

YELLOWSTONE RIVER COMPACT COMMISSION

**408 Federal Building
Helena, Montana**

December 23, 1953

**His Excellency C. J. Rogers
Governor of the State of Wyoming
Cheyenne, Wyoming**

**His Excellency J. Hugo Aronson
Governor of the State of Montana
Helena, Montana**

**His Excellency Norman Brunsdale
Governor of the State of North Dakota
Bismarck, North Dakota**

Sir:

Pursuant to Article III of the Yellowstone River Compact, the Commission created by the terms of said Compact makes the following second annual report:

At the Second Annual Meeting of the Yellowstone River Compact Commission held at Billings, Montana, on November 17, 1953, the Commission discussed and adopted Rules and Regulations for the Administration of the Yellowstone River Compact as presented in Appendix A of the accompanying report.

The expenses for administration of the Compact during the period ending June 30, 1953, were \$1200 of which \$600 was borne by the federal government and the remainder was borne equally by the States of Wyoming and Montana. A budget of \$7450, has been adopted for the fiscal year ending June 30, 1954.

The Commission feels satisfied that water use on the several streams by the upstream state, or states, did not exceed allocations during the water year ending September 30, 1953, and therefore did not determine allocable use.

MINISTRE DES TRAVAI ET DU BENEVOLENT
DEPARTMENT OF LABOUR AND WELFARE
Public Health
and
Social Services
Department

December 11, 1955
Ottawa, Ontario

Mr. J. D. [Name] and
[Address] [City] [Province] [Canada]

Dear Mr. [Name]:
I am pleased to hear that you are
interested in the [Topic] and
would like to know more about it.

The [Topic] is a very important
part of our [Program] and we
are glad to provide you with
the information you need.

Sincerely,
[Signature]

Enclosed for you are [Number] copies of the [Document] which
you requested. If you have any questions, please do not
hesitate to contact me at [Phone Number].

I am sure that you will find this information
very helpful. If you have any suggestions
for improving our [Program], please let me
know. We are always interested in
your views.

The [Program] is designed to provide
[Description] and we are glad to
provide you with the information you
need. If you have any questions,
please contact me at [Phone Number].

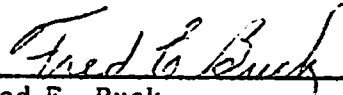
We are glad to provide you with the
information you need. If you have
any questions, please contact me at
[Phone Number]. We are always
interested in your views.

Pertinent data and records are available in the files of the Commission in the office of the District Engineer, U. S. Geological Survey, Helena, Montana.

Respectfully submitted,



L. C. Bishop
Commissioner for Wyoming



Fred E. Buck
Commissioner for Montana



Frank Stermitz
Federal Representative

GENERAL REPORT

Cost:

The work of the Commission is being financed by cooperative arrangements between the States of Wyoming and Montana and the United States of America. The following is the budget for the collection of basic records and other expense of administration for the fiscal year ending June 30, 1954:

	<u>Total Cost</u>	<u>Borne by United States</u>	<u>Borne by Wyoming</u>	<u>Montana</u>
Gage station operation.....	\$3000	\$1500	\$750	\$750
Improvement or installation of gaging stations.....	\$3450	\$1725	\$500	a/ \$1225
Collection and assembly of data and administration....	\$1000	\$ 500	\$250	\$ 250
	<u>\$7450</u>	<u>\$3725</u>	<u>\$1500</u>	<u>\$2225</u>

a/ The greater contribution by Montana for gaging station installations will be adjusted in the following fiscal year.

Gaging stations:

The increased budget for the current fiscal year provided for the installation of a recording gaging station on the Clarks Fork. After due reconnaissance of the stream from Edgar, Montana to the mouth near Rockvale, it was decided to utilize the present site at Edgar because of better hydrologic conditions and accessibility. The manner in which the discharge record will be used is incorporated in the Rules and Regulations.

A recording gaging station was installed on the Little Bighorn River near Hardin, Montana to better determine the flow of that stream which is excluded from Compact allocation. The probable backwater effect from ice jams or high stages on the Bighorn River make it desirable to continue the supplementary record at the upstream station near Crow Agency, Montana.

The two new installations are of the cylindrical concrete-pipe type. Nearby bridges are being used for discharge measurements.

