

Report
on
Division and Use of Water
of
St. Mary and Milk Rivers
1926

WATER SURVEY OF CANADA
CALGARY DISTRICT OFFICE

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THE INVESTIGATIVE COMMISION
FOR MISSING PERSONS

SEARCHED

REPORT TO THE INTERNATIONAL JOINT COMMISSION

on

THE DIVISION AND USE MADE OF THE WATERS OF

ST. MARY AND NILE RIVERS

by

J. T. JOHNSTON

representing Canada

and

Dr. Elwood Mead

representing the United States

The Honourable, the International Joint Commission,
Washington, D.C. and Ottawa, Canada.

Gentlemen,-

In compliance with the provisions of
Clause 10 of your order of the 4th of October, 1921,
directing the division of the waters of St.Mary and
Milk rivers between the United States and Canada, we
are transmitting herewith a report on the operations
during the irrigation season of 1926.

Respectfully submitted,

Accredited Irrigation Officer of His Majesty.

Accredited Reclamation Officer of the United States.

Date: 5th April, 1927.

INTRODUCTION

The field work in the division and administration of the waters of the St. Mary and Milk rivers in Alberta, Saskatchewan and Montana during the irrigation season of 1926, was conducted by the same engineers as in previous years.

Dr. Elwood Mead, Commissioner of the United States Bureau of Reclamation, as accredited officer for the United States, was represented in the field by members of his staff stationed at Malta, Montana. Mr. J. T. Johnston, Director, Dominion Water Power and Reclamation Service, as accredited officer for His Majesty, was represented by Mr. S. G. Dawson.

The water of the two rivers was divided between the two countries in accordance with the order of the Commission dated in Ottawa, Canada, on the 6th day of October, 1921.

The hydrometric data, on which this report is based, were obtained in Montana by engineers of the United States Geological Survey under the direct personal supervision of Mr. W. A. Lamb, District

Engineer, Helena, Montana; while those from streams and ditches in Canada were collected under the supervision of the Commissioner of Irrigation, Dominion Water Power and Reclamation Service, Calgary, Alberta. International gauging stations were visited frequently by representatives of both countries.

A table showing the daily use made of the waters of St.Mary river was forwarded, weekly to the Manager of the United States Milk river project; to the Superintendent, Lethbridge section, Canadian Pacific Railway, Irrigation system and to the Director, Dominion Water Power and Reclamation Service. As this table showed the computed natural flow of the St.Mary river at the international boundary and the share of this flow to which each country was entitled, the engineers in the field kept in constant touch with the conditions relative to the flow of the different streams affected by the treaty, the quantity of water stored or released from storage and the quantity diverted by each country.

DIVISION OF WATER

The loss between the intake of the United States St.Mary Canal and the gauging station at the

canal crossing of the St.Mary river, which this year was 13% of the water diverted at the headgates, is assumed to return directly to the river and eventually becomes available to Canada. Therefore, the discharge of 100,100 acre-feet of the canal at the St.Mary crossing during the period of operation between 16th April and 16th September, is considered as the actual quantity diverted by the United States. 95,500 acre-feet of St.Mary river water were delivered to the Milk river.

Storing in Sherburne reservoir was commenced with the spring breakup and continued until May 11th when 20,000 acre-feet of the flow of Swiftcurrent creek had been impounded. This stored water was released during the season to augment the flow of the river and was fully expended by the end of July.

As only 100 acre-feet were diverted from Milk river basin in Canada, the natural flow of the river is considered as delivered to the United States at Eastern Crossing. From the Northern tributaries of Milk river, 10,100 acre-feet from Lodge creek, 12,800 acre-feet from Battle creek, 55,600 acre-feet from

Frenchman river and 13,900 acre-feet from Rock creek crossed the international boundary into Montana.

The Canadian Pacific Railway canal at Kimball diverted 160,000 acre-feet from the St.Mary river during the period of its operation from April 15th to October 19th for the irrigation of lands in the Lethbridge section and the Taber extension. Canadian irrigators diverted 225 acre-feet from Lodge creek; 1,503 acre-feet from Battle creek and 777 acre-feet from Frenchman river to irrigate lands in these basins, but there was no diversion from Rock and Whitewater creeks in Canada.

The proper share due each country from the St.Mary river, as defined by your Order of the 4th of October, 1921, was determined by making current meter measurements of the discharge of the headwaters of St.Mary river, computing the inflow to and measuring the outflow from the Sherburne reservoir, the quantity diverted by the St.Mary canal, and the quantity delivered to Canada at the international boundary. From these measurements and calculations the natural flow of St. Mary river was computed and the share to which each country was entitled, determined on the following basis:-

- (1) When the natural flow of St.Mary river

was less than 666 cubic feet per second, Canada was entitled to three-quarters of that flow and the United States, one-quarter.

- (2) When the natural flow was greater than 666 cubic feet per second, Canada was entitled to 500 cubic feet per second, plus one-half of the increase over 666 cubic feet per second and the United States entitled to the remainder.

WATER SUPPLY

The precipitation on the drainage basins of St.Mary and Milk rivers during the winter 1925 - 26 was so very much below the average that it may be considered as the lowest for many years.

The annual survey of the snow conditions on the headwaters of the St.Mary river determined that the snow accumulated on the drainage basin was considerably less than has ever before been known, indicating that without exceptionally heavy rains during the following season, the discharge from the river could be expected to be at a minimum. Mountain fed streams, usually show considerable increasing daily discharges during May and June, but this year the St.Mary river reached its maximum of 1,900 cubic feet per second on May 9th and, despite some heavy rains during June, continued a falling stage throughout the season. The run-off in May was 50% and in June 35% of the average of 24 years on record.

The inflow to Milk river from its Northern tributaries in Saskatchewan was much below the normal flow. During May and June these tributaries discharged only 20% of the average flow. From the Lodge creek basin the recorded flow from March 1st to the end of the season of 10,100 acre-feet at the boundary was only one-third of the average for the 15 years on record. 85% of this flow passed off during March before it could be utilized, in Canada, for irrigation purposes, and the discharge ceased at the boundary by the middle of July.

In the Battle creek basin the seasonal flow at the boundary was also 1/3 of the average flow; 60% of this flow occurred before the irrigation season with the stream going practically dry by the middle of July.

The flow of the Frenchman river was 63% of normal, with 68% of the flow occurring in March. This stream was practically dry during August and early September.

The flow of Swiftcurrent, Canyon and other creeks above Sherburne until May 11th was impounded in Sherburne reservoir. The 20,000 acre-feet so stored was used to increase the diversion of the United States St. Mary canal and was all used up by the end of July.

(Water Storied or released from Sheddams Reservoir)
to October inclusive, in this table. Sheet No. 1
Shows the four sheets for each month, April

for use and need by Canada.
divested by the United States and the water available
navigation season, the water available for use and
the natural flow of the St. Mary River during the
Table No. 1 shows the method of determining

water of the two basins.
summarize the data on the division and use made of the
The tables following have been prepared to

DESCRIPTION OF TABLES

In the two drainage basins during 1926.
and discharge at all the gauge stations operated
of different meter measurements, the daily gauge heights
an appendix to this report gives the results

In Canada dividing themself.
preceding years on the international streams and general
Canada maintained the same stations as in

the fixed engineer.
mainland and operated under the joint supervision of
streams in the St. Mary and Milk River basins were
used in the determination of the daily flow of the
All international gauge stations generally

shows the daily inflow and outflow of Sherburne reservoir. The difference gives the quantity of water stored or released from storage. On this sheet the unrecorded inflow is determined by comparison with the recorded flows of Swiftcurrent and Canyon creeks and by use of the storage curve of Sherburne reservoir to give the gain or loss in storage. This estimate is put in the column headed "unrecorded inflow". As the stream flow records for April and October are incomplete this sheet for these months is left unfinished.

