,200	89,640	43,520	1968	139,200	96,540	42,690
1939	50,110	33,540	16,560	1969	236,000	147,000	88,930
1940	69,710	46,390	23,320	1970	121,300	84,790	36,460

Continued…

* Revised

Note: The totals of the United States and Canadian shares may not agree with the computed natural flows as all figures have been rounded for this summary. The table is a direct conversion from English to SI units. Totals prior to 1985 may not concur in some cases.

Table 9 (continued): HISTORICAL SUMMARY OF MARCH – OCTOBER COMPUTED NATURAL FLOW MILK RIVER AT EASTERN CROSSING OF INTERNATIONAL BOUNDARY

(VALUES IN CUBIC DECAMETRES)

YEAR	COMPUTED NATURAL FLOW	UNITED STATES SHARE	CANADIAN SHARE
1971	127,900	91,280	36,650
1972	228,700	148,500	80,260
1973	44,490	29,600	14,890
1974	116,700	82,190	34,530
1975	324,200	206,100	118,100
1976	117,800	80,360	37,400
1977	37,180	25,800	11,380
1978	273,900	173,200	100,700
1979	248,200	152,600	95,570
1980	99,420	69,480	29,940
1981	113,300	79,170	34,170
1982	164,500	109,300	55,150
1983	46,550	32,650	13,910
1984	26,550	17,490	9,060
1985	58,800	41,680	17,110*
1986	88,070	58,850	29,220
1987	58,300	40,890	17,410
1988	35,930	25,010	10,920
1989	116,800*	78,520	38,320
1990	121,000	82,250	38,730
1991	148,100	105,200	42,840
1992	38,900	26,910	11,990
1993	160,300	109,500	50,770
1994	188,000	115,400	72,590
1995	229,300	155,200	74,110
1996	200,300	124,800	75,500
1997	173,800	113,500	60,280
1998	75,030*	53,920*	21,100*
1999	76,810	54,810	22,000
2000	35,390	24,320	11,070
2001	21,730	15,100	6,630
2002	235,400	145,600	89,820*
2003	97,260	63,670	33,600
2004	61,960	42,350	19,620
2005	73,300	51,190	22,110
2006	83,750	58,480	25,270
2007	75,980	48,600	27,380
2008	108,700	77,000	31,660
2009	79,840	56,010	23,830
2010	278,100	186,800	91,290
2011	358,700	227,400	131,200
2012	111,700	78,570	33,100
2013	97,590	67,340	30,250
2014	196,900	128,400	68,410
2015	66,620	44,100	22,520
AVERAGE 1912 – 2014	137,700	91,570	46,140

* Revised

Note: The totals of the United States and Canadian shares may not agree with the computed natural flows as all figures have been rounded for this summary. The table is a direct conversion from English to SI units. Totals prior to 1985 may not concur in some cases.

Table 10: NATURAL FLOW OF LODGE CREEK AT THE INTERNATIONAL BOUNDARY FOR THE YEAR 2015

	1	2	3	4	5	6		7	8	9		10
Period Upper Lodge Area	Michel Reservoir Depletion	Greasewood Reservoir Depletion	Massy Reservoir Depletion	Minor Diversions (Upper Lodge Incl. Bare Cr.)	Total Depletion Upper Lodge Reservoirs	Channel Loss to International Boundary 7.34 dam^3/day +% of remainder		Net Depletion Upper Lodge	Bare Creek Reservoir Depletion	Channel Loss to International Boundary 7.34 dam^3/day +% of remainder		Net Depletion Bare Creek
	Observed	Observed	Observed	Reported	1+2+3+4			5 - 6	Observed			8 - 9
Feb 26-Mar 11	62	11	16	95	184	6	115	69	330	6	123	207
Mar 12 - 27	-52	-9	-14	0	-75	6	-75	0	-51	6	-51	0
Mar 28-Apr 11	-8	0	1	224	217	9	120	97	-38	9	-38	0
Apr 12 - 26	2	1	-2	0	1	9	1	0	-29	9	-29	0
Apr 27-May 11	13	2	4	205	224	15	127	97	-1	15	-1	0
May 12 - 27	10	4	-23	0	-9	15	-9	0	0	15	0	0
May 28-Jun 11	9	2	-20	123	114	24	111	3	0	24	0	0
Jun 12 - 26	-2	-61	-69	37	-95	24	-95	0	-18	24	-18	0
Jun 27-Jul 11	4	-41	-46	0	-83	24	-83	0	10	24	10	0
Jul 12 - 27	0	2	-31	0	-29	24	-29	0	5	24	5	0
Jul 28-Aug 11	4	2	0	0	6	24	6	0	-481	24	-199	-282
Aug 12 - 27	-11	0	0	0	-11	24	-11	0	-5	24	-5	0
Aug 28-Sep 11	-4	2	0	0	-2	15	-2	0	12	15	12	0
Sep 12 - 26	-2	2	0	0	0	15	0	0	13	15	13	0
Sep 27-Oct 11	-5	2	0	0	-3	9	-3	0	14	9	14	0
Oct 12 - 27	-343	2	0	0	-341	9	-138	-203	10	9	10	0
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Total	-323	-79	-184	684	98		35	63	-229		-154	-75

All values are derived from data as published in Appendix B.
All quantities in cubic decametres. Totals may not add or subtract exactly as a result of rounding.

Table 10 (continued): NATURAL FLOW OF LODGE CREEK AT THE INTERNATIONAL BOUNDARY FOR THE YEAR 2015

	11	12		13	14	15	16	17		18		19	20		21
Period Cressday and Mitchell Reservoir Area	Cressday Reservoir Depletion	Channel Loss to Inter-national Boundary 4.92 dam^3/day +% of remainder		Net Depletion Cressday	Mitchell Reservoir Depletion	Minor Diversions	Total Depletion Mitchell Reservoir	Channel Loss to Inter-national Boundary 4.92 dam^3/day +% of remainder		Net Depletion Mitchell	Period Jaydot Reservoir Area	Jaydot Reservoir Depletion	Channel Loss to Inter-national Boundary 2.42 dam^3/day +% of remainder		Net Depletion Jaydot
	Observed			11 - 12	Observed	Reported	14 + 15			16 – 17		Observed			19 - 20
Feb 27-Mar 12	279	4	82	197	161	0	161	4	77	84	Feb 27-Mar 13	0	2	0	0
Mar 13 - 28	-139	4	-81	-58	52	205	257	4	86	171	Mar 14 - 29	0	2	0	0
Mar 29-Apr 12	-31	6	-31	0	-74	0	-74	6	-74	-0	Mar 30-Apr 13	0	3	0	0
Apr 13 - 27	-11	6	-11	0	-2	0	-2	6	-2	0	Apr 14 - 28	0	3	0	0
Apr 28-May 12	16	10	16	0	1	0	27	10	27	-26	Apr 29-May 13	0	5	0	0
May 13 - 28	-1	10	-1	0	7	0	-181	10	-89	96	May 14 - 29	0	5	0	0
May 29-Jun 12	17	16	17	0	-142	104	2	16	2	-40	May 30-Jun 13	0	8	0	0
Jun 13 - 27	7	16	7	0	-99	0	-99	16	-78	-21	Jun 14 - 28	0	8	0	0
Jun 28-Jul 12	6	16	6	0	0	0	0	16	0	0	Jun 29-Jul 13	0	8	0	0
Jul 13 - 28	2	16	2	0	2	0	2	16	2	0	Jul 14 - 29	0	8	0	0
Jul 29-Aug 12	-4	16	-4	0	-3	0	-3	16	-3	0	Jul 30-Aug 13	0	8	0	0
Aug 13 - 28	-10	16	-10	0	-14	0	-14	16	-14	0	Aug 14 - 29	0	8	0	0
Aug 29-Sep 12	-10	10	-10	0	-5	0	5	10	5	-10	Aug 30-Sep 13	0	5	0	0
Sep 13 - 27	-17	10	-17	0	-3	0	-3	10	-3	0	Sep 14 - 28	0	5	0	0
Sep 28-Oct 12	-5	6	-5	0	-28	0	-28	6	-28	0	Sep 29-Oct 13	0	3	0	0
Oct 13 - 28	-8	6	-8	0	-3	0	-3	6	-3	0	Oct 14 - 29	0	3	0	0
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Total	91		-48	139	-150	308	47		-94	253		0		0	0

All values are derived from data as published in Appendix B.
All quantities in cubic decametres. Totals may not add or subtract exactly as a result of rounding.

Table 10 (continued): NATURAL FLOW OF LODGE CREEK AT THE INTERNATIONAL BOUNDARY FOR THE YEAR 2015

	22	23	24	25	26	27	28		29
Period Middle Creek Reservoir Area	Middle Creek Reservoir Inflow	Bedford Outlet	Flood Spillway	Irrigation Return Middle Creek Below Middle Creek Reservoir	Minor Diversions (Middle Cr.)	Gross Depletion	Channel Loss to International Boundary		Net Depletion Middle Creek
	Observed	Observed	Observed	Observed	Reported	22-23-24-25+26	4.92 dam^3/day +% of remainder		27 - 28
Feb 27-Mar 12	849	0	0	9	7	847	4	105	742
Mar 13 - 28	1485	0	0	45	4	1444	4	133	1311
Mar 29-Apr 12	164	0	0	1	0	163	6	79	84
Apr 13 - 27	47	0	0	0	0	47	6	47	0
Apr 28-May 12	34	0	0	0	0	34	10	34	0
May 13 - 28	30	0	0	552	0	-522	10	-123	-399
May 29-Jun 12	22	0	0	39	0	-17	16	-17	0
Jun 13 - 27	22	0	0	0	0	22	16	22	0
Jun 28-Jul 12	13	0	0	0	0	13	16	13	0
Jul 13 - 28	10	0	0	0	0	10	16	10	0
Jul 29-Aug 12	8	0	0	0	0	8	16	8	0
Aug 13 - 28	11	0	0	0	0	11	16	11	0
Aug 29-Sep 12	12	0	0	0	0	12	10	12	0
Sep 13 - 27	12	0	0	0	0	12	10	12	0
Sep 28-Oct 12	12	0	0	0	0	12	6	12	0
Oct 13 - 28	11	0	0	0	0	11	6	11	0
Total	2740	0	0	646	12	2106		368	1738

All values are derived from data as published in Appendix B.
All quantities in cubic decametres. Totals may not add or subtract exactly as a result of rounding.

Table 10 (continued): NATURAL FLOW OF LODGE CREEK AT THE INTERNATIONAL BOUNDARY FOR THE YEAR 2015

	30	31			32	33	34	35		36
Period Middle Creek Near Govenlock	Middle Creek Near Govenlock	Channel Loss to Middle Cr Above Lodge Creek		Period To Middle Creek Above Lodge Creek	Apparent Flow At Middle Creek Above Lodge Creek	Measured Flow At Middle Creek Above Lodge Creek	Water Use Stokke - Buchanan Projects	Channel Loss to International Boundary		Net Depletion Stokke - Buchanan
	Observed	1.21 dam^3/day +% of remainder			30 - 31	Observed	32 - 33	1.21 dam^3/day +% of remainder		34 - 35
Feb 28-Mar 13	580	1	24	Feb 28-Mar 14	556	622	-66	1	-19	-48
Mar 14 - 29	472	1	24	Mar 15 – 30	448	537	-88	1	-20	-68
Mar 30-Apr 13	161	2	21	Mar 31-Apr 14	140	194	-54	2	-19	-35
Apr 14 - 28	133	2	20	Apr 15 – 29	112	72	40	2	19	22
Apr 29-May 13	46	3	19	Apr 30-May 14	27	5	22	3	18	3
May 14 - 29	371	3	30	May 15 – 30	341	35	306	3	28	278
May 30-Jun 13	48	4	19	May 31-Jun 14	29	26	2	4	2	0
Jun 14 - 28	12	4	12	Jun 15 – 29	0	59	-59	4	-20	-39
Jun 29-Jul 13	0	4	0	Jun 30-Jul 14	0	3	-3	4	-3	0
Jul 14 - 29	0	4	0	Jul 15 – 30	0	0	0	4	0	0
Jul 30-Aug 13	0	4	0	Jul 31-Aug 14	0	0	0	4	0	0
Aug 14 - 29	0	4	0	Aug 15 – 30	0	0	0	4	0	0
Aug 30-Sep 13	0	3	0	Aug 31-Sep 14	0	0	0	3	0	0
Sep 14 - 28	0	3	0	Sep 15 – 29	0	0	0	3	0	0
Sep 29-Oct 13	10	2	10	Sep 30-Oct 14	0	0	0	2	0	0
Oct 14 - 29	15	2	15	Oct 15 – 30	0	0	0	2	0	0
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Total	1847		193		1653	1554	99		-14	113

All values are derived from data as published in Appendix B.
All quantities in cubic decametres. Totals may not add or subtract exactly as a result of rounding.

Table 10 (continued): NATURAL FLOW OF LODGE CREEK AT THE INTERNATIONAL BOUNDARY FOR THE YEAR 2015

	37	38	39	40	41	42	43		44
Period Altawan Reservoir Area	Altawan Reservoir Depletion	Spangler Ditch	Return Flow From Spangler Ditch -Squaw Coulee	Return Flow From Bedford -Walburger Coulee	Minor Diversions	Gross Depletion	Channel Loss to International Boundary		Net Depletion Altawan
	Observed	Observed	Observed	Observed	Reported	37+38-39-40+41	2.42 dam^3/day +% of remainder		42 - 43
Feb 28-Mar 13	766	0	0	0	0	766	2	51	715
Mar 14 - 29	-717	0	7	0	19	-705	2	-52	-653
Mar 30-Apr 13	-31	0	0	0	65	34	3	34	0
Apr 14 - 28	39	0	0	0	0	39	3	36	3
Apr 29-May 13	-152	156	0	0	0	4	5	4	0
May 14 - 29	-1283	1169	0	0	0	-114	5	-42	-71
May 30-Jun 13	-316	353	33	0	0	4	8	4	0
Jun 14 - 28	43	0	0	0	0	43	8	37	6
Jun 29-Jul 13	36	0	0	0	0	36	8	36	0
Jul 14 - 29	-26	6	0	0	0	-20	8	-20	0
Jul 30-Aug 13	-774	574	0	0	0	-200	8	-49	-150
Aug 14 - 29	-59	0	0	0	0	-59	8	-40	-19
Aug 30-Sep 13	-19	0	0	0	0	-19	5	-19	0
Sep 14 - 28	-30	0	0	0	0	-30	5	-30	0
Sep 29-Oct 13	2	0	0	0	0	2	3	2	0
Oct 14 - 29	-74	0	0	0	0	-74	3	-40	-34
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Total	-2595	2259	39	0	84	-292		-88	-203

All values are derived from data as published in Appendix B.
All quantities in cubic decametres. Totals may not add or subtract exactly as a result of rounding.
Flows at Squaw Coulee considered “natural” are entered as zero.

Table 10 (continued): NATURAL FLOW OF LODGE CREEK AT THE INTERNATIONAL BOUNDARY FOR THE YEAR 2015

	45	46	47	48	49	50
Period At International Boundary	Net Depletion In Canada	Lodge Creek At International Boundary	Natural Flow Of Lodge Creek	U.S.A. Share Of Natural Flow	Excess Flow To U.S.A.	Deficit(-) To Date
	7 + 10 + 13 + 18 +21 + 29 + 36 + 44	Observed	45+ 46	50% of 47	46 - 48	Sum of 49
Mar 1 - 15	1967	6400	8366	4183	2217	0
Mar 16 - 31	703	3811	4513	2257	1554	0
Apr 1 - 15	145	1021	1166	583	438	0
Apr 16 - 30	24	414	438	219	195	0
May 1 - 15	74	85	159	79	6	0
May 16 - 31	-96	51	0	0	51	0
Jun 1 - 15	-37	105	68	34	71	0
Jun 16 - 30	-54	1	0	0	1	0
Jul 1 - 15	0	2	2	1	1	0
Jul 16 - 31	0	0	0	0	0	0
Aug 1 - 15	-432	0	0	0	0	0
Aug 16 - 31	-19	0	0	0	0	0
Sep 1 - 15	-10	0	0	0	0	0
Sep 16 - 30	0	0	0	0	0	0
Oct 1 - 15	0	0	0	0	0	0
Oct 16 - 31	-238	0	0	0	0	0
Total	2027	11889	14712	7356	4533	0

All values are derived from data as published in Appendix B.
All quantities in cubic decametres.
Totals may not add or subtract exactly as a result of rounding.

Approved by: _____ For Canada

_____ For the United States

Table 11: HISTORICAL SUMMARY OF MARCH TO OCTOBER COMPUTED NATURAL AND RECORDED FLOW LODGE CREEK AT THE INTERNATIONAL BOUNDARY

(VALUES IN CUBIC DECAMETRES)

YEAR	COMPUTED NATURAL FLOW	CANADIAN & U.S.A. SHARES	RECORDED FLOW	YEAR	COMPUTED NATURAL FLOW	CANADIAN & U.S.A. SHARES	RECORDED FLOW
1950	17,900	8,950	14,410				
1951	62,950	31,475	48,760	1986	93,870	46,935	75,060
1952	161,600	80,800	147,200	1987	31,280	15,640	20,670
1953	38,240	19,120	27,240	1988	2,990	1,495	1,370
1954	13,050	6,525	7,620	1989	4,160	2,080	1,920
1955	97,070	48,535	75,390	1990	29,750	14,875	16,030
1956	21,180	10,590	15,770	1991	13,870	6,935	7,670
1957	32,770	16,385	24,500	1992	398	199	0
1958	48,180	24,090	42,090	1993	46,180	23,090	26,690
1959	21,220	10,610	14,300	1994	28,150	14,075	18,190
1960	39,590	19,795	29,510	1995	3,760	1,880	2,360
1961	2,200	1,100	1,030	1996	68,440	34,220	53,370
1962	25,640	12,820	18,840	1997	45,860	22,930	33,500
1963	14,080	7,040	7,500	1998	3,390	1,695	1,620
1964	9,790	4,895	5,130	1999	6,910	3,455	3,720
1965	95,340	47,670	68,060	2000	174	87	0
1966	44,230	22,115	30,180	2001	139	70	0
1967	90,360	45,180	73,260	2002	12,590	6,295	6,100
1968	4,910	2,455	2,650	2003	21,330	10,665	12,660
1969	36,900	18,450	20,850	2004	9,630	4,815	5,440
1970	29,050	14,525	16,160	2005	6,860	3,430	3,310
1971	26,290	13,145	13,080	2006	11,010	5,505	5,140
1972	27,380	13,690	13,580	2007	6,930	3,465	3,930
1973	2,080	1,040	1,060	2008	2,230	1,115	1,100
1974	26,980	13,490	14,560	2009	4,640	2,320	2,210
1975	48,000	24,000	34,540	2010	41,620	20,810	22,980
1976	29,480	14,740	22,320	2011	89,490	44,745	79,850
1977	1,240	620	891	2012	4,000	2,000	1,930
1978	37,240	18,620	22,350	2013	17,050	8,525	9,750
1979	47,020	23,510	30,390	2014	15,150	7,575	9,980
1980	2,140	1,070	712	2015	14,710	7,355	11,890
1981	1,260	630	407	AVERAGE			
1982	38,800	19,400	22,420	1950-2014	28,350	14,175	20,100
1983	4,660	2,330	2,480				
1984	937	469	600				
1985	21,270	10,635	9,960				

Table 12: NATURAL FLOW OF BATTLE CREEK AT THE INTERNATIONAL BOUNDARY FOR THE YEAR 2015

	1	2	3	4	5		6	7	8	9	10	11
Period Reesor Lake Area	Reesor Lake Depletion	Reesor Lake Minor use	Gross Depletion Reesor Lake	Channel Loss To International Boundary	Net Depletion Upper Battle Creek	Period Gaff Ditch Area	Gaff Ditch	Return Flow	Gaff Ditch Area Minor Use	Gross Depletion Gaff Ditch	Channel Loss To International Boundary	Net Depletion Gaff Ditch
	Observed	Reported	1 + 2	14.7 dam^3/day	3 - 4		Measured	35% of 6	Reported	(6 - 7) + 8	9.76 dam^3/day	9 - 10
Feb 24-Mar 19	19	10	29	29	0	Feb 25-Mar 21	26	9	0	17	17	0
Mar 20-Apr 3	7	1	8	8	0	Mar 22-Apr5	5	2	155	158	146	11
Apr 4 - 18	-18	-3	-21	-21	0	Apr 6 - 20	27	10	274	292	146	145
Apr 19-May 3	24	7	31	31	0	Apr 21-May 5	20	7	166	180	146	33
May 4 - 19	13	6	19	19	0	May 6 - 21	21	7	176	190	156	33
May 20-Jun 3	15	16	31	31	0	May 22-Jun 5	15	5	79	89	89	0
Jun 4 - 18	20	-5	15	15	0	Jun 6 - 20	11	4	7	15	15	0
Jun 19-Jul 3	5	-12	-7	-7	0	Jun 21-Jul 5	9	3	7	13	13	0
Jul 4 -19	-8	-18	-26	-26	0	Jul 6 - 21	6	2	5	8	8	0
Jul 20-Aug 3	50	-9	41	41	0	Jul 22-Aug 5	3	1	8	9	9	0
Aug 4 - 19	-17	0	-17	-17	0	Aug 6 - 21	3	1	8	10	10	0
Aug 20-Sep 3	-12	0	-12	-12	0	Aug 22-Sep 5	3	1	7	10	10	0
Sep 4 – 18	16	0	16	16	0	Sep 6 - 20	4	1	8	10	10	0
Sep 19-Oct 3	22	0	22	22	0	Sep 21-Oct 5	4	1	7	10	10	0
Oct 4-Oct 19	-14	0	-14	-14	0	Oct 6 - 21	4	1	7	9	9	0
Oct 20 - 25	-4	0	-4	-4	0	Oct 22-27	2	1	2	3	3	0
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Total	118	-7	111	111	0		164	57	915	1022	798	222

All values are derived from data as published in Appendix B.
All quantities in cubic decametres. Totals may not add or subtract exactly as a result of rounding.

Table 12 (continued): NATURAL FLOW OF BATTLE CREEK AT THE INTERNATIONAL BOUNDARY FOR THE YEAR 2015

	12	13	14	15	16	17	18	19	20	21	22	23
Period Cypress Lake Area	West Inflow Canal	West Outflow Canal	West Inflow Canal Drain	Cypress Lake Area Release	Net Diversion To Cypress Lake Area	Vidora Ditch	Return Flow 25% of 17	Total Cypress Lake Diversion	Cypress Area Minor Use	Gross Depletion Cypress Lake	Channel Loss To Inter-National Boundary	Net Depletion Cypress Lake
	Measured	Measured	Measured	13 + 14	12-15	Measured	(4 day lag)	16+17-18	Reported	19+20	7.34 dam^3/day	21 - 22
Feb 27-Mar 22	949	526	1	528	421	0	0	421	26	447	184	263
Mar 23-Apr 6	11	4299	1	4301	-4289	0	0	-4289	25	-4264	-110	-4154
Apr 7- 21	6	655	1	657	-650	0	0	-650	8	-642	-110	-532
Apr 22-May 6	276	69	1	70	206	0	0	206	0	206	110	96
May 7 - 22	302	5704	1	5705	-5404	1586	397	-4214	0	-4214	-117	-4096
May 23-Jun 6	79	831	1	832	-753	538	135	-349	0	-349	-110	-239
Jun 7 -21	243	51	1	52	191	0	0	191	0	191	110	81
Jun 22-Jul 6	212	46	3	49	163	0	0	163	0	163	110	53
Jul 7 - 22	0	32	1	32	-32	0	0	-32	0	-32	-32	0
Jul 23-Aug 6	146	2	3	5	141	0	0	141	0	141	110	31
Aug 7 - 22	0	0	1	1	-1	0	0	-1	0	-1	-1	0
Aug 23-Sep 6	0	0	0	0	0	0	0	0	0	0	0	0
Sep 7 - 21	0	0	0	0	0	0	0	0	0	0	0	0
Sep 22-Oct 6	0	0	0	0	0	0	0	0	0	0	0	0
Oct 7 - 22	0	0	0	0	0	0	0	0	0	0	0	0
Oct 23 - 28	0	0	0	0	0	0	0	0	0	0	0	0
Total	2 224	12 216	15	12 231	-10 007	2 125	531	-8 414	59	-8 355	143	-8 497

All values are derived from data as published in Appendix B.
All quantities in cubic decametres. Totals may not add or subtract exactly as a result of rounding.

Table 12 (continued): NATURAL FLOW OF BATTLE CREEK AT THE INTERNATIONAL BOUNDARY FOR THE YEAR 2015

	24	25	26	27	28	29	30	31
Period Consul Area	Richardson Ditch	McKinnon Ditch	Return Flow 25% of 24 & 25	Gross Canal Diversion	Consul Area Minor Use	Gross Depletion at Consul	Channel Loss To International Boundary	Net Depletion At Consul
	Measured	Measured	(2 day lag)	24+25-26	Reported	27+28	4.92 dam^3/day	29-30
Feb 28-Mar 23	0	0	0	0	76	76	76	0
Mar 24-Apr 7	0	0	0	0	144	144	74	71
Apr 8 – 22	0	0	0	0	15	15	15	0
Apr 23-May 7	0	0	0	0	0	0	0	0
May 8 – 23	1799	1481	820	2460	0	2460	79	2381
May 24-Jun 7	57	34	23	68	0	68	68	0
Jun 8 – 22	0	0	0	0	0	0	0	0
Jun 23-Jul 7	0	0	0	0	0	0	0	0
Jul 8 – 23	0	0	0	0	0	0	0	0
Jul 24-Aug 7	0	0	0	0	0	0	0	0
Aug 8 – 23	0	0	0	0	0	0	0	0
Aug 24-Sep 7	0	0	0	0	0	0	0	0
Sep 8 – 22	0	0	0	0	0	0	0	0
Sep 23-Oct 7	0	0	0	0	0	0	0	0
Oct 8 – 23	0	0	0	0	0	0	0	0
Oct 24-29	0	0	0	0	0	0	0	0
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Total	1 856	1 515	843	2 528	235	2 763	312	2 452

All values are derived from data as published in Appendix B.
All quantities in cubic decametres. Totals may not add or subtract exactly as a result of rounding.

Table 12 (continued): NATURAL FLOW OF BATTLE CREEK AT THE INTERNATIONAL BOUNDARY FOR THE YEAR 2015

Period Nashlyn Area	32 Battle Creek Near Consul	33 Battle Creek Below Nashlyn Project	34 Nashlyn Canal	35 Return Flow	36 Gross Canal Diversion	37 Nashlyn Area Minor Use	38 Gross Depletion At Nashlyn	39 Channel Loss To International Boundary	40 Net Depletion At Nashlyn
	Measured	Measured	Measured	33-(32-34)	34-35	Reported	36+37	2.42 dam^3/day	38-39
Feb 28-Mar 24	5296	4748	1355	610	745	11	756	61	696
Mar 25-Apr 8	6306	5581	1389	625	764	1	765	36	729
Apr 9 – 23	1384	1657	144	65	79	0	79	36	43
Apr 24-May 8	589	503	0	0	0	0	0	0	0
May 9 - 24	1779	1909	0	0	0	0	0	0	0
May 25-Jun 8	993	1224	0	0	0	0	0	0	0
Jun 9 – 23	693	420	0	0	0	0	0	0	0
Jun 24-Jul 8	381	197	0	0	0	0	0	0	0
Jul 9 – 24	309	462	0	0	0	0	0	0	0
Jul 25-Aug 8	213	249	0	0	0	0	0	0	0
Aug 9 – 24	302	205	0	0	0	0	0	0	0
Aug 25-Sep 8	264	181	0	0	0	0	0	0	0
Sep 9 - 23	651	536	0	0	0	0	0	0	0
Sep 24-Oct 8	651	573	0	0	0	0	0	0	0
Oct 9 - 24	732	736	0	0	0	0	0	0	0
Oct 25 - 30	248	246	0	0	0	0	0	0	0
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Total	20 793	19 428	2 888	1 300	1 588	12	1 601	133	1 468

A factor of 25% was used to estimate Nashlyn Canal return flow.

All values are derived from data as published in Appendix B.
All quantities in cubic decametres. Totals may not add or subtract exactly as a result of rounding.

Table 12 (continued): NATURAL FLOW OF BATTLE CREEK AT THE INTERNATIONAL BOUNDARY FOR THE YEAR 2015

Period At International Boundary	41 Net Depletion In Canada	42 Battle Creek At International Boundary	43 Natural Flow Of Battle Creek	44 U.S.A. Share Of Natural Flow	45 Excess Flow To The U.S.A.	46 Deficit(-) To Date
	5+11+23+31+40	Measured	41+42	50% of 43	42-44	Sum of 45
Mar 1 - 25	959	7255	8214	4107	3148	0
Mar 26-Apr 9	-3343	6348	3005	1502	4846	0
Apr 10 - 24	-344	1905	1561	780	1125	0
Apr 25-May 9	129	573	702	351	222	0
May 10 - 25	-1682	1761	79	39	1722	0
May 26-Jun 9	-239	1393	1154	577	816	0
Jun 10 - 24	81	353	434	217	136	0
Jun 25-Jul 9	53	127	180	90	37	0
Jul 10 - 25	0	315	315	158	157	0
Jul 26-Aug 9	31	176	207	103	73	0
Aug 10 - 25	0	92	92	46	46	0
Aug 26-Sep 9	0	89	89	44	45	0
Sep 10 - 24	0	374	374	187	187	0
Sep 25-Oct 9	0	456	456	228	228	0
Oct 10 - 25	0	645	645	323	322	0
Oct 26 - 31	0	233	233	117	116	0
Total	-4 355	22 094	17 739	8 869	13 225	0

All values are derived from data as published in Appendix B.
All quantities in cubic decametres.
Totals may not add or subtract exactly as a result of rounding.