A reduction in the investigations being conducted by the U. S. Department of Interior under the Missouri Basin Program necessitated the discontinuance as of September 30, 1953 of full federal support for gaging stations on the Bighorn River near Custer and Tongue River at Miles City, Mont. As these stations reasonably well satisfy the conditions of

designated point of measurement, the Commission through cooperative agreement with the offices of the State Engineers of Wyoming and Montana, is continuing the collection of records at these sites.

The records of discharge collected at the points of measurement approved by the Commission are given in Appendix B.

Diversions:

No records of the quantity of water subject to percentage allocation by this Compact were collected during the report period. The Commission was assured by the State representatives that allocable use in either Wyoming or Montana had not approached the pro rata shares. Until such a time draws near the Commission feels the expense of collecting detailed records of diversion should be spared. However, to make possible the collection of records on short notice, information on water-right filings or permits in the two states should be in the files of the Commission.

Mr. L. C. Bishop, representing the State of Wyoming, submitted to the Commission a list of applications for permits and permits granted in the Yellowstone River Basin in Wyoming during the period January 1, 1950 to January 1, 1953. The listing did not differentiate between use for certain supplemental irrigation which is excluded from the Compact provisions and also included small stock-water reservoirs which are also excluded.

Mr. Fred E. Buck, representing the State of Montana, stated that the last session of the Montana Legislature provided that copies of new water-right filings be furnished the State Engineer. Information received by December 20, 1953, shows about 75 filings. As in Wyoming, the filings do not differentiate the uses which come under Compact provisions.

The improvement in information available to the Commission is encouraging. As the data is kept current and properly identified, allocable use can be more readily approximated.

Storage:

In reservoirs completed after January 1, 1950:

Boysen Reservoir on the Bighorn River is the principal Reservoir coming under this category, records for which are given under Appendix C. Information furnished by the State Engineer of Wyoming for that state lists 8 applications for permit covering the storage of about 950 acre-feet of water were received for the Bighorn River Basin, 7 applications covering the storage at about 700 acre-feet were received for the Tongue River Basin and 41 applications covering the storage of about 39,370 acre-feet were received for the Powder River Basin. The enlargements of Lake Desmet and Kearney Lake Reservoir

account for 35,476 acre-feet of storage capacity permits in the Powder River Basin. Corresponding information for Montana indicates the construction of reservoirs was limited to small stock-water reservoirs. Until water use becomes critical the Commission does not expect to require reports on quantities in storage in the smaller reservoirs in this category.

In reservoirs existing on January 1, 1950:

Information available to the Commission indicated the quantities of water stored therein which are subject to Compact allocation was minor during the report period. For the benefit of the record, the quantities in storage on month-ends in Bull Lake, Pilot Butte and Buffalo Bill Reservoirs are listed in Appendix D without distinction as to the ultimate use.

APPENDIX A

**RULES AND REGULATIONS FOR ADMINISTRATION OF
THE YELLOWSTONE RIVER COMPACT**

A compact, known as the Yellowstone River Compact between the States of Wyoming, Montana and North Dakota, having become effective on October 30, 1951 upon approval of the Congress of the United States, which appor-tions the waters of certain interstate tributaries of the Yellowstone River which are available after the appropriative rights existing in the states of Wyoming and Montana on January 1, 1950 are supplied, and after appropriative rights to the use of necessary supplemental water are also supplied as specified in the Compact, the following rules and regulations are adopted subject to the provisions for amendment, revision or abrogation as provided herein.

Article 1. Collection of Water Records.

- A. It shall be the joint and equal responsibility of the members of the states of Wyoming and Montana to collect, cause to be collected or otherwise furnish records of tributary stream flow at the points of measurement specified in Article V (B) of the Compact, or as near thereto as is physically or economically feasible or justified.

1. Clarks Fork

The gaging station known as Clarks Fork at Edgar, Montana and which is located in S $\frac{1}{4}$ sec. 24, T. 4 S., R. 24 E., shall temporarily be the point of measurement for the Clarks Fork, subject to whatever mutually agreeable corrections to the stream-flow records at this point as may be deemed practical to meet the terms of the Compact.

2. Bighorn River (exclusive of Little Bighorn River)

The gaging station known as the Bighorn River near Custer, Montana and located near the center of sec. 10, T. 4 N., R. 34 E., shall temporarily be the designated point of measurement on that stream. The flow of the Little Bighorn River as measured at the gaging station near Hardin, Montana and located in S $\frac{1}{2}$, SE $\frac{1}{4}$ sec. 18, T. 1 S., R. 34 E., shall be considered the point of measurement for that stream, except that if or when satisfactory records are not available, the records for the nearest upstream station with practical corrections for intervening inflow or diversion shall be used.

