Report to

THE INTERNATIONAL JOINT COMMISSION

on

THE DIVISION OF THE WATERS OF

THE ST. MARY AND MILK RIVERS

1995



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Cover photo:

St. Mary River near Babb, Montana, February 1996. Photo by Donald A. Bischoff, U.S. Geological Survey, Helena, Montana.

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by

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R.A. Halliday representing Canada

and

David J. Lystrom representing the United States

March 1996

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

Commissioners;

In compliance with the provisions of Article VI of the Boundary Waters Treaty of 1909 and Clause VIII (c) of your order of October 4, 1921, directing the division of the waters of the 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, 1995.

Respectfully submitted,

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R.A. Halliday Accredited Officer of Her Majesty

David J. Lystron for Accredited Officer of the United States

<u>SYNOPSIS</u>

During the 1995 irrigation season, the natural flows of the St. Mary and Milk Rivers were 123 percent and 165 percent, respectively, of the long-term averages.

The natural flow of the St. Mary River at the International Boundary during the irrigation season, April 1 to October 31, 1995, was 878 000 cubic decametres (dam³) (712,000 acre-feet). Under the terms of the Boundary Waters Treaty, the Canadian share was 513 000 dam³ (416,000 acre-feet). The total flow recorded at the International Boundary during the irrigation season was 149 percent of the Canadian allotment.

The natural flow of the Milk River at the Eastern Crossing of the International Boundary from March 1 to October 31, 1995, was 229 000 dam³ (186,000 acre-feet). Under the terms of the Treaty, the United States' allotment was 155 000 dam³ (126,000 acre-feet). The United States received 148 percent of its allotment at Eastern Crossing, in addition to its share of St. Mary River water diverted into the Milk River by the St. Mary Canal.

The March to October natural flows of the three apportioned tributaries of the Milk River; Lodge Creek, Battle Creek, and Frenchman River; were 11 percent, 57 percent, and 32 percent, respectively, of the long term averages.

The annual meeting of the Field Representatives was held in Cypress Hills Provincial Park, Saskatchewan on February 7, 1996. Mutual problems, future plans, and changes in computational procedures were discussed and a schedule of field operations for 1996 was adopted. Streamflow records and natural flow computations collected jointly by the United States and Canada were reviewed and approved at the meeting.

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INTRODUCTION

The apportionment of the waters of the St. Mary and Milk Rivers is governed by Article VI of the Boundary Waters Treaty of 1909 between Great Britain and the United States. The terms of the Treaty were further clarified by the 1921 Order of the International Joint Commission. A copy of the 1921 Order, including Article VI, is contained in Annex A of this report.

To comply with this Treaty, Field Representatives of the United States and Canada collected and compiled hydrometric data at 36 international gauging stations on a cooperative basis. An additional 32 gauging stations were operated independently by the United States or Canada to obtain data on diversions, reservoir contents, return flows and index runoff. Most of this additional information was used to improve the accuracy of natural-flow computations.

This report summarizes the 1995 natural-flow computations, apportionment of the natural flow, unusual occurrences during the year, and procedural modifications designed to increase the accuracy of the natural-flow computations. Summary natural-flow tables are included. Detailed natural-flow computations are included in Appendix A. Daily discharge and other related data are included in Appendix B. Appendices A and B are submitted with this report under separate cover.

In accordance with the International System of Units (SI) conversion schedule adopted by the International Joint Commission, this report uses SI units first, followed by inch-pound units in parentheses. Data in tables are shown in SI units first, followed by the respective inch-pound units (for example, Tables 1 and 1A). The format for Appendices A and B of the report is SI units only. All Canadian data are collected, computed and published in SI units. The United States' data, which are collected and computed in inch-pound units, were converted to SI units using the appropriate conversions. A summary of the conversion factors is contained in Annex B.

Mr. R.A. Halliday, as Accredited Officer of Her Majesty, was represented in the field by Mr. R.G. Boals, Chief, Monitoring and Operations Division, Prairie and Northern Region. Mr. David J. Lystrom, United States Geological Survey, as Accredited Officer of the United

States, was represented in the field by Mr. R.E. Davis, District Chief, United States Geological Survey, Helena, Montana. This report was prepared jointly by personnel of Environment Canada, Monitoring and Operations Division, and the United States Geological Survey, under the supervision of Messrs. Boals and Davis.

The annual meeting of the Field Representatives was held in the Cypress Hills, Saskatchewan, on February 7, 1996. Mutual problems, future plans, and changes in computational procedures were discussed and a schedule of field operations for 1996 was adopted.

Streamflow records and natural-flow computations collected jointly by the United States and Canada for 1995 were reviewed and approved at the meeting.

ST. MARY RIVER

During the irrigation season, April 1 to October 31, Canada's share of the natural flow of the St. Mary River at the International Boundary, as stipulated by the 1921 Order, is three-fourths of the natural flow when that flow is 666 cubic feet per second (18.86 cubic metres per second) or less. Flow in excess of that quantity is divided equally between Canada and the United States. During the non-irrigation season, November 1 to March 31, the flow is divided equally between the two countries.

To comply with the above Order, representatives of both countries make twice-monthly computations of the daily natural flow of the St. Mary River during the irrigation season. If use by the United States is in excess of its share, then a delivery of an equivalent quantity of water is normally made to Canada at the earliest opportunity. Regular interim reports of these computations are sent to all agencies involved in the water use and management of the flow of the St. Mary River. The interim reports keep these agencies informed as to the quantity of water that is available and the status of apportionment.

Tentative computations and interim reports are not made during the non-irrigation season when use by the United States is limited to storage in Lake Sherburne. The flow into Lake Sherburne is considerably less than 50 percent of the natural flow. Occasionally, water is diverted into the St. Mary Canal during the non-irrigation season, necessitating additional computations.

Lake Sherburne, the only storage reservoir within the St. Mary River basin in the United States, is used to store part of the United States' share of flow for later diversion to the Milk River. This water, which passes through Canada, is used by the United States for irrigation in the eastern portion of the Milk River basin.

Storage in Lake Sherburne (station 05AE036) was 11 900 dam³ (9,650 acre-feet) on October 31, 1994 and increased to 35 200 dam³ (28,500 acre-feet) on March 26, 1995, when releases began. Maximum storage was 82 100 dam³ (66,600 acre-feet) on July 22, 1995 and storage decreased to 44 700 dam³ (36,200 acre-feet) by the end of the irrigation season on October 31, 1995.

