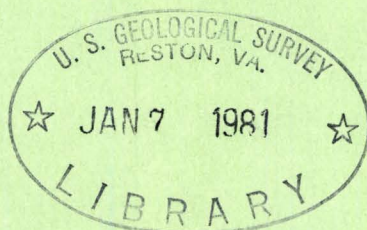


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pt. 2

Water Resources Data for Wyoming

Part 2. Water Quality Records



**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

Prepared in cooperation with the State of Wyoming
and with other agencies

CALENDAR FOR WATER YEAR 1972

OCTOBER 1971

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

NOVEMBER 1971

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

DECEMBER 1971

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

JANUARY 1972

S	M	T	W	T	F	S
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2	3	4	5	6	7	8
9	10	11	12	13	14	15
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23	24	25	26	27	28	29
30	31					

FEBRUARY 1972

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29				

MARCH 1972

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

APRIL 1972

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
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16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

MAY 1972

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

JUNE 1972

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

JULY 1972

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

AUGUST 1972

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

SEPTEMBER 1972

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

1972

**Water Resources Data
for
Wyoming**

Part 2. Water Quality Records



**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

**Prepared in cooperation with the State of Wyoming
and with other agencies**

Prepared in cooperation with

Office of the Wyoming State Engineer
Wyoming Department of Economic Planning and Development
Wyoming State Department of Agriculture
Wyoming Game and Fish Commission
Bureau of Land Management, U. S. Department of the Interior
Bureau of Reclamation, U. S. Department of the Interior
Environmental Protection Agency

Water resources records, 1972, for Wyoming are in the following reports of the U. S. Geological Survey:

1. Water Resources Data for Wyoming
Part 1: Surface-Water Records
2. Water Resources Data for Wyoming
Part 2: Water-Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U. S. Geological Survey
4015 Warren Avenue
P. O. Box 2087
Cheyenne, Wyoming 82001

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FOR WHICH RECORDS ARE PUBLISHED

[Letters after station name designate type of data:
(c), chemical; (t), water temperature; (s), sediment]

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WATER RESOURCES DATA FOR WYOMING, 1972

PART 2. WATER QUALITY RECORDS

by F. C. Boner, S. J. Rucker, IV, and L. L. DeLong

INTRODUCTION

Water-resources data for the 1972 water year for Wyoming include records of data for the chemical and physical characteristics of surface and ground water. Data on the quality of surface water (chemical, temperature, and sediment) were collected from designated sampling sites at predetermined intervals such as once daily, weekly, monthly or less frequently. At some sites water-temperature data were recorded on charts by recorders. Data are given for 138 sampling stations of which 112 are continuous-record stations and 26 are miscellaneous sites. Chemical analyses also are given for 127 ground-water sites. Locations of surface water-quality stations are shown in figure 1 and locations of ground-water sites are shown in figure 2. These data represent that portion of the National Water Data System collected by the U. S. Geological Survey and cooperating State and Federal agencies in Wyoming. The records were collected and computed by the Water Resources Division of the U. S. Geological Survey under the direction of Robert L. Cushman, district chief. Wyoming district personnel who contributed significantly to the collection and preparation of data included in this report were: E. R. Cox, S. A. Druse, W. G. Hodson, M. E. Lowry, D. J. O'Connell, G. W. Armentrout, Jr., M. A. Crist, B. H. Ringen, W. B. Borchert, W. R. Glass, G. C. Lines, H. B. Fabricius, P. B. McCollam, C. E. Obert, K. G. Polinoski, T. W. Custis, R. L. Muench, J. O. Ragsdale, M. D. Stevens, R. C. Baumann, D. W. Brownell, R. V. Foresman, J. M. Johnson, J. L. Lynch, M. L. Smalley, and J. P. Kyner.

The Geological Survey has published records of chemical quality, water temperatures, and sediment since 1941 in an annual series of water-supply papers entitled, "Quality of Surface Water of the United States." Beginning with the 1964 water year, water-quality records have been released by the Geological Survey in annual reports on a State-boundary basis. These reports are for limited distribution and are designed primarily for rapid release of data shortly after the end of the water year. These records will be published later in Geological Survey water-supply papers.

COOPERATION

This report was prepared by the U.S. Geological Survey under cooperative agreement with the following organizations:

Wyoming Department of Agriculture, Glenn J. Hertzler, Jr.,
commissioner

Wyoming State Engineer, Floyd A. Bishop

Wyoming Department of Economic Planning and Development,
Myron W. Goodson, Chief of Water Development

Wyoming Game and Fish Commission, James B. White, commissioner

Agencies furnishing assistance were:

Bureau of Land Management, U.S. Department of the Interior
Bureau of Reclamation, U.S. Department of the Interior
Environmental Protection Agency

Funds for many stations were provided under the Missouri River Basin Development Program for collection of data to meet the needs of several agencies of the Department of the Interior.

DEFINITION OF TERMS

Terms related to water quality and hydrologic data, as used in this report, are defined as follows:

Acre-foot (AC-FT, ac-ft) is a quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons.

Bed material is the shifting portion of fragmented alluvial material of which the streambed is composed.

Biochemical oxygen demand (BOD) is the amount of oxygen required by bacteria while stabilizing decomposable organic matter under aerobic conditions.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, or about 646,000 gallons, and represents a runoff of approximately 0.0372 inches from 1 square mile.

Coliform organisms are a group of bacteria used as an indicator of the sanitary quality of the water. The number of coliform colonies per 100 milliliters is determined by the immediate or delayed incubation membrane filter method.

Color refers to the appearance of water that is free from suspended solids. It is expressed in units of the platinum-cobalt scale. One unit of color is produced by one milligram per liter of platinum in the form of the chloroplatinate ion.

Cubic foot per second (cfs, CFS) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

Discharge is the volume of water (or more broadly, total fluids), that passes a given point within a given period of time.

Mean discharge is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time. If this discharge is reported instead of the daily mean, the heading of the discharge column in the tables is "Discharge (cfs)." An exception to this is in the "Mean discharge (cfs)" column for a continuous station, where the discharge given for "Analyses of Additional Samples" is that for the time shown.

Drainage area of a stream at a specified location is that area, measured in horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or body of impounded surface water together with all tributary surface stream and bodies of impounded surface water.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Hardness of water is a physical-chemical characteristic attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate (CaCO_3).

Micrograms per liter ($\mu\text{g/l}$, UG/L) is a unit expressing the concentration of chemical constituents in solution as weight (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (mg/l, MG/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per liter by multiplying by the factors in table 1, page 5. Concentration of suspended sediment also is expressed in mg/l, and is based on the weight of sediment per liter of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2, page 5.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling) (Guy, 1969).

Particle-size classification, used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay.....	0.00024 - 0.004	Sedimentation
Silt.....	.004 - .062	Sedimentation
Sand.....	.062 - 2.0	Sedimentation or sieve
Gravel.....	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis (Guy, 1969).

pH indicates the degree of acidity or alkalinity of water and is expressed in terms of pH units. The pH value of a solution is the negative logarithm of the concentration of hydrogen ions, in moles per liter. A pH of 7.0 indicates that the water is neither acid nor alkaline. pH readings progressively lower than 7.0 denote increasing acidity and those progressively higher than 7.0 denote increasing alkalinity. The pH of most natural surface waters ranges between 6 and 8.

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter

Ion	Multi- ply by	Ion	Multi- ply by
Aluminum (Al^{+3})*.....	0.11119	Iodide (I^{-1}).....	0.00788
Ammonia as NH_4^{+1}	.05544	Iron (Fe^{+3})*.....	.05372
Barium (Ba^{+2}).....	.01456	Lead (Pb^{+2})*.....	.00965
Bicarbonate (HCO_3^{-1}).....	.01639	Lithium (Li^{+1})*.....	.14411
Bromide (Br^{-1}).....	.01251	Magnesium (Mg^{+2}).....	.08226
Calcium (Ca^{+2}).....	.04990	Manganese (Mn^{+2})*....	.03640
Carbonate (CO_3^{-2})....	.03333	Nickel (Ni^{+2})*.....	.03406
Chloride (Cl^{-1}).....	.02821	Nitrate (NO_3^{-1}).....	.01613
Chromium (Cr^{+6})*.....	.11539	Nitrite (NO_2^{-1}).....	.02174
Cobalt (Co^{+2})*.....	.03394	Phosphate (PO_4^{-3})....	.03159
Copper (Cu^{+2})*.....	.03148	Potassium (K^{+1}).....	.02557
Cyanide (CN^{-1}).....	.03844	Sodium (Na^{+1}).....	.04350
Fluoride (F^{-1}).....	.05264	Strontium (Sr^{+2})*....	.02283
Hydrogen (H^{+1}).....	.99209	Sulfate (SO_4^{-2}).....	.02082
Hydroxide (OH^{-1}).....	.05880	Zinc (Zn^{+2})*.....	.03060

*Constituent reported in micrograms per liter; multiply by factor and divide results by 1,000.

Table 2.--Factors for conversion of sediment concentration in milligrams per liter to parts per million*
(All values calculated to three significant figures)

Range of concentration in 1000 mg/l	Di- vide by	Range of concentration in 1000 mg/l	Di- vide by	Range of concentration in 1000 mg/l	Di- vide by	Range of concentration in 1000 mg/l	Di- vide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 g/ml and a specific gravity of sediment of 2.65.

Sediment is solid material that originates mostly from disintegrated rocks and is transformed by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment discharge is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. It is computed by multiplying discharge times mg/l times 0.0027.

Total sediment discharge or total sediment load is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that is discharged during a given time (Colby and Hembree, 1955).

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/l).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Sodium adsorption ratio is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. This ratio should be known especially for water used for irrigation.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff." Streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph that automatically records water temperature on paper tape.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the water year.

Tons per acre-foot indicates the dry weight of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

Irrigation network stations are water-quality stations located at or near certain streamflow gaging stations west of the main stem of the Mississippi River. Data collected at these stations are used to evaluate the chemical quality of surface waters used for irrigation and the changes resulting from the drainage of irrigated lands. Prior to water year 1966, the data for these stations were published in the annual water-supply paper series, "Quality of Surface Water for Irrigation, Western States."

Pesticide program is a network of regularly sampled water-quality stations where additional monthly samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides.

Radiochemical program is a network of regularly sampled water-quality stations where additional samples are collected twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of water-quality stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each water-quality station, gaging station, and miscellaneous site has been assigned a station number. These are in the same downstream order used in this report. Water-quality stations located at or near gaging stations have the same number as the gaging station. Gaps are left in the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 06259000 which appears just to the left of the station name, includes the 2-digit part number "06" plus the 6-digit downstream order number "259000." In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 6 (Missouri River basin), Part 9 (Colorado River basin), Part 10 (The Great Basin), and Part 13 (Snake River basin). All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

WELL NUMBER

The well numbers used in this report indicate the well location. The numbering system is based on the Federal system of land subdivision. The number shows the location of the well by township, range, section, and position within the section. The first numeral indicates the township, the second the range, and the third the section in which the well is located. Lowercase letters following the section number locate the well within the section. The first letter denotes the quarter section, the second the quarter-quarter section, and the third the quarter-quarter-quarter section. The letters are assigned within the section in a counterclockwise direction beginning with (a) in the northeast quarter of the section. Letters are assigned within each quarter section and quarter-quarter section in the same manner. Where two or more locations are within the smallest subdivision, consecutive numbers beginning with 1 are added to the letters in the order in which the wells were inventoried. For example, 30-110-15daa2 indicates a well in the northeast quarter of the northeast quarter of the southeast quarter of sec. 15, T. 30 N., R. 110 W., and shows that this is the second well inventoried in the quarter-quarter-quarter section.

For a small irregularly-shaped area in west central Wyoming the well numbers are based on the Wind River Meridian and Base Line system. The uppercase letter that begins the number designates the quadrant of the system. The quadrants are lettered A, B, C, and D in a counterclockwise direction beginning with A in the northeast quadrant. Otherwise, the well numbers are the same as given above.

Because the Federal system of land subdivision does not extend to Yellowstone National Park, a well-code numbering system based on latitude and longitude is used in this report for that area. The six digits before the letter N denote the latitude; the remaining seven digits denote the longitude. The degree, minute, and second symbols have been omitted for brevity. For example, the number 441025N1103045 would indicate the well or spring is located at latitude 44°10'25" north, longitude 110°30'45" west.

COLLECTION AND EXAMINATION OF DATA

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment discharge. Discharge records for streams in Wyoming have been released in the report, "Water Resources Data for Wyoming, 1972, Part 1. Surface Water Records."

The data in this report include a description of the sampling station and tabulations of the samples analyzed. The description of the sampling station gives the location, drainage area, periods of

record for the various water-quality data, extremes of the pertinent data, and general remarks, in a format similar to that used for stream-flow gaging stations. For ground-water sampling stations, no descriptive statements are given. However, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of ground water.

Water-quality information is presented for chemical quality, biological, microbiological, water temperature, and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, sodium adsorption ratio, specific conductance, and pH. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a continuous temperature recorder furnishes information from which daily minimums and maximums are obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment and bed material.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the U.S. Geological Survey began to use the metric system; data for chemical constituents and concentrations of suspended sediment are now reported in milligrams per liter (mg/l) and water temperatures are given in degrees Celsius (centigrade, °C). In waters with a density of 1.000 g/ml (grams per milliliter), parts per millions and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per liter. To convert temperature in degrees Celsius to degrees Fahrenheit, see table 3, page 11.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. (See "Definitions of Terms," page 2.)

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*
(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

* °C = 5/9 (°F - 32) or °F = 9/5 (°C) + 32.

Solutes

The methods of collecting and analyzing water samples for determining the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge depending on the source of material and the turbulence and the mixing of the stream. Some must be sampled at several verticals across the channel to determine accurately the solute load.

The daily chemical quality data in this report generally represent equal-volume composites for 2- to 30-day periods; the composite periods are selected on the basis of specific conductance of the daily samples and fluctuation of water discharge.

Ground water does not change significantly during short periods of time; infrequent sampling and analysis of ground water adequately defines ground-water quality at a given site. Water samples from wells are analyzed individually.

Temperature

Water temperatures are measured at most of the water-quality stations. For daily stations, the water temperatures are taken at about the same time each day when sample is collected. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where continuously recording thermographs are present, the records consist of maximum and minimum temperatures for each day and for each month.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

WATER-SUPPLY PAPERS

Table 4 below shows the annual series of water-supply papers that give information on quality of surface waters in Wyoming. Data for the Missouri River basin are given in parts 5-6 prior to 1968 and in part 6 thereafter. Data for the Colorado River basin and the Great Basin are given in parts 9-14 prior to 1964, in parts 9-11 from 1964 to 1967, and in parts 9-10 after 1967. Data for the Snake River basin are given in parts 9-14 prior to 1964, in parts 12-15 in 1964, and in parts 12-16 after 1964.

Table 4.--Water-supply paper numbers and parts,
water years, 1948-70

<u>Year</u>	<u>Parts</u> <u>5-6</u>	<u>Parts</u> <u>9-14</u>	<u>Year</u>	<u>Parts</u> <u>5-6</u>	<u>Parts</u> <u>9-14</u>
1948	1132	A1133	1956	1451	1453
1949	1162	A1163	1957	1521	1523
1950	1187	1189	1958	1572	1574
1951	1198	1200	1959	1643	1645
1952	1251	1253	1960	1743	1745
1953	1291	1293	1961	1883	1885
1954	1351	1353	1962	1943	1945
1955	1401	1403	1963	1949	1951
<u>Year</u>	<u>Parts</u> <u>5-6</u>	<u>Part</u> <u>6</u>	<u>Parts</u> <u>9-10</u>	<u>Parts</u> <u>9-11</u>	<u>Parts</u> <u>12-16</u>
1964	1956	--	--	1958	B1959
1965	1963	--	--	1965	1966
1966	1993	--	--	1995	1996
1967	2013	--	--	2015	2016
1968	--	2095	C2098	--	C2100
1969	--	C2145	C2148	--	C2150
1970	--	C2155	C2158	--	C2160

A Parts 7-14.

B Parts 12-15.

C In press.

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U.S. Inter-Agency Committee on Water Resources, Subcommittee on Sedimentation, A study of methods used in measurement and analysis of sediment loads in streams. Published by the St. Anthony Falls Hydraulic Laboratory, Minneapolis, Minn.

- _____ 1941, Methods of analyzing sediment samples: Rept. 4.
- _____ 1953, Accuracy of sediment size analyses made by the bottom-withdrawal-tube method: Rept. 10.
- _____ 1957, The development and calibration of visual-accumulation tube: Rept. 11.
- _____ 1957, Some fundamentals of particle size analysis: Rept. 12.
- _____ 1959, Federal Inter-agency sedimentation instruments and reports: Rept. AA.
- _____ 1961, The single stage sampler for suspended sediment: Rept. 13.
- _____ 1963, Determinations of fluvial sediment discharge: Rept. 14.

WATER-QUALITY RECORDS

PART 6. MISSOURI RIVER BASIN

YELLOWSTONE RIVER BASIN

06191500 YELLOWSTONE RIVER AT CORWIN SPRINGS, MONT.

LOCATION.--Lat 45°06'43", long 110°47'37", in SE¼NW¼ sec.30, T.8 S., R.8 E., Park County, at gaging station at highway bridge at Corwin Springs, 1.3 miles upstream from Mol Herron Creek, 7 miles northwest of Gardiner, and at mile 530.5.

DRAINAGE AREA.--2,623 sq mi.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)
OCT.									
21...	1415	1790	14	4.7	17	36	9.6	.6	.39
JAN.									
25...	0820	854	23	7.1	28	48	18	1.0	.34
APR.									
24...	1530	1560	17	5.8	20	32	12	.8	.13
JULY									
25...	1530	5810	8.7	3.1	11	16	5.0	.5	--
AUG.									
24...	1530	3270	12	4.0	16	22	7.0	.7	--
SEP.									
26...	1300	2280	15	5.3	19	31	9.2	.8	--

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BERYL- LIUM (BE) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	CYANIDE (CN) (MG/L)
OCT.									
21...	1415	1790	20	0	320	0	1	1	.50
JAN.									
25...	0820	854	30	0	630	0	0	4	.00
APR.									
24...	1530	1560	10	0	380	1	0	1	.00

DATE	TIME	DIS- CHARGE (CFS)	ALDRIN (UG/L)	LINDANE (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)
OCT.								
21...	1415	1790	.00	.00	.0	.00	.00	.00
FEB.								
24...	0915	808	.00	.00	.0	.00	.00	.00
APR.								
24...	1530	1560	.00	.00	.0	.00	.00	.00

YELLOWSTONE RIVER BASIN

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06191500 YELLOWSTONE RIVER AT CORWIN SPRINGS, MONT.--Continued

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1972.

REMARKS.--Flow affected by natural storage in Yellowstone Lake.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED SOLIDS (RESI- DUE AT 190 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	SODIUM AD- SORP- TION RATIO	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
OCT. 21...	178	.24	860	54	1.0	.07	.060	.7
JAN. 25...	218	.30	503	87	1.3	.29	.11	1.6
APR. 24...	182	.25	767	66	1.1	.07	.070	1.1
JULY 25...	98	.13	1540	34	.8	--	--	1.2
AUG. 24...	150	.20	1320	46	1.0	--	--	.8
SEP. 26...	156	.21	960	59	1.1	--	--	1.6

DATE	DIS- SOLVED LEAD (Pb) (UG/L)	DIS- SOLVED MANGANESE (Mn) (UG/L)	DIS- SOLVED MERCURY (Hg) (UG/L)	DIS- SOLVED MOLYB- DENUM (Mo) (UG/L)	DIS- SOLVED NICKEL (Ni) (UG/L)	DIS- SOLVED SELE- NIUM (Se) (UG/L)	DIS- SOLVED SILVER (Ag) (UG/L)	DIS- SOLVED ZINC (Zn) (UG/L)
OCT. 21...	0	20	.1	0	3	4	0	10
JAN. 25...	2	40	.3	3	2	1	1	8
APR. 24...	5	20	.0	0	6	2	0	10

DATE	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 21...	.00	.00	.00	.00	.00	.00	.00
FEB. 24...	.00	.00	.00	.00	.00	.00	.00
APR. 24...	.00	.00	.00	.00	.00	.00	.00

FIELD DETERMINATIONS

DATE	TIME	TEMPER- ATURE (DEG C)	AIR TEMP- ERATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	ALKA- LITY AS CAC03 (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)
OCT. 21...	1415	8.0	11.5	200	11.4	8.0	54	--	30
JAN. 25...	0820	.0	-22.0	300	12.0	7.7	--	--	42
APR. 24...	1530	9.0	18.5	240	11.4	8.4	--	--	6
JULY 25...	1530	16.0	25.5	150	8.6	7.5	42	820	30
AUG. 24...	1530	17.0	23.5	180	9.2	7.6	51	210	4
SEP. 26...	1300	9.0	12.0	220	11.0	7.3	49	360	4

YELLOWSTONE RIVER BASIN

06207500 CLARKS FORK YELLOWSTONE RIVER NEAR BELFRY, MONT.

LOCATION.--Lat 45°00'40", long 109°04'00", in E½NE¼ sec.31, T.9 S., R.22 E., Carbon County, at bridge on county road, 0.4 mile downstream from gaging station, just upstream from Sand Coulee, 0.8 mile north of Wyoming-Montana State line, 9.5 miles southwest of Belfry, and at mile 78.1.

DRAINAGE AREA.--1,154 sq mi (at gaging station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 21...	1320	450	12	150	37	7.9	8.5	.9	132	0	32	2.1
NOV. 02...	1715	510	9.7	0	36	11	9.8	1.3	133	0	41	1.3
DEC. 02...	1415	267	9.0	70	43	12	11	1.1	153	0	53	3.1
JAN. 04...	1620	292	11	30	41	10	10	1.1	140	0	42	3.1
FEB. 09...	1645	301	11	150	41	12	9.8	1.3	137	0	53	1.7
MAR. 08...	1530	271	9.1	80	47	12	14	1.2	130	0	78	2.1
MAY 01...	1530	516	12	20	28	6.2	8.7	.5	110	0	26	1.0
JUNE 01...	1715	6520	9.2	40	13	2.0	2.9	.7	48	0	7.4	.0
JULY 13...	0830	3120	6.9	0	11	3.2	3.5	.5	49	0	5.8	.7
AUG. 02...	1645	1620	14	480	21	4.5	5.4	1.2	79	0	15	1.7
30...	1545	950	9.3	120	27	6.8	7.5	1.2	101	4	21	1.3

YELLOWSTONE RIVER BASIN

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06207500 CLARKS FORK YELLOWSTONE RIVER NEAR BELFRY, MONT.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1965 to September 1972.

Water temperatures: October 1965 to September 1969.

Sediment records: April to August 1971.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 21...	.1	.5	40	166	.23	202	120	12	.3	281	8.3	8.0
NOV. 02...	.2	.2	20	176	.24	242	140	31	.4	296	8.3	4.0
DEC. 02...	.2	.1	10	208	.28	150	160	34	.4	337	8.3	1.5
JAN. 04...	.1	.8	40	188	.26	148	140	25	.4	319	8.3	.0
FEB. 09...	.2	1.0	50	198	.27	161	150	38	.3	349	7.8	.0
MAR. 08...	.2	.7	20	228	.31	167	160	53	.5	381	8.1	6.0
MAY 01...	.0	.2	20	137	.19	191	95	5	.4	235	8.2	4.0
JUNE 01...	.1	.2	20	58	.08	1020	41	2	.2	89	7.9	9.5
JULY 13...	.1	.2	20	56	.08	472	40	0	.2	95	7.7	14.5
AUG. 02...	.1	.7	0	103	.14	451	70	5	.3	155	8.0	17.5
30...	.2	.3	30	128	.17	328	95	5	.3	217	8.5	19.5

YELLOWSTONE RIVER BASIN

06207540 SILVER TIP CREEK NEAR BELFRY, MONT.

LOCATION (revised).--Lat 45°09'32", long 108°58'31", in NE¼NW¼ sec.12, T.8 S., R.22 E., Carbon County, at gaging station 0.1 mile upstream from county bridge, 1.5 miles upstream from mouth and 2 miles northeast of Belfry.

DRAINAGE AREA.--88.0 sq mi. Area at site used prior to May 12, 1972, 87.6 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1968 to March 1972 (daily), April to September 1972 (monthly).

Water temperatures: October 1969 to April 1972 (discontinued).

Sediment records: October 1968 to April 1972 (daily), May to September 1972 (monthly).

EXTREMES, October 1971 to April 1972:

Dissolved solids (October to March): Maximum, 7,020 mg/l Dec. 5-9; minimum, 673 mg/l Feb. 19-24.

Hardness (October to March): Maximum, 1,700 mg/l Dec. 5-9; minimum, 220 mg/l Feb. 19-24.

Specific conductance (October to March): Maximum daily, 8,620 micromhos Dec. 7; minimum daily, 567 micromhos Feb. 20.

Water temperatures: Maximum, 22.0°C Oct. 10; minimum, freezing point on several days during November to March.

Sediment concentrations: Maximum daily, 37,200 mg/l Mar. 12; minimum daily, no flow for many days during period.

Sediment discharge: Maximum daily, 7,160 tons Feb. 28; minimum daily, 0 tons on many days during period.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT.												
02-05	--	13	--	8.7	325	150	43	490	32	238	0	1200
06-28	--	1.3	--	12	10	250	110	1000	60	269	0	2500
NOV.												
01-08	--	.36	--	14	40	220	130	1200	58	177	0	2900
09-30	--	1.4	--	13	0	220	110	1100	57	218	0	2500
DEC.												
05-09	--	.23	--	17	10	350	190	1700	7.4	390	0	3900
FEB.												
19-24	--	87	--	4.9	90	65	15	120	12	120	0	350
25-29	--	53	--	7.9	10	110	33	280	16	216	0	700
MAR.												
01-10	--	9.8	--	7.5	20	170	57	520	26	228	0	1300
11-19	--	5.3	--	8.5	20	220	88	810	43	267	0	2000
20-31	--	2.5	--	11	10	220	110	1100	58	188	0	2600
1/												
WTD. AVG.	--	--	--	6.9	65	111	36	328	21	175	0	831
TIME WTD.												
AVG.	--	10	--	11	29	211	97	914	46	231	0	2190
TONS												
PER DAY	--	--	--	.2	0	3.1	1.0	9.2	.6	5	0	23

ANALYSES OF ADDITIONAL SAMPLES

NOV.												
19...	1530	.18	.0	16	30	330	150	1300	59	401	0	3000
FEB.												
25...	1110	3.2	.0	8.2	20	150	45	400	19	232	0	1000
MAR.												
16...	1415	4.3	10.5	10	--	270	110	1100	51	379	0	2300
APR.												
04...	1630	3.7	12.0	14	20	310	120	1100	65	403	0	2700
13...	1345	1.4	1.5	11	10	270	120	1100	53	333	0	2700
MAY												
04...	1320	2.5	19.0	13	20	260	120	1100	71	341	0	2700
30...	1620	2.3	27.0	15	30	290	120	1100	.9	348	0	2700
JUNE												
10...	1015	19	14.0	8.1	30	180	51	390	24	196	0	1200
27...	1600	2.7	25.0	12	40	280	110	1100	67	325	0	2500
JULY												
10...	1345	2.4	23.0	14	20	270	130	1100	79	312	0	2800
25...	1030	1.1	18.5	15	20	290	140	1200	74	283	0	2700
AUG.												
08...	1415	2.4	21.5	15	30	250	110	1100	70	314	0	2500
28...	1030	.82	16.5	11	90	250	110	1000	43	297	0	2400
SEP.												
12...	1300	1.8	17.5	14	210	240	110	970	58	321	0	2300
26...	1030	1.5	4.0	15	20	240	110	1100	61	358	0	2400

1/ For the period October 1971 to March 1972

06207540 SILVER TIP CREEK NEAR BELFRY, MONT.--Continued

EXTREMES.--Continued

Period of record:

Dissolved solids: Maximum, 7,020 mg/l Dec. 5-9, 1972; minimum, 673 mg/l Feb. 19-24, 1972.

Hardness: Maximum, 1,700 mg/l Dec. 5-9, 1972; minimum, 220 mg/l Feb. 19-24, 1972.

Specific conductance: Maximum daily, 8,620 micromhos Dec. 7, 1971; minimum daily, 225 micromhos Feb. 13, 1971.

Water temperatures: Maximum observed, 28.0°C June 23, 1970, June 23, July 23, 1971; minimum, freezing point on many days during winter periods.

Sediment concentrations: Maximum daily, 60,300 mg/l July 12, 1970; minimum daily, no flow for many days each year.

Sediment discharge: Maximum daily, 40,200 tons June 26, 1969; minimum daily, 0 tons on many days each year.