Sheet No. 2 (Determination of the natural flow of St.Mary River) shows the quantity of water diverted, stored or released from storage by the United States and the natural flow of St.Mary river which would cross the international boundary if undisturbed. Two days has been estimated as the time for stored water released at Sherburne to reach the boundary so this lag has been applied on this sheet.

Sheet No. 3 (Water available and used by United States) shows the water available for use by the United States by ruling of your Order of October 4th, 1921, the water diverted and the excess or deficiency of this quantity over the amount available.

Sheet No.4 (Water available for use and used by Canada) shows the natural flow of St. Mary river at Kimball, which is near the crossing of the international boundary; Canada's share under the order of the Commission, the actual discharge of the river at Kimball which is the quantity available for use by Canada, the quantity used by Canada and the excess or deficiency of the quantity received by Canada as compared with the share.

Table No.2 (Division of St. Mary river, Canada) is in two parts. Part one shows in acre-feet, the quantity of water in the St. Mary river basin that is available, each month for use by Canada. The second part shows the disposition made of the available water, the quantity diverted by Canada, the quantity wasted, the loss or gain in the main canals, and the quantity left in the river below all points of diversion.

Table No.3 gives the available data on diversions in Canada from the principal northern tributaries of Milk river and the quantity which crossed the boundary into the United States.

DETERMINATION OF NATURAL FLOW OF ST. MARY RIVER
WATER STORED OR RELEASED FROM SHERBURNE RESERVOIR
APRIL - 1926

Day	Inflow into Sherburne Reservoir	Swiftcurrent: Water Creek below	Released	Water Stored	Water Released	No. stored water released in April
	Recorded Inflow	Unrecorded		Creek	Sherburne	
	Swiftcurrent: Canyon	Inflow	Total			
	Creek	Creek	estimated	Inflow		
1					30	
2					30	
3					25	
4					20	
5					20	
6					20	
7					25	
8					30	
9					40	
10					55	
11					100	
12					216	
13					216	
14					216	
15					216	
16					212	
17					466	
18				790	324	466
19				672	356	316
20				739	467	272
21				464	464	-
22	267	35	71	393	369	4
23	234	44	52	330	290	40
24	158	52	53	293	264	29
25	168	53	49	270	240	30
26	178	46	49	273	198	75
27	226	39	48	313	193	130
28	296	30	72	398	203	195
29	387	24	90	501	225	276
30	458	23	106	587	221	366
Sec.-ft.	2422	346	590	6023	3834	4136
Mean	269					138
Ac.-ft.	4800	682	1170	11900	7600	8200

Table 1
April
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DETERMINATION OF NATURAL FLOW OF ST.MARY RIVER
APRIL - 1926

	:St.Mary River:Diverted by:	Stored by:	Total in:	Stored Water:	Natural flow
Day	at Kimball	: U.S.R.S.	: U.S.R.S.:	Sec.-ft.:	Released :St.Mary River
1	156	-	30	186	186
2	156	-	30	186	186
3	143	-	30	173	173
4	130	-	30	160	160
5	130	-	25	155	155
6	143	-	20	163	163
7	143	-	20	163	163
8	156	-	20	176	176
9	156	-	25	181	181
10	160	-	30	190	190
11	170	-	40	210	210
12	180	-	55	235	235
13	192	-	100	292	292
14	198	-	216	414	414
15	220	-	216	436	436
16	286	-	216	502	502
17	367	-	216	583	583
18	418	32	212	662	662
19	413	148	466	1027	1027
20	678	174	466	1318	1318
21	868	228	316	1412	1412
22	1000	270	272	1542	1542
23	1010	286	-	1296	1296
24	911	319	4	1234	1234
25	853	324	40	1217	1217
26	790	320	29	1139	1139
27	736	320	30	1086	1086
28	736	322	75	1133	1133
29	770	322	130	1222	1222
30	875	329	195	1399	1399
Sec.-ft.	13144	3394	3554	20092	20092
Mean	438	261	118	670	670
Ac.-ft.	26100	6730	7020	39900	39900

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Table 1
April
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DIVISION OF WATER OF ST. MARY RIVER
WATER USED BY UNITED STATES
APRIL - 1926

	Natural flow: AVAILABLE FOR USE BY U.S.A.	USED BY U.S.A.	Excess:Deficit
Day:	St. Mary R. :U.S. :Stored Water: Total	Diverted: Stored: Total:	:ency
	: at Kimball :Share : Released :	:	: Of Share Used
1	186	46	0
2	186	46	0
3	173	43	0
4	160	40	0
5	155	39	0
6	163	41	0
7	163	41	0
8	176	44	0
9	181	45	0
10	190	48	0
11	210	52	0
12	235	59	0
13	292	73	0
14	414	103	0
15	436	109	0
16	502	125	0
17	583	146	0
18	662	165	0
19	1027	347	0
20	1315	492	0
21	1412	539	0
22	1542	604	0
23	1296	481	0
24	1234	450	0
25	1217	441	0
26	1139	403	0
27	1086	376	0
28	1133	400	0
29	1222	444	0
30	1399	532	0
Total Sec.-ft.	20092	6774	6774
Mean	670	226	226
Total Ac.-ft.	39900	13400	13400

Table 1
April
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DIVISION OF WATER OF ST. MARY RIVER
WATER AVAILABLE FOR USE AND USED BY CANADA
APRIL - 1926.

Day	Natural flow of St. Mary River at Kimball.	Canada's Share at Kimball.	St. Mary River by Kimball.	Diverted to Canada.	Excess of Canada.	Deficiency Delivered.
1	186	140	156		16	
2	186	140	156		16	
3	173	130	143		13	
4	160	120	130		10	
5	155	116	130		14	
6	163	122	143		21	
7	163	122	143		21	
8	176	132	156		24	
9	181	136	156		20	
10	190	142	160		18	
11	210	158	170		12	
12	235	176	180		4	
13	292	219	192			27
14	414	311	198			113
15	436	327	220	78		107
16	502	377	286	157		91
17	583	437	367	200		70
18	662	497	418	225		79
19	1027	680	413	322		267
20	1313	826	676	371		148
21	1412	873	868	353		5
22	1542	938	1000	341	62	
23	1296	815	1010	348	195	
24	1234	784	911	368	127	
25	1217	776	853	382	77	
26	1139	736	790	373	54	
27	1086	710	736	395	26	
28	1133	733	736	437	3	
29	1222	778	770	480		
30	1399	867	875	459	8	
Total Sec.pft.	20092	13318	13144	5289	741	915
Mean	670	226 444	438	330	24.7	30.5
Total Ac.-ft.	39900	13400 76,420	26100	10500	1470	1820

