Report to

THE INTERNATIONAL JOINT COMMISSION

on

THE DIVISION AND USE MADE OF THE WATERS OF ST. MARY AND MILK RIVERS

by

J. D. McLEOD
representing Canada

and

E. L. HENDRICKS
representing United States

1968

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International Joint Commission,
Washington, D.C., and Ottawa, Ontario.

Gentlemen:

In compliance with the provisions of Clause VIII (c) of your Order of October 4, 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 ended October 31, 1968.

Respectfully submitted,

J. D. McLeod
Accredited Officer of Her Majesty

E. L. Hendricks
Accredited Officer of the United States

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INTRODUCTION

Article VI of the Boundary Waters Treaty of 1909 between Great Britain and the United States governs the apportionment of the waters of the St. Mary and Milk Rivers. To comply with this treaty representatives of Canada and the United States collected and compiled, co-operatively, hydrometric data at forty-six international gauging stations. Canada operated another twelve non-international gauging stations, the data of which are used in the natural flow computations.

This report summarizes the natural flow computations during 1968, enlarges on the apportionment of the natural flow and explains any unusual occurrences throughout the year as well as any modifications which have been made or are contemplated for increasing the accuracy of the natural flow computations. Summarized natural flow tables are included in the report proper whereas the expanded computations are included in Appendix A. The daily discharge data for 1968 are included in Appendix B.

Mr. J. D. McLeod, Senior Engineer, Inland Waters Branch, Department of Energy, Mines and Resources, acting in the capacity of Accredited Officer of Her Majesty, was represented in the field by Mr. R. D. May, District Engineer, Calgary, Alberta. Mr. E. L. Hendricks, Chief Hydrologist, United States Geological Survey, as Accredited Officer of the United States, was represented in the field by Mr. C. W. Lane, District Chief, Helena, Montana. This report has been prepared jointly by representatives of Canada and the United States under the supervision of Mr. R. D. May and Mr. C. W. Lane.

The natural flows of the St. Mary and Milk Rivers were near normal, whereas the natural flows of the eastern tributaries of Milk River were well below normal. No major problems in the apportionment of flows were encountered.

ST. MARY RIVER

During the irrigation season, Canada's share of the natural flow of the St. Mary River at the International Boundary is, as stipulated by the 1921 Order, to be three-quarters of the natural flow up to a total flow of 666 cfs, with anything above that quantity to be divided equally between Canada and the United States. During the non-irrigation season (November 1 to March 31) the entire natural flow is to be divided equally between the two countries.

To comply with the above order field engineers of both countries made semi-monthly computations of the daily natural flow of St. Mary River during the 1968 irrigation season. Regular interim reports of these computations were sent to all agencies involved in the water use and distribution of the St. Mary River, in order to keep them informed as to the amount of water available as well as to ensure that any appropriation by the United States in excess of her share could be adjusted by a subsequent delivery of an equivalent amount at the earliest opportunity.

Tentative computations and interim reports are not made during the non-irrigation season as the only usage by the United States during this period is storage in Lake Sherburne. The average annual flow into this reservoir is only about one-quarter of the total natural flow at the International Boundary.

Lake Sherburne, the only storage reservoir in the St. Mary River Basin in the United States, is used to store excess flows for diversion to the Milk River. This water is later utilized by the United States, after passing through Canada, for irrigation in the lower Milk River valley. Storage in Lake Sherburne was 9,010 acre-feet on October 31, 1967 and had

increased to 33,300 acre-feet just prior to the irrigation season on March 31, 1968. The storage reached a maximum of 63,600 acre-feet on July 13 and declined to 12,900 acre-feet by the end of the irrigation season on October 31.

Water was diverted from the St. Mary River to the North Milk River via the St. Mary Canal from April 10 to October 2. The total recorded flow past the gauging station on the St. Mary Canal at St. Mary Crossing was 216,000 acre-feet. Any seepage from the canal between the point of diversion and the crossing of the St. Mary River is assumed to return to the river and eventually become available to Canada.