REMARKS.--Daily samples for chemical analyses composited by discharge during October to March. Additional samples were collected for more comprehensive definition of water quality at this station. No flow for many days during period. Flow affected by ice most of winter months. Flow affected by oil recovery operations upstream from station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED CHLORIDE (CL) (MG/L)	DIS- SOLVED FLUORIDE (F) (MG/L)	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.												
02-15	200	1.1	.00	--	2240	3.05	78.6	550	360	9.1	3030	8.3
06-24	440	1.3	.00	--	4510	6.13	15.8	1100	860	13	5800	8.1
NOV.												
01-08	520	1.0	.49	--	5130	6.98	4.99	1100	940	16	6330	8.1
09-31	470	1.1	.34	--	4580	6.23	17.3	1000	820	15	5780	8.0
DEC.												
05-09	660	1.4	.35	--	7020	9.55	5.69	1700	1300	18	8550	8.1
FEB.												
19-24	45	.4	.33	.000	673	.92	156	220	130	3.5	1050	7.9
25-29	100	.6	.33	.000	1350	1.84	193	410	230	6.0	1930	8.3
MAR.												
01-10	200	1.2	.47	.000	2400	3.26	63.5	660	470	8.8	3350	7.4
11-19	330	1.3	.46	.010	3630	4.94	51.9	910	690	12	4940	7.5
20-31	440	1.5	.20	.010	4630	6.30	31.3	1000	850	15	6250	7.2
WTD. AVG. TIME WTD. AVG. TONS PER DAY	129	.7	.25	--	1550	2.11	--	426	285	6.2	2180	7.9
	382	1.2	.26	--	3970	5.40	--	932	734	13	5140	7.9
	3.6	.0	.11	--	43	--	--	--	--	--	--	--

ANALYSES OF ADDITIONAL SAMPLES

NOV.												
19...	510	1.4	.20	--	5570	7.58	2.71	1400	1100	15	6880	7.6
FEB.												
25...	190	.9	.29	--	1930	2.62	16.7	560	370	7.4	2740	7.6
MAR.												
16...	790	1.2	.18	--	4820	6.53	55.7	1100	820	14	5650	7.6
APR.												
14...	470	1.3	.23	.010	4980	6.77	49.8	1300	940	13	6260	7.9
18...	440	1.2	.29	.000	4860	6.61	18.8	1200	890	14	5960	8.3
MAY												
14...	510	1.3	.17	.010	4960	6.75	33.5	1100	860	14	6400	7.9
30...	510	1.5	.34	.020	4910	6.68	30.5	1200	930	14	6560	7.0
JUNE												
10...	110	.7	1.4	.020	2070	2.82	107	660	500	6.6	2790	7.3
27...	490	1.2	.00	.000	4720	6.42	34.4	1200	880	14	5980	8.1
JULY												
17...	540	1.4	.01	.000	5090	6.92	33.1	1200	950	14	6610	7.9
25...	650	1.4	.01	.000	5210	7.09	15.5	1300	1100	14	6320	7.5
AUG.												
28...	520	1.6	.33	.020	4720	6.42	30.6	1100	820	15	6340	7.8
28...	500	1.4	.50	.000	4460	6.07	9.87	1100	830	13	5860	8.1
SEP.												
12...	470	1.3	.26	.010	4330	5.89	21.0	1100	790	13	5780	8.1
26...	500	1.5	.27	.030	4600	6.26	19.5	1100	760	15	5710	8.0

1/ For the period October 1971 to March 1972

YELLOWSTONE RIVER BASIN

06207540 SILVER TIP CREEK NEAR BELFRY, MONT.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
NOV.					
19...	1530	.18	--	2300	10
FEB.					
25...	1110	3.2	.030	740	280
MAR.					
16...	1415	4.3	.070	1800	340
APR.					
04...	1630	3.7	--	2200	30
18...	1345	1.4	.000	--	10
MAY					
04...	1320	2.5	--	2700	17
30...	1620	2.3	--	2700	20
JUNE					
10...	1015	19	--	71	340
27...	1600	2.7	--	2600	40
JULY					
10...	1345	2.4	.020	2700	14
25...	1030	1.1	.030	200	25
AUG.					
08...	1415	2.4	.030	3100	20
28...	1030	.82	--	--	0
SEP.					
12...	1300	1.8	.020	2500	10
26...	1030	1.5	--	--	0

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDIM- ENT (MG/L)	SUS- PENDED SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .034 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM
FEB.										
29...	1445	2.0	30	15700	1270	38	52	79	90	100
MAR.										
10...	1715	7.0	7.5	33000	668	32	50	93	99	100
12...	1630	6.5	6.4	40800	705	32	52	93	99	100
MAY										
20...	1230	15.0	3.0	27500	223	--	--	--	--	--
21...	1120	13.5	33	23800	2120	--	--	--	--	--
21...	2050	17.0	88	109000	25900	55	78	85	90	100
22...	1625	16.5	6.0	22700	368	--	--	--	--	--
23...	1625	19.0	3.0	8260	67	--	--	--	--	--
24...	1625	18.5	2.8	32600	246	--	--	--	--	--
25...	1730	11.5	3.2	8670	75	--	--	--	--	--
JUNE										
09...	1445	20.0	12	66800	2160	--	--	--	--	--
09...	2035	15.0	832	62400	140000	--	--	--	--	--
10...	0730	14.0	20	47700	2580	--	--	--	--	--
10...	1000	14.0	19	40300	2050	56	71	95	98	100
AUG.										
03...	0745	15.0	22	46100	2740	--	--	--	--	--
23...	1915	14.0	14	37900	1430	--	--	--	--	--

YELLOWSTONE RIVER BASIN

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06207540 SILVER TIP CREEK NEAR BELFRY, MONT.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), OCTOBER 1971 TO MARCH 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	7870	5980	---	---	3440	---	---	---	---	---	---
2	1880	6030	6740	---	---	3480	---	---	---	---	---	---
3	3850	5840	---	---	---	4210	---	---	---	---	---	---
4	3040	5510	---	---	---	4230	---	---	---	---	---	---
5	3040	5460	8370	---	---	3790	---	---	---	---	---	---
6	4480	7010	8490	---	---	2530	---	---	---	---	---	---
7	5860	7010	8620	---	---	---	---	---	---	---	---	---
8	6090	6680	8370	---	---	4120	---	---	---	---	---	---
9	6320	5590	8030	---	---	4150	---	---	---	---	---	---
10	6350	5560	---	---	---	3610	---	---	---	---	---	---
11	6360	5300	---	---	---	4110	---	---	---	---	---	---
12	6450	5080	---	---	---	4270	---	---	---	---	---	---
13	6500	6050	---	---	---	4580	---	---	---	---	---	---
14	6730	6220	---	---	---	4790	---	---	---	---	---	---
15	6310	5760	---	---	---	5270	---	---	---	---	---	---
16	5070	5940	---	---	---	5460	---	---	---	---	---	---
17	6190	6100	---	---	---	5620	---	---	---	---	---	---
18	3570	6540	---	---	---	5720	---	---	---	---	---	---
19	5540	5790	---	---	1840	5510	---	---	---	---	---	---
20	5520	7390	---	---	567	6060	---	---	---	---	---	---
21	5850	5790	---	---	1010	5770	---	---	---	---	---	---
22	6020	6310	---	---	1110	6160	---	---	---	---	---	---
23	6090	6340	---	---	1010	6360	---	---	---	---	---	---
24	6200	6410	---	---	817	6170	---	---	---	---	---	---
25	6400	6140	---	---	3220	6180	---	---	---	---	---	---
26	6230	6340	7280	---	3200	6170	---	---	---	---	---	---
27	5450	6020	---	---	2030	6380	---	---	---	---	---	---
28	6910	6040	---	---	1050	6290	---	---	---	---	---	---
29	---	6400	---	---	1590	6290	---	---	---	---	---	---
30	---	6470	---	---	---	6210	---	---	---	---	---	---
31	---	---	---	---	---	6200	---	---	---	---	---	---
MONTH	5490	6170	---	---	---	5090	---	---	---	---	---	---

TEMPERATURE (°C) OF WATER, OCTOBER 1971 TO APRIL 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	3.0	0.0	---	---	0.0	12.0	---	---	---	---	---
2	10.0	3.0	1.0	---	---	0.0	5.0	---	---	---	---	---
3	10.0	3.0	---	---	---	1.0	0.0	---	---	---	---	---
4	15.5	5.0	---	---	---	2.0	14.0	---	---	---	---	---
5	19.5	1.0	---	---	---	3.0	14.0	---	---	---	---	---
6	7.5	0.0	0.0	---	---	5.0	20.0	---	---	---	---	---
7	5.5	2.0	0.0	---	---	---	17.0	---	---	---	---	---
8	5.0	2.0	0.0	---	---	5.0	12.0	---	---	---	---	---
9	16.0	3.0	0.0	---	---	6.0	11.0	---	---	---	---	---
10	22.0	3.0	0.0	---	---	7.0	6.0	---	---	---	---	---
11	16.0	2.0	---	---	---	5.0	14.0	---	---	---	---	---
12	16.5	3.0	---	---	---	6.5	14.0	---	---	---	---	---
13	15.5	9.5	---	---	---	12.0	11.0	---	---	---	---	---
14	8.0	5.0	---	---	---	17.0	6.0	---	---	---	---	---
15	2.5	2.0	---	---	---	11.0	18.0	---	---	---	---	---
16	4.5	4.0	---	---	---	15.0	16.0	---	---	---	---	---
17	5.0	1.5	---	---	---	16.0	12.0	---	---	---	---	---
18	8.0	1.0	---	---	---	7.0	3.0	---	---	---	---	---
19	10.0	2.0	---	---	5.0	11.0	11.0	---	---	---	---	---
20	11.5	1.5	---	---	1.0	8.0	15.0	---	---	---	---	---
21	7.0	5.0	---	---	1.0	15.0	17.0	---	---	---	---	---
22	12.0	2.0	---	---	4.0	8.0	12.0	---	---	---	---	---
23	12.0	1.0	---	---	0.0	8.0	16.0	---	---	---	---	---
24	10.0	1.0	---	---	0.0	15.0	17.0	---	---	---	---	---
25	12.0	6.5	---	---	3.0	5.0	9.0	---	---	---	---	---
26	13.0	1.0	5.0	---	2.0	8.0	5.0	---	---	---	---	---
27	0.0	2.0	---	---	2.0	7.0	19.0	---	---	---	---	---
28	0.0	1.5	---	---	7.0	6.0	8.0	---	---	---	---	---
29	---	5.0	---	---	7.0	4.0	20.0	---	---	---	---	---
30	---	2.0	---	---	---	5.0	11.0	---	---	---	---	---
31	---	---	---	---	---	11.0	---	---	---	---	---	---
MONTH	10.0	2.5	---	---	---	7.5	12.0	---	---	---	---	---

YELLOWSTONE RIVER BASIN

06207540 SILVER TIP CREEK NEAR BELFRY, MONT.--Continued

SUSPENDED-SEDIMENT DISCHARGE, OCTOBER 1971 TO APRIL 1972

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6.9	10800	281	.10	519	.14	.10	525	.14
2	21	20600	1170	.20	591	.32	.10	980	.26
3	11	13200	446	.20	592	.32	0	0	0
4	13	18800	730	.30	335	.27	0	0	0
5	8.0	18400	444	.50	352	.48	0	0	0
6	.86	4910	11	.10	368	.10	.10	42	.01
7	.82	3140	7.0	.50	488	.66	.20	92	.05
8	1.0	3410	9.2	1.0	600	1.6	.30	662	.54
9	1.0	4940	13	1.6	359	1.6	.30	579	.47
10	.92	4490	11	5.0	356	4.8	.20	88	.05
11	.92	4370	11	7.2	4900	95	.10	7	0
12	.58	2010	3.1	4.1	11900	132	0	0	0
13	1.5	3800	22	2.0	10400	56	0	0	0
14	1.0	5760	17	1.6	2620	11	0	0	0
15	.57	3510	5.4	2.6	4050	28	0	0	0
16	.61	4030	8.2	2.5	5750	39	0	0	0
17	1.3	6600	23	1.9	880	4.5	0	0	0
18	4.3	14700	217	.70	635	1.2	0	0	0
19	4.1	6100	99	.20	800	.43	0	0	0
20	1.3	4660	16	.40	3300	3.6	0	0	0
21	1.1	4080	12	.30	11400	9.2	0	0	0
22	1.3	4810	17	.20	1700	.92	0	0	0
23	1.4	5680	21	.20	1130	.61	0	0	0
24	1.5	5550	22	.20	850	.46	.20	5800	3.1
25	1.3	4890	17	.20	930	.50	.30	4450	3.6
26	1.4	4700	18	.10	1410	.38	.20	1440	.78
27	1.3	2330	8.2	.10	4680	1.3	.10	50	.01
28	.30	1900	1.5	.20	3050	1.6	0	0	0
29	0	0	0	.20	720	.39	0	0	0
30	0	0	0	.10	900	.24	0	0	0
31	0	0	0	--	--	--	0	0	0
TOTAL	90.28	--	3660.6	34.50	--	396.62	2.20	--	9.01

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0	0	0	0	19	7900	405
2	0	0	0	0	0	0	12	6900	224
3	0	0	0	0	0	0	5.9	3100	49
4	0	0	0	0	0	0	5.9	2350	37
5	0	0	0	0	0	0	6.8	9180	169
6	0	0	0	0	0	0	18	18400	894
7	0	0	0	0	0	0	7.2	10300	200
8	0	0	0	0	0	0	7.2	10300	200
9	0	0	0	0	0	0	5.9	10300	164
10	0	0	0	0	0	0	7.5	27800	563
11	0	0	0	0	0	0	7.7	27400	570
12	0	0	0	0	0	0	6.4	37200	643
13	0	0	0	0	0	0	6.2	34100	571
14	0	0	0	0	0	0	5.3	31200	446
15	0	0	0	0	0	0	4.1	25400	281
16	0	0	0	0	0	0	4.7	23200	294
17	0	0	0	0	0	0	4.9	19600	259
18	0	0	0	0	0	0	4.1	17700	196
19	0	0	0	80	1110	240	4.3	18300	212
20	0	0	0	170	280	129	4.1	5700	63
21	0	0	0	120	1000	324	2.7	12100	88
22	0	0	0	80	2790	603	1.2	5610	18
23	0	0	0	50	1170	158	1.9	11200	57
24	0	0	0	20	2230	120	3.3	11800	105
25	0	0	0	5.0	1200	16	3.8	15000	154
26	0	0	0	10	600	16	2.7	14300	104
27	0	0	0	80	4300	929	2.5	11600	78
28	0	0	0	120	22100	7160	1.3	2300	8.1
29	0	0	0	50	26000	4320	.75	7500	15
30	0	0	0	--	--	--	2.7	10300	75
31	0	0	0	--	--	--	2.7	10500	77
TOTAL	0	--	0	785.0	--	14015	172.75	--	7219.1

YELLOWSTONE RIVER BASIN

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06207540 SILVER TIP CREEK NEAR BELFRY, MONT.--Continued

SUSPENDED-SEDIMENT DISCHARGE, OCTOBER 1971 TO APRIL 1972

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.4	10800	70	--	--	--	--	--	--
2	2.1	10600	60	--	--	--	--	--	--
3	1.6	2300	9.9	--	--	--	--	--	--
4	1.3	12200	43	--	--	--	--	--	--
5	1.2	10600	34	--	--	--	--	--	--
6	1.3	10400	37	--	--	--	--	--	--
7	1.4	11200	42	--	--	--	--	--	--
8	1.6	9300	40	--	--	--	--	--	--
9	1.7	7800	36	--	--	--	--	--	--
10	1.8	4300	21	--	--	--	--	--	--
11	1.8	7600	37	--	--	--	--	--	--
12	2.0	7950	43	--	--	--	--	--	--
13	2.1	7200	41	--	--	--	--	--	--
14	2.2	2600	15	--	--	--	--	--	--
15	2.3	5100	32	--	--	--	--	--	--
16	2.5	7100	48	--	--	--	--	--	--
17	2.6	4600	32	--	--	--	--	--	--
18	2.7	9000	66	--	--	--	--	--	--
19	2.6	14100	99	--	--	--	--	--	--
20	2.5	9700	65	--	--	--	--	--	--
21	2.5	8600	58	--	--	--	--	--	--
22	2.5	6300	43	--	--	--	--	--	--
23	2.4	7500	49	--	--	--	--	--	--
24	2.4	6800	44	--	--	--	--	--	--
25	2.3	8300	52	--	--	--	--	--	--
26	2.2	4700	28	--	--	--	--	--	--
27	2.2	7200	43	--	--	--	--	--	--
28	2.2	8800	52	--	--	--	--	--	--
29	2.2	6400	38	--	--	--	--	--	--
30	2.3	5300	33	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--
TOTAL	62.9	--	1310.9	--	--	--	--	--	--

TOTAL DISCHARGE FOR PERIOD (CFS-DAYS)

1147.63

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR PERIOD (TONS)

26611.23

YELLOWSTONE RIVER BASIN

06218500 WIND RIVER NEAR DUBOIS, WYO.

LOCATION.--Lat 43°34'43", long 109°45'33", in NW¼NE¼ sec.25, T.42 N., R.108 W., Fremont County, at gaging station, 2.5 miles upstream from Warm Springs Creek, and 7 miles northwest of Dubois.

DRAINAGE AREA.--232 sq mi.

PERIOD OF RECORD.--Chemical analyses: April 1947 to September 1948, October 1949 to December 1950, June to September 1953, July 1965 to September 1972.

Water temperatures: April 1947 to September 1948.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV.												
03...	1410	a96	25	0	23	5.1	7.9	2.0	98	0	12	1.5
DEC.												
03...	1350	a73	28	10	27	4.4	8.5	2.0	113	0	9.9	3.1
JAN.												
03...	1330	a72	26	70	23	4.3	8.5	2.4	104	0	9.0	1.0
FEB.												
02...	1330	a78	28	30	24	5.5	7.9	2.7	105	0	12	1.7
MAR.												
01...	1245	a66	25	10	25	5.0	8.5	2.2	109	0	7.4	1.6
APR.												
09...	1400	113	24	60	29	4.8	14	2.3	121	0	21	1.0
25...	1355	126	24	70	29	3.7	9.3	2.3	117	0	12	1.5
MAY												
15...	1230	362	18	100	23	2.1	9.3	1.4	93	0	11	2.0
JUNE												
02...	1040	1700	16	550	14	3.3	6.4	1.9	68	0	8.2	.3
JULY												
17...	1230	362	24	60	17	1.5	5.3	1.4	71	0	4.9	.3
AUG.												
01...	1440	280	24	20	17	4.0	6.0	2.3	80	0	4.9	2.3
SEP.												
05...	1345	138	27	20	20	2.7	7.0	2.6	87	0	4.1	1.7

a Daily mean discharge.

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
NOV.												
03...	.2	.1	10	125	.17	32.4	78	0	.4	192	8.0	.0
DEC.												
03...	.1	.2	10	138	.19	27.2	80	0	.4	200	8.0	.0
JAN.												
03...	.2	.1	10	126	.17	24.5	76	0	.4	189	7.7	.0
FEB.												
02...	.2	.1	50	134	.18	28.2	82	0	.4	200	7.7	.0
MAR.												
01...	.2	.1	0	129	.18	23.0	84	0	.4	199	8.1	.0
APR.												
09...	.2	.1	20	155	.21	47.3	93	0	.6	228	8.0	7.5
25...	.2	.1	20	139	.19	47.3	88	0	.4	219	7.8	6.5
MAY												
15...	.1	.3	20	113	.15	110	66	0	.5	175	7.7	6.0
JUNE												
02...	.1	.4	0	84	.11	386	50	0	.4	120	7.7	5.0
JULY												
17...	.2	.2	10	90	.12	88.0	49	0	.3	124	7.8	10.0
AUG.												
01...	.2	.1	20	100	.14	75.6	58	0	.3	143	8.0	14.0
SEP.												
05...	.2	.1	20	108	.15	40.2	61	0	.4	157	8.0	9.5

YELLOWSTONE RIVER BASIN

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06225500 WIND RIVER NEAR CROWHEART, WYO.

LOCATION.--Lat 43°14'33", long 109°00'35", in NW¼NW¼ sec.16, T.3 N., R.2 W., Fremont County, Wind River Indian Reservation, at gaging station, 0.9 mile downstream from Bull Lake Creek, and 9 miles southeast of Crowheart.

DRAINAGE AREA.--1,891 sq mi.

PERIOD OF RECORD.--Sediment records: October 1971 to September 1972.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
NOV.											
08...	1420	4.5	807	21	46	--	--	--	--	--	--
DEC.											
31...	1410	.5	545	11	16	--	--	--	--	--	--
JAN.											
05...	1430	.0	569	14	22	--	--	--	--	--	--
FEB.											
16...	1545	1.5	517	20	28	--	--	--	--	--	--
MAR.											
27...	1530	4.5	524	106	150	--	--	--	--	--	--
APR.											
13...	1250	7.0	538	74	107	--	--	--	--	--	--
MAY											
11...	1400	10.5	1390	82	308	--	--	--	--	--	--
JUNE											
15...	1540	13.0	8890	1983	47500	16	30	64	85	99	100
JULY											
17...	1700	15.0	3000	44	356	--	--	--	--	--	--
AUG.											
12...	1420	15.5	2340	16	101	--	--	--	--	--	--
24...	1500	15.5	1910	293	1510	42	65	85	89	95	100
SEP.											
26...	1000	8.0	1020	8	22	--	--	--	--	--	--

a Daily mean discharge.

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP.							
26...	1000	8.0	1020	0	1	4	34

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EXTREMES.--1971-72:

Specific conductance: Maximum daily, 546 micromhos Feb. 21; minimum daily, 148 micromhos June 14.

Water temperatures: Maximum, 24.5°C Aug. 9, 10, 12, 13; minimum, freezing point on many days during October, January to March.

Period of record:

Specific conductance (1947-49, 1965-72): Maximum daily, 932 micromhos Dec. 16, 1965; minimum daily, 148

micromhos June 14, 1972.

Water temperatures: Maximum, 27.0°C July 23, Aug. 4, 1969, Aug. 7, 1970; minimum, freezing point on many days during winter period.

DATE	DIS-SOLVED FLUO- RIDE (F)	DIS- SOLVED NITRATE (NO3)	DIS- SOLVED BORON (B)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE (DEG C)
	(MG/L)	(MG/L)	(UG/L)	(MG/L)							(UNITS)	
OCT. 27...	.4	.1	40	278	.38	291	170	26	.9	454	8.3	5.0
NOV. 10...	.4	.2	30	273	.37	372	180	40	.8	438	8.2	4.0
DEC. 03...	.2	.1	40	283	.38	355	180	32	.8	446	8.3	.0
JAN. 03...	.3	.1	30	219	.30	334	140	19	.6	346	8.0	.0
FEB. 17...	.3	.5	20	232	.32	288	160	38	.7	383	8.0	.0
MAR. 10...	.3	.3	50	228	.31	276	140	18	.8	377	8.2	4.5
APR. 14...	.3	.1	40	251	.34	352	160	17	.9	413	8.2	9.0
MAY 11...	.2	.3	30	187	.25	576	110	10	.7	306	7.9	12.0
JUNE 07...	.2	.3	10	117	.16	1910	75	4	.4	186	7.8	14.0
JULY 10...	.2	.1	10	113	.15	384	69	0	.5	184	7.9	20.0
31...	.2	.2	40	142	.19	240	83	5	.8	230	8.0	21.5
AUG. 30...	.3	.0	40	229	.31	242	140	21	.9	367	8.2	15.5

[illegible]

YELLOWSTONE RIVER BASIN

06231000 LITTLE WIND RIVER ABOVE ARAPAHOE, WYO.

LOCATION.--Lat 42°57'37", long 108°29'54", in NE¼SE¼ sec.22, T.1 S., R.3 E., Fremont County, Wind River Indian Reservation, at bridge on county road, 0.5 mile west of Arapahoe, and 1.2 miles upstream from Popo Agie River.

DRAINAGE AREA.--660 sq mi(revised).

PERIOD OF RECORD.--Chemical analyses: August 1966 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV. 10...	1000	165	14	20	76	40	70	2.2	183	0	340	13
DEC. 03...	0955	103	7.2	0	81	40	62	2.2	198	0	320	9.4
JAN. 04...	1445	71	7.3	40	64	29	43	2.0	171	0	220	9.4
FEB. 09...	1135	83	8.7	70	65	25	38	1.8	146	0	210	9.4
MAR. 17...	1030	182	5.1	60	81	38	67	1.9	176	0	340	12
APR. 14...	0710	148	6.2	50	94	44	80	2.8	196	0	410	15
MAY 15...	1150	282	6.3	160	62	30	60	2.1	150	0	270	9.6
JUNE 08...	1010	1980	5.8	90	18	5.4	9.3	1.2	59	0	31	2.3
JULY 13...	1530	385	5.3	30	33	17	27	1.4	92	0	130	4.0
JULY 31...	1015	72	6.6	80	73	37	74	2.8	192	0	330	12
SEP. 15...	0900	178	5.0	20	75	40	78	3.0	187	0	340	10

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
NOV. 10...	.6	.7	90	648	.88	289	360	210	1.6	947	8.2	3.0
DEC. 03...	.5	.7	100	623	.85	173	370	210	1.4	922	8.0	.0
JAN. 04...	.4	.7	80	458	.62	87.8	280	140	1.1	670	8.0	.0
FEB. 09...	.4	.6	80	430	.58	96.4	260	140	1.0	666	7.9	.0
MAR. 17...	.5	1.0	100	633	.86	311	360	216	1.5	932	7.8	8.0
APR. 14...	.5	.2	120	746	1.01	298	420	259	1.7	1080	8.1	7.5
MAY 15...	.4	.6	80	514	.70	391	280	157	1.6	774	8.1	13.5
JUNE 08...	.1	.3	30	103	.14	551	66	18	.5	179	7.6	13.0
JULY 13...	.2	.6	70	266	.36	277	160	85	1.0	433	8.2	22.5
JULY 31...	.5	.6	150	632	.86	123	340	182	1.8	944	8.0	18.5
SEP. 15...	.6	.4	140	646	.88	310	350	197	1.8	967	8.1	12.5

YELLOWSTONE RIVER BASIN

31

06235000 BEAVER CREEK NEAR ARAPAHOE, WYO.

LOCATION.--Lat 42°57'16", long 108°25'39", in NW¼NE¼ sec.29, T.1 S., R.4 E., Fremont County, Wind River Indian Reservation, at former gaging station, 1.0 mile upstream from mouth, and 3.8 miles east of Arapahoe.

DRAINAGE AREA.--354 sq mi.

PERIOD OF RECORD.--Chemical analyses: April 1951, October 1967 to September 1972.
Sediment records: April 1950 to September 1953.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV. 10...	1140	3.4	16	60	180	60	210	8.3	287	0	710	140
DEC. 02...	1515	3.0	18	0	180	41	200	7.9	286	0	640	120
JAN. 03...	1610	.55	20	50	200	45	220	9.2	306	0	730	140
FEB. 09...	1300	2.6	19	260	170	46	200	8.7	287	0	620	120
MAR. 10...	0900	7.3	13	80	91	21	81	5.1	143	0	300	45
APR. 14...	1150	58	16	40	71	18	64	4.6	153	0	190	38
MAY 15...	1040	94	17	70	54	11	49	3.7	139	0	140	23
JUNE 08...	0900	66	21	160	66	9.5	61	4.4	153	0	180	26
JULY 18...	1300	.00										
AUG. 11...	1215	.00										
SEP. 15...	1015	.00										

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
NOV. 10...	1.1	.5	320	1460	1.99	13.4	690	455	3.5	2070	8.0	3.0
DEC. 02...	1.0	.3	280	1340	1.82	10.9	630	395	3.5	1880	7.6	.0
JAN. 03...	1.1	.5	270	1510	2.05	2.24	690	439	3.7	2140	7.7	.0
FEB. 09...	1.0	2.4	320	1330	1.81	9.34	620	385	3.5	1830	7.2	.0
MAR. 10...	.7	1.1	140	631	.86	12.4	320	203	2.0	962	8.1	.0
APR. 14...	.5	.5	120	482	.66	75.5	250	124	1.8	747	8.2	11.0
MAY 15...	.4	.4	80	365	.50	92.6	180	66	1.6	565	7.8	14.5
JUNE 08...	.4	.7	110	439	.60	78.2	200	74	1.9	677	7.8	15.0

LOCATION.--Lat 42°59'51", long 108°22'29", in NE¼NW¼ sec.11, T.1 S., R.4 E., Fremont County, Wind River Indian Reservation, at gaging station, at bridge on county road, 1.8 miles upstream from mouth, and 1.9 miles south-east of Riverton.

PERIOD OF RECORD.--Chemical analyses: June to September 1953, May to October 1954, October 1965 to September 1972.
Water temperatures: March to September 1949, May to September 1953, October 1955 to September 1956, October 1965 to September 1972.
Sediment records: March 1949 to December 1953, October 1955 to September 1958, October 1959 to September 1964.

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
NOV. 10...	1520	405	5.8	0	75	39	60	2.0	189	0	310	9.4
DEC. 04...	1210	a270	7.7	0	91	39	66	2.0	220	0	310	11
JAN. 03...	1400	a260	9.1	20	74	29	49	2.0	178	0	240	9.0
FEB. 17...	1500	a220	11	0	76	30	53	2.2	184	0	250	9.7
MAR. 10...	1145	445	11	140	83	36	64	2.8	184	0	310	12
APR. 14...	1640	350	9.4	80	79	29	55	2.6	178	0	250	14
MAY 11...	1105	717	11	60	55	17	43	2.6	134	0	180	8.0
JUNE 06...	1200	4870	6.1	200	25	3.1	10	1.2	66	0	41	2.0
JULY 18...	1340	738	7.4	20	44	19	32	1.6	123	0	150	5.0
31...	1500	298	9.6	80	73	33	54	2.8	195	0	260	7.3
AUG. 30...	1500	282	6.5	10	85	40	74	3.3	206	8	340	8.3

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

[illegible]

33

EXTREMES.--1971-72:

Specific conductance: Maximum daily, 1,470 micromhos Apr. 22; minimum daily, 164 micromhos June 4.
Water temperatures: Maximum, 25.5°C Aug. 10, 12-14; minimum, freezing point on many days during October, December to March.

Period of record:

Specific conductance (1965-72): Maximum daily, 2,160 micromhos Apr. 23, 1971; minimum daily, 109 micromhos Feb. 17, 1970.
Water temperatures: Maximum, 28.0°C Aug. 7, 1949, Aug. 4, 1969; minimum, freezing point on many days during winter period.