26400

DETERMINATION OF NATURAL FLOW OF ST. MARY RIVER
WATER STORED OR RELEASED FROM SHERBURN RESERVOIR
MAY - 1926

Day	INFLOW INTO SHERBURN RESERVOIR			Swiftcurrent: Water		Water
	Recorded Inflow	Unrecorded: Total	Total Creek below	Estimated	Released	
	Swiftcurrent: Canyon inflow	Inflow	Sherburne			
	Creek	Creek	Estimated			
1	442	22.5	103	567	268	299
2	356	32.0	85	473	233	240
3	305	32.9	64	412	163	249
4	368	22.5	86	477	70	407
5	455	25.9	108	599	82	517
6	340	32.9	82	455	82	373
7	267	32.0	66	365	83	282
8	215	25.3	53	293	103	190
9	180	21.5	44	246	106	140
10	156	20.0	39	215	133	82
11	144	17.6	32	194	204	-
12	130	15.8	29	175	281	-
13	130	16.7	29	176	320	-
14	163	21.5	37	222	365	-
15	204	27.1	46	277	405	-
16	210	25.9	35	271	413	-
17	207	26.5	35	268	363	-
18	202	27.1	34	263	369	-
19	210	30.4	36	276	402	-
20	267	45.7	47	360	402	-
21	276	42.4	32	350	405	-
22	231	34.6	27	293	405	-
23	192	30.4	23	252	391	-
24	188	28.3	22	238	361	-
25	168	23.5	19	211	338	-
26	141	20.5	16	178	232	-
27	134	20.5	16	171	228	-
28	130	19.5	15	165	250	-
29	134	20.0	15	169	281	-
30	139	20.0	16	175	296	-
31	130	18.5	15	164	308	-
Sec.-ft.	6831	800.0	1306	8950	8342	2779
Mean	220	25.8	42.1	288	269	90
Ac.-ft.	13500	1590	2590	17700	16500	5510
						4300

DETERMINATION OF NATURAL FLOW OF ST. MARY RIVER
MAY - 1926

	St.Mary River:Diverted by:Stored by:	Total In :	Stored Water:	Natural flow		
Day : at Kimball	: U.S.R.S. : U.S.R.S.:	Sec.-ft.	Released	: St.Mary River		
1	934	378	276	1588	-	1588
2	1060	392	366	1818	-	1818
3	1090	398	299	1787	-	1787
4	1060	408	240	1708	-	1708
5	1050	408	249	1707	-	1707
6	1020	408	407	1835	-	1835
7	981	406	517	1904	-	1904
8	911	402	373	1686	-	1686
9	811	400	282	1493	-	1493
10	729	396	190	1315	-	1315
11	697	396	140	1233	-	1233
12	658	404	82	1144	-	1144
13	658	416	-	1074	10	1064
14	622	434	-	1056	106	950
15	628	442	-	1070	144	926
16	640	460	-	1100	143	957
17	665	468	-	1133	128	1005
18	658	480	-	1138	142	996
19	678	484	-	1162	95	1067
20	710	488	-	1198	106	1092
21	763	492	-	1255	126	1129
22	797	502	-	1299	42	1257
23	797	502	-	1299	55	1244
24	790	506	-	1296	112	1184
25	770	512	-	1282	139	1143
26	804	474	-	1278	123	1155
27	710	416	-	1126	127	999
28	652	414	-	1066	54	1012
29	622	410	-	1032	57	975
30	609	408	-	1017	65	932
31	597	408	-	1005	112	893
Sec.-ft.	24171	13512	3412	41104	1906	39198
Mean	780	436	110	1320	61	1260
Ac.-ft.	48000	26800	6780	81500	3750	77500

Table 1.
May
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DIVISION OF WATER OF ST. MARY RIVER
WATER USED BY UNITED STATES
MAY - 1926.

Day	Natural Flow: AVAILABLE FOR USE BY U.S.A.			USED BY U.S.A.			Excess :Defici-		
	St. Mary R. at Kimball	U.S. Share	Stored Water: Released	Total:	Diverted:	Stored:	Total:	of Share used	
1	1588	627		627	378	276	654	27	
2	1818	742		742	392	366	758	16	
3	1787	727		727	398	299	697	30	
4	1798	687		687	408	240	648	39	
5	1707	687		687	408	249	657	30	
6	1835	750		750	408	407	815	65	
7	1904	785		785	406	517	923	138	
8	1686	676		676	402	373	775	99	
9	1493	580		580	400	282	682	102	
10	1315	490		490	396	190	596	96	
11	1233	450		450	396	140	536	86	
12	1144	405		405	404	82	486	81	
13	1064	365	10	375	416		416	41	
14	950	308	106	414	434		434	20	
15	926	296	144	440	442		442	2	
16	957	312	143	455	460		460	5	
17	1005	335	128	463	468		468	5	
18	996	331	142	473	480		480	7	
19	1067	367	95	462	484		484	22	
20	1092	379	106	485	488		488	3	
21	1129	398	126	524	492		492	32	
22	1257	462	42	504	502		502	2	
23	1244	455	55	510	502		502	8	
24	1184	425	112	537	506		506	31	
25	1143	405	139	544	512		512	32	
26	1155	410	123	533	474		474	59	
27	999	333	127	460	416		416	2	
28	1012	339	54	393	414		414	21	
29	975	320	57	377	410		410	33	
30	932	299	85	364	408		408	24	
31	893	260	112	392	408		408	16	
ft.	39198	14425	1906	16331	13512	3421	16933	909	307
	1260	465	61	526	436	110	546	29.3	9.9
	77500	28600	3750	32300	26800	6790	33600	1800	608

DIVISION OF WATER OF ST. MARY RIVER
WATER AVAILABLE FOR USE AND USED BY CANADA
MAY - 1926.

Day	: Natural Flow of St. Mary River at Kimball	: Canada's Share at Kimball	: St. Mary River at Kimball	: Diverted by Canada	: Excess of Share	: Deficiency Delivered
1	1588	961	934	445		27
2	1818	1076	1060	449		16
3	1787	1060	1090	457	30	
4	1708	1021	1060	453	39	
5	1707	1020	1050	499	30	
6	1835	1085	1020	476		65
7	1904	1119	981	467		138
8	1686	1010	911	474		99
9	1493	913	811	467		102
10	1315	825	729	480		96
11	1233	783	697	480		86
12	1144	739	658	493		81
13	1064	699	658	488		41
14	950	642	622	519		20
15	926	630	628	582		2
16	957	645	640	573		5
17	1005	670	665	582		5
18	996	665	658	575		7
19	1067	700	678	597		22
20	1092	713	710	585		3
21	1129	731	763	609	32	
22	1257	795	797	585	2	
23	1244	789	797	594	8	
24	1184	759	790	580	31	
25	1143	738	770	585	32	
26	1155	745	804	638	59	
27	999	666	710	638	44	
28	1012	673	652	604		21
29	975	655	622	566		33
30	932	633	609	556		24
31	893	613	597	543		16
Total Sec.-ft.	39198	24773	24171	16639	307	909
Mean	1260	799	780	537	9.9	29.3
Total Ac.-ft.	77500	49100	48000	33000	608	1800