Water was diverted from the St. Mary River into the Milk River via the St. Mary Canal from March 27 through April 7 and April 15 through August 25, 1995. The St. Mary Canal was not used during April 8-14, 1995, to enable repair of a breach in the canal bank. The total flow recorded at the gauging station on the St. Mary Canal at St. Mary Crossing (station 05AE029) was 105 000 dam³ (85,100 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 computed natural flow of the St. Mary River at the International Boundary from November 1, 1994 to October 31, 1995 was 970 000 dam³ (786,000 acre-feet) of which 878 000 dam³ (712,000 acre-feet) occurred during the irrigation season, April 1 to October 31, 1995. For the irrigation season, Canada's and the United States' shares were 513 000 dam³ (416,000 acre-feet) and 365 000 dam³ (296,000 acre-feet), respectively. A total discharge of 766 000 dam³ (621,000 acre-feet) was recorded at the International Boundary, which was 149 percent of the Canadian share. The computed natural flow during the irrigation season was 123 percent of the average of the previous 92 years of record.

Deficit deliveries were recorded in 2 of the 14 division periods during the 1995 irrigation season. Deficits were refunded by the middle of June.

The division of St. Mary River natural flow is summarized in Tables 1 and 1A and Figure 1, which follow. The detailed computation of the natural flow is given in Table 6 and the historical summary is given in Table 7 of Appendix A.

TABLE 1

SUMMARY OF ST. MARY RIVER DIVISION FOR 1995¹ QUANTITIES IN CUBIC DECAMETRES

DIVISION PERIOD AT	COMPUTED	CANADAS	DECEIVED	RECEIVED BY CANADA	
INTERNATIONAL BOUNDARY	NATURAL FLOW	SHARE	BY CANADA	ABOVE SHARE	BELOW SHARE
APR 1 - APR 15	12 374	9 280	9 439	159	
APR 16 - APR 30	12 166	9 125	5 916		3 209
MAY 1 - MAY 15	52 412	31 769	29 907		1 862
MAY 16 - MAY 31	99 228	56 129	56 834	705	
JUNE 1 - JUNE 15	226 622	119 421	193 378	73 957	
JUNE 16 - JUNE 30	140 170	76 193	132 164	55 971	
JULY 1 - JULY 15	99 835	56 025	94 440	38 415	
JULY 16 - JULY 31	67 138	40 085	59 599	19 514	
AUG 1 - AUG 15	38 355	25 286	41 796	16 510	
AUG 16 - AUG 31	30 534	21 349	38 957	17 608	
SEPT 1 - SEPT 15	19 075	14 260	36 428	22 168	
SEPT 16 - SEPT 30	12 900	9 675	17 007	7 332	
OCT 1 - OCT 15	25 341	16 722	17 213	491	
OCT 16 - OCT 31	41 584	27 257	32 606	5 349	
TOTAL	877 734	512 576	765 684		

¹This is a summary of data from Table 6, Appendix A.

TABLE 1A

SUMMARY OF ST. MARY RIVER DIVISION FOR 1995¹ QUANTITIES IN ACRE-FEET

DIVISION PERIOD AT	COMPUTED	COMPUTED NATURAL FLOW		RECEIVED BY CANADA	
INTERNATIONAL BOUNDARY	NATURAL FLOW		BY CANADA	ABOVE SHARE	BELOW SHARE
APR 1 - APR 15	10,032	7,523	7,652	129	
APR 16 - APR 30	9,863	7,398	4,796		2,602
MAY 1 - MAY 15	42,490	25,755	24,246		1,510
MAY 16 - MAY 31	80,444	45,504	46,075	572	
JUNE 1 - JUNE 15	183,722	96,815	156,772	59,957	
JUNE 16 - JUNE 30	113,636	61,770	107,145	45,376	
JULY 1 - JULY 15	80,936	45,419	76,563	31,143	
JULY 16 - JULY 31	54,429	32,497	48,317	15,820	
AUG 1 - AUG 15	31,094	20,499	33,884	13,385	
AUG 16 - AUG 31	24,754	17,308	31,582	14,275	
SEPT 1 - SEPT 15	15,464	11,561	29,532	17,972	
SEPT 16 - SEPT 30	10,458	7,844	13,788	5,944	
OCT 1 - OCT 15	20,544	13,557	13,955	398	
OCT 16 - OCT 31	33,712	22,097	26,434	4,336	
TOTAL	711,579	415,545	620,740		

¹All values are conversions of data from Table 1. Totals and shares may not add or subtract exactly as a result of rounding.

7 FIGURE 1 ST. MARY RIVER DIVISION, 1995

Division Period Values



MILK RIVER

During the irrigation season, April 1 to October 31, the United States' share of the natural flow of the Milk River at the Eastern Crossing of the International Boundary, as stipulated by the 1921 Order, is three-fourths of the natural flow when that flow is 666 cubic feet per second (18.86 cubic metres per second) or less. Flows in excess of that quantity are divided equally between the United States and Canada. During the non-irrigation season, November 1 to March 31, the entire flow is divided equally between the two countries.

Prior to the mid 1970's, uses of the natural flow of the Milk River by Canada and the United States were assumed to be less than their respective shares and no formal apportionment was made. By 1977, it became apparent that the increasing numbers of sprinkler irrigation systems were capable of using all of the natural flow for long periods of time. Consequently, a more comprehensive natural-flow computation and water-division procedure was developed and has been used since 1985. The revised computation procedure includes an approximate accounting of irrigation consumptive uses in both countries, and the interbasin transfer of water in Canada. An additional refinement was made in 1988 when F.I. Morton's evapotranspiration model replaced the adjusted pan evaporation method in the natural-flow computations. During 1995, the United States' and Canada's respective estimated consumptive uses were 5 050 dam³ (4,090 acre-feet) and 5 160 dam³ (4,180 acre-feet). An interbasin transfer of 5 330 dam³ (4,320 acre-feet) from Verdigris Coulee near the Mouth (station 11AA038) was credited to the Canadian consumptive use.