DATE	DIS-SOLVED FLUO- RIDE (F)	DIS- SOLVED NITRATE (NO3)	DIS- SOLVED BORON (B)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE (DEG C)
	(MG/L)	(MG/L)	(UG/L)	(MG/L)							(UNITS)	
NOV. 10...	.5	.7	80	591	.80	646	350	195	1.4	862	8.2	4.0
DEC. 04...	.3	1.0	100	632	.86	461	390	210	1.5	965	8.2	.0
JAN. 03...	.4	1.1	90	505	.69	355	300	154	1.2	785	7.9	.0
FEB. 17...	.4	2.5	80	528	.72	314	310	159	1.3	779	7.7	.0
MAR. 10...	.4	2.2	90	612	.83	735	360	210	1.5	875	8.1	1.5
APR. 14...	.4	.2	80	527	.72	498	320	174	1.3	795	8.2	9.5
MAY 11...	.3	.8	70	380	.52	736	210	100	1.3	606	7.8	9.0
JUNE 06...	.1	.4	50	121	.16	1590	75	21	.5	204	7.8	12.0
JULY 18...	.3	.4	60	318	.43	634	190	89	1.0	500	8.1	21.5
31...	.5	.2	120	542	.74	436	320	160	1.3	829	8.2	22.0
AUG. 30...	.5	.1	130	670	.91	510	380	198	1.7	979	8.5	20.5

[illegible]

YELLOWSTONE RIVER BASIN

06239000 MUSKRAT CREEK NEAR SHOSHONI, WYO.

LOCATION.--Lat 43°08'53", long 108°09'27", in SW¼NE¼SW¼ sec.15, T.2 N., R.6 E., Fremont County, Wind River Indian Reservation, at gaging station, 2 miles upstream from mouth, and 7 miles southwest of Shoshoni. Prior to Oct. 1, 1971, 60 ft downstream.

DRAINAGE AREA.--733 sq mi.

PERIOD OF RECORD.--Sediment records: June 1950 to September 1958, October 1959 to September 1972.

EXTREMES.--1971-72:

Sediment concentrations: Maximum daily, not determined; minimum daily, no flow for many days during year.
Sediment discharge: Maximum daily, 165,000 (estimated) tons Feb. 22; minimum daily, 0 tons on many days during year.

Period of record:

Sediment concentrations: Maximum daily, not determined; minimum daily, no flow for many days each year.
Sediment discharge: Maximum daily, 851,000 tons Feb. 10, 1962; minimum daily, 0 tons on many days each year.

MONTHLY AND ANNUAL SUMMARY OF WATER AND SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

MONTH	DISCHARGE (CFS-DAYS)	RUNOFF (ACRE-FEET)	SUSPENDED SEDIMENT				CONCENTRATION (MG/L)	
			DISCHARGE (TONS)	MEAN	MAXIMUM	MINIMUM	WEIGHTED MEAN	MAXIMUM OBSERVED
OCTOBER 1971.....	0.12	0.2	10	0.323	10	0		
NOVEMBER.....	0	0	0	0	0	0		
DECEMBER.....	0	0	0	0	0	0		
JANUARY 1972.....	0	0	0	0	0	0		
FEBRUARY.....	2,214.60	4,390	561,933	19,377	165,000	0		
MARCH.....	228.80	454	32,838	1,059	4,390	0		
APRIL.....	1.66	3.3	168	5.60	77	0		
MAY.....	11.32	22	1,251	40.4	560	0		
JUNE.....	350.96	696	89,808	2,994	88,500	0		
JULY.....	0	0	0	0	0	0		
AUGUST.....	0	0	0	0	0	0		
SEPTEMBER.....	0	0	0	0	0	0		
WATER YEAR.....	2,807.46	5,570	686,008	1,874	165,000	0		

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
FEB. 22...	1625	1.0	508	9860	13500	41	56	77	87	100	--
29...	1255	4.5	161	11500	5000	51	68	86	94	100	--
MAR. 29...	1635	15.0	12	6940	225	77	89	94	97	100	--
JUNE 05...	1050	15.0	364	38200	37500	60	74	89	96	99	100

YELLOWSTONE RIVER BASIN

35

06244500 FIVEMILE CREEK ABOVE WYOMING CANAL, NEAR PAVILLION, WYO.

LOCATION.--Lat 43°18'04", long 108°42'04", in NW¼NE¼ sec.25, T.4 N., R.1 E., Fremont County, at gaging station, 1,400 ft upstream from Wyoming Canal siphon, and 4 miles north of Pavillion.

DRAINAGE AREA.--118 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1950 to November 1951.

Water temperatures: October 1950 to September 1951, April to September 1961, April 1965 to September 1966, April to September 1967, May to September 1968, May to September 1969, May to September 1970, May to September 1971, May to September 1972.

Sediment records: October 1949 to September 1958, April 1961 to September 1964, April 1965 to September 1966, April to September 1967, May to September 1968, May to September 1969, May to September 1970, May to September 1971, May to September 1972.

EXTREMES.--May to September 1972:

Water temperatures: Maximum, 32.5°C July 9, Aug. 15; minimum, freezing point Sept. 26.

Sediment concentrations: Maximum daily, 999 mg/l Aug. 2; minimum daily, 3 mg/l June 24, 28.

Sediment discharge: Maximum daily, 221 tons Aug. 21; minimum daily, 0 tons on many days during June, July, and August.

Period of record:

Water temperatures (1961, 1965-72): Maximum, 35.5°C July 16, 1971; minimum, freezing point on many days during winter period.

Sediment concentrations: Maximum daily, 82,000 mg/l Sept. 20, 1950; minimum daily, no flow for many days most years.

Sediment discharge: Maximum daily, 123,000 tons Sept. 20, 1950; minimum daily, 0 tons on many days most years.

TEMPERATURE (°C) OF WATER, MAY TO SEPTEMBER 1972

DAY	JUN	JUL	AUG	SEP	JUN	JUL	AUG	SEP	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	10.0	27.5	21.5	10.0
2	---	---	---	---	---	---	---	---	4.0	14.0	9.5	20.5
3	---	---	---	---	---	---	---	---	6.5	19.0	13.0	12.0
4	---	---	---	---	---	---	---	---	9.0	13.5	21.0	17.5
5	---	---	---	---	---	---	---	---	5.0	17.0	19.0	21.0
6	---	---	---	---	---	---	---	---	9.0	22.0	15.5	16.0
7	---	---	---	---	---	---	---	---	5.5	22.5	17.0	12.5
8	---	---	---	---	---	---	---	---	7.0	17.0	21.0	12.5
9	---	---	---	---	---	---	---	---	11.0	22.0	22.5	14.0
10	---	---	---	---	---	---	---	---	9.0	24.0	20.0	14.0
11	---	---	---	---	---	---	---	---	10.5	30.5	18.5	10.5
12	---	---	---	---	---	---	---	---	14.0	---	18.5	13.5
13	---	---	---	---	---	---	---	---	7.5	22.0	20.5	12.0
14	---	---	---	---	---	---	---	---	12.0	19.0	21.5	25.5
15	---	---	---	---	---	---	---	---	26.0	15.5	22.0	25.0
16	---	---	---	---	---	---	---	---	22.0	16.0	20.5	17.5
17	---	---	---	---	---	---	---	---	12.0	23.0	20.0	11.0
18	---	---	---	---	---	---	---	---	16.0	20.0	23.0	12.0
19	---	---	---	---	---	---	---	---	10.5	10.0	18.5	7.5
20	---	---	---	---	---	---	---	---	17.0	16.5	8.5	14.5
21	---	---	---	---	---	---	---	---	10.5	15.0	15.0	4.0
22	---	---	---	---	---	---	---	---	11.0	17.0	20.0	11.0
23	---	---	---	---	---	---	---	---	12.0	15.5	15.0	18.5
24	---	---	---	---	---	---	---	---	9.5	22.0	16.5	6.0
25	---	---	---	---	---	---	---	---	15.0	17.0	18.0	8.0
26	---	---	---	---	---	---	---	---	8.0	14.5	15.0	0.0
27	---	---	---	---	---	---	---	---	10.0	21.0	15.0	15.0
28	---	---	---	---	---	---	---	---	10.5	20.5	13.5	7.0
29	---	---	---	---	---	---	---	---	18.5	32.0	21.0	5.5
30	---	---	---	---	---	---	---	---	---	27.0	22.0	11.0
31	---	---	---	---	---	---	---	---	29.0	---	13.5	---
SEP	---	---	---	---	---	---	---	---	12.0	20.0	19.0	13.0

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, MAY TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .024 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM
MAY 10...	1310	9.0	9.2	945	23	74	89	93	96	100

06244500 FIVEMILE CREEK ABOVE WYOMING CANAL, NEAR PAVILLION, WYO.--Continued

SUSPENDED-SEDIMENT DISCHARGE, MAY TO SEPTEMBER 1972

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	--	--	--	4.1	18	.19	1.8	33	.16
2	--	--	--	3.8	18	.16	1.6	15	.06
3	--	--	--	3.8	6	.06	1.5	6	.02
4	--	--	--	3.5	4	.14	1.4	8	.03
5	--	--	--	3.5	5	.05	2.6	9	.06
6	--	--	--	4.1	8	.09	4.0	37	.40
7	--	--	--	5.3	18	.26	2.8	8	.06
8	--	--	--	6.1	27	.44	3.2	19	.16
9	--	--	--	5.3	16	.23	15	163	10
10	--	--	--	9.2	600	15	4.0	32	.35
11	--	--	--	6.4	47	.81	2.2	13	.06
12	--	--	--	5.1	30	.43	1.8	9	.04
13	--	--	--	4.1	16	.17	1.5	13	.05
14	--	--	--	3.2	14	.12	1.5	12	.05
15	--	--	--	2.6	16	.11	1.2	9	.03
16	--	--	--	1.5	14	.06	1.2	22	.07
17	--	--	--	1.5	14	.06	1.2	15	.05
18	--	--	--	1.6	15	.06	1.5	27	.11
19	--	--	--	3.5	15	.14	4.7	178	3.1
20	--	--	--	6.4	44	.76	3.5	46	.43
21	--	--	--	5.7	24	.37	3.0	15	.12
22	--	--	--	4.1	13	.14	2.6	9	.06
23	--	--	--	3.1	9	.07	1.5	5	.02
24	--	--	--	2.9	8	.06	1.0	3	.01
25	--	--	--	2.8	10	.08	1.5	5	.02
26	--	--	--	2.6	7	.05	1.5	4	.02
27	--	--	--	2.6	6	.04	1.0	5	.01
28	--	--	--	2.4	7	.05	.18	3	.0
29	--	--	--	2.2	15	.09	.50	50	.07
30	--	--	--	2.0	18	.11	.50	36	.05
31	--	--	--	1.8	44	.21	--	--	--
TOTAL	--	--	--	116.4	--	21.45	71.48	--	15.67

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.13	91	.3	2.3	516	7.8	9.5	399	17
2	.1	74	.1	22	999	212	3.8	37	.38
3	.0	75	.1	26	908	77	3.2	34	.33
4	.00	3	.07	9.2	180	4.5	2.0	47	.25
5	1.2	1	.3	2.8	72	.54	1.4	47	.18
6	.02	7	.02	1.4	40	.15	1.4	15	.06
7	.02	16	.4	.74	48	.10	.74	21	.04
8	.0	14	.2	.18	22	.01	.91	33	.08
9	.2	53	.2	.16	21	.01	.74	79	.16
10	.2	64	.2	.1	64	.0	.74	12	.02
11	.2	41	.1	.11	19	.0	.74	47	.09
12	.2	27	.0	.11	10	.0	1.5	31	.13
13	.1	72	.1	.11	15	.0	.58	17	.03
14	.74	39	.8	.1	27	.0	.74	13	.03
15	.1	42	.1	.11	129	.0	.74	20	.04
16	.1	93	.1	.11	72	.0	.58	76	.12
17	.1	1.2	.0	.1	36	.0	.58	63	.10
18	.1	7	.0	.1	75	.0	.58	21	.03
19	.2	91	.3	.1	28	.0	.74	6	.01
20	.2	42	.2	.1	15	.0	.58	23	.05
21	.2	65	.3	21	966	221	.58	57	.08
22	.9	17	.0	15	543	40	.91	46	.11
23	.6	41	.1	5.3	180	2.6	1.2	84	.27
24	.6	36	.1	7.5	150	3.0	1.4	52	.20
25	.76	9	.0	33	910	90	1.5	46	.19
26	.76	14	.0	14	289	13	1.8	10	.05
27	.02	14	.0	7.5	72	1.5	2.2	18	.11
28	.02	13	.0	5.1	149	2.0	2.0	8	.04
29	.02	15	.0	2.4	34	.22	1.8	11	.05
30	.02	27	.0	1.4	21	.08	1.8	10	.05
31	.06	12	.0	2.7	123	4.6	--	--	--
TOTAL	6.20	--	.41	179.71	--	680.11	46.98	--	20.28

TOTAL DISCHARGE FOR PERIOD (CFS-DAYS) 420.77
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR PERIOD (TONS) 736.92

YELLOWSTONE RIVER BASIN

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06253000 FIVEMILE CREEK NEAR SHOSHONI, WYO.

LOCATION.--Lat 43°13'20", long 108°13'06", in NW¼SW¼ sec.19, T.3 N., R.6 E., Fremont County, at gaging station, 1.2 miles upstream from normal high-water line of Boysen Reservoir at elevation 4,725 ft, and 5 miles west of Shoshoni.

DRAINAGE AREA.--418 sq mi, of which 133 sq mi is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: September 1949 to November 1951, April to September 1953, July 1965 to September 1972.

Water temperatures: December 1948 to September 1969, December 1971 to June 1972 (discontinued).

Sediment records: August 1948 to September 1969, December 1971 to June 1972 (discontinued).

EXTREMES, December 1971 to June 1972:

Water temperatures: Maximum, 23.5°C June 29; minimum, freezing point on several days during January and February.

Sediment concentrations: Maximum daily, 2,970 mg/l Apr. 25; minimum daily, 60 mg/l Dec. 29.

Sediment discharge: Maximum daily, 2,050 tons June 7; minimum daily, 8.9 tons Jan. 14.

Period of record:

Water temperatures: Maximum (1948-58, 1959-69), 29.0°C June 10, 1949; minimum, freezing point on many days during winter periods.

Sediment concentrations: Maximum daily, 150,000 mg/l June 12, 1949; minimum daily, 10 mg/l Jan. 31, 1951.

Sediment discharge: Maximum daily, 350,000 (estimated) tons Sept. 19, 1948; minimum daily, less than 0.50 ton Jan. 31, 1951.

REMARKS.--Flow affected by ice Dec. 9, 10, 15-20, Jan. 18-26, 29, 30, Feb. 15-27.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
27...	1025	121	4.8	20	140	40	370	4.0	268	0	1000	30
NOV.												
11...	1415	105	7.0	150	110	72	360	3.3	265	0	1100	32
DEC.												
06...	1550	a89	12	0	150	68	380	3.6	281	0	1100	30
JAN.												
17...	1600	a58	7.8	80	160	48	400	3.6	305	0	1200	30
FEB.												
14...	1100	a44	8.8	150	180	69	380	4.7	313	0	1200	33
MAR.												
10...	1530	53	7.5	120	190	51	380	3.3	263	0	1200	31
APR.												
07...	1440	39	4.8	210	180	62	460	4.2	267	0	1400	36
MAY												
10...	1340	210	10	150	100	34	280	3.0	195	0	910	25
JUNE												
05...	1715	254	13	20	68	13	120	3.5	164	0	320	9.3
JULY												
18...	1045	458	13	70	60	12	110	3.5	167	0	300	10
AUG.												
02...	1540	555	12	80	61	14	120	3.7	165	0	320	10
SEP.												
12...	1630	266	11	50	76	24	180	3.3	218	0	480	15

a Daily mean discharge.

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT.												
27...	1.1	7.8	150	1770	2.41	578	510	290	7.1	2360	8.2	5.0
NOV.												
11...	1.1	18	150	1790	2.43	507	570	353	6.6	2370	8.0	4.0
DEC.												
06...	.8	11	170	1930	2.62	464	650	419	6.5	2430	8.0	.0
JAN.												
17...	1.0	14	160	1970	2.68	309	590	340	7.1	2580	8.1	.0
FEB.												
14...	1.0	17	160	2080	2.83	247	750	493	6.1	2660	7.5	.0
MAR.												
10...	1.0	14	180	2030	2.76	291	680	464	6.3	2460	8.0	9.0
APR.												
07...	1.0	15	220	2280	3.10	240	720	501	7.5	2910	7.8	10.0
MAY												
10...	.7	4.7	120	1370	1.86	777	400	240	6.2	1900	7.8	10.0
JUNE												
05...	.5	4.6	80	637	.87	437	220	85	3.5	913	7.6	20.5
JULY												
18...	.5	2.7	70	594	.81	735	200	63	3.4	888	7.8	17.5
AUG.												
02...	.5	3.1	80	618	.84	926	210	75	3.6	875	8.0	18.0
SEP.												
12...	.7	3.8	110	907	1.23	651	290	111	4.6	1290	8.1	19.5

YELLOWSTONE RIVER BASIN

06253000 FIVEMILE CREEK NEAR SHOSHONI, WYO.--Continued

TEMPERATURE (°C) OF WATER, DECEMBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	0.5	---	---	9.0	21.0	---	---	---
2	---	---	---	---	---	6.0	---	14.0	15.0	---	---	---
3	---	---	---	---	---	---	12.0	17.0	22.0	---	---	---
4	---	---	---	---	---	6.0	14.0	18.0	21.0	---	---	---
5	---	---	---	---	---	7.0	15.0	12.0	19.5	---	---	---
6	---	---	---	---	---	8.0	15.0	13.0	16.0	---	---	---
7	---	---	---	---	1.0	5.0	15.0	10.0	22.0	---	---	---
8	---	---	---	3.0	---	9.0	15.0	11.5	23.0	---	---	---
9	---	---	---	---	0.0	---	17.0	16.0	21.0	---	---	---
10	---	---	---	0.5	---	10.0	13.0	11.5	23.0	---	---	---
11	---	---	---	1.0	---	8.0	14.0	10.0	23.0	---	---	---
12	---	---	---	---	2.5	11.0	11.5	---	22.0	---	---	---
13	---	---	---	---	2.5	13.0	8.0	18.0	21.0	---	---	---
14	---	---	---	---	0.0	---	13.0	19.0	21.0	---	---	---
15	---	---	1.0	---	1.0	18.0	8.0	12.0	20.0	---	---	---
16	---	---	---	---	2.0	---	14.0	---	21.0	---	---	---
17	---	---	1.0	0.0	2.0	---	11.0	---	21.0	---	---	---
18	---	---	---	0.5	2.0	12.0	4.0	19.0	20.0	---	---	---
19	---	---	---	1.5	2.0	10.5	3.0	12.0	19.0	---	---	---
20	---	---	---	1.0	1.0	---	6.0	17.5	20.5	---	---	---
21	---	---	---	---	1.0	14.0	15.0	---	22.0	---	---	---
22	---	---	---	---	1.0	12.0	12.0	18.0	19.5	---	---	---
23	---	---	---	0.5	---	---	14.0	11.0	23.0	---	---	---
24	---	---	---	1.0	---	12.0	14.5	13.0	19.5	---	---	---
25	---	---	---	1.0	5.0	12.0	10.0	14.0	17.0	---	---	---
26	---	---	---	---	---	8.0	10.0	11.0	17.0	---	---	---
27	---	---	---	---	---	8.0	15.0	17.0	17.0	---	---	---
28	---	---	---	0.0	7.0	8.0	12.0	16.0	22.0	---	---	---
29	---	---	---	---	4.0	---	16.0	20.0	23.5	---	---	---
30	---	---	---	---	---	12.0	10.0	17.0	23.0	---	---	---
31	---	---	---	0.5	---	4.0	---	22.0	---	---	---	---
MONTH	---	---	---	---	---	---	12.0	15.0	20.5	---	---	---

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SED- IMENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM
APR. 25...	1830	10.0	87	8960	2110	50	88	95	98	100	--	--
MAY 10...	1340	10.0	210	1420	805	23	35	54	70	93	99	100

YELLOWSTONE RIVER BASIN

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06253000 FIVEMILE CREEK NEAR SHOSHONI, WYO.--Continued

SUSPENDED-SEDIMENT DISCHARGE, DECEMBER 1971 TO JUNE 1972

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1							88	135	32
2							87	132	31
3							87	125	29
4							84	12	27
5							84	115	26
6									
7							89	117	26
8							87	108	23
9							73	104	20
10							72	94	19
11							72	95	17
12									
13							70	82	15
14							68	72	13
15							69	68	13
16							71	72	14
17							72	87	16
18									
19							70	86	16
20							74	96	19
21							72	102	20
22							73	102	20
23							75	94	20
24									
25							76	90	18
26							77	86	18
27							75	84	17
28							73	82	16
29							76	76	16
30									
31							76	77	14
							71	66	13
							68	62	11
							68	61	11
							67	62	11
							68	74	14
TOTAL							2324	--	575

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	69	82	15	45	196	24	59	103	164
2	69	97	17	42	178	20	53	59	94
3	64	94	16	44	174	21	62	50	84
4	61	92	15	45	178	22	56	53	80
5	63	84	14	46	190	24	53	46	66
6									
7	69	72	13	44	202	24	65	61	107
8	66	64	12	45	218	26	59	61	97
9	65	64	11	45	248	37	58	50	78
10	66	77	12	44	318	38	59	45	72
11	64	97	16	42	320	36	57	44	68
12									
13	65	176	19	47	317	33	59	46	73
14	65	76	13	47	313	34	57	41	63
15	59	68	11	42	350	47	58	41	64
16	57	60	8.9	44	296	35	56	42	66
17	54	68	9.7	43	254	29	57	41	63
18									
19	54	76	11	50	700	95	54	38	55
20	58	86	13	68	980	120	57	37	57
21	62	86	14	88	95	226	53	36	52
22	62	12	20	110	950	303	54	38	55
23	60	99	63	130	920	323	57	38	58
24									
25	61	494	81	115	860	267	54	32	47
26	60	420	68	104	950	267	53	27	39
27	58	372	58	98	1020	270	52	27	38
28	56	356	54	93	1050	264	52	25	35
29	54	316	46	91	1280	314	50	27	36
30									
31	57	218	29	80	1070	231	51	28	39
	49	130	17	77	970	202	45	30	36
	57	79	11	74	970	194	45	33	40
	51	88	12	71	1150	220	44	31	37
	49	120	16	--	--	--	44	34	40
	48	164	21	--	--	--	44	25	30
TOTAL	1832	--	736.8	1908	--	3792	1679	--	1923

06253000 FIVEMILE CREEK NEAR SHOSHONI, WYO.--Continued

SUSPENDED-SEDIMENT DISCHARGE, DECEMBER 1971 TO JUNE 1972

[illegible]

06256650 BADWATER CREEK AT LYSITE, WYO.

LOCATION.--Lat 43°15'53", long 107°41'44", in NE¼SW¼NW¼ sec.13, T.38 N., R.91 W., Fremont County, at gaging station, 0.4 mile southwest of Lysite and 2.2 miles upstream from Bridger Creek.

DRAINAGE AREA.--415 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1966 to September 1972.
Sediment records: November 1965 to September 1972.

EXTREMES.--1971-72:

Water temperatures: Maximum, 29.5°C Aug. 9, 16; minimum, freezing point on many days during October to February.

Sediment concentrations: Maximum daily, 19,800 mg/l Oct. 18; minimum daily, 6 mg/l July 23.

Sediment discharge: Maximum daily, 14,700 tons Feb. 29; minimum daily, 0.01 tons July 23.

Period of record:

Water temperatures (1966-72): Maximum, 30.0°C Aug. 15, 1971; minimum, freezing point on many days during winter period most years.

Sediment concentrations: Maximum daily, 76,000 mg/l June 15, 1967; minimum daily, 3 mg/l Oct. 18, 1969.

Sediment discharge: Maximum daily, 460,000 tons June 8, 1968; minimum daily, 0 tons Sept. 30, Oct. 1, 5, 6, 1969.

REMARKS.--Flow affected by ice Oct. 28 to Nov. 13, Nov. 17 to Jan. 10, 17-25, Jan. 28 to Feb. 29.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.5	0.0	0.0	---	0.0	2.0	7.0	8.0	21.0	23.5	21.5	22.0
2	7.0	0.0	0.0	0.0	0.0	1.0	9.0	13.5	20.5	12.0	26.5	22.0
3	15.0	0.0	0.0	0.0	0.0	0.5	6.0	14.0	---	16.0	22.0	18.5
4	13.0	0.0	---	0.0	0.0	---	6.5	15.0	19.0	18.5	24.5	26.0
5	14.5	0.0	0.0	0.0	---	4.0	---	9.0	16.0	23.5	---	18.0
6	15.5	---	0.0	0.0	0.0	2.5	---	5.5	23.0	17.0	13.0	14.5
7	14.0	0.0	0.0	0.0	0.0	2.0	---	9.0	22.0	24.0	23.0	23.0
8	16.0	0.0	0.0	---	0.0	5.5	---	9.5	17.0	---	26.0	18.5
9	14.0	0.0	0.0	0.0	0.0	6.5	3.0	13.0	25.0	25.5	29.5	---
10	18.0	0.0	0.0	0.0	0.0	4.5	12.0	7.5	19.0	18.5	22.5	21.0
11	14.0	0.0	---	0.0	0.0	---	11.5	9.0	22.0	22.0	28.0	16.0
12	11.0	0.5	0.0	0.0	---	---	10.0	9.5	16.5	---	25.0	20.5
13	12.0	---	0.0	0.0	0.0	7.0	7.0	---	26.0	17.0	17.5	23.0
14	6.5	3.0	0.0	0.0	0.0	7.0	8.5	18.0	23.0	20.5	24.5	15.5
15	4.0	3.0	0.0	---	0.0	7.5	---	13.0	20.0	23.0	22.0	15.5
16	---	2.5	0.0	0.0	0.0	9.5	11.5	12.0	22.5	27.5	29.5	15.5
17	5.0	1.5	0.0	0.0	0.0	9.0	5.0	14.0	22.5	19.5	26.0	20.5
18	2.0	0.0	---	0.0	0.0	12.0	3.5	18.0	19.0	23.0	19.5	---
19	5.5	0.0	0.0	0.0	0.0	5.0	3.0	11.5	17.5	---	---	18.5
20	7.5	---	0.0	0.0	0.0	6.5	11.0	13.0	27.0	---	17.5	17.0
21	6.5	0.0	0.0	0.0	0.0	11.5	11.0	16.0	23.5	---	13.5	16.0
22	5.0	1.0	0.0	---	0.5	12.0	---	---	22.0	---	27.0	17.0
23	---	1.5	0.0	0.0	0.0	5.0	15.5	15.0	15.5	19.5	13.5	15.0
24	8.0	3.0	0.0	0.0	0.0	9.0	14.5	13.5	---	22.5	22.0	16.0
25	9.5	3.0	---	0.0	0.0	6.0	6.0	16.0	16.5	26.5	24.0	11.0
26	10.0	2.0	0.0	0.0	---	5.0	10.0	16.5	18.5	26.5	18.0	15.0
27	3.0	---	0.0	0.0	0.0	7.0	12.5	13.5	23.5	26.0	22.5	11.0
28	0.0	1.5	0.0	0.0	1.0	7.0	13.0	19.0	24.5	26.5	29.0	10.0
29	0.0	0.0	0.0	---	2.0	4.5	11.0	14.0	26.0	---	25.5	12.0
30	---	0.0	0.0	0.0	---	5.0	7.5	22.0	26.5	25.0	22.5	14.0
31	0.0	---	0.0	0.0	---	7.5	---	23.0	---	24.0	22.5	---
MAY 1	9.0	1.0	0.0	0.0	0.0	6.0	9.0	13.5	21.5	---	22.5	17.5
JUN 1	10.5											

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
OCT. 18...	1700	4.0	124	49600	16600	54	76	91	97	99	100
FEB. 28...	1835	.0	a290	31300	24500	29	44	70	86	100	--
FEB. 29...	1500	1.5	a340	16200	14900	30	44	70	89	99	100
MAR. 06...	1840	3.5	147	21900	8690	32	48	75	86	98	100
MAY 10...	1050	8.0	62	10000	1670	57	78	91	98	100	--
MAY 11...	1550	11.5	68	15200	2790	75	93	98	99	100	--
JUNE 05...	1045	16.0	19	3570	183	75	90	98	99	100	--
JUNE 19...	1000	10.5	16	27200	1180	69	92	100	--	--	--
AUG. 02...	1010	18.0	3.4	10600	97	77	99	100	--	--	--
AUG. 24...	1215	22.0	6.2	25700	430	85	100	--	--	--	--

a Daily mean discharge.