DETERMINATION OF NATURAL FLOW OF ST. MARY RIVER
WATER STORED OR RELEASED FROM SHERBURNE RESERVOIR
JUNE - 1926

Day	INFLOW INTO SHERBURNE RESERVOIR			Swiftcurrent:	Water:	Water	
	Recorded Inflow	Unrecorded:	Total	Creek below	Stored	Released	
	Swiftcurrent: Canyon:	Inflow:	Inflow:	Sherburne:	:	:	
	Creek	Creek	Estimated:	:	:	:	
1	121	18.0	21	160	328	-	
2	121	19.5	21	162	332	-	
3	130	21.0	23	174	336	-	
4	166	24.1	28	218	344	-	
5	212	32.0	37	281	346	-	
6	242	35.4	41	318	346	-	
7	259	35.4	44	338	346	-	
8	231	31.2	39	301	346	-	
9	212	29.0	36	277	344	-	
10	186	27.0	32	245	330	-	
11	166	26.0	29	221	324	-	
12	144	25.0	25	194	378	-	
13	128	24.0	23	175	378	-	
14	125	24.0	22	171	372	-	
15	141	25.9	25	192	324	-	
16	146	27.0	26	199	346	-	
17	151	30.0	27	208	369	-	
18	158	35.0	29	222	365	-	
19	204	45.0	37	286	344	-	
20	245	49.0	44	338	332	6	
21	234	49.5	43	327	312	15	
22	228	49.0	42	319	312	7	
23	228	49.0	42	319	306	13	
24	234	50.0	43	327	288	39	
25	234	50.0	43	327	284	43	
26	242	49.0	44	335	286	49	
27	250	46.8	45	342	284	58	
28	245	41.3	43	329	292	37	
29	215	35.4	38	288	348	-	
30	193	32.9	34	260	378	-	
Sec.-ft	5791	1036.4	1046	7853	10020	267	2434
Mean	193	34.5	34.9	262	334	8.9	81
Ao.-ft.	11500	2050	2070	15600	19900	529	4820

DETERMINATION OF NATURAL FLOW OF ST. MARY RIVER
JUNE - 1926

	St. Mary River	Diverted by	Stored by	Total in stored water	Natural flow	Day : at Kimball : U.S.R.S. : U.S.R.S. : Sec.-ft. : Released : St. Mary River
1	585	402	-	987	121	866
2	585	400	-	985	144	841
3	579	398	-	977	168	809
4	585	400	-	985	170	815
5	591	403	-	991	162	829
6	615	402	-	1017	126	891
7	658	403	-	1066	62	1001
8	703	414	-	1117	28	1089
9	723	416	-	1139	8	1131
10	729	415	-	1145	45	1100
11	697	418	-	1115	67	1048
12	646	450	-	1096	85	1011
13	615	468	-	1083	103	980
14	640	470	-	1110	184	926
15	665	462	-	1147	203	944
16	597	486	-	1083	201	882
17	579	484	-	1063	132	931
18	597	486	-	1083	147	936
19	710	486	-	1196	151	1035
20	832	488	-	1320	143	1177
21	811	492	-	1303	58	1245
22	804	490	6	1300	-	1300
23	839	490	15	1344	-	1344
24	839	492	7	1338	-	1338
25	832	492	13	1337	-	1337
26	811	490	39	1340	-	1340
27	783	492	43	1318	-	1318
28	763	492	49	1304	-	1304
29	743	490	58	1291	-	1291
30	743	490	37	1270	-	1270
Sec.-ft.	20899	13684	267	34850	2521	32329
Mean	697	456	8.9	1160	84	1080
Ac.-ft.	41500	27100	529	69000	5000	64300

Table 1
June
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DIVISION OF WATER OF ST. MARY RIVER
WATER USED BY UNITED STATES
JUNE - 1926.

	Natural Flow	AVAILABLE FOR USE BY U.S.A.		USED BY U.S.A.		Excess:Defici-			
Day:	St. Mary R.	:U.S. Share:	Stored water:	Total:	Diverted:	Stored:	Total:	:ency	
at Kimball	:	Released	:	:	:	:	:	:of Share Used	
1	866	266	121	387	402	402	15		
2	841	253	144	397	400	400	3		
3	809	237	168	405	398	398	7		
4	815	240	170	410	400	400	10		
5	829	248	162	410	400	400	10		
6	891	278	126	404	402	402	2		
7	1001	334	55	399	408	408	9		
8	1089	377	28	405	414	414	9		
9	1131	399	8	407	416	416	9		
10	1100	383	45	426	416	416	12		
11	1048	357	67	424	418	418	6		
12	1011	339	85	424	450	450	26		
13	980	323	103	426	468	468	42		
14	926	296	184	480	470	470	10		
15	944	305	203	508	482	482	26		
16	882	274	201	475	486	486	11		
17	931	299	132	431	484	484	53		
18	936	301	147	448	486	486	38		
19	1035	350	161	511	486	486	25		
20	1177	421	143	564	488	488	76		
21	1245	456	58	514	492	492	22		
22	1300	483		483	490	6	496		
23	1344	505		505	490	15	505		
24	1338	502		502	492	7	499		
25	1337	502		502	492	13	505		
26	1340	503		503	490	39	529		
27	1318	492		492	492	43	535		
28	1304	485		485	492	49	541		
29	1291	478		478	490	58	548		
30	1270	468		468	490	37	527		
Total Sec.-ft.	32329	11154	2521	13675	13684	267	13951	510	184
Mean	1080	372	84	456	456	8.9	465	17	6.1
Ac. ft.	64300	22300	5000	27300	27100	529	27600	1010	365

DIVISION OF WATER OF ST. MARY RIVER
WATER AVAILABLE FOR USE AND USED BY CANADA
JUNE - 1926.

Day	Natural flow of St. Mary River	Canada's share at Kimball	St. Mary River at Kimball	Diverted by Canada	Excess of Canada's share	Deficiency Delivered
1	866	600	585	534		15
2	841	588	585	530		3
3	809	572	579	527	7	
4	815	575	585	536	10	
5	829	581	591	541	10	
6	891	613	615	563	2	
7	1001	667	658	611		9
8	1089	712	703	659		9
9	1131	732	723	676		9
10	1100	717	729	676	12	
11	1048	691	697	645	6	
12	1011	672	646	599		26
13	980	657	615	566		42
14	926	630	640	587	10	
15	944	639	665	611	26	
16	882	608	597	552		11
17	931	632	579	534		53
18	936	635	597	545		38
19	1035	685	710	499		25
20	1177	756	832	231	76	
21	11245	789	811	441	22	
22	1300	817	804	480		13
23	1344	839	839	497		
24	1335	836	839	488	3	
25	1337	835	832	495		3
26	1340	837	811	516		26
27	1318	826	783	505		43
28	1304	819	763	495		56
29	1291	813	743	508		70
30	1270	802	743	523		59
Total Sec.-ft.	32329	21175	20899	16170	184	510
Mean	1080	706	697	539	6.1	17
Total Mc.-ft.	64300	42000	41500	32100	365	1010

DIVISION OF WATER OF ST. MARY RIVER
WATER AVAILABLE FOR USE AND USED BY CANADA
JUNE - 1926.