The total natural flow of the St. Mary River at the International Boundary for the period November 1, 1967 to October 31, 1968 was 679,000 acre-feet, of which 584,000 acre-feet occurred during the irrigation season, April 1 to October 31, 1968. For the irrigation season the Canadian and United States shares were 356,000 acre-feet and 228,000 acre-feet respectively. The United States used 197,000 acre-feet or 86 per cent of her share. No problems in the apportionment of the natural flow between the two countries were encountered. The natural flow during the irrigation season was 99 per cent of the average of the previous sixty-five years of record.

Table 1 which follows summarizes the apportionment of the water of the St. Mary River.

Table 1

Summary of Division of St. Mary River and Diversion to Milk River
1968

(quantities in acre-feet)

Month	St.Mary River at Int'l. Boundary				Excess Rec'd. by Canada	Storage Lake Sherburne	Total Available for Diversion	St. Mary Canal at St. Mary Crossing	Milk* River at Eastern Crossing
	Recorded Flow	Natural Flow	U. S. Share	Canada Share					
April	14,420	17,298	4,326	12,972	+ 1,448	-21,747r	26,073	24,625	30,470
May	69,696	116,991	48,270	68,720	+ 976	+ 8,488	39,782	38,807	57,460
June	110,183	192,003	86,076	105,927	+ 4,257	+40,594	45,482	41,225	54,320
July	58,718	97,925	38,712	59,213	- 496	- 3,153r	41,865	42,362	47,150
Aug.	34,925	48,106	13,912	34,194	+ 732	-29,076r	42,988	42,256	45,650
Sept.	59,323	62,810	21,660	41,150	+18,173	-23,267r	44,927	26,753	43,080
Oct.	40,198	49,332	15,037	34,295	+ 5,903	+ 9,134	5,903	0	13,600
Total Irrig. Season	387,463	584,465	227,993	356,471	+30,993	-19,027r	247,020	216,028	291,730
For Yr. Nov. to Oct.	457,477	678,987	275,254	403,732					

r Negative sign indicates a release from Lake Sherburne.
* Represents natural flow of Milk River and diversion from St. Mary River Basin.

Lake Sherburne quantities are corrected for evaporation.

Storage in Lake Sherburne on: October 31, 1967 = 9,010 acre-feet
March 31, 1968 = 33,300 acre-feet
October 31, 1968 12,900 acre-feet

Division Period at International Boundary	Natural Flow cfs	Canada's Share cfs	Received by Canada cfs	Received by Canada	
				Above (+) Share cfs	Below (-) Share cfs
Apr. 1 - Apr. 15	3,984	2,987	3,608	621	
Apr. 16 - Apr. 30	4,737	3,553	3,662	109	
May 1 - May 15	15,582	10,277	10,080		197
May 16 - May 31	43,400	24,369	25,058	689	
June 1 - June 15	55,190	30,097	32,700	2,603	
June 16 - June 30	41,610	23,307	22,850		457
July 1 - July 15	29,495	17,249	17,207		42
July 16 - July 31	19,875	12,604	12,396		208
Aug. 1 - Aug. 15	12,127	8,565	8,973	408	
Aug. 16 - Aug. 31	12,126	8,674	8,635		39
Sep. 1 - Sep. 15	9,711	7,268	7,258		10
Sep. 16 - Sep. 30	21,955	13,478	22,650	9,172	
Oct. 1 - Oct. 15	15,335	10,169	12,900	2,731	
Oct. 16 - Oct. 31	9,536	7,121	7,366	245	

In order to provide advance information on the probable runoff in the St. Mary River basin, the forty-seventh annual international snow survey was conducted on April 30th and May 1st, 1968. The tabulated results of the forecasts and actual discharge or natural flow at three locations are given in Table 2.