The computed natural flow of the Milk River at the Eastern Crossing of the International Boundary from March 1 to October 31, 1995 was 229 000 dam³ (186,000 acre-feet). This flow was 165 percent of the average computed natural flow of the previous 83 years of record. It is important to note, however, that natural-flow computations prior to 1985 did not account for consumptive use. Consequently, natural-flow values after 1985 are not directly comparable with natural flows of previous years. The respective shares of the United States and Canada were 155 000 dam³ (126,000 acre-feet) and 74 100 dam³ (60,100 acre-feet). The United States received 148 percent of its allotment at Eastern Crossing, in addition to its share of St. Mary River water diverted into the Milk River by the St. Mary Canal. No deficit deliveries occurred during the period.

TABLE 2

SUMMARY OF MILK RIVER DIVISION FOR 1995¹ QUANTITIES IN CUBIC DECAMETRES

DIVISION PERIOD AT	COMPUTED			RECEIVED BY U.S.A.	
INTERNATIONAL BOUNDARY	NATURAL FLOW	U.S.A. SHARE	BY U.S.A.	ABOVE SHARE	BELOW SHARE
MAR 1 - MAR 15	9 662	4 829	9 662	4 833	
MAR 16 - MAR 31	9 431	4 713	9 437	4 724	
APR 1 - APR 15	6 386	4 787	6 388	1 601	ł
APR 16 - APR 30	3 065	2 298	3 168	870	
MAY 1 - MAY 15	23 432	16 021	23 816	7 795	
MAY 16 - MAY 31	21 892	16 226	21 436	5 210	
JUNE 1 - JUNE 15	54 785	32 848	54 268	21 420	
JUNE 16 - JUNE 30	28 089	19 906	27 910	8 004	
JULY 1 - JULY 15	21 767	15 830	21 198	5 368	
JULY 16 - JULY 31	14 165	10 245	13 725	3 480	
AUG 1 - AUG 15	7 268	5 450	7 219	1 769	
AUG 16 - AUG 31	7 288	5 469	7 204	1 735	
SEPT 1 - SEPT 15	5 675	4 256	5 807	1 551	
SEPT 16 - SEPT 30	4 668	3 500	5 163	1 663	
OCT 1 - OCT 15	5 564	4 174	6 107	1 933	
OCT 16 - OCT 31	6 124	4 590	6 811	2 221	
TOTAL	229 261	155 142	229 319		

¹This is a summary of data from Table 8, Appendix A.

TABLE 2A

SUMMARY OF MILK RIVER DIVISION FOR 1995¹ QUANTITIES IN ACRE-FEET

DIVISION PERIOD AT	COMPUTED			RECEIVED BY U.S.A.	
INTERNATIONAL BOUNDARY	NATURAL FLOW	U.S.A. SHARE	RECEIVED BY U.S.A.	ABOVE SHARE	BELOW SHARE
MAR 1 - MAR 15	7,833	3,915	7,833	3,918	
MAR 16 - MAR 31	7,646	3,821	7,651	3,830	
APR 1 - APR 15	5,177	3,881	5,179	1,298	
APR 16 - APR 30	2,485	1,863	2,568	706	
MAY 1 - MAY 15	18,997	12,989	19,308	6,319	
MAY 16 - MAY 31	17,748	13,154	17,378	4,224	
JUNE 1 - JUNE 15	44,415	26,631	43,995	17,365	
JUNE 16 - JUNE 30	22,772	16,138	22,627	6,489	
JULY 1 - JULY 15	17,647	12,834	17,185	4,352	
JULY 16 - JULY 31	11,483	8,306	11,127	2,822	
AUG 1 - AUG 15	5,893	4,418	5,852	1,434	
AUG 16 - AUG 31	5,909	4,434	5,840	1,407	
SEPT 1 - SEPT 15	4,601	3,450	4,708	1,257	
SEPT 16 - SEPT 30	3,784	2,837	4,186	1,348	
OCT 1 - OCT 15	4,511	3,384	4,951	1,567	
OCT 16 - OCT 31	4,965	3,722	5,522	1,801	
TOTAL	185,862	125,774	185,909		

¹All values are conversions of data from Table 2. Totals and shares may not add or subtract exactly as a result of rounding.

11 FIGURE 2 MILK RIVER DIVISION, 1995

Division Period Values



SOUTHERN TRIBUTARIES OF THE MILK RIVER

Responding to concerns expressed by Canadian water users, the International Joint Commission at its executive session on December 8, 1986, agreed in principle that the issue of utilization of the southern tributaries should be addressed in an informal, pragmatic manner. The Commission instructed the Accredited Officers to proceed with discussion to resolve Canadian concerns. To assist them in implementing the Commission's instructions, the Accredited Officers established a four-member ad hoc task force comprised of officials from the State of Montana and the Province of Alberta water management agencies and the United States and Canadian field representatives for the St. Mary-Milk River Treaty.

The task force met with United States and Canadian water users, conducted public meetings, toured water-use projects, compiled information on water availability and use, investigated ground-water supplies, and considered various options for resolving issues. The task force determined that United States water users were reluctant to participate in options that might limit their use of water and jeopardize their water claims in future adjudication of water rights. They also determined that basic Canadian water-user needs for domestic and stock-water use were being satisfied with wells and dugouts. Solutions to water-utilization problems were limited because cost of storage facilities, pumpage from the Milk River, and formal apportionment of southern tributary waters would not be cost effective.

In September 1991, the Montana Department of Natural Resources and Conservation, in response to requests from the task force and others, issued an Order to close the southern tributaries to issuance of additional water permits.

The final report was forwarded to the International Joint Commission in May 1994. At its Executive session on September 21, 1994, the Commission agreed that the task force should be terminated as recommended. The Commission also agreed not to act at that time on the three recommendations related to the adjudication process, but requested that the Accredited Officers continue to monitor the situation and report annually, or more frequently if appropriate, on such matters as complaints by Canadian ranchers and changes in the status of basin adjudication.

Communication with officials from Alberta Environment and the Montana Department of Natural Resources and Conservation in January 1996 indicated no Canadian complaints or changes in the Montana adjudication process in 1995.

Flows for March through October 1995 for the southern tributaries were as follows:

- o Breed Creek near International Boundary 3 090 dam³ (2,500 acre-feet)
- o Bear Creek near International Boundary 2 670 dam³ (2,170 acre-feet)
- o Miners Coulee near International Boundary 1 450 dam³ (1,180 acre-feet)

EASTERN TRIBUTARIES OF THE MILK RIVER

The waters of the eastern tributaries of the Milk River are divided in accordance with the 1921 Order of the International Joint Commission, 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 order might well be interpreted as requiring that the division of water be made on a continuing basis; however, the physical limitation due to transit time in the flow system was recognized. Further analysis showed that the minimum practical time frame for compilation of the natural flows at the International Boundary was every 10 days. In 1994 the time frame was increased to twice monthly to reduce lag-time anomalies, reduce costs, and conform to St. Mary and Milk Rivers computation periods.