YELLOWSTONE RIVER BASIN

06256650 BADWATER CREEK AT LYSITE, WYO.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.8	74	.36	5.1	180	2.5	5.5	118	1.8
2	3.4	112	1.0	5.4	180	2.6	5.4	142	2.1
3	1.6	132	.57	5.8	175	2.7	5.5	122	1.8
4	1.5	94	.47	7.2	120	2.3	5.7	89	1.4
5	1.3	68	.24	7.5	180	3.6	5.8	108	1.7
6	1.3	43	.15	6.9	160	3.0	6.1	128	2.1
7	1.6	32	.14	7.0	130	2.5	5.6	133	2.0
8	1.6	39	.17	7.3	110	2.2	5.0	122	1.6
9	2.0	45	.24	7.4	100	2.1	5.4	144	2.1
10	1.8	47	.23	8.0	160	3.5	5.6	102	1.5
11	1.8	33	.16	8.4	175	4.0	5.5	96	1.4
12	1.8	36	.17	8.9	420	10	5.3	128	1.8
13	1.8	33	.16	8.9	330	7.9	5.2	127	1.7
14	1.3	43	.21	9.7	420	10	5.1	102	1.4
15	2.2	39	.23	10	360	9.7	5.2	116	1.6
16	2.5	29	.27	8.4	220	5.0	5.0	90	1.2
17	2.8	3	.23	7.0	275	5.2	5.3	88	1.3
18	7.0	1980	3740	6.6	250	4.5	5.5	112	1.7
19	1.9	1410	1460	6.4	250	4.3	5.7	92	1.4
20	1.0	1630	440	6.7	270	4.9	6.2	71	1.2
21	4.6	610	76	6.9	300	5.6	6.4	139	1.9
22	3.0	1310	11	6.6	320	5.7	6.5	145	2.5
23	3.0	320	2.4	6.2	230	3.9	6.8	110	2.0
24	3.0	230	1.9	6.3	150	2.6	7.0	100	1.9
25	3.4	590	13	5.8	230	3.6	6.8	54	.99
26	6.6	220	3.9	6.1	170	2.8	6.8	69	1.3
27	6.2	270	3.3	6.1	225	3.6	6.5	73	1.4
28	5.4	290	4.2	5.8	270	4.2	6.3	73	1.2
29	5.0	250	3.4	5.7	150	2.3	5.9	66	1.1
30	4.6	430	5.3	5.6	166	2.5	5.7	66	1.0
31	5.0	260	3.5	--	--	--	5.6	75	1.1
TOTAL	186.4	--	5772.76	209.3	--	129.3	180.0	--	49.19
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6.1	1.3	1.7	5.3	62	.89	188	12400	5280
2	5.9	.92	1.5	4.9	68	.90	68	2700	496
3	5.6	.78	1.2	5.2	48	.67	53	2200	315
4	5.2	.71	1.0	5.7	72	1.1	26	1250	88
5	5.5	.64	.95	6.0	62	1.0	30	3700	300
6	5.9	.60	.96	6.4	70	1.2	86	11500	2670
7	6.0	.59	.96	6.4	81	1.4	158	7500	3200
8	6.1	.56	.92	6.8	88	1.6	68	2800	514
9	6.0	.52	.84	6.5	74	1.3	49	2000	265
10	6.0	.54	.87	6.0	82	1.3	56	4100	620
11	6.7	.56	.86	5.7	62	.95	52	9900	1390
12	5.4	.6	.91	5.7	100	1.5	47	3400	431
13	5.3	.66	.94	6.5	86	1.5	39	1600	168
14	5.2	.69	.97	6.7	70	1.3	50	2000	270
15	5.4	112	1.6	6.6	84	1.5	36	1110	108
16	5.8	.84	1.3	7.0	70	1.3	41	1280	142
17	6.1	.64	1.1	9.2	108	2.7	49	1480	196
18	6.4	.7	1.2	20	252	14	51	1010	139
19	6.6	102	1.3	110	1250	371	54	1480	216
20	6.8	.84	1.5	130	4900	1720	47	1030	131
21	6.6	.88	1.6	160	3700	1600	28	500	38
22	6.8	1.9	2.0	140	10700	4640	26	400	28
23	6.5	112	2.0	140	6500	2460	45	600	73
24	6.3	106	1.8	70	2600	491	27	450	33
25	6.0	110	1.9	30	1600	130	25	190	13
26	5.5	1.2	1.5	30	2800	227	24	330	21
27	5.2	.98	1.4	130	8800	3090	24	280	18
28	5.0	.74	1.0	290	16800	13200	19	250	13
29	5.2	.56	.79	340	16000	14700	16	260	11
30	5.1	.5	.60	--	--	--	15	270	11
31	5.1	.62	.85	--	--	--	16	150	6.5
TOTAL	180.5	--	38.61	1696.6	--	42065.11	1513	--	17204.5

06256650 BADWATER CREEK AT LYSITE, WYO.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	17	12	5.5	25	210	14	3.4	58	.53
2	18	20	9.7	27	200	15	3.7	56	.56
3	22	17	10	25	170	11	2.9	109	.85
4	2	15	8.1	24	200	13	2.2	80	.48
5	18	150	7.3	45	790	96	19	892	46
6	27	690	50	25	275	19	16	196	8.5
7	33	100	97	24	180	12	12	160	5.2
8	25	33	22	24	140	9.1	4.6	68	.84
9	25	25	17	45	1100	134	3.7	33	.33
10	23	200	12	64	7500	1300	3.4	27	.25
11	19	11	5.6	71	9800	1850	3.0	13	.11
12	27	42	31	61	3000	486	3.0	13	.11
13	26	325	23	63	700	119	2.8	9	.07
14	17	16	7.3	65	1180	207	2.8	11	.08
15	13	17	6.	72	1300	246	2.8	9	.07
16	11	10	5.6	51	1100	149	2.5	15	.11
17	19	36	18	47	520	66	2.9	440	33
18	11	14	4.2	38	820	84	3.4	1050	96
19	19	130	6.7	25	510	34	12	1460	473
20	18	15	7.3	26	375	26	3.4	175	16
21	15	18	7.3	43	820	95	3.0	200	1.7
22	14	5	1.9	31	600	49	3.4	120	1.1
23	12	66	2.1	23	320	20	2.5	82	.55
24	12	72	2.3	21	210	11	2.0	33	.21
25	21	226	13	18	158	7.7	2.2	56	.33
26	22	151	9.1	21	268	15	2.5	39	.26
27	27	164	12	21	160	8.6	2.5	37	.26
28	26	149	10	19	168	8.6	3.0	45	.36
29	26	143	10	21	274	12	2.5	44	.30
30	36	57	55	14	148	5.6	2.0	46	.25
31	--	--	--	4.3	110	1.3	--	--	--
TOTAL	619	--	475.9	175.3	--	5123.9	135.0	--	687.41

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.1	41	.22	.62	70	.12	1.6	194	.84
2	2.1	23	.12	2.1	130	7.0	1.6	126	.54
3	2.5	30	.26	.88	116	.28	2.2	264	1.6
4	2.2	53	.31	.79	85	.17	3.0	150	1.2
5	2.5	58	.39	.79	76	.16	4.0	110	1.2
6	2.2	49	.29	.79	80	.17	3.7	80	.80
7	2.5	47	.32	.62	86	.14	2.8	46	.35
8	2.5	42	.28	.79	62	.13	2.5	31	.20
9	2.2	40	.20	1.1	185	.55	2.5	22	.15
10	2.0	65	.35	.79	114	.24	2.0	22	.12
11	2.0	51	.28	.79	106	.23	2.0	24	.13
12	2.0	47	.25	.62	84	.14	1.8	29	.14
13	1.8	57	.24	.79	62	.13	2.0	27	.15
14	1.8	81	.39	.62	60	.10	1.6	21	.09
15	2.1	101	.55	.62	68	.11	1.8	17	.08
16	1.8	36	.17	.79	82	.17	1.6	26	.11
17	1.6	33	.14	.98	74	.20	1.2	38	.12
18	.98	29	.08	.79	58	.12	.98	25	.07
19	.79	38	.08	.90	40	.10	.79	27	.06
20	.88	27	.05	.78	32	.08	.79	45	.11
21	.98	27	.06	.98	46	.12	.79	31	.07
22	.79	2	.04	1.2	62	.21	.79	27	.16
23	.79	6	.01	1.8	80	.39	.79	22	.05
24	.77	5	.02	4.6	12200	152	.79	20	.04
25	.70	62	.12	1.9	470	2.3	.88	44	.10
26	.77	79	.15	2.5	300	2.0	.88	10	.04
27	.62	48	.08	1.9	164	.80	.98	10	.03
28	.79	71	.15	1.8	102	.50	.98	10	.03
29	.70	74	.14	1.1	58	.17	1.5	36	.15
30	.73	58	.11	.88	44	.10	3.7	82	.82
31	.70	52	.10	1.1	52	.15	--	--	--
TOTAL	46.32	--	6.04	36.61	--	169.07	52.54	--	9.44

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

5930.57

71731.23

YELLOWSTONE RIVER BASIN

06256800 BRIDGER CREEK NEAR LYSITE, WYO.

LOCATION.--Lat 43°17'22", long 107°43'16", in NE¼NE¼SW¼ sec.2, T.38 N., R.91 W., Fremont County, at gaging station, 0.3 mile upstream from mouth, and 2.2 miles northwest of Lysite.

DRAINAGE AREA.--182 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1966 to September 1971.

Sediment records: November 1965 to September 1971.

EXTREMES.--1971-72:

Water temperatures: Maximum, 27.0°C Aug. 13, 17; minimum, freezing point on many days during October to February.

Sediment concentrations: Maximum daily, 10,200 mg/l Oct. 18; minimum daily, no flow July 29.

Sediment discharge: Maximum daily, 1,540 tons Oct. 18; minimum daily, 0 tons on several days during July and August.

Period of record:

Water temperatures (1966-72): Maximum, 29.0°C Aug. 7, 1968, July 26, 1970; minimum, freezing point on many days during winter period most years.

Sediment concentrations: Maximum daily, 40,000 mg/l June 23, 1967; minimum daily, no flow for many days during July, August, September 1966, August and September 1971, July 29, 1972.

Sediment discharge: Maximum daily, 55,000 tons June 23, 1967; minimum daily, 0 tons on many days during July, August, September 1966, August and September 1971, July 29, 1972.

REMARKS.-- Flow affected by ice Oct. 29 to Nov. 15, Nov. 19 to Jan. 2, 5-12, Jan. 19 to Feb. 8, Feb. 12 to Mar. 8. No flow July 29.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	0.0	0.0	---	0.0	0.5	6.5	9.5	22.0
2	7.0	0.0	0.0	0.0	0.0	0.5	7.5	11.5	22.5
3	0.5	0.0	0.0	0.0	0.0	---	13.0	15.5	21.0
4	0.0	0.0	---	0.0	0.0	---	5.5	14.0	22.5
5	11.0	0.0	0.0	0.0	---	---	10.5	18.5	22.5
6	12.0	---	0.0	0.0	0.0	2.0	---	11.0	22.0
7	12.0	0.0	0.0	0.0	0.0	1.0	---	9.0	24.5
8	12.0	0.0	0.0	---	0.0	2.0	---	9.0	21.0
9	11.5	0.0	---	0.0	0.0	6.0	12.0	11.0	24.0
10	12.5	0.0	0.0	0.0	0.0	2.0	11.0	9.5	21.5
11	12.0	0.0	---	0.0	0.0	---	10.5	10.0	24.5
12	10.0	0.5	0.0	0.0	---	---	10.0	10.5	21.5
13	6.0	---	0.0	0.0	0.0	6.0	7.5	---	25.0
14	5.0	0.0	0.0	0.0	0.0	5.5	10.0	17.0	24.0
15	4.0	0.0	0.0	---	0.0	5.5	---	17.0	23.0
16	---	0.0	0.0	0.0	0.0	6.0	11.5	15.5	23.0
17	7.0	0.0	0.0	0.0	0.0	7.0	9.5	16.0	19.5
18	2.0	0.0	---	0.0	0.0	9.0	4.0	18.5	23.0
19	6.0	0.0	0.0	0.0	0.0	6.0	3.0	13.5	16.5
20	6.0	---	0.0	0.0	0.0	5.0	6.0	---	22.0
21	6.0	0.0	0.0	0.0	0.0	7.0	11.0	16.0	22.0
22	6.5	0.0	0.0	---	0.0	---	---	---	22.5
23	---	0.0	0.0	0.0	0.0	5.0	12.5	16.5	19.5
24	6.0	0.0	0.0	0.0	0.0	7.0	13.5	15.0	---
25	6.5	0.0	---	0.0	0.0	8.0	8.0	16.5	19.0
26	0.5	0.0	0.0	0.0	---	5.0	10.0	16.5	18.0
27	3.0	---	0.0	0.0	0.0	5.0	11.5	15.0	21.0
28	0.0	0.0	0.0	0.0	0.0	4.0	13.0	19.5	25.0
29	0.0	0.0	0.0	---	0.5	3.0	12.5	16.5	24.5
30	---	0.0	0.0	0.0	---	4.5	3.5	21.0	26.0
31	0.0	---	0.0	0.0	---	5.5	---	21.0	---
MEAN	7.0	0.0	0.0	0.0	0.0	4.5	9.0	14.0	22.0
YEAR	10.0								

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE DIAM. (MG/L)	SUS- PENDE SEDIM- ENT (T/DAY)	SUS- SED. FALL DIAM. % FINER THAN .004 MM	SUS- SED. FALL DIAM. % FINER THAN .016 MM	SUS- SED. FALL DIAM. % FINER THAN .062 MM	SUS- SED. FALL DIAM. % FINER THAN .125 MM	SUS- SED. FALL DIAM. % FINER THAN .250 MM
OCT. 18...	1820	3.0	38	5700	585	86	94	96	98	100
FEB. 29...	1630	1.0	a194	3170	1660	40	56	88	97	100
JUNE 05...	1245	15.5	5.4	7050	103	89	99	100	---	---
19...	1630	10.0	4.9	9200	122	74	97	100	---	---

a Daily mean discharge.

YELLOWSTONE RIVER BASIN

45

06256800 BRIDGER CREEK NEAR LYSITE, WYO.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.45	52	.06	2.6	620	4.4	5.0	109	1.5
2	1.0	64	.17	2.8	231	1.7	4.8	182	2.4
3	1.9	193	.99	3.3	184	1.6	4.9	191	2.5
4	.90	274	.67	4.0	187	2.0	5.2	192	2.7
5	1.9	148	.76	4.7	170	2.2	5.4	112	1.6
6	2.1	130	.74	4.4	142	1.7	4.1	123	1.4
7	2.2	132	.78	4.8	141	1.8	3.0	119	.96
8	2.5	101	.68	5.5	121	1.8	2.2	102	.59
9	2.7	78	.57	6.0	151	2.4	2.7	109	.79
10	2.4	79	.51	6.5	128	2.2	3.5	148	1.4
11	2.4	88	.57	7.1	170	3.3	5.0	130	1.9
12	2.4	67	.43	7.7	199	4.1	5.6	112	1.7
13	2.4	51	.33	8.3	198	4.4	5.2	121	1.7
14	2.7	49	.36	8.5	188	4.3	4.9	141	1.9
15	3.0	70	.57	8.9	162	3.9	5.0	136	1.8
16	3.5	122	1.2	9.3	178	4.5	4.9	140	1.9
17	5.1	434	6.0	8.9	175	4.2	5.1	180	2.5
18	49	10200	1540	6.1	155	2.6	5.3	199	2.8
19	15	2600	144	6.0	310	5.0	5.6	135	2.0
20	7.4	1190	24	6.2	228	3.8	6.0	114	1.8
21	5.1	700	9.6	6.5	230	4.0	6.2	136	2.3
22	4.9	399	5.3	6.2	167	2.8	6.3	122	2.1
23	4.9	186	2.5	5.8	170	2.7	6.5	127	2.2
24	4.6	258	3.2	5.6	152	2.3	6.7	120	2.2
25	4.9	278	3.7	5.4	128	1.9	6.6	100	1.8
26	4.4	241	2.9	5.6	155	2.3	6.6	86	1.5
27	4.2	220	2.5	5.6	136	2.1	6.3	73	1.2
28	4.0	292	3.2	5.5	180	2.7	6.0	89	1.4
29	2.3	310	1.9	5.3	138	2.0	5.7	115	1.8
30	2.1	312	1.8	5.2	114	1.6	5.5	129	1.9
31	2.3	309	1.9	--	--	--	5.5	119	1.8
TOTAL	154.65	--	1761.89	178.3	--	86.3	161.3	--	56.04

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5.9	101	1.6	5.2	139	2.0	113	4740	1450
2	5.7	79	1.2	4.8	141	1.8	79	3700	789
3	5.4	111	1.6	5.2	130	1.8	64	2190	378
4	5.0	120	1.6	5.7	137	2.1	45	1620	197
5	5.3	130	1.9	6.0	138	2.2	52	1500	211
6	5.6	134	2.0	6.2	132	2.2	90	3400	826
7	5.8	128	2.0	6.4	134	2.3	120	4000	1300
8	6.0	119	1.9	6.7	137	2.5	72	3480	677
9	5.8	107	1.7	6.2	105	1.8	55	2180	324
10	5.7	100	1.5	6.0	104	1.7	64	2790	482
11	5.6	95	1.4	5.7	120	1.8	124	3900	1310
12	5.4	97	1.4	6.0	129	2.1	142	3300	1270
13	5.2	102	1.4	6.4	115	2.0	104	2200	618
14	5.0	129	1.7	6.8	97	1.8	79	1980	422
15	5.2	158	2.2	6.5	83	1.5	47	1220	155
16	5.6	166	2.5	7.0	97	1.8	38	810	83
17	5.8	149	2.3	8.8	68	1.6	36	920	89
18	6.0	130	2.1	12	58	1.9	38	850	87
19	6.4	134	2.3	32	264	23	38	870	89
20	6.6	108	1.9	42	570	65	35	570	54
21	6.5	104	1.8	56	1160	175	28	470	36
22	6.7	110	2.0	55	860	128	25	465	31
23	6.4	115	2.0	72	750	146	27	565	41
24	6.2	99	1.7	50	425	57	32	840	73
25	5.9	142	2.3	20	425	23	33	570	51
26	5.5	207	3.1	12	650	21	29	400	31
27	5.2	169	2.4	15	890	36	28	290	22
28	4.9	137	1.8	77	1990	414	26	230	16
29	5.2	127	1.8	194	2210	1160	23	285	18
30	5.0	129	1.7	--	--	--	24	230	15
31	5.0	136	1.8	--	--	--	25	225	15
TOTAL	175.5	--	58.6	742.6	--	2282.9	1735	--	11160

YELLOWSTONE RIVER BASIN

06256800 BRIDGER CREEK NEAR LYSITE, WYO.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	24	180	12	18	140	6.8	4.4	76	.90
2	24	24	16	19	172	8.8	4.0	95	1.0
3	25	277	19	18	145	7.0	4.2	144	1.6
4	25	213	15	17	133	6.1	3.3	103	.92
5	24	21	14	14	115	4.3	6.1	4700	100
6	25	193	13	11	75	2.2	4.6	300	3.7
7	25	194	13	11	100	3.0	4.6	203	2.5
8	25	172	12	13	120	4.2	4.4	164	1.9
9	25	139	9.4	14	121	4.6	3.7	120	1.2
10	25	14	9.5	17	202	9.3	3.7	85	.85
11	25	151	10	20	337	18	4.9	136	1.8
12	25	181	12	22	295	18	4.4	112	1.3
13	25	205	14	18	105	5.1	1.5	90	.36
14	25	232	16	17	140	6.4	1.2	75	.24
15	25	242	16	17	122	5.6	2.8	105	.79
16	25	243	16	15	103	4.2	2.4	82	.53
17	24	202	13	15	86	3.5	1.9	48	.25
18	24	19	12	15	80	3.2	4.0	85	.92
19	24	14	9.1	15	88	3.6	6.8	5300	278
20	24	16	10	17	70	3.2	5.4	229	3.3
21	21	240	14	18	90	4.4	5.8	258	4.0
22	22	276	13	15	52	2.1	6.4	162	2.8
23	22	138	7.5	11	71	2.1	5.1	143	2.0
24	19	135	6.9	8.4	62	1.4	4.4	90	1.1
25	19	131	6.7	10	77	2.1	3.5	131	1.2
26	18	118	5.7	8.4	62	1.4	4.0	135	1.5
27	21	135	7.3	9.8	59	1.6	3.5	98	.93
28	21	137	7.4	9.8	62	1.6	3.7	104	1.0
29	22	121	6.5	8.4	70	1.6	3.7	104	1.0
30	18	82	4.7	6.8	95	1.7	3.7	95	.95
31	--	--	--	5.8	95	1.5	--	--	--
TOTAL	691	--	340.2	434.4	--	148.6	122.1	--	418.54

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.7	86	.86	.1	124	0	.04	99	.01
2	3.3	94	.84	.02	102	.01	.06	93	.02
3	2.3	84	.52	.06	107	.02	.08	77	.02
4	3.5	91	.86	.26	98	.07	.05	114	.02
5	2.3	87	.50	.30	75	.06	.12	84	.03
6	.7	78	.15	.26	90	.06	.30	100	.08
7	1.1	11	.30	.23	74	.05	.14	79	.03
8	1.2	43	.14	.52	83	.19	.14	68	.03
9	1.0	72	.37	2.1	238	1.3	.17	68	.03
10	1.5	37	.35	1.4	162	.61	.20	80	.04
11	.90	64	.16	.30	98	.08	.40	45	.05
12	.90	7	.17	.35	90	.09	.45	58	.07
13	1.5	7	.28	.45	94	.11	.50	81	.11
14	1.5	74	.30	.50	87	.12	.60	50	.08
15	1.7	68	.31	.12	80	.03	.50	62	.08
16	1.9	66	.34	.01	72	0	.45	61	.07
17	2.1	73	.41	.10	99	.03	.70	82	.15
18	2.3	69	.43	1.7	134	.62	.70	91	.17
19	2.1	59	.33	2.1	148	.84	1.0	113	.31
20	2.1	60	.37	.60	106	.17	.35	68	.06
21	2.1	76	.43	.60	75	.12	.17	60	.03
22	.60	7	.11	1.5	100	.41	.30	75	.06
23	.23	55	.03	.45	153	.19	.80	43	.09
24	.30	45	.04	.40	267	.29	.70	42	.08
25	.10	43	.01	.23	120	.07	1.2	38	.12
26	.14	45	0	.10	60	.02	.90	25	.06
27	.12	46	0	.14	57	.02	.45	44	.05
28	.01	57	0	.08	38	.01	1.8	83	.52
29	0	0	0	.04	43	0	2.8	87	.66
30	.01	89	0	.24	59	.01	2.4	65	.42
31	.12	113	.01	.14	67	.01	--	--	--
TOTAL	41.93	--	8.62	15.01	--	5.61	18.47	--	3.55

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

4470.16

16330.65

YELLOWSTONE RIVER BASIN

47

06256900 DRY CREEK NEAR BONNEVILLE, WYO.

LOCATION.--Lat 43°16'52", long 107°54'45", in NW¼NW¼ sec.8, T.38 N., R.92 W., Fremont County, at gaging station, 0.4 mile upstream from mouth, and 8 miles east of Bonneville.

DRAINAGE AREA.--52.6 sq mi.

PERIOD OF RECORD.--Sediment records: September 1965 to September 1972.

EXTREMES.--1971-72:

Sediment concentrations: Maximum daily, not determined; minimum daily, no flow for many days during year.
Sediment discharge: Maximum daily, 700 tons Aug. 21; minimum daily, 0 tons on many days during year.

Period of record:

Sediment concentrations: Maximum daily, not determined; minimum daily, no flow for many days each year.
Sediment discharge: Maximum daily, 19,000 tons June 15, 1967; minimum daily, 0 tons on many days each year.

MONTHLY AND ANNUAL SUMMARY OF WATER AND SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

MONTH	DISCHARGE (CFS-DAYS)	RUNOFF (ACRE-FEET)	SUSPENDED SEDIMENT				CONCENTRATION (MG/L)	
			DISCHARGE (TONS)	DAILY DISCHARGE (TONS)			WEIGHTED MEAN	MAXIMUM OBSERVED
				MEAN	MAXIMUM	MINIMUM		
OCTOBER 1971.....	2.65	5	1.26	0.041	1.1	0		
NOVEMBER.....	0	0	0	0	0	0		
DECEMBER.....	.15	.3	.01	.0003	.01	0		
JANUARY 1972.....	.23	.5	.02	.0006	.01	0		
FEBRUARY.....	31.30	62	19.19	.662	3.6	0		
MARCH.....	65.55	130	37.61	1.21	2.9	.34		
APRIL.....	32.90	65	19.71	.657	2.9	0		
MAY.....	116.19	230	121.51	3.92	12	0		
JUNE.....	0	0	0	0	0	0		
JULY.....	1.30	3	.55	.018	.55	0		
AUGUST.....	112.52	223	962.49	31.0	700	0		
SEPTEMBER.....	7.13	14	8.0	.267	8.0	0		
WATER YEAR.....	369.82	734	1,170.35	3.20	700	0		

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDIM- ENT (MG/L)	DIS- CHARGE (T/DAY)	SUS- PENDED SED.	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.
						FALL DIAM.	FALL DIAM.	FALL DIAM.	FALL DIAM.	FALL DIAM.	FALL DIAM.
						% FINER THAN .004 MM	% FINER THAN .016 MM	% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM
MAR. 11...	1100	.0	3.8	967	9.9	72	78	82	85	98	100

YELLOWSTONE RIVER BASIN

06257000 BADWATER CREEK AT BONNEVILLE, WYO.

LOCATION.--Lat 43°16'09", long 108°04'46", in NW¼NE¼ sec.14, T.38 N., R.94 W., Fremont County, at gaging station, 0.4 mile west of Bonneville, and 3 miles upstream from normal high-water line of Boysen Reservoir at elevation 4,725 ft.

DRAINAGE AREA.--808 sq mi.

PERIOD OF RECORD.--Chemical analyses: April 1951, April to June 1953.

Water temperatures: October 1963 to September 1972.

Sediment records: October 1947 to February 1954, August 1954 to September 1972.

EXTREMES.--1971-72:

Water temperatures: Maximum, 36.0°C June 6; minimum observed, freezing point on many days during November, December, February, and March.

Sediment concentrations: Maximum daily, 27,500 mg/l Oct. 19; minimum daily, no flow for many days during October, December, January, February, June to September.

Sediment discharge: Maximum daily, 40,400 tons Feb. 29; minimum daily, 0 tons on many days during October, December, January, February, June to September.

Period of record:

Water temperatures (1963-72): Maximum, 36.0°C June 6, 1972; minimum, freezing point on many days during winter period.

Sediment concentrations: Maximum daily, 117,000 mg/l July 11, 1949; minimum daily, no flow for many days each year.

Sediment discharge: Maximum daily, 1,100,000 tons June 9, 1968; minimum daily, 0 tons on many days each year.