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_____ For the United States

Table 13: HISTORICAL SUMMARY OF MARCH TO OCTOBER COMPUTED NATURAL AND RECORDED FLOW
BATTLE CREEK AT INTERNATIONAL BOUNDARY
(VALUES IN CUBIC DECAMETRES)

YEAR	COMPUTED NATURAL FLOW	CANADIAN & U.S.A. SHARES	RECORDED FLOW		YEAR	COMPUTED NATURAL FLOW	CANADIAN & U.S.A. SHARES	RECORDED FLOW
1940	45,030	22,515	32,100		1980	9,960	4,980	5,860
1941	31,280	15,640	20,860		1981	8,900	4,450	5,610
1942	27,500	13,750	13,490		1982	36,120	18,060	21,940
1943	40,710	20,355	27,960		1983	18,560	9,280	9,660
1944	12,990	6,495	9,470		1984	5,490	2,745	2,820
1945	11,010	5,505	9,970		1985	20,790	10,395	10,530
1946	12,820	6,410	8,590		1986	75,180	37,590	49,540
1947	13,900	6,950	8,540		1987	36,420	18,210	18,460
1948	23,100	11,550	9,670		1988	9,940	4,970	4,650
1949	1,650	825	2,160		1989	8,590	4,295	5,080
1950	23,800	11,900	12,730		1990	19,360	9,680	10,720
1951	35,910	17,955	20,440		1991	19,380 *	9,690	9,930
1952	138,400	69,200	127,800	**	1992	7,490	3,745	4,820
1953	46,580	23,290	34,760	**	1993	34,490	17,245	17,840
1954	40,930	20,465	31,520	**	1994	34,430	17,215	18,260
1955	110,700	55,350	117,600		1995	17,730	8,865	9,310
1956	31,590	15,795	24,890		1996	79,430	39,715	38,140
1957	33,910	16,955	22,990		1997	62,990	31,495	43,580
1958	34,290	17,145	25,040		1998	12,110	6,055	6,300
1959	22,340	11,170	14,680		1999	11,380	5,690	6,890
1960	34,520	17,260	19,350	***	2000	5,670	2,835	2,950
1961	6,970	3,485	5,510		2001	4,480	2,240	1,720
1962	9,090	4,545	6,010		2002	23,660	11,830	12,620
1963	9,920	4,960	5,790		2003	27,280	13,640	15,640
1964	13,100	6,550	6,670		2004	25,790	12,895	17,180
1965	67,350	33,675	33,950	**	2005	17,800	8,900	9,480
1966	45,850	22,925	24,860		2006	11,710	5,855	4,980
1967	80,440	40,220	67,670		2007	15,830	7,915	9,640
1968	20,090	10,045	12,830		2008	14,400	7,200	7,820
1969	35,440	17,720	21,590		2009	11,720	5,860	5,840
1970	38,260	19,130	22,570	**	2010	66,300	33,150	27,320
1971	23,770	11,885	15,420		2011	103,000	51,500	85,700
1972	27,440	13,720	17,210		2012	19,320	9,660	13,630
1973	11,810	5,905	6,170		2013	25,430	12,715	23,050
1974	23,720	11,860	15,300		2014	21,240	10,620	12,760
					2015	17,740	8,870	22,090
1975	54,440	27,220	32,440					
1976	34,520	17,260	21,210		AVERAGE			
1977	5,840	2,920	3,330		1940-2014	30,390	15,195	20,100
1978	28,520	14,260	16,690					
1979	47,520	23,760	27,640					

* Revised.
** For comparison purposes, totals for Mar 1 to Oct 31 are shown. Additional periods are not included.
*** Between 2000 and 2002, the values for 2000 were reported as 5 700, 2 850, and 2 990 and in 2003 the values were erroneously reported as 5 670, 2 830, and 2 950. The values for the year 2000 currently shown in the above table are correct.

Table 14: NATURAL FLOW OF FRENCHMAN RIVER AT THE INTERNATIONAL BOUNDARY FOR THE YEAR 2015

	1	2	3	4	5	6
Period For Cypress Lake Area	Belanger Creek Diversion	Cypress Lake East Outflow Canal	Cypress Area Minor Use	Gross Depletion At Cypress Lake	Channel Loss To Inter - National Boundary	Net Depletion At Cypress Lake
	Measured	Measured	Reported	1 - 2 + 3	Computed	4 - 5
Feb 21-Mar 6	0	120	8	- 112	- 112	0
Mar 7 - 22	3 766	1 888	37	1 914	437	1 478
Mar 23-Apr 6	976	930	82	128	128	0
Apr 7 - 21	673	732	124	65	65	0
Apr 22-May 6	139	443	109	- 195	- 195	0
May 7 - 22	371	209	72	234	234	0
May 23-Jun 6	258	210	48	96	96	0
Jun 7 -21	0	142	0	- 142	- 142	0
Jun 22-Jul 6	0	120	0	- 120	- 120	0
Jul 7 - 22	0	77	0	- 77	- 77	0
Jul 23-Aug 6	0	59	0	- 59	- 59	0
Aug 7 - 22	0	41	0	- 41	- 41	0
Aug 23-Sep 6	0	52	0	- 52	- 52	0
Sep 7 - 21	0	65	0	- 65	- 65	0
Sep 22-Oct 6	0	77	0	- 77	- 77	0
Oct 7 - 22	0	83	0	- 83	- 83	0
Total	6 181	5 248	480	1 414	- 64	1 478

All values are derived from data as published in Appendix B.
All quantities in cubic decametres.

Table 14 (continued): NATURAL FLOW OF FRENCHMAN RIVER AT THE INTERNATIONAL BOUNDARY FOR THE YEAR 2015

Period For Eastend Area	7 Eastend Reservoir Depletion Observed	8 Eastend Canal Measured	9 Return Flow Computed	10 Eastend Area Minor Use Reported	11 Gross Depletion At Eastend 7+8-9+10	12 Channel Loss At Inter - National Boundary Computed	13 Net Depletion At Eastend 11-12
Feb 23-Mar 8	- 3	0	0	3	0	0	0
Mar 9 - 24	1 806	0	0	4	1 810	358	1 452
Mar 25-Apr 8	39	0	0	14	53	53	0
Apr 9 - 23	847	0	0	1	848	284	564
Apr 24-May 8	279	0	0	62	341	213	128
May 9 - 24	-1 610	2 585	646	62	391	245	146
May 25-Jun 8	- 195	1 116	279	33	676	332	344
Jun 9 - 23	948	0	0	1	949	490	459
Jun 24-Jul 8	412	0	0	0	412	275	136
Jul 9 - 24	- 846	956	239	0	- 128	- 128	0
Jul 25-Aug 8	- 242	0	0	0	- 242	- 208	- 35
Aug 9 - 24	- 35	0	0	0	- 35	- 35	0
Aug 25-Sep 8	- 284	0	0	0	- 284	- 219	- 64
Sep 9 - 23	- 27	0	0	0	- 27	- 27	0
Sep 24-Oct 8	397	0	0	0	397	231	166
Oct 9 - 24	450	0	0	0	450	235	215
Total	1 937	4 658	1 164	180	5 611	2 099	3 511

All values are derived from data as published in Appendix B.
All quantities in cubic decametres.

Table 14 (continued): NATURAL FLOW OF FRENCHMAN RIVER AT THE INTERNATIONAL BOUNDARY FOR THE YEAR 2015

	14	15	16	17	18	19	20	21	22	23	24	25
Period For Val Marie Area	Huff Lake Net Depletion	Newton Lake Net Depletion	Total Change In Reservoir Contents	Huff Lake Gravity Canal	Huff Lake Pumping Canal	Newton Lake Main Canal	Total Canal Diversion	Return Flow	Val Marie Minor Use	Gross Depletion At Val Marie	Channel Loss To Boundary	Net Depletion At Val Marie
	Observed	Observed	14+15	Measured	Measured	Measured	17+18+19	Computed	Reported	16+20-21+22	Computed	23 - 24
Feb 27-Mar 12	- 356	1 555	1 199	0	0	0	0	0	16	1 215	119	1 095
Mar 13 - 28	634	- 610	23	0	0	0	0	0	50	73	73	0
Mar 29-Apr 12	- 48	15	- 33	0	0	0	0	0	12	- 21	- 21	0
Apr 13 - 27	502	334	836	0	0	0	0	0	0	836	120	716
Apr 28-May 12	71	481	552	429	0	0	429	107	167	1 041	171	870
May 13 - 28	- 699	-1 515	-2 214	1 317	737	2 461	4 515	1 129	119	1 291	200	1 091
May 29-Jun 12	123	-2 102	-1 979	26	806	3 066	3 898	974	0	945	213	732
Jun 13 - 27	338	130	468	0	18	0	18	4	0	481	139	342
Jun 28-Jul 12	461	165	626	0	0	0	0	0	0	626	162	464
Jul 13 - 28	23	1 309	1 333	0	0	0	0	0	0	1 333	279	1 053
Jul 29-Aug 12	52	775	827	0	0	0	0	0	0	827	194	633
Aug 13 - 28	43	- 38	4	0	0	0	0	0	0	4	4	0
Aug 29-Sep 12	- 581	1 402	821	0	0	0	0	0	0	821	149	673
Sep 13 - 27	157	653	810	0	0	0	0	0	0	810	147	663
Sep 28-Oct 12	502	- 600	- 97	0	0	0	0	0	0	- 97	- 75	- 22
Oct 13 - 28	- 246	- 344	- 590	0	0	0	0	0	0	- 590	- 109	- 480
Total	977	1 609	2 586	1 772	1 560	5 527	8 859	2 214	364	9 595	1 765	7 830

All values are derived from data as published in Appendix B.
All quantities in cubic decametres.

Table 14 (continued): NATURAL FLOW OF FRENCHMAN RIVER AT THE INTERNATIONAL BOUNDARY FOR THE YEAR 2015

Period At International Boundary	26 Near International Boundary Minor Use Reported	27 Net Depletion In Canada 6+13+25+26	28 Frenchman River at International Boundary Measured	29 Natural Flow Of Frenchman River 27+28	30 U.S.A. Share Of Natural Flow 50% of 29	31 Excess Flow To The U.S.A. 28-30	32 Deficit(-) To Date Sum of 31
Mar 1 – 15	0	1 095	10810	11 905	5 952	4 858	0
Mar 16 – 31	0	2 930	19374	22 304	11 152	8 222	0
Apr 1 - 15	0	0	8466	8 466	4 233	4 233	0
Apr 16 - 30	0	1 281	3201	4 481	2 241	960	0
May 1 - 15	0	999	1814	2 813	1 406	408	0
May 16 - 31	0	1 237	1438	2 675	1 338	100	0
Jun 1 - 15	0	1 076	1045	2 121	1 061	- 16	-16
Jun 16 - 30	0	801	52	853	426	- 374	-390
Jul 1 - 15	0	600	13	613	306	- 293	-683
Jul 16 - 31	0	1 053	580	1 633	817	- 237	-921
Aug 1 - 15	0	598	2198	2 796	1 398	800	-120
Aug 16 - 31	0	0	536	536	268	268	0
Sep 1 - 15	0	608	114	722	361	- 247	-247
Sep 16 - 30	0	663	25	688	344	- 319	-566
Oct 1 - 15	0	144	416	560	280	136	-430
Oct 16 - 31	0	- 265	841	576	288	553	0
Total	0	12 819	50 922	63 742	31 871	19 051	0

All values are derived from data as published in Appendix B.
All quantities in cubic decameters

Approved by: _____ For Canada

_____ For the United States

Table 15: HISTORICAL SUMMARY OF MARCH TO OCTOBER COMPUTED NATURAL AND RECORDED FLOW
FRENCHMAN RIVER AT INTERNATIONAL BOUNDARY
(VALUES IN CUBIC DECAMETRES)

YEAR	COMPUTED NATURAL FLOW	CANADIAN & U.S.A. SHARES	RECORDED FLOW	YEAR	COMPUTED NATURAL FLOW	CANADIAN & U.S.A. SHARES	RECORDED FLOW
1940	101,400	50,700	84,120	1980	33,440	16,720	17,780
1941	71,120	35,560	57,560	1981	18,140	9,070	8,310
1942	72,190	36,095	52,210	1982	114,700	57,350	82,530
1943	164,700	82,350	147,000	1983	44,230	22,115	22,990
1944	69,630	34,815	50,560	1984	11,920	5,960	5,640
1945	42,630	21,315	28,440	1985	42,500	21,250	22,180
1946	39,800	19,900	26,460	1986	107,000	53,500	74,060
1947	65,090	32,545	43,190	1987	79,590	39,795	59,520
1948	48,950	24,475	31,000	1988	13,510	6,755	6,050
1949	17,680	8,840	8,000	1989	22,760	11,380	12,020
1950	93,280	46,640	73,590	1990	34,430	17,215	19,950
1951	137,500	68,750	110,900	1991	101,500	50,750	72,100
1952	445,200	222,600	433,500	1992	11,100	5,550	5,980
1953	92,360	46,180	71,990	1993	77,310	38,655	49,220
1954	109,700	54,850	92,480	1994	97,860	48,930	76,410
1955	230,300	115,150	210,300	1995	25,130	12,565	12,340
1956	59,650	29,825	41,950	1996	168,900	84,450	134,200
1957	48,050	24,025	32,710	1997	192,000	96,000	166,700
1958	79,380	39,690	64,280	1998	19,530	9,765	9,500
1959	64,040	32,020	41,230	1999	83,560	41,780	59,260
1960	94,050	47,025	75,440	2000	29,260	14,630	14,950
1961	23,060	11,530	11,490	2001	11,810	5,905	6,380
1962	78,090	39,045	48,240	2002	59,740	29,870	37,940
1963	57,730	28,865	41,790	* 2003	65,540	32,770	56,210
1964	25,050	12,525	13,300	2004	71,660	35,830	48,180
1965	132,100	66,050	95,070	* 2005	38,840	19,420	27,790
1966	91,180	45,590	66,470	2006	40,040	20,020	25,080
1967	130,900	65,450	107,600	2007	58,470	29,235	32,280
1968	49,720	24,860	27,010	* 2008	26,050	13,025	12,660
1969	97,920	48,960	71,540	2009	33,850	16,925	17,140
1970	133,400	66,700	102,500	** 2010	71,020	35,510	37,460
1971	57,120	28,560	39,360	2011	241,800	120,900	223,000
1972	45,900	22,950	24,990	2012	47,800	23,900	36,180
1973	27,470	13,735	14,720	2013	96,990	48,495	83,560
1974	104,100	52,050	75,610	2014	133,900	66,950	117,200
1975	92,000	46,000	60,720	2015	63,740	31,870	50,920
1976	90,690	45,345	73,980				
1977	12,730	6,365	8,270	AVERAGE			
1978	67,920	33,960	41,310	1940-2014	78,640	39,320	59,610
1979	108,500	54,250	77,360				

* Period 16 extended to include Nov. 1-5 data.
** For comparison purposes, totals for Mar 1 to Oct 31 are shown. Additional periods are not included.

APPENDIX B

TABLE OF CONTENTS

Station Name	Station Number	Page
Joint Review And Approval of Records – St. Mary and Milk Rivers		1
St. Mary River at International Boundary	05AE027	2
Lake Sherburne at Sherburne, Montana	05AE036	3
St. Mary Canal at St. Mary Crossing	05AE029	4
Milk River at Eastern Crossing of International Boundary	11AA031	5
Milk River at Western Crossing of International Boundary	11AA025	6
North Fork Milk River above St. Mary Canal, near Browning, Montana	11AA032	7
North Milk River near International Boundary	11AA001	8
Milk River at Milk River, Alberta	11AA005	9
Joint Review and Approval of Records – Eastern Tributaries		11
Lodge Creek Below McRae Creek at International Boundary	11AB083	12
Michel Reservoir near Elkwater	11AB091	13
Greasewood Reservoir near Elkwater	11AB092	14
Massy Reservoir near Elkwater	11AB104	15
Bare Creek Reservoir near Elkwater	11AB094	16
Cressday Reservoir near Cressday	11AB097	17
Mitchell Reservoir near Elkwater	11AB099	18
Jaydot Reservoir near Jaydot	11AB098	19
Middle Creek near Saskatchewan Boundary	11AB009	20
Middle Creek Reservoir Bedford Outlet	11AB114	21
Middle Creek Reservoir Flood Spillway	11AB115	22
Middle Creek below Middle Creek Reservoir	11AB001	23
Middle Creek above Lodge Creek	11AB008	24
Middle Creek near Govenlock	11AB108	25
Altawan Evaporation	11EV089	26
Altawan Reservoir near Govenlock	11AB089	30
Spangler Ditch near Govenlock	11AB060	31
Squaw Coulee near Willow Creek	11AB103	32
Lodge Creek Basin Minor Diversions		33

TABLE OF CONTENTS (continued)

Station Name	Station Number	Page
Battle Creek at International Boundary	11AB027	35
Reesor Reservoir near Elkwater	11AB090	36
Gaff Ditch near Merryflat	11AB102	37
Cypress Lake West Inflow Canal	11AB078	38
Cypress Lake West Outflow Canal	11AB077	39
Cypress Lake West Inflow Canal Drain	11AB085	40
Vidora Ditch near Consul	11AB084	41
Richardson Ditch near Consul	11AB058	42
McKinnon Ditch near Consul	11AB044	43
Nashlyn Canal near Consul	11AB018	44
Battle Creek Basin Minor Diversions		45
Frenchman River at International Boundary	11AC041	49
Belanger Creek Diversion to Cypress Lake	11AC064	50
Cypress Lake	11AC037	51
Cypress Lake East Outflow Canal	11AC060	52
Eastend Reservoir	11AC055	53
Eastend Canal near Eastend	11AC052	54
Val Marie Evaporation	11EV063	55
Huff Lake	11AC063	57
Newton Lake	11AC056	58
Huff Lake Gravity Canal	11AC065	59
Huff Lake Pumping Canal	11AC066	60
Newton Lake Main Canal	11AC054	61
Frenchman River Basin Minor Diversions		62
Table 16		
Month-End Contents of Major Reservoirs in Lodge Creek, Battle Creek, and Frenchman River Basins		66
Lyons Creek at International Boundary	11AB075	67

International Gauging Stations
Joint Review and Approval of Records

Pursuant to Article V of the International Joint Commission Order of October 4, 1921, the International Gauging Stations listed below have been operated and maintained by the Water Survey of Canada and the United States Geological Survey on a joint basis.

It is hereby certified that the annexed records have been computed in accordance with standard procedures of each country and jointly reviewed and approved on this 18th day of February, 2016

St. Mary River at International Boundary	05AE027
Lake Sherburne at Sherburne, Montana	05AE036
St. Mary Canal at St. Mary Crossing	05AE029
Milk River at Eastern Crossing of International Boundary	11AA031
Milk River at Western Crossing of International Boundary	11AA025
North Fork Milk River above St. Mary Canal, near Browning, Montana	11AA032
North Milk River near International Boundary	11AA001
Milk River at Milk River, Alberta	11AA005

Field Representative for the United States

Field Representative for Canada

UNITED STATES DEPARTMENT OF THE INTERIOR - GEOLOGICAL SURVEY – WATER RESOURCES DIVISION

05020500 ST MARY RIVER AT INTERNATIONAL BOUNDARY 05AE027

DISCHARGE IN CUBIC METERS PER SECOND, CALENDAR YEAR JANUARY TO DECEMBER 2015

DAILY MEAN VALUES

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	e6.51	e6.23	e13.3	27.4	19.9	53.5	21.3	8.16	7.79	5.64	4.53	e6.80
2	e6.09	e6.23	e13.9	27.4	20.5	75.6	22.4	7.48	6.99	5.47	4.98	e6.23
3	e5.80	e6.23	e13.0	27.2	22.1	89.8	22.7	7.45	6.14	5.58	5.47	e5.52
4	e5.66	e6.51	e12.5	26.4	22.9	81.6	22.1	7.84	5.61	5.75	6.20	e5.80
5	e5.38	6.54	15.0	24.9	23.1	75.6	23.8	8.27	6.09	5.44	6.97	6.14
6	e5.52	7.62	15.0	24.3	24.5	69.7	23.3	8.58	6.03	5.21	7.45	6.12
7	e5.66	9.20	14.6	23.8	24.8	63.7	21.2	8.30	5.80	5.07	8.44	6.31
8	e5.66	10.1	14.4	22.5	25.9	61.2	19.5	7.84	5.49	5.27	8.24	6.37
9	e5.95	10.9	14.2	21.3	26.7	61.7	17.8	7.42	5.95	4.98	8.04	8.13
10	e5.95	11.6	13.3	20.4	26.2	63.4	16.4	7.14	6.31	4.96	7.73	9.71
11	e5.80	12.9	13.6	19.8	26.2	62.9	16.0	6.80	6.26	5.35	7.99	11.4
12	e5.66	14.3	13.1	18.6	25.8	61.2	15.8	6.43	6.29	5.21	7.48	13.5
13	e5.52	12.9	13.0	17.3	24.3	59.2	14.8	6.14	6.34	5.24	8.10	14.4
14	e5.38	13.9	12.6	16.5	23.1	54.4	14.5	5.95	6.34	5.15	8.41	15.1
15	e5.24	15.0	14.2	16.1	22.6	48.7	15.6	6.60	6.63	4.96	7.45	15.0
16	e5.10	15.1	21.1	15.6	23.2	42.5	16.3	6.40	6.77	4.98	7.62	e15.0
17	e4.96	14.7	29.4	14.8	27.6	36.5	16.8	6.68	6.85	4.79	8.78	e14.7
18	e4.81	14.7	38.2	14.4	27.2	32.6	16.5	6.63	6.82	4.70	e9.63	e14.2
19	e4.67	14.9	43.3	14.9	24.0	29.2	15.5	6.97	6.97	4.67	e9.63	e13.6
20	e4.53	15.4	45.6	14.9	21.0	26.9	15.0	6.74	6.77	4.62	e9.91	e12.7
21	e4.67	e14.2	45.3	14.8	18.0	25.1	14.5	6.37	6.80	4.76	10.6	e11.9
22	e4.67	e13.6	44.2	14.9	18.3	23.9	13.8	6.43	6.60	4.64	11.0	e11.3
23	e4.53	e13.3	41.9	15.6	20.7	22.0	13.0	6.23	6.37	4.50	10.4	e10.8
24	e4.53	e14.7	40.5	16.5	24.6	20.5	12.4	5.75	6.29	4.36	e10.2	e10.2
25	e4.81	15.6	39.4	17.0	28.6	19.3	12.1	5.89	6.23	4.22	e9.34	e9.34
26	e4.96	15.0	36.8	17.4	32.8	18.2	11.1	6.82	6.20	4.16	8.55	e8.21
27	e5.38	14.9	32.8	17.8	37.7	18.1	10.8	8.64	6.20	4.22	e8.21	e8.21
28	e5.38	14.6	30.9	17.3	41.3	18.3	10.7	10.8	6.06	4.16	e7.65	e7.93
29	e5.66	---	30.9	17.3	44.2	19.0	10.1	10.4	5.95	4.16	e7.36	e7.36
30	e5.38	---	31.1	18.0	46.2	20.5	9.34	9.23	5.83	4.13	e7.08	e7.08
31	e6.23	---	29.7	---	49.6	---	8.78	9.43	---	4.22	---	e6.80
TOTAL	166.05	340.86	786.8	575.1	843.6	1354.8	493.92	229.81	190.77	150.57	243.44	305.86
MEAN	5.356	12.17	25.38	19.17	27.21	45.16	15.93	7.413	6.359	4.857	8.115	9.866
MAX	6.51	15.6	45.6	27.4	49.6	89.8	23.8	10.8	7.79	5.75	11.0	15.1
MIN	4.53	6.23	12.5	14.4	18.0	18.1	8.78	5.75	5.49	4.13	4.53	5.52
DAM3	14350	29450	67980	49690	72890	117050	42670	19860	16480	13010	21030	26430

FOR THE SEASON, MARCH TO OCTOBER:
TOTAL DISCHARGE: 490 900 DAM3
MAX INST DISCHARGE: 100 M3/S AT 0430 HRS ON JUNE 3 (G.H. 2.115 M)
MIN DAILY DISCHARGE: 4.13 M3/S ON OCT 30

FOR THE YEAR 2015:
TOTAL DISCHARGE 816 400 DAM3

e–Estimated

APPROVED BY FIELD REPRESENTATIVES OF THE UNITED STATES AND CANADA

UNITED STATES DEPARTMENT OF THE INTERIOR - GEOLOGICAL SURVEY - WRD

05015500 LAKE SHERBURNE AT SHERBURNE, MT 05AE036

Month-end gage heights and contents at 2400 hours

Date	Gage height (metres)	Contents (cubic decametres)	Change in Contents (cubic decametres)
Sept. 30, 2014	1451.967	38 360	
Oct. 31, 2014	1453.390	45 220	+6 860
Nov. 30, 2014	1455.588	57 140	+11 920
Dec. 31, 2014	1456.978	65 610	+8 470
		Total 2014 calendar year	*+28 070*
Jan. 31, 2015	1457.618	69 710	+4 100
Feb. 28, 2015	1458.559	75 950	+6 240
Mar. 31, 2015	1458.102	72 890	-3 060
Apr. 30, 2015	1457.654	69 950	-2 940
May 31, 2015	1456.981	65 630	-4 320
June 30, 2015	1458.739	77 170	+11 540
July 31, 2015	1453.567	46 110	-31 060
Aug. 31, 2015	1446.136	14 880	-31 230
Sept. 30, 2015	1447.535	19 810	+4 930
		Total 2015 water year	*-18 550*
Oct. 31, 2015	1448.455	23 290	+3 480
Nov. 30, 2015	1450.552	31 970	+8 680
Dec. 31, 2015	1452.549	41 120	+9 150
		Total 2015 calendar year	*-24 490*

Maximum total contents: 78 520 dam3 at 1515 hrs on June 18 (gage height 1458.937 m).

Minimum total contents: 14 710 dam3 at 1045 hrs on Sept. 3 (gage height 1446.087 m).

APPROVED BY FIELD REPRESENTATIVES OF THE UNITED STATES AND CANADA

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

ST. MARY CANAL AT ST. MARY CROSSING
Station Number: 05AE029

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	0 E	5.06	5.04	16.9	16.8	16.7	2.33	0	0	---	1
2	---	---	0 E	5.12	5.03	16.7	16.9	16.8	2.09	0	0	---	2
3	---	---	0 E	5.12	5.07	16.4	16.9	16.8	1.78	0	0	---	3
4	---	---	0 E	5.12	5.90	16.7	16.8	16.8	1.55	0	0 A	---	4
5	---	---	0 E	5.11	8.30	16.9	16.9	17.0	1.54	0	---	---	5
6	---	---	0 E	5.11	9.02	16.8	16.6	17.0	1.58	0	---	---	6
7	---	---	0 E	5.10	11.5	16.7	16.7	17.0	1.53	0	---	---	7
8	---	---	0 E	5.06	13.7	16.8	16.7	16.9	1.48	0	---	---	8
9	---	---	0 E	5.06	14.1	16.8	16.8	16.9	1.26	0	---	---	9
10	---	---	0 E	5.05	14.4	16.9	16.7	16.8	0	0	---	---	10
11	---	---	0 E	5.05	14.4	16.9	16.7	16.8	0	0	---	---	11
12	---	---	0 E	5.02	14.4	16.9	16.7	16.8	0	0	---	---	12
13	---	---	0 E	4.98	14.3	16.8	16.7	16.7	0	0	---	---	13
14	---	---	0 E	4.98	14.3	16.7	16.9	16.7	0	0	---	---	14
15	---	---	0 E	4.96	14.3	16.7	16.8	16.8	0	0	---	---	15
16	---	---	0 E	4.96	14.3	16.8	16.9	16.8	0	0	---	---	16
17	---	---	0 E	4.96	14.4	16.7	17.0	16.8	0	0	---	---	17
18	---	---	0 E	4.95	14.3	16.7	16.9	16.8	0	0	---	---	18
19	---	---	0 E	4.94	14.4	16.8	16.8	16.8	0	0	---	---	19
20	---	---	0 E	4.94	15.4	16.8	16.8	16.8	0	0	---	---	20
21	---	---	0 E	4.93	16.5	16.8	16.7	16.8	0	0	---	---	21
22	---	---	0 E	4.96	17.4	16.8	16.7	16.8	0	0	---	---	22
23	---	---	0 E	4.95	17.5	16.8	16.7	16.7	0	0	---	---	23
24	---	---	0 A	4.98	17.6	16.8	16.7	16.5	0	0	---	---	24
25	---	0 A	0 E	4.95	17.3	16.8	16.7	15.3	0	0	---	---	25
26	---	0 E	0 E	4.97	17.2	17.0	16.8	12.8	0	0	---	---	26
27	---	0 E	0 E	4.99	16.9	17.0	16.8	9.42	0	0	---	---	27
28	---	0 E	0 E	4.98	16.7	17.0	16.8	5.59	0	0	---	---	28
29	---		0 E	4.98	16.8	17.0	16.7 A	3.21	0	0	---	---	29
30	---		0 E	5.01	16.8	16.8	16.7 A	2.89	0	0	---	---	30
31	---		1.45 A		16.9		16.6	2.76		0		---	31
Mean	---	---	.047	5.01	13.7	16.8	16.8	14.7	.505	0	---	---	
Total	---	---	125	13000	36600	43600	44900	39300	1310	0	---	---	
Max	---	0	4.86	5.51	17.7	17.1	17.1	17.1	2.53	0	0	---	
(day)		25|15:15	31|23:45	11|03:15	24|04:45	2|03:45	5|04:30	5|12:00	1|00:00	1|00:00	1|00:00		
Min	---	0	0	4.84	4.95	16.2	16.5	2.52	0	0	0	---	
(day)		25|15:15	1|00:00	1|00:00	1|19:45	2|22:00	6|10:45	31|23:45	10|00:00	1|00:00	1|00:00		

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius displayed in a modified format.