Table 2

St. Mary River Basin Snow Survey Results

Location	Period of Correlation	Forecast of 1968 Runoff		Measured Runoff	
		Acre-Feet	% of Average	Acre-Feet	% of Average
Swiftcurrent Creek at Many Glacier	1923 - 65	73,500 (May to July)	(1923-67) 107	67,000 (May to July)	(1923-67) 97
Natural Flow Swiftcurrent Creek at Sherburne	1922 - 65	124,000 (May to Sept.)	(1922-67) 107	126,000 (May to Sept.)	(1922-67) 110
Natural Flow St. Mary River at International Boundary	1922 - 65	550,000 (May to Sept.)	(1922-67) 108	518,000 (May to Sept.)	(1922-67) 101

MILK RIVER

The 1921 Order on the division of flow of the Milk River is the converse to that of the St. Mary River. This is, the United States is entitled to three-quarters of the flow up to a total discharge of 666 cfs. with any amount above this total to be divided equally between the two countries. During the non-irrigation season (November 1st to March 31st) the entire flow is to be divided equally.

No actual apportionment of the Milk River at Eastern Crossing is made as, except for a few small unmeasured diversions above the eastern crossing of the International Boundary, the entire natural flow of the Milk River was delivered to the United States.

The computed natural flow of the Milk River at its eastern crossing of the International Boundary during the period March 1st to October 31st, 1968, was 113,000 acre-feet. This is 97 per cent of the average natural flow of the previous fifty-six years of record. The United States and Canadian shares were 78,300 acre-feet and 34,600 acre-feet respectively. The natural flow computations of the Milk River at its eastern crossing are given in Table 12 in Appendix A.

The international gauging station on the South Fork Milk River near Babb, Montana, was again operated in 1968 to study the utilization of water in the Milk River Basin within the Blackfeet Indian Reservation.

During 1968 a substantial flow was recorded in the Milk River at the western crossing of the International Boundary for the entire season. Consequently there were no complaints by Canadian ranchers this year.

EASTERN TRIBUTARIES OF MILK RIVER

The division of the waters of the eastern tributaries of the Milk River was carried out in accordance with the Order of the International Joint Commission dated October 4, 1921, which stipulates under Rule III that "The natural flow of the eastern (otherwise known as the Saskatchewan or northern) tributaries of the Milk River at the points where they cross the International Boundary shall be divided equally between the two countries." This rule might well be interpreted as requiring that the division of water be made on a daily basis. It was recognized early in operation under this rule that daily division was impracticable so compilation of the natural flow at the International Boundary by ten-day periods was begun in 1940.

During the runoff season, March 1st to October 31st, field engineers of both countries make ten-day computations of the natural flows of Lodge Creek, Battle Creek and Frenchman River to determine each country's share, in order that any appropriation by Canada in excess of her share can be adjusted at the earliest opportunity by a subsequent delivery to the United States of an equivalent amount. Regular interim reports on the progress of the division of the natural flows of Lodge Creek, Battle Creek and Frenchman River at the International Boundary were made to interested agencies throughout the runoff season. No division of flow is made during the winter period as there is usually very little flow and it is impracticable to obtain streamflow records during this period.

Extremely low spring runoff occurred in the eastern tributaries in 1968. However, the wet summer and fall reduced the need for irrigation. Reservoirs were near capacity from the previous year and an adequate supply of water was available. No major problems were encountered in the division

of the natural flow of these tributaries although a deficit delivery to the United States was recorded in the Frenchman River in seven out of the last eight division periods.

The total quantity of water delivered to the United States by the eastern tributaries of the Milk River during the period March 1st to October 31st, 1968 was 52,300 acre-feet or 37 per cent of 140,000 acre-feet, the average of the previous forty-one years. The quantities delivered to the United States by the various tributaries are listed in Table 3.