REMARKS.--Flow affected by ice Nov. 3-29, Feb. 16-25, 28, 29. No flow Oct. 1-17, Dec. 16 to Feb. 14, June 15-17, June 26 to July 31, Aug. 2-7, 10-20, Aug. 23 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	0.0	---	---	0.0	11.0	15.0	28.0	---	---	---
2	---	---	---	---	---	0.0	9.0	17.0	20.0	---	---	---
3	---	0.0	---	---	---	0.0	12.0	24.0	24.0	---	---	---
4	---	0.0	---	---	---	0.0	10.0	28.0	15.0	---	---	---
5	---	0.0	---	---	---	0.0	13.0	4.0	34.0	---	---	---
6	---	---	0.0	---	---	2.0	10.0	25.0	36.0	---	---	---
7	---	---	---	---	---	1.0	10.0	24.0	25.0	---	---	---
8	---	---	---	---	---	0.0	11.0	22.0	24.0	---	---	---
9	---	---	---	---	---	2.0	9.0	20.0	27.0	---	15.0	---
10	---	---	---	---	---	0.0	11.0	12.0	30.0	---	---	---
11	---	---	---	---	---	0.0	10.0	15.0	20.0	---	---	---
12	---	---	---	---	---	0.0	12.0	15.0	27.0	---	---	---
13	---	---	---	---	---	3.0	2.0	6.0	25.0	---	---	---
14	---	---	---	---	---	1.0	11.0	16.0	18.0	---	---	---
15	---	---	---	---	---	5.0	15.0	22.0	---	---	---	---
16	---	---	---	---	---	3.0	13.0	24.0	---	---	---	---
17	---	0.0	---	---	---	9.0	9.0	20.0	---	---	---	---
18	4.5	---	---	---	---	10.0	5.0	23.0	24.0	---	---	---
19	10.0	---	---	---	---	8.0	4.0	26.0	17.0	---	---	---
20	12.0	---	---	---	---	9.0	15.0	29.0	26.0	---	---	---
21	12.5	---	---	---	0.5	12.0	17.0	31.0	28.0	---	---	---
22	---	---	---	---	0.0	12.0	19.0	30.0	18.0	---	---	---
23	---	---	---	---	0.0	2.0	15.0	22.0	21.0	---	---	---
24	---	---	---	---	0.0	3.0	14.0	24.0	26.0	---	---	---
25	---	---	---	---	0.0	9.0	12.0	23.0	23.0	---	---	---
26	---	---	---	---	---	3.0	19.0	28.0	---	---	---	---
27	2.0	---	---	---	---	2.0	7.0	19.0	---	---	---	---
28	---	---	---	---	0.0	3.0	19.0	21.0	---	---	---	---
29	---	---	---	---	0.0	2.0	21.0	25.0	---	---	---	---
30	---	---	---	---	---	0.0	11.0	26.0	---	---	---	---
31	---	---	---	---	---	2.0	---	24.0	---	---	---	---
WY 74	---	---	---	---	---	3.5	12.0	21.5	---	---	---	---

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM
OCT. 18...	1825	4.0	186	38600	19400	54	73	82	93	100	--	--
MAR. 01...	1415	2.0	450	10800	13100	32	51	65	78	94	99	100
MAY 10...	1705	11.5	86	8070	1870	35	49	71	90	99	100	--
12...	0700	4.0	126	10900	3710	55	70	87	97	100	--	--
26...	1150	19.0	44	1520	181	24	34	67	88	99	99	100
JUNE 19...	1930	17.0	150	25000	10100	75	96	100	--	--	--	--

06257000 BADWATER CREEK AT BONNEVILLE, WYO.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0	14	340	13	5.5	540	8.0
2	0	0	0	4.8	205	2.7	4.5	510	6.2
3	0	0	0	7.0	345	6.5	3.8	485	5.0
4	0	0	0	9.0	590	14	2.9	445	3.5
5	0	0	0	11	895	27	2.4	415	2.7
6	0	0	0	10	465	13	2.2	385	2.3
7	0	0	0	10	370	11	2.1	355	2.0
8	0	0	0	11	380	11	1.9	325	1.7
9	0	0	0	12	420	14	1.8	290	1.4
10	0	0	0	14	485	18	1.6	255	1.1
11	0	0	0	16	595	26	1.4	235	.89
12	0	0	0	18	750	36	1.3	200	.70
13	0	0	0	20	1120	55	1.2	175	.57
14	0	0	0	23	1310	81	1.1	145	.43
15	0	0	0	19	1250	64	1.0	105	.28
16	0	0	0	16	1110	44	0	0	0
17	0	0	0	15	975	39	0	0	0
18	166	1770	14500	14	885	33	0	0	0
19	163	2750	14400	12	840	27	0	0	0
20	86	1310	3400	11	820	24	0	0	0
21	94	1510	3830	11	800	24	0	0	0
22	78	7450	1570	12	785	25	0	0	0
23	78	4150	874	12	775	25	0	0	0
24	71	4250	813	13	725	25	0	0	0
25	78	4300	906	13	700	25	0	0	0
26	102	4350	1200	11	670	20	0	0	0
27	110	4450	1320	9.0	640	16	0	0	0
28	86	3610	838	8.0	620	13	0	0	0
29	64	2290	396	7.2	595	12	0	0	0
30	38	1210	124	6.6	560	10	0	0	0
31	24	590	38	--	--	--	0	0	0
TOTAL	1237	--	43839	369.6	--	756.2	34.7	--	36.77

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0	0	0	0	438	5000	5910
2	0	0	0	0	0	0	62	3100	519
3	0	0	0	0	0	0	7.0	2800	53
4	0	0	0	0	0	0	7.0	975	18
5	0	0	0	0	0	0	10	2350	63
6	0	0	0	0	0	0	192	6900	5290
7	0	0	0	0	0	0	571	6930	11500
8	0	0	0	0	0	0	288	5250	4080
9	0	0	0	0	0	0	210	5200	2840
10	0	0	0	0	0	0	234	6500	4110
11	0	0	0	0	0	0	378	6100	6230
12	0	0	0	0	0	0	510	9550	13200
13	0	0	0	0	0	0	630	10100	17200
14	0	0	0	0	0	0	550	15500	23000
15	1.0	65	.18	490	11900	15700	490	11900	15700
16	5.0	150	2.0	360	8800	8550	360	8800	8550
17	10	200	5.4	432	10100	11800	432	10100	11800
18	5	220	30	414	12600	14100	414	12600	14100
19	100	220	59	510	19500	26900	510	19500	26900
20	450	615	747	414	10900	12200	414	10900	12200
21	520	1150	1610	360	7900	7680	360	7900	7680
22	480	1420	1840	198	6450	3450	198	6450	3450
23	850	2280	5230	246	6800	4520	246	6800	4520
24	650	1820	3190	234	5600	3540	234	5600	3540
25	390	502	529	234	5510	3480	234	5510	3480
26	190	400	205	258	5510	3840	258	5510	3840
27	170	295	135	186	2750	1380	186	2750	1380
28	650	2600	4560	150	4100	1660	150	4100	1660
29	1600	9350	40400	118	1100	350	118	1100	350
30	--	--	--	142	1800	690	142	1800	690
31	--	--	--	118	3700	1180	118	3700	1180
TOTAL	--	--	0	6116.0	--	58542.58	8951.0	--	215033

YELLOWSTONE RIVER BASIN

06257000 BADWATER CREEK AT BONNEVILLE, WYO.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	142	2600	997	18	1260	61	18	502	24
2	150	2250	911	94	2500	635	18	300	15
3	86	2670	620	78	3700	779	38	500	51
4	118	1950	621	102	910	251	10	725	20
5	78	2250	474	78	1310	276	14	800	30
6	110	2280	677	118	2050	653	45	1330	162
7	78	4210	887	70	1400	265	14	1020	39
8	78	4700	990	78	1490	314	4.8	887	11
9	44	8490	1010	61	1500	247	4.0	500	5.4
10	64	1800	311	110	6000	1780	3.5	365	3.4
11	38	1000	103	78	17200	3620	3.0	220	1.8
12	38	1500	154	78	10800	2270	2.0	248	1.3
13	70	750	142	70	5000	945	1.0	250	.68
14	102	1200	330	10	2750	74	4.50	50	.07
15	70	2500	473	14	2500	95	0	0	0
16	44	4230	499	70	5800	1100	0	0	0
17	51	4100	565	44	4990	593	0	0	0
18	142	1950	748	58	3490	547	1.0	375	1.0
19	126	2300	782	58	1800	282	111	12000	8150
20	150	2800	1130	31	1100	92	42	9400	1070
21	110	2550	757	38	1300	133	6.0	6000	97
22	102	2200	606	58	2210	346	3.0	2690	22
23	51	2100	289	38	1520	156	3.0	3200	26
24	64	3800	657	24	1300	84	2.5	985	6.6
25	31	3700	310	24	1100	71	2.0	1190	6.4
26	70	7400	1400	14	1200	45	0	0	0
27	58	1650	258	10	1680	45	0	0	0
28	64	1500	259	58	1250	196	0	0	0
29	94	1650	419	94	1220	310	0	0	0
30	24	1550	100	64	1760	304	0	0	0
31	--	--	--	18	650	32	--	--	--
TOTAL	2447	--	17479	1758	--	16601	346.30	--	9743.65

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1				12	775	25			
2				0	0	0			
3				0	0	0			
4				0	0	0			
5				0	0	0			
6				0	0	0			
7				0	0	0			
8				13	562	20			
9				76	26600	15000			
10				0	0	0			
11				0	0	0			
12				0	0	0			
13				0	0	0			
14				0	0	0			
15				0	0	0			
16				0	0	0			
17				0	0	0			
18				0	0	0			
19				0	0	0			
20				0	0	0			
21				143	9750	3760			
22				4.8	1690	22			
23				0	0	0			
24				0	0	0			
25				0	0	0			
26				0	0	0			
27				0	0	0			
28				0	0	0			
29				0	0	0			
30				0	0	0			
31				0	0	0			
TOTAL	0	--	0	248.8	--	18827	0	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

21508.40

380858.20

YELLOWSTONE RIVER BASIN

51

06257500 MUDDY CREEK NEAR PAVILLION, WYO.

LOCATION.--Lat 43°21'46", long 108°36'08", in NW¼Sec. 35, T.5 N., R.2 E., Fremont County, at gaging station, 600 ft upstream from Wyoming Canal siphon, 4.1 miles downstream from Sheep Creek, and 9.2 miles northeast of Pavilion.

DRAINAGE AREA.--267 sq mi.

PERIOD OF RECORD.--Water temperatures: March to July 1949, October 1954 to September 1958, April 1961 to September 1962, August 1965 to September 1966, April to September 1967, May to September 1968, May to September 1969, May to September 1970, May to September 1971, May to September 1972.
Sediment records: March 1949 to November 1953, October 1954 to September 1958, April 1961 to September 1964, August 1965 to September 1966, April to September 1967, May to September 1968, May to September 1969, May to September 1970, May to September 1971, May to September 1972.

EXTREMES.--May to September 1972:

Water temperatures: Maximum, 26.0°C June 8, 29; minimum, 9.0 C May 6-8, 10, Aug. 23.

Sediment concentrations: Maximum daily, 19,500 mg/l June 9; minimum daily, no flow for many days during July to September.

Sediment discharge: Maximum daily, 9,050 tons June 9; minimum daily, 0 tons on many days during July to September.

Period of record:

Water temperatures (1954-58, 1961-62, 1965-72): Maximum, 32.0°C June 5, 1957; minimum, freezing point on many days during winter period.

Sediment concentrations (1961-64, 1965-72): Maximum daily, 56,000 mg/l Sept. 19, 1961, June 16, 1963; minimum daily, no flow for many days.

Sediment discharge: Maximum daily, 140,000 (estimated) tons July 4, 1950; minimum daily, 0 tons on many days.

REMARKS.--No flow July 4-31, Aug. 3-22, Aug. 28 to Sept. 25.

TEMPERATURE (°C) OF WATER, MAY TO SEPTEMBER 1972

DAY	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---	11.0	24.0	18.0	20.0	---
2	---	---	---	---	---	---	---	---	---	---	---	---	12.0	25.0	---	19.0	---
3	---	---	---	---	---	---	---	---	---	---	---	---	16.0	20.0	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---	13.0	15.0	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---	10.0	22.0	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---	9.0	24.0	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---	9.0	25.0	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---	9.0	26.0	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---	15.0	17.0	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---	9.0	18.0	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---	11.0	16.0	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---	16.0	23.0	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---	17.0	22.0	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---	18.0	24.0	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---	17.0	23.0	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---	19.0	25.0	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---	18.0	19.0	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---	19.0	19.0	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---	12.0	12.0	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---	18.0	18.0	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---	18.0	21.0	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---	17.0	23.0	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---	19.0	20.0	---	9.0	---
24	---	---	---	---	---	---	---	---	---	---	---	---	16.0	20.0	---	12.0	---
25	---	---	---	---	---	---	---	---	---	---	---	---	17.0	17.0	---	19.0	---
26	---	---	---	---	---	---	---	---	---	---	---	---	18.0	18.0	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---	10.0	21.0	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---	20.0	24.0	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---	20.0	26.0	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---	15.0	25.0	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---	24.0	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---	15.0	21.0	---	---	---

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM
JUNE										
09...	1010	14.0	152	33700	13800	63	89	99	100	--
19...	1610	12.0	111	20800	6230	64	91	98	99	100
AUG.										
24...	1020	11.0	9.5	9440	242	82	99	100	--	--

YELLOWSTONE RIVER BASIN

06257500 MUDDY CREEK NEAR PAVILLION, WYO.--Continued

SUSPENDED-SEDIMENT DISCHARGE, MAY TO SEPTEMBER 1972

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	--	--	--	3.6	101	.98	.35	44	.04
2	--	--	--	3.4	72	.66	.25	47	.03
3	--	--	--	3.3	71	.63	.15	39	.02
4	--	--	--	3.3	51	.45	.05	70	.01
5	--	--	--	3.4	41	.38	.20	48	.03
6	--	--	--	3.6	42	.41	1.2	50	.16
7	--	--	--	4.0	78	.84	1.1	60	.18
8	--	--	--	4.6	219	2.7	1.2	810	26
9	--	--	--	5.0	153	2.1	85	19500	9050
10	--	--	--	5.8	186	2.9	34	14900	2210
11	--	--	--	5.4	242	3.5	9.6	2080	54
12	--	--	--	5.2	230	3.2	8.6	498	12
13	--	--	--	4.4	168	2.0	8.6	257	6.0
14	--	--	--	4.2	100	1.1	5.8	200	3.1
15	--	--	--	3.2	92	.79	2.1	124	.70
16	--	--	--	3.2	91	.79	2.4	119	.77
17	--	--	--	2.7	98	.71	19	8720	863
18	--	--	--	2.6	98	.69	3.6	500	4.9
19	--	--	--	3.1	88	.74	51	9500	3360
20	--	--	--	3.7	150	1.5	17	2700	124
21	--	--	--	3.2	127	1.1	6.8	420	7.7
22	--	--	--	2.5	66	.45	6.2	352	5.9
23	--	--	--	1.9	29	.15	5.5	199	3.0
24	--	--	--	1.6	32	.14	4.2	147	1.7
25	--	--	--	1.5	25	.10	5.2	162	2.3
26	--	--	--	1.4	48	.18	4.6	168	2.1
27	--	--	--	1.3	65	.23	4.0	231	2.5
28	--	--	--	1.2	36	.12	3.2	141	1.2
29	--	--	--	1.1	46	.14	1.4	113	.43
30	--	--	--	1.0	50	.14	.70	82	.15
31	--	--	--	.70	42	.08	--	--	--
TOTAL	--	--	--	95.10	--	29.90	293.00	--	15741.92

53

SUSPENDED SEDIMENT DISCHARGE, MAY TO SEPTEMBER, 1972

[illegible]

55

EXTREMES.--1971-72:

Specific conductance: Maximum daily, 694 micromhos Apr. 19; minimum daily, 404 micromhos June 16.
Water temperatures: Maximum, 21.0°C Aug. 19-21; minimum, 3.0 C Dec. 20, 22.

Period of record:

Specific conductance: Maximum daily, 1,380 micromhos June 18, 1954; minimum daily, 385 micromhos July 19, 1971.

Water temperatures: Maximum (1960-72), 22.0°C on several days in 1961, 1970, 1971; minimum, 1.0 C Dec. 17, 18, 1964.

DATE	DIS-SOLVED FLUO- RIDE (F)	DIS- SOLVED NITRATE (NO3)	DIS- SOLVED BORON (B)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE (DEG C)
	(MG/L)	(MG/L)	(UG/L)	(MG/L)							(UNITS)	
DCT.												
20...	.3	.0	60	332	.45	1240	160	46	1.5	526	8.1	12.0
NOV.												
10...	.4	.5	70	344	.47	1560	170	63	1.6	542	8.2	7.0
DEC.												
02...	.4	.2	80	351	.48	902	170	54	1.6	562	8.3	4.0
JAN.												
11...	.4	.5	120	398	.54	2150	200	74	1.6	619	8.3	3.5
FEB.												
08...	.4	.2	80	391	.53	1830	200	86	1.6	619	8.1	3.5
MAR.												
06...	.3	.2	50	381	.52	1990	200	71	1.6	594	8.3	8.5
APR.												
14...	.4	.3	60	443	.60	2310	220	87	1.9	681	8.0	8.0
MAY												
12...	.4	.2	60	434	.59	1950	210	75	1.8	674	8.1	10.5
JUNE												
07...	.3	.4	60	384	.52	2350	200	80	1.6	610	8.0	17.5
30...	.3	.6	50	270	.37	2040	140	42	1.2	440	7.9	18.0
AUG.												
08...	.3	.2	40	268	.36	1660	140	41	1.2	429	8.2	19.0
SEP.												
08...	.3	.2	50	280	.38	1300	140	37	1.4	463	8.2	20.0

[illegible]

YELLOWSTONE RIVER BASIN

06264700 BIGHORN RIVER AT LUCERNE, WYO.

LOCATION.--Lat 43°44'10", long 108°09'38", in SE¼ sec.32, T.44 N., R.94 W., Hot Springs County, at bridge on Black Mountain road, 0.7 mile upstream from Kirby Creek, 0.8 mile east of Lucerne, and 1 mile downstream from Owl Creek.

PERIOD OF RECORD.--Chemical analyses: July 1966 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NESIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 20...	1040	1400	9.9	250	50	16	48	2.7	151	0	160	9.8
NOV. 10...	1600	1760	8.1	140	56	12	50	2.4	146	0	170	11
DEC. 02...	1115	901	6.3	50	56	17	53	2.7	162	0	180	11
JAN. 11...	1600	2060	8.9	0	53	20	53	2.4	159	0	180	11
FEB. 04...	1510	1740	9.3	50	56	18	55	2.7	160	0	190	9.4
MAR. 06...	1430	2000	9.9	240	54	21	54	2.8	167	0	170	11
APR. 04...	1510	2100	7.0	50	57	20	63	2.8	156	0	210	11
MAY 12...	0930	1720	3.3	0	61	18	64	3.3	168	0	210	11
JUNE 07...	1515	2300	7.9	220	54	17	58	2.8	153	0	190	8.3
30...	1430	2800	9.9	100	42	12	38	2.3	129	0	130	2.0
AUG. 08...	1620	2300	9.5	90	43	12	36	2.6	130	0	120	6.0
SEP. 08...	1520	1780	12	210	46	16	41	2.6	135	4	140	7.3

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 20...	.3	.2	70	372	.51	1410	190	66	1.5	594	7.9	10.0
NOV. 10...	.4	.0	60	379	.52	1800	190	70	1.6	595	8.3	8.0
DEC. 02...	.4	.2	80	408	.55	993	210	77	1.6	651	8.0	4.0
JAN. 11...	.4	.4	70	409	.56	2270	220	90	1.6	644	8.2	--
FEB. 04...	.4	.5	70	416	.57	1950	210	79	1.6	647	8.2	2.0
MAR. 06...	.4	.3	50	409	.56	2210	220	83	1.6	630	8.2	8.0
APR. 04...	.	.	60	447	.61	2530	220	92	1.8	695	8.2	9.0
MAY 12...	.4	.2	70	455	.62	2110	230	92	1.9	710	8.0	10.0
JUNE 07...	.3	.3	70	416	.57	2580	200	74	1.8	646	8.0	19.0
30...	.3	.6	90	297	.40	2250	150	44	1.3	489	7.9	19.5
AUG. 08...	.4	.2	50	297	.40	1840	160	53	1.3	485	8.3	19.5
SEP. 08...	.4	.1	70	338	.46	1620	180	63	1.3	513	8.4	21.0

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED RA-226 (RADON METHOD PC/L)
APR. 25...	1120	2020	0.12

06268500 FIFTEEN MILE CREEK NEAR WORLAND, WYO.

LOCATION.--Lat 44°01'14", long 108°00'42", in NW¼NW¼NE¼ sec.27, T.47 N., R.93 W., Washakie County, at gaging station, 300 ft upstream from Bighorn Canal spillway, 2.0 miles upstream from mouth, and 2.8 miles west of Worland.

DRAINAGE AREA.--518 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1960 to December 1972 (discontinued).
Sediment records: March 1951 to December 1972 (discontinued).

EXTREMES.--1971-72:

Water temperatures: Maximum observed, 27.0°C Aug. 27; minimum observed, freezing point Feb. 24-26, Mar. 8.
Sediment concentrations: Maximum daily, 97,200 mg/l Sept. 3; minimum daily, no flow for many days.
Sediment discharge: Maximum daily, 141,000 tons Aug. 3; minimum daily, 0 tons on many days.

October to December 1972:

Water temperatures: Maximum observed, 14.0°C Oct. 10; minimum observed, 1.0°C Oct. 29.
Sediment concentrations: Maximum daily, 34,600 mg/l Oct. 26; minimum daily, no flow for many days during period.
Sediment discharge: Maximum daily, 1,510 tons Oct. 5; minimum daily, 0 tons on many days during period.

Period of record:

Water temperatures (1960-72): Maximum, 32.0°C July 10, 1969; minimum, freezing point on many days during winter period.
Sediment concentrations: Maximum daily, 135,000 mg/l Apr. 16, 1952; minimum daily, no flow for many days each year.
Sediment discharge: Maximum daily, 418,000 tons May 22, 1952; minimum daily, 0 tons on many days each year.

REMARKS.--Flow affected by ice Oct. 28 to Nov. 5, 1971, Feb. 18-27, Mar. 25-27, 1972. No flow Nov. 23, 1971 to Feb. 17, Mar. 17-24, Mar. 28 to June 3, 6-18, June 24 to July 3, 8-20, 23-31, Aug. 12-20, Aug. 29 to Sept. 1, Sept. 7 to Oct. 4, 11-25, Oct. 31 to Dec. 31, 1972. Bureau of Land Management has extensive spreader systems on some of the tributaries above station.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	0.5	---	---	---	3.5	---	---	---	---	---	---
2	5.5	0.5	---	---	---	3.0	---	---	---	---	---	---
3	8.5	---	---	---	---	3.0	---	---	---	---	16.0	15.5
4	8.0	2.0	---	---	---	3.0	---	---	---	---	19.0	15.0
5	11.0	3.0	---	---	---	3.0	---	---	---	---	24.5	20.0
6	14.0	1.5	---	---	---	6.5	---	---	---	---	23.0	---
7	---	---	---	---	---	2.0	---	---	---	---	21.5	---
8	---	3.5	---	---	---	0.0	---	---	---	---	---	---
9	---	2.0	---	---	---	6.0	---	---	---	---	---	---
10	---	---	---	---	---	5.5	---	---	---	---	20.5	---
11	15.5	---	---	---	---	11.0	---	---	---	---	21.0	---
12	16.0	---	---	---	---	7.5	---	---	---	---	---	---
13	12.5	---	---	---	---	10.5	---	---	---	---	---	---
14	---	---	---	---	---	12.0	---	---	---	---	---	---
15	4.0	---	---	---	---	14.0	---	---	---	---	---	---
16	6.0	2.0	---	---	---	14.5	---	---	---	---	---	---
17	6.0	---	---	---	---	---	---	---	---	---	---	---
18	3.0	2.0	---	---	---	---	---	---	---	---	---	---
19	5.0	---	---	---	1.0	---	---	---	15.5	---	---	---
20	6.5	5.0	---	---	1.0	---	---	---	21.0	---	---	---
21	6.0	5.0	---	---	3.0	---	---	---	26.0	21.0	---	---
22	6.5	4.0	---	---	0.5	---	---	---	20.5	17.0	---	---
23	6.5	---	---	---	1.5	---	---	---	21.5	---	---	---
24	---	---	---	---	0.0	---	---	---	---	---	13.5	---
25	9.5	---	---	---	0.0	---	---	---	---	---	21.5	---
26	9.0	---	---	---	0.0	---	---	---	---	---	21.0	---
27	3.5	---	---	---	4.5	---	---	---	---	---	27.0	---
28	---	---	---	---	2.0	---	---	---	---	---	---	---
29	0.5	---	---	---	3.5	---	---	---	---	---	---	---
30	1.0	---	---	---	---	---	---	---	---	---	---	---
31	0.5	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SED- IMENT (MG/L)	SUS- PEN- DED SED- IMENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM
OCT.												
02...	1520	5.5	516	48200	67200	40	50	78	92	97	100	--
18...	1535	3.0	920	52600	131000	44	59	83	92	96	99	100
19...	0025	3.0	1250	28800	97200	65	76	87	94	99	100	--
19...	1100	3.0	1690	24700	113000	72	83	89	94	98	100	--
FEB.												
22...	1630	.5	a230	18800	11700	38	53	84	95	99	100	--
23...	1430	1.5	a214	13700	7920	48	59	83	97	100	--	--
25...	1635	--	a114	8140	2510	45	60	91	97	100	--	--
28...	1050	2.0	329	52400	46500	30	44	83	94	100	--	--
29...	1215	1.5	772	61700	129000	28	38	71	93	99	100	--
AUG.												
02...	2100	--	1040	60000	168000	50	67	83	93	98	100	--
24...	0900	13.5	142	78600	30100	62	81	96	99	100	--	--

a Daily mean discharge

06268500 FIFTEEN MILE CREEK NEAR WORLAND, WYO.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	101	22300	10200	1.5	4950	20			
2	450	45100	54800	1.6	4850	21			
3	293	42600	36400	1.6	4700	20			
4	131	21800	7710	1.6	4600	20			
5	59	19100	3040	1.8	4250	21			
6	30	18800	1520	2.1	5000	28			
7	21	13800	782	1.2	2000	6.5			
8	18	11000	535	.56	280	.42			
9	15	9200	373	.56	144	.22			
10	14	8000	302	1.8	196	.95			
11	13	7050	247	1.2	182	.59			
12	9.0	6250	152	.56	123	.19			
13	2.4	5600	36	2.4	2440	16			
14	.35	5000	4.7	7.5	4700	95			
15	.13	4400	1.5	9.0	4220	103			
16	.13	2150	.75	5.0	3760	51			
17	7.5	5840	118	.88	2030	4.8			
18	851	43700	117000	.25	450	.30			
19	1100	27700	77700	.21	230	.13			
20	370	29900	29900	.21	130	.07			
21	235	26100	16600	.17	92	.04			
22	148	16200	6470	.02	70	0			
23	100	10600	2860	0	0	0			
24	58	9050	1420	0	0	0			
25	47	9200	1170	0	0	0			
26	43	8200	952	0	0	0			
27	39	7000	737	0	0	0			
28	29	6400	501	0	0	0			
29	18	6250	304	0	0	0			
30	3.2	5800	50	0	0	0			
31	1.5	5950	24	--	--	--			
TOTAL	4207.21	--	371909.95	41.72	--	409.21	0	--	0
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1				0	0	0	160	31000	14300
2				0	0	0	79	11300	2410
3				0	0	0	41	6400	708
4				0	0	0	23	4200	261
5				0	0	0	19	3610	185
6				0	0	0	38	12700	2320
7				0	0	0	124	54500	22400
8				0	0	0	24	22400	1450
9				0	0	0	18	11000	535
10				0	0	0	15	4800	194
11				0	0	0	14	4750	180
12				0	0	0	7.5	4200	85
13				0	0	0	6.4	5100	88
14				0	0	0	3.0	2600	21
15				0	0	0	1.3	990	3.5
16				0	0	0	.04	360	.04
17				0	0	0	0	0	0
18				3.0	350	2.8	0	0	0
19				12	800	26	0	0	0
20				26	1500	105	0	0	0
21				40	3700	400	0	0	0
22				230	10200	6330	0	0	0
23				214	12700	7340	0	0	0
24				125	8220	2770	0	0	0
25				114	5400	1660	12	3690	120
26				42	5000	567	6.0	4800	78
27				34	6750	620	.21	1000	.57
28				287	45000	37300	0	0	0
29				554	59800	97800	0	0	0
30				--	--	--	0	0	0
31				--	--	--	0	0	0
TOTAL	0	--	0	1681.0	--	154920.8	591.45	--	45339.11

06268500 FIFTEEN MILE CREEK NEAR WORLAND, WYO.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1							0	0	0
2							0	0	0
3							0	0	0
4							1.2	6790	22
5							.88	8830	21
6							0	0	0
7							0	0	0
8							0	0	0
9							0	0	0
10							0	0	0
11							0	0	0
12							0	0	0
13							0	0	0
14							0	0	0
15							0	0	0
16							0	0	0
17							0	0	0
18							0	0	0
19							15	41800	2430
20							15	50900	2610
21							6.7	59000	1070
22							2.8	41000	310
23							.10	14000	3.8
24							0	0	0
25							0	0	0
26							0	0	0
27							0	0	0
28							0	0	0
29							0	0	0
30							0	0	0
31							--	--	--
TOTAL	0	--	0	0	--	0	41.68	--	6466.8

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0	3.9	6230	65	0	0	0
2	0	0	0	294	48300	52400	.77	3670	12
3	0	0	0	725	64700	141000	87	97200	25200
4	6.2	12200	204	132	25800	9200	12	55900	2420
5	6.0	21800	353	79	13100	2790	1.4	9500	57
6	1.8	6000	79	40	9800	1060	.02	292	.01
7	.04	1200	.13	33	9500	846	0	0	0
8	0	0	0	22	4800	285	0	0	0
9	0	0	0	16	1000	43	0	0	0
10	0	0	0	14	300	11	0	0	0
11	0	0	0	3.0	200	1.6	0	0	0
12	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0
21	63	61400	14000	12	24600	797	0	0	0
22	17	34600	1590	15	45500	1840	0	0	0
23	0	0	0	7.9	27600	813	0	0	0
24	0	0	0	148	75100	31800	0	0	0
25	0	0	0	31	29300	2650	0	0	0
26	0	0	0	12	14200	493	0	0	0
27	0	0	0	1.9	6500	33	0	0	0
28	0	0	0	.04	1000	.11	0	0	0
29	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	--	--	--
TOTAL	94.04	--	16176.13	1592.74	--	256128.71	101.19	--	27689.01

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

8351.03
879039.72

YELLOWSTONE RIVER BASIN

06268500 FIFTEEN MILE CREEK NEAR WORLAND, WYO.--Continued

TEMPERATURE (°C) OF WATER, OCTOBER TO DECEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	6.0	---	---	---	---	---	---	---	---	---	---	---
6	4.5	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	14.0	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	5.0	---	---	---	---	---	---	---	---	---	---	---
27	6.0	---	---	---	---	---	---	---	---	---	---	---
28	8.0	---	---	---	---	---	---	---	---	---	---	---
29	1.0	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

SUSPENDED-SEDIMENT DISCHARGE, OCTOBER TO DECEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0						
2	0	0	0						
3	0	0	0						
4	0	0	0						
5	16	21400	1510						
6	14	24300	983						
7	7.1	20000	383						
8	1.0	13800	37						
9	.25	13300	9.0						
10	.21	11000	6.2						
11	0	0	0						
12	0	0	0						
13	0	0	0						
14	0	0	0						
15	0	0	0						
16	0	0	0						
17	0	0	0						
18	0	0	0						
19	0	0	0						
20	0	0	0						
21	0	0	0						
22	0	0	0						
23	0	0	0						
24	0	0	0						
25	0	0	0						
26	11	34600	1140						
27	7.8	26200	552						
28	2.6	22000	154						
29	.76	20000	41						
30	0	0	0						
31	0	0	0						
TOTAL	60.72	--	4815.2	0	--	0	0	--	0

TOTAL DISCHARGE FOR PERIOD (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR PERIOD (TONS)

60.72
4815.2

YELLOWSTONE RIVER BASIN

61

06268600 BIGHORN RIVER AT WORLAND, WYO.

LOCATION.--Lat 44°00'53", long 107°58'08", in SW¼NE¼ sec.25, T.47 N., R.93 W., Washakie County, 40 ft downstream from former gaging station, at bridge on U.S. Highway 20 at Worland, and 0.5 mile downstream from Fifteen Mile Creek.

DRAINAGE AREA.--10,810 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1965 to September 1972.

Water temperatures: July 1965 to September 1969.