APPROVED BY FIELD REPRESENTATIVES OF THE UNITED STATES AND CANADA

UNITED STATES DEPARTMENT OF THE INTERIOR - GEOLOGICAL SURVEY – WATER RESOURCES DIVISION

06135000 EASTERN CROSSING MILK RIVER AT INTERNATIONAL BOUNDARY 11AA031

DISCHARGE IN CUBIC METERS PER SECOND, CALENDAR YEAR JANUARY TO DECEMBER 2015

DAILY MEAN VALUES

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	---	e6.80	5.07	6.26	22.7	14.4	15.0	8.86	0.991	---	---
2	---	---	e7.08	5.10	6.12	24.0	14.4	14.9	7.02	0.991	---	---
3	---	---	e7.50	5.18	6.20	24.5	14.4	14.8	5.38	1.67	---	---
4	---	---	e7.65	5.18	6.23	24.9	14.6	15.0	4.56	3.43	---	---
5	---	---	e7.65	5.07	6.03	26.2	16.7	15.4	4.76	3.00	---	---
6	---	---	e7.50	5.01	6.17	31.7	18.3	15.3	7.05	2.10	---	---
7	---	---	e7.36	7.16	6.26	27.8	17.8	15.3	5.61	1.67	---	---
8	---	---	e7.93	9.83	5.64	25.3	18.9	15.4	5.10	1.42	---	---
9	---	---	e7.93	9.74	5.47	22.6	18.2	15.3	4.33	1.27	---	---
10	---	---	e7.93	9.37	7.05	21.4	16.5	15.7	4.13	1.10	---	---
11	---	---	e7.93	8.98	8.95	19.8	15.3	15.3	3.74	0.934	---	---
12	---	---	e11.3	8.44	12.3	17.8	18.9	15.6	3.28	0.906	---	---
13	---	---	e16.1	8.55	16.2	16.7	15.1	15.4	2.89	0.906	---	---
14	---	---	14.5	8.47	17.5	15.7	15.2	15.2	2.66	0.878	---	---
15	---	---	11.7	8.41	19.5	16.7	15.2	15.3	2.89	0.850	---	---
16	---	---	10.1	8.04	20.6	16.8	14.8	15.2	3.20	0.878	---	---
17	---	---	10.7	7.73	20.7	16.7	14.3	15.2	3.03	0.878	---	---
18	---	---	11.0	7.48	20.4	16.3	15.2	15.8	2.44	0.878	---	---
19	---	---	8.50	7.48	20.5	16.1	16.1	16.3	2.10	0.906	---	---
20	---	---	7.84	7.33	21.2	15.8	17.6	16.8	1.81	0.906	---	---
21	---	---	9.71	7.53	23.5	15.6	18.9	16.4	1.64	0.906	---	---
22	---	---	9.83	7.70	22.0	15.7	17.5	15.9	1.59	0.934	---	---
23	---	---	8.27	7.56	18.8	15.7	16.2	16.0	1.44	0.934	---	---
24	---	---	7.96	7.36	18.8	15.5	16.1	15.9	1.36	0.906	---	---
25	---	---	9.43	7.05	20.2	15.2	15.1	16.4	1.30	0.906	---	---
26	---	---	8.61	7.05	21.6	15.3	14.4	16.8	1.22	0.934	---	---
27	---	---	7.62	6.82	21.5	14.7	14.5	16.5	1.13	0.934	---	---
28	---	---	6.80	6.57	20.4	14.5	16.6	16.3	1.08	0.934	---	---
29	---	---	6.48	6.54	21.6	14.4	16.0	16.0	1.02	0.963	---	---
30	---	---	6.03	6.43	21.7	14.3	15.4	14.7	0.991	0.991	---	---
31	---	---	5.47	---	21.8	---	15.2	11.4	---	0.991	---	---
TOTAL	---	---	271.21	218.23	471.18	570.4	497.8	480.5	97.611	36.895	---	---
MEAN	---	---	8.749	7.274	15.20	19.01	16.06	15.50	3.254	1.190	---	---
MAX	---	---	16.1	9.83	23.5	31.7	18.9	16.8	8.86	3.43	---	---
MIN	---	---	5.47	5.01	5.47	14.3	14.3	11.4	0.991	0.850	---	---
DAM3			23430	18860	40710	49280	43010	41520	8430	3190		

FOR THE SEASON, MARCH TO OCTOBER: e--Estimated

TOTAL DISCHARGE: 228 430 DAM3

MAX INST DISCHARGE: 35.7 M3/S AT 0945 HRS ON JUN 6 (G.H. 1.460 M)

MIN DAILY DISCHARGE: 0.849 M3/S ON OCT 15

APPROVED BY FIELD REPRESENTATIVES OF THE UNITED STATES AND CANADA

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

MILK RIVER AT WESTERN CROSSING OF INTERNATIONAL BOUNDARY
Station Number: 11AA025

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	1.20 B	2.89	1.56	3.21	.315	.035	0	.156	---	---	1
2	---	---	.991 B	2.73	1.47	3.07	.275	.018	0	.136	---	---	2
3	---	---	.963 B	2.75	1.40	11.6	.258	.012	0	.168	---	---	3
4	---	---	1.01 B	2.71	1.32	11.5	.256	.021	0	.188	---	---	4
5	---	---	1.08 B	2.61	1.30	5.98	.547	.022	.005	.178	---	---	5
6	---	---	1.18 B	2.52	1.30	4.04	.465	.020	.238	.225	---	---	6
7	---	---	1.25 B	2.48	1.29	3.16	.539	.012	.104	.255	---	---	7
8	---	---	1.38 B	2.59	1.27	2.62	.824	.007	.064	.269	---	---	8
9	---	---	1.86 B	2.89	1.34	2.18	.717	.004	.176	.273	---	---	9
10	---	---	2.53 B	2.89	1.68	1.89	.570	.003	.269	.264	---	---	10
11	---	---	3.80 B	2.64	2.07	1.64	.481	.002	.195	.249	---	---	11
12	---	---	5.15 B	2.39	1.98	1.51	.398	.001	.130	.181	---	---	12
13	---	---	5.06 B	2.28	1.98	1.57	.315	0	.091	.155	---	---	13
14	---	---	4.01 B	2.32	2.40	1.44	.272	0	.074	.144	---	---	14
15	---	---	3.59 B	2.26	2.56	1.39	.279	0	.074	.169	---	---	15
16	---	---	4.00	2.20	3.31	1.35	.199	0	.074	.202	---	---	16
17	---	---	6.92	2.25	4.56	1.29	.231	0	.106	.244	---	---	17
18	---	---	6.98	2.26	7.03	1.27	.333	0	.111	.261	---	---	18
19	---	---	5.38	2.17	5.74	1.23	.276	.000	.100	.261	---	---	19
20	---	---	5.83	2.34	3.77	1.16	.320	.001	.086	.270	---	---	20
21	---	---	6.65	2.31	2.95	1.03	.408	.001	.102	.266	---	---	21
22	---	---	5.99	2.10	2.47	.914	.365	.000	.109	.265	---	---	22
23	---	---	5.02	1.94	2.13	.826	.258	0	.118	.282	---	---	23
24	---	---	4.31	1.85	1.93	.772	.210	.000	.088	.281	---	---	24
25	---	---	3.78	1.78	1.80	.712	.168	.002	.063	.305	---	---	25
26	---	---	3.41	1.72	1.89	.624	.137	.001	.050	.293	---	---	26
27	---	---	3.28	1.68	1.92	.549	.110	0	.175	.293	---	---	27
28	---	---	3.20	1.72	1.99	.483	.104	0	.207	.288	---	---	28
29	---		3.31	1.80	2.55	.417	.081 A	0	.201	.297	---	---	29
30	---		3.41	1.69	2.72	.349	.061 A	0	.181	.312	---	---	30
31	---		3.21		3.47		.060	0		.333		---	31
Mean	---	---	3.54	2.29	2.42	2.33	.317	.005	.106	.241	---	---	
Total	---	---	9480	5940	6490	6030	850	14.1	276	645	---	---	
Max	---	---	8.50	3.04	7.47	15.1	.883	.051	.444	.357	---	---	
(day)			17|21:20	1|00:15	18|15:05	3|21:10	8|16:05	1|00:20	6|05:00	30|17:25			
Min	---	---	.940	1.59	1.25	.311	.043	0	0	.124	---	---	
(day)			2|22:45	30|22:30	8|09:00	30|18:05	31|23:05	11|15:15	1|00:00	2|23:25			

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS
TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius displayed in a modified format.

APPROVED BY FIELD REPRESENTATIVES OF THE UNITED STATES AND CANADA

UNITED STATES DEPARTMENT OF THE INTERIOR - GEOLOGICAL SURVEY – WATER RESOURCES DIVISION

06133500 NORTH FORK MILK RIVER ABOVE ST MARY CANAL NEAR BROWNING, MT 11AA032

DISCHARGE, IN CUBIC METERS PER SECOND, CALENDAR YEAR JANUARY TO DECEMBER 2015

DAILY MEAN VALUES

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	---	e0.453	0.595	0.481	0.651	0.425	0.396	0.396	0.425	---	---
2	---	---	e0.425	0.595	0.481	1.30	0.425	0.396	0.396	0.453	---	---
3	---	---	e0.425	0.595	0.481	0.934	0.425	0.425	0.396	0.510	---	---
4	---	---	e0.425	0.595	0.481	0.623	0.396	0.425	0.453	0.538	---	---
5	---	---	e0.453	0.595	0.481	0.566	0.765	0.425	0.651	0.510	---	---
6	---	---	e0.481	0.595	0.481	0.538	0.595	0.425	0.651	0.481	---	---
7	---	---	e0.510	0.595	0.481	0.510	0.481	0.425	0.453	0.481	---	---
8	---	---	e0.566	0.595	0.538	0.481	0.481	0.425	0.425	0.481	---	---
9	---	---	e0.623	0.566	0.623	0.453	0.453	0.396	0.425	0.453	---	---
10	---	---	e0.680	0.566	0.566	0.453	0.425	0.396	0.396	0.453	---	---
11	---	---	e0.708	0.538	0.538	0.453	0.425	0.396	0.396	0.453	---	---
12	---	---	0.736	0.510	0.538	0.425	0.425	0.368	0.396	0.453	---	---
13	---	---	0.736	0.510	0.510	0.453	0.425	0.396	0.368	0.453	---	---
14	---	---	0.680	0.538	0.566	0.453	0.425	0.396	0.396	0.453	---	---
15	---	---	0.736	0.538	0.680	0.453	0.425	0.453	0.425	0.453	---	---
16	---	---	0.850	0.538	0.878	0.453	0.453	0.425	0.425	0.453	---	---
17	---	---	0.765	0.510	1.42	0.453	0.595	0.453	0.396	0.453	---	---
18	---	---	0.765	0.595	1.10	0.481	0.651	0.425	0.396	0.453	---	---
19	---	---	0.821	0.651	0.793	0.453	0.481	0.425	0.396	0.453	---	---
20	---	---	0.934	0.566	0.708	0.425	0.481	0.396	0.396	0.481	---	---
21	---	---	0.793	0.538	0.651	0.425	0.481	0.425	0.425	0.453	---	---
22	---	---	0.708	0.538	0.623	0.453	0.453	0.510	0.425	0.453	---	---
23	---	---	0.680	0.510	0.623	0.425	0.425	0.453	0.425	0.453	---	---
24	---	---	0.651	0.510	0.595	0.425	0.425	0.396	0.425	0.453	---	---
25	---	---	0.623	0.510	0.595	0.425	0.425	0.396	0.425	0.453	---	---
26	---	---	0.623	0.510	0.623	0.396	0.425	0.368	0.396	0.453	---	---
27	---	---	0.623	0.510	0.680	0.396	0.453	0.396	0.425	0.453	---	---
28	---	---	0.680	0.481	0.708	0.396	0.510	0.368	0.425	0.481	---	---
29	---	---	0.651	0.481	0.765	0.396	0.453	0.368	0.425	0.453	---	---
30	---	---	0.680	0.481	0.878	0.425	0.425	0.396	0.425	0.453	---	---
31	---	---	0.651	---	0.736	---	0.425	0.396	---	0.453	---	---
TOTAL	---	---	20.135	16.455	20.302	15.173	14.557	12.739	12.853	14.354	---	---
MEAN	---	---	0.650	0.548	0.655	0.506	0.470	0.411	0.428	0.463	---	---
MAX	---	---	0.934	0.651	1.42	1.30	0.765	0.510	0.651	0.538	---	---
MIN	---	---	0.425	0.481	0.481	0.396	0.396	0.368	0.368	0.425	---	---
DAM3			1740	1420	1750	1310	1260	1100	1110	1240		

FOR THE SEASON, MARCH TO OCTOBER:
TOTAL DISCHARGE: 10 930 DAM3
MAX INST DISCHARGE: 2.04 M3/S AT 1630 HRS ON JUN 2 (G.H. 0.786 M)
MIN DAILY DISCHARGE: 0.368 M3/S ON AUG 12, 26, 28-29, and SEP 13

e--Estimated

APPROVED BY FIELD REPRESENTATIVES OF THE UNITED STATES AND CANADA

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

NORTH MILK RIVER NEAR INTERNATIONAL BOUNDARY
Station Number: 11AA001

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	.389 B	.684	5.10	17.9	17.6	17.6	3.26	.479	---	---	1
2	---	---	.312 B	4.94	5.05	19.6	17.7	17.7	2.92	.492	---	---	2
3	---	---	.342 B	5.44	5.18	19.1	17.7	17.8	2.67	.551	---	---	3
4	---	---	.421 B	5.40	5.21	17.9	17.8	17.9	2.54	.625	---	---	4
5	---	---	.518 B	5.45	6.47	18.0	18.5	18.0	2.85	.560	---	---	5
6	---	---	.568 B	5.49	8.34	18.1	18.0	18.1	2.79	.516	---	---	6
7	---	---	.568 B	5.55	9.71	17.9	17.7	18.1	2.36	.489	---	---	7
8	---	---	.566 B	5.49	12.4	17.8	17.6	18.0	2.21	.484	---	---	8
9	---	---	.572 B	5.43	14.2	17.7	17.7	18.0	2.10	.474	---	---	9
10	---	---	.584 B	5.44	14.7	17.8	17.7	17.9	1.68	.460	---	---	10
11	---	---	.608 B	5.45	14.9	17.9	17.7	17.8	.996	.462	---	---	11
12	---	---	.651 B	5.25	14.9	17.8	17.6	17.8	.893	.453	---	---	12
13	---	---	.821 B	5.20	14.9	17.8	17.6	17.6	.851	.444	---	---	13
14	---	---	.824 B	5.32	14.9	17.8	17.8	17.4	.666	.452	---	---	14
15	---	---	1.02	5.27	15.0	17.7	17.9	17.9	.557	.456	---	---	15
16	---	---	1.17	5.30	15.4	17.7	17.9	17.8	.535	.457	---	---	16
17	---	---	1.03	5.24	16.5	17.8	18.4	17.9	.527	.459	---	---	17
18	---	---	1.07	5.40	15.8	17.7	18.3	17.8	.509	.454	---	---	18
19	---	---	1.18	5.49	15.0	17.7	18.0	17.7	.493	.460	---	---	19
20	---	---	1.62	5.30	15.3	17.7	17.9	17.7	.477	.455	---	---	20
21	---	---	1.27	5.27	16.5	17.7	17.9	17.7	.501	.453	---	---	21
22	---	---	.988	5.29	17.8	17.8	17.7	17.8	.525	.447	---	---	22
23	---	---	.873	5.21	18.5	17.7	17.7	17.7	.515	.437	---	---	23
24	---	---	.818	5.23	18.7	17.7	17.8	17.6	.498	.443	---	---	24
25	---	---	.746	5.22	18.7	17.7	17.7	17.1	.484	.444	---	---	25
26	---	---	.752	5.26	18.6	17.7	17.8	15.3	.472	.447	---	---	26
27	---	---	.730	5.26	18.5	17.7	17.9	12.6	.470	.456	---	---	27
28	---	---	.804	5.16	18.2	17.8	17.9	9.52	.469	.464 A	---	---	28
29	---		.806	5.18	18.1	17.8	17.8	6.34	.478	.465 E	---	---	29
30	---		.712	5.14	18.6	17.7	17.7	4.20	.479	.464 E	---	---	30
31	---		.787		18.2		17.7	3.60		.460 E		---	31
Mean	---	---	.778	5.16	14.2	17.9	17.8	16.0	1.23	.473	---	---	
Total	---	---	2080	13400	38000	46300	47700	42900	3180	1270	---	---	
Max	---	---	1.88	5.66	19.0	21.5	19.0	18.3	3.41	.663	---	---	
(day)			20|06:30	11|18:10	26|09:20	2|19:40	17|17:05	6|10:55	1|02:05	4|04:55			
Min	---	---	.307	.644	4.98	17.5	17.5	3.30	.428	.433	---	---	
(day)			2|12:15	1|17:45	1|13:20	15|16:15	1|18:45	31|21:45	20|23:10	12|19:40			

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius displayed in a modified format.

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WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

MILK RIVER AT MILK RIVER
Station Number: 11AA005

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	1.22 B	4.94 B	1.82 B	4.33	6.70	21.5	17.1	15.8	4.10	.777	1.03	1.38 B	1
2	1.18 B	4.24 B	2.13 B	4.01	6.54	21.7	16.8	15.8	3.69	.820	1.03	1.46 B	2
3	1.13 B	4.09 B	2.41 B	5.24	6.64	24.3	16.7	16.0	3.47	.949	1.08 B	1.50 B	3
4	1.13 B	4.35 B	2.26 B	8.20	6.63	30.1	16.8	15.9	3.40	.915	1.11 B	1.51 B	4
5	1.17 B	4.90 B	1.99 B	8.37	6.50	25.6	18.7	15.9	3.65	.956	.923 B	1.53 B	5
6	1.21 B	5.62 B	2.06 B	8.43	7.02	22.9	18.3	16.2	4.04	.984	.847 B	1.60 B	6
7	1.18 B	6.37 B	2.48 B	8.45	9.01	21.4	17.4	16.3	3.74	1.02	1.06 B	1.71 B	7
8	1.06 B	7.00 B	2.98 B	8.38	9.98	20.4	17.0	16.2	3.05	.945	1.22 B	1.80 B	8
9	.960 B	7.37 B	3.08 B	8.42	12.6	19.6	17.1	16.2	2.66	.936	1.05 B	1.85 B	9
10	.942 B	7.33 B	3.28 B	8.58	14.3	19.0	17.1	16.3	2.55	.891	.827 B	1.80 B	10
11	1.01 B	6.77 B	3.29 B	8.37	14.9	18.9	16.9	16.1	2.37	.870	.727 B	1.74 B	11
12	1.16 B	5.93 B	3.64 B	8.05	15.6	18.2	16.6	16.0	2.29	.830	.733 B	1.65 B	12
13	1.30 B	5.34 B	5.15 B	7.74	15.6	18.0	16.4	15.9	1.76	.806	.811 B	1.54 B	13
14	1.36 B	5.46 B	8.36 B	7.72	15.9	18.0	16.2	15.9	1.47	.784	1.05 B	1.40 B	14
15	1.35 B	6.15 B	8.34 B	7.80	16.6	17.9	16.3	16.2	1.45	.749	1.38 B	1.27 B	15
16	1.26 B	5.16 B	6.42 B	7.80	17.5	17.8	16.4	16.4	1.40	.753	1.17 B	1.20 B	16
17	1.20 B	4.86 B	6.82	7.66	18.5	17.8	17.3	16.7	1.25	.756	.850 B	1.22 B	17
18	1.25 B	4.59 B	9.47	7.87	20.6	17.9	18.5	16.7	1.06	.833	.657 B	1.29 B	18
19	1.31 B	4.08 B	8.27	8.00	21.1	17.9	17.4	16.5	.953	.896	.631 B	1.27 B	19
20	1.27 B	3.38 B	7.35	7.98	19.1	17.7	17.1	16.5	.866	.953	.731 B	1.14 B	20
21	1.18 B	2.74 B	8.27	7.86	18.5	17.5	17.3	16.7	.835	.947	.901 B	.982 B	21
22	1.19 B	2.38 B	8.44	7.77	19.1	17.5	16.7	16.9	.816	.938	1.23 B	.877 B	22
23	1.30 B	2.31 B	7.60	7.54	19.7	17.4	16.4	17.0	.818	.922	1.56 B	.815 B	23
24	1.49 B	2.44 B	6.57	7.38	20.1	17.3	16.3	16.9	.788	.918	1.42 B	.779 B	24
25	2.57 B	2.67 B	5.81	7.23	20.1	17.3	16.3	16.8	.798	.939	.974 B	.766 B	25
26	8.25 B	2.86 B	5.25	7.22	20.3	17.1	16.3	16.2	.779	.948	.733 B	.782 B	26
27	9.86 B	2.71 B	4.79	7.11	20.6	17.1	16.3	14.9	.734	.992	.727 B	.806 B	27
28	11.2 B	2.19 B	4.62	7.02	20.4	17.1	16.4	12.5	.710	.982	.867 B	.823 B	28
29	10.2 B		4.58	6.87	20.3	17.1	16.2	9.76	.701	1.00	1.07 B	.823 B	29
30	8.74 B		4.74	6.87	21.4	17.1	16.1	7.00	.689	.997	1.25 B	.803 B	30
31	6.58 B		4.74		21.8		15.9	4.87		1.01		.788 B	31
Mean	2.78	4.58	5.06	7.48	15.6	19.3	16.8	15.3	1.90	.904	.988	1.25	
Total	7450	11100	13600	19400	41800	50000	45100	40900	4910	2420	2560	3360	
Max	13.5	7.43	10.6	8.72	22.2	31.1	19.4	17.4	4.29	1.08	1.59	1.86	
(day)	28|00:05	9|18:50	14|19:20	10|12:40	31|05:50	4|03:55	5|19:10	22|21:15	1|06:20	7|09:45	23|12:30	9|08:20	
Min	.935	1.96	1.77	3.85	6.35	16.7	15.6	4.26	.668	.680	.616	.667	
(day)	10|02:15	28|23:55	1|14:15	3|06:05	6|00:00	27|23:55	31|17:50	31|23:40	29|23:30	1|00:05	19|00:45	31|14:40	

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius displayed in a modified format.

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International Gauging Stations
Joint Review and Approval of Records

Pursuant to Article V of the International Joint Commission Order of October 4, 1921, the International Gauging Stations listed below have been operated and maintained by the Water Survey of Canada and the United States Geological Survey on a joint basis.

It is hereby certified that the annexed records have been computed in accordance with standard procedures of each country and jointly reviewed and approved on this 18th day of February, 2016.

Lodge Creek Below McRae Creek at International Boundary	11AB083
Middle Creek near Saskatchewan Boundary	11AB009
Middle Creek below Middle Creek Reservoir	11AB001
Middle Creek above Lodge Creek	11AB008
Middle Creek near Govenlock	11AB108
Altawan Reservoir near Govenlock	11AB089
Spangler Ditch near Govenlock	11AB060
Battle Creek at International Boundary	11AB027
Gaff Ditch near Merryflat	11AB102
Cypress Lake West Inflow Canal	11AB078
Cypress Lake West Inflow Canal Drain	11AB085
Cypress Lake West Outflow Canal	11AB077
Vidora Ditch near Consul	11AB084
Richardson Ditch near Consul	11AB058
McKinnon Ditch near Consul	11AB044
Nashlyn Canal near Consul	11AB018
Frenchman River at International Boundary	11AC041
Belanger Creek Diversion to Cypress Lake	11AC064
Cypress Lake	11AC037
Cypress Lake East Outflow Canal	11AC060
Eastend Reservoir	11AC055
Eastend Canal near Eastend	11AC052
Huff Lake	11AC063
Huff Lake Gravity Canal	11AC065
Huff Lake Pumping Canal	11AC066
Newton Lake	11AC056
Newton Lake Main Canal	11AC054

Field Representative for the United States

Field Representative for Canada

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

LODGE CREEK BELOW MCRAE CREEK AT INTERNATIONAL BOUNDARY
Station Number: 11AB083
Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	.117 B	.876	.097	.105	0	0	0	0	---	---	1
2	---	---	.095 B	1.12	.084	.125	0	0	0	0	---	---	2
3	---	---	.065 B	1.24	.097	.128	0 A	0	0	0	---	---	3
4	---	---	.057 B	.936	.097	.161	.000	0	0	0	---	---	4
5	---	---	.125 B	.894	.079	.132	.000	0	0	0	---	---	5
6	---	---	.298 B	.855	.070	.141	.003	0	0	0	---	---	6
7	---	---	.600 B	.811	.077	.138	.005	0	0	0	---	---	7
8	---	---	1.36 B	.757	.060	.114	.005	0	0	0	---	---	8
9	---	---	2.59 B	.732	.047	.072	.003 A	0	0	0	---	---	9
10	---	---	5.88 B	.678	.039	.044	.002 A	0	0	0	---	---	10
11	---	---	10.3 B	.626	.072	.029	.001	0	0	0	---	---	11
12	---	---	13.1 B	.597	.057	.017 A	.001	0	0	0	---	---	12
13	---	---	14.0 B	.613	.041	.007	.001	0 A	0	0	---	---	13
14	---	---	13.2 B	.592	.033	.004	.000	0	0	0	---	---	14
15	---	---	12.3 B	.486	.029	.003	0	0	0	0	---	---	15
16	---	---	9.00	.583	.028	.002	0	0	0	0	---	---	16
17	---	---	6.56	.579	.031	.002	0	0	0	0	---	---	17
18	---	---	4.77	.361	.054	.002	0	0	0	0	---	---	18
19	---	---	3.65	.332	.109	.001	0	0	0	0	---	---	19
20	---	.283 B	2.85	.538	.071	.001	0 A	0	0	0 A	---	---	20
21	---	.359 B	2.39	.351	.042	.001	0 A	0	0	0 A	---	---	21
22	---	.348 B	2.11	.294	.027	.001	0	0	0	0 A	---	---	22
23	---	.301 B	2.03	.287	.022	.000	0	0	0	0 A	---	---	23
24	---	.165 B	1.95	.260	.024	.000	0	0	0	0 A	---	---	24
25	---	.325 B	1.78	.226	.024	.000	0	0	0	0 A	---	---	25
26	---	.272 B	1.57	.196	.021	0 A	0	0	0	0 A	---	---	26
27	---	.201 B	1.43	.214	.015	0 A	0	0	0	0 A	---	---	27
28	---	.103 B	1.27	.266	.010	0 A	0	0	0	0 A	---	---	28
29	---		1.01	.180	.008	0 A	0 A	0	0	0 A	---	---	29
30	---		.905 A	.126	.029	0	0 A	0	0	0 A	---	---	30
31	---		.841		.081		0 A	0		0 A		---	31
Mean	---	---	3.81	.554	.051	.041	.001	0	0	0	---	---	
Total	---	---	10200	1430	136	106	1.77	0	0	0	---	---	
Max	---	.584	16.1	1.44	.123	.172	.005	0	0	0	---	---	
(day)		22|23:00	13|17:15	3|03:30	19|06:45	4|12:10	7|03:55	1|00:00	1|00:00	1|00:00			
Min	---	.085	.041	.105	.007	0	0	0	0	0	---	---	
(day)		28|13:25	4|08:40	30|23:35	30|05:15	22|21:40	1|00:00	1|00:00	1|00:00	1|00:00			

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

STORAGE FACTORS AND EVAPORATION LOSSES
2015

MICHEL RESERVOIR 11AB091

PERIOD	ELEVATION At End of Period (m)	MEAN RESERVOIR SURFACE AREA (dam^2)	EVAPORATION		STORAGE AT		TOTAL CHANGE IN STORAGE (dam^3)
			Penman Evap. Adjusted for Elevation (m)	Reservoir (dam^3)	Beginning of Period (dam^3)	End of Period (dam^3)	
1	1102.723	2500	0.000	0	915	977	62
2	1102.516	2510	0.000	0	977	925	-52
3	1102.483	2470	0.000	0	925	917	-8
4	1102.452	2460	0.037	9	917	910	2
5	1102.430	2451	0.075	18	910	905	13
6	1102.402	2450	0.072	18	905	897	10
7	1102.371	2440	0.065	16	897	890	9
8	1102.292	2422	0.071	17	890	871	-2
9	1102.241	2410	0.068	16	871	859	4
10	1102.187	2390	0.061	15	859	844	0
11	1102.124	2380	0.075	18	844	830	4
12	1102.061	2360	0.013	3	830	816	-11
13	1102.034	2340	0.014	3	816	809	-4
14	1102.021	2330	0.001	0	809	807	-2
15	1102.001	2330	0.000	0	807	802	-5
16	1100.262	1980	0.012	2	802	457	-343

Stage-capacity curve # 2.00 and stage-area curve # 2.01 were used in 2015 computations.