Table 3

Measured Runoff of the Eastern Tributaries of the Milk River at the International Boundary for the period March to October 1968

(quantities in acre-feet)

Month	Lodge Creek	Battle Creek	Wood-pile Coulee	East Fork Battle Creek	Lyons Creek	White-water Creek	Frenchman River	Rock Creek below Horse Creek	McEachern Creek
March	192	2,140	0	0	0	23	9,060	13,460	2,710
April	1,230	2,000	0	0	0	17	6,460	729	31
May	398	1,580	0	0	0	11	3,200	245	8
June	321	1,240	0	0	0	5	1,460	383	0
July	5	1,120	0	0	0	1	724	69	0
Aug.	0	591	0	0	0	2	664	40	0
Sept.	0	511	0	0	0	5	211	143	0
Oct.	0	1,010	0	0	0	7	160	95	0
Total	2,146	10,192	0	0	0	71	21,939	15,164	2,749

Estimates for a number of small diversions from the eastern tributaries of Milk River in Saskatchewan and Alberta were provided by the Water Resources Commission of the Province of Saskatchewan and the Water Resources Division of the Province of Alberta, and are based on reports from the individual licensed irrigators. The Saskatchewan Water Resources Commission has introduced a system whereby it receives results from the irrigators at the time of irrigation rather than the end of the season. This has resulted in a greater accuracy in the estimate for usage by the ungauged minor diversions. In order to include these minor diversion usages in the interim reports a total usage for the year was estimated on the basis of the snow survey results. Thus there is some discrepancy between the final and interim division computations. The reported minor diversions, as supplied by the Provinces of Saskatchewan and Alberta are contained in Appendix B.

Records were again collected at the index domestic projects (stock-water reservoirs) and usages for the spring runoff periods of 1966 to 1968 were calculated for the Battle Creek and Frenchman River Basins. These computations indicate that the total usage by all the projects within the two basins is a very small percentage of the total natural flow. The 1968 results indicate a usage in the Battle Creek Basin of 0.6 per cent of the computed natural flow (March to October) whereas in the Frenchman River Basin the indicated usage was 2.5 per cent of the computed natural flow (March to October). Records will be collected at the index stations for two or three more years, at which time a report will be prepared showing the usages by the domestic projects through the period of record and recommendations whether or not inclusion of these usages in the natural flow computations is warranted.

The supplementary gauging stations, which were established in 1965, on the Frenchman River and Battle Creek were again operated but the collected data are insufficient to make an adequate analysis of channel losses and

return flows.

The sixteenth annual snow survey in the basins of the eastern tributaries of Milk River was conducted by the Inland Waters Branch, Canada, during the period February 26 to 28, 1968. The tabulated results of the forecasts and measured discharge or computed natural flow are shown in Table 4.

Table 4

Cypress Hills Snow Survey Results

Location	Period of Correlation	Forecast of 1968 Runoff		Measured Runoff	
		Acre-Feet	% of Average	Acre-Feet	% of Average
Natural Flow Lodge Creek at International Boundary	1953 - 66	7,490 (March to April)	(1953-67) 37	3,050 (March to April)	(1953-67) 15
Natural Flow Battle Creek at International Boundary	1953 - 66	6,770 (Mar.5 to May 4)	(1953-67) 41	8,700 (Mar.5 to May 4)	(1953-67) 53
Natural Flow Frenchman River at International Boundary	1953 - 66	38,700 (March to May)	(1940-67) 68	33,900 (March to May)	(1940-67) 52

Lodge Creek

The computed natural flow of Lodge Creek at the International Boundary, for the period March 1 to October 31, 1968, was 3,980 acre-feet. This total represents 11 per cent of the average flow of the previous eighteen years of record. Each country was entitled to fifty per cent of the natural flow (1,990 acre-feet). A total flow of 2,150 acre-feet was recorded at the International Boundary, which is 108 per cent of the United States share.

Deficit deliveries were recorded in March but these were promptly refunded in April. Several very small deficits occurred during the summer.

A summary of the Lodge Creek division is presented in Table 5, the details of which are explained in Table 13 in Appendix A.