Day	Natural flow of St. Mary River at Kimball.	Canada's Share at Kimball	St. Mary River at Kimball	Diverted by Canada	Excess of Canada's Share	Deficiency Delivered
1	866	600	585	534		15
2	841	588	585	530		3
3	809	572	579	527	7	
4	815	575	585	536	10	
5	829	581	591	541	10	
6	891	613	615	563	2	
7	1001	667	658	611		9
8	1089	712	703	659		9
9	1131	732	723	676		9
10	1100	717	729	676	12	
11	1048	691	697	645	6	
12	1011	672	646	599		26
13	980	657	615	566		42
14	926	630	640	587	10	
15	944	639	665	611	26	
16	882	608	597	552		11
17	931	632	579	534		53
18	936	635	597	545		38
19	1035	685	710	499		25
20	1177	756	832	231	76	
21	11245	789	811	441	22	
22	1300	817	804	480		13
23	1344	839	839	497		
24	1338	836	839	488	3	
25	1337	835	832	495		3
26	1340	837	811	516		26
27	1318	826	783	505		43
28	1304	819	763	495		56
29	1291	813	743	508		70
30	1270	802	743	523		59
Total Sec.-ft.	32329	21175	20899	16170	184	510
Mean	1080	706	697	539	6.1	17
Total Cu.-ft.	64300	42000	41500	32100	365	1010

DETERMINATION OF NATURAL FLOW OF ST. MARY RIVER
JULY - 1926

Day	St. Mary River at Kimball	Diverted by U.S.R.S.	Stored by U.S.R.S.	Total in Sec.-ft.	Released	Natural flow St. Mary River
1	750	490		1240	60	1180
2	770	492		1262	118	1144
3	743	492		1235	92	1143
4	716	492		1208	73	1155
5	720	492		1202	68	1134
6	650	490		1140	123	1017
7	634	492		1126	120	1006
8	658	488		1146	112	1034
9	671	492		1163	127	1036
10	646	498		1144	146	998
11	628	498		1126	175	951
12	603	494		1097	188	909
13	585	498		1083	182	898
14	574	496		1070	198	872
15	579	498		1077	220	857
16	556	498		1054	269	785
17	556	498		1054	261	793
18	533	496		1029	290	739
19	500	494		994	297	697
20	500	492		992	292	700
21	562	462		1024	335	689
22	516	446		962	299	663
23	473	442		915	300	615
24	447	440		887	299	588
25	422	438		860	306	554
26	399	436		835	313	522
27	358	410		768	286	482
28	363	320		683	154	529
29	447	202		649	75	574
30	399	198		597	36	561
31	413	152		565	27	538
Sec.-ft.	17361	13826		31187	5824	25363
Mean	560	446		1016	189	818
Avg. sec.	34400	27400		61800	11500	50300

DIVISION OF WATER OF ST. MARY RIVER
WATER USED BY UNITED STATES
JULY - 1926

	Natural flow: AVAILABLE FOR USE BY U.S.A.		USED BY U.S.A.		Excess:Defici-		
Day:	St.Mary R.	:U.S.	:Stored water:Total	:Diverted:Stored:Total:	:ency		
	: at Kimball	: Share..:	Released. :	:	:	: Of Share Used.	
1	1180	423	60	483	490	7	-
2	1144	405	118	523	492	-	39
3	1143	404	92	496	492	-	4
4	1155	410	53	463	492	492	-
5	1134	400	68	460	492	492	24
6	1017	342	123	465	490	490	25
7	1006	336	120	456	492	492	36
8	1034	350	112	462	488	488	26
9	1036	351	127	478	492	492	14
10	998	332	146	478	498	498	20
11	951	309	175	484	498	498	14
12	909	286	188	476	494	494	18
13	898	282	185	467	498	498	31
14	872	269	198	467	496	496	29
15	857	262	220	482	498	498	16
16	785	225	269	494	498	498	4
17	793	230	261	491	498	498	7
18	739	203	290	493	496	496	3
19	697	182	297	479	494	494	15
20	700	183	292	475	492	492	17
21	689	177	335	512	462	462	50
22	663	156	299	465	446	446	19
23	615	154	300	454	442	442	12
24	588	147	299	446	440	440	6
25	554	138	306	444	438	438	6
26	522	130	313	443	436	436	7
27	482	121	286	407	410	410	-
28	529	132	154	286	320	320	34
29	574	144	75	219	202	202	-
30	561	140	36	176	198	198	22
31	538	134	27	161	152	152	9
Total Sec.-ft.	25363	7769	5824	13593	13826	394	161
Mean	818	251	189	440	446	446	12.7 5.2
Total Ac.-ft.	50300	15400	11500	26900	27400	781	319

DIVISION OF WATER OF ST. MARY RIVER
WATER AVAILABLE FOR USE AND USED BY CANADA
JULY - 1926

Table 1
July
Page 4.

Day	Natural Flow of:		Canada's	St. Mary River:	Diverted	Excess of:	Deficiency
	St. Mary River	Share		at	by	:	:
	Kimball			Kimball	Canada	Share	Delivered
1	1180	757		750	532		7
2	1144	739		770	519	31	
3	1143	739		742	480	4	
4	1155	745		715	486		29
5	1134	734		710	505		24
6	1017	675		650	490		25
7	1006	670		634	453		36
8	1034	684		658	408		26
9	1036	685		671	516		14
10	998	666		646	505		20
11	951	642		628	499		14
12	909	621		603	493		18
13	898	616		585	488		31
14	872	603		574	519		29
15	857	595		579	536		16
16	785	560		556	516		4
17	793	563		556	510		7
18	739	536		533	490		3
19	697	515		500	463		15
20	700	517		500	463		17
21	689	512		562	516	50	
22	663	497		516	478	19	
23	615	461		473	441	12	
24	588	441		447	417	6	
25	554	416		422	400	6	
26	522	392		399	376	7	
27	482	361		358	339		3
28	529	397		363	344		34
29	574	430		447	425	17	
30	561	421		399	380		22
31	538	404		413	395		9
		17594					
Total Sec.-ft.	25363	17504		17361	14382	161	394
Mean	818	565.568		560	464	5.2	12.7
Total Ac.-ft.	50300	34900		34400	28500	319	781

DETERMINATION OF NATURAL FLOW OF ST. MARY RIVER
WATER STORED OR RELEASED FROM SHERBURNE RESERVOIR
AUGUST - 1926

Day	INFLOW INTO SHERBURNE RESERVOIR			Swiftcurrent: Water		Water	
	Recorded Inflow	Unrecorded:	Total	Creek below	Stored	Released	
	Swiftcurrent: Creek	Canyon: Creek	Inflow: Estimated	Sherburne			
1	101	15.8	6	123	125	-	25
2	98	14.9	6	119	124	-	13
3	92	12.6	5	111	124	-	11
4	88	12.6	5	107	118	-	5
5	88	12.6	5	107	112	-	5
6	86	12.1	5	104	110	-	5
7	82	13.6	5	101	106	-	5
8	78	12.6	5	96	105	-	5
9	78	12.2	4	94	100	-	5
10	74	10.0	4	88	101	-	4
11	70	9.2	4	83	95	-	3
12	73	9.0	4	85	91	-	2
13	78	10.0	4	92	91	-	1
14	80	10.4	5	95	91	-	1
15	89	9.5	5	92	94	-	1
16	82	10.0	5	93	93	-	1
17	86	11.8	5	103	106	-	1
18	86	11.0	5	102	108	-	1
19	96	12.0	6	113	114	-	1
20	105	15.0	6	126	129	17	4
21	90	11.0	5	106	110	-	10
22	78	9.5	4	91	101	-	12
23	74	10.0	4	88	100	-	3
24	78	10.4	4	92	95	-	6
25	84	10.8	5	100	94	-	4
26	96	12.6	6	114	110	14	-
27	116	17.2	6	139	125	10	-
28	109	14.4	6	129	119	-	4
29	96	14.9	6	117	121	-	-
30	112	25.9	7	145	142	3	-
31	166	60.0	12	238	178	60	-
Sec.-ft.	2800	438.4	162	3402	3417	120	135
Mean	90	14.1	5.2	110	110	3.9	4.4
Ac.-ft.	5530	867	321	6720	6760	238	268