Prior to 1937, Canadian use along the eastern tributaries consisted of domestic projects, and the Canadian share of the natural flow was not fully used. In the late 1930s, the Government of Canada constructed three dams on the Frenchman River creating Eastend Reservoir (station 11AC055), Huff Lake (station 11AC063), and Newton Lake (station 11AC056) necessitating an operational division of flow on this tributary by 1937. In 1938, dams were constructed at both ends of Cypress Lake (station 11AC037) near the Battle Creek-Frenchman River divide to allow interbasin storage and transfers of water. In the early 1950s the redevelopment of several private irrigation projects and the construction of the Vidora Irrigation Project resulted in increased use of Battle Creek water in Canada and made an operational division of flow on this tributary necessary by 1957. In 1960, construction of Altawan Reservoir (station 11AB089) and Spangler Irrigation Project (station 11AB060) on Lodge Creek made an operational division of flow on this tributary necessary by 1961.

During the period March 1 to October 31, twice-monthly computations of the natural flow of Lodge Creek, Battle Creek and the Frenchman River are made to determine each country's share. If use by Canada is in excess of its share, then a delivery of an equivalent quantity of water is made to the United States at the earliest opportunity. When mutually agreed to, the United States or Canada may request that deficit deliveries be delayed to allow for more efficient use of the water.

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 are distributed to interested agencies during the irrigation season. Additional computations may be made to account for significant usages beyond October 31. Generally, no division of flow is made during the winter as flow and use are low and streamflow records are impractical to obtain.

Lyons Creek is monitored but does not have sufficient use in Canada at this time to warrant an operational division of flow. No flow was recorded at Lyons Creek in 1995.

Volumes for unmeasured diversions to private irrigation projects in the Lodge Creek, Battle Creek, and Frenchman River basins in Saskatchewan were based on year-end reports provided by the Saskatchewan Water Corporation, and for the Lodge Creek and Battle Creek basins in Alberta, by Alberta Environmental Protection. These reports are compiled from reports received from operators of irrigation projects and from on-site inspections. An additional adjustment is made for domestic projects in the Battle Creek and Frenchman River basins based on the results of studies conducted by Canada on domestic use.

For interim reports prepared at the end of each division period, estimates of minor diversions were made based on field conditions and historical usages. At mid-year and at year-end, estimates of minor diversions were updated based on usage reports received from Alberta Environmental Protection and the Saskatchewan Water Corporation. Consequently, some discrepancy exists between interim and final division computations. Lists of reported diversions are contained in Appendix B.

In 1994 Cypress Lake rose above the dead storage level of 30 000 dam³ (24,300 acrefeet) for the first time since 1989. Below average runoff and normal water use by local irrigators occurred in 1995, causing lake levels to drop slightly below the dead storage level by the end of October. Storage in Eastend Reservoir was greatly reduced after July in order for construction crews to begin work on a new control and spillway structure. This project is scheduled to be completed by April 1996. At the end of February, the combined usable storage of Middle Creek Reservoir, Altawan Reservoir, Eastend Reservoir, Huff Lake, and Newton Lake was 21 000 dam³ (17,000 acre-feet), or 51 percent of the total usable storage of 41 100 dam³ (33,300 acre-feet). By the end of April, runoff had increased the combined storage to the yearly maximum of 30 600 dam³ (24,800 acre-feet) or 74 percent of the total usable storage. By the end of September, irrigation usage, evaporation, and releases from the reservoirs depleted the combined usable storage to 12 600 dam³ (10,200 acre-feet) or 31 percent of the total usable storage. Further details on storage in the major Canadian reservoirs are provided in Figure 3, and in Table 16 of Appendix B.

FIGURE 3 RESERVOIRS IN LODGE, BATTLE, AND FRENCHMAN BASINS MONTH-END CONTENTS, 1994, 1995, AND 1985-1994 MEAN



0------0 1995 A----- A 1994 X----- X 1985-94 MEAN

LODGE CREEK

The computed natural flow of Lodge Creek at the International Boundary from March 1 to October 31, 1995, was 3 760 dam³ (3,050 acre-feet). This volume is 11 percent of the average natural flow of the previous 45 years of record. Each country is entitled to 50 percent of the natural flow -- 1 880 dam³ (1,520 acre-feet). A total flow of 2 360 dam³ (1,910 acre-feet) was recorded at Lodge Creek below McRae Creek at the International Boundary (station 11AB083) from March 1 to October 31.

Deficit deliveries were recorded in 8 of the 16 division periods during the season. Most deficits were refunded by the end of July, but a small deficit of 5 dam³ (4 acre-feet) remained at the end of October.

The division of the Lodge Creek natural flow is summarized in Tables 3 and 3A and Figure 4 which follow. The detailed computation of the natural flow is given in Table 10 and the historical summary is given in Table 11 of Appendix A.

TABLE 3

У

SUMMARY OF LODGE CREEK DIVISION FOR 1995¹ QUANTITIES IN CUBIC DECAMETRES

DIVISION PERIOD AT	COMPUTED		DECEIVED	RECEIVED BY U.S.A.	
INTERNATIONAL BOUNDARY	NATURAL U.S. SHA	U.S.A. SHARE	HARE BY U.S.A.	ABOVE SHARE	BELOW SHARE
MAR 1 - MAR 15	0	0	0		
MAR 16 - MAR 31	73	36	0		36
APR 1 - APR 15	313	157	0		157
APR 16 - APR 30	292	146	0		146
MAY 1 - MAY 15	29	14	0		14
MAY 16 - MAY 31	148	74	0		74
JUNE 1 - JUNE 15	0	0	648	648	
JUNE 16 - JUNE 30	2 570	1 285	971		314
JULY 1 - JULY 15	213	107	241	134	
JULY 16 - JULY 31	0	0	383	383	
AUG 1 - AUG 15	32	16	35	19	
AUG 16 - AUG 31	78	39	78	39	
SEPT 1 - SEPT 15	0	0	0		
SEPT 16 - SEPT 30	0	0	0		
OCT 1 - OCT 15	2	1	0		1
OCT 16 - OCT 31	8	4	0		4
TOTAL	3 760	1 880	2 356		

¹This is a summary of data from Table 10, Appendix A. Totals and shares may not add or subtract exactly as a result of rounding.