Table 5

1968 Lodge Creek Division Summary

Division Period at International Boundary	Natural Flow cfs	U. S. A. Share cfs	Received by U. S. A. cfs	Received by U. S. A.	
				Above (+) Share cfs	Below (-) Share cfs
Mar. 1 - Mar. 10	438	219	38		181
Mar. 11 - Mar. 20	337	169	44		125
Mar. 21 - Mar. 31	224	112	15		97
Apr. 1 - Apr. 10	272	136	150	14	
Apr. 11 - Apr. 20	192	96	247	151	
Apr. 21 - Apr. 30	73	36	223	187	
May 1 - May 10	82	41	148	107	
May 11 - May 20	66	33	48	15	
May 21 - May 31	34	17	5		12
June 1 - June 10	99	50	94	44	
June 11 - June 20	59	29	30	1	
June 21 - June 30	94	47	37		10
July 1 - July 10	15	8	3		5
July 11 - July 20	0	0	0		0
July 21 - July 31	7	3	0		3
Aug. 1 - Aug. 10	0	0	0		0
Aug. 11 - Aug. 20	0	0	0		0
Aug. 21 - Aug. 31	0	0	0		0
Sep. 1 - Sep. 10	0	0	0		0
Sep. 11 - Sep. 20	0	0	0		0
Sep. 21 - Sep. 30	14	7	0		7
Oct. 1 - Oct. 10	0	0	0		0
Oct. 11 - Oct. 20	0	0	0		0
Oct. 21 - Oct. 31	0	0	0		0

Battle Creek

The natural flow of Battle Creek at the International Boundary, for the period February 23 to October 31, 1968 was 16,300 acre-feet or 56 per cent of the average of the previous twenty-eight years of record. A total of 10,400 acre-feet was delivered to the United States, which is 128 per cent of her share. Four deficit deliveries were recorded during the season and these were all promptly refunded.

The Battle Creek division is summarized in Table 6 and detailed in Table 14 of Appendix A.

Table 6

1968 Battle Creek Division Summary

Division Period at International Boundary	Natural Flow cfs	U. S. A. Share cfs	Received by U. S. A. cfs	Received by U. S. A.	
				Above (+) Share cfs	Below (-) Share cfs
Feb. 23 - Mar. 4	264	132	210	78	
Mar. 5 - Mar. 14	987	494	378		116
Mar. 15 - Mar. 25	676	338	419	81	
Mar. 26 - Apr. 4	1,005	502	282		220
Apr. 5 - Apr. 14	730	365	428	63	
Apr. 15 - Apr. 24	563	282	337	55	
Apr. 25 - May 4	424	212	271	59	
May 5 - May 14	491	246	283	37	
May 15 - May 25	148	74	187	113	
May 26 - June 4	278	139	281	142	
June 5 - June 14	428	214	245	31	
June 15 - June 24	321	160	94		66
June 25 - July 4	472	236	287	51	
July 5 - July 14	341	171	127		44
July 15 - July 25	0	0	166	166	
July 26 - Aug. 4	53	26	288	262	
Aug. 5 - Aug. 14	93	46	99	53	
Aug. 15 - Aug. 25	66	33	61	28	
Aug. 26 - Sep. 4	49	25	46	21	
Sep. 5 - Sep. 14	33	16	31	15	
Sep. 15 - Sep. 24	106	53	99	46	
Sep. 25 - Oct. 4	213	107	182	75	
Oct. 5 - Oct. 14	152	76	142	66	
Oct. 15 - Oct. 25	205	102	190	88	
Oct. 26 - Oct. 31	115	58	107	49	

Frenchman River

The natural flow of the Frenchman River at the International Boundary, for the period March 1 to October 31, 1968 was 40,300 acre-feet or 52 per cent of the average of the previous twenty-eight years of record. The total delivery to the United States was 21,900 acre-feet or 106 per cent of its share. Several large deficit deliveries were recorded during the spring runoff period. These were more than made up with several large excess deliveries also during spring runoff. From August 11th to the end of the season, however, small deficit deliveries were recorded in seven of the eight division periods. A total deficit of 284 acre-feet was recorded during those eight division periods.

The division of the Frenchman River flows at the International Boundary are summarized in Table 7. Details are given in Table 15 of Appendix A.