DETERMINATION OF NATURAL FLOW OF ST. MARY RIVER
AUGUST - 1926

Day	St. Mary River : at Kimball	Diverted by : U.S.R.S.	Stored by : U.S.R.S.	Total in : Sec.-ft.	Released : Sec.-ft.	Natural flow : St. Mary River
1	376	148	-	524	15	509
2	394	125	-	519	4	515
3	385	116	-	501	2	499
4	367	117	-	484	5	479
5	346	116	-	462	13	449
6	333	115	-	448	11	437
7	318	113	-	431	5	426
8	326	107	-	433	6	427
9	333	106	-	439	5	434
10	322	105	-	427	9	418
11	303	104	-	407	6	401
12	296	103	-	399	13	386
13	296	104	-	390	12	378
14	279	102	-	361	5	376
15	279	100	-	380	-	380
16	276	100	-	380	-	380
17	286	100	-	387	-	387
18	282	100	-	382	-	382
19	276	113	-	389	3	386
20	218	138	-	366	6	360
21	307	66	-	373	1	372
22	266	104	17	387	-	387
23	269	97	-	366	4	362
24	266	94	-	360	10	350
25	260	93	-	353	12	341
26	266	89	-	352	3	352
27	289	84	6	379	-	379
28	279	88	4	371	-	371
29	279	89	14	382	-	382
30	303	101	10	414	-	414
31	341	110	-	451	4	447
Sec.-ft.	9416	3247	57	12720	154	12566
Mean	304	105	1.8	411	5.0	405
Ac.pft.	18700	6460	113	25200	305	24900

DIVISION OF WATER OF ST.MARY RIVER
WATER USED BY UNITED STATES
August - 1926

	Natural Flow:AVAILABLE FOR USE BY U.S.A.		USED BY U.S.A.		Excess:Defici-				
Day:	St.Mary R.	:U.S.	:Stored Water:	Total	:Diverted:	:Stored:	Total:	:ency	
	at Kimball	:Share:	Released :	:	:	:	:	: Of Share Used	
1	509	127	15	142	148	-	148	6	
2	515	129	4	133	125	-	125	-	
3	499	125	2	127	116	-	116	-	
4	479	120	5	125	117	-	117	-	
5	449	112	13	125	116	-	116	-	
6	437	109	11	120	115	-	115	-	
7	426	107	5	112	113	-	113	1	
8	427	107	6	113	107	-	107	-	
9	434	108	5	113	106	-	106	-	
10	418	104	9	113	105	-	105	-	
11	401	100	6	106	104	-	104	-	
12	386	97	13	110	103	-	103	-	
13	378	94	12	106	104	-	104	-	
14	376	94	5	99	102	-	102	3	
15	380	95	-	95	100	1	101	6	
16	380	95	-	95	100	4	104	9	
17	387	97	-	97	100	1	101	4	
18	382	96	-	96	100	-	100	-	
19	386	97	3	100	113	-	113	13	
20	360	90	6	96	138	-	138	42	
21	372	93	1	94	66	-	66	-	
22	367	97	-	97	104	17	121	24	
23	362	90	4	94	97	-	97	3	
24	350	87	10	97	94	-	94	-	
25	341	85	12	97	93	-	93	-	
26	352	88	3	91	89	-	89	-	
27	379	95	-	95	84	6	90	-	
28	371	93	-	93	88	4	92	-	
29	382	95	-	95	89	14	103	8	
30	414	103	-	103	101	10	111	-	
31	447	112	4	116	110	-	110	6	
Total Sec.-ft.	12566	3141	154	3295	3247	57	3304	131	122
Mean	405	101	5.0	106	105	1.8	107	42	4.0
Total Ac.-ft.	24900	6230	305	6540	6460	113	6570	260	242

DIVISION OF WATER OF ST. MARY RIVER
WATER AVAILABLE FOR USE AND USED BY CANADA
AUGUST - 1926.

Day	Natural Flow of St. Mary River at Kimball	Canada's Share at Kimball	St. Mary River: at Kimball	Diverted by Canada	Excess of Share	Deficiency Delivered.
1	509	382	376	362		6
2	515	386	394	373	8	
3	499	374	385	368	11	
4	479	359	367	351	8	
5	449	337	346	339	9	
6	437	328	333	327	5	
7	426	319	318	310		1
8	427	320	326	320	6	
9	434	326	333	320	7	
10	418	314	322	315	8	
11	401	301	303	299	2	
12	386	289	296	283	7	
13	378	284	286	275	2	
14	376	282	279	274		3
15	380	285	279	269		6
16	380	285	276	270		9
17	387	290	286	278		4
18	382	286	282	275		4
19	386	289	276	271		13
20	360	270	228	219		42
21	372	279	307	304	28	
22	387	290	266	261		24
23	362	272	269	266		3
24	350	263	266	261	3	
25	341	256	260	256	4	
26	352	264	266	260	2	
27	379	284	289	283	5	
28	371	278	279	270	1	
29	382	287	279	272		8
30	414	311	303	299		8
31	447	335	341	326	6	
Total Sec.-ft.	12566	9425	9416	9156	122	131
Mean	405	304	304	295	4.2	4.0
Total Ac.-ft.	24900	18700	18700	18100	260	242

DETERMINATION OF NATURAL FLOW OF ST. MARY RIVER
WATER STORED OR RELEASED FROM SHERBURN RESERVOIR
SEPTEMBER - 1926

Day	INFLOW INTO SHERBURN RESERVOIR			Swiftcurrent:	Water	Water
	Recorded Inflow	Unrecorded:	Total	Creek below	Stored	Released
	Swiftcurrent: Canyon: inflow	Inflow:	Sherburne	:	:	:
	Creek	Creek	Estimated		:	:
1	290	62.0	70	422	243.0	179
2	290	60.0	70	420	314.0	106
3	248	50.0	60	358	332.0	26
4	196	45.0	48	289	314.0	-
5	170	40.0	42	252	271.0	-
6	170	30.0	40	240	257.0	-
7	179	31.0	42	252	264.0	-
8	188	31.0	44	263	296.0	-
9	197	32.0	45	274	300.0	-
10	206	32.0	43	286	227.0	.59
11	178	28.0	41	247	107.0	140
12	150	25.0	35	210	79.0	131
13	121	23.0	29	173	82.0	91
14	116	22.0	27	165	78.0	87
15	118	23.0	28	169	66.0	103
16	123	23.0	29	175	50.0	125
17	116	22.0	27	165	17.6	147
18	109	21.0	26	156	15.6	140
19	98	20.0	24	142	14.0	128
20	96	21.0	23	140	13.8	126
21	105	22.5	19	147	13.6	133
22	123	22.0	22	167	13.4	154
23	118	19.5	20	158	13.4	145
24	101	20.5	18	140	13.2	127
25	90	19.5	16	126	13.0	113
26	86	15.0	10	112	12.8	99
27	82	15.0	10	108	12.6	95
28	86	15.0	10	112	12.4	100
29	90	15.0	11	117	12.2	105
30	92	15.0	11	119	12.0	107
Sec.-ft.	4332	824.0	945	6104	3469.6	2766
Mean	144	27.5	31.5	203	116	92
Ao.-ft.	8570	1640	1880	12100	6900	5480
						262