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3. Tongue River

The gaging station known as the Tongue River at Miles City, Montana and located in SE $\frac{1}{4}$ sec. 23., T. 7 N., R. 47 E., shall temporarily be the point of measurement for that stream.

4. Powder River

The gaging station known as the Powder River near Locate, Montana and located in NE $\frac{1}{4}$ sec. 26, T. 8 N., R. 51 E., shall temporarily be the designated point of measurement for that stream.

- B.** Records of total annual diversion in acre-feet above the points of measurement designated in the Compact for irrigation, municipal and industrial uses developed after January 1, 1950 shall be furnished by the members of the Commission for their respective states, at such time as the Commission deems necessary for interstate administration as provided by the terms of the Compact. Providing that if it be acceptable to the Commission, reasonable estimates thereof may be substituted.
- C.** Annual records of the net change in storage in all reservoirs, not excluded under Article V (E) of the Compact, above the specified point of measurement specified in the Compact and completed after January 1, 1950, and the annual net change in reservoirs existing prior to January 1, 1950, which is used for irrigation, municipal and industrial purposes developed after January 1, 1950, shall be the primary responsibility of the member of the Commission in whose state such works are located; providing, such data is not furnished by federal agencies under the provisions of Article III (D) of the Compact, or, collected by the Commission.

Article 11. Office and Officers.

- A.** The office of the Commission shall be located, and be that of the United States Geological Survey in Helena, Montana.
- B.** The Chairman of the Commission shall be the federal representative as provided in the Compact.
- C.** The Secretary of the Commission shall be as provided for in Article III of these rules.
- D.** The credentials of each member of the Commission shall be placed on file in the office of the Commission.

Article III. Secretary.

- A. The Commission, subject to the approval of the Director, of the United States Geological Survey to cooperative agreements for such purpose, shall employ the U. S. Geological Survey on a yearly basis to render such engineering and clerical aid as may reasonably be necessary for the administration of the Compact. Said agreement shall provide that the Geological Survey shall:
1. Maintain and operate gaging stations at or near the points of measurement specified in Article V (A) of the Compact.
 2. Assemble factual information on stream flow, diversion and reservoir storage for the preparation of an annual report to the Governors of the signatory states.
 3. Make such investigations and reports as may be requested by the Commission in aid of its administration of the Compact.
 4. Act as Secretary to the Commission.

Article IV. Budget.

- A. At the annual meeting of each even numbered year or prior thereto, the Commission shall adopt a budget for operation during the ensuing biennium beginning July first. Such budget shall set forth the total cost of construction, maintenance and operation of gaging stations, the cost of engineering and clerical aid, and other necessary expenses excepting the salaries and personal expenses of the Commissioners. On odd-numbered years revisions of the budget shall be considered.
- B. It shall be the obligation of the Commissioners of the States of Montana and Wyoming to endeavor to secure from the Legislature of their respective states sufficient funds with which to meet the obligations of this Compact, except insofar as provided by the federal government.

Article V. Meetings.

An annual meeting of the Commission shall be held on the third Tuesday of each November at some mutually agreeable point in the Yellowstone River Basin for consideration of the annual report for the water year ending the preceding September 30th, and for the transaction of such other business consistent with its authority; provided that by unanimous consent of the Commission the date and

APPENDIX A.

place of the annual meeting may be changed. Other meetings as may be deemed necessary shall be held at a time and place set by mutual agreement, for the transaction of any business consistent with its authority.

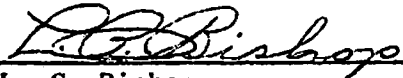
No action of the Commission shall be effective until approval by the Commissioners for the States of Wyoming and Montana.

Article VI. Amendments, Revisions and Abrogations.

The Rules and Regulations of the Commission may be amended or revised by a unanimous vote at any meeting of the Commission.




Fred E. Buck
Fred E. Buck
Commissioner for Montana



L. C. Bishop
L. C. Bishop
Commissioner for Wyoming

Attested:


Frank Stermitz
Frank Stermitz
Federal Representative

Adopted November 17, 1953

MONTHLY SUMMARY OF DISCHARGE

Clarks Fork at Edgar, Montana

Location.--Lat. 45°28', long. 108°51', in SW $\frac{1}{4}$ sec. 24, T. 4 S., R. 23 E., on right bank just downstream from County bridge, half a mile east of Edgar and 6 miles upstream from Rock Creek.