Table 7

1968 Frenchman River Division Summary

Division Period at International Boundary	Natural Flow cfs	U. S. A. Share cfs	Received by U. S. A. cfs	Received by U. S. A.	
				Above (+) Share cfs	Below (-) Share cfs
Mar. 1 - Mar. 10	5,042	2,521	3,638	1,117	
Mar. 11 - Mar. 20	4,445	2,223	478		1,745
Mar. 21 - Mar. 31	1,893	946	452		494
Apr. 1 - Apr. 10	1,481	740	2,090	1,350	
Apr. 11 - Apr. 20	1,025	512	800	288	
Apr. 21 - Apr. 30	913	456	369		87
May 1 - May 10	845	422	617	195	
May 11 - May 20	694	347	613	266	
May 21 - May 31	729	364	383	19	
June 1 - June 10	552	276	355	79	
June 11 - June 20	311	156	200	44	
June 21 - June 30	324	162	181	19	
July 1 - July 10	180	90	41		49
July 11 - July 20	121	60	83	23	
July 21 - July 31	263	132	241	109	
Aug. 1 - Aug. 10	258	129	179	50	
Aug. 11 - Aug. 20	279	140	126		14
Aug. 21 - Aug. 31	187	93	30		63
Sep. 1 - Sep. 10	83	42	14		28
Sep. 11 - Sep. 20	19	10	2		8
Sep. 21 - Sep. 30	223	112	91		21
Oct. 1 - Oct. 10	244	122	5		117
Oct. 11 - Oct. 20	78	39	74	35	
Oct. 21 - Oct. 31	139	70	2		68

APPENDICES

Appendices A and B are submitted with this report under separate cover. Appendix A contains natural flow computations for the St. Mary River, Milk River, Lodge Creek, Battle Creek and Frenchman River. It also contains historical summaries of the mean monthly flows, United States shares and Canadian shares of the St. Mary River. Appendix B contains the daily discharge data for 39 international gauging stations and 3 semi-international gauging stations. Reservoir contents for 7 international and 9 semi-international gauging stations are also included. The details of the minor diversions in Canada are also contained in Appendix B.

GAUGING STATIONS OPERATED JOINTLY BY
CANADA AND UNITED STATES
IN ST. MARY AND MILK RIVER DRAINAGE BASINS

- 1968 -

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11AB060	Spangler Ditch near Govenlock	Int. [a]
11AB009	Middle Creek near Alberta Boundary	Int. [a]
11AB080	Middle Creek Reservoir	Int. R[a]
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Map Index	Stream and Location	Remarks
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11AB085	Cypress Lake West Inflow Canal Drain	Int. [a]
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11AC057	Frenchman River below Eastend Irrigation Project	Int. [a]
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11AC056	Val Marie Reservoir	Int. R[a]
11AC051	Frenchman River below Val Marie	Int. [a]
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Map Index	Stream and Location	Remarks
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11AC052	Eastend Canal	Int. [a]
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GAUGING STATIONS OPERATED INDEPENDENTLY
BY CANADA OR UNITED STATES
IN ST. MARY AND MILK RIVER DRAINAGE BASINS

- 1968 -

Map Index	Stream and Location	Remarks
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Map Index	Stream and Location	Remarks
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11AB008	Middle Creek above Lodge Creek	Canada [c]
11AB103	Squaw Coulee near Willow Creek	Canada [a]
6-1460	North Chinook Canal near Havre, Montana	U.S.A. [c]
	Battle Creek Tributary Basin	
11AB081	Battle Creek at Ranger Station	Canada [c]
11AB100	Battle Creek above Cypress Lake West Outflow Canal	Canada [c]
11AB096	Battle Creek near Consul	Canada [c]
11AB101	Battle Creek below Nashlyn Project	Canada [c]
11AB095	Adams Lake	Canada R[a]
11AB090	Reesor Reservoir	Canada R[a]
11AB102	Gaff Ditch near Merryflat	Canada [c]
	Frenchman River Tributary Basin	
11AC067	Frenchman River at No. 37 Highway	Canada [c]
11AC071	Frenchman River below Mule Creek	Canada [c]
11AC023	Frenchman River at 50 Mile	Canada [c]
11AC062	Frenchman River below Val Marie Reservoir	Canada [c]
11AC070	Frenchman River near Rosefield	Canada [c]