STORAGE FACTORS AND EVAPORATION LOSSES
2015

GREASEWOOD RESERVOIR 11AB092

PERIOD	ELEVATION At End of Period (m)	MEAN RESERVOIR SURFACE AREA (dam^2)	EVAPORATION		STORAGE AT		TOTAL CHANGE IN STORAGE (dam^3)
			Penman Evap. Adjusted for Elevation (m)	Reservoir (dam^3)	Beginning of Period (dam^3)	End of Period (dam^3)	
1	30.284	623	0.000	0	142	153	11
2	30.199	625	0.000	0	153	144	-9
3	30.199	616	0.000	0	144	144	0
4	30.190	615	0.037	2	144	143	1
5	30.172	612	0.075	5	143	140	2
6	30.169	610	0.072	4	140	140	4
7	30.149	608	0.065	4	140	138	2
8	29.084	499	0.071	4	138	73	-61
9	27.633	297	0.068	2	73	30	-41
10	27.690	216	0.061	1	30	31	2
11	27.697	220	0.075	2	31	31	2
12	27.694	220	0.013	0	31	31	0
13	27.758	224	0.014	0	31	33	2
14	27.839	233	0.001	0	33	35	2
15	27.937	245	0.000	0	35	37	2
16	27.993	255	0.012	0	37	39	2

STORAGE FACTORS AND EVAPORATION LOSSES
2015

MASSY RESERVOIR 11AB104

PERIOD	ELEVATION At End of Period (m)	MEAN RESERVOIR SURFACE AREA (dam^2)	EVAPORATION		STORAGE AT		TOTAL CHANGE IN STORAGE (dam^3)
			Penman Evap. Adjusted for Elevation (m)	Reservoir (dam^3)	Beginning of Period (dam^3)	End of Period (dam^3)	
1	29.083	1391	0.000	0	226	242	16
2	28.950	1403	0.000	0	242	228	-14
3	28.956	1330	0.000	0	228	229	1
4	28.893	1297	0.037	5	229	222	-2
5	28.840	1234	0.075	9	222	217	4
6	28.543	1078	0.072	8	217	186	-23
7	28.260	933	0.065	6	186	160	-20
8	27.327	815	0.071	6	160	85	-69
9	26.485	548	0.068	4	85	35	-46
10	24.880	157	0.061	1	35	3	-31
11	24.879	56	0.075	0	3	3	0
12	24.888	57	0.013	0	3	3	0
13	24.901	57	0.014	0	3	3	0
14	24.915	59	0.001	0	3	3	0
15	24.929	60	0.000	0	3	3	0
16	24.943	61	0.012	0	3	3	0

The zero capacity WL is set on the current use table (No. 1) at 23.774 m.
Based on observations on July 11, 2001, it is estimated that the zero capacity WL is approx. 24.300 m.
All periods below 24.300 m will be treated as zero capacity.
Stage-capacity Table No. 1 was extended from 29.260 m (262 dam^3) to 29.300 m (270 dam^3).
Stage-area Table No. 1 was extended from 28.950 m (1326 dam^2) to 29.300m (1711 dam^2).

STORAGE FACTORS AND EVAPORATION LOSSES
2015

BARE CREEK RESERVOIR 11AB094

PERIOD	ELEVATION At End of Period (m)	MEAN RESERVOIR SURFACE AREA (dam^2)	EVAPORATION		STORAGE AT		TOTAL CHANGE IN STORAGE (dam^3)
			Penman Evap. Adjusted for Elevation (m)	Reservoir (dam^3)	Beginning of Period (dam^3)	End of Period (dam^3)	
1	1137.808	5377	0.000	0	1981	2311	330
2	1137.727	5659	0.000	0	2311	2260	-51
3	1137.665	5593	0.000	0	2260	2222	-38
4	1137.572	5509	0.037	20	2222	2173	-29
5	1137.493	5408	0.075	40	2173	2132	-1
6	1137.420	5319	0.072	38	2132	2094	0
7	1137.354	5237	0.065	34	2094	2060	0
8	1137.248	5136	0.071	37	2060	2005	-18
9	1137.202	5047	0.068	34	2005	1981	10
10	1137.155	4992	0.061	30	1981	1956	5
11	1135.975	4396	0.075	33	1956	1442	-481
12	1135.947	3879	0.013	5	1442	1432	-5
13	1135.967	3876	0.014	5	1432	1439	12
14	1136.004	3896	0.001	0	1439	1452	13
15	1136.044	3924	0.000	0	1452	1466	14
16	1136.057	3942	0.012	5	1466	1471	10

STORAGE FACTORS AND EVAPORATION LOSSES
2015

CRESSDAY RESERVOIR 11AB097

PERIOD	ELEVATION At End of Period (m)	MEAN RESERVOIR SURFACE AREA (dam^2)	EVAPORATION		STORAGE AT		TOTAL CHANGE IN STORAGE (dam^3)
			Penman (m)	Reservoir (dam^3)	Beginning of Period (dam^3)	End of Period (dam^3)	
1	964.288	5692	0.000	0	524	803	279
2	964.060	6082	0.000	0	803	664	-139
3	964.004	5656	0.000	0	664	633	-31
4	963.932	5464	0.049	27	633	595	-11
5	963.877	5274	0.087	46	595	565	16
6	963.793	5075	0.085	43	565	521	-1
7	963.745	4826	0.082	40	521	498	17
8	963.670	4547	0.089	41	498	464	7
9	963.610	4240	0.078	33	464	437	6
10	963.551	3972	0.073	29	437	410	2
11	963.454	3725	0.087	32	410	374	-4
12	963.413	3567	0.015	5	374	359	-10
13	963.366	3469	0.019	7	359	342	-10
14	963.317	3363	0.004	1	342	324	-17
15	963.297	3291	0.005	2	324	317	-5
16	963.261	3238	0.012	4	317	305	-8

Stage-capacity table # 4 and stage-area table # 5 used in 2015 computations.

STORAGE FACTORS AND EVAPORATION LOSSES
2015

MITCHELL RESERVOIR 11AB099

PERIOD	ELEVATION At End of Period (m)	MEAN RESERVOIR SURFACE AREA (dam^2)	EVAPORATION		STORAGE AT		TOTAL CHANGE IN STORAGE (dam^3)
			Penman Evap. Adjusted for Elevation (m)	Reservoir (dam^3)	Beginning of Period (dam^3)	End of Period (dam^3)	
1	34.353	4006	0.000	0	453	614	161
2	34.466	4795	0.000	0	614	666	52
3	34.302	4715	0.000	0	666	592	-74
4	34.257	4388	0.042	18	592	572	-2
5	34.190	4214	0.075	31	572	542	1
6	34.140	4031	0.071	29	542	520	7
7	33.669	3544	0.068	24	520	354	-142
8	33.246	2772	0.074	20	354	235	-99
9	33.182	2352	0.063	15	235	220	0
10	33.123	2245	0.061	14	220	208	2
11	33.035	2118	0.074	16	208	189	-3
12	32.956	1974	0.012	2	189	173	-14
13	32.916	1872	0.014	3	173	165	-5
14	32.898	1822	0.000	0	165	162	-3
15	32.720	1652	0.001	0	162	134	-28
16	32.689	1472	0.011	2	134	129	-3

STORAGE FACTORS AND EVAPORATION LOSSES
2015

JAYDOT RESERVOIR 11AB098

PERIOD	ELEVATION At End of Period (m)	MEAN RESERVOIR SURFACE AREA (dam^2)	EVAPORATION		STORAGE AT		TOTAL CHANGE IN STORAGE (dam^3)
			Penman (m)	Reservoir (dam^3)	Beginning of Period (dam^3)	End of Period (dam^3)	
1	915.920	0	0.000	0	0	0	0
2	915.920	0	0.000	0	0	0	0
3	915.920	0	0.000	0	0	0	0
4	915.920	0	0.037	0	0	0	0
5	915.920	0	0.048	0	0	0	0
6	915.920	0	0.082	0	0	0	0
7	915.920	0	0.055	0	0	0	0
8	915.920	0	0.038	0	0	0	0
9	915.920	0	0.100	0	0	0	0
10	915.920	0	0.083	0	0	0	0
11	915.920	0	0.071	0	0	0	0
12	915.920	0	0.012	0	0	0	0
13	915.920	0	0.041	0	0	0	0
14	915.920	0	0.059	0	0	0	0
15	915.920	0	0.039	0	0	0	0
16	915.920	0	0.023	0	0	0	0

In 2015, reservoir levels were estimated to be 915.920 m to reflect the near empty condition during the entire season.

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

MIDDLE CREEK NEAR THE SASKATCHEWAN BOUNDARY
Station Number: 11AB009

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	.012	.290	.027	.019	.010	.005	.009	.010	.009	---	1
2	---	---	.012	.141	.026	.018	.010	.006	.009	.009	.009	---	2
3	---	---	.012	.079	.026	.019	.010	.006	.009	.012	.009	---	3
4	---	---	.013	.059	.025	.018	.010	.005	.009	.013	.008	---	4
5	---	---	.012	.053	.026	.017	.012	.005	.009	.012	.009 A	---	5
6	---	---	.017	.054	.026	.016	.011	.005	.009	.008	---	---	6
7	---	---	.021	.059	.026	.015	.010	.006	.009	.006	---	---	7
8	---	---	.026	.054	.026	.015	.010	.006	.009	.006	---	---	8
9	---	---	.114	.046	.026	.014	.009	.006	.009	.009	---	---	9
10	---	---	1.58	.082	.025	.014	.009	.007	.009	.009	---	---	10
11	---	---	4.39	.105	.025	.015	.009	.007	.009	.009	---	---	11
12	---	---	3.60	.073	.025	.014	.009	.007	.009	.007	---	---	12
13	---	---	3.52	.062	.025	.018	.009	.007	.009	.006	---	---	13
14	---	---	3.79	.052	.025	.021	.009	.007	.009	.006	---	---	14
15	---	---	2.50	.044	.025	.021	.008	.008	.009	.006	---	---	15
16	---	---	1.83	.039	.024	.023	.008	.008	.009	.007	---	---	16
17	---	---	1.10	.037	.023	.025	.008	.008	.009	.007	---	---	17
18	---	---	.549	.034	.023	.025	.008	.008	.009	.007	---	---	18
19	---	---	.428	.033	.022	.020	.007	.008	.009	.009	---	---	19
20	---	---	.425	.032	.020	.015	.008	.008	.009	.010	---	---	20
21	---	---	.699	.032	.020	.014	.008	.008	.009	.008	---	---	21
22	---	---	.594	.031	.019	.013	.007	.008	.009	.008	---	---	22
23	---	---	.824	.031	.020	.012	.006	.008	.010	.008	---	---	23
24	---	---	.543	.030	.020	.012	.006	.008	.010	.007	---	---	24
25	---	.015 A	.155	.030	.020	.011	.006	.008	.010	.008	---	---	25
26	---	.014	.092	.029	.020	.010	.006	.008	.010	.009	---	---	26
27	---	.013	.074	.029	.020	.010	.007	.008	.010	.009	---	---	27
28	---	.013	.065	.028	.020	.010	.008	.008	.010	.008	---	---	28
29	---		.075	.028	.020	.010	.008 A	.008	.010	.009	---	---	29
30	---		.290	.027	.020	.010	.007 A	.009	.010	.009	---	---	30
31	---		.435		.020		.006	.009		.008		---	31
Mean	---	---	.896	.057	.023	.016	.008	.007	.009	.008	---	---	
Total	---	---	2400	149	61.8	41.0	22.3	19.5	23.9	22.6	---	---	
Max	---	.015	5.19	.339	.028	.027	.012	.009	.010	.014	.011	---	
(day)		25|11:00	11|13:10	1|00:00	1|11:10	18|11:10	5|02:20	14|21:25	22|13:20	3|21:10	2|04:40		
Min	---	.012	.010	.026	.018	.009	.005	.004	.009	.005	.007	---	
(day)		27|11:20	6|11:15	29|23:15	22|08:00	28|16:40	24|18:50	4|15:50	1|00:00	7|12:15	4|08:35		

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

MIDDLE CREEK RESERVOIR BEDFORD OUTLET
Station Number: 11AB114

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	0	0	0	0	0	0	0	0	0	0	0	0	1
2	0	0	0	0	0	0	0	0	0	0	0	0	2
3	0	0	0	0	0	0	0	0	0	0	0	0	3
4	0	0	0	0	0	0	0	0	0	0	0	0	4
5	0	0	0	0	0	0	0	0	0	0	0	0	5
6	0	0	0	0	0	0	0	0	0	0	0	0	6
7	0	0	0	0	0	0	0	0	0	0	0	0	7
8	0	0	0	0	0	0	0	0	0	0	0	0	8
9	0	0	0	0	0	0	0	0	0	0	0	0	9
10	0	0	0	0	0	0	0	0	0	0	0	0	10
11	0	0	0	0	0	0	0	0	0	0	0	0	11
12	0	0	0	0	0	0	0	0	0	0	0	0	12
13	0	0	0	0	0	0	0	0	0	0	0	0	13
14	0	0	0	0	0	0	0	0	0	0	0	0	14
15	0	0	0	0	0	0	0	0	0	0	0	0	15
16	0	0	0	0	0	0	0	0	0	0	0	0	16
17	0	0	0	0	0	0	0	0	0	0	0	0	17
18	0	0	0	0	0	0	0	0	0	0	0	0	18
19	0	0	0	0	0	0	0	0	0	0	0	0	19
20	0	0	0	0	0	0	0	0	0	0	0	0	20
21	0	0	0	0	0	0	0	0	0	0	0	0	21
22	0	0	0	0	0	0	0	0	0	0	0	0	22
23	0	0	0	0	0	0	0	0	0	0	0	0	23
24	0	0	0	0	0	0	0	0	0	0	0	0	24
25	0	0	0	0	0	0	0	0	0	0	0	0	25
26	0	0	0	0	0	0	0	0	0	0	0	0	26
27	0	0	0	0	0	0	0	0	0	0	0	0	27
28	0	0	0	0	0	0	0	0	0	0	0	0	28
29	0		0	0	0	0	0	0	0	0	0	0	29
30	0		0	0	0	0	0	0	0	0	0	0	30
31	0		0		0		0	0		0		0	31
Mean	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	
Max	0	0	0	0	0	0	0	0	0	0	0	0	
(day)	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	
Min	0	0	0	0	0	0	0	0	0	0	0	0	
(day)	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES FOR CANADA AND THE UNITED STATES

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

MIDDLE CREEK RESERVOIR FLOOD SPILLWAY
Station Number: 11AB115

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	1
2	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	2
3	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	3
4	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	4
5	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	5
6	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	6
7	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	7
8	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	8
9	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	9
10	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	10
11	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	11
12	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	12
13	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	13
14	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	14
15	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	15
16	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	16
17	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	17
18	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	18
19	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	19
20	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	20
21	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	21
22	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	22
23	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	23
24	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	24
25	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	25
26	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	26
27	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	27
28	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	28
29	0 A		0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	29
30	0 A		0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	0 A	30
31	0 A		0 A		0 A		0 A	0 A		0 A		0 A	31
Mean	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	
Max	0	0	0	0	0	0	0	0	0	0	0	0	
(day)	1|20:30	1|20:30	1|20:30	1|20:30	1|20:30	1|20:30	1|20:30	1|20:30	1|20:30	1|20:30	1|20:30	1|20:30	
Min	0	0	0	0	0	0	0	0	0	0	0	0	
(day)	1|20:30	1|20:30	1|20:30	1|20:30	1|20:30	1|20:30	1|20:30	1|20:30	1|20:30	1|20:30	1|20:30	1|20:30	

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

Note: Report data from Aquarius displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES FOR CANADA AND THE UNITED STATES

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

MIDDLE CREEK BELOW MIDDLE CREEK RESERVOIR
Station Number: 11AB001

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	0 E	.000	0	.013	0	0	0	0	---	---	1
2	---	---	0 E	0	0	.009	0	0	0	0	---	---	2
3	---	---	0 E	0	0	.007	0	0	0	0	---	---	3
4	---	---	0 E	0	0	.009	0	0	0	0	---	---	4
5	---	---	0 E	0	0	.023	0	0	0	0	---	---	5
6	---	---	0 E	0	0	.078	0	0	0	0	---	---	6
7	---	---	0 E	0	0	.199	0	0	0	0	---	---	7
8	---	---	0 E	0	0	.042	0	0	0	0	---	---	8
9	---	---	.002 E	0	0	.016	0	0	0	0	---	---	9
10	---	---	.020 E	0	0	.004	0	0	0	0	---	---	10
11	---	---	.041 E	0	0	.001	0	0	0	0	---	---	11
12	---	---	.045 E	0	0	0	0	0	0	0	---	---	12
13	---	---	.045 E	0	0	0	0	0	0	0	---	---	13
14	---	---	.046 E	0	.363	0	0	0	0	0	---	---	14
15	---	---	.046 E	0	1.56	0	0	0	0	0	---	---	15
16	---	---	.046 E	0	1.47	0	0	0	0	0	---	---	16
17	---	---	.044 E	0	1.31	0	0	0	0	0	---	---	17
18	---	---	.038	0	.854	0	0	0	0	0	---	---	18
19	---	---	.047 A	0	.110	0	0	0	0	0	---	---	19
20	---	---	.053	0	.086	0	0	0	0	0	---	---	20
21	---	---	.035	0	.122	0	0	0	0	0	---	---	21
22	---	---	.027	0	.138	0	0	0	0	0	---	---	22
23	---	---	.024	0	.150	0	0	0	0	0	---	---	23
24	---	---	.021	0	.069	0	0	0	0	0	---	---	24
25	---	---	.018	0	.051	0	0	0	0	0	---	---	25
26	---	---	.010	0	.041	0	0	0	0	0	---	---	26
27	---	---	.012	0	.036	0	0	0	0	0	---	---	27
28	---	---	.008	0	.026	0	0	0	0	0	---	---	28
29	---		.008 A	0	.015	0	0 A	0	0	0	---	---	29
30	---		.003	0	.014	0	0 A	0	0	0	---	---	30
31	---		.001		.019		0	0		0		---	31
Mean	---	---	.021	.000	.208	.013	0	0	0	0	---	---	
Total	---	---	55.3	.026	556	34.6	0	0	0	0	---	---	
Max	---	---	.100	.001	1.63	.307	0	0	0	0	---	---	
(day)			19|22:34	1|00:00	14|20:24	7|06:24	1|00:00	1|00:00	1|00:00	1|00:00			
Min	---	---	0	0	0	0	0	0	0	0	---	---	
(day)			1|00:04	1|06:29	1|00:00	11|15:09	1|00:00	1|00:00	1|00:00	1|00:00			

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

Note: Report data from Aquarius displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

MIDDLE CREEK ABOVE LODGE CREEK
Station Number: 11AB008

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	.002 B	.210	.006	.041	.005	0	0	0	---	---	1
2	---	---	.001 B	.190	.005	.043	.004	0	0	0	---	---	2
3	---	---	.001 B	.182	.005	.047	.002	0	0	0	---	---	3
4	---	---	.000 B	.166	.004	.037	.002	0	0	0	---	---	4
5	---	---	0 B	.158	.004	.024	.003	0	0	0	---	---	5
6	---	---	.021 B	.152	.004	.019	.003	0	0	0	---	---	6
7	---	---	.156 B	.145	.004	.014	.004	0	0	0	---	---	7
8	---	---	.259 B	.143	.004	.010	.003	0	0	0	---	---	8
9	---	---	.405 B	.136	.003	.006	.002	0	0	0	---	---	9
10	---	---	1.09 B	.127	.003	.004	.001	0	0	0	---	---	10
11	---	---	1.29	.122	.003	.003	.001	0	0	0	---	---	11
12	---	---	1.46	.107	.003	.002	.000	0	0	0	---	---	12
13	---	---	1.33	.097	.003	.002	0	0	0	0	---	---	13
14	---	---	1.18	.093	.003	.001	0	0	0	0	---	---	14
15	---	---	1.05	.088	.003	.001	0	0	0	0	---	---	15
16	---	---	.875 B	.079	.004	.001	0	0	0	0	---	---	16
17	---	---	.630	.069	.005	.003	0	0	0	0	---	---	17
18	---	---	.351 B	.063	.004	.005	0	0	0	0	---	---	18
19	---	---	.382 B	.063	.004	.005	0	0	0	0	---	---	19
20	---	---	.351	.080	.004	.005	0	0	0	0	---	---	20
21	---	---	.322	.090	.003	.004	0	0	0	0	---	---	21
22	---	---	.306	.090	.003	.003	0	0	0	0	---	---	22
23	---	---	.292	.083	.003	.002	0	0	0	0	---	---	23
24	---	---	.275	.042	.002	.218	0	0	0	0	---	---	24
25	---	.173 B	.242	.039	.025	.233	0	0	0	0	---	---	25
26	---	.057 B	.227	.022	.046	.103	0	0	0	0	---	---	26
27	---	.010 B	.228	.012	.110	.049	0	0	0	0	---	---	27
28	---	.005 B	.233	.008	.080	.029	0	0	0	0	---	---	28
29	---		.224 A	.007	.053	.017	0 A	0	0	0	---	---	29
30	---		.221	.006	.057	.008	0 A	0	0	0	---	---	30
31	---		.221		.053		0	0		0		---	31
Mean	---	---	.440	.096	.017	.031	.001	0	0	0	---	---	
Total	---	---	1180	248	44.4	81.1	2.60	0	0	0	---	---	
Max	---	.256	1.96	.219	.143	.458	.006	0	0	0	---	---	
(day)		25|16:30	11|16:50	1|00:00	27|13:30	24|13:20	1|00:00	1|00:00	1|00:00	1|00:00			
Min	---	.004	0	.005	.002	.001	0	0	0	0	---	---	
(day)		27|18:40	3|23:35	30|22:35	23|14:10	14|11:45	11|18:30	1|00:00	1|00:00	1|00:00			

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

MIDDLE CREEK NEAR GOVENLOCK
Station Number: 11AB108

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	.002	.147	.050	.054	.001	0	0	0	---	---	1
2	---	---	.001	.138	.045	.043	.000	0	0	0	---	---	2
3	---	---	.001	.135	.039	.040	.000	0	0	0	---	---	3
4	---	---	.001	.131	.036	.042	.000	0	0	0	---	---	4
5	---	---	.001	.126	.034	.038	.000	0	0	.007	---	---	5
6	---	---	.033	.122	.032	.037	.000	0	0	.019	---	---	6
7	---	---	.227 B	.118	.028	.033	.000	0	0	.022	---	---	7
8	---	---	.701 B	.113	.027	.028	.000	0	0	.017	---	---	8
9	---	---	1.08 B	.113	.026	.021	.000	0	0	.014	---	---	9
10	---	---	1.48	.109	.027	.023	.000	0	0	.011	---	---	10
11	---	---	1.10	.106	.026	.017	0	0	0	.009	---	---	11
12	---	---	1.15	.101	.022	.016	0	0	0	.006	---	---	12
13	---	---	.918	.095	.019	.013	0	0	0	.005	---	---	13
14	---	---	.889	.097	.020	.010	0	0	0	.005	---	---	14
15	---	---	.902	.101	.019	.009	0	0	0	.004	---	---	15
16	---	---	.479 B	.162	.021	.011	0	0	0	.005	---	---	16
17	---	---	.374 B	.186	.240	.019	0	0	0	.006	---	---	17
18	---	---	.280	.147	1.08	.016	0	0 A	0	.008	---	---	18
19	---	---	.238 B	.122	.953	.014	0	0	0	.009	---	---	19
20	---	---	.267 B	.107	.676	.012	0	0	0	.010	---	---	20
21	---	---	.210 B	.093	.357	.011	0	0	0	.009	---	---	21
22	---	---	.178	.084	.211	.010	0	0	0	.011	---	---	22
23	---	---	.215	.083	.155	.008	0	0	0	.012	---	---	23
24	---	---	.270 B	.080	.124	.006	0	0	0	.013	---	---	24
25	---	.100 A	.241	.075	.101	.004	0	0	0	.013	---	---	25
26	---	.058 B	.327	.069	.081	.003	0	0	0	.014	---	---	26
27	---	.022 B	.234	.066	.075	.002	0	0	0	.016	---	---	27
28	---	.008	.191	.064	.087	.001	0	0	0	.016	---	---	28
29	---		.170 A	.063	.091	.001	0 A	0	0	.017	---	---	29
30	---		.158	.057	.082	.001	0 A	0	0	.018	---	---	30
31	---		.153		.068		0	0		.019		---	31
Mean	---	---	.402	.107	.157	.018	.000	0	0	.010	---	---	
Total	---	---	1080	277	420	47.0	.197	0	0	27.2	---	---	
Max	---	.106	1.98	.225	1.13	.064	.001	0	0	.024	---	---	
(day)		25|17:30	10|12:20	16|15:40	18|05:45	1|07:45	1|00:00	1|00:00	1|00:00	7|12:35			
Min	---	.002	0	.052	.018	.001	0	0	0	0	---	---	
(day)		28|15:05	4|07:45	30|13:55	13|08:40	27|12:50	1|15:05	1|00:00	1|00:00	1|00:00			

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius displayed in a modified format.

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ALTAWAN EVAPORATION STATION NO. 11EV089
Station Elevation: 925 m
2015

Date March	Penman Evaporation Pe mm	Tipping Bucket ppt mm	Net Reservoir Evaporation Pe - TB ppt	Net Reesor Lake Evap Elev. Adj 0.789 Pe-TB ppt	Net Upper Reservoir Evaporation Elev Adj 0.853 Pe-TB ppt	Period Evaporation Summations M
1	no evap data	0	no evap data	no evap data	no evap data	Reservoirs
2	no evap data	0	no evap data	no evap data	no evap data	Remain
3	no evap data	0	no evap data	no evap data	no evap data	Frozen -
4	no evap data	0	no evap data	no evap data	no evap data	No Evaporation
5	no evap data	0	no evap data	no evap data	no evap data	Considered
6	no evap data	0	no evap data	no evap data	no evap data	March 1 to April 17
7	no evap data	0	no evap data	no evap data	no evap data	Upper Reservoirs *
8	no evap data	0	no evap data	no evap data	no evap data	Mitchell ** Cressday ***
9	no evap data	0	no evap data	no evap data	no evap data	Altawan ****
10	no evap data	0	no evap data	no evap data	no evap data	Reesor / Adams *****
11	no evap data	0	no evap data	no evap data	no evap data	0.000 *
12	no evap data	0	no evap data	no evap data	no evap data	0.000 ** 0.000 ***
13	no evap data	0	no evap data	no evap data	no evap data	0.000 ****
14	no evap data	0	no evap data	no evap data	no evap data	
15	no evap data	0	no evap data	no evap data	no evap data	
16	no evap data	0	no evap data	no evap data	no evap data	
17	no evap data	0	no evap data	no evap data	no evap data	
18	no evap data	0	no evap data	no evap data	no evap data	
19	no evap data	0	no evap data	no evap data	no evap data	0.000 *****
20	no evap data	0	no evap data	no evap data	no evap data	
21	no evap data	0	no evap data	no evap data	no evap data	
22	no evap data	0	no evap data	no evap data	no evap data	
23	no evap data	0	no evap data	no evap data	no evap data	
24	no evap data	0	no evap data	no evap data	no evap data	
25	no evap data	0	no evap data	no evap data	no evap data	
26	no evap data	0	no evap data	no evap data	no evap data	
27	no evap data	0	no evap data	no evap data	no evap data	0.000 *
28	no evap data	0	no evap data	no evap data	no evap data	0.000 ** 0.000 ***
29	no evap data	0	no evap data	no evap data	no evap data	0.000 ****
30	no evap data	0	no evap data	no evap data	no evap data	
31	no evap data	0	no evap data	no evap data	no evap data	
Total	no evap data	0	no evap data	no evap data	no evap data	

Date April	Penman Evaporation Pe mm	Tipping Bucket ppt mm	Net Reservoir Evaporation Pe - TB ppt	Net Reesor Lake Evap Elev. Adj 0.789 Pe-TB ppt	Net Upper Reservoir Evaporation Elev Adj 0.853 Pe-TB ppt	Period Evaporation Summations M
1	no evap data	0	no evap data	no evap data	no evap data	Reservoirs
2	no evap data	0	no evap data	no evap data	no evap data	Remain
3	no evap data	0	no evap data	no evap data	no evap data	Frozen -
4	no evap data	0	no evap data	no evap data	no evap data	No Evaporation
5	no evap data	0	no evap data	no evap data	no evap data	Considered
6	no evap data	0	no evap data	no evap data	no evap data	March 1 to April 17
7	no evap data	0	no evap data	no evap data	no evap data	Upper Reservoirs *
8	no evap data	0	no evap data	no evap data	no evap data	Mitchell ** Cressday ***
9	no evap data	0	no evap data	no evap data	no evap data	Altawan ****
10	no evap data	0	no evap data	no evap data	no evap data	Reesor / Adams *****
11	no evap data	0	no evap data	no evap data	no evap data	0.000 *
12	no evap data	0	no evap data	no evap data	no evap data	0.000 ** 0.000 ***
13	no evap data	0	no evap data	no evap data	no evap data	0.000 ****
14	no evap data	0	no evap data	no evap data	no evap data	
15	no evap data	0	no evap data	no evap data	no evap data	
16	no evap data	0	no evap data	no evap data	no evap data	
17	no evap data	0	no evap data	no evap data	no evap data	
18	4.66	0	4.66	3.68	3.97	0.001 *****
19	4.34	0	4.34	3.42	3.70	
20	5.21	0	5.21	4.11	4.45	
21	6.01	0	6.01	4.74	5.13	
22	6.98	0	6.98	5.51	5.95	
23	5.88	0	5.88	4.64	5.02	
24	4.76	0	4.76	3.76	4.06	
25	3.53	0	3.53	2.78	3.01	
26	2.10	0	2.10	1.65	1.79	0.037 *
27	5.77	0	5.77	4.56	4.93	0.042 ** 0.049 ***
28	6.90	0	6.90	5.44	5.88	0.056 ****
29	6.63	0	6.63	5.23	5.66	
30	6.78	0	6.78	5.35	5.78	
Total	69.55	0	69.55	54.88	59.33	

Notes:

Division Period Evaporation Summations:

* Upper Reservoirs (Michel, Greasewood, Massy, Bare)

** Mitchell Reservoir

*** Cressday Reservoir

**** Altawan Reservoir

***** Reesor and Adams Reservoirs

Total shown for April is for a partial month.