Records available.--July 1921 to September 30, 1953

Gage-- Water-stage recorder. Prior to August 31, 1953, wire-weight gage on bridge at same site and datum.

Average discharge.-- 20 years (1930-31, 1934-53), 1026 cfs.

Extremes.-- Maximum discharge observed during year, 8,340 cfs June 14, (gage height, 7.92 ft.); minimum daily discharge, 190 cfs Mar. 2. 1921-53: Maximum discharge observed, 10,900 cfs June 2, 1936 (gage height, 8.62 ft); minimum observed, 41 cfs July 25, 1931; minimum gage height observed, 1.13 ft March 11, 1950.

<u>Month</u>	<u>Second foot-days</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Mean</u>	<u>Runoff in Acre-feet</u>
October 1952	11,554	435	272	373	22,920
November	12,756	498	250	425	25,300
December	14,193	545	250	458	28,150
January 1953	14,316	530	380	462	28,400
February	9,792	398	250	350	19,420
March	10,261	380	190	331	20,350
April	12,838	831	294	428	25,460
May	26,762	2,660	407	863	53,080
June	125,170	7,900	2,060	4,172	248,300
July	70,808	3,820	920	2,284	140,400
August	20,444	1,370	356	659	40,550
September '53	<u>10,383</u>	<u>652</u>	<u>241</u>	<u>346</u>	<u>20,590</u>
Water year					
1953 ----	339,277	7,900	190	930	672,900

MONTHLY SUMMARY OF DISCHARGE

Bighorn River near Custer, Montana

Location-- Lat. 46°07', long 107°28', near center of sec. 10, T. 4 N., R. 34 E., on left bank just downstream from Manning diversion dam, 3 miles upstream from Tullock Creek, 4 miles southeast of Custer, and 4½ miles upstream from mouth.

Records available-- May 1945 to September 1953

Gage-- Water-stage recorder. Prior to December 7, 1945, wire weight gage at different datum.

Average discharge-- 8 years, 4,084 cfs.

Extremes-- Maximum discharge during year, 12,200 cfs June 17 (gage height, 6.01 ft); minimum, 1,020 cfs July 17 (gage height, 1.38 ft). 1945-53: Maximum discharge, 26,200 cfs June 24, 1947 (gage height, 8.79 ft), from rating curve extended above 12,500 cfs by logarithmic plotting; maximum gage height recorded, 10.65 ft Mar. 20, 1947 (ice jam); minimum discharge, 756 cfs Dec. 13, 1950 (gage height, 0.89 ft).

<u>Month</u>	<u>Second foot-days</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Mean</u>	<u>Runoff in Acre-feet</u>
October 1952	89,420	3,150	2,400	2,885	177,400
November	85,800	3,130	2,120	2,860	170,200
December	73,760	3,150	1,700	2,379	146,300
January 1953	87,450	3,400	2,200	2,821	173,500
February	80,220	3,480	2,390	2,865	159,100
March	89,050	3,730	2,350	2,873	176,600
April	77,930	3,270	2,230	2,598	154,600
May	81,090	5,330	1,910	2,616	160,800
June	189,310	12,000	2,900	6,310	375,500
July	50,510	2,760	1,130	1,629	100,200
August	58,250	2,650	1,460	1,879	115,500
September 1953	<u>60,390</u>	<u>2,240</u>	<u>1,640</u>	<u>2,013</u>	<u>119,800</u>
Water year 1953,	1,023,180	12,000	1,130	2,803	2,029,500

MONTHLY SUMMARY OF DISCHARGE

Little Bighorn River near Crow Agency, Montana

Location.-- Lat. 45°34', long 107°27', in E½, SE¼ sec. 13, T. 13S., R. 34E., on right bank, at Chicago, Burlington and Quincy Railroad bridge, 2 miles south of Crow Agency and 14 miles upstream from mouth.

Drainage area.-- 1,190 sq. mi.

Records available.-- September 1911 to September 1924, August 1928 to December 1932, April 1938 to September 1953 (few winter records in early years). March 1905 to June 1906 at site at Crow Agency, 2 miles downstream; records not equivalent owing to Crow Agency ditch which diverts between the two sites.

Gage.-- Water-stage recorder. March 1905 to June 1906, chain gage 2 miles downstream at different datum. Prior to May 7, 1947, recorder, staff or chain gage used for extensive intermittent periods.