TABLE 3A

SUMMARY OF LODGE CREEK DIVISION FOR 1995¹ QUANTITIES IN ACRE-FEET

DIVISION PERIOD AT	COMPUTED			RECEIVED BY U.S.A.	
INTERNATIONAL BOUNDARY	NATURAL FLOW	SHARE	BY U.S.A.	ABOVE SHARE	BELOW SHARE
MAR 1 - MAR 15	0	0	0		
MAR 16 - MAR 31	59	30	0		29
APR 1 - APR 15	254	127	0		127
APR 16 - APR 30	237	118	0		118
MAY 1 - MAY 15	24	12	0		11
MAY 16 - MAY 31	120	60	0		60
JUNE 1 - JUNE 15	0	0	525	525	
JUNE 16 - JUNE 30	2,084	1,042	787		255
JULY 1 - JULY 15	173	87	195	109	
JULY 16 - JULY 31	0	0	310	310	
AUG 1 - AUG 15	26	13	28	15	
AUG 16 - AUG 31	63	32	63	32	
SEPT 1 - SEPT 15	0	0	0		
SEPT 16 - SEPT 30	0	0	0		
OCT 1 - OCT 15	2	1	0		1
OCT 16 - OCT 31	3	2	0		3
TOTAL	3,043	1,522	1,910		

¹All values are conversions of data from Table 3. Totals and shares may not add or subtract exactly as a result of rounding.

21 FIGURE 4 LODGE CREEK DIVISION, 1995

3 000 2,430 QUANTITIES, IN CUBIC DECAMETRES 2 500 2,025 **Z** Computed Natural Flow Canada/USA Share QUANTITIES. IN ACRE-FEET Received by USA 2 000 1,620 1 500 1,215 1 000 810 500 405 IOMAT STATE 15 JUNE 1-JUNE 16-JUNE 30 JUNE 16-JUNE 10-1-AUG AUG COMPANY 0CT 0CT 160CT 3T SEPTISEPT 15 APR 16 APR 30 MAR 1-WAR 15 MAY 1-MAY 15 MAR 16-MAR 31 APR 1-APR 15 MAY 16 MAY 31 0 **Delivery to USA** 800 648 Above/Below Share Deficit to date QUANTITIES, IN CUBIC DECAMETRES 600 486 QUANTITIES. IN ACRE-FEET 400 324 200 162 0 0 -200 -162 -400 -324 2007 10007 15 0007 31 APR 16-APR 30 MAR 1-MAR 15 MAR 16 MAR 31 APR 1-APR 15 MAY 1-MAY 15 -486 30 AV 15 AV 31 INE 15 30 VY 15 31 1.MAY 16 MAY 1.JUNE 16 JUNY 1-JULY 16 JULY 31 MAY JUNE JUNE 1 JULY JULY 16 JUC 1-MAY JUNE JUNE 1 JULY AUG 1-5 NULY 31 NUC 1-AUG 15-AUG 31 AUG 16-AUG 15-EPT 15-SEPT AUG 16-AUG 15-EPT 16-SEPT AUG 5-EPT 16-SEPT 16-SEPT

Division Period Values

BATTLE CREEK

The computed natural flow of Battle Creek at the International Boundary from March 1 to October 31, 1995, was 17 700 dam³ (14,300 acre-feet). This volume is 57 percent of the average natural flow of the previous 55 years of record. Each country is entitled to 50 percent of the natural flow -- 8 850 dam³ (7,170 acre-feet). A total flow of 9 310 dam³ (7,550 acre-feet) was recorded at Battle Creek at International Boundary (station 11AB027) from March 1 to October 31.

Deficit deliveries were recorded in 6 of the 16 division periods during the season. No deficit remained at the end of October.

The division of the Battle Creek natural flow is summarized in Tables 4 and 4A and Figure 5 which follow. The detailed computation of the natural flow is given in Table 12 and the historical summary is given in Table 13 of Appendix A.

TABLE 4

SUMMARY OF BATTLE CREEK DIVISION FOR 1995¹ QUANTITIES IN CUBIC DECAMETRES

DIVISION PERIOD AT	COMPUTED	HCA	RECEIVED	RECEIVED BY U.S.A.	
INTERNATIONAL BOUNDARY	NATURAL FLOW	SHARE	BY U.S.A.	ABOVE SHARE	BELOW SHARE
MAR 1 - MAR 25	1 174	587	824	237	
MAR 26 - APR 9	1 431	716	542		174
APR 10 - APR 24	3 832	1 916	818		1 098
APR 25 - MAY 9	1 611	806	683		123
MAY 10 - MAY 25	1 708	854	924	70	
MAY 26 - JUNE 9	861	431	1 267	836	
JUNE 10 - JUNE 24	1 795	897	715		182
JUNE 25 - JULY 9	1 094	547	831	284	
JULY 10 - JULY 25	607	303	271		32
JULY 26 - AUG 9	196	98	196	98	
AUG 10 - AUG 25	290	145	290	145	
AUG 26 - SEPT 9	179	89	179	90	
SEPT 10 - SEPT 24	693	346	381	35	
SEPT 25 - OCT 9	474	237	474	237	
OCT 10 - OCT 25	1 486	743	700		43
OCT 26 - OCT 31	301	150	212	62	
TOTAL	17 732	8 865	9 307		

¹This is a summary of data from Table 12, Appendix A. Totals and shares may not add or subtract exactly as a result of rounding.

TABLE 4A

SUMMARY OF BATTLE CREEK DIVISION FOR 1995¹ QUANTITIES IN ACRE-FEET

DIVISION PERIOD AT	COMPUTED			BY U.S.A.	
INTERNATIONAL BOUNDARY	NATURAL FLOW	U.S.A. SHARE	BY U.S.A.	ABOVE SHARE	BELOW SHARE
MAR 1 - MAR 25	952	476	668	192	
MAR 26 - APR 9	1,160	580	439		141
APR 10 - APR 24	3,107	1,553	663		890
APR 25 - MAY 9	1,306	653	554		100
MAY 10 - MAY 25	1,385	692	749	57	
MAY 26 - JUNE 9	698	349	1,027	678	<u></u>
JUNE 10 - JUNE 24	1,455	728	580		148
JUNE 25 - JULY 9	887	443	674	230	
JULY 10 - JULY 25	492	246	220		27
JULY 26 - AUG 9	159	79	159	79	
AUG 10 - AUG 25	235	118	235	118	
AUG 26 - SEPT 9	145	73	145	72	
SEPT 10 - SEPT 24	562	281	309	28	
SEPT 25 - OCT 9	384	192	384	192	
OCT 10 - OCT 25	1,205	602	567		35
OCT 26 - OCT 31	244	122	172	49	- <u></u>
TOTAL	14,375	7,188	7,545		

¹All values are conversions of data from Table 4. Totals and shares may not add or subtract exactly as a result of rounding.