DETERMINATION OF NATURAL FLOW OF ST.MARY RIVER
SEPTEMBER - 1926

Day	St.Mary River	Diverted by	Stored by	Total in	Stored Water:	Natural flow
	at Kimball	: U.S.R.S.	: U.S.R.S.:	Sec.-ft.	Released	: St.Mary River
1	363	107	3	473	-	473
2	380	132	60	572	-	572
3	506	149	179	834	-	834
4	516	203	106	825	-	825
5	562	203	36	791	-	791
6	640	196	-	836	25	811
7	646	216	-	862	19	843
8	684	225	-	909	17	892
9	690	243	-	933	12	921
10	646	286	-	932	33	899
11	646	278	-	924	26	898
12	723	149	59	931	-	931
13	671	137	140	948	-	948
14	634	131	131	896	-	896
15	609	112	91	812	-	812
16	628	70	87	785	-	785
17	690	-	103	793	-	793
18	652	-	125	777	-	777
19	615	-	147	762	-	762
20	585	-	140	725	-	725
21	562	-	128	690	-	690
22	556	-	126	682	-	682
23	550	-	133	683	-	683
24	533	-	154	687	-	687
25	516	-	145	661	-	661
26	500	-	127	627	-	627
27	500	-	113	613	-	613
28	489	-	99	588	-	588
29	473	-	95	568	-	568
30	452	-	100	552	-	552
Sec.-ft.	17217	2837	2627	22671	132	22539
Mean	574	177	87	756	4.4	751
Ac.-ft.	34200	5600	5190	45000	262	44700

Table 1
September
Page 3

DIVISION OF WATER OF ST. MARY RIVER
WATER USED BY UNITED STATES
SEPTEMBER - 1926

	Natural flow: Available for use by U.S.A.	Used by U.S.A.	Excess:Deficit
Day:	St. Mary R. :U.S. :Stored water: Total	Diverted: Stored: Total	:ency
	: at Kimball :Share.: Released. :	:	: Of Share used.
1	473	118	-
2	572	143	-
3	634	250	-
4	825	245	-
5	791	228	-
6	811	239	25
7	843	254	19
8	892	279	17
9	921	294	12
10	699	263	33
11	898	263	26
12	931	298	-
13	948	307	-
14	896	281	-
15	812	239	-
16	785	226	-
17	793	230	-
18	777	222	-
19	762	214	-
20	725	195	-
21	690	178	-
22	662	174	-
23	683	174	-
24	687	177	-
25	661	165	-
26	627	156	-
27	613	153	-
28	588	147	-
29	568	142	-
30	552	138	-
Total Sec.-ft.	22539	6432	132
Mean	751	214	4.4
Total Ac.-ft.	44700	12800	252
			13100
			5600
			5190
			10800
			381
			2600
			100
			100
			38

DIVISION OF WATER OF ST. MARY RIVER
WATER AVAILABLE FOR USE AND USED BY CANADA
SEPTEMBER - 1926.

Day	Natural flow : St. Mary River: at Kimball.	Canada's Share.	St. Mary River at Kimball.	Diverted by Canada	Excess of Share	Deficiency Delivered.
1	473	355	363	346	8	
2	592	429	380	362		49
3	834	584	506	463		78
4	825	580	516	478		64
5	791	563	562	505		1
6	811	572	640	429	68	
7	843	589	646	364	57	
8	892	613	684	398	71	
9	921	627	690	375	63	
10	899	616	646	315	30	
11	898	615	646	334	31	
12	931	633	723	402	90	
13	948	641	671	339	30	
14	896	615	634	339	19	
15	812	573	609	344	36	
16	785	559	628	351	69	
17	793	563	690	344	127	
18	777	555	652	341	97	
19	762	548	615	371	67	
20	725	530	585	389	55	
21	690	512	562	396	50	
22	682	508	556	400	48	
23	683	509	550	396	41	
24	687	510	533	387	23	
25	661	496	516	431	20	
26	627	471	500	453	29	
27	613	460	500	445	40	
28	588	441	489	431	48	
29	568	426	473	429	47	
30	552	414	452	423	38	
Total Sec.-ft.	22539	16107	17217	11780	1302	192
Mean	751	537	574	393	43.4	6.4
Total Ac.-ft.	44700	31900	34200	23400	2600	381

Table 1
October
Page 1

DETERMINATION OF NATURAL FLOW OF ST. MARY RIVER
WATER STORED OR RELEASED FROM SHERBURNE RESERVOIR
OCTOBER - 1926

Day	INFLOW INTO SHERBURNE RESERVOIR : Recorded Inflow : Creek	Swiftcurrent: Creek	Water : Creek below : Estimated	Water : Stored : Sherburne	Water : Released
1	92	15.4	6	113	101
2	94	14.9	6	115	103
3	105	17.2	6	128	116
4	123	17.6	6	147	136
5	123	18.0	7	148	137
6	178	21.0	10	209	198
7	449	49.0	25	523	512
8	422	33.0	23	478	467
9	299	23.0	16	338	327
10	228	15.0	12	255	244
11	188	9.0	10	207	196
12	170	14.0	9	193	182
13	158	20.0	9	187	176
14	146	26.0	9	181	170
15	176	34.6	10	221	211
16				10.2	
17				10.2	
18				10.2	
19				10.4	
20				10.6	
21				10.6	
22				10.8	
23				11.2	
24				11.0	
25				11.0	
26				11.0	
27				11.2	
28				11.2	
29				11.4	
30				11.4	
31				11.4	
Sec.-ft.				340.2	No Records Available
Mean				11.0	
Ac.-ft.				676	

No Stored Water Released during October

DETERMINATION OF NATURAL FLOW OF ST.MARY RIVER
OCTOBER - 1926

Day	St.Mary River	Diverted by	Stored by	Total in	Stored Water	Natural flow
	at Kimball	: U.S.R.S.	: U.S.R.S.	Sec.-ft.	: Released	: St.Mary River
1	442			105	547	547
2	427			107	534	534
3	427			101	528	528
4	437			103	540	540
5	427			116	543	543
6	437			136	573	573
7	506			137	643	643
8	591			198	789	789
9	634			512	1146	1146
10	678			467	1145	1145
11	710			327	1037	1037
12	736			244	980	980
13	736			196	932	932
14	756			182	938	938
15	756			176	932	932
16	756			170	926	926
17	1030			211	1241	1241
18	1430					
19	1580					
20	1630					
21	1570					
22	1490					
23	1360					
24	1260					
25	1150					
26	1060					
27	981					
28	890					
29	818					
30	790					
31	763					
Sec.-ft.	27258					
Mean	879					
Ac.-ft.	54000					

DIVISION OF WATER OF ST.MARY RIVER
WATER AVAILABLE FOR USE AND USED BY CANADA
OCTOBER - 1926.