Average discharge.-- 17 years (1928-29, 1931-32, 1938-53), 273 cfs.

Extremes.-- Maximum discharge during year, 1,470 cfs June 16 (gage height, 7.32 ft); minimum, 34 cfs Aug. 26 (gage height, 3.99 ft). 1912-24, 1928-32, 1938-53: Maximum discharge observed, about 8,200 cfs July 23, 1923 (gage height, 14.0 ft); no flow July 28 to Aug. 6, 1921.

<u>Month</u>	<u>Second foot-days</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Mean</u>	<u>Runoff in Acres-feet</u>
October 1952	3,631	141	64	117	7,200
November	3,896	146	105	130	7,730
December	3,715	135	105	120	7,370
January 1953	4,090	155	110	132	8,110
February	3,595	145	120	128	7,130
March	3,916	176	112	126	7,770
April	3,434	141	98	114	6,810
May	4,803	403	85	155	9,530
June	20,939	1,360	293	698	41,530
July	4,319	254	73	139	8,570
August	3,005	269	40	95.9	5,960
September 1953	<u>2,490</u>	<u>146</u>	<u>45</u>	83.0	4,940
Water Year 1953	61,833	1,360	40	169	122,600

MONTHLY SUMMARY OF DISCHARGE

Little Bighorn River near Hardin, Montana

Location.-- Lat. 45°44'20", long 107°33'20", S½ SE¼ sec 18, T. 1 S., R. 34 E., on right bank 425 feet upstream from county road bridge, ½ miles east of Hardin and 600 feet upstream from mouth.

Records available.-- June to September 1953.

Gage.-- Wire- weight gage

Extremes.-- Maximum daily discharge during period, 1,310 cfs, June 17, (gage height, 5.31 ft.); minimum daily discharge, 40 cfs, Sept. 18, (gage height, 2.39 ft.)

Remarks.-- Agency Ditch at Crow Agency constitutes the principal diversion between this station and preceding station near Crow Agency. On basis of 4 discharge measurements and stage records the quantity diverted by the Agency Ditch has been approximated as 17,000 acre-feet from May 7 to September 30, 1953.

<u>Month</u>	<u>Second foot-days</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Mean</u>	<u>Runoff in Acre-feet</u>
June 4-30, 1953	19,395	1,310	298	718	38,470
July	2,411	187	22	77.8	4,780
August	2,857	234	26	92.2	5,670
September 1953	2,547	162	40	84.9	5,050

MONTHLY SUMMARY OF DISCHARGE

Tongue River at Miles City, Montana

Location.-- Lat. 46°21', long 105°48', in SE¼ sec. 23, T. 7 N., R. 47E., on right bank 4 miles south of Miles City and 8 miles upstream from mouth.

Records available.-- April 1938 to April 1942, April 1946 to September 1953. Published as "near Miles City" April 1938 to April 1942. Not equivalent to records published as "near Miles City" May 1929 to September 1932.

Gage.-- Water-stage recorder. April 1938 to April 1942, wire-weight gage at site 8 miles upstream at different datum.

Average discharge.-- 9 years (1939, 1941, 1946-53), 417 cfs.

Extremes.-- Maximum discharge during year, 3,100 cfs June 20 (gage height, 5.16 ft); minimum daily, 8.5 cfs Aug. 26,27 (gage height, 0.48 ft).
1938-42, 1946-53; Maximum discharge, 12,000 cfs Mar. 6, 1949 (float measurement during ice break up); maximum gage height, 11.80 ft (corrected) Mar. 6, 1949 (ice jam); no flow at various times July to September, 1940.

<u>Month</u>	<u>Second foot days</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Mean</u>	<u>Runoff in Acre--feet</u>
October 1952	10,374	448	190	335	20,580
November	6,673	265	90	222	13,240
December	6,395	220	200	206	12,680
January 1953	5,595	220	150	180	11,100
February	4,665	195	150	167	9,250
March	6,805	430	130	220	13,500
April	4,486	193	90	150	8,900
May	13,632	1,400	94	440	27,040
June	53,615	2,860	490	1,787	106,300
July	4,381	574	10	141	8,690
August	1,146	156	8.5	32.0	2,270
September 1953	<u>611</u>	<u>38</u>	<u>11.</u>	20.4	1,210
Water Year 1953	118,378	2,860	8.5	324	234,800

Appendix B.