Map Index	Stream and Location	Remarks
11AC029	Frenchman River at Walker's	Canada c
11AC068	Val Marie Electric Pump No. 1	Canada a
11AC069	Val Marie Electric Pump No. 2	Canada a

SYMBOL CODE

Int. - International Gauging Station

Int. R - International Station on Reservoir

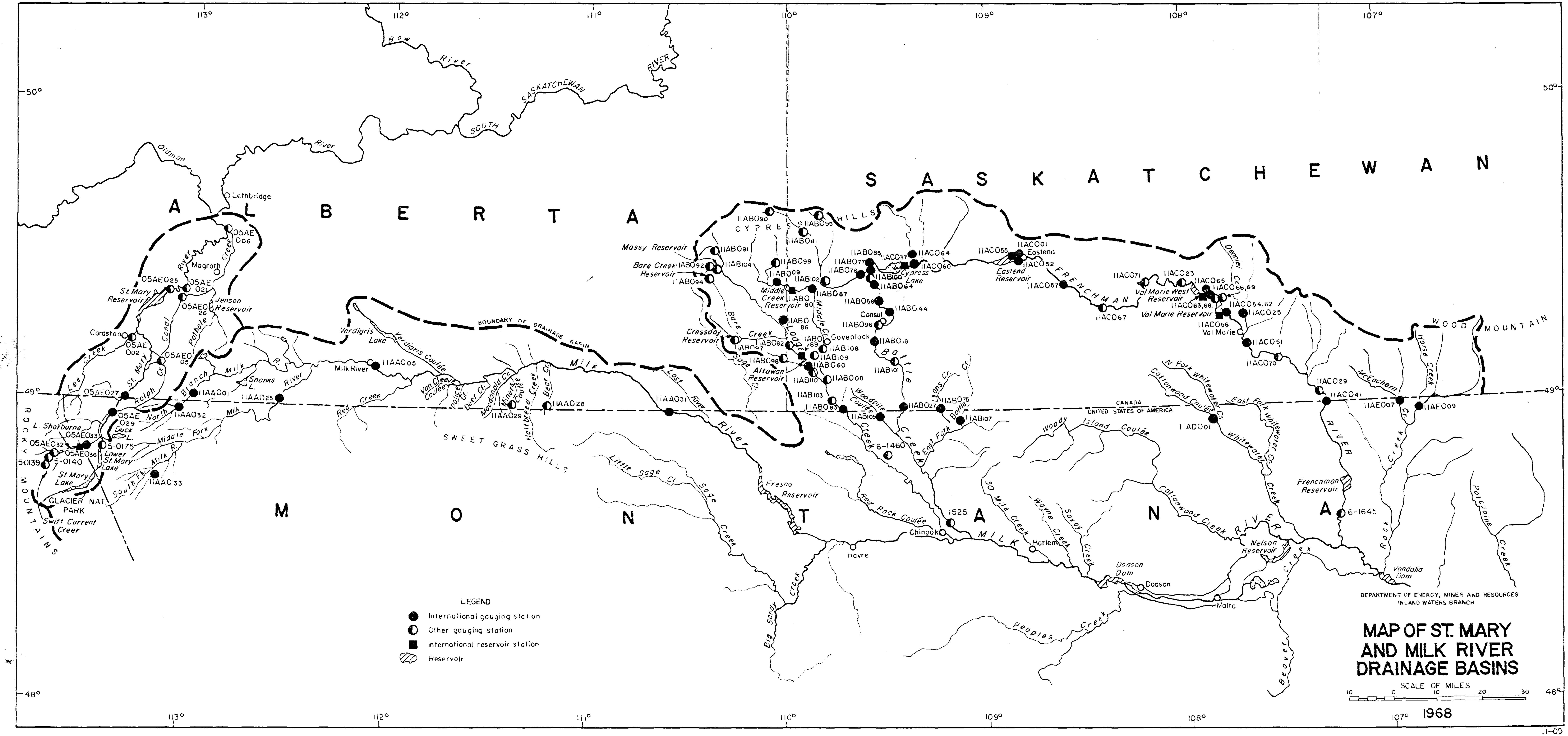
U.S.A. - Operation by United States Geological Survey