Day	Natural Flow of St.Mary River at Kimball.	Canada's Share. at Kimball.	St.Mary River at Kimball.	Diverted by Canada.	Excess of Share. Delivered.	Deficiency
1.	547	410	442	423	32	
2	534	400	427	411	27	
3	528	396	427	413	31	
4	540	405	437	419	32	
5	543	407	427	413	20	
6	573	430	437	415	7	
7	643	482	506	429	24	
8	789	562	591	433	29	
9	1146	740	634	411		106
10	1145	739	678	445		61
11	1037	686	710	441	24	
12	980	657	736	404	79	
13	932	633	736	387	103	
14	938	636	756	366	120	
15	932	633	756	257	123	
16	926	630	756	260	126	
17	1241	787	1930	309	243	
18			1430	320		
19			1580	180		
20			1630			
21			1570			
22			1490			
23			1360			
24			1260			
25			1150			
26			1060			
27			981			
28			890			
29			818			
30			790			
31			763			
Total Sec.-ft.		22,670	27258	7136		
Mean		731	879	376		
Total Cu.-ft.			54000	14200		

DIVISION OF WATER OF ST.MARY RIVER
WATER USED BY UNITED STATES
OCTOBER - 1926

	Natural Flow: Available for Use by U.S.A.	Used by U.S.A.	Excess:Deficit
Day:	St.Mary R. :U.S. :Stored Water:Total	:Diverted:Stored:Total:	:ency
	: at Kimball :Share.: Released. :	:	: Of Share used.
1	547	137	- 32
2	534	134	- 27
3	528	132	- 31
4	540	135	- 32
5	543	136	- 20
6	573	143	7
7	643	161	24
8	789	227	29
9	1146	406	-
10	1145	406	-
11	1037	351	24
12	980	323	79
13	932	299	103
14	938	302	120
15	932	299	123
16	926	296	126
17	1241	454	243
18	1480		
19	1260		
20	2010		
21	2010		
22	1930		
23	1730 1775		
24	1650		
25	1520 1515		
26	1430 1445		
27	1270 1291		
28	1180		
29	1020 1030		
30	1050		
31	983		

no stored water released

on diversion in October

Total Sec.-ft. 35387 35381 12,711

Mean 1141 410

Total Ac.-ft. 70189 70177

copied from work sheet

in St.Mary River Net Flow File

2/3/60 12

See A 17L for
Con & us Share
Feb 23/60

Table - 2

DIVISION OF ST. MARY RIVER
CANADA

WATER AVAILABLE - IN ACRE FEET

Month	St. Mary River: at Kimball	Molph Creek :	Pothole Creek :	Combined Flow
April	26,100	-	-	26,100
May	48,000	166	-	48,200
June	41,500	226	-	41,700
July	34,400	277	-	34,700
August	18,700	154	-	18,900
September	34,200	375	-	34,600
October	54,000	86	-	54,100
TOTAL	256,900	984^a	-^b	258,300^c

DISPOSITION

Month	Diverted by A.R. & I. Co.	Wasted by A.R. & I. Co.	Losses A.R. & I. Co.	Stored in Chin Res.	St. Mary River Lethbridge
April	10,500	1,322	1,418	43,582	17,800
May	33,000	1,389	1,404		18,000
June	32,100	3,579	306		13,300
July	28,500	1,917	876		8,930
August	18,100	510	1,018		1,960
September	23,400	1,560	1,032		16,400
October	14,200	10,830	+ 184		55,900
TOTAL	159,800^d	21,107^e	5,870^f	44,026^g	132,340^x

a - includes seepage losses from U.S. St. Mary Canal

b - natural flow only

c - computed

d - diverted by A.R. & I. at Kimball

e - wasted in Pinebound & Pothole wasteways

f - evaporation and seepage losses between Kimball & Magrath

g - in storage on November 1st.

x - below all points of diversion.

Table - 3

DISPOSITION OF THE WATERS OF LODGE CREEK

1926

QUANTITIES IN ACRES-FEET.

Irrigator	March	April	May	June	July	August	September	October	Total
T.S.Clark S.ditch									15
" " N.ditch									--
J.A.English									150
W.B.Gregg									--
D.A.Hammond					do				--
J.E.Hartt									30
J.E.Hartt N.ditch					no diversion				--
" " S.ditch					do				--
B.A.John					do				--
G.A.Legge									10
Wm.Mitchell					no diversion				
H.A.Mudie					do				
J.Read									20
R.L.Roth					no diversions				
J.H.Spangler					do				
A.Sturm					do				
TOTAL ESTIMATED AS USED BY CANADA									225
FLOW AT BOUNDARY AS DELIVERED TO THE UNITED STATES.	8,610	1,150	25	-	369	-	-	-	10,100

Table - 3DISPOSITION OF THE WATERS OF BATTLE CREEK1926QUANTITIES IN ACRES-FEET.

Irrigator	March	April	May	June	July	August	September	October	Total
J.Leslie									-
Wood & Anderson					do				-
E.J.Parsonage					do				-
J.M.Spangler				61	8				69
Lindner Bros.				96	139	6			241
W.G.Patterson									-
J.A.Gaff					do				-
Marshall & Gaff				141	48				189
Shepherd W.ditch				44	24				68
do E. do	4	9	-	-					13
Wilkes Bros.		12		31					43
Gilchrist Bros.					no diversion				-
Richardson					do				-
J.McKinnon					Estimated diversion				280
Stirling & Nash				do	do				600
H.J.Badger					no diversion				-
TOTAL ESTIMATED AS USED BY CANADA	4	21	373	219	6	-	-	-	1503
FLOW AT BOUNDARY (at Nash's) AS DELIVERED TO THE UNITED STATES	.7750	3690	603	137	529	6	34	74	12,800

Table - 3

DISPOSITION OF THE WATERS OF FRENCHMAN RIVER

1926

QUANTITIES IN ACRE-FOOT.

Irrigator	March	April	May	June	July	August	September	October	Total
Armstrong									-
A.E.Bate									25
Bolinbroke					12	12			24
V.J.Bull	-	-	74	48					122
F.Cross	-	-	12	71					83
Clark & Thompson									-
T.A.Druzy									-
Kearney Bros.									-
T.Kokott				54	18				72
Morrison Bros.									-
G.N.Morrison					do				-
J.C.Strong					do				-
D.J.Wylie	-	105	141	119	86	-	-	-	451
 TOTAL ESTIMATED AS DIVERTED BY CANADA -	105	227	304	116	-	-	-	-	777

FLOW AT BOUNDARY AS
DELIVERED TO THE
UNITED STATES. 37,700 10,900 3,060 1,690 1,000 37 547 695 55,600

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1694
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1926

Report to the International Joint
Commission on the division and use
of the waters of the St. Mary and
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