…..…. **Continued**

26

ALTAWAN EVAPORATION STATION NO. 11EV089
Station Elevation: 925 m
2015

Date	Penman Evaporation Pe	Tipping Bucket ppt	Net Reservoir Evaporation	Net Reesor Lake Evap Elev. Adj 0.789	Net Upper Reservoir Evaporation Elev Adj 0.853	Period Evaporation Summations
May	mm	mm	Pe - TB ppt	Pe-TB ppt	Pe-TB ppt	M
1	6.17	0	6.17	4.87	5.27	
2	4.98	0	4.98	3.93	4.25	
3	5.13	0	5.13	4.04	4.37	0.064 *****
4	7.65	0	7.65	6.03	6.52	
5	5.69	0	5.69	4.49	4.85	Upper Reservoirs *
6	6.48	0	6.48	5.11	5.53	Mitchell ** Cressday ***
7	4.95	0	4.95	3.90	4.22	Altawan ****
8	3.91	0	3.91	3.08	3.33	Reesor / Adams *****
9	5.65	0	5.65	4.46	4.82	
10	5.25	0	5.25	4.14	4.48	
11	5.83	0	5.83	4.60	4.98	0.075 *
12	5.37	0	5.37	4.23	4.58	0.075 ** 0.087 ***
13	3.20	0	3.20	2.52	2.73	0.084 ****
14	3.37	1	2.37	1.66	1.88	
15	2.91	0	2.91	2.29	2.48	
16	2.67	2	0.67	0.11	0.28	
17	3.94	1	2.94	2.11	2.36	
18	6.73	0	6.73	5.31	5.74	
19	7.74	0	7.74	6.10	6.60	0.060 *****
20	7.92	0	7.92	6.25	6.76	
21	9.28	0	9.28	7.32	7.91	
22	8.99	0	8.99	7.10	7.67	
23	8.10	0	8.10	6.39	6.91	
24	5.60	0	5.60	4.42	4.78	
25	7.36	0	7.36	5.81	6.28	
26	5.88	0	5.88	4.64	5.02	
27	3.92	3	0.92	0.10	0.35	0.072 *
28	4.12	0	4.12	3.25	3.51	0.071 ** 0.085 ***
29	7.58	0	7.58	5.98	6.47	0.089 ****
30	3.98	2	1.98	1.14	1.39	
31	6.98	0	6.98	5.51	5.96	
Total	177.33	9	168.33	130.92	142.27	

Date	Penman Evaporation Pe	Tipping Bucket ppt	Net Reservoir Evaporation	Net Reesor Lake Evap Elev. Adj 0.789	Net Upper Reservoir Evaporation Elev Adj 0.853	Period Evaporation Summations
June	mm	mm	Pe - TB ppt	Pe-TB ppt	Pe-TB ppt	M
1	8.63	0	8.63	6.81	7.36	
2	2.35	1	1.35	0.86	1.01	
3	4.61	0	4.61	3.64	3.93	0.069 *****
4	3.44	1	2.44	1.72	1.94	
5	6.30	0	6.30	4.97	5.37	
6	7.56	0	7.56	5.96	6.44	
7	5.89	1	4.89	3.64	4.02	
8	9.35	0	9.35	7.38	7.98	
9	10.29	0	10.29	8.12	8.78	
10	6.23	11	-4.77	-6.08	-5.69	
11	8.07	0	8.07	6.37	6.89	0.065 *
12	7.06	0	7.06	5.57	6.03	0.068 ** 0.082 ***
13	7.05	0	7.05	5.57	6.02	0.082 ****
14	5.50	0	5.50	4.34	4.70	
15	6.86	0	6.86	5.41	5.85	
16	7.96	0	7.96	6.28	6.79	
17	5.14	0	5.14	4.06	4.38	
18	6.10	2	4.10	2.81	3.21	0.066 *****
19	4.98	12	-7.02	-8.07	-7.75	
20	6.26	0	6.26	4.94	5.34	
21	6.46	0	6.46	5.10	5.51	
22	7.33	0	7.33	5.78	6.25	
23	6.57	1	5.57	4.18	4.60	
24	8.16	0	8.16	6.44	6.96	
25	6.64	0	6.64	5.24	5.67	
26	8.83	0	8.83	6.96	7.53	0.071 *
27	10.35	0	10.35	8.16	8.83	0.074 ** 0.089 ***
28	9.77	0	9.77	7.71	8.34	0.092 ****
29	8.97	0	8.97	7.07	7.65	
30	7.03	0	7.03	5.55	6.00	
31						
Total	209.74	29	180.74	136.49	149.91	

Notes:
Division Period Evaporation Summations:

* Upper Reservoirs (Michel, Greasewood, Massy, Bare)
** Mitchell Reservoir
*** Cressday Reservoir
**** Altawan Reservoir
***** Reesor and Adams Reservoirs

..…. Continued

ALTAWAN EVAPORATION STATION NO. 11EV098
Station Elevation: 925 m
2015

Date	Penman Evaporation Pe	Tipping Bucket ppt	Net Reservoir Evaporation	Net Reesor Lake Evap Elev. Adj 0.789	Net Upper Reservoir Evaporation Elev Adj 0.853	Period Evaporation Summations
July	mm	mm	Pe - TB ppt	Pe-TB ppt	Pe-TB ppt	M
1	4.31	0	4.31	3.40	3.67	
2	6.23	0	6.23	4.91	5.31	
3	7.63	0	7.63	6.02	6.51	0.073 *****
4	8.23	13.968	-5.74	-7.48	-6.95	
5	1.72	8.04	-6.32	-6.69	-6.58	Upper Reservoirs *
6	7.35	0	7.35	5.80	6.27	Mitchell ** Cressday ***
7	4.05	1.008	3.04	2.19	2.45	Altawan ****
8	7.68	0	7.68	6.06	6.55	Reesor / Adams *****
9	8.54	0	8.54	6.74	7.28	
10	9.41	0	9.41	7.42	8.02	
11	5.06	0	5.06	3.99	4.32	0.068 *
12	4.98	0	4.98	3.93	4.25	0.063 ** 0.078 ***
13	6.53	0	6.53	5.15	5.57	0.075 ****
14	5.56	0	5.56	4.39	4.74	
15	6.42	0	6.42	5.07	5.48	
16	4.17	0	4.17	3.29	3.56	
17	2.28	1.008	1.27	0.79	0.94	
18	5.80	0	5.80	4.57	4.95	
19	6.57	0	6.57	5.19	5.61	0.050 *****
20	5.59	10.992	-5.40	-6.58	-6.22	
21	7.08	0	7.08	5.59	6.04	
22	5.18	0	5.18	4.09	4.42	
23	5.34	0	5.34	4.22	4.56	
24	7.17	0	7.17	5.66	6.12	
25	6.53	0	6.53	5.15	5.57	
26	5.55	0	5.55	4.38	4.74	
27	0.49	0	0.49	0.38	0.41	0.061 *
28	4.77	0	4.77	3.76	4.07	0.061 ** 0.073 ***
29	8.55	0	8.55	6.75	7.30	0.075 ****
30	12.48	0	12.48	9.84	10.64	
31	8.29	0	8.29	6.54	7.07	
Total	189.54	35.016	154.52	114.53	126.66	

Date	Penman Evaporation Pe	Tipping Bucket ppt	Net Reservoir Evaporation	Net Reesor Lake Evap Elev. Adj 0.789	Net Upper Reservoir Evaporation Elev Adj 0.853	Period Evaporation Summations
August	mm	mm	Pe - TB ppt	Pe-TB ppt	Pe-TB ppt	M
1	7.93	0	7.93	6.26	6.76	
2	8.41	0	8.41	6.63	7.17	
3	8.53	0	8.53	6.73	7.28	0.069 *****
4	3.97	0	3.97	3.13	3.38	
5	4.55	0	4.55	3.59	3.88	
6	3.62	0	3.62	2.85	3.09	
7	2.53	0	2.53	1.99	2.16	
8	3.24	0	3.24	2.56	2.77	
9	3.22	0	3.22	2.54	2.74	
10	3.78	0	3.78	2.98	3.22	
11	4.01	0	4.01	3.16	3.42	0.075 *
12	3.49	0	3.49	2.75	2.98	0.074 ** 0.087 ***
13	4.05	0	4.05	3.20	3.46	0.082 ****
14	4.21	0	4.21	3.32	3.59	
15	1.63	3	-1.37	-1.71	-1.61	
16	1.45	0	1.45	1.15	1.24	
17	1.16	2	-0.84	-1.08	-1.01	
18	1.51	0	1.51	1.19	1.29	0.033 *****
19	2.11	0	2.11	1.66	1.80	
20	-15.83	0	-15.83	-12.49	-13.50	
21	1.56	0	1.56	1.23	1.33	
22	2.33	0	2.33	1.84	1.98	
23	2.31	0	2.31	1.82	1.97	
24	2.64	0	2.64	2.09	2.25	
25	3.09	0	3.09	2.44	2.64	
26	2.97	0	2.97	2.35	2.54	
27	2.22	0	2.22	1.75	1.89	0.013 *
28	2.59	0	2.59	2.05	2.21	0.012 ** 0.015 ***
29	3.45	0	3.45	2.72	2.94	0.014 ****
30	3.03	1	2.03	1.39	1.59	
31	2.98	0	2.98	2.35	2.54	
Total	86.75	6	80.75	62.45	68.00	

Notes:

Division Period Evaporation Summations:

* Upper Reservoirs (Michel, Greasewood, Massy, Bare)

** Mitchell Reservoir

*** Cressday Reservoir

**** Altawan Reservoir

***** Reesor and Adams Reservoirs

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ALTAWAN EVAPORATION STATION NO. 11EV089
Station Elevation: 925 m
2015

Date	Penman Evaporation Pe	Tipping Bucket ppt	Net Reservoir Evaporation	Net Reesor Lake Evap Elev. Adj 0.789	Net Upper Reservoir Evaporation Elev Adj 0.853	Period Evaporation Summations
September	mm	mm	Pe - TB ppt	Pe-TB ppt	Pe-TB ppt	M
1	2.82	0	2.82	2.23	2.41	
2	3.53	0	3.53	2.78	3.01	
3	1.80	1	0.80	0.42	0.54	0.015 *****
4	-0.01	12	-12.01	-12.01	-12.01	
5	0.06	0	0.06	0.05	0.05	Upper Reservoirs *
6	1.97	0	1.97	1.56	1.68	Mitchell ** Cressday ***
7	1.78	0	1.78	1.40	1.52	Altawan ****
8	2.38	0	2.38	1.88	2.03	Reesor / Adams *****
9	1.78	0	1.78	1.41	1.52	
10	2.52	0	2.52	1.99	2.15	
11	2.27	0	2.27	1.79	1.94	0.014 *
12	2.71	0	2.71	2.14	2.31	0.014 ** 0.019 ***
13	2.76	0	2.76	2.18	2.35	0.018 ****
14	1.61	1	0.61	0.27	0.37	
15	-0.02	18	-18.02	-18.02	-18.02	
16	-0.20	6	-6.20	-6.16	-6.17	
17	1.66	0	1.66	1.31	1.42	
18	2.51	0	2.51	1.98	2.14	-0.018 *****
19	2.72	0	2.72	2.15	2.32	
20	3.62	0	3.62	2.86	3.09	
21	1.84	0	1.84	1.45	1.57	
22	2.84	0	2.84	2.24	2.43	
23	2.41	0	2.41	1.91	2.06	
24	1.81	0	1.81	1.43	1.55	
25	2.30	0	2.30	1.82	1.96	
26	1.80	0	1.80	1.42	1.54	0.001 *
27	1.31	0	1.31	1.03	1.11	0.000 ** 0.004 ***
28	1.42	0	1.42	1.12	1.21	0.003 ****
29	1.61	0	1.61	1.27	1.38	
30	0.22	0	0.22	0.17	0.18	
31						
Total	55.84	38	17.84	6.06	9.63	

Date	Penman Evaporation Pe	Tipping Bucket ppt	Net Reservoir Evaporation	Net Reesor Lake Evap Elev. Adj 0.789	Net Upper Reservoir Evaporation Elev Adj 0.853	Period Evaporation Summations
October	mm	mm	mm	Pe-TB ppt	Pe-TB ppt	M
1	1.90	0	1.90	1.50	1.62	
2	0.38	6	-5.62	-5.70	-5.68	
3	0.13	14	-13.87	-13.90	-13.89	0.001 *****
4	0.31	1	-0.69	-0.76	-0.74	
5	1.26	0	1.26	1.00	1.08	
6	1.20	0	1.20	0.94	1.02	
7	2.03	0	2.03	1.60	1.73	
8	2.15	0	2.15	1.70	1.83	
9	2.92	0	2.92	2.31	2.49	
10	3.19	0	3.19	2.52	2.72	
11	5.17	0	5.17	4.08	4.41	0.000 *
12	1.81	0	1.81	1.43	1.54	0.001 ** 0.005 ***
13	1.21	0	1.21	0.96	1.03	0.004 ****
14	1.27	0	1.27	1.00	1.08	
15	0.93	0	0.93	0.74	0.80	
16	1.13	0	1.13	0.90	0.97	
17	1.00	0	1.00	0.79	0.85	
18	0.79	0	0.79	0.63	0.68	
19	0.90	0	0.90	0.71	0.77	0.021 *****
20	0.82	0	0.82	0.64	0.70	
21	0.28	0	0.28	0.22	0.24	
22	0.52	0	0.52	0.41	0.45	
23	0.56	0	0.56	0.44	0.48	
24	0.56	0	0.56	0.44	0.48	
25	1.13	0	1.13	0.89	0.97	0.003 *****
26	0.71	0	0.71	0.56	0.61	
27	0.27	0	0.27	0.21	0.23	0.012 *
28	0.24	0	0.24	0.19	0.21	0.011 ** 0.012 **
29	0.37	0	0.37	0.29	0.32	0.012 ****
30	0.71	0	0.71	0.56	0.61	
31	0.37	0	0.37	0.29	0.31	
Total	36.24	21	15.24	7.60	9.92	

Notes:

Division Period Evaporation Summations:

* Upper Reservoirs (Michel, Greasewood, Massy, Bare)

** Mitchell Reservoir

*** Cressday Reservoir

**** Altawan Reservoir

***** Reesor and Adams Reservoirs

STORAGE FACTORS AND EVAPORATION LOSSES
2015

ALTAWAN RESERVOIR 11AB089

PERIOD	ELEVATION At End of Period (m)	MEAN RESERVOIR SURFACE AREA (dam^2)	EVAPORATION		STORAGE AT		TOTAL CHANGE IN STORAGE (dam^3)
			Penman (m)	Reservoir (dam^3)	Beginning of Period (dam^3)	End of Period (dam^3)	
1	900.341	18142	0.000	0	6974	7740	766
2	899.946	18161	0.000	0	7740	7023	-717
3	899.929	17876	0.000	0	7023	6992	-31
4	899.895	17838	0.056	100	6992	6931	39
5	899.725	17685	0.084	148	6931	6631	-152
6	898.877	16932	0.089	151	6631	5197	-1283
7	898.596	15837	0.082	130	5197	4751	-316
8	898.532	15467	0.092	142	4751	4652	43
9	898.480	15334	0.075	115	4652	4573	36
10	898.388	15195	0.075	114	4573	4433	-26
11	897.746	14005	0.082	115	4433	3544	-774
12	897.684	12086	0.014	17	3544	3468	-59
13	897.649	11920	0.018	22	3468	3427	-19
14	897.621	11825	0.003	3	3427	3394	-30
15	897.618	11779	0.004	5	3394	3391	2
16	897.544	11671	0.012	13	3391	3304	-74

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

SPANGLER DITCH NEAR GOVENLOCK
Station Number: 11AB060

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	0	0 A	0	.784	0	.719	0	0	---	---	1
2	---	---	0	0	0	.709	0	.714	0	0	---	---	2
3	---	---	0	0	0	.661	0	.710	0	0	---	---	3
4	---	---	0	0	0	.344	0	.694	0	0	---	---	4
5	---	---	0	0 A	0	.008	0	.702	0	0	---	---	5
6	---	---	0	0 A	0	.001	0	.685	0	0	---	---	6
7	---	---	0	0	0	0	0	.539	0	0	---	---	7
8	---	---	0	0	0	0	0	.425	0	0	---	---	8
9	---	---	0	0	0	0	0	.009	0 A	0	---	---	9
10	---	---	0	0	0	0	0	0	0	0	---	---	10
11	---	---	0	0	.137	0	0	0	0	0	---	---	11
12	---	---	0	0	.803	0	0	0	0	0	---	---	12
13	---	---	0 A	0	.867	0	0	0	0	0	---	---	13
14	---	---	0	0	.868	0	0	0	0	0	---	---	14
15	---	---	0	0	.853	0	0	0	0	0	---	---	15
16	---	---	0	0	.713	0	0	0	0	0	---	---	16
17	---	---	0 A	0	.000	0	0	0	0	0	---	---	17
18	---	---	0 A	0	.328	0	0	0	0	0	---	---	18
19	---	---	0	0	.968	0	0	0	0	0	---	---	19
20	---	---	0	0	.967	0	0	0	0	0	---	---	20
21	---	---	0	0	.971	0	0	0	0	0	---	---	21
22	---	---	0	0	.972	0	0	0	0	0	---	---	22
23	---	---	0 A	0	.976	0	0	0 A	0	0	---	---	23
24	---	---	0	0	.982	0	0	0	0	0	---	---	24
25	---	---	0 A	0	.992	0	0	0	0	0	---	---	25
26	---	---	0	0	1.00	0	0	0	0	0	---	---	26
27	---	---	0 A	0	1.01	0	0	0	0	0	---	---	27
28	---	---	0	0	1.02	0	0	0	0	0	---	---	28
29	---		0	0	.913	0	.070	0	0	0	---	---	29
30	---		0	0	.783	0	.727	0	0	0	---	---	30
31	---		0		.799		.725	0		0		---	31
Mean	---	---	0	0	.546	.084	.049	.168	0	0	---	---	
Total	---	---	0	0	1460	217	131	449	0	0	---	---	
Max	---	---	0	0	1.03	.829	.762	.725	0	0	---	---	
(day)			1|00:00	1|00:00	28|13:15	1|15:05	30|01:35	1|00:00	1|00:00	1|00:00			
Min	---	---	0	0	0	0	0	0	0	0	---	---	
(day)			1|00:00	1|00:00	1|00:00	6|14:05	1|00:00	9|04:05	1|00:00	1|00:00			

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

SQUAW COULEE NEAR WILLOW CREEK
Station Number: 11AB103

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	0 A	0 A	0	.034	0	0	0	0	---	---	1
2	---	---	---	0	0	.042	0	0	0	0	---	---	2
3	---	---	---	0 A	0	.066	0	0	0	0	---	---	3
4	---	---	---	0	0	.039	0	0	0	0	---	---	4
5	---	---	---	0 A	0	.043	0	0	0	0	---	---	5
6	---	---	---	0	0	.044	0	0	0	0	---	---	6
7	---	---	---	0	0	.017	0	0	0	0	---	---	7
8	---	---	---	0	0	.007	0	0	0 A	0	---	---	8
9	---	---	---	0	0	.003	0	0	0 A	0	---	---	9
10	---	---	---	0	0	.001	0	0	0	0	---	---	10
11	---	---	---	0	0	0	0	0	0	0	---	---	11
12	---	---	---	0	0	0	0	0	0	0	---	---	12
13	---	---	---	0	0	0	0	0	0	0	---	---	13
14	---	---	---	0	0	0	0	0	0	0	---	---	14
15	---	---	---	0	0	0	0	0	0	0	---	---	15
16	---	---	.023 A	0	0	0	0	0	0	0	---	---	16
17	---	---	.016	0	0	0	0	0	0	0	---	---	17
18	---	---	.013	0 A	0	0	0	0	0	0	---	---	18
19	---	---	.011	0	0	0	0	0	0	0	---	---	19
20	---	---	.007	0	0	0	0	0	0	0	---	---	20
21	---	---	.005	0	0	0	0 A	0	0	0	---	---	21
22	---	---	.002	0	0	0	0	0	0	0	---	---	22
23	---	---	.000	0	0	0	0	0	0	0	---	---	23
24	---	---	0	0	0	0	0	0	0	0	---	---	24
25	---	---	0 A	0 A	0	0	0	0	0	0	---	---	25
26	---	---	0	0	0	0	0	0	0	0	---	---	26
27	---	---	0	0	0	0	0	0	0	0	---	---	27
28	---	---	0	0	0	0	0	0	0	0	---	---	28
29	---		0	0	.000	0	0	0	0	0	---	---	29
30	---		0	0 A	.039	0	0	0	0	0	---	---	30
31	---		0		.045		0	0		0		---	31
Mean	---	---	---	0	.003	.010	0	0	0	0	---	---	
Total	---	---	---	0	7.28	25.7	0	0	0	0	---	---	
Max	---	---	.028	0	.051	.078	0	0	0	0	---	---	
(day)			16|10:35	1|00:00	31|16:30	3|05:35	1|00:00	1|00:00	1|00:00	1|00:00			
Min	---	---	0	0	0	0	0	0	0	0	---	---	
(day)			1|00:00	1|00:00	1|00:00	10|13:25	1|00:00	1|00:00	1|00:00	1|00:00			

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

LODGE CREEK BASIN - SASKATCHEWAN
SURFACE WATER USE (MINOR DIVERSIONS) FOR 2015
(VOLUME IN CUBIC DECAMETERS)

Projects associated with the Middle Creek Reservoir Area

	March		April		May		June		July		August		Sept	
File Number	**1-15**	**16-31**	**1-15**	**16-30**	**1- 15**	**16- 31**	**1-15**	**15-30**	**1-15**	**16-31**	**1-15**	**16-31**	**1-15**	**Total**
205														**0**
8250														**0**
11727														**0**
11746														**0**
11768	7.2	4.3												**12**
15028														**0**

Projects Associated with the Altawan Reservoir Area

	March		April		May		June		July		August		Sept	
File Number	**1-15**	**16-31**	**1-15**	**16-30**	**1-15**	**16- 31**	**1-15**	**15-30**	**1-15**	**16-31**	**1-15**	**16-31**	**1-15**	**Total**
410			8.2											**8**
787														**0**
788														**0**
831														**0**
832														**0**
1582														**0**
1583			8.2											**8**
4446		3.3												**3**
8299														**0**
10136														**0**
10600														**0**
10663														**0**
10789														**0**
10877														**0**
12478														**0**
12479														**0**
12480														**0**
12481														**0**
12482			41.1											**41**
Total Saskatchewan Middle	**7**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**
Total Saskatchewan Altawan	**0**	**3**	**58**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**61**
Total Minor Diversion Saskatchewan	**7**	**8**	**58**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**72**

Continued ...

LODGE CREEK BASIN - ALBERTA
SURFACE WATER USE (MINOR DIVERSIONS) FOR 2015
(VOLUME IN CUBIC DECAMETERS)

Projects Associated with the Upper Lodge Creek Basin

	March		April		May		June		July		August		Sept	
File Number	**1-15**	**16-31**	**1-15**	**16-30**	**1-15**	**16-31**	**1-15**	**15-30**	**1-15**	**16-31**	**1-15**	**16-31**	**1-15**	**Total**
370	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
397	0	0	0	0	88.8	0	78.9	0	0	0	0	0	0	**168**
412	0	0	8.6	0	0	0	0	0	0	0	0	0	0	**9**
415	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2935	0	0	8	0	0	0	0	0	0	0	0	0	0	**8**
3787	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
8097	0	0	175	0	0	0	0	0	0	0	0	0	0	**175**
9654	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
12719	0	0	0	0	0	0	0	37	0	0	0	0	0	**37**
13803	95	0	0	0	0	0	0	0	0	0	0	0	0	**95**
14535	0	0	32.1	0	0	0	0	0	0	0	0	0	0	**32**
14562	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
15617	0	0	0	0	115.9	0	44.4	0	0	0	0	0	0	**160**
16878	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**

Projects Associated with the Altawan Reservoir Area

	March		April		May		June		July		August		Sept	
File Number	**1-15**	**16-31**	**1-15**	**16-30**	**1-15**	**16-31**	**1-15**	**15-30**	**1-15**	**16-31**	**1-15**	**16-31**	**1-15**	**Total**
2130	0	0	7.4	0	0	0	0	0	0	0	0	0	0	**7**
16378	0	15.5	0	0	0	0	0	0	0	0	0	0	0	**16**

Projects Associated with the Middle Creek Reservoir Area

	March		April		May		June		July		August		Sept	
File Number	**1-15**	**16-31**	**1–15**	**16-30**	**1-15**	**16-31**	**1-15**	**16-30**	**1-15**	**16-31**	**1-15**	**16-31**	**1-15**	**Total**
20452M	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**

Projects Associated with the Mitchell Reservoir Area

	March		April		May		June		July		August		Sept	
File Number	**1-15**	**16-31**	**1–15**	**16-30**	**1-15**	**16-31**	**1-15**	**16-30**	**1-15**	**16-31**	**1-15**	**16-31**	**1-15**	**Total**
303M	0	204.8	0	0	0	0	103.6	0	0	0	0	0	0	**308**
365M	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
920M	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1830M	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Upper Lodge Total	**95**	**0**	**224**	**0**	**205**	**0**	**123**	**37**	**0**	**0**	**0**	**0**	**0**	**684**
Mitchell Total (AB)	**0**	**205**	**0**	**0**	**0**	**0**	**104**	**0**	**0**	**0**	**0**	**0**	**0**	**308**
Altawan Total (AB & SK)	**0**	**19**	**65**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**84**
Middle Total (AB & SK)	**7**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**
Total Alberta	**95**	**220**	**231**	**0**	**205**	**0**	**227**	**37**	**0**	**0**	**0**	**0**	**0**	**1015**
Total Saskatchewan	**7.2**	**7.6**	**57.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**72**
Total Lodge Creek Basin	**102**	**228**	**289**	**0**	**205**	**0**	**227**	**37**	**0**	**0**	**0**	**0**	**0**	**1087**

Water Rights Data supplied by Saskatchewan Water Security Agency and Alberta Environment and Sustainable Resource Development.