Canada - Operation by Inland Waters Branch, Canada

a - Monthly and daily discharge data and stream measurements or month-end contents contained in Appendix B

b - Monthly discharge data only tabulated in this report

c - Data not included in this report or appendices


MAP OF ST. MARY AND MILK RIVER DRAINAGE BASINS
1968
DEPARTMENT OF ENERGY, MINES AND RESOURCES
INLAND WATERS BRANCH
LEGEND
International gauging station
Other gauging station
International reservoir station
Reservoir
SCALE OF MILES
10 0 10 20 30
ALBERTA
SASKATCHEWAN
MONTANA
CANADA
UNITED STATES OF AMERICA
BOUNDARY OF DRAINAGE BASIN
113°
112°
111°
110°
109°
108°
107°
50°
49°
48°
Bow River
SOUTH SASKATCHEWAN RIVER
Oldman River
Lethbridge
Magrath
Cardston
Milk River
Chinook
Havre
Harlem
Dodson
Malta
Consul
Govenlock
Eastend
Val Marie
ROCKY MOUNTAINS
GLACIER NAT. PARK
SWEET GRASS HILLS
CYPRESS HILLS
WOOD MOUNTAIN
St. Mary Reservoir
Jensen Reservoir
Verdigris Lake
Massy Reservoir
Bare Creek Reservoir
Middle Creek Reservoir
Cressday Reservoir
Altawan Reservoir
Cypress Lake
Eastend Reservoir
Val Marie West Reservoir
Val Marie Reservoir
Fresno Reservoir
Nelson Reservoir
Frenchman Reservoir
Vandalia Dam
Dodson Dam
L. Sherburne
Lower St. Mary Lake
St. Mary Lake
Duck L.
Shanks L.
Lee Creek
St. Mary River
Pothole Creek
Rolph Cr.
North Branch Milk R.
Middle Fork Milk R.
South Fk. Milk R.
Swift Current Creek
Red Creek
Verdigris Coulée
Van Cleeve Coulée
Police Cr.
Deer Cr.
Macdonald Cr.
Miners Coulée
Halfbreed Creek
Bear Cr.
Lost River
Milk River
Bare Creek
Sage Cr.
Middle Cr.
Lodge Creek
Battle Creek
Woodpile Coulée
Lyons Cr.
East Fork Battle Cr.
Frenchman River
Denniel Cr.
Horse Creek
McEachern Cr.
Rock Creek
Porcupine Creek
Whitewater Creek
N. Fork Whitewater Cr.
East Fork Whitewater Cr.
Cottonwood Coulée
Cottonwood Creek
Woody Island Coulée
Little Sage Cr.
Sage Creek
Big Sandy Creek
Red Rock Coulée
30 Mile Creek
Wayne Creek
Savoy Creek
Beaver Creek
Peoples Creek
05AE006
05AE025
05AE021
05AE026
05AE002
05AE005
05AE027
05AE029
05AE033
05AE032
05AE036
5-0139
5-0140
5-0175
11AA001
11AA032
11AA025
11AA005
11AA029
11AA028
11AA031
11AA033
11AB090
11AB095
11AB081
11AB091
11AB092
11AB104
11AB094
11AB099
11AB009
11AB085
11AB077
11AB078
11AB100
11AB084
11AB102
11AB087
11AB080
11AB058
11AB044
11AB086
11AB096
11AB082
11AB097
11AB089
11AB098
11AB108
11AB109
11AB060
11AB018
11AB110
11AB008
11AB101
11AB103
11AB083
11AB105
11AB027
11AB075
11AB107
11AC037
11AC064
11AC060
11AC055
11AC001
11AC052
11AC057
11AC067
11AC071
11AC023
11AC065
11AC066,69
11AC063,68
11AC054,62
11AC025
11AC056
11AC051
11AC070
11AC029
11AC041
11AD001
11AE007
11AE009
6-1460
1525
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1968

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