Sediment records: July 1965 to September 1969.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 14...	0830	1490	10	190	58	19	79	3.3	162	0	230	16
NOV. 09...	1540	1890	7.3	50	62	21	73	3.1	164	0	240	16
DEC. 03...	1600	1170	8.8	0	67	25	78	3.8	189	0	260	20
JAN. 13...	1500	2410	9.8	0	54	26	60	2.9	168	0	220	14
FEB. 07...	1545	1780	4.7	450	60	20	66	2.9	165	0	220	14
MAR. 13...	1530	2380	8.9	110	62	28	71	4.0	162	0	250	18
APR. 04...	1615	1820	7.1	10	65	25	82	3.3	165	0	270	17
MAY 15...	1315	1130	2.7	220	60	19	78	3.0	160	0	240	13
JUNE 07...	1630	1520	9.1	60	60	20	71	3.5	168	0	230	13
30...	1635	2820	8.4	90	45	11	40	2.3	130	0	130	5.0
AUG. 17...	1305	1400	9.8	110	47	17	52	3.0	153	0	160	12
SEP. 10...	1230	1130	9.6	50	54	17	61	3.0	151	4	190	11

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 14...	.4	.3	80	496	.67	2000	220	87	2.3	722	7.9	10.0
NOV. 09...	.5	.4	80	500	.68	2550	240	105	2.0	767	8.1	7.0
DEC. 03...	.5	.0	130	559	.76	1770	270	115	2.1	859	7.8	3.0
JAN. 13...	.5	.4	90	467	.64	3040	240	102	1.7	714	8.0	.0
FEB. 07...	.4	.2	80	467	.64	2240	230	95	1.9	718	8.2	1.0
MAR. 13...	.5	.8	90	519	.71	3340	270	137	1.9	798	8.1	9.0
APR. 04...	.4	.5	90	553	.75	2720	260	125	2.2	850	8.1	10.0
MAY 15...	.4	.2	60	499	.68	1520	230	99	2.2	772	8.1	16.5
JUNE 07...	.4	1.3	80	491	.67	2020	230	92	2.0	766	7.7	22.0
30...	.4	.9	80	307	.42	2340	160	53	1.4	505	7.8	21.5
AUG. 17...	.4	1.2	30	380	.52	1440	190	64	1.7	595	8.0	23.5
SEP. 10...	.4	.6	90	426	.58	1300	200	69	1.9	661	8.4	17.5

YELLOWSTONE RIVER BASIN

06270000 NOWOOD RIVER NEAR TEN SLEEP, WYO.

LOCATION.--Lat 44°00'50", long 107°25'44", in SW¼SW¼NW¼ sec.27, T.47 N., R.88 W., Washakie County, at former gaging station, 1.8 miles southeast of Ten Sleep, and 3 miles upstream from Tensleep Creek.

DRAINAGE AREA.--803 sq mi.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 13...	1345	88	11	170	110	36	22	2.0	190	0	300	2.3
NOV. 05...	1230	88	11	50	120	32	21	1.8	209	0	290	2.1
DEC. 07...	1415	78	12	0	110	33	15	1.3	223	0	260	3.1
JAN. 10...	1045	90	12	50	110	32	12	1.3	221	0	240	1.3
FEB. 01...	1600	83	14	120	110	31	11	1.6	207	0	230	1.7
MAR. 02...	1100	313	11	860	93	20	26	4.4	139	0	240	1.6
APR. 04...	1400	108	11	270	100	31	16	1.6	204	0	250	2.0
MAY 08...	1400	292	12	180	58	9.1	6.0	1.4	125	0	86	1.6
JUNE 16...	1500	98	14	0	110	30	28	3.0	204	0	290	2.3
JULY 03...	1000	72	11	50	130	38	28	3.0	231	0	350	2.3
AUG. 09...	1030	34	13	230	160	50	43	3.3	244	0	520	1.7
SEP. 05...	1905	73	11	10	130	42	27	2.6	209	0	380	1.7
25...	1130	62	10	40	120	41	26	2.3	214	0	340	2.0

YELLOWSTONE RIVER BASIN

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06270000 NOWOOD RIVER NEAR TEN SLEEP, WYO.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1972.
Sediment records: October 1971 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 13...	.3	.4	70	578	.79	137	420	264	.5	800	8.0	10.0
NOV. 05...	.4	1.2	60	584	.79	139	430	259	.4	827	8.1	3.5
DEC. 07...	.2	2.0	30	548	.75	115	410	227	.3	791	8.1	.0
JAN. 10...	.3	2.6	150	516	.70	125	400	219	.3	765	8.0	.0
FEB. 01...	.3	2.7	30	504	.69	113	400	230	.2	734	8.0	.0
MAR. 02...	.4	2.4	60	471	.64	398	320	206	.6	681	7.7	.0
APR. 04...	.3	1.0	50	515	.70	150	390	223	.4	752	8.2	10.0
MAY 08...	.2	2.2	20	238	.32	188	180	77	.2	377	7.8	8.0
JUNE 16...	.4	1.5	60	580	.79	153	400	233	.6	827	8.2	23.5
JULY 03...	.4	.3	80	681	.93	132	480	291	.6	960	8.1	14.5
AUG. 09...	.5	.2	100	915	1.24	84.0	620	420	.8	1200	8.0	20.5
SEP. 05...	.4	.2	70	698	.95	138	500	329	.5	958	8.2	19.0
25...	.4	.2	200	653	.89	109	480	304	.5	929	8.1	4.5

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDIM- ENT (MG/L)	SUS- PENDED SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
OCT. 13...	1345	10.0	88	17	4.0	--	--	--	--	--	--
NOV. 05...	1230	3.5	88	196	47	--	--	--	--	--	--
DEC. 07...	1415	.0	78	66	14	--	--	--	--	--	--
JAN. 10...	1045	.0	90	44	11	--	--	--	--	--	--
FEB. 01...	1600	.0	83	50	11	--	--	--	--	--	--
MAR. 02...	1100	.0	313	3980	3360	42	55	84	91	99	100
APR. 04...	1400	10.0	108	156	45	--	--	--	--	--	--
MAY 08...	1400	8.0	292	1220	962	--	--	--	--	--	--
JUNE 16...	1540	13.5	134	999	361	16	26	60	85	98	100
JULY 03...	1500	23.5	98	1120	296	81	96	100	--	--	--
AUG. 09...	1000	14.5	72	76	15	--	--	--	--	--	--
SEP. 05...	1030	20.5	34	148	14	--	--	--	--	--	--
25...	1905	19.0	73	96	19	--	--	--	--	--	--
	1130	4.5	62	22	3.7	--	--	--	--	--	--

YELLOWSTONE RIVER BASIN

06273500 PAINT ROCK CREEK NEAR MOUTH, BELOW HYATTVILLE, WYO.

LOCATION.--Lat 44°12'20", long 107°42'54", in SW¼SE¼NW¼ sec.19, T.49 N., R.90 W., Big Horn County, at bridge on county road, 0.5 mile south of State Secondary Highway 0201, 1.0 mile upstream from mouth, and 6.4 miles southwest of Hyattville.

DRAINAGE AREA.--376 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: January 1951 to September 1953, October 1967 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 12...	1225	110	10	50	100	27	31	1.8	190	0	270	1.7
NOV. 05...	1020	98	8.8	50	99	26	31	2.4	194	0	260	2.9
DEC. 06...	1015	68	12	10	110	28	29	1.6	214	0	280	3.1
JAN. 03...	1515	40	12	200	100	31	33	1.8	220	0	260	2.5
FEB. 03...	1440	43	13	50	98	29	28	1.6	194	0	250	2.3
MAR. 01...	1600	51	12	130	140	34	37	3.3	184	0	400	2.2
APR. 05...	1500	46	9.3	260	85	29	28	1.6	183	0	220	3.6
MAY 04...	1515	46	7.4	120	91	31	37	1.9	198	0	270	1.7
JUNE 02...	1640	1300	6.2	180	18	3.7	3.7	.5	53	0	20	1.0
JULY 03...	1445	454	6.3	160	31	6.1	8.5	.9	79	0	55	1.0
AUG. 15...	1400	47	14	20	140	36	53	3.3	232	0	410	2.3
SEP. 07...	1545	239	9.5	130	57	14	14	1.4	115	4	130	1.7

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 12...	.4	.1	70	536	.73	159	370	214	.7	767	8.2	12.0
NOV. 05...	.4	.0	50	521	.71	138	350	191	.7	752	8.2	4.5
DEC. 06...	.3	.8	50	562	.76	103	380	204	.6	800	8.2	1.0
JAN. 03...	.4	1.3	50	554	.75	59.8	380	200	.7	770	8.0	.0
FEB. 03...	.4	2.0	60	515	.70	59.8	360	201	.6	760	7.9	.0
MAR. 01...	.4	2.3	30	730	.99	101	500	349	.7	983	8.1	5.5
APR. 05...	.3	.1	70	468	.64	58.1	330	180	.7	719	8.3	13.0
MAY 04...	.3	.1	80	535	.73	66.4	360	198	.9	775	8.1	17.5
JUNE 02...	.1	.4	10	80	.11	281	59	16	.2	128	7.8	16.0
JULY 03...	.2	.2	0	148	.20	181	100	35	.4	254	7.8	13.0
AUG. 15...	.5	.1	110	768	1.04	97.5	490	300	1.0	1040	8.3	24.0
SEP. 07...	.2	.0	60	284	.39	183	200	99	.4	445	8.4	17.5

YELLOWSTONE RIVER BASIN

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06274220 NOWOOD RIVER AT MANDERSON, WYO.

LOCATION.--Lat 44°16'34", long 107°57'35", in NE¼SW¼ sec.30, T.50 N., R.92 W., Big Horn County, at bridge on State Secondary Highway 0201 and 0.5 mile upstream from mouth near corporate limit of Manderson.

DRAINAGE AREA.--2,000 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: July 1965 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 12...	1200	235	8.5	230	110	36	36	2.2	200	0	340	3.0
NOV. 05...	0940	250	9.3	80	110	38	34	2.2	204	0	320	2.9
DEC. 06...	1425	248	10	0	120	36	29	1.8	214	0	320	5.2
JAN. 03...	1420	183	11	180	120	37	25	2.0	228	0	300	2.7
FEB. 03...	1635	169	13	50	120	35	22	1.3	207	0	290	2.5
MAR. 01...	1500	1250	9.9	1900	99	21	44	4.4	121	0	310	3.1
APR. 05...	1620	230	7.8	260	100	31	33	2.1	168	0	300	4.2
MAY 04...	1600	110	10	30	71	23	22	1.4	156	0	180	2.9
JUNE 29...	1405	708	9.4	20	50	15	15	1.4	109	0	130	2.7
JULY 25...	1150	210	7.5	0	83	28	38	2.1	154	0	280	2.3
AUG. 15...	1600	110	10	100	120	38	63	4.2	184	0	440	5.0
SEP. 04...	1030	410	8.4	10	71	22	23	1.9	132	0	200	1.7

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 12...	.4	.2	80	635	.86	403	430	266	.8	902	8.2	11.5
NOV. 05...	.4	.6	70	623	.85	421	430	263	.7	870	8.2	2.0
DEC. 06...	.3	1.4	50	630	.86	422	440	264	.6	895	8.1	1.0
JAN. 03...	.4	2.2	70	604	.82	298	440	253	.5	813	8.1	.0
FEB. 03...	.4	2.9	50	580	.79	265	430	260	.5	827	7.9	.0
MAR. 01...	.4	2.5	50	553	.75	1870	330	231	1.0	782	7.7	1.0
APR. 05...	.3	.1	80	564	.77	350	390	252	.7	819	8.0	13.0
MAY 04...	.2	1.9	70	388	.53	115	270	142	.6	594	7.9	17.5
JUNE 29...	.2	.3	70	275	.37	526	180	91	.5	445	7.8	22.0
JULY 25...	.3	.3	40	515	.70	292	320	194	.9	765	8.1	23.0
AUG. 15...	.5	.1	100	774	1.05	230	460	309	1.3	1060	8.2	24.0
SEP. 04...	.3	.2	50	392	.53	434	270	162	.6	590	8.3	18.0

YELLOWSTONE RIVER BASIN

06277500 GREYBULL RIVER NEAR BASIN, WYO.

LOCATION.--Lat 44°24'24", long 108°11'10", in NE¼NW¼SW¼ sec.8, T.51 N., R.94 W., Big Horn County, at gaging station at bridge on State Secondary Highway 0200, 3.0 miles upstream from Dorsey Creek, and 8 miles west of Basin.

DRAINAGE AREA.--1,115 sq mi.

PERIOD OF RECORD.--Chemical analyses: January 1951 to September 1953, July 1965 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 12...	1030	142	14	210	65	25	90	3.1	272	7	220	5.2
NOV. 09...	1145	220	15	90	58	28	66	1.8	250	0	190	5.2
DEC. 07...	1030	39	16	40	87	42	94	2.7	325	0	300	9.4
JAN. 03...	1130	72	15	90	78	33	82	2.4	302	0	250	5.4
FEB. 03...	1140	76	18	0	77	30	78	2.2	248	0	250	5.8
MAR. 01...	1200	698	9.6	570	43	13	43	5.3	153	0	120	4.6
APR. 05...	1110	140	11	170	69	30	89	2.6	247	0	270	6.8
MAY 04...	1145	13	12	100	83	47	140	3.0	322	0	400	12
JUNE 02...	1300	1280	16	100	29	6.8	23	2.1	112	0	57	1.7
JULY 07...	1600	49	19	20	64	25	130	3.3	289	0	290	11
AUG. 15...	1110	172	17	50	49	15	61	3.3	202	0	140	3.7
SEP. 07...	1445	40	18	190	62	25	130	3.5	279	0	290	11

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 12...	.4	.5	80	564	.77	216	270	35	2.4	858	8.4	9.5
NOV. 09...	.4	.9	60	492	.67	292	260	55	1.8	774	8.2	2.5
DEC. 07...	.4	1.2	80	715	.97	75.3	390	123	2.1	1050	8.0	.0
JAN. 03...	.4	2.2	80	619	.84	120	330	82	2.0	870	8.1	.0
FEB. 03...	.4	2.2	80	589	.80	121	320	117	1.9	871	7.9	.0
MAR. 01...	.3	3.3	50	317	.43	597	160	34	1.5	507	7.9	1.0
APR. 05...	.4	.1	80	598	.81	226	300	97	2.3	896	8.2	10.0
MAY 04...	.5	.9	120	852	1.16	29.9	400	136	3.0	1200	8.1	12.0
JUNE 02...	.1	1.3	40	192	.26	664	100	8	1.0	301	7.8	19.0
JULY 07...	.6	2.7	110	688	.94	91.0	260	23	3.5	1010	8.3	26.0
AUG. 15...	.3	1.9	60	394	.54	183	180	14	2.0	609	7.8	19.5
SEP. 07...	.6	.9	110	678	.92	73.2	260	31	3.5	975	8.2	19.5

SUSPENDED SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
FEB. 03...	1145	.0	76	24	4.9

YELLOWSTONE RIVER BASIN

67

06279090 SHELL CREEK NEAR GREYBULL, WYO.

LOCATION.--Lat 44°30'34", long 108°02'52", in NW¼SW¼ sec.4, T.52 N., R.93 W., Big Horn County, at bridge on county road, 0.4 mile upstream from mouth, and 1.5 miles north of post office in Greybull.

DRAINAGE AREA.--560 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: January to September 1951, July 1965 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 19...	1430	160	13	80	130	33	110	4.4	195	0	500	7.3
NOV. 05...	1100	105	8.4	0	110	36	64	2.0	228	0	370	3.8
DEC. 01...	1445	80	7.8	110	100	35	56	1.3	223	0	330	4.2
JAN. 06...	1505	72	9.7	50	100	36	50	1.3	242	0	300	2.1
FEB. 07...	1425	66	12	10	95	32	44	1.1	227	0	260	2.7
MAR. 15...	1035	87	8.6	20	100	38	63	1.6	226	0	340	5.0
APR. 05...	1330	71	7.8	200	93	33	52	1.4	207	0	290	3.6
MAY 03...	1605	57	6.9	120	100	48	76	2.3	214	0	420	3.8
JUNE 01...	1615	1340	7.9	60	34	8.4	12	1.2	99	0	63	2.7
JULY 07...	1445	195	8.5	0	77	24	40	1.6	171	0	230	2.0
AUG. 22...	1115	49	10	100	180	61	140	4.0	256	0	750	5.0
SEP. 07...	1315	37	8.7	260	130	46	82	3.3	232	0	460	4.0

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 19...	.5	8.3	150	903	1.23	390	450	290	2.2	1230	7.8	10.0
NOV. 05...	.4	1.8	130	707	.96	200	420	233	1.4	991	8.2	3.0
DEC. 01...	.4	1.7	80	644	.88	139	400	217	1.2	933	7.9	3.0
JAN. 06...	.4	2.4	140	624	.85	121	400	201	1.1	914	7.9	.0
FEB. 07...	.4	2.2	110	565	.77	101	370	184	1.0	815	7.9	.0
MAR. 15...	.4	1.7	110	673	.92	158	410	225	1.4	939	8.1	4.0
APR. 05...	.3	1.0	90	583	.79	112	370	200	1.2	859	8.0	10.5
MAY 03...	.6	1.5	190	762	1.04	117	460	284	1.6	1070	7.9	17.0
JUNE 01...	.1	1.0	30	179	.24	648	120	39	.5	282	7.8	13.5
JULY 07...	.4	.9	110	470	.64	247	290	150	1.0	709	8.3	20.5
AUG. 22...	.7	4.2	230	1280	1.74	169	690	480	2.3	1640	8.0	21.0
SEP. 07...	.5	.8	220	842	1.15	84.1	500	310	1.6	1210	8.0	19.5

YELLOWSTONE RIVER BASIN

06279500 BIGHORN RIVER AT KANE, WYO.

LOCATION.--Lat 44°45'31", long 108°10'51", in NW¼NE¼SW¼ sec.9, T.55 N., R.94 W., Big Horn County, sampled at Mageobar Corp. bridge 24.5 miles upstream from gaging station.

DRAINAGE AREA.--15,765 sq mi (at gaging station).

PERIOD OF RECORD.--Chemical analyses: March to August 1947, June 1948 to July 1949, December 1949 to September 1953, June 1955 to September 1957, December 1960 to September 1972.

Water temperatures: July to September 1949, October 1950 to September 1972 (at sampling site).

Sediment records: March 1946 to September 1964, December 1969 to September 1972.

EXTREMES.--1971-72:

Specific conductance: Maximum daily observed, 1,060 micromhos Dec. 8; minimum daily, 399 micromhos June 3.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 06...	1300	2300	12	40	81	24	100	4.4	186	0	330	15
NOV. 05...	1510	2770	9.8	0	75	26	80	3.3	200	0	270	15
NOV. 30...	0930	2410	9.7	200	72	25	78	3.3	184	0	280	14
JAN. 18...	1420	3230	9.3	--	68	22	66	3.1	183	0	230	12
FEB. 07...	1210	2360	7.4	210	68	20	62	3.3	176	0	230	12
MAR. 06...	1520	3020	9.7	100	72	33	76	3.5	189	0	280	15
APR. 20...	1315	2770	7.1	60	69	25	76	3.0	182	0	260	14
MAY 16...	1330	2110	5.7	70	71	22	78	3.3	178	0	270	12
JUNE 21...	1400	7140	9.3	70	56	17	56	2.8	153	0	200	8.3
JULY 06...	1000	3490	9.8	70	54	17	49	2.6	149	0	180	9.3
JULY 31...	1640	2160	9.5	0	65	20	61	3.0	171	0	230	10
SEP. 07...	1550	2220	13	280	76	21	72	3.3	189	0	270	12

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BERYL- LIUM (BE) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT. 06...	1300	2300	3	0	--	--	--
NOV. 05...	1510	2770	--	0	0	1	5
JAN. 18...	1420	3230	0	0	1	1	5
APR. 20...	1315	2770	7	0	0	0	2

DATE	TIME	DIS- CHARGE (CFS)	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- AZINON (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)
JAN. 18...	1420	3230	.00	.0	.00	.00	.00	--	.00	.00
MAR. 06...	1520	3020	.00	.0	.00	.00	.00	--	.00	.00
JUNE 21...	1400	7140	.00	.0	.00	.00	.00	.00	.00	.00
SEP. 07...	1550	2220	.00	.0	.00	.00	.00	.02	.01	.00

DATE	TIME	DIS- CHARGE (CFS)	ALDRIN IN BOTTOM DE- POSIT (UG/KG)	LINDANE IN BOTTOM DE- POSIT (UG/KG)	CHLOR- DANE IN BOTTOM DE- POSIT (UG/KG)	DDD IN BOTTOM DE- POSIT (UG/KG)	DDE IN BOTTOM DE- POSIT (UG/KG)	DDT IN BOTTOM DE- POSIT (UG/KG)	DI- ELDRIN IN BOTTOM DE- POSIT (UG/KG)	ENDRIN IN BOTTOM DE- POSIT (UG/KG)	HEPTA- CHLOR IN BOTTOM DE- POSIT (UG/KG)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSIT (UG/KG)
MAR. 06...	1520	3020	<.2	<.2	<1.0	<.2	<.2	<.2	4.5	<.2	<.2	<.2
JUNE 21...	1400	7140	<.2	<.2	<1.0	<.2	<.2	<.2	<.2	<.2	<.2	<.2
SEP. 07...	1550	2220	<.2	<.2	<1.0	<.2	<.2	<.2	8.0	<.2	<.2	<.2

YELLOWSTONE RIVER BASIN

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06279500 BIGHORN RIVER AT KANE, WYO.--Continued

EXTREMES.--1971-72: Continued

Water temperatures: Maximum, 25.5°C Aug. 16; minimum, freezing point on many days during December and period of ice cover.

Period of record:

Specific conductance (1955-57, 1960-72): Maximum daily, 3,030 micromhos July 7, 1961; minimum daily, 382 micromhos June 23, 1968.

Water temperatures: Maximum, 29.0°C July 14, 30, 1953, July 12, 1954; minimum, freezing point on many days during winter periods.

REMARKS.--Temperature recorder at gaging station 24.5 miles downstream from sampling site. Recorded water temperatures: Maximum, 22.0°C Aug. 15; minimum, freezing point on many days during December to February. No appreciable inflow between sampling point and gaging station except during periods of intense local precipitation. Stream frozen Dec. 10 to Feb. 26.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 06...	.4	1.8	110	660	.90	4100	300	147	2.5	910	7.9	10.5
NOV. 05...	.5	.5	40	600	.82	4490	300	140	2.0	895	8.1	3.0
NOV. 30...	.5	.3	100	572	.78	3720	280	129	2.0	878	7.6	2.0
JAN. 18...	.4	3.1	70	505	.69	4400	260	110	1.8	740	7.8	.0
FEB. 07...	.4	.6	70	486	.66	3100	250	106	1.7	747	7.6	.0
MAR. 06...	.5	1.4	80	589	.60	4800	320	165	1.9	851	7.7	2.5
APR. 20...	.4	.4	90	545	.74	4080	280	131	2.0	824	7.9	5.5
MAY 16...	.4	1.2	80	549	.75	3130	270	124	2.1	813	8.0	11.0
JUNE 21...	.3	1.7	80	423	.58	8150	210	84	1.7	665	7.9	16.0
JULY 06...	.4	1.4	90	396	.54	3730	200	78	1.5	614	8.0	18.0
JULY 31...	.5	1.2	90	480	.65	2800	240	100	1.7	715	8.3	24.0
SEP. 07...	.5	1.3	100	558	.76	3340	260	125	1.9	822	8.1	17.5

DATE	DIS-SOLVED LEAD (Pb) (UG/L)	DIS-SOLVED MANGANESE (Mn) (UG/L)	DIS-SOLVED MOLYBDENUM (MO) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT. 06...	--	--	--	--	--	--
NOV. 05...	4	10	0	1	3	30
JAN. 18...	2	30	1	1	0	20
APR. 20...	3	0	4	1	0	20

DATE	HEPTACHLOR (UG/L)	HEPTACHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	PCB (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
JAN. 18...	.00	.00	.00	--	--	--	.0	.04	.00	.00
MAR. 06...	.00	.00	.00	--	--	--	.0	.03	.00	.00
JUNE 21...	.00	.00	.00	.00	.00	.00	.0	.00	.00	.00
SEP. 07...	.00	.00	.00	.00	.00	.00	.0	.03	.00	.00

DATE	TIME	DISCHARGE (CFS)	BIO-CHEMICAL OXYGEN DEMAND (MG/L)
JULY 19...	1120	2450	1.3

YELLOWSTONE RIVER BASIN

06279500 BIGHORN RIVER AT KANE, WYO.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	898	844	---	---	864	847	820	---	554	899	774
2	---	872	857	---	---	777	861	824	402	605	866	---
3	871	886	---	---	---	793	845	841	399	---	925	---
4	925	896	974	---	---	873	832	816	456	600	732	762
5	978	---	937	---	---	868	882	847	449	592	724	809
6	898	891	942	---	---	860	869	849	562	592	713	804
7	940	901	983	---	---	903	854	---	465	592	732	803
8	877	865	1060	---	---	868	847	---	---	597	697	799
9	854	859	1030	---	---	852	850	---	443	613	708	789
10	862	864	---	---	---	871	834	812	438	609	724	786
11	851	889	---	---	---	864	813	795	501	631	752	778
12	859	905	---	---	---	866	810	801	528	613	730	779
13	859	912	---	---	---	861	799	786	516	626	753	782
14	---	898	---	---	---	884	797	823	514	657	---	781
15	---	895	---	---	---	861	822	821	---	641	788	783
16	---	901	---	---	---	922	825	795	511	666	782	770
17	---	885	---	---	---	---	804	713	506	701	774	773
18	---	870	---	---	---	877	803	657	454	692	787	782
19	805	875	---	---	---	874	798	607	536	737	774	779
20	921	---	---	---	---	860	856	604	636	713	---	774
21	917	877	---	---	---	835	857	566	562	771	787	771
22	919	874	---	---	---	831	---	535	528	800	786	775
23	919	854	---	---	---	844	824	507	570	762	---	789
24	845	---	---	---	---	816	824	546	569	718	774	---
25	874	861	---	---	---	---	---	589	573	---	851	807
26	909	---	---	---	---	---	851	584	561	747	---	817
27	914	860	---	---	798	823	862	613	569	743	---	815
28	875	852	---	---	797	856	861	---	551	740	771	812
29	836	860	---	---	854	875	---	632	557	741	768	799
30	856	855	---	---	---	848	811	577	---	729	786	797
31	872	---	---	---	---	842	---	508	---	---	749	---
MONTH	---	879	---	---	---	856	835	699	514	671	774	788

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	0.5	2.0	---	---	2.0	9.5	6.0	---	21.0	19.0	19.0
2	---	---	1.5	---	---	1.5	11.5	7.0	17.0	17.0	19.0	---
3	9.0	---	0.5	---	---	1.5	8.5	9.5	16.5	---	19.5	---
4	7.0	---	0.0	---	---	3.0	9.0	11.5	14.5	19.0	20.5	18.0
5	11.0	---	0.0	---	---	4.5	9.5	12.0	17.0	16.0	21.5	16.5
6	11.5	---	0.0	---	---	5.0	12.0	11.0	14.5	16.5	22.5	16.5
7	12.0	---	0.0	---	---	3.5	11.0	---	19.0	17.0	23.5	16.0
8	12.0	---	0.0	---	---	5.5	11.0	---	---	24.5	24.0	15.0
9	12.5	6.0	0.0	---	---	4.5	9.0	---	16.5	21.5	25.0	16.0
10	12.0	6.0	---	---	---	6.5	7.0	12.5	19.0	22.5	25.0	16.5
11	11.5	7.0	---	---	---	8.5	6.0	13.0	19.5	21.5	24.5	16.0
12	11.0	6.5	---	---	---	9.0	9.0	12.0	17.5	21.5	23.5	16.5
13	12.0	7.0	---	---	---	9.5	9.0	14.5	17.0	22.5	23.0	16.5
14	---	6.0	---	---	---	9.5	8.0	17.0	17.0	22.5	---	16.5
15	---	5.0	---	---	---	9.0	14.5	17.0	---	21.5	25.0	17.0
16	---	4.0	---	---	---	9.5	14.0	18.0	17.5	21.5	25.5	18.0
17	---	2.5	---	---	---	---	9.5	17.5	17.5	22.5	25.0	17.5
18	---	2.0	---	---	---	10.0	7.0	17.0	18.0	23.0	23.5	17.0
19	5.5	1.5	---	---	---	10.0	6.5	14.0	16.0	17.0	23.0	17.5
20	9.0	---	---	---	---	7.5	11.0	14.5	16.0	18.0	---	16.0
21	9.0	5.0	---	---	---	7.0	11.5	15.0	18.0	18.0	21.5	15.5
22	10.5	5.0	---	---	---	7.0	---	12.0	19.5	20.5	21.0	14.5
23	10.5	9.0	---	---	---	7.0	14.5	11.5	20.0	22.0	---	14.5
24	10.0	---	---	---	---	7.0	14.5	11.5	20.5	22.0	17.0	---
25	9.0	4.0	---	---	---	---	---	15.0	20.0	---	21.5	10.5
26	9.0	---	---	---	---	---	11.0	10.5	17.5	21.5	---	12.5
27	8.0	3.0	---	---	3.0	4.5	13.5	15.0	19.5	20.5	---	12.0
28	3.0	3.5	---	---	3.0	5.0	14.0	---	20.5	21.5	22.0	11.5
29	1.0	2.0	---	---	2.5	4.5	---	17.0	22.0	21.5	22.0	11.5
30	0.5	2.5	---	---	---	6.5	9.0	17.0	---	23.5	21.5	11.5
31	1.0	---	---	---	---	8.5	---	19.0	---	---	18.5	---
MONTH	---	---	---	---	---	6.5	10.5	13.5	18.0	20.5	22.0	15.5