25 FIGURE 5 BATTLE CREEK DIVISION, 1995

Division Period Values



FRENCHMAN RIVER

The computed natural flow of the Frenchman River at the International Boundary from March 1 to October 31, 1995, was 25 100 dam³ (20,300 acre-feet). This volume is 32 percent of the average natural flow of the previous 55 years of record. Each country is entitled to 50 percent of the natural flow -- 12 550 dam³ (10,200 acre-feet). A total flow of 12 300 dam³ (9,970 acre-feet) was recorded at Frenchman River at International Boundary (station 11AC041) from March 1 to October 31.

Deficit deliveries were recorded in 10 of the 16 division periods during the season. A lateseason release from Newton Lake failed to prevent a deficit of 223 dam³ (181 acre-feet) at the end of October.

The division of the Frenchman River natural flow is summarized in Tables 5 and 5A and Figure 6 which follow. The detailed computation of the natural flow is given in Table 14 and the historical summary is given in Table 15 of Appendix A.

TABLE 5

SUMMARY OF FRENCHMAN RIVER DIVISION FOR 1995¹ QUANTITIES IN CUBIC DECAMETRES

DIVISION PERIOD AT	COMPUTED NATURAL FLOW	U.S.A. SHARE	RECEIVED BY U.S.A.	RECEIVED BY U.S.A.	
INTERNATIONAL BOUNDARY				ABOVE SHARE	BELOW SHARE
MAR 1 - MAR 15	626	313	147		166
MAR 16 - MAR 31	2 342	1 171	184		987
APR 1 - APR 15	1 514	757	116		641
APR 16 - APR 30	4 925	2 463	116		2 347
MAY 1 - MAY 15	2 073	1 037	27		1 010
MAY 16 - MAY 31	2 267	1 134	1 455	321	
JUNE 1 - JUNE 15	2 232	1 116	3 190	2 074	
JUNE 16 - JUNE 30	2 425	1 213	2 457	1 244	
JULY 1 - JULY 15	2 032	1 016	2 135	1 119	
JULY 16 - JULY 31	999	500	781	281	
AUG 1 - AUG 15	250	125	11		114
AUG 16 - AUG 31	1 186	593	7		586
SEPT 1 - SEPT 15	572	286	3		283
SEPT 16 - SEPT 30	610	305	1		304
OCT 1 - OCT 15	237	119	1 375	1 256	
OCT 16 - OCT 31	841	421	337		84
TOTAL	25 131	12 566	12 342		

¹This is a summary of data from Table 14, Appendix A. Totals and shares may not add or subtract exactly as a result of rounding.

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TABLE 5A

SUMMARY OF FRENCHMAN RIVER DIVISION FOR 1995¹ QUANTITIES IN ACRE-FEET

DIVISION PERIOD AT	COMPUTED			RECEIVED BY U.S.A.	
INTERNATIONAL	NATURAL	U.S.A. Share	RV II S A	ABOVE	BELOW
BOUNDARY	FLOW	SHARE DI U.S.A.	SHARE	SHARE	
MAR 1 - MAR 15	507	254	119		135
MAR 16 - MAR 31	1,899	949	149		800
APR 1 - APR 15	1,227	614	94		520
APR 16 - APR 30	3,993	1,997	94		1,903
MAY 1 - MAY 15	1,681	841	22		819
MAY 16 - MAY 31	1,838	919	1,180	260	
JUNE 1 - JUNE 15	1,809	905	2,586	1,681	
JUNE 16 - JUNE 30	1,966	983	1,992	1,009	
JULY 1 - JULY 15	1,647	824	1,731	907	
JULY 16 - JULY 31	810	405	633	228	
AUG 1 - AUG 15	203	101	9		92
AUG 16 - AUG 31	96 1	481	6		475
SEPT 1 - SEPT 15	464	232	2		229
SEPT 16 - SEPT 30	495	247	1		246
OCT 1 - OCT 15	192	96	1,115	1,018	
OCT 16 - OCT 31	682	341	273		68
TOTAL	20,374	10,187	10,006		

¹All values are conversions of data from Table 5. Totals and shares may not add or subtract exactly as a result of rounding.

29 FIGURE 6 FRENCHMAN RIVER DIVISION, 1995

Division Period Values



ANNEX A

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1921 ORDER OF THE INTERNATIONAL JOINT COMMISSION RESPECTING THE ST. MARY-MILK RIVERS

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INTERNATIONAL JOINT COMMISSION

ORDER

IN THE MATTER OF THE MEASUREMENT AND APPORTIONMENT OF THE WATERS OF THE ST. MARY AND MILK RIVERS AND THEIR TRIBUTARIES IN THE STATE OF MONTANA AND THE PROVINCES OF ALBERTA AND SASKATCHEWAN.

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Whereas by Article VI of the Treaty entered into between the United States of America and His Majesty, the King of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the Seas, Emperor of India, signed at Washington on the 11th of January 1909, it is provided as follows:

The High Contracting Parties agree that the St. Mary and Milk Rivers and their tributaries (in the State of Montana and the Provinces of Alberta and Saskatchewan) are to be treated as one stream for the purposes of irrigation and power, and the waters thereof shall be apportioned equally between the two countries, but in making such equal apportionment more than half may be taken from one river and less than half from the other by either country so as to afford a more beneficial use to each. It is further agreed that in the division of such waters during the irrigation season, between the 1st of April and 31st of October, inclusive, annually, the United States is entitled to a prior appropriation of 500 cubic feet per second of the waters of the Milk River, or so much of such amount as constitutes three-fourths of its natural flow, and that Canada is entitled to a prior appropriation of 500 cubic feet per second of the flow of St. Mary River, or so much of such amount as constitutes three-fourths of its natural flow.