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

BATTLE CREEK AT INTERNATIONAL BOUNDARY
Station Number: 11AB027

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	.391 B	6.04	.425	1.05	.084	.135	.048	.268	---	---	1
2	---	---	.450 B	6.74	.403	.894	.080	.119	.042	.272	---	---	2
3	---	---	.377 B	6.29	.397	.950	.076	.111	.034	.350	---	---	3
4	---	---	.388 B	5.59	.357	.900	.066	.099	.062	.352	---	---	4
5	---	---	.396 B	5.37	.350	.844	.087	.075	.098	.362	---	---	5
6	---	---	.508 B	4.90	.404	.874	.083	.063	.098	.381	---	---	6
7	---	---	2.11 B	4.26	.372	.784	.073	.060	.109	.389	---	---	7
8	---	---	2.66 B	3.98	.336	.615	.073	.041	.142	.394	---	---	8
9	---	---	4.02 B	3.66	.304	.528	.068	.061	.137	.774	---	---	9
10	---	---	5.77 B	2.70	.277	.482	.067	.064	.139	.751	---	---	10
11	---	---	8.58 B	3.67	.246	.513	.234	.049	.130	.603	---	---	11
12	---	---	8.27 B	2.68	.221	.529	.392	.031	.165	.578	---	---	12
13	---	---	4.86	2.08	.214	.372	.374	.022	.304	.490	---	---	13
14	---	---	3.62	1.79	.643	.287	.310	.020	.285	.434	---	---	14
15	---	---	2.99	1.43	.778	.238	.301	.088	.264	.430	---	---	15
16	---	---	3.26	1.31	1.23	.222	.262	.076	.282	.430	---	---	16
17	---	---	2.92	1.22	1.76	.217	.355	.090	.294	.426	---	---	17
18	---	---	3.17 B	.727	1.76	.233	.299	.096	.294	.405	---	---	18
19	---	---	2.70 B	.434	1.96	.206	.190	.092	.293	.409	---	---	19
20	---	---	5.17 B	.674	2.16	.184	.158	.095	.286	.414	---	---	20
21	---	---	5.25 B	.786	1.71	.165	.144	.090	.332	.412	---	---	21
22	---	---	4.36	.912	1.57	.152	.144	.074	.461	.416	---	---	22
23	---	---	5.12	.874	1.71	.135	.147	.063	.421	.419	---	---	23
24	---	---	3.52	.765	2.07	.149	.137	.059	.379	.422	---	---	24
25	---	---	3.11	.722	2.07	.169	.135	.055	.332	.429	---	---	25
26	---	---	2.61	.593	1.51	.156	.129	.050	.276	.443	---	---	26
27	---	---	4.11	.524	1.58	.139	.167	.044	.284	.438	---	---	27
28	---	---	4.73	.508	1.61	.120	.401	.037	.287	.459	---	---	28
29	---		4.36	.481	1.37	.106	.234	.041	.281	.449	---	---	29
30	---		5.28	.451	1.34	.093	.175	.040	.272	.442	---	---	30
31	---		5.54		1.28		.165	.045		.467		---	31
Mean	---	---	3.57	2.41	1.05	.410	.181	.067	.228	.442	---	---	
Total	---	---	9560	6230	2800	1060	485	180	590	1180	---	---	
Max	---	---	11.5	6.89	2.30	1.26	.475	.153	.479	.937	---	---	
(day)			11|20:34	2|13:19	20|09:09	1|00:00	28|10:54	1|19:34	22|07:29	9|10:54			
Min	---	---	.248	.352	.207	.082	.056	.018	.031	.262	---	---	
(day)			3|01:24	19|17:24	12|21:34	30|18:19	4|20:24	14|17:34	3|17:04	1|21:44			

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

STORAGE FACTORS AND EVAPORATION LOSSES
2015

REESOR RESERVOIR 11AB090

PERIOD	ELEVATION At End of Period (m)	MEAN RESERVOIR SURFACE AREA (dam^2)	EVAPORATION		STORAGE AT		TOTAL CHANGE IN STORAGE (dam^3)
			Penman Evap. Adjusted for Elevation (m)	Reservoir (dam^3)	Beginning of Period (dam^3)	End of Period (dam^3)	
1	1226.501	5203	0.000	0	1651	1670	19
2	1226.513	5217	0.000	0	1670	1677	7
3	1226.476	5210	0.001	1	1677	1658	-18
4	1226.458	5196	0.064	33	1658	1649	24
5	1226.425	5182	0.060	31	1649	1631	13
6	1226.382	5162	0.069	36	1631	1610	15
7	1226.355	5143	0.066	34	1610	1596	20
8	1226.291	5119	0.073	38	1596	1563	5
9	1226.224	5084	0.050	26	1563	1529	-8
10	1226.254	5075	0.069	35	1529	1544	50
11	1226.187	5064	0.033	17	1544	1510	-17
12	1226.146	5042	0.015	8	1510	1490	-12
13	1226.196	5043	-0.018	-9	1490	1515	16
14	1226.241	5063	0.001	0	1515	1537	22
15	1226.192	5062	0.021	10	1537	1513	-14
16	1226.180	5049	0.003	2	1513	1507	-4

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

GAFF DITCH NEAR MERRYFLAT
Station Number: 11AB102

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	0 B	.005 B	.014	.011	.007	.002	.003	.003	---	---	1
2	---	---	0 B	.003 B	.013	.011	.007	.002	.003	.003	---	---	2
3	---	---	0 B	.005 B	.013	.010	.007	.002	.003	.003	---	---	3
4	---	---	0 B	.004 B	.013	.010	.007	.002	.003	.003	---	---	4
5	---	---	0 B	.012 B	.012	.010	.006	.002	.003	.003	---	---	5
6	---	---	0 B	.005 B	.012	.011	.006	.002	.003	.003	---	---	6
7	---	---	.006 B	.021 B	.010 E	.010	.006	.002	.003	.003	---	---	7
8	---	---	.030 B	.023 B	.010 E	.010	.005	.002	.003	.003	---	---	8
9	---	---	.028 B	.021 B	.012 E	.010	.005	.002	.003	.003	---	---	9
10	---	---	.039 B	.023 B	.015 E	.009	.005	.002	.003	.003	---	---	10
11	---	---	.075 B	.020 B	.018 E	.008	.005	.002	.003	.003	---	---	11
12	---	---	.054 B	.026 B	.019 E	.008	.004	.002	.003	.003	---	---	12
13	---	---	.033 B	.027	.018	.008	.004	.002	.003	.003	---	---	13
14	---	---	.021 B	.025	.018	.008	.004	.002	.003	.003	---	---	14
15	---	---	.011 B	.025	.017	.008	.004	.002	.003	.003	---	---	15
16	---	---	.005 B	.024	.017	.008	.004	.002	.003	.003	---	---	16
17	---	---	.002 B	.021	.016	.008	.003	.002	.003	.003	---	---	17
18	---	---	.001 B	.020	.017	.007	.003	.002	.003	.003	---	---	18
19	---	---	.000 B	.019	.016	.007	.003	.002	.003	.003	---	---	19
20	---	---	.000 B	.018	.016	.007	.003	.002	.003	.003	---	---	20
21	---	---	.000 B	.017	.016	.007	.003	.002	.003	.003	---	---	21
22	---	---	.000 B	.016	.015	.007	.002	.002	.003	.003	---	---	22
23	---	---	.000 B	.018	.013	.007	.002	.002	.003	.003	---	---	23
24	---	---	.000 B	.019	.013	.007	.002	.002	.003	.003	---	---	24
25	---	---	.000 B	.019	.013	.007	.002	.002	.003	.003	---	---	25
26	---	---	.001 B	.018	.013	.007	.002	.002	.003	.003	---	---	26
27	---	---	.002 B	.017	.012	.007	.002	.003	.003	.003	---	---	27
28	---	---	.006 B	.016	.011	.007	.002	.002	.003	.003	---	---	28
29	---		.008 B	.016	.012	.007	.002	.003	.003	.003	---	---	29
30	---		.007 B	.015	.011	.007	.002	.003	.003	.003	---	---	30
31	---		.004 B		.011		.002	.003		.003		---	31
Mean	---	---	.011	.017	.014	.008	.004	.002	.003	.003	---	---	
Total	---	---	28.7	44.8	37.7	21.4	10.5	5.81	8.14	8.67	---	---	
Max	---	---	.087	.029	.019	.012	.007	.003	.004	.004	---	---	
(day)			11|05:30	12|10:00	11|23:35	1|00:00	1|00:00	4|17:50	17|13:30	2|23:50			
Min	---	---	0	.002	.009	.006	.002	.001	.003	.003	---	---	
(day)			1|00:05	2|10:40	7|17:05	21|05:35	21|23:55	3|01:10	1|00:00	1|00:00			

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

Note: Report data from Aquarius displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

CYPRESS LAKE WEST INFLOW CANAL
Station Number: 11AB078

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	0 B	.005	.222	0	.220	.250	0	0	0	---	1
2	---	---	0 B	.002	.220	0	.213	.244	0	0	0	---	2
3	---	---	0 B	.002	.224	0	.174	.240	0	0	0	---	3
4	---	---	0 B	.001	.222	.116	.033	.191	0	0	0	---	4
5	---	---	0 B	.000	.219	.188	.009 A	.027	0	0	0 A	---	5
6	---	---	.043 B	0	.214	.187	.005	.004 A	0	0	---	---	6
7	---	---	.493 B	0	.224	.187	.002	.001	0	0	---	---	7
8	---	---	1.13 B	.001	.222	.182	.001	0	0	0	---	---	8
9	---	---	1.14 B	.006	.221	.182	.000	0	0	0	---	---	9
10	---	---	1.14 B	.014	.219	.186	0	0	0	0	---	---	10
11	---	---	.825 B	.039	.217	.186	0	0	0	0	---	---	11
12	---	---	.523 B	.011	.221	.185	0	0	0	0	---	---	12
13	---	---	.448 B	.002	.221	.190	0	0	0	0	---	---	13
14	---	---	1.97 B	.000	.222	.186	0	0	0	0	---	---	14
15	---	---	2.83 B	.000	.221	.188	0	0	0	0	---	---	15
16	---	---	.066	0	.218	.186	0	0	0	0	---	---	16
17	---	---	.018	0	.218	.186	0	0	0	0	---	---	17
18	---	---	.018	0	.218	.193	0	0	0	0	---	---	18
19	---	---	.040	0	.214	.194	0	0	0	0	---	---	19
20	---	---	.174	0	.214	.192	0	0	0	0	---	---	20
21	---	---	.087	0	.213	.189	0	0	0	0	---	---	21
22	---	---	.040	.060	.209	.195	0	0	0	0	---	---	22
23	---	---	.023	.230	.209	.193	0	0	0	0	---	---	23
24	---	---	.015	.228	.178	.193	0	0	0	0	---	---	24
25	---	---	.010	.225	.029	.197	0	0	0	0	---	---	25
26	---	0 B	.009	.232	.005	.197	0	0	0	0	---	---	26
27	---	0 B	.011	.228	.002	.201	0	0	0	0	---	---	27
28	---	0 B	.012	.224	.001	.204	0	0	0	0	---	---	28
29	---		.023	.225	.000	.205	.116	0	0	0	---	---	29
30	---		.010	.222	.000	.210	.204	0	0	0	---	---	30
31	---		.007		.000		.415	0		0		---	31
Mean	---	---	.358	.065	.169	.170	.045	.031	0	0	---	---	
Total	---	---	959	169	453	441	120	82.7	0	0	---	---	
Max	---	0	3.67	.248	.245	.222	.527	.268	0	0	0	---	
(day)		26|10:44	15|07:29	23|02:34	7|04:44	30|22:08	31|09:28	1|00:00	1|00:00	1|00:00	1|00:00		
Min	---	0	0	0	0	0	0	0	0	0	0	---	
(day)		26|10:44	1|00:00	4|15:54	29|10:29	1|00:00	8|15:48	7|13:10	1|00:00	1|00:00	1|00:00		

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

CYPRESS LAKE WEST OUTFLOW CANAL
Station Number: 11AB077

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	0 B	4.16	.028 A	.051	.021	.002	0	0	---	---	1
2	---	---	0 B	3.62	.028	.049	.021	.001	0 A	0 A	---	---	2
3	---	---	0 B	3.58	.027	.049	.021	0	0 A	0	---	---	3
4	---	---	0 B	3.54	.027	.050	.035	0	0 A	0 A	---	---	4
5	---	---	.000 B	3.53	.027	.053	.102	0	0	0	---	---	5
6	---	---	.000 B	3.51	.026	.053	.110	0	0	0	---	---	6
7	---	---	.000 B	2.54	.026	.051	.158	0	0	0	---	---	7
8	---	---	.001 B	1.81	.026	.047	.090	0	0	0	---	---	8
9	---	---	.002 B	1.16	.025	.044	.034	0	0 A	0	---	---	9
10	---	---	.002 B	.445	.024	.040	.021	0	0 A	0 A	---	---	10
11	---	---	.002 B	.237	4.10	.040	.015	0	0 A	0	---	---	11
12	---	---	.002 B	.217	5.88	.041	.011	0	0	0	---	---	12
13	---	---	.004 B	.200	5.83	.040	.008	0	0	0	---	---	13
14	---	---	.016 B	.187	5.81	.039	.006	0	0	0	---	---	14
15	---	---	1.09 B	.187	5.81	.039	.005	0	0 A	0	---	---	15
16	---	---	.799 B	.138	5.81	.038	.004	0	0	0	---	---	16
17	---	---	.615	.101	5.82	.037	.003	0	0	0 A	---	---	17
18	---	---	.749	.099	5.77	.036	.003	0	0	0	---	---	18
19	---	---	.758	.093	5.73	.037	.002	0	0	0 A	---	---	19
20	---	---	.690	.090	5.68	.034	.002	0 A	0	0 A	---	---	20
21	---	---	.714	.087	5.30	.032	.002	0	0 A	0	---	---	21
22	---	---	.646	.086	4.37	.031	.002	0 A	0	0	---	---	22
23	---	---	.614	.085	3.34	.030	.002	0	0	0	---	---	23
24	---	---	1.42	.084	2.34	.028	.002	0	0 A	0	---	---	24
25	---	---	2.52	.083	1.77	.027	.002	0 A	0 A	0 A	---	---	25
26	---	0 B	2.82	.082	1.05	.026	.002	0 A	0	0 A	---	---	26
27	---	0 B	3.27	.081	.578	.022	.002	0 A	0	0	---	---	27
28	---	0 B	4.15	.072	.078	.020	.003	0 A	0	0	---	---	28
29	---		4.10	.032	.057	.020	.004	0 A	0	0	---	---	29
30	---		4.18	.029	.053	.020	.003	0	0	0 A	---	---	30
31	---		4.75		.052		.003	0 A		0		---	31
Mean	---	---	1.09	1.01	2.44	.037	.023	.000	0	0	---	---	
Total	---	---	2930	2610	6520	97.2	60.5	.239	0	0	---	---	
Max	---	0	4.81	4.76	6.11	.055	.170	.002	0	0	---	---	
(day)		26|10:33	31|00:13	1|00:00	11|12:43	5|23:28	7|02:08	1|00:00	1|00:00	1|00:00			
Min	---	0	0	.027	.023	.019	.002	0	0	0	---	---	
(day)		26|10:33	1|00:00	30|08:58	10|13:43	28|17:33	19|11:38	2|15:53	1|00:00	1|00:00			

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

Note: Report data from Aquarius displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

CYPRESS LAKE WEST INFLOW CANAL DRAIN
Station Number: 11AB085

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	0 E	.001 E	.001 E	.001	.003	.002	0	0	0	---	1
2	---	---	0 E	.001 E	.001 E	.000	.002	.002	0	0	0	---	2
3	---	---	0 E	.001 E	.001 E	.000	.002	.002	0	0	0	---	3
4	---	---	0 E	.001 E	.001 E	.001	.002	.002	0	0	0	---	4
5	---	---	0 E	.001 E	.001 E	.000	.001	.002	0	0	0 A	---	5
6	---	---	0 E	.001 E	.001 E	0	.001	.002	0	0	---	---	6
7	---	---	.000 E	.001 E	.001 E	0	.001	.002	0	0	---	---	7
8	---	---	.000 E	.001 E	.001 E	0	.000	.001	0	0	---	---	8
9	---	---	.001 E	.001 E	.001 E	0	.000	.001	0	0	---	---	9
10	---	---	.001 E	.001 E	.001 E	0	.000	.001	0	0	---	---	10
11	---	---	.001 E	.001 E	.001 E	0	.000	.001	0	0	---	---	11
12	---	---	.001 E	.001 E	.001 E	.000	.000	.001	0	0	---	---	12
13	---	---	.001 E	.001 E	.001 E	.000	.001	.001	0	0	---	---	13
14	---	---	.001 E	.001 E	.001 E	.000	.001	.001	0	0	---	---	14
15	---	---	.001 E	.001 E	.001 E	.001	.000	.001	0	0	---	---	15
16	---	---	.001 E	.001 E	.001 E	.001	.000	.001	0	0	---	---	16
17	---	---	.001 E	.001 E	.001 E	.001	.001	.001	0	0	---	---	17
18	---	---	.001 E	.001 E	.001 E	.001	.001	.001	0	0	---	---	18
19	---	---	.001 E	.001 E	.001 E	.001	.001	.001	0	0	---	---	19
20	---	---	.001 E	.001 E	.001 E	.001	.001	.001	0	0	---	---	20
21	---	---	.001 E	.001 E	.001 E	.001 A	.001	.001	0	0	---	---	21
22	---	---	.001 E	.001 E	.001	.002	.001	.001	0	0	---	---	22
23	---	---	.001 E	.001 E	.001	.002	.001	.001	0	0	---	---	23
24	---	---	.001 E	.001 E	.001	.002	.001	.000	0	0	---	---	24
25	---	---	.001 E	.001 E	.000	.002	.001	.000	0	0	---	---	25
26	---	---	.001 E	.001 E	.000	.002	.001	.000	0	0	---	---	26
27	---	---	.001 E	.001 E	.000	.002	.002	.000	0	0	---	---	27
28	---	---	.001 E	.001 E	.001	.002	.002	.000	0	0	---	---	28
29	---		.001 E	.001 E	.001	.002	.003 A	0	0	0	---	---	29
30	---		.001 E	.001 E	.001	.002	.003 A	0	0	0	---	---	30
31	---		.001 E		.001		.003	0		0		---	31
Mean	---	---	.001	.001	.001	.001	.001	.001	0	0	---	---	
Total	---	---	2.01	2.59	2.33	2.44	3.11	2.82	0	0	---	---	
Max	---	---	.001	.001	.001	.002	.004	.003	0	0	0	---	
(day)			8|18:04	1|00:00	1|00:00	4|12:44	29|19:54	1|00:00	1|00:00	1|00:00	1|00:00		
Min	---	---	0	.001	0	0	0	0	0	0	0	---	
(day)			1|00:04	1|00:00	25|09:54	1|19:54	8|13:29	23|16:49	1|00:00	1|00:00	1|00:00		

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

VIDORA DITCH NEAR CONSUL
Station Number: 11AB084

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	0	0	0	0	0	0	0	0	---	---	1
2	---	---	0	0	0	0	0	0	0	0	---	---	2
3	---	---	0	0	0	0	0	0	0	0	---	---	3
4	---	---	0	0	0	0	0	0	0	0	---	---	4
5	---	---	0	0	0	0	0	0	0	0	---	---	5
6	---	---	0	0	0	0	0	0	0	0	---	---	6
7	---	---	0	0	0	0	0	0	0	0	---	---	7
8	---	---	0	0	0	0	0	0	0	0	---	---	8
9	---	---	0	0	0	0	0	0	0	0	---	---	9
10	---	---	0	0	0	0	0	0	0	0	---	---	10
11	---	---	0	0	1.16	0	0	0	0	0	---	---	11
12	---	---	0	0	1.64	0	0	0	0	0	---	---	12
13	---	---	0	0	1.57	0	0	0	0	0	---	---	13
14	---	---	0	0	1.53	0	0	0	0	0	---	---	14
15	---	---	0	0	1.54	0	0	0	0	0	---	---	15
16	---	---	0	0	1.51	0	0	0	0	0	---	---	16
17	---	---	0	0	1.53	0	0	0	0	0	---	---	17
18	---	---	0	0	1.52	0	0	0	0	0	---	---	18
19	---	---	0	0	1.49	0	0	0	0	0	---	---	19
20	---	---	0	0	1.54	0	0	0	0	0	---	---	20
21	---	---	0	0	1.62	0	0	0	0	0	---	---	21
22	---	---	0	0	1.72	0	0	0	0	0	---	---	22
23	---	---	0	0	1.66	0	0	0	0	0	---	---	23
24	---	---	0	0	1.67	0	0	0	0	0	---	---	24
25	---	---	0	0	1.55	0	0	0	0	0	---	---	25
26	---	---	0	0	.936	0	0	0	0	0	---	---	26
27	---	---	0	0	.420	0	0	0	0	0	---	---	27
28	---	---	0	0	0	0	0	0	0	0	---	---	28
29	---		0	0	0	0	0	0	0	0	---	---	29
30	---		0	0	0	0	0	0	0	0	---	---	30
31	---		0		0		0	0		0		---	31
Mean	---	---	0	0	.793	0	0	0	0	0	---	---	
Total	---	---	0	0	2120	0	0	0	0	0	---	---	
Max	---	---	0	0	2.10	0	0	0	0	0	---	---	
(day)			1|00:00	1|00:00	11|14:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00			
Min	---	---	0	0	0	0	0	0	0	0	---	---	
(day)			1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00			

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS
TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

RICHARDSON DITCH NEAR CONSUL
Station Number: 11AB058

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	0	0	0	0	0	0	0	0	---	---	1
2	---	---	0	0	0	0	0	0	0	0	---	---	2
3	---	---	0	0	0	0	0	0	0	0	---	---	3
4	---	---	0	0	0	0	0	0	0	0	---	---	4
5	---	---	0	0	0	0	0	0	0	0	---	---	5
6	---	---	0	0	0	0	0	0	0	0	---	---	6
7	---	---	0	0	0	0	0	0	0	0	---	---	7
8	---	---	0	0	0	0	0	0	0	0	---	---	8
9	---	---	0	0	0	0	0	0	0	0	---	---	9
10	---	---	0	0	0	0	0	0	0	0	---	---	10
11	---	---	0	0	0	0	0	0	0	0	---	---	11
12	---	---	0	0	1.11	0	0	0	0	0	---	---	12
13	---	---	0	0	1.44	0	0	0	0	0	---	---	13
14	---	---	0	0	1.45	0	0	0	0	0	---	---	14
15	---	---	0	0	1.81	0	0	0	0	0	---	---	15
16	---	---	0	0	1.99	0	0	0	0	0	---	---	16
17	---	---	0	0	2.06	0	0	0	0	0	---	---	17
18	---	---	0	0	2.06	0	0	0	0	0	---	---	18
19	---	---	0	0	2.05	0	0	0	0	0	---	---	19
20	---	---	0	0	2.05	0	0	0	0	0	---	---	20
21	---	---	0	0	1.85	0	0	0	0	0	---	---	21
22	---	---	0	0	.946	0	0	0	0	0	---	---	22
23	---	---	0	0	2.01	0	0	0	0	0	---	---	23
24	---	---	0	0	.654	0	0	0	0	0	---	---	24
25	---	---	0	0	0	0	0	0	0	0	---	---	25
26	---	---	0	0	0	0	0	0	0	0	---	---	26
27	---	---	0	0	0	0	0	0	0	0	---	---	27
28	---	---	0	0	0	0	0	0	0	0	---	---	28
29	---		0	0	0	0	0	0	0	0	---	---	29
30	---		0	0	0	0	0	0	0	0	---	---	30
31	---		0		0		0	0		0		---	31
Mean	---	---	0	0	.693	0	0	0	0	0	---	---	
Total	---	---	0	0	1860	0	0	0	0	0	---	---	
Max	---	---	0	0	3.32	0	0	0	0	0	---	---	
(day)			1|00:00	1|00:00	23|16:05	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00			
Min	---	---	0	0	0	0	0	0	0	0	---	---	
(day)			1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00			

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius 3.1.591 displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

MCKINNON DITCH NEAR CONSUL
Station Number: 11AB044

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	0	0	0	0	0	0	0	0	---	---	1
2	---	---	0	0	0	0	0	0	0	0	---	---	2
3	---	---	0	0	0	0	0	0	0	0	---	---	3
4	---	---	0	0	0	0	0	0	0	0	---	---	4
5	---	---	0	0	0	0	0	0	0	0	---	---	5
6	---	---	0	0	0	0	0	0	0	0	---	---	6
7	---	---	0	0	0	0	0	0	0	0	---	---	7
8	---	---	0	0	0	0	0	0	0	0	---	---	8
9	---	---	0	0	0	0	0	0	0	0	---	---	9
10	---	---	0	0	0	0	0	0	0	0	---	---	10
11	---	---	0	0	0	0	0	0	0	0	---	---	11
12	---	---	0	0	.996	0	0	0	0	0	---	---	12
13	---	---	0	0	1.56	0	0	0	0	0	---	---	13
14	---	---	0	0	1.59	0	0	0	0	0	---	---	14
15	---	---	0	0	1.59	0	0	0	0	0	---	---	15
16	---	---	0	0	1.54	0	0	0	0	0	---	---	16
17	---	---	0	0	1.56	0	0	0	0	0	---	---	17
18	---	---	0	0	1.75	0	0	0	0	0	---	---	18
19	---	---	0	0	1.72	0	0	0	0	0	---	---	19
20	---	---	0	0	1.68	0	0	0	0	0	---	---	20
21	---	---	0	0	1.42	0	0	0	0	0	---	---	21
22	---	---	0	0	1.16	0	0	0	0	0	---	---	22
23	---	---	0	0	.582	0	0	0	0	0	---	---	23
24	---	---	0	0	.361	0	0	0	0	0	---	---	24
25	---	---	0	0	.015	0	0	0	0	0	---	---	25
26	---	---	0	0	.008	0	0	0	0	0	---	---	26
27	---	---	0	0	.006	0	0	0	0	0	---	---	27
28	---	---	0	0	.005	0	0	0	0	0	---	---	28
29	---		0	0	.002	0	0	0	0	0	---	---	29
30	---		0	0	.000	0	0	0	0	0	---	---	30
31	---		0		.000		0	0		0		---	31
Mean	---	---	0	0	.566	0	0	0	0	0	---	---	
Total	---	---	0	0	1520	0	0	0	0	0	---	---	
Max	---	---	0	0	1.78	0	0	0	0	0	---	---	
(day)			1|00:00	1|00:00	15|01:50	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00			
Min	---	---	0	0	0	0	0	0	0	0	---	---	
(day)			1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00			

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius 3.1.591 displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

NASHLYN CANAL NEAR CONSUL
Station Number: 11AB018

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	0 B	1.07	0	0	0	0	0	0	0	---	1
2	---	---	0 B	1.01	0	0	0	0	0	0	0	---	2
3	---	---	0 B	.998	0	0	0	0	0	0	0	---	3
4	---	---	0 B	1.01	0	0	0	0	0	0	0 A	---	4
5	---	---	0 B	.979	0	0	0	0	0	0	---	---	5
6	---	---	0 B	1.00	0	0	0	0	0	0	---	---	6
7	---	---	0 B	1.04	0	0	0	0	0	0	---	---	7
8	---	---	0 B	1.03	0	0	0	0	0	0	---	---	8
9	---	---	0 B	.857	0	0	0	0	0	0	---	---	9
10	---	---	.239 B	.055	0	0	0	0	0	0	---	---	10
11	---	---	.864	.022	0	0	0	0	0	0	---	---	11
12	---	---	1.02	.015	0	0	0	0	0	0	---	---	12
13	---	---	1.04	.009	0	0	0	0	0	0	---	---	13
14	---	---	1.04	.005	0	0	0	0	0	0	---	---	14
15	---	---	1.08	.004	0	0	0	0	0	0	---	---	15
16	---	---	1.10	.162	0	0	0	0	0	0	---	---	16
17	---	---	1.10	.458	0	0	0	0	0	0	---	---	17
18	---	---	1.17	.045	0	0	0	0	0	0	---	---	18
19	---	---	1.20	.017	0	0	0	0	0	0	---	---	19
20	---	---	1.18	.011	0	0	0	0	0	0	---	---	20
21	---	---	1.21	.005	0	0	0	0	0	0	---	---	21
22	---	---	1.16	.000	0	0	0	0	0	0	---	---	22
23	---	---	1.15	0	0	0	0	0	0	0	---	---	23
24	---	---	1.11	0	0	0	0	0	0	0	---	---	24
25	---	---	1.12	0	0	0	0	0	0	0	---	---	25
26	---	---	1.19	0	0	0	0	0	0	0	---	---	26
27	---	---	1.19	0	0	0	0	0	0	0	---	---	27
28	---	---	1.15	0	0	0	0	0	0	0	---	---	28
29	---		1.11	0	0	0	0	0	0	0	---	---	29
30	---		1.08	0	0	0	0	0	0	0	---	---	30
31	---		1.09		0		0	0		0		---	31
Mean	---	---	.762	.327	0	0	0	0	0	0	---	---	
Total	---	---	2040	847	0	0	0	0	0	0	---	---	
Max	---	---	1.39	1.10	0	0	0	0	0	0	0	---	
(day)			22|11:25	1|00:15	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00		
Min	---	---	0	0	0	0	0	0	0	0	0	---	
(day)			1|00:00	15|17:40	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00		

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius 3.1.591 displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

BATTLE CREEK BASIN

SURFACE WATER USE (MINOR DIVERSIONS) FOR 2015

(VOLUME IN CUBIC DECAMETERS)

Minor Diversions Associated with Nashlyn Diversion Area

File	March		April		May		June		July		August		September		October		
Number	1-25	26-9	10-24	25-9	10-25	26-9	10-24	25-9	10-25	26-9	10-25	26-9	10-24	25-9	10-25	26-31	Total
323																	**0**
338																	**0**
622																	**0**
710																	**0**
900																	**0**
985																	**0**
1247																	**0**
1499																	**0**
2841																	**0**
2954																	**0**
3855																	**0**
3930																	**0**
3931																	**0**
4851																	**0**
5293																	**0**
5442																	**0**
5512																	**0**
5528	2.5																**2.5**
5529	5.8																**5.8**
5784																	**0**
5940																	**0**
6139																	**8**
6150																	**0**
6714																	**0**
6719																	**8**
6795																	**0**
7144																	**0**
8056																	**0**
8225																	**0**
8228																	**0**
8314																	**0**
8336																	**0**
8559																	**0**
8575																	**0**
8646																	**0**
8647																	**0**
8648																	**0**
8649																	**0**
8998																	**0**
9344																	**0**
9679	1.0	0.6															**1.6**
10138																	**0**
Sub-Total	**9.3**	**0.6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9.9**
Dom. Uses	**2.2**	**0.1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2.4**
Sub-Total	**11**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**

Continued ...