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06279500 BIGHORN RIVER AT KANE, WYO.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	8.5	3.0	3.0	2.0	2.0	0.5	0.5	0.0	0.0	2.0	1.5
2	8.5	7.5	3.0	3.0	2.0	1.0	0.5	0.5	0.0	0.0	2.5	2.0
3	8.0	7.0	3.5	3.0	1.0	1.0	0.5	0.5	0.0	0.0	2.5	2.5
4	9.0	8.0	4.0	3.5	1.0	1.0	1.5	1.0	0.0	0.0	2.5	2.5
5	10.5	9.0	4.0	3.0	1.0	1.0	1.0	0.5	0.0	0.0	2.5	2.5
6	12.0	10.5	3.5	2.5	1.0	1.0	0.5	0.0	0.0	0.0	3.5	2.5
7	12.0	11.5	2.5	2.0	1.0	1.0	0.0	0.0	0.0	0.0	3.5	3.0
8	12.0	11.0	3.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	3.0	3.0
9	11.5	10.5	3.5	3.0	1.0	0.5	0.0	0.0	0.0	0.0	3.0	3.0
10	12.0	11.0	4.0	3.5	0.5	0.5	0.0	0.0	0.0	0.0	3.5	3.0
11	12.0	11.5	4.0	4.0	0.5	0.5	0.0	0.0	0.0	0.0	4.0	3.5
12	12.0	11.0	5.0	4.0	0.5	0.0	0.0	0.0	0.0	0.0	5.0	4.0
13	11.0	10.0	5.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	5.0
14	10.0	9.0	5.5	5.5	0.0	0.0	0.0	0.0	0.0	0.0	6.0	5.5
15	9.0	7.0	5.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	5.5
16	7.0	6.5	5.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	6.0	5.5
17	7.0	6.5	4.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	6.0
18	7.0	6.5	3.0	2.5	0.0	0.0	0.5	0.0	0.0	0.0	6.5	6.0
19	6.5	5.5	2.5	2.0	0.0	0.0	0.5	0.0	0.0	0.0	6.5	6.5
20	6.0	5.5	2.5	2.0	0.0	0.0	0.5	0.5	0.0	0.0	6.5	6.5
21	7.0	6.0	2.5	2.5	0.0	0.0	0.5	0.0	0.0	0.0	6.5	6.0
22	7.5	7.0	3.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	6.5	6.0
23	7.5	7.0	3.0	2.5	0.0	0.0	0.5	0.0	0.0	0.0	6.5	6.5
24	7.5	7.0	3.0	2.5	0.0	0.0	1.0	0.5	0.0	0.0	6.5	6.0
25	8.5	7.5	2.5	2.5	1.0	0.0	1.0	1.0	0.0	0.0	6.0	6.0
26	8.5	8.0	2.5	2.5	1.5	1.0	1.5	1.0	0.0	0.0	6.0	6.0
27	8.5	5.5	2.5	2.5	1.5	0.5	1.5	1.0	0.0	0.0	6.0	5.0
28	5.5	3.0	2.5	2.5	1.5	0.5	1.5	0.5	0.0	0.0	5.0	5.0
29	3.0	2.5	2.5	2.0	1.0	0.5	0.5	0.0	1.5	0.0	5.0	4.5
30	2.5	2.0	2.0	2.0	0.5	0.5	0.0	0.0	---	---	4.5	4.5
31	3.0	2.5	---	---	0.5	0.5	0.0	0.0	---	---	5.5	4.5
MONTH	12.0	2.0	5.5	2.0	2.0	0.0	1.5	0.0	1.5	0.0	6.5	1.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.5	5.5	7.5	7.0	14.5	14.0	20.0	19.5	19.0	17.5	17.0	16.5
2	6.0	5.5	7.5	7.0	14.5	14.0	19.5	17.5	18.0	17.0	17.0	17.0
3	6.0	5.5	9.0	7.5	14.5	14.0	17.5	16.0	17.0	16.0	17.0	17.0
4	6.0	5.5	9.5	8.5	14.5	13.5	16.5	15.5	16.0	15.5	17.5	16.5
5	6.0	5.5	9.5	9.5	14.5	13.5	18.0	16.0	16.5	15.5	17.5	17.5
6	6.5	6.0	9.5	9.0	15.5	14.5	18.0	17.5	17.5	16.5	17.5	17.5
7	7.0	6.5	9.0	8.5	16.5	15.5	19.0	17.5	18.5	17.5	18.0	16.5
8	7.0	6.5	8.5	8.0	17.0	16.5	20.0	19.0	19.5	18.0	17.5	17.0
9	7.0	7.0	8.5	8.0	17.0	16.0	20.0	19.5	20.5	19.0	17.5	17.0
10	7.5	7.0	9.0	8.5	16.0	15.0	20.5	19.0	21.0	19.5	17.5	16.5
11	7.5	7.5	9.0	9.0	17.0	16.0	20.0	19.5	20.5	19.5	17.0	16.0
12	8.0	7.5	9.0	9.0	17.0	16.5	21.0	19.5	21.0	20.0	17.5	16.5
13	8.0	7.5	9.5	8.5	17.0	16.0	21.0	20.0	21.0	19.5	17.0	16.5
14	7.5	7.0	10.5	9.5	17.0	16.5	20.5	19.0	20.5	19.0	17.0	16.0
15	7.5	7.0	11.0	10.5	17.5	17.0	20.0	18.5	22.0	20.0	17.0	16.0
16	8.0	7.5	13.0	11.0	18.0	17.0	20.0	19.0	21.5	20.5	17.0	16.0
17	8.0	8.0	13.0	12.5	18.0	17.5	19.0	17.5	21.5	20.0	17.0	16.0
18	8.0	6.5	12.5	12.5	18.0	17.5	19.5	18.0	21.0	20.0	17.0	16.0
19	6.5	6.0	12.5	12.0	18.0	16.5	18.5	15.0	20.5	19.5	17.0	16.0
20	6.5	6.0	12.0	11.0	16.5	16.0	15.5	15.0	19.5	18.5	16.0	14.5
21	7.5	6.5	12.0	11.5	17.0	16.0	16.0	15.0	19.0	18.0	15.5	14.5
22	8.0	7.5	12.0	11.5	18.5	17.0	17.0	15.5	19.0	18.0	14.5	14.5
23	8.0	7.5	11.5	11.5	18.5	18.0	18.0	16.5	19.0	16.5	15.0	14.5
24	8.0	7.5	12.0	11.0	18.5	18.0	19.5	18.0	16.5	16.0	14.5	13.5
25	8.0	7.5	12.0	12.0	18.5	18.0	19.5	18.5	16.5	16.0	13.5	12.5
26	7.5	6.5	12.0	11.0	18.5	18.0	19.5	18.0	16.5	16.5	12.5	11.5
27	8.0	7.0	12.0	11.5	18.0	17.5	19.5	18.0	18.0	16.5	12.0	11.5
28	9.0	8.0	12.5	11.5	18.5	17.5	19.5	17.5	19.0	18.0	12.0	12.0
29	9.0	8.5	13.5	12.5	19.5	18.5	19.5	18.5	19.0	18.5	12.0	11.5
30	9.0	7.5	14.0	13.5	20.0	19.5	19.5	19.0	19.0	18.5	12.5	11.5
31	---	---	14.0	13.5	---	---	19.0	18.0	19.0	17.0	---	---
MONTH	9.0	5.5	14.0	7.0	20.0	13.5	21.0	15.0	22.0	15.5	18.0	11.5
YEAR	22.0	0.0										

YELLOWSTONE RIVER BASIN

06279500 BIGHORN RIVER AT KANE, WYO.--Continued

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)
JULY 19...	1120	2450	8.4	8.3	710	550	70

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
OCT. 06...	1300	10.5	2300	2270	14100	74	88	93	95	99	100
NOV. 05...	1510	3.0	2770	457	3420	--	--	--	--	--	--
NOV. 30...	0930	2.0	2410	134	872	--	--	--	--	--	--
JAN. 18...	1420	.0	3230	214	1870	--	--	--	--	--	--
FEB. 07...	1210	.0	2360	130	828	--	--	--	--	--	--
MAR. 06...	1520	2.5	3020	807	6580	30	44	74	87	99	100
MAY 03...	1305	13.0	1940	283	1480	--	--	--	--	--	--
MAY 16...	1330	11.0	2110	326	1860	34	57	81	89	100	--
JUNE 21...	1400	16.0	7140	1590	30700	22	30	55	81	96	100
JULY 06...	1000	18.0	3490	573	5400	33	42	58	78	98	100
JULY 31...	1640	24.0	2160	244	1420	28	39	72	86	100	--
SEP. 07...	1550	17.5	2220	232	1390	--	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	NUMBER OF SAM- PLING POINTS	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM
MAR. 06...	1520	2.5	3020	10	1	2	9
JUNE 21...	1400	16.0	7140	9	0	1	6
SEP. 07...	1550	17.5	2220	5	1	2	34

DATE	BED MAT. FALL DIAM. % FINER THAN .500 MM	BED MAT. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
MAR. 06...	24	34	39	47	65	92	94
JUNE 21...	27	32	33	35	45	63	83
SEP. 07...	90	96	96	99	100	--	--

YELLOWSTONE RIVER BASIN

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06282000 SHOSHONE RIVER BELOW BUFFALO BILL RESERVOIR, WYO.

LOCATION.--Lat 44°31'00", long 109°05'50", in lot 71, NE¼ sec.3, T.52 N., R.102 W., Park County, at gaging station 0.5 mile downstream from Trail Creek, 1 mile west of Cody city limits, and 5.5 miles downstream from Buffalo Bill Reservoir.

DRAINAGE AREA.--1,538 sq mi.

PERIOD OF RECORD.--Chemical analyses: April 1947 to September 1949, October 1964 to September 1972.
Water temperatures: April 1947 to September 1949.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 08...	1500	867	15	140	42	9.2	13	2.2	139	0	53	2.1
NOV. 03...	0940	875	15	160	46	8.6	13	2.7	145	0	57	4.2
DEC. 02...	1240	897	15	0	60	12	17	2.7	154	0	100	3.1
JAN. 05...	1135	604	16	30	67	17	19	3.3	214	0	91	4.8
FEB. 09...	1500	748	16	100	58	11	20	2.7	181	0	80	4.1
MAR. 08...	1030	864	15	200	50	12	20	2.3	162	0	73	3.1
APR. 06...	1540	1470	15	250	42	8.1	18	1.6	126	0	69	2.4
MAY 02...	0945	1300	14	50	42	11	20	1.6	145	0	72	4.2
31...	1735	1200	16	70	41	8.2	17	2.6	140	0	55	2.3
JULY 12...	1730	2760	15	0	20	2.9	8.5	1.4	71	0	22	2.0
31...	1400	1260	14	70	29	6.9	8.6	1.9	99	0	37	1.7
AUG. 30...	1425	917	16	100	45	5.8	11	2.8	132	0	50	2.3

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 08...	.3	.2	60	206	.28	482	140	26	.5	335	7.0	--
NOV. 03...	.3	.0	60	218	.30	515	150	31	.5	357	7.0	8.0
DEC. 02...	.4	.7	80	292	.40	707	200	74	.5	464	7.0	5.5
JAN. 05...	.5	.0	100	324	.44	528	240	64	.5	503	7.0	2.0
FEB. 09...	.3	.5	100	282	.38	570	190	42	.6	443	7.6	3.0
MAR. 08...	.4	.2	110	255	.35	595	170	37	.7	406	7.6	8.0
APR. 06...	.2	.1	60	219	.30	869	140	37	.7	360	7.4	9.5
MAY 02...	.2	.0	70	236	.32	828	150	31	.7	378	7.0	5.0
31...	.3	.1	50	212	.29	687	140	25	.6	335	6.8	11.5
JULY 12...	.2	.3	50	107	.15	797	61	3	.5	170	7.3	17.5
31...	.3	.9	50	149	.20	507	100	19	.4	256	7.0	15.0
AUG. 30...	.3	.3	70	199	.27	493	140	32	.4	316	7.0	17.5

YELLOWSTONE RIVER BASIN

06284500 BITTER CREEK NEAR GARLAND, WYO.

LOCATION.--Lat 44°45'13", long 108°35'29", in SW¼SW¼SW¼ sec. 7, T.55 N., R.97 W., Big Horn County, at bridge on county road, 100 ft upstream from gaging station, 1 mile upstream from mouth, 4 miles southeast of Garland, and 5 miles southwest of Byron.

DRAINAGE AREA.--80.5 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1951 to December 1953 (partial-record station), August 1958 to September 1961, April 1969 to September 1972.

Water temperatures: July 1969 to September 1972.

EXTREMES.--1971-72:

Dissolved solids: Maximum, 1,290 mg/l Mar. 15-31; minimum, 402 mg/l June 12-25.

Hardness: Maximum, 360 mg/l Jan. 13-31, Feb. 14-29; minimum, 160 mg/l June 12-25.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.										
01-17	277	18	56	19	90	2.8	221	0	220	4.9
18-25	250	17	55	19	88	3.2	212	0	230	5.1
26-31	67	19	70	27	190	3.1	321	0	380	10
NOV.										
01-17	42	18	71	29	230	3.5	336	0	510	13
18-30	33	17	70	30	250	3.7	345	0	540	14
DEC.										
01-16	22	20	87	31	260	3.9	379	0	600	16
17-31	18	20	81	31	250	3.8	374	0	550	16
JAN.										
01-12	15	24	93	29	240	3.8	360	0	530	17
13-31	12	26	93	30	240	3.8	355	0	560	18
FEB.										
01-13	13	21	82	33	220	3.0	347	0	500	17
14-29	18	16	87	35	250	4.0	304	0	600	18
MAR.										
01-14	22	13	84	35	280	3.3	322	0	650	17
15-31	22	12	70	39	300	3.3	302	0	690	19
APR.										
01-09	19	9.9	72	33	290	3.5	311	0	650	18
10-30	276	17	56	11	73	2.1	188	0	170	7.1
MAY										
01-31	287	19	56	14	77	2.6	190	0	190	5.0
JUNE										
01-11	238	17	47	14	81	2.7	194	0	180	5.0
12-25	296	17	43	14	67	2.4	177	0	160	4.0
26-30	230	17	47	16	80	3.1	196	0	180	5.0
JULY										
01-17	244	17	45	16	84	2.6	192	0	170	4.8
18-31	282	18	50	16	77	3.1	208	0	180	5.4
AUG.										
01-18	352	18	52	17	77	2.8	214	0	180	4.7
19-31	378	18	56	18	77	2.7	220	0	190	4.4
SEP.										
01-15	307	18	60	19	89	2.9	222	0	200	5.5
16-30	311	17	58	18	84	2.9	226	0	200	5.1
WTD. AVG. TIME WTD.	--	18	55	17	90	2.8	213	0	211	5.8
AVG. TONS PER DAY	169	18	66	23	159	3.1	265	0	363	10
	--	8.1	25	7.7	41	1.3	97	0	96	2.6

YELLOWSTONE RIVER BASIN

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06284500 BITTER CREEK NEAR GARLAND, WYO.--Continued

EXTREMES.--1971-72: Continued

Specific conductance: Maximum daily, 2,200 micromhos Jan. 7; minimum daily, 540 micromhos Apr. 18.
 Water temperatures: Maximum, 22.0°C June 7, 28, 30, July 8; minimum, freezing point on many days during December to February.

Period of record (July 1969 to September 1972):

Dissolved solids: Maximum, 1,320 mg/l Mar. 1-17, 1970; minimum, 364 mg/l June 18-30, 1971.
 Hardness: Maximum, 460 mg/l Feb. 12-28, 1971; minimum, 150 mg/l June 18 to July 8, 1971.
 Specific conductance: Maximum daily, 2,300 micromhos Jan. 30, 1971; minimum daily, 540 micromhos Apr. 18, 1972.
 Water temperatures: Maximum, 23.0°C June 23, July 20, 1970, Aug. 11, 1971; minimum, freezing point on many days during winter period.

REMARKS.--Daily samples for chemical analysis composited by discharge.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.										
01-17	1.4	140	526	.72	393	220	37	2.7	807	7.7
18-25	1.3	140	528	.72	356	220	42	2.6	814	7.6
26-31	3.5	210	874	1.19	158	290	23	4.9	1320	8.0
NOV.										
01-17	4.1	230	1060	1.44	120	300	21	5.8	1540	8.0
18-30	4.0	240	1110	1.51	98.9	300	15	6.3	1610	8.2
DEC.										
01-16	4.6	250	1230	1.67	73.1	340	34	6.1	1700	8.0
17-31	4.8	240	1160	1.58	56.4	330	23	6.0	1650	8.0
JAN.										
01-12	--	200	1140	1.55	46.2	350	55	5.6	1590	8.2
13-31	--	220	1170	1.59	37.9	360	69	5.5	1640	8.1
FEB.										
01-13	--	200	1070	1.46	37.6	340	55	5.2	1520	8.1
14-29	--	170	1180	1.60	57.3	360	111	5.7	1660	7.9
MAR.										
01-14	--	180	1250	1.70	74.3	350	86	6.5	1750	7.4
15-31	--	220	1290	1.75	76.6	340	92	7.1	1810	7.8
APR.										
01-09	--	220	1240	1.69	63.6	320	65	7.1	1770	7.6
10-30	--	110	437	.59	326	180	26	2.3	720	7.8
MAY										
01-31	--	120	465	.63	360	200	44	2.4	715	8.1
JUNE										
01-11	1.8	80	451	.61	290	170	16	2.7	691	7.5
12-25	1.5	80	402	.55	321	160	20	2.3	618	7.6
26-30	1.8	90	453	.62	281	180	22	2.6	705	6.5
JULY										
01-17	1.8	120	443	.60	292	180	21	2.7	665	7.4
18-31	2.0	140	461	.63	351	190	20	2.4	719	7.0
AUG.										
01-18	1.8	130	465	.63	442	200	24	2.4	723	7.8
19-31	1.6	140	482	.66	492	210	33	2.3	748	7.8
SEP.										
01-15	1.2	150	510	.69	423	230	46	2.6	784	7.9
16-30	.96	160	501	.68	421	220	34	2.5	763	7.9
WTD. AVG.	--	132	512	.70	--	206	32	2.7	784	7.7
TIME WTD.										
AVG.	--	166	785	1.07	--	260	42	4.1	1150	7.8
TONS										
PER DAY	--	0	233	--	--	--	--	--	--	--

YELLOWSTONE RIVER BASIN

06284500 BITTER CREEK NEAR GARLAND, WYO.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TEMPER- ATURE (DEG C)
OCT.					
05...	1600	270	.50	--	14.5
NOV.					
04...	1040	49	.19	--	5.0
29...	1530	33	.26	--	5.5
JAN.					
06...	1155	15	.50	--	.0
FEB.					
09...	1000	14	.74	--	.0
MAR.					
08...	1735	26	--	.25	7.0
MAY					
01...	1600	271	--	.12	12.0
JUNE					
01...	1245	215	--	.20	19.0
JULY					
06...	1625	282	--	.14	17.5
AUG.					
08...	1700	301	--	.070	21.5
SEP.					
07...	1025	327	--	.090	14.5

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

[illegible]

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TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

[illegible]

YELLOWSTONE RIVER BASIN

06284800 WHISTLE CREEK NEAR GARLAND, WYO.

LOCATION.--Lat 44°43'21", long 108°34'16", in NW¼NW¼NE¼ sec. 30, T.55 N., R.97 W., Big Horn County, at gaging station, 330 ft upstream from Elk-Lovell Canal, 5.6 miles southeast of Garland, and 6.3 miles southwest of Byron.

DRAINAGE AREA.--101 sq mi.

PERIOD OF RECORD.--Chemical analyses: August 1958 to May 1960, April 1969 to September 1972.
Water temperatures: July 1969 to September 1972.

EXTREMES.--1971-72:

Dissolved solids: Maximum, 5,750 mg/l Feb. 1-16; minimum, 249 mg/l July 1-12.

Hardness: Maximum, 1,400 mg/l Feb. 1-16; minimum, 120 mg/l July 1-12.

Specific conductance: Maximum daily, 10,300 micromhos Feb. 6, 7; minimum daily, 301 micromhos June 15.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PU- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.										
01-17	46	14	55	19	130	4.1	192	0	310	6.2
18-29	40	14	47	15	110	4.0	189	0	260	5.4
30-31	14	11	190	100	820	6.9	445	0	2200	45
NOV.										
01-03	14	11	190	100	820	6.9	445	0	2200	45
04-18	6.4	10	120	60	550	6.5	360	0	1400	25
19-30	2.8	9.4	200	110	890	7.1	460	0	2500	46
DEC.										
01-11	1.8	10	210	130	1100	8.6	466	0	3000	54
12-27	.97	11	260	160	1200	9.6	571	0	3300	60
28-31	.44	10	87	26	130	3.0	354	0	330	6.2
JAN.										
01-16	.30	15	200	140	1100	12	436	0	2900	50
17-31	.24	15	240	160	1100	11	436	0	3100	53
FEB.										
01-16	.29	12	290	180	1300	7.4	464	0	3700	52
17-29	1.7	7.7	69	30	260	6.3	207	0	680	15
MAR.										
01-13	5.0	10	140	66	560	6.5	300	0	1500	33
14-31	2.8	8.4	200	120	1000	7.2	391	0	2700	56
APR.										
01-15	3.6	4.7	200	130	1200	7.2	347	0	3100	67
16-30	25	14	44	12	56	2.3	143	0	160	5.2
MAY										
01-08	50	17	47	15	47	2.1	159	0	140	4.3
09-31	63	16	52	14	63	2.6	166	0	190	5.3
JUNE										
01-22	71	15	36	9.3	40	2.4	126	0	120	2.0
23-30	52	15	43	12	50	2.8	132	0	160	3.0
JULY										
01-12	54	15	33	9.2	32	2.0	113	0	100	2.1
13-31	52	14	47	14	63	2.9	149	0	200	4.0
AUG.										
01-19	86	15	48	13	64	3.6	172	0	170	3.2
20-31	90	16	53	15	62	3.3	172	0	190	3.4
SEP.										
01-16	50	16	57	18	73	2.9	180	0	220	4.4
17-30	47	14	62	20	92	2.9	185	0	250	5.1
WTD. AVG.	--	15	52	17	93	3.1	168	0	260	5.4
TIME WTD.										
AVG.	32	13	115	61	464	5.3	274	0	1260	24
TONS										
PER DAY	--	1.3	4.5	1.5	8.0	.3	15	0	22	.5

YELLOWSTONE RIVER BASIN

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06284800 WHISTLE CREEK NEAR GARLAND, WYO.--Continued

EXTREMES.--1971-72: Continued

Water temperatures: Maximum, 26.0°C July 29; minimum, freezing point on many days during December to March.

Period of record (July 1969 to September 1972):

Dissolved solids: Maximum, 10,000 mg/l Jan. 7-10, 1970; minimum, 230 mg/l June 24-30, 1970.

Hardness: Maximum, 2,010 mg/l Jan. 7-10, 1970; minimum, 88 mg/l May 14-31, 1971.

Specific conductance: Maximum daily, 12,300 micromhos Jan. 10, 1970; minimum daily, 301 micromhos June 28, 1970, June 15, 1972.

Water temperature: Maximum, 28.0°C July 17, 1970; minimum, freezing point on many days during winter period.

REMARKS.--Daily samples for chemical analysis composited by discharge.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED (SUM OF TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.										
01-17	.55	100	636	.87	79.0	220	58	3.9	982	7.7
18-29	.55	100	551	.75	59.5	180	24	3.6	857	7.7
30-31	4.5	270	3610	4.91	136	890	520	12	4660	7.9
NOV.										
01-03	4.5	270	3610	4.91	136	890	520	12	4660	7.9
04-18	3.1	170	2360	3.21	40.8	550	250	10	3150	7.8
19-30	4.8	240	4010	5.45	30.3	950	570	13	5040	7.9
DEC.										
01-11	6.6	280	4770	6.49	23.2	1100	680	15	5820	8.0
12-27	8.0	300	5320	7.24	13.9	1300	840	14	6500	8.0
28-31	.22	100	768	1.04	.91	320	34	3.1	1130	7.6
JAN.										
01-16	--	190	4650	6.32	3.77	1100	740	15	5230	7.9
17-31	--	190	4920	6.69	3.19	1200	840	14	5610	7.9
FEB.										
01-16	--	240	5750	7.82	4.50	1400	1020	15	6310	8.0
17-29	--	100	1180	1.60	5.42	300	130	6.6	1610	8.1
MAR.										
01-13	--	120	2510	3.41	33.9	610	364	9.8	3270	7.8
14-31	--	190	4280	5.82	32.4	1000	679	14	5140	8.0
APR.										
01-15	--	200	4900	6.66	47.6	1000	715	16	5810	8.0
16-30	--	80	363	.49	24.5	160	43	1.9	611	7.9
MAY										
01-08	--	100	352	.48	47.5	180	50	1.5	535	8.0
09-31	--	110	422	.57	71.8	190	54	2.0	645	8.0
JUNE										
01-22	.16	20	288	.39	55.2	130	25	1.5	442	7.4
23-30	.13	50	352	.48	49.4	160	48	1.7	542	7.7
JULY										
01-12	.03	60	249	.34	36.3	120	28	1.3	397	7.2
13-31	.22	100	420	.57	59.0	170	53	2.1	647	7.4
AUG.										
01-19	.17	100	403	.55	93.6	170	32	2.1	635	7.6
20-31	.21	120	429	.58	104	190	53	1.9	662	7.6
SEP.										
01-16	.11	130	481	.65	64.9	220	69	2.2	729	7.8
17-30	.13	120	528	.72	67.0	240	85	2.3	788	7.8
WTD. AVG.	--	95	530	.72	--	201	63	2.5	780	7.7
TIME WTD.										
AVG.	--	142	2090	2.84	--	537	311	7.1	2580	7.8
TONS										
PER DAY	--	0	46	--	--	--	--	--	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS-CHARGE (CFS)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TEMPER- ATURE (DEG C)
OCT. 05...	1215	37	.72	--	10.5
NOV. 04...	1310	7.2	1.4	--	1.5
05...	1230	--	--	.000	--
29...	1345	3.3	.070	--	2.0
JAN. 05...	1230	.25	.050	--	.0
FEB. 01...	1120	.20	1.4	--	.0
MAR. 09...	1030	5.3	--	.030	2.5
MAY 02...	1500	38	--	.10	13.5
31...	1600	41	--	.15	26.0
JULY 05...	1515	53	--	.050	22.5
AUG. 08...	1100	57	--	.040	19.5
SEP. 05...	1425	51	--	.090	18.5

[illegible]

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TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

[illegible]

YELLOWSTONE RIVER BASIN

06285100 SHOSHONE RIVER NEAR LOVELL, WYO.

LOCATION.--Lat 44°50'20", long 108°26'00", in NW¼NW¼ sec.16, T.56 N., R.96 W., Big Horn County, at gaging station, 30 ft upstream from bridge on U.S. Highway 310, and 1.5 miles west of Lovell.

DRAINAGE AREA.--2,350 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1966 to September 1972.

Water temperatures: October 1966 to September 1972.

Sediment records: October 1971 to September 1972.

EXTREMES.--1971-72:

Dissolved solids: Maximum, 598 mg/l Nov. 16-30; minimum, 252 mg/l June 1-16.

Hardness: Maximum, 340 mg/l Jan. 25-31; minimum, 120 mg/l June 1-16.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.										
01-16	1260	17	58	19	73	3.1	199	0	210	7.6
17-31	1247	16	59	20	70	3.2	194	0	220	7.7
NOV.										
01-15	1090	16	63	20	65	3.3	204	0	210	8.8
16-30	730	16	75	26	83	4.0	239	0	260	12
DEC.										
01-15	1070	17	66	21	55	3.4	205	0	200	8.8
16-31	1080	16	64	19	51	3.7	200	0	180	9.0
JAN.										
01-16	1110	20	83	26	58	3.8	236	0	230	12
25-31	823	22	93	25	62	3.8	256	0	240	12
FEB.										
01-15	870	19	72	19	52	3.5	190	3	180	9.1
16-29	1270	18	62	20	61	3.7	180	0	190	9.3
MAR.										
01-14	1070	16	64	21	54	3.3	186	0	180	8.3
15-31	952	14	60	20	50	3.0	177	0	170	8.3
APR.										
01-14	1710	15	47	11	37	2.1	143	0	120	5.5
15-30	1550	15	46	12	42	2.1	148	0	120	6.3
MAY										
01-15	693	17	61	18	69	2.6	193	0	200	9.3
16-31	704	17	58	20	73	2.6	195	0	210	8.7
JUNE										
01-16	2810	16	35	8.7	31	2.2	127	0	93	2.0
17-30	988	16	47	15	55	2.5	160	0	160	5.0
JULY										
01-19	1630	16	39	12	43	2.0	139	0	120	4.6
20-31	862	15	56	17	68	3.0	193	0	190	7.5
AUG.										
01-19	1050	17	56	18	72	3.1	201	0	190	7.4
20-31	1070	17	61	19	74	3.3	208	0	210	7.9
SEP.										
01-15	796	17	65	21	82	3.1	218	0	220	9.9
16-30	835	15	58	21	79	3.0	197	0	220	10
WTD. AVG. TIME WTD.	--	16	56	17	56	2.9	181	0	174	7.4
AVG. TONS PER DAY	1150	17	59	18	60	3.0	189	0	186	8.1
	--	51	175	54	176	9.1	563	0	542	23

YELLOWSTONE RIVER BASIN

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06285100 SHOSHONE RIVER NEAR LOVELL, WYO.--Continued

EXTREMES.--1971-72: Continued

Specific conductance: Maximum daily, 1,040 micromhos Jan. 27; minimum daily, 325 micromhos June 16.

Water temperatures: Maximum, 24.0°C June 30; minimum, freezing point on many days during December to February.

Period of record:

Dissolved solids: Maximum, 867 mg/l Nov. 1-30, 1966; minimum, 183 mg/l June 29 to July 17, 1967.

Hardness: Maximum, 434 mg/l Feb. 1-6, 1970; minimum, 93 mg/l June 23-30, 1971.