MONTHLY SUMMARY OF DISCHARGE

Powder River near Locate, Montana

Location.-- Lat 46°26', long 105°18', in NE¼ sec. 26, T. 8 N., R 51 E., on right bank 50 feet downstream from bridge on U. S. Highway 12, 3 miles upstream from Locate Creek, 5 miles west of former site of Locate, and 25 miles east of Miles City.

Records available.-- March 1938 to September 1953.

Gage.-- Water-stage recorder. Prior to July 11, 1947, wire-weight gage at bridge 50 ft upstream at same datum.

Average discharge.-- 15 years, 70k cfs.

Extremes.-- Maximum discharge during year, 8,860 cfs June 17 (gage height, 6.49 ft); minimum daily, 9.0 cfs Sept. 29, 30. 1938-53; Maximum discharge observed, 31,000 cfs Feb. 19, 1943 (gage height, 11.23 ft), from rating curve extended above 14,000 cfs; no flow Jan. 16 to Feb. 12, Feb. 22-24, 1950.

<u>Month</u>	<u>Second foot-days</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Mean</u>	<u>Runoff in Acre-feet</u>
October 1952	1,664	82	39	53.7	3,300
November	3,029	138	75	101	6,010
December	3,125	130	85	101	6,200
January 1953	3,785	200	80	122	7,510
February	5,750	240	150	205	11,400
March	17,773	2,570	130	573	35,250
April	10,412	454	222	347	20,650
May	15,645	1,370	253	505	31,030
June	59,311	6,960	492	1,980	117,600
July	4,338	456	17	140	8,600
August	14,358	2,500	92	463	28,480
September 1953	<u>710</u>	<u>113</u>	<u>9.0</u>	<u>23.7</u>	<u>1,410</u>
Water Year 1953	139,900	6,960	9.0	383.	277,400

Appendix C

RESERVOIRS COMPLETED AFTER JANUARY 1, 1950

BOYSEN RESERVOIR

Water-stage recorder at dam on Bighorn River, about 21 miles south of Thermopolis, Wyoming. Reservoir formed by earth-fill dam, construction of which began in 1947. Storage began on October 11, 1951. Dead storage, 62,000 acre-feet at elevation 4657.0. Usable contents, 758,000 acre-feet at elevation 4725.0 (top of gates). Crest of dam at elevation 4758.

Records given herein represent usable contents. Water is used for irrigation and power development. Allocation for flood control provided. Data collected by U. S. Bureau of Reclamation and furnished by Corps of Engineers, U. S. Army.

<u>Month</u>	<u>Water-surface elevation in feet</u>	<u>*Contents in Acre-feet</u>	<u>Change in contents during month in acre-feet</u>
September 30, 1952	4,719.11	647,800	
October 31	4,718.10	630,000	- 17,800
November 30	4,717.15	613,600	- 16,400
December 31	4,716.08	595,400	- 18,200
January 31, 1953	4,715.17	580,200	- 15,200
February 28	4,712.74	540,800	- 39,400
March 31	4,709.80	495,000	- 45,800
April 30	4,707.17	455,900	- 39,100
May 31	4,706.04	439,500	- 16,400
June 30	4,719.30	651,100	+211,600
July 31	4,719.72	658,600	+ 7,500
August 31	4,718.73	641,100	- 17,500
September 30, 1953	<u>4,716.74</u>	<u>606,600</u>	<u>- 34,500</u>
Water Year 1952-53			- 41,200

* Does not include dead storage of 62,000 acre-feet

Appendix D

RESERVOIRS IN EXISTENCE ON JANUARY 1, 1950

The extent, if any, of the use of reservoirs in this category which may be subject to Compact allocation was not determined. As a matter of hydrologic interest, the readily available month-end contents of three reservoirs in the Bighorn River Basin are given. Data furnished by U. S. Bureau of Reclamation.

<u>Date</u>	<u>Bull Lake</u>	<u>Pilot Butte</u>	<u>Buffalo Bill</u>
September 30, 1952	88,080	6,200	276,000
October 31	86,920	5,400	214,300
November 30	83,190	5,600	189,900
December 31	75,200	7,300	175,600
January 31, 1953	66,880	9,000	158,400
February 28	60,840	12,400	151,200
March 31	56,000	23,500	154,800
April 30	50,980	29,400	164,700
May 31	58,120	28,800	155,200
June 30	119,100	23,000	381,800
July 31	147,700	15,600	431,300
August 31	141,300	11,000	360,900
September 30, 1953	127,700	3,900	308,500