BATTLE CREEK BASIN (continued)
SURFACE WATER USE (MINOR DIVERSIONS) FOR 2015
(VOLUME IN CUBIC DECAMETERS)

Minor Diversions Associated with Richardson Diversion (Consul) Area

File Number	March		April		May		June		July		August		September		October		
	1-23	24-7	8-22	23-7	8-23	24-7	8-22	23-7	8-23	24-7	8-23	24-7	8- 22	23-7	8-23	24-31	Total
606																	**0**
765																	**0**
1753																	**0**
1754																	**0**
1786																	**0**
2124																	**0**
2159																	**0**
2282																	**0**
2283																	**0**
2500																	**0**
2655																	**0**
2755		49.3															**49.3**
3586																	**0**
5263		39.5	9.9														**49.3**
5292																	**0**
5420																	**0**
5421																	**0**
5422	43.2																**43.2**
5453	17.7	13.8															**31.5**
5455																	**0**
5539																	**0**
5540																	**0**
5557																	**0**
5874																	**0**
6308																	**0**
7241																	**0**
8107																	**0**
8192																	**0**
9759																	**0**
9760																	**0**
9811		10.2	2.2														**12.3**
11191																	**0**
11192																	**0**
11805	0.4	3.7															**4.1**
Sub-Total	**61.3**	**116.4**	**12.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**189.8**
Dom. Uses	**14.7**	**27.9**	**2.9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**45.6**
Sub-Total	**76**	**144**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**235**

Continued ...

BATTLE CREEK BASIN (continued)
SURFACE WATER (MINOR DIVERSIONS) FOR 2015
(VOLUME IN CUBIC DECAMETERS)

Minor Diversions Associated with Cypress Lake Area

	March		April		May		June		July		August		September		October		
File	**1-25**	**26-9**	**10-24**	**25-9**	**10-25**	**26-9**	**10–24**	**25-9**	**10-25**	**26-9**	**10-25**	**26-9**	**10-24**	**25-9**	**10-25**	**26-31**	**Total**
86 (sprinkler)	Not included as it is accounted for with Shepherd Ditch																**0**
181	20.6																**20.6**
219																	**0**
237																	**0**
358		20.4	6.3														**26.7**
5609																	**0**
10340																	**0**
13756																	**0**
14422																	**0**
15610																	**0**
Sub-Total	**20.6**	**20.4**	**6.3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**47.3**
Dom. Uses	**4.9**	**4.9**	**1.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11.4**
Sub-Total	**26**	**25**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**59**

Minor Diversions Associated with Gaff Ditch Area

52A																	**0**
52B																	**0**
59																	**0**
71																	**0**
73																	**0**
77																	**0**
190		124.6	109.0														**233.6**
5193																	**0**
5527																	**0**
9803																	**0**
9917																	**0**
14994																	**0**
Shepherd Ditch	0	0	149	179	189	85	8	7.7	5	8.2	8.7	8	8.1	7.5	7.2	2.2	**672.6**
(includes 86, 110)	0.0	0.0	111.8	134.3	141.8	63.8	6	5.8	3.8	6.2	6.5	6.0	6.1	5.6	5.4	1.7	**504.5**
Sub-Total	**0**	**124.6**	**220.8**	**134.3**	**141.8**	**63.8**	**6**	**5.8**	**3.8**	**6.2**	**6.5**	**6.0**	**6.1**	**5.6**	**5.4**	**1.7**	**738.1**
Dom. Uses	**0**	**29.9**	**53.0**	**32.2**	**34.0**	**15.3**	**1.4**	**1.4**	**0.9**	**1.5**	**1.6**	**1.4**	**1.5**	**1.4**	**1.3**	**0.4**	**177.1**
Sub-Total	**0**	**155**	**274**	**166**	**176**	**79**	**7**	**7**	**5**	**8**	**8**	**7**	**8**	**7**	**7**	**2**	**915**

25% return flow factor applied to Shepherd Ditch as per Section 6.6.1 of the Procedures Manual

Continued ...

BATTLE CREEK BASIN (continued)
SURFACE WATER USE (MINOR DIVERSIONS) FOR 2015
(VOLUME IN CUBIC DECAMETERS)

Minor Diversions Associated with Upper Battle Creek (Reesor Lake) Area

File Number	March		April		May		June		July		August		September		October		
	1-25	26-9	10-24	25-9	10-25	26-9	10-24	25-9	10-25	26-9	10-25	26-9	10-24	25-9	10-25	26-31	Total
Adams Lake	10.0	1.0	-3.0	7.0	6.0	16.0	-5.0	-12.0	-18.0	-9.0							-7.0
Alberta Use																	**0**
Sub-Total	**10.0**	**1.0**	**-3.0**	**7.0**	**6.0**	**16.0**	**-5.0**	**-12.0**	**-18.0**	**-9.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**-7.0**
Dom. Uses	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Sub-Total	**10**	**1**	**-3**	**7**	**6**	**16**	**-5**	**-12**	**-18**	**-9**	**0**	**0**	**0**	**0**	**0**	**0**	**-7**

Total Minor Diversions from Battle Creek (Less Adams Lake)

Nashlyn Area	9.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9
Consul Area	61.3	116.4	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	189.8
Cypress Lake	20.6	20.4	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.3
Gaff Ditch	0.0	124.6	220.8	134.3	141.8	63.8	6.0	5.8	3.8	6.2	6.5	6.0	6.1	5.6	5.4	1.7	738.1
Reesor Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**91**	**262**	**239**	**134**	**142**	**64**	**6**	**6**	**4**	**6**	**7**	**6**	**6**	**6**	**5**	**2**	**985**
Percent Domestic Use (From Table)																0.240	

Total Diversions (minor and domestic) from Battle Creek including Adams Lake

Nashlyn Area	11.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.2
Consul Area	76.0	144.4	14.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	235.3
Cypress Lake	25.5	25.3	7.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.7
Gaff Ditch	0.0	154.5	273.8	166.5	175.8	79.1	7.4	7.2	4.7	7.6	8.1	7.4	7.5	7.0	6.7	2.0	915.2
Reesor Lake	10.0	1.0	-3.0	7.0	6.0	16.0	-5.0	-12.0	-18.0	-9.0	0.0	0.0	0.0	0.0	0.0	0.0	-7.0
Total	**123**	**326**	**293**	**173**	**182**	**95**	**2**	**-5**	**-13**	**-1**	**8**	**7**	**8**	**7**	**7**	**2**	**1214**

Water Rights Data supplied by Saskatchewan Water Security Agency and Alberta Environment and Sustainable Resource Development .
Totals of columns and rows may not add exactly due to rounding.
A 25 percent return flow factor is applied to Shepherd Ditch.
See Upper Battle Creek Depletion computations for Adams Lake.

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

FRENCHMAN RIVER AT INTERNATIONAL BOUNDARY
Station Number: 11AC041

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	.739	3.94	3.47	6.17	1.25	1.62	.015	.176	.238	.003	.197	.189	1
2	.691	2.64	3.03	7.11	1.20	1.55	.015	.095	.183	.004	.202	.188	2
3	.485	2.41	4.07	8.94	1.20	1.78	.014	.478	.132	.005	.206	.218	3
4	.512	2.16	3.91	9.00	2.01	1.86	.011	.672	.089	.009	.230	.267	4
5	.365	2.66	3.88	8.23	2.07	2.05	.012	.610	.069	.011	.245	.296	5
6	.312	2.67	4.77	7.14	2.31	2.07	.011	6.11	.053	.011	.247	.303	6
7	.419	2.81	6.70	6.14	2.57	1.56	.009	6.07	.046	.011	.204	.300	7
8	.299	2.29	9.80	5.30	2.52	1.03	.008	2.01	.034	.011	.135	.302	8
9	.136	2.05	21.9	6.46	2.49	1.03	.011	.912	.028	.179	.086	.311	9
10	.197	3.72	34.5	5.65	2.11	.862	.012	.678	.025	.260	.081	.324	10
11	.328	8.45	42.0	6.39	1.07	.579	.010	.559	.026	.292	.092	.308	11
12	.235	5.32	46.6	6.20	.921	.385	.014	.494	.033	.274	.092	.303	12
13	.248	4.40	46.7	4.79	.904	.297	.020	.459	.030	.244	.094	.305	13
14	.402	9.13 A	42.6	4.65	.900	.260	.018	.408	.027	.261	.098	.297	14
15	.450	8.76	28.2	4.57	.888	.174	.008	.338	.023	.257	.101	.298	15
16	.508	6.34 A	27.4	4.47	.935	.122	.006	.307	.023	.260	.098	.303	16
17	.689	4.96 A	28.8	4.87	1.10	.087	.004	.315	.023	.264	.098	.328	17
18	.530	3.90	64.5	4.98	.802	.066	.005	.286	.022	.264	.089	.510	18
19	.773	3.82	30.6	4.42	.544	.066	.003	.236	.019	.273	.082	.715	19
20	.750	6.89 A	11.1	3.96	.399	.065	.003	.225	.016	.277	.082	.682	20
21	.762	15.9	10.3	3.91	.330	.055	.004	.239	.012	.275	.112	.680	21
22	.792	19.3	15.3	3.62	.279	.050	.004	.253	.008	.281	.204	.467	22
23	.810	16.7	19.5	2.30	.259	.046	.006	.247	.005	.271	.220	.460	23
24	1.06	13.9	20.7	1.19	.565	.040	.011	.257	.003	.273	.218	.474	24
25	1.51	9.25	18.7	1.10	1.70	.034	.013	.260	.004	.264	.210	.390	25
26	2.08	6.40	10.9	1.08	2.10	.030	.014	.259	.004	.201	.209	.334	26
27	2.87	6.16	10.9	.993	2.35	.028	.048	.249	.004	.194	.210	.502	27
28	3.47	5.10	6.40	1.20	1.94	.025	1.27	.260	.004	.176	.208	.522	28
29	4.08		4.13	1.34	1.95	.021	2.52 A	.266	.003	.178	.194	.566	29
30	3.70		7.08	1.29	2.17	.017	.736 A	.273	.002	.182	.189	.577	30
31	4.56		6.66 A		1.69		.345	.283		.194		.573	31
Mean	1.12	6.50	19.2	4.58	1.40	.595	.167	.783	.040	.183	.158	.397	
Total	3000	15700	51400	11900	3760	1540	448	2100	103	489	409	1060	
Max	5.11	20.6	104	9.06	2.61	2.45	4.04	18.0	.273	.400	.269	1.55	
(day)	31|16:45	22|19:00	18|17:35	3|16:15	7|03:00	5|21:55	28|19:45	6|03:40	1|00:00	11|22:10	25|14:00	21|10:45	
Min	.062	1.88	2.61	.967	.251	.015	.001	.085	0	.003	.034	.170	
(day)	10|04:40	9|12:35	29|10:40	27|17:20	23|19:15	30|23:10	19|18:40	2|13:20	30|12:35	1|00:00	19|11:05	2|08:25	

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

Note: Report data from Aquarius displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

BELANGER CREEK DIVERSION TO CYPRESS LAKE
Station Number: 11AC064

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	0 B	.786	.098	.258	0	0	0	0	---	---	1
2	---	---	0 B	.741	.063	.244	0	0	0	0	---	---	2
3	---	---	0 B	.649	.047	.205	0	0	0	0	---	---	3
4	---	---	0 B	.640	.049	0	0	0	0	0	---	---	4
5	---	---	0 B	.630	.051	0	0	0	0	0	---	---	5
6	---	---	0 B	.617	.054	0	0	0	0	0	---	---	6
7	---	---	.200 B	.599	.159	0	0	0	0	0	---	---	7
8	---	---	.478 B	.593	.291	0	0	0	0	0	---	---	8
9	---	---	.936 B	.629	.293	0	0	0	0	0	---	---	9
10	---	---	3.16	.809	.297	0	0	0	0	0	---	---	10
11	---	---	3.71	.904	.289	0	0	0	0	0	---	---	11
12	---	---	5.49	.795	.288	0	0	0	0	0	---	---	12
13	---	---	8.15	.659	.296	0	0	0	0	0	---	---	13
14	---	---	7.01	.553	.295	0	0	0	0	0	---	---	14
15	---	---	6.59	.536	.290	0	0	0	0	0	---	---	15
16	---	---	2.80	.541	.275	0	0	0	0	0	---	---	16
17	---	---	.852	.304	.295	0	0	0	0	0	---	---	17
18	---	---	.841	.245	.278	0	0	0	0	0	---	---	18
19	---	---	.838	.222	.262	0	0	0	0	0	---	---	19
20	---	---	.846	.212	.239	0	0	0	0	0	---	---	20
21	---	---	.842	.185	.228	0	0	0	0	0	---	---	21
22	---	---	.828	.169	.218	0	0	0	0	0	---	---	22
23	---	---	.819	.169	.215	0	0	0	0	0	---	---	23
24	---	---	.814	.163	.219	0	0	0	0	0	---	---	24
25	---	---	.792	.153	.229	0	0	0	0	0	---	---	25
26	---	---	.800	.135	.226	0	0	0	0	0	---	---	26
27	---	---	.800	.138	.270	0	0	0	0	0	---	---	27
28	---	---	.808	.118	.300	0	0	0	0	0	---	---	28
29	---		.807	.105	.266	0	0	0	0	0	---	---	29
30	---		.801	.093	.259	0	0	0	0	0	---	---	30
31	---		.787		.295		0	0		---		---	31
Mean	---	---	1.64	.436	.224	.024	0	0	0	---	---	---	
Total	---	---	4390	1130	599	61.1	0	0	0	---	---	---	
Max	---	---	11.3	1.82	.336	.306	0	0	0	0	---	---	
(day)			13|20:50	16|09:30	28|02:00	3|16:05	1|00:00	1|00:00	1|00:00	1|00:00			
Min	---	---	0	.086	.036	0	0	0	0	0	---	---	
(day)			1|00:00	30|02:30	7|07:50	3|21:15	1|00:00	1|00:00	1|00:00	1|00:00			

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

Note: Report data from Aquarius displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

WATER SURVEY CANADA — CYPRESS LAKE

Daily Mean Stage Report for 2015 — Station Number: 11AC037 — Stage Units: Metres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	975.220	975.463	975.292	974.977	974.894	974.846	974.731	974.687	---	---	1
2	---	---	975.223	975.428	975.293	974.977	974.907	974.842	974.731	974.686	---	---	2
3	---	---	975.219	975.404	975.289	974.970	974.908	974.840	974.726	974.705	---	---	3
4	---	---	975.216	975.400	975.275	974.967	974.905	974.833	974.731	974.702	---	---	4
5	---	---	975.216	975.407	975.274	974.961	974.924	974.832	974.743	974.697	---	---	5
6	---	---	975.220	975.389	975.270	974.962	974.922	974.823	974.740	974.694	---	---	6
7	---	---	975.233	975.372	975.279	974.957	974.921	974.816	974.757	974.690	---	---	7
8	---	---	975.240	975.366	975.278	974.957	974.920	974.813	974.751	974.688	---	---	8
9	---	---	975.239	975.361	975.276	974.973	974.918	974.809	974.758	974.683	---	---	9
10	---	---	975.262	975.348	975.276	974.973	974.912	974.805	974.759	974.674	---	---	10
11	---	---	975.286	975.342	975.276	974.964	974.906	974.801	974.754	974.668	---	---	11
12	---	---	975.313	975.338	975.248	974.960	974.902	974.795	974.744	974.699	---	---	12
13	---	---	975.347	975.350	975.228	974.950	974.904	974.790	974.750	974.697	---	---	13
14	---	---	975.400	975.353	975.212	974.934	974.911	974.784	974.751	974.693	---	---	14
15	---	---	975.439	975.351	975.188	974.922	974.909	974.795	974.754	974.690	---	---	15
16	---	---	975.480	975.334	975.176	974.913	974.901	974.816	974.755	974.686	---	---	16
17	---	---	975.491	975.336	975.154	974.913	974.887	974.815	974.757	974.683	---	---	17
18	---	---	975.502	975.329	975.118	974.906	974.885	974.814	974.751	974.678	---	---	18
19	---	---	975.508	975.334	975.092	974.908	974.894	974.806	974.750	974.673	---	---	19
20	---	---	975.514	975.326	975.071	974.909	974.879	974.805	974.742	974.672	---	---	20
21	---	---	975.521	975.333	975.055	974.908	974.879	974.800	974.742	974.675	---	---	21
22	---	---	975.526	975.328	975.033	974.899	974.875	974.818	974.732	974.682	---	---	22
23	---	---	975.527	975.331	975.024	974.896	974.866	974.799	974.722	974.682	---	---	23
24	---	---	975.533	975.328	975.013	974.893	974.857	974.795	974.707	974.676	---	---	24
25	---	---	975.527	975.315	975.015	974.891	974.848	974.785	974.701	974.660	---	---	25
26	---	---	975.525	975.317	975.007	974.885	974.847	974.777	974.700	974.646	---	---	26
27	---	---	975.520	975.300	974.989	974.881	974.852	974.766	974.697	974.645	---	---	27
28	---	---	975.518	975.300	974.995	974.880	974.855	974.759	974.692	974.646	---	---	28
29	---		975.504	975.295	974.991	974.885	974.852	974.756	974.690	974.646	---	---	29
30	---		975.498	975.299	974.984	974.892	974.849	974.748	974.689	974.634	---	---	30
31	---		975.485		974.977		974.848	974.728		974.635		---	31
Mean	---	---	975.395	975.349	975.150	974.929	974.888	974.800	974.734	974.677	---	---	
Max	---	---	975.617	975.602	975.401	975.122	974.978	974.913	974.781	974.719	---	---	
(day)			30|03:15	2|02:25	11|03:40	12|14:25	19|10:10	22|03:35	6|20:45	3|15:25			
Min	---	---	975.207	975.268	974.948	974.864	974.819	974.693	974.667	974.604	---	---	
(day)			6|15:50	29|23:55	27|08:15	29|14:10	25|16:15	31|18:10	29|11:45	30|23:45			

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius 3.1.591 displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

CYPRESS LAKE EAST OUTFLOW CANAL
Station Number: 11AC060

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	.028 B	.887	.298	.091	.052	.044	.020	.057	---	---	1
2	---	---	.031 B	.905	.239	.129	.056	.037	.020	.060	---	---	2
3	---	---	.035 B	1.23	.190	.177	.067	.032	.021	.075	---	---	3
4	---	---	.055 B	1.23	.176	.233	.050	.033	.034	.081	---	---	4
5	---	---	.203 B	1.24	.264	.297	.074	.030	.068	.081	---	---	5
6	---	---	1.03 B	1.24	.223	.264	.084	.038	.082	.075	---	---	6
7	---	---	1.72 B	1.24	.175	.157	.075	.034	.058	.090	---	---	7
8	---	---	1.48 B	1.27	.149	.127	.063	.031	.052	.070	---	---	8
9	---	---	1.44 B	1.27	.131	.098	.057	.033	.042	.062	---	---	9
10	---	---	1.42 B	1.15	.117	.084	.131	.030	.041	.029	---	---	10
11	---	---	1.35 B	.901	.106	.082	.052	.024	.039	.015	---	---	11
12	---	---	1.32 B	.499	.112	.074	.043	.031	.038	.009	---	---	12
13	---	---	1.09 B	.586	.194	.085	.042	.024	.035	.065	---	---	13
14	---	---	.594 B	.614	.154	.087	.049	.023	.039	.061	---	---	14
15	---	---	.522 B	.451	.124	.075	.051	.029	.057	.068	---	---	15
16	---	---	.754 B	.087	.107	.070	.047	.025	.068	.070	---	---	16
17	---	---	2.16 B	.082	.116	.086	.044	.028	.065	.058	---	---	17
18	---	---	2.32 B	.081	.091	.111	.044	.030	.063	.082	---	---	18
19	---	---	1.76 B	.080	.194	.142	.051	.031	.054	.066	---	---	19
20	---	---	1.49 B	.083	.276	.158	.047	.033	.052	.070	---	---	20
21	---	---	1.38 B	.085	.210	.213	.045	.034	.045	.066	---	---	21
22	---	---	1.05	.087	.165	.148	.047	.037	.044	.082	---	---	22
23	---	---	.458	.398	.154	.109	.040	.044	.045	.069	---	---	23
24	---	---	.400	.445	.149	.120	.124	.049	.050	.078	---	---	24
25	---	---	.393	.425	.142	.172	.041	.045	.052	.088	---	---	25
26	---	---	.395	.421	.138	.138	.035	.042	.052	.078	---	---	26
27	---	---	.399	.447	.147	.107	.031	.042	.057	.080	---	---	27
28	---	---	.428	.602	.144	.085	.049	.038	.052	.084	---	---	28
29	---		.435	.512	.129	.069	.051	.037	.054	.073	---	---	29
30	---		.459	.395	.123	.059	.038	.036	.056	.076	---	---	30
31	---		.665		.114		.059	.024		.067		---	31
Mean	---	---	.880	.631	.163	.128	.056	.034	.048	.067	---	---	
Total	---	---	2360	1640	436	332	150	90.6	126	180	---	---	
Max	---	---	2.48	1.33	.337	.463	.982	.090	.124	.239	---	---	
(day)			18|01:05	11|10:25	1|00:10	19|00:10	10|19:50	30|17:00	8|12:35	7|12:30			
Min	---	---	.015	.070	.071	.049	.021	.018	.016	.007	---	---	
(day)			4|06:30	17|09:20	18|17:20	30|19:15	30|18:25	11|15:55	1|19:15	12|03:10			

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

STORAGE FACTORS AND EVAPORATION LOSSES
2015

EASTEND RESERVOIR 11AC055

PERIOD	ELEVATION At End of Period (m)	MEAN RESERVOIR SURFACE AREA (dam^2)	EVAPORATION		STORAGE AT		TOTAL CHANGE IN STORAGE (dam^3)
			Penman (m)	Reservoir (dam^3)	Beginning of Period (dam^3)	End of Period (dam^3)	
1	916.799	7793	0.010	8	665	654	-3
2	918.291	12042	0.012	15	654	2446	1806
3	918.293	16202	0.022	36	2446	2449	39
4	918.697	18276	0.061	112	2449	3184	847
5	918.773	20648	0.058	120	3184	3343	279
6	917.735	15879	0.056	88	3343	1645	-1610
7	917.515	12413	0.067	83	1645	1368	-195
8	918.162	13379	0.055	73	1368	2243	948
9	918.358	15930	0.064	102	2243	2553	412
10	917.747	14468	0.032	46	2553	1661	-846
11	917.558	12539	-0.001	-1	1661	1420	-242
12	917.459	11872	0.067	79	1420	1305	-35
13	917.155	10885	0.042	46	1305	975	-284
14	917.105	9965	0.023	23	975	925	-27
15	917.457	10755	0.018	19	925	1303	397
16	917.783	12390	0.036	45	1303	1708	450

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

EASTEND CANAL NEAR EASTEND
Station Number: 11AC052

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	0	0	0	.996	0	0	0	0	---	---	1
2	---	---	0	0	0	.769	0	0	0	0	---	---	2
3	---	---	0	0	0	.102	0	0	0	0	---	---	3
4	---	---	0	0	0	0	0	0	0	0	---	---	4
5	---	---	0	0	0	0	0	0	0	0	---	---	5
6	---	---	0	0	0	0	0	0	0	0	---	---	6
7	---	---	0	0	0	0	0	0	0	0	---	---	7
8	---	---	0	0	0	0	0	0	0	0	---	---	8
9	---	---	0	0	0	0	0	0	0	0	---	---	9
10	---	---	0	0	0	0	0	0	0	0	---	---	10
11	---	---	0	0	1.44	0	0	0	0	0	---	---	11
12	---	---	0	0	2.18	0	0	0	0	0	---	---	12
13	---	---	0	0	2.19	0	0	0	0	0	---	---	13
14	---	---	0	0	2.29	0	0	0	0	0	---	---	14
15	---	---	0	0	2.32	0	0	0	0	0	---	---	15
16	---	---	0	0	2.29	0	0	0	0	0	---	---	16
17	---	---	0	0	2.25	0	1.34	0	0	0	---	---	17
18	---	---	0	0	2.27	0	2.13	0	0	0	---	---	18
19	---	---	0	0	2.23	0	2.12	0	0	0	---	---	19
20	---	---	0	0	2.20	0	2.01	0	0	0	---	---	20
21	---	---	0	0	2.16	0	1.74	0	0	0	---	---	21
22	---	---	0	0	2.13	0	1.17	0	0	0	---	---	22
23	---	---	0	0	2.06	0	.479	0	0	0	---	---	23
24	---	---	0	0	1.92	0	.078	0	0	0	---	---	24
25	---	---	0	0	1.85	0	0	0	0	0	---	---	25
26	---	---	0	0	1.85	0	0	0	0	0	---	---	26
27	---	---	0	0	1.80	0	0	0	0	0	---	---	27
28	---	---	0	0	1.74	0	0	0	0	0	---	---	28
29	---		0	0	1.63	0	0	0	0	0	---	---	29
30	---		0	0	1.18	0	0	0	0	0	---	---	30
31	---		0		.996		0	0		0		---	31
Mean	---	---	0	0	1.32	.062	.357	0	0	0	---	---	
Total	---	---	0	0	3540	161	956	0	0	0	---	---	
Max	---	---	0	0	2.36	1.01	2.15	0	0	0	---	---	
(day)			1|00:00	1|00:00	14|13:10	2|07:30	18|12:15	1|00:00	1|00:00	1|00:00			
Min	---	---	0	0	0	0	0	0	0	0	---	---	
(day)			1|00:00	1|00:00	1|00:00	3|08:40	1|00:00	1|00:00	1|00:00	1|00:00			

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

Note: Report data from Aquarius displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

VAL MARIE EVAPORATION STATION NO. 11EV063
Station Elevation: 600 m
2015

Date	Penman Evaporation Pe	Tipping Bucket ppt	Net Reservoir Evaporation	Period Evaporation Summations	Date	Penman Evaporation Pe	Tipping Bucket ppt	Net Reservoir Evaporation	Period Evaporation Summations	Date	Penman Evaporation Pe	Tipping Bucket ppt	Net Reservoir Evaporation	Period Evaporation Summations	Date	Penman Evaporation Pe	Tipping Bucket ppt	Net Reservoir Evaporation	Period Evaporation Summations
March	mm	mm	Pe - TB ppt	M	April	mm	mm	Pe - TB ppt	M	May	mm	mm	Pe - TB ppt	M	June	mm	mm	Pe - TB ppt	M
1	0.82	0	0.82	Eastend *	1	3.49	0	3.49		1	5.04	0	5.04		1	6.60	0	6.60	
2	0.81	0	0.81	Huff / Newton **	2	2.86	0	2.86		2	4.63	0	4.63		2	1.32	0	1.32	
3	0.56	0	0.56		3	1.91	0	1.91		3	3.88	0	3.88		3	3.26	2	1.26	
4	0.64	0	0.64		4	2.44	0	2.44		4	5.20	0	5.20		4	2.85	0	2.85	
5	1.28	0	1.28		5	0.19	3	-2.81		5	5.68	0	5.68		5	5.91	0	5.91	
6	2.09	0	2.09		6	0.23	0	0.23		6	3.78	1	2.78		6	5.94	0	5.94	
7	1.61	0	1.61		7	0.32	6	-5.68		7	2.83	0	2.83		7	5.75	0	5.75	
8	2.31	0	2.31	0.010 *	8	2.09	0	2.09	0.022 *	8	3.70	0	3.70	0.058 *	8	7.55	0	7.55	0.067 *
9	2.56	0	2.56		9	3.83	0	3.83		9	3.98	0	3.98		9	7.24	0	7.24	
10	2.64	0	2.64		10	4.29	0	4.29		10	4.50	0	4.50		10	4.71	4	0.71	
11	1.86	0	1.86		11	4.50	0	4.50		11	5.55	0	5.55		11	6.54	0	6.54	
12	2.91	0	2.91	0.020 **	12	2.71	0	2.71	0.031 **	12	3.97	0	3.97	0.069 **	12	7.10	0	7.10	0.070 **
13	2.50	0	2.50		13	3.97	0	3.97		13	1.75	0	1.75		13	5.19	0	5.19	
14	2.44	0	2.44		14	3.86	0	3.86		14	2.50	0	2.50		14	5.44	0	5.44	
15	1.60	5.496	-3.89		15	5.36	0	5.36		15	5.02	0	5.02		15	3.02	0	3.02	
16	1.93	5.496	-3.57		16	3.99	0	3.99		16	1.15	11	-9.85		16	5.15	0	5.15	
17	1.70	0	1.70		17	4.73	0	4.73		17	2.80	2	0.80		17	3.95	0	3.95	
18	0.04	9	-8.96		18	4.70	0	4.70		18	4.18	0	4.18		18	2.94	4	-1.06	
19	2.30	0	2.30		19	4.02	0	4.02		19	4.98	0	4.98		19	3.35	15	-11.65	
20	1.73	0	1.73		20	3.95	0	3.95		20	5.41	0	5.41		20	6.02	0	6.02	
21	1.64	0	1.64		21	3.78	0	3.78		21	6.07	0	6.07		21	5.91	0	5.91	
22	2.99	0	2.99		22	4.66	0	4.66		22	5.87	0	5.87		22	5.44	0	5.44	
23	2.09	0	2.09		23	4.05	1	3.05	0.061 *	23	5.97	0	5.97		23	5.74	0	5.74	0.055 *
24	1.31	0	1.31	0.012 *	24	3.68	0	3.68		24	4.85	0	4.85	0.056 *	24	6.12	0	6.12	
25	3.13	0	3.13		25	1.45	5	-3.55		25	4.62	0	4.62		25	5.51	0	5.51	
26	2.33	0	2.33		26	1.97	0	1.97		26	5.13	0	5.13		26	7.22	0	7.22	
27	3.44	0	3.44		27	4.51	0	4.51	0.053 **	27	4.80	0	4.80		27	6.77	0	6.77	0.059 **
28	1.53	4.008	-2.48	0.009 **	28	5.26	0	5.26		28	3.71	0	3.71	0.056 **	28	7.54	0	7.54	
29	3.68	0	3.68		29	6.26	0	6.26		29	4.84	0	4.84		29	6.48	0	6.48	
30	3.95	0	3.95		30	6.00	0	6.00		30	3.74	2	1.74		30	5.44	0	5.44	
31	3.43	0	3.43							31	4.65	0	4.65						
Total	63.83	24	39.83		Total	105.08	15	90.08		Total	134.80	16	118.80		Total	161.99	25	136.99	