The channel of the Milk River in Canada may be used at the convenience of the United States for the conveyance, while passing through Canadian territory, of waters diverted from the St. Mary River. The provisions of Article II of this treaty shall apply to any injury resulting

to property in Canada from the conveyance of such waters through the Milk River.

The measurement and apportionment of the water to be used by each country shall from time to time be made jointly by the properly constituted reclamation officers of the United States and the properly constituted irrigation officers of His Majesty under the direction of the International Joint Commission.

And whereas, the said Reclamation and Irrigation Officers have been unable to agree as to the manner in which the waters mentioned in the said Article VI should be measured and apportioned;

And whereas, before giving directions as to the measurement and apportionment of the said waters, the International Joint Commission deemed it proper to hear such representations and suggestions thereon as the Governments of the United States and Canada, the Provinces of Alberta and Saskatchewan, and the State of Montana, and as corporations and persons interested might see fit to make, and for such purposes sittings of the Commission were held at the following times and places: At the city of St. Paul, in the State of Minnesota, on the 24th, 25th, 26th, 27th, and 28th days of May, 1915; at the city of Detroit, in the State of Michigan, on the 15th, 16th, and 17th days of May, 1917; at the city of Ottawa, in the Province of Ontario, on the 3rd, 4th, and 5th days of May, 1920; at the village of Chinook, in the State of Montana, on the 17th day of September 1921; and at the city of Lethbridge, in the Province of Alberta, on the 17th day of September, 1921, when counsel and representatives of the said Governments, corporations, and persons appeared and presented their views;

And whereas, pending final decision as to the proper method of measuring and apportioning said waters, interim orders with reference thereto have been made by the International Joint Commission from time to time, the last of such orders bearing the date of 5th day of April, 1921;

And whereas the members of the International Joint Commission have unanimously determined that the said Reclamation and Irrigation Officers should be guided in the

measurement and apportionment of said waters by the directions and instructions hereinafter set forth;

IT IS THEREFORE ORDERED AND DIRECTED by the Commission in pursuance of the powers conferred by the said Article VI of the said Treaty that the Reclamation and Irrigation Officers of the United States and Canada shall, until this order is varied, modified, or withdrawn by the Commission, make jointly the measurement and apportionment of the water to be used by the United States and Canada in accordance with the following rules:

St. Mary River

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I. (a) During the irrigation season when the natural flow of the St. Mary River at the point where it crosses the international boundary is six hundred and sixty-six (666) cubic feet per second or less Canada shall be entitled to three-fourths and the United States to one-fourth of such flow.

(b) During the irrigation season when the natural flow of the St. Mary River at the point where it crosses the international boundary is more than six hundred and sixty-six (666) cubic feet per second Canada shall be entitled to a prior appropriation of five hundred (500) cubic feet per second, and the excess over six hundred and sixty-six (666) cubic feet per second shall be divided equally between the two countries.

(c) During the non-irrigation season the natural flow of the St. Mary River at the point where it crosses the international boundary shall be divided equally between the two countries.

Milk River

II (a) During the irrigation season when the natural flow of the Milk River at the point where it crosses the international boundary for the last time (commonly and hereafter

called the Eastern Crossing) is six hundred and sixty-six (666) cubic feet per second or less, the United States shall be entitled to three-fourths and Canada to one-fourth of such natural flow.

(b) During the irrigation season when the natural flow of the Milk River at the Eastern Crossing is more than six hundred and sixty-six (666) cubic feet per second the United States shall be entitled to a prior appropriation of five hundred (500) cubic feet per second and the excess over six hundred and sixty-six (666) cubic feet per second shall be divided equally between the two countries.

(c) During the non-irrigation season the natural flow of the Milk River at the Eastern Crossing shall be divided equally between the two countries.

Eastern Tributaries of Milk River

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III. 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.

Waters not naturally crossing the boundary

IV. Each country shall be apportioned such waters of the said rivers and of any tributaries thereof as rise in that country but do not naturally flow across the international boundary.

V. For the purpose of carrying out the apportionment directed in Paragraphs I, II, and III hereof the said Reclamation and Irrigation Officers shall jointly take steps:

(a) To ascertain and keep a daily record of the natural flow of the St. Mary River at the international boundary, of the Milk River at the Eastern Crossing, and of the eastern tributaries of the Milk River at the international boundary by measurement in each case:

(1) At the gauging station at the international boundary;

- (2) At all places where any of the waters which would naturally flow across the international boundary at that particular point are diverted in either country prior to such crossing;
- (3) At all places where any of the waters which would naturally flow across the international boundary at that particular point are stored, or the natural flow thereof increased or decreased prior to such crossing;

(b) To fix the amount of water to which each country is entitled in each case by applying the directions contained in paragraphs 1, 2, and 3 hereof to the total amount of the natural flow so ascertained in each case.

(c) To communicate the amount so fixed to all parties interested, so that the apportionment of the said waters may be fully carried out by both countries in accordance with the said directions.

VI. Each country may receive its share of the said waters as so fixed at such point or points as it may desire. A gauging station shall be established and maintained by the Reclamation or Irrigation Officers of the country in which any diversion, storage, increase or decrease of the natural flow shall be made at every point where such diversion, storage, increase, increase, or decrease takes place.

VII. International gauging stations shall be maintained at the following points:

St. Mary River near international boundary; the north branch of Milk River near international boundary; the south branch of Milk River near international boundary; Milk River at Eastern Crossing; Lodge Creek, Battle Creek, and Frenchman River, near international boundary; and gauging stations shall be established and maintained at such other points as the Commission may from time to time approve.

VIII. The said Reclamation and Irrigation Officers are hereby further authorized and directed:

(a) To make such additional measurements and to take such further and other steps as may be necessary or advisable in order to insure the apportionment of the said waters in accordance with the directions herein set forth.

(b) To operate the irrigation works of either country in such a manner as to facilitate the use by the other country of its share of the said waters and subject hereto to secure to the two countries the greatest beneficial use thereof.

(c) To report to the Commission the measurements made at all international and other gauging stations established pursuant to this order.

IX. In the event of any disagreement in respect to any matter or thing to be done under this order the said Reclamation and Irrigation Officers shall report to the Commission, setting forth fully the points of difference and the facts relating thereto.

X. The said order of the Commission dated the 6th day of April 1921, is hereby withdrawn, except with respect to the report to be furnished to the Commission thereunder.

Dated at Ottawa, Canada, this 4th day of October, 1921.