Notes:
Division Period Evaporation Summations
* Eastend Reservoir
** Huff and Newton Reservoirs

..... Continued

VAL MARIE EVAPORATION STATION NO. 11EV063
Station Elevation: 600 m
2015

Date July	Penman Evaporation Pe mm	Tipping Bucket ppt mm	Net Reservoir Evaporation Pe-TB ppt	Period Evaporation Summations M	Date Aug.	Penman Evaporation Pe mm	Tipping Bucket ppt mm	Net Reservoir Evaporation Pe - TB ppt	Period Evaporation Summations M	Date Sept.	Penman Evaporation Pe mm	Tipping Bucket ppt mm	Net Reservoir Evaporation Pe-TB ppt	Period Evaporation Summations M	Date Oct.	Penman Evaporation Pe mm	Tipping Bucket ppt mm	Net Reservoir Evaporation Pe - TB ppt	Period Evaporation Summations M
1	3.34	10.008	-6.67	Eastend *	1	7.42	0	7.42		1	4.66	0	4.66		1	2.77	0	2.77	
2	4.28	0	4.28	Huff / Newton **	2	5.24	0	5.24		2	3.71	0	3.71		2	1.40	0	1.40	
3	6.80	0	6.80		3	5.29	0	5.29		3	4.70	0	4.70		3	0.46	14	-13.54	
4	6.81	1.488	5.32		4	4.97	0	4.97		4	1.59	10	-8.41		4	0.80	3	-2.20	
5	3.70	10.512	-6.82		5	5.92	0	5.92		5	0.66	2	-1.34		5	1.29	0	1.29	
6	4.81	0	4.81		6	4.54	4.008	0.53		6	3.49	0	3.49		6	2.04	0	2.04	
7	5.27	0	5.27		7	5.66	0	5.66		7	3.43	0	3.43		7	2.84	0	2.84	
8	6.08	0	6.08	0.064 *	8	5.00	0	5.00	-0.001 *	8	4.10	0	4.10	0.042 *	8	1.91	0	1.91	0.018 *
9	7.02	0	7.02		9	5.96	0	5.96		9	3.54	0	3.54		9	3.03	0	3.03	
10	6.76	0	6.76		10	6.97	0	6.97		10	2.36	0	2.36		10	3.66	0	3.66	
11	3.30	15	-11.70		11	6.79	0	6.79		11	3.81	0	3.81		11	2.65	0	2.65	
12	2.40	7.008	-4.61	0.036 **	12	5.23	0	5.23	0.082 **	12	4.39	0	4.39	0.041 **	12	4.07	0	4.07	0.019 **
13	4.76	27	-22.24		13	6.44	0	6.44		13	4.08	0	4.08		13	2.30	0	2.30	
14	4.91	1.008	3.90		14	5.27	1.008	4.27		14	2.60	0	2.60		14	2.05	0	2.05	
15	5.52	0	5.52		15	5.33	1.008	4.32		15	0.89	6	-5.11		15	1.87	0	1.87	
16	5.49	0	5.49		16	3.14	0	3.14		16	0.31	15	-14.69		16	1.70	0	1.70	
17	4.31	1.008	3.30		17	2.96	0	2.96		17	2.67	0	2.67		17	2.24	0	2.24	
18	5.51	0	5.51		18	1.73	1	0.73		18	3.29	0	3.29		18	2.21	0	2.21	
19	7.20	0	7.20		19	4.97	0	4.97		19	3.44	0	3.44		19	1.76	0	1.76	
20	5.98	0	5.98		20	4.50	0	4.50		20	3.77	0	3.77		20	1.97	0	1.97	
21	8.09	1.992	6.10		21	1.83	0	1.83		21	2.28	0	2.28		21	1.54	0	1.54	
22	6.16	0	6.16		22	3.05	3	0.05		22	2.70	0	2.70		22	1.79	0	1.79	
23	2.42	1.992	0.42		23	4.30	0	4.30		23	3.78	0	3.78	0.023 *	23	1.83	0	1.83	
24	7.01	0	7.01	0.032 *	24	4.40	0	4.40	0.067 *	24	2.72	0	2.72		24	1.34	0	1.34	0.036 *
25	7.08	0	7.08		25	4.69	0	4.69		25	3.59	0	3.59		25	1.32	0	1.32	
26	5.73	5.496	0.23		26	3.08	0	3.08		26	3.46	0	3.46		26	1.15	0	1.15	
27	3.87	49.008	-45.13		27	3.72	0	3.72		27	3.18	0	3.18	0.022 **	27	0.78	0	0.78	
28	1.95	21.504	-19.55	-0.023 **	28	3.85	0	3.85	0.057 **	28	2.50	0	2.50		28	1.23	0	1.23	0.027 **
29	5.28	1.008	4.27		29	4.82	0	4.82		29	3.04	0	3.04		29	0.90	0	0.90	
30	5.84	0	5.84		30	3.29	1	2.29		30	3.07	0	3.07		30	0.67	0	0.67	
31	6.67	0	6.67		31	5.69	0	5.69							31	missing data	0	missing data	
Total	164.33	154.032	10.30		Total	146.04	11.024	135.01		Total	91.79	33	58.79		Total	55.61	17	38.61	

Notes:
Division Period Evaporation Summations
* Eastend Reservoir
** Huff and Newton Reservoirs

STORAGE FACTORS AND EVAPORATION LOSSES
2015

HUFF LAKE 11AC063

PERIOD	ELEVATION At End of Period (m)	MEAN RESERVOIR SURFACE AREA (dam^2)	EVAPORATION		STORAGE AT		TOTAL CHANGE IN STORAGE (dam^3)
			Penman (m)	Reservoir (dam^3)	Beginning of Period (dam^3)	End of Period (dam^3)	
1	815.417	18880	0.020	38	3376	2982	-356
2	815.733	19100	0.009	17	2982	3599	634
3	815.680	19735	0.031	61	3599	3490	-48
4	815.873	20085	0.053	106	3490	3886	502
5	815.838	20424	0.069	141	3886	3816	71
6	815.431	19375	0.056	108	3816	3009	-699
7	815.428	18450	0.070	129	3009	3003	123
8	815.548	18740	0.059	110	3003	3231	338
9	815.744	19430	0.036	70	3231	3622	461
10	815.777	20005	-0.023	-46	3622	3692	23
11	815.724	19955	0.082	163	3692	3580	52
12	815.690	19735	0.057	113	3580	3510	43
13	815.342	18864	0.041	78	3510	2851	-581
14	815.410	18180	0.022	40	2851	2969	157
15	815.653	18928	0.019	35	2969	3436	502
16	815.499	19104	0.027	52	3436	3138	-246

STORAGE FACTORS AND EVAPORATION LOSSES
2015

NEWTON LAKE 11AC056

PERIOD	ELEVATION At End of Period (m)	MEAN RESERVOIR SURFACE AREA (dam^2)	EVAPORATION		STORAGE AT		TOTAL CHANGE IN STORAGE (dam^3)
			Penman (m)	Reservoir (dam^3)	Beginning of Period (dam^3)	End of Period (dam^3)	
1	803.444	59198	0.020	119	11829	13265	1555
2	803.335	60940	0.009	53	13265	12602	-610
3	803.307	59146	0.031	183	12602	12434	15
4	803.311	58834	0.053	310	12434	12458	334
5	803.323	59042	0.069	409	12458	12530	481
6	802.995	55480	0.056	310	12530	10706	-1515
7	802.490	48188	0.070	337	10706	8266	-2102
8	802.460	44675	0.059	263	8266	8133	130
9	802.461	44493	0.036	160	8133	8137	165
10	802.766	46468	-0.023	-107	8137	9554	1309
11	802.842	49160	0.082	402	9554	9927	775
12	802.777	49250	0.057	282	9927	9607	-38
13	803.013	50525	0.041	208	9607	10800	1402
14	803.113	53597	0.022	117	10800	11337	653
15	802.982	53312	0.019	99	11337	10638	-600
16	802.888	51230	0.027	139	10638	10156	-344

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

HUFF LAKE GRAVITY CANAL
Station Number: 11AC065

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	0	0	0	0	0	0	0	---	---	---	1
2	---	---	0	0	0	0	0	0	0	---	---	---	2
3	---	---	0	0	0	0	0	0	0	---	---	---	3
4	---	---	0	0	0	0	0	0	0	---	---	---	4
5	---	---	0	0	0	0	0	0	0	---	---	---	5
6	---	---	0	0	0	0	0	0	0	---	---	---	6
7	---	---	0	0	0	0	0	0	0	---	---	---	7
8	---	---	0	0	.181	0	0	0	0	---	---	---	8
9	---	---	0	0	.917	0	0	0	0	---	---	---	9
10	---	---	0	0	1.13	0	0	0	0	---	---	---	10
11	---	---	0	0	1.35	0	0	0	0	---	---	---	11
12	---	---	0	0	1.39	0	0	0	0	---	---	---	12
13	---	---	0	0	1.40	0	0	0	0	---	---	---	13
14	---	---	0	0	1.40	0	0	0	0	---	---	---	14
15	---	---	0	0	1.27	0	0	0	0	---	---	---	15
16	---	---	0	0	1.10	0	0	0	0 A	---	---	---	16
17	---	---	0	0	.987	0	0	0	---	---	---	---	17
18	---	---	0	0	.935	0	0	0	---	---	---	---	18
19	---	---	0	0	.928	0	0	0	---	---	---	---	19
20	---	---	0	0	.917	0	0	0	---	---	---	---	20
21	---	---	0	0	.918	0	0	0	---	---	---	---	21
22	---	---	0	0	.893	0	0	0	---	---	---	---	22
23	---	---	0	0	.886	0	0	0	---	---	---	---	23
24	---	---	0	0	.866	0	0	0	---	---	---	---	24
25	---	---	0	0	.871	0	0	0	---	---	---	---	25
26	---	---	0	0	.862	0	0	0	---	---	---	---	26
27	---	---	0	0	.626	0	0	0	---	---	---	---	27
28	---	---	0	0	.392	0	0	0	---	---	---	---	28
29	---		0	0	.223	0	0	0	---	---	---	---	29
30	---		0	0	.075	0	0	0	---	---	---	---	30
31	---		0		0		0	0		---		---	31
Mean	---	---	0	0	.661	0	0	0	---	---	---	---	
Total	---	---	0	0	1770	0	0	0	---	---	---	---	
Max	---	---	0	0	1.49	0	0	0	0	---	---	---	
(day)			1|00:00	1|00:00	14|02:00	1|00:00	1|00:00	1|00:00	1|00:00				
Min	---	---	0	0	0	0	0	0	0	---	---	---	
(day)			1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00				

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data computed manually and displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

WATER SURVEY CANADA
HUFF LAKE PUMPING CANAL
Daily Mean Discharge Report for 2015
Station Number: 11AC066
Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	0	0	0	0	0	0.617	0	0	0	0	0	0	1
2	0	0	0	0	0	0.676	0	0	0	0	0	0	2
3	0	0	0	0	0	0.676	0	0	0	0	0	0	3
4	0	0	0	0	0	0.615	0	0	0	0	0	0	4
5	0	0	0	0	0	0.594	0	0	0	0	0	0	5
6	0	0	0	0	0	0.589	0	0	0	0	0	0	6
7	0	0	0	0	0	0.469	0	0	0	0	0	0	7
8	0	0	0	0	0	0.704	0	0	0	0	0	0	8
9	0	0	0	0	0	0.685	0	0	0	0	0	0	9
10	0	0	0	0	0	0.694	0	0	0	0	0	0	10
11	0	0	0	0	0	0.613	0	0	0	0	0	0	11
12	0	0	0	0	0	0.422	0	0	0	0	0	0	12
13	0	0	0	0	0.028	0.206	0	0	0	0	0	0	13
14	0	0	0	0	0.432	0	0	0	0	0	0	0	14
15	0	0	0	0	0.489	0	0	0	0	0	0	0	15
16	0	0	0	0	0.531	0	0	0	0	0	0	0	16
17	0	0	0	0	0.530	0	0	0	0	0	0	0	17
18	0	0	0	0	0.567	0	0	0	0	0	0	0	18
19	0	0	0	0	0.577	0	0	0	0	0	0	0	19
20	0	0	0	0	0.589	0	0	0	0	0	0	0	20
21	0	0	0	0	0.636	0	0	0	0	0	0	0	21
22	0	0	0	0	0.619	0	0	0	0	0	0	0	22
23	0	0	0	0	0.490	0	0	0	0	0	0	0	23
24	0	0	0	0	0.463	0	0	0	0	0	0	0	24
25	0	0	0	0	0.650	0	0	0	0	0	0	0	25
26	0	0	0	0	0.597	0	0	0	0	0	0	0	26
27	0	0	0	0	0.661	0	0	0	0	0	0	0	27
28	0	0	0	0	0.667	0	0	0	0	0	0	0	28
29	0		0	0	0.659	0	0	0	0	0	0	0	29
30	0		0	0	0.644	0	0	0	0	0	0	0	30
31	0		0		0.671		0	0		0		0	31
Mean	0	0	0	0	0.339	0.582	0	0	0	0	0	0	
Total	0	0	0	0	907	653	0	0	0	0	0	0	
Max	0	0	0	0	0.671	0.694	0	0	0	0	0	0	
(day)	1|00:00	1|00:00	1|00:00	1|00:00	31|00:00	10|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	
Min	0	0	0	0	0	0	0	0	0	0	0	0	
(day)	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	14|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

Note: Report data computed manually and displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

NEWTON LAKE MAIN CANAL
Station Number: 11AC054

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	0	0	0	0	0	3.70	0	0	0	0	0	0	1
2	0	0	0	0	0	3.52	0	0	0	0	0	0	2
3	0	0	0	0	0	3.52	0	0	0	0	0	0	3
4	0	0	0	0	0	3.49	0	0	0	0	0	0	4
5	0	0	0	0	0	3.44	0	0	0	0	0	0	5
6	0	0	0	0	0	2.96	0	0	0	0	0	0	6
7	0	0	0	0	0	1.76	0	0	0	0	0	0	7
8	0	0	0	0	0	1.01	0	0	0	0	0	0	8
9	0	0	0	0	0	.771	0	0	0	0	0	0	9
10	0	0	0	0	0	.455	0	0	0	0	0	0	10
11	0	0	0	0	0	0	0	0	0	0	0	0	11
12	0	0	0	0	0	0	0	0	0	0	0	0	12
13	0	0	0	0	0	0	0	0	0	0	0	0	13
14	0	0	0	0	0	0	0	0	0	0	0	0	14
15	0	0	0	0	0	0	0	0	0	0	0	0	15
16	0	0	0	0	0	0	0	0	0	0	0	0	16
17	0	0	0	0	0	0	0	0	0	0	0	0	17
18	0	0	0	0	0	0	0	0	0	0	0	0	18
19	0	0	0	0	0	0	0	0	0	0	0	0	19
20	0	0	0	0	0	0	0	0	0	0	0	0	20
21	0	0	0	0	3.22	0	0	0	0	0	0	0	21
22	0	0	0	0	3.24	0	0	0	0	0	0	0	22
23	0	0	0	0	3.62	0	0	0	0	0	0	0	23
24	0	0	0	0	3.69	0	0	0	0	0	0	0	24
25	0	0	0	0	3.69	0	0	0	0	0	0	0	25
26	0	0	0	0	3.71	0	0	0	0	0	0	0	26
27	0	0	0	0	3.70	0	0	0	0	0	0	0	27
28	0	0	0	0	3.62	0	0	0	0	0	0	0	28
29	0		0	0	3.60	0	0	0	0	0	0	0	29
30	0		0	0	3.51	0	0	0	0	0	0	0	30
31	0		0		3.76		0	0		0		0	31
Mean	0	0	0	0	1.27	.820	0	0	0	0	0	0	
Total	0	0	0	0	3400	2130	0	0	0	0	0	0	
Max	0	0	0	0	4.00	3.92	0	0	0	0	0	0	
(day)	1|00:00	1|00:00	1|00:00	1|00:00	23|06:29	1|11:59	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	
Min	0	0	0	0	0	0	0	0	0	0	0	0	
(day)	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	10|17:29	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data computed manually and displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES

FRENCHMAN RIVER BASIN
SURFACE WATER USE (MINOR DIVERSIONS) FOR 2015
(VOLUME IN CUBIC DECAMETERS)

File Number	March		April		May		June		July		August		September		
	1-15	16-31	1-15	16-30	1-15	16-31	1-15	16-30	1-15	16-31	1-15	16-31	1-15	16-30	Total
	Minor Diversions Associated with Cypress Area														
65															**0**
70A															**0**
70B															**0**
80				13.3	15.5										**29**
93				13.3	15.5										**29**
121					3.1	8.2	7.2								**19**
122															**0**
123					3.3	8.9	2.2								**14**
124					10.3	27.4	24.0								**62**
129															**0**
334		9.3	15.4	15.4	7.2										**47**
335			1	2.6	0.5										**4**
369															**0**
379															**0**
411			5.1	12.8	2.6										**21**
989															**5**
1014															**0**
1589															**0**
2235															**0**
2236															**0**
2851															**0**
3635															**0**
3964			6.6												**7**
5525															**0**
5729															**0**
6339															**0**
7331															**0**
8201															**0**
9138															**0**
9139															**0**
9140															**0**
9450			5.0	1.5											**7**
9951															**0**
10156															**0**
10411	5.8	6.2	2.7												**15**
10804															**0**
10805															**0**
10836															**0**
10864															**0**
11974		10.4	17.3	17.3	8.1										**53**
11975			3.6	9	1.8										**14**
12232					7.4	4.9									**12**
14420															**0**
15596															**0**
15760															**0**
Sub-Total	**5.8**	**25.9**	**56.7**	**85.2**	**75.3**	**49.4**	**33.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**332**
Domestic Uses	**2.6**	**11.7**	**25.5**	**38.3**	**33.9**	**22.2**	**15.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**149**
Total	**8.4**	**37.6**	**82.2**	**123.5**	**109.2**	**71.6**	**48.4**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**481**

Domestic uses: 45% of Sub-Total

Continued ...

FRENCHMAN RIVER BASIN (continued)
SURFACE WATER USE (MINOR DIVERSIONS) FOR 2015
(VOLUME IN CUBIC DECAMETERS)

File Number	March		April		May		June		July		August		September		
	1-15	16-31	1-15	16-30	1-15	16-31	1-15	16-30	1-15	16-31	1-15	16-31	1-15	16-30	Total
	Minor Diversions Associated with Eastend														
55					15.9	20.5									**36.4**
60															**0**
74															**0**
118							15.4								**15.4**
154															**0**
461															**0**
1289															**0**
2305															**0**
4579															**0**
4665															**0**
4848						2.5	7.6	1.0							**11.1**
4912					2.8	2.1									**4.9**
5235															**0**
5250															**0**
5278															**0**
5298			7.4												**7.4**
5493															**0**
6064															**0**
6432					5.7	4.3									**10**
7312															**0**
7682															**0**
8131															**0**
8632															**0**
8756															**0**
8901	2.3	2.4	2.3	0.5											**7.5**
9137															**0**
9490															**0**
9552															**0**
9592															**0**
9691					4.7	3.5									**8.2**
9957															**0**
10425															**0**
11409															**0**
11455															**0**
11864															**0**
12082															**0**
12207															**0**
12213															**0**
12400					10.6	7.9									**18.5**
12591															**0**
13524															**0**
15341															**0**
15342															**0**
15343															**0**
15535															**0**
15604															**0**
16625															**0**
16447															**0**
16666															**0**
16667					2.8	2.1									**4.9**
Sub-Total	**2.3**	**2.4**	**9.7**	**0.5**	**42.5**	**42.9**	**23**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**124.3**
Domestic Uses	**1.0**	**1.0**	**4.4**	**0.2**	**19.1**	**19.3**	**10.4**	**0.5**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**55.9**
Total	**3.3**	**3.4**	**14.1**	**0.7**	**61.6**	**62.2**	**33.4**	**1.5**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**180.2**

Domestic uses: 45% of Sub-Total

Continued ...

FRENCHMAN RIVER BASIN (continued)

SURFACE WATER USE (MINOR DIVERSIONS) FOR 2015

(VOLUME IN CUBIC DECAMETERS)

File Number	March		April		May		June		July		August		September		
	1-15	16-31	1-15	16-30	1-15	16-31	1-15	16-30	1-15	16-31	1-15	16-31	1-15	16-30	Total
	Minor Diversions Associated with Val Marie Area														
479															**0**
507															**0**
657															**0**
992															**0**
1603															**0**
3929															**0**
4865															**0**
5002															**0**
5084															**0**
5085															**0**
5086															**0**
5871															**0**
7332															**0**
7645															**0**
7754															**0**
7778															**0**
7935															**0**
8322															**0**
8345															**0**
9481															**0**
9571															**0**
9596															**0**
10064															**0**
10962															**0**
11617															**0**
11618															**0**
15061															**0**
15388															**0**
15399															**0**
15400															**0**
15408															**0**
15413															**0**
15450	10.9	8.0													**19**
15487															**0**
15639		26.3	8.1												**34**
15706															**0**
15714															**0**
16545															**0**
V.M. Pump 1	**0**	**0**	**0**	**0**	**98**	**65**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**163**
V.M. Pump 2	**0**	**0**	**0**	**0**	**17**	**17**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**34**
Sub-Total	**10.9**	**34.3**	**8.1**	**0**	**115**	**82**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**250**
Domestic Uses	**4.9**	**15.4**	**3.6**	**0.0**	**51.8**	**36.9**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**112.6**
Total	**15.8**	**49.7**	**11.7**	**0.0**	**166.8**	**118.9**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**362.6**

Domestic uses: 45% of Sub-Total

Continued ...

FRENCHMAN RIVER BASIN (continued)
SURFACE WATER USE (MINOR DIVERSIONS) FOR 2015
(VOLUME IN CUBIC DECAMETRES)

Minor Diversions Associated with International Boundary Area

File	March		April		May		June		July		August		September		
Number	1-15	16-31	1-15	16-30	1-15	16-31	1-15	16-30	1-15	16-31	1-15	16-31	1-15	16-30	Total
3694															**0**
4992															**0**
8855															**0**
8856															**0**
11447															**0**
11448															**0**
11449															**0**
11450															**0**
11451															**0**
11452															**0**
12253															**0**
12545															**0**
12546															**0**
12547															**0**
12599															**0**
12600															**0**
12670															**0**
Sub-Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Domestic Uses	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Domestic uses: 45% of Sub-Total

Minor Diversions Associated with Cypress Area															
	8	**37**	**82**	**124**	**109**	**72**	**48**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**481**
Minor Diversions Associated with Eastend Area															
	3	**4**	**14**	**1**	**62**	**62**	**33**	**1**	**0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**180**
Minor Diversions Associated with Val Marie Area															
	16	**50**	**12**	**0.0**	**167**	**119**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**363**
Minor Diversions Associated with International Boundary Area															
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	**27**	**91**	**108**	**125**	**338**	**253**	**81**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1024**

Water Rights Data supplied by Saskatchewan Water Security Agency.
There was no usage reported for periods 13 to 16 (September – October).
A 25 percent return flow factor was applied to Val Marie Pumps 1 and 2.

In 2005, the following licences in the Frenchman River basin were determined to be either abandoned, never active, located in Grasslands National Park, or located on non-contributing or back flood operation areas: 690, 943, 1691, 1992, 2154, 3057, 3284, 8696, 9076, 9219, 10659, 10853, 11142, 11237, 11372, 11431, 11608, 11835, 12647, 15402, 15406, 15416, and 15587.

TABLE 16

MONTH-END CONTENTS OF MAJOR RESERVOIRS IN LODGE CREEK, BATTLE CREEK AND FRENCHMAN RIVER BASINS FOR 2015

(QUANTITIES IN CUBIC DECAMETRES)

	Altawan Reservoir	Cypress Lake	Eastend Reservoir	Huff Lake	Newton Lake	(a) Combined Usable Storage	Percent of Live Storage (a/b*100)
FEBRUARY	6,960	111,141	623	3,338	11,757	103,763	84
MARCH	7,049	116,895	2,561	3,414	12,494	112,357	91
APRIL	6,900	112,642	3,270	3,908	12,853	109,517	88
MAY	5,028	105,417	1,016	2,999	9,867	94,271	76
JUNE	4,606	103,549	2,337	3,261	8,067	91,764	74
JULY	4,226	102,592	1,558	3,736	9,882	91,938	74
AUGUST	3,422	99,773	1,074	3,492	9,549	87,254	70
SEPTEMBER	3,350	98,783	996	3,077	11,282	87,432	71
OCTOBER	3,299	97,433	1,870	3,056	10,151	85,753	69
Full Supply Level (FSL)	6,710	128,100	3,190	3,700	12,269		
Dead Storage	0	30,031	0	25	0		
Percentage of FSL on October 31	49	76	59	83	83		

Total storage at FSL: 153,969

Total dead storage: 30,056

Total available live storage with Cypress Lake included: 123,913 (b)

Total available live storage without Cypress Lake included: 25,844

Note: Cypress Lake was above the dead storage elevation and total lake contents were included in the calculations.

WATER SURVEY CANADA
Daily Mean Discharge Report for 2015

LYONS CREEK AT INTERNATIONAL BOUNDARY
Station Number: 11AB075

Discharge Units: Cubic Metres Per Second
Total Units: Cubic Decametres

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day
1	---	---	0 B	.019 E	.005 E	0	0	0	0	0	---	---	1
2	---	---	0 B	.018 E	.005 E	0	0	0	0	0	---	---	2
3	---	---	0 B	.018 E	.005 E	0	0	0	0	0	---	---	3
4	---	---	0 B	.018 E	.004 E	.000	0	0	0	0	---	---	4
5	---	---	.000 B	.017 E	.004 E	.000	0	0	0	0	---	---	5
6	---	---	.003 B	.017 E	.003 E	.000	0	0	0	0	---	---	6
7	---	---	.005 B	.016 E	.003 E	0	0	0	0	0	---	---	7
8	---	---	.007 B	.016 E	.002 E	0	0	0	0	0	---	---	8
9	---	---	.010 B	.015 E	.002 E	0	0	0	0	0	---	---	9
10	---	---	.040 B	.015 E	.001 E	0	0	0	0	0	---	---	10
11	---	---	.114 B	.014 E	.001 E	0	0	0	0	0	---	---	11
12	---	---	.189 B	.014 E	.000 E	0	0	0	0	0	---	---	12
13	---	---	.600 B	.014 E	.000 E	0	0	0	0	0	---	---	13
14	---	---	1.24 B	.013 E	0	0	0	0	0	0	---	---	14
15	---	---	1.15 B	.013 E	0	0	0	0	0	0	---	---	15
16	---	---	.572 E	.012 E	.000	0	0	0	0	0	---	---	16
17	---	---	.096 E	.012 E	.001	0	0	0	0	0	---	---	17
18	---	---	.043 E	.011 E	.000	0	0	0	0	0	---	---	18
19	---	---	.038 E	.011 E	.000	0	0	0	0	0	---	---	19
20	---	---	.033 E	.010 E	0	0	0	0	0	0	---	---	20
21	---	---	.028 E	.010 E	0	0	0	0	0	0 A	---	---	21
22	---	---	.024 E	.009 E	0	0	0	0	0	0 E	---	---	22
23	---	---	.023 E	.009 E	0	0	0	0	0	0 E	---	---	23
24	---	---	.022 E	.009 E	0	0	0	0	0	0 E	---	---	24
25	---	---	.022 E	.008 E	0	0	0	0	0	0 E	---	---	25
26	---	---	.022 E	.008 E	0	0	0	0	0	0 E	---	---	26
27	---	---	.021 E	.007 E	0	0	0	0	0	0 E	---	---	27
28	---	---	.021 E	.007 E	0	0	0	0	0	0 E	---	---	28
29	---		.020 E	.006 E	0	0	0	0	0	0 E	---	---	29
30	---		.020 E	.006 E	0	0	0	0	0	0 E	---	---	30
31	---		.019 E		0		0	0		0 E		---	31
Mean	---	---	.141	.012	.001	.000	0	0	0	0	---	---	
Total	---	---	378	32.1	3.22	.034	0	0	0	0	---	---	
Max	---	---	1.45	.019	.006	0	0	0	0	0	---	---	
(day)			14|23:15	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00			
Min	---	---	0	.006	0	0	0	0	0	0	---	---	
(day)			1|00:00	29|03:10	12|11:55	1|00:00	1|00:00	1|00:00	1|00:00	1|00:00			

A - Manual Gauge B - Ice Conditions E - Estimated D - Dry

AQUARIUS TIME-SERIES™ SOFTWARE

Note: Report data from Aquarius 3.1.591 displayed in a modified format.

APPROVED BY THE FIELD REPRESENTATIVES OF CANADA AND THE UNITED STATES