O. GARDNER, C.A. MAGRATH, C.D. CLARK, HENRY A. POWELL, W.H. HEARST, MARK A. SMITH.

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ANNEX B

Conversion Factors

FACTORS FOR CONVERSION BETWEEN INCH-POUND UNITS AND INTERNATIONAL SYSTEM (SI) UNITS

Since 1975, the Report to the International Joint Commission on the Division of the Waters of the St. Mary and Milk Rivers has used dual units (SI and inch-pound).

The two inch-pound units that were used in previous reports were cfs-days and acre-feet.

1 cfs-day = 86,400 cubic feet 1 acre-foot = 43,560 cubic feet 1 cfs-day = 1.9835 acre-feet

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The SI unit replacing the inch-pound units is the cubic decametre (dam^3) .

1 dam³ = 1 000 cubic metres 1 cubic metre = 35.315 cubic feet 1 dam³ = 35,315 cubic feet 1 acre-foot = 1.2335 dam³ 1 cfs-day = 2.4466 dam³ 1 dam³ = 0.8107 acre-feet A ALIVE AND A

ANNEX C

List of Gauging Stations

INTERNATIONAL GAUGING STATIONS OPERATED JOINTLY BY THE UNITED STATES AND CANADA ST. MARY AND MILK RIVER BASINS 1995

Map Index	Station Name
	ST. MARY RIVER BASIN
05AE027	St. Mary River at International Boundary
05AE029	St. Mary Canal at St. Mary Crossing near Babb, Montana
05AE036	Lake Sherburne at Sherburne, Montana
	MILK RIVER BASIN
11AA001	North Milk River near International Boundary
11AA005	Milk River at Milk River, Alberta
11AA025	Milk River at Western Crossing of International Boundary
11AA031	Milk River at Eastern Crossing of International Boundary
11AA032	N. Fork Milk River above St. Mary Canal near Browning, Montana
11 AA03 8	Verdigris Coulee near the Mouth
	LODGE CREEK TRIBUTARY BASIN
11AB008	Middle Creek above Lodge Creek
11AB001	Middle Creek below Middle Creek Reservoir
11AB108	Middle Creek near Govenlock
11AB009	Middle Creek near Saskatchewan Boundary
11AB060	Spangler Ditch near Govenlock
11AB083	Lodge Creek below McRae Creek at International Boundary
11AB089	Altawan Reservoir near Govenlock

BATTLE CREEK TRIBUTARY BASIN

11AB018 Nashlyn Canal near Consul

- 11AB027 Battle Creek at International Boundary
- 11AB044 McKinnon Ditch near Consul
- 11AB058 Richardson Ditch near Consul
- 11AB077 Cypress Lake West Outflow Canal
- 11AB078 Cypress Lake West Inflow Canal
- 11AB084 Vidora Ditch near Consul
- 11AB085 Cypress Lake West Inflow Canal Drain
- 11AB102 Gaff Ditch near Merryflat

FRENCHMAN RIVER TRIBUTARY BASIN

- 11AC037 Cypress Lake
- 11AC041 Frenchman River at International Boundary
- 11AC052 Eastend Canal near Eastend
- 11AC054 Newton Lake Main Canal
- 11AC055 Eastend Reservoir
- 11AC056 Newton Lake
- 11AC060 Cypress Lake East Outflow Canal
- 11AC063 Huff Lake
- 11AC064 Belanger Creek Diversion to Cypress Lake
- 11AC065 Huff Lake Gravity Canal
- 11AC066 Huff Lake Pumping Canal

GAUGING STATIONS OPERATED INDEPENDENTLY BY EITHER THE UNITED STATES OR CANADA ST. MARY AND MILK RIVER BASINS 1995

*Data for these stations are not included in this report or appendices

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Map Index	Station Name	Operated by
	ST. MARY RIVER BASIN	
5-0145*	Swiftcurrent Creek at Many Glacier, Montana	U.S.A.
5-0160*	Swiftcurrent Creek at Sherburne, Montana	U.S.A.
5-0175*	St. Mary River near Babb, Montana	U.S.A.
	MILK RIVER BASIN	
6-1322*	South Fork Milk River near Babb, Montana	U.S.A.
11AA028*	Bear Creek near International Boundary	Canada
11AA029*	Miners Coulee near International Boundary	Canada
11AA040*	Breed Creek near International Boundary	Canada
	LODGE CREEK TRIBUTARY BASIN	
11AB080	Middle Creek Reservoir	Canada
11AB082*	Lodge Creek at Alberta Boundary	Canada
11AB091	Michel Reservoir near Elkwater	Canada
11AB092	Greasewood Reservoir near Elkwater	Canada
11AB094	Bare Creek Reservoir near Elkwater	Canada
11AB097	Cressday Reservoir near Cressday	Canada
11AB098	Jaydot Reservoir near Jaydot	Canada
11AB099	Mitchell Reservoir near Elkwater	Canada
11AB103	Squaw Coulee near Willow Creek	Canada
11AB104	Massy Reservoir near Elkwater	Canada
11AB114	Middle Creek Reservoir Bedford Outlet	Canada
11AB115	Middle Creek Reservoir Flood Spillway	Canada

BATTLE CREEK TRIBUTARY BASIN

11AB020*	Shepherd Ditch near Consul	Canada
11AB075	Lyons Creek at International Boundary	Canada
11AB090	Reesor Reservoir near Elkwater	Canada
11AB095*	Adams Lake	Canada
11AB096*	Battle Creek near Consul	Canada
11AB101*	Battle Creek below Nashlyn Project	Canada
11AB117*	Battle Creek at Alberta Boundary	Canada
11AB118*	Battle Creek below Wilson's Weir	Canada
	FRENCHMAN RIVER TRIBUTARY BASIN	
11AC001*	Frenchman River Below Eastend Reservoir	Canada
11AC025*	Denniel Creek near Val Marie	Canada
11AC062*	Frenchman River below Newton Lake	Canada
11AC068*	Val Marie Pump No. 1	Canada
	ROCK CREEK TRIBUTARY BASIN	
6-1695*	Rock Creek below Horse Creek near International Boundary	U.S.A.



HD	Report to the International Joint
1694	Commission on the division and use
.A2	of the waters of the St. Mary and
R424	Milk Rivers
1995	Milk Rivers

HD 1694 .A2 R424 1995	Report to the International Joint Commission on the division and use of the waters of the St. Mary and Milk Rivers
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