Specific conductance: Maximum daily, 1,360 micromhos July 21, 1968; minimum daily, 257 micromhos June 30, 1970.

Water temperatures: Maximum, 30.0°C June 6, 1969; minimum, freezing point on many days during winter period.

REMARKS.--Daily samples for chemical analyses composited by discharge.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.										
01-16	.82	140	490	.67	1670	220	60	2.1	756	7.8
17-31	.63	140	495	.67	1670	230	70	2.0	752	7.7
NOV.										
01-15	.58	150	490	.67	1440	240	72	1.8	754	7.8
16-30	.72	180	598	.81	1180	290	98	2.1	904	7.9
DEC.										
01-15	.45	150	475	.65	1370	250	83	1.5	726	7.7
16-31	.54	140	444	.60	1290	240	74	1.4	685	7.8
JAN.										
01-16	--	160	552	.75	1650	310	120	1.4	837	7.5
25-31	--	160	590	.80	1310	340	130	1.5	881	7.5
FEB.										
01-15	--	130	452	.61	1060	260	99	1.4	693	8.4
16-29	--	110	458	.62	1570	240	92	1.7	699	8.1
MAR.										
01-14	--	140	442	.60	1280	240	87	1.5	694	7.6
15-31	--	120	413	.56	1060	230	85	1.4	662	7.7
APR.										
01-14	--	90	306	.42	1410	160	43	1.3	487	7.9
15-30	--	90	320	.44	1340	160	39	1.4	508	7.8
MAY										
01-15	--	120	478	.65	894	230	72	2.0	730	8.2
16-31	--	130	491	.67	933	230	70	2.1	747	8.1
JUNE										
01-16	.32	30	252	.34	1910	120	19	1.2	398	6.5
17-30	.83	60	384	.52	1020	180	48	1.8	595	7.6
JULY										
01-19	.45	100	307	.42	1350	150	33	1.5	471	7.1
20-31	.99	120	457	.62	1060	210	51	2.0	712	7.6
AUG.										
01-19	1.1	130	468	.64	1330	210	49	2.1	733	7.8
20-31	1.1	140	500	.68	1440	230	60	2.1	763	7.7
SEP.										
01-15	.53	160	528	.72	1130	250	70	2.3	799	8.0
16-30	.51	180	506	.69	1140	230	70	2.3	846	8.2
WTD. AVG.	--	117	423	.58	--	211	63	1.7	655	7.6
TIME WTD.										
AVG.	--	127	449	.61	--	224	69	1.7	694	7.7
TONS										
PER DAY	--	0	1320	--	--	--	--	--	--	--

06285100 SHOSHONE RIVER NEAR LOVELL, WYO.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TEMPER- ATURE (DEG C)
OCT.					
07...	1410	1180	.34	--	14.0
NOV.					
04...	1755	1290	.16	--	7.0
30...	1600	803	.060	--	4.0
FEB.					
09...	1200	810	.11	--	.0
MAR.					
10...	1050	1070	--	.030	8.0
MAY					
03...	1050	681	--	.060	10.5
30...	1430	803	--	.070	18.0
JULY					
07...	1040	1920	--	.060	18.5
AUG.					
09...	1030	855	--	.040	18.5
SEP.					
06...	1410	871	--	.040	17.5

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

[illegible]

YELLOWSTONE RIVER BASIN

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06285100 SHOSHONE RIVER NEAR LOVELL, WYO.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	5.0	4.0	---	0.0	5.0	10.5	9.5	22.0	21.5	21.0	17.0
2	9.5	---	2.0	---	0.0	5.0	---	10.5	20.0	14.0	18.0	17.0
3	---	---	2.5	0.0	---	5.0	9.0	10.5	18.5	15.0	19.5	18.0
4	---	---	---	0.0	---	1.5	9.0	10.5	16.0	17.5	20.0	19.5
5	13.0	4.5	2.5	0.0	---	6.0	10.5	10.5	17.0	19.5	21.0	17.5
6	13.0	4.5	---	0.0	---	8.0	10.5	10.0	18.0	18.0	22.0	16.0
7	13.5	5.0	0.0	0.5	---	5.5	10.0	7.5	18.0	20.0	22.0	18.0
8	12.0	---	0.0	1.0	0.5	6.5	9.5	9.5	19.0	20.0	22.5	17.0
9	9.5	---	---	1.0	0.5	---	10.0	15.0	18.0	19.5	22.5	16.0
10	---	6.0	1.0	0.0	0.5	9.0	9.0	13.5	17.0	20.0	23.5	15.5
11	13.0	7.5	0.0	1.0	1.0	9.0	10.0	13.5	17.5	19.5	22.0	16.5
12	---	8.0	0.5	---	0.5	10.0	11.0	12.0	17.5	20.5	22.0	18.0
13	10.0	---	1.0	0.0	1.0	11.0	8.0	16.5	16.0	21.0	22.5	18.0
14	10.0	6.5	---	0.0	2.0	10.5	7.5	17.0	17.0	19.0	22.0	17.0
15	8.0	---	1.0	0.5	2.0	---	---	18.0	16.0	20.5	22.0	18.0
16	7.0	5.0	0.0	0.5	---	7.0	12.0	18.0	16.5	20.0	21.5	17.0
17	---	4.5	1.0	1.0	3.5	12.0	9.5	17.0	21.0	20.0	21.0	17.5
18	8.0	4.0	1.0	0.5	5.0	12.0	6.0	17.0	19.5	20.5	21.5	17.0
19	---	---	1.5	1.0	---	---	7.5	13.0	17.5	13.0	19.0	17.0
20	9.0	6.0	2.0	1.0	5.0	11.5	10.5	15.0	18.0	15.0	19.0	15.0
21	10.0	6.5	2.0	3.0	5.0	11.0	10.5	17.0	18.5	17.0	21.0	14.5
22	9.0	6.0	3.0	---	---	---	10.0	16.0	20.0	20.0	20.0	15.5
23	---	5.0	---	0.0	4.0	---	10.0	17.0	19.0	20.0	15.0	14.5
24	10.0	5.0	4.0	1.0	---	7.0	10.0	17.0	16.0	22.0	18.5	12.0
25	10.0	5.5	---	0.0	2.5	---	8.0	13.0	17.5	20.0	19.5	10.0
26	10.0	4.5	0.0	0.0	4.0	6.0	10.0	17.5	17.0	20.5	20.5	11.5
27	---	---	0.0	0.0	6.0	6.0	10.0	18.0	18.5	20.0	21.0	12.5
28	2.0	4.5	0.0	0.0	---	---	10.0	17.5	21.5	21.5	21.0	10.0
29	3.5	4.5	0.0	0.0	6.0	---	10.5	17.5	23.0	21.5	20.0	11.0
30	3.5	4.0	1.0	0.0	---	7.0	8.0	20.5	24.0	21.5	21.0	14.0
31	5.5	---	0.0	1.0	---	9.5	---	21.5	---	21.0	16.0	---
MONTH	---	---	1.0	0.5	---	---	9.5	14.5	18.5	19.5	20.5	15.5
YEAR	11.0											

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
OCT.											
07...	1410	14.0	1180	448	1430	50	60	76	83	98	100
NOV.											
04...	1755	7.0	1290	228	794	--	--	--	--	--	--
30...	1600	4.0	803	44	95	--	--	--	--	--	--
JAN.											
17...	1530	.0	800	313	676	--	--	--	--	--	--
FEB.											
09...	1200	.0	810	184	402	--	--	--	--	--	--
18...	1050	2.5	1080	146	426	--	--	--	--	--	--
MAR.											
10...	1050	8.0	1070	210	607	56	72	87	94	99	100
MAY											
03...	1050	10.5	681	358	658	--	--	--	--	--	--
30...	1430	18.0	803	222	481	--	--	--	--	--	--
JULY											
07...	1040	18.5	1920	647	3350	20	27	48	72	94	100
AUG.											
09...	1030	18.5	855	244	563	43	60	84	94	100	--
SEP.											
06...	1410	17.5	871	180	423	--	--	--	--	--	--
24...	1230	12.0	848	54	124	--	--	--	--	--	--

YELLOWSTONE RIVER BASIN

06285400 SAGE CREEK AT SIDON CANAL, NEAR DEEVER, WYO.

LOCATION.--Lat 44°53'08", long 108°33'01", in NE¼NE¼NW¼ sec.34, T.57 N., R.97 W., Big Horn County, at gaging station, 300 ft downstream from Polecat Creek, 800 ft upstream from Sidon Canal crossing, and 2.4 miles east of Deaver.

DRAINAGE AREA.--341 sq mi.

PERIOD OF RECORD.--Chemical analyses: August 1958 to May 1960, April 1969 to September 1972.
Water temperatures: July 1969 to September 1972.

EXTREMES.--1971-72:

Dissolved solids: Maximum, 3,060 mg/l Dec. 16-31; minimum, 767 mg/l Apr. 15-30.

Hardness: Maximum, 1,300 mg/l Jan. 13 to Feb. 16; minimum, 340 mg/l Apr. 15-30.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.										
01-15	136	15	110	51	180	4.7	232	0	610	12
16-26	163	15	98	45	150	3.8	219	0	550	8.9
27-31	38	13	210	110	380	5.3	374	0	1400	21
NOV.										
01-17	31	12	210	130	450	5.8	357	0	1700	26
18-30	25	12	220	130	430	5.5	365	0	1700	26
DEC.										
01-15	19	12	230	150	490	6.0	402	0	1900	28
16-31	16	12	240	150	490	6.2	441	0	1900	28
JAN.										
01-12	15	15	230	160	430	4.4	369	0	1800	26
13-31	11	16	230	170	440	4.9	389	0	1800	27
FEB.										
01-16	12	13	230	190	460	4.9	375	0	1800	28
17-29	31	12	170	120	390	7.4	261	0	1400	26
MAR.										
01-17	38	11	180	130	340	5.8	294	0	1400	28
18-31	21	8.4	210	160	430	5.6	331	0	1800	33
APR.										
01-14	17	7.7	200	130	390	4.6	296	0	1600	27
15-30	98	14	85	32	110	2.6	182	0	420	8.8
MAY										
01-18	74	16	120	49	160	3.7	203	0	650	13
19-31	112	16	120	49	170	3.5	220	0	660	13
JUNE										
01-18	67	14	110	51	170	4.6	230	0	640	22
19-30	93	14	110	46	160	4.0	206	0	610	10
JULY										
01-17	69	14	110	48	170	4.1	219	0	630	9.0
18-31	60	13	120	53	190	4.8	243	0	700	12
AUG.										
01-16	83	15	120	53	170	4.5	247	0	660	11
17-31	147	16	100	43	140	4.0	229	0	520	10
SEP.										
01-15	129	16	110	42	140	3.6	229	0	540	9.1
16-30	110	14	120	45	150	3.8	242	0	570	9.7
WTD. AVG.	--	14	125	61	198	4.2	243	0	756	14
TIME WTD.										
AVG.	64	13	159	94	285	4.7	285	0	1110	19
TONS										
PER DAY	--	2.5	22	11	34	.7	42	0	130	2.4

YELLOWSTONE RIVER BASIN

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06285400 SAGE CREEK AT SIDON CANAL, NEAR DEAVER, WYO.--Continued

EXTREMES.--1971-72: Continued

Specific conductance: Maximum daily, 3,940 micromhos Dec. 26; minimum daily, 910 micromhos Apr. 16.
 Water temperatures: Maximum, 25.0°C June 6; minimum, freezing point Dec. 8-12.

Period of record (July 1969 to September 1972):

Dissolved solids: Maximum, 3,410 mg/l Dec. 26-31, 1970; minimum 767 mg/l Apr. 15-30, 1972.

Hardness: Maximum, 1,600 mg/l Dec. 26-31, 1970; minimum, 340 mg/l Apr. 15-30, 1972.

Specific conductance: Maximum daily, 4,790 micromhos Dec. 29, 1970; minimum daily, 910 micromhos Apr. 16, 1972.

Water temperatures: Maximum, 27.0°C June 23, 1971; minimum, freezing point on many days during winter period.

REMARKS.--Daily samples for chemical analysis composited by discharge.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.										
01-15	.67	300	1100	1.50	404	480	290	3.6	1580	7.6
16-26	.65	220	982	1.34	432	430	250	3.1	1380	7.7
27-31	2.0	420	2330	3.17	239	980	670	5.3	2980	7.9
NOV.										
01-17	2.2	500	2720	3.70	228	1100	770	6.0	3490	7.8
18-30	2.2	480	2710	3.69	183	1100	780	5.7	3350	7.9
DEC.										
01-15	2.8	500	3030	4.12	155	1200	860	6.2	3730	7.8
16-31	3.0	490	3060	4.16	132	1200	850	6.1	3740	7.9
JAN.										
01-12	--	330	2830	3.85	115	1200	897	5.3	3300	7.9
13-31	--	340	2930	3.98	87.0	1300	980	5.4	3370	7.8
FEB.										
01-16	--	370	2940	4.00	95.3	1300	992	5.4	3410	8.1
17-29	--	290	2260	3.07	189	900	686	5.6	2730	8.0
MAR.										
01-17	--	300	2210	3.01	227	990	749	4.7	2730	7.9
18-31	--	380	2810	3.82	159	1200	928	5.4	3390	8.0
APR.										
01-14	--	320	2520	3.43	116	1000	757	5.3	3080	8.0
15-30	--	140	767	1.04	203	340	191	2.6	1110	7.9
MAY										
01-18	--	220	1110	1.51	222	490	323	3.1	1520	8.2
19-31	--	240	1140	1.55	345	500	320	3.3	1550	7.9
JUNE										
01-18	.90	220	1130	1.54	204	480	300	3.4	1590	7.7
19-30	.79	200	1060	1.44	267	460	290	3.2	1430	7.7
JULY										
01-17	1.0	240	1100	1.50	205	470	290	3.4	1520	7.4
18-31	1.3	270	1220	1.66	198	520	320	3.6	1650	7.2
AUG.										
01-16	.86	280	1160	1.58	260	520	320	3.3	1610	7.9
17-31	.66	240	949	1.29	377	430	240	3.0	1360	7.8
SEP.										
01-15	.26	260	975	1.33	340	450	260	2.9	1380	7.8
16-30	.29	240	1030	1.40	306	480	290	3.0	1430	8.0
WTD. AVG.	--	262	1290	1.76	--	562	363	3.5	1740	7.8
TIME WTD.										
AVG.	--	309	1840	2.50	--	779	544	4.3	2330	7.8
TONS										
PER DAY	--	0	223	--	--	--	--	--	--	--

DATE	TIME	DIS- CHARGE (CFS)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TEMPER- ATURE (DEG C)
OCT.					
06...	1700	135	.40	--	14.0
NOV.					
04...	1520	36	.18	--	8.0
DEC.					
01...	1020	23	.050	--	3.0
JAN.					
05...	1530	13	.060	--	.0
FEB.					
01...	1550	9.4	.12	--	.0
MAR.					
09...	1540	33	--	.040	6.0
MAY					
02...	1210	87	--	.050	11.0
31...	1030	90	--	.080	17.0
JULY					
05...	1245	95	--	.090	19.0
AUG.					
10...	1125	84	--	.050	21.5
SEP.					
06...	1015	143	--	.050	15.5

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

[illegible]

YELLOWSTONE RIVER BASIN

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06286258 BIG COULEE NEAR LOVELL, WYO.

LOCATION.--Lat 44°58'31", long 108°17'50", in SE¼NW¼SE¼ sec.27, T.58 N., R.59 W., Big Horn County, at gaging station, 0.6 mile upstream from county road, 1.3 miles upstream from mouth, and 11 miles northeast of Lovell. Prior to Aug. 31, 1972, at site 0.7 mile downstream.

DRAINAGE AREA.--28.8 mi. Area at site used prior to Aug. 31, 1972, 30.1 sq mi.

PERIOD OF RECORD.--Sediment records: April 1970 to September 1972.

EXTREMES.--1971-72:

Sediment concentrations: Maximum daily, not determined; minimum daily, no flow for many days during year.
Sediment discharge: Maximum daily, 511 tons Aug. 23; minimum daily, 0 tons on many days during year.

Period of record:

Sediment concentrations: Maximum daily, not determined; minimum daily, no flow for many days each year.
Sediment discharge: Maximum daily, 511 tons Aug. 23, 1972; minimum daily, 0 tons on many days each year.

MONTHLY AND ANNUAL SUMMARY OF WATER AND SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

MONTH	DISCHARGE (CFS-DAYS)	RUNOFF (ACRE-FeET)	SUSPENDED SEDIMENT					
			DISCHARGE (TONS)	DAILY DISCHARGE (TONS)			CONCENTRATION (MG/L)	
				MEAN	MAXIMUM	MINIMUM	WEIGHTED MEAN	MAXIMUM OBSERVED
OCTOBER 1971.....	0.21	0.4	2.0	0.06	2.0	0		
NOVEMBER.....	0	0	0	0	0	0		
DECEMBER.....	0	0	0	0	0	0		
JANUARY 1972.....	0	0	0	0	0	0		
FEBRUARY.....	6.20	12	6.75	.23	1.1			
MARCH.....	0	0	0	0	0	0		
APRIL.....	0	0	0	0	0	0		
MAY.....	0	0	0	0	0	0		
JUNE.....	0	0	0	0	0	0		
JULY.....	.59	1.2	1.34	.04	1.33			
AUGUST.....	5.3	11	511	16.5	511			
SEPTEMBER.....	0	0	0	0	0	0		
WATER YEAR.....	12.30	24	521.09	1.42	511	0		

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SED- IMENT (MG/L)	SUS- PEN- DED SED- IMENT DIS- CHARGE (T/DAY)	SUS. SED. FALL	SUS. SED. FALL	SUS. SED. FALL	SUS. SED. FALL	SUS. SED. FALL
						DIAM. % FINER THAN .004 MM	DIAM. % FINER THAN .016 MM	DIAM. % FINER THAN .062 MM	DIAM. % FINER THAN .125 MM	DIAM. % FINER THAN .250 MM
FEB. 18...	1415	.0	.50	3560	4.8	52	82	98	100	--
AUG. 23...	1400	14.0	37	52800	5270	36	74	96	98	100

YELLOWSTONE RIVER BASIN

06287000 BIGHORN RIVER NEAR ST. XAVIER, MONT.

LOCATION.--Lat 45°19'00", long 107°55'05", in NW¼NE¼ sec.16, T.6 S., R.31 E., Big Horn County, at gaging station 800 ft downstream from Yellowtail afterbay dam, 1,500 ft downstream from Lime Kiln Creek, and 14 miles southwest of St. Xavier.

DRAINAGE AREA.--19,667 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1966 to September 1972.
Water temperatures: December 1962 to September 1972.

EXTREMES.--1971-72:

Dissolved solids: Maximum, 557 mg/l Feb. 1-29; minimum, 381 mg/l Aug. 1-31.
Hardness: Maximum, 270 mg/l on several days during February to July; minimum, 200 mg/l Aug. 1-31.
Specific conductance: Maximum daily, 865 micromhos May 30, 31; minimum daily, 580 micromhos Aug. 2.
Water temperatures: Maximum, 17.0°C Sept. 9; minimum, 1.0°C on many days during February and March.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT.												
01-31	--	5170	--	11	0	66	22	76	3.6	184	0	240
NOV.												
01-30	--	5070	--	12	0	64	21	73	3.8	180	0	240
DEC.												
01-31	--	4240	--	11	0	62	21	64	3.0	181	0	230
JAN.												
01-31	--	4000	--	12	10	62	20	68	3.4	187	0	230
FEB.												
01-29	--	4000	--	11	10	72	23	75	3.7	191	6	260
MAR.												
01-31	--	4620	--	11	10	70	22	73	3.6	200	0	250
APR.												
01-30	--	6700	--	10	30	70	23	72	3.9	201	0	240
MAY												
01-31	--	5060	--	9.7	10	69	23	78	3.6	196	0	250
JUNE												
01-30	--	6130	--	8.6	10	71	23	70	3.4	189	0	240
JULY												
01-14	--	4190	--	7.7	10	69	23	68	3.1	187	0	240
15-31	--	3700	--	8.1	10	59	18	56	2.7	161	0	190
AUG.												
01-31	--	3230	--	9.4	30	53	16	48	2.5	153	0	170
SEP.												
01-30	--	3140	--	10	10	56	17	49	3.0	154	0	180
WTD. AVG.	--	--	--	10	11	66	21	69	3.4	185	0	232
TIME WTD.												
AVG.	--	4600	--	10	11	65	21	67	3.4	182	0	228
TONS												
PER DAY	--	--	--	128	0	818	265	854	43	2300	5	2890

ANALYSES OF ADDITIONAL SAMPLES

DEC.												
08...	1620	4460	5.0	11	0	66	22	73	3.4	185	0	240
MAR.												
02...	1225	4480	2.0	13	10	72	25	74	3.6	208	0	260
JUNE												
08...	1345	6200	8.0	9.2	20	69	23	72	3.6	191	0	250
SEP.												
06...	1140	3170	15.5	10	30	54	17	49	2.5	149	0	180

YELLOWSTONE RIVER BASIN

91

06287000 BIGHORN RIVER NEAR ST. XAVIER, MONT.--Continued

EXTREMES.--Continued

Period of record:

Dissolved solids: Maximum, 842 mg/l Jan. 1-31, 1967; minimum, 322 mg/l Aug. 1-31, 1971.

Hardness: Maximum, 394 mg/l Mar. 1-31, 1967; minimum, 160 mg/l Sept. 1-18, 1971.

Specific conductance: Maximum daily, 1,180 micromhos on several days during 1966-67; minimum daily, 492 micromhos Aug. 28, 1971.

Water temperatures: Maximum, 24.5°C on several days during 1963-65; minimum, freezing point on many days during winter periods most years prior to regulation.

REMARKS.--Daily samples for chemical analysis composited by discharge. Additional samples were collected for more comprehensive definition of water quality at this station. Maximum observed during water year: Dissolved solids, 565 mg/l Mar. 2; hardness, 280 mg/l Mar. 2. Thermograph records furnished by Montana Fish and Game Department. Flow regulated since Nov. 3, 1965, by Bighorn Lake.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT. 01-31	9.7	.4	.15	--	520	.71	7260	260	100	2.1	810	8.2
NOV. 01-30	11	.5	.00	--	514	.70	7040	250	99	2.0	789	7.8
DEC. 01-31	9.7	.4	.21	--	491	.67	5620	240	93	1.8	755	8.2
JAN. 01-31	11	.3	.24	--	500	.68	5400	240	84	1.9	747	8.2
FEB. 01-29	11	.5	.23	.010	557	.76	6020	270	110	2.0	822	8.4
MAR. 01-31	11	.4	.28	.010	541	.74	6750	270	100	2.0	788	8.1
APR. 01-30	11	.4	.30	.000	531	.72	9610	270	100	1.9	813	7.9
MAY 01-31	12	.3	.20	.000	543	.74	7420	270	110	2.1	832	8.1
JUNE 01-30	10	.4	.04	.000	520	.71	8610	270	120	1.8	805	7.5
JULY 01-14	8.7	.4	.18	.000	513	.70	5800	270	110	1.8	782	8.1
15-31	6.6	.3	.23	.000	421	.57	4210	220	89	1.6	664	7.7
AUG. 01-31	6.4	.4	.00	.000	381	.52	3320	200	73	1.5	605	7.0
SEP. 01-30	7.0	.4	.17	.000	399	.54	3380	210	83	1.5	630	7.7
WTD. AVG. TIME WTD.	10	.4	.17	--	505	.69	--	253	99	1.9	771	7.9
AVG. TONS PER DAY	9.8	.4	.17	--	496	.68	--	249	97	1.9	759	7.9
	124	4.9	2.1	--	6270	--	--	--	--	--	--	--

ANALYSES OF ADDITIONAL SAMPLES

DEC. 08...	10	.3	.42	--	519	.71	6250	260	100	2.0	790	8.0
MAR. 02...	13	.4	.44	--	565	.77	6830	280	110	1.9	835	7.9
JUNE 08...	11	.6	.24	.000	534	.73	8940	270	110	1.9	818	6.6
SEP. 06...	6.4	.4	.39	.010	394	.54	3370	200	83	1.5	611	7.7

YELLOWSTONE RIVER BASIN

06287000 BIGHORN RIVER NEAR ST. XAVIER, MONT.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 12...	1225	5220	.060	--	--
NOV. 09...	1025	4920	.10	--	--
DEC. 08...	1620	4460	.030	120	0
JAN. 17...	1055	3990	.030	--	--
31...	1235	3970	.050	--	--
MAR. 02...	1225	4480	.020	140	10
APR. 10...	1150	6580	.020	--	--
MAY 09...	1200	6400	.020	--	--
JUNE 08...	1345	6200	.010	160	10
JULY 06...	1330	4740	.010	--	--
AUG. 08...	1035	3190	.020	--	--
SEP. 06...	1140	3170	.040	90	10

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

[illegible]

06290500 LITTLE BIGHORN RIVER BELOW PASS CREEK, NEAR WYOLA, MONT.

LOCATION.--Lat 45°10'38", long 107°23'36", in W₁SW₄ sec.35, T.7 S., R.35 E., Big Horn County, at gaging station 3.5 miles north of Wyola and 6 miles downstream from Pass Creek.

DRAINAGE AREA.--428 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1969 to September 1972.

Water temperatures: October 1969 to September 1972.

Sediment records: October 1969 to September 1972.

EXTREMES.--1971-72:

Dissolved solids: Maximum, 458 mg/l Mar. 13-31; minimum, 193 mg/l June 1-15.

Hardness: Maximum, 320 mg/l Mar. 13-31; minimum, 170 mg/l June 1-15.

Specific conductance: Maximum daily, 760 micromhos Mar. 24; minimum daily, 322 micromhos June 8.

Water temperatures: Maximum, 22.5°C Aug. 13-16; minimum, freezing point on many days during October to March.

Sediment concentrations: Maximum daily, 1,910 mg/l Feb. 28; minimum daily, 22 mg/l Nov. 19.

Sediment discharge: Maximum daily, 6,030 tons Feb. 28; minimum daily, 7.1 tons Jan. 29.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT.												
01-31	--	161	--	7.7	0	65	27	23	1.5	251	0	120
NOV.												
01-30	--	148	--	6.8	0	60	28	21	1.6	234	0	130
DEC.												
01-31	--	114	--	7.7	10	51	29	21	1.0	206	0	130
JAN.												
01-31	--	102	--	8.4	10	55	27	21	1.6	213	0	130
FEB.												
01-19	--	123	--	8.1	10	58	26	23	1.9	212	0	130
20-29	--	439	--	8.2	120	54	20	29	4.4	194	0	130
MAR.												
01-12	--	338	--	8.7	10	64	28	40	3.2	230	0	170
13-31	--	246	--	8.0	10	74	32	36	2.2	269	0	170
APR.												
01-30	--	186	--	5.8	20	60	31	31	1.5	230	0	160
MAY												
01-17	--	260	--	7.9	20	65	27	26	1.4	246	0	120
18-31	--	626	--	6.9	20	52	17	8.3	1.0	208	0	46
JUNE												
01-15	--	896	--	5.8	20	46	13	5.3	.9	181	0	32
16-30	--	426	--	6.2	20	50	17	9.4	1.1	196	0	51
JULY												
01-31	--	223	--	6.6	10	56	22	16	1.2	229	0	89
AUG.												
01-31	--	151	--	6.9	10	58	25	17	1.2	241	0	94
SEP.												
01-30	--	131	--	6.2	10	62	24	17	1.6	244	0	94
WTD. AVG.	--	--	--	7.0	19	56	23	19	1.6	219	0	98
TIME WTD.												
AVG.	--	234	--	7.2	14	58	25	21	1.6	227	0	115
TONS												
PER DAY	--	--	--	4.4	0	36	14	12	1.0	139	0	62

ANALYSES OF ADDITIONAL SAMPLES

DEC.												
02...	1200	92	.0	6.7	0	76	30	22	1.4	264	0	130
MAR.												
01...	1630	398	1.0	8.4	20	59	25	33	3.9	221	0	150
JUNE												
01...	1615	860	14.5	5.2	30	47	14	5.8	.8	184	0	36
SEP.												
05...	1600	135	16.0	5.8	10	61	26	17	1.2	235	0	91

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT.					
07...	1230	157	.030	--	--
NOV.					
04...	1330	188	.080	--	--
DEC.					
02...	1200	92	.040	80	20
JAN.					
13...	1330	89	.090	--	--
FEB.					
09...	1445	123	.030	--	--
MAR.					
01...	1630	398	.010	90	10
APR.					
05...	1200	185	.040	--	--
MAY					
03...	1230	215	.010	--	--
JUNE					
01...	1615	860	.020	100	0
JULY					
10...	1600	230	.010	--	--
AUG.					
09...	1145	150	.010	--	--
SEP.					
05...	1600	135	.030	80	20

06290500 LITTLE BIGHORN RIVER BELOW PASS CREEK, NEAR WYOLA, MONT.--Continued

EXTREMES.--Continued

Period of record:

Dissolved solids: Maximum, 473 mg/l Mar. 20-31, 1970; minimum, 193 mg/l June 1-15, 1972.

Hardness: Maximum, 320 mg/l Mar. 13-31, 1972; minimum, 170 mg/l Feb. 11-15, June 1-24, June 25-30, 1971, June 1-15, 1972.

Specific conductance: Maximum daily, 792 micromhos Apr. 6, 1971; minimum daily, 322 micromhos June 8, 1972.

Water temperatures: Maximum, 22.5°C on several days during 1970-72; minimum, freezing point on many days during winter periods.

Sediment concentrations: Maximum daily, 3,510 mg/l Apr. 25, 1971; minimum daily, 17 mg/l Oct. 30, Nov. 3, 1970.

Sediment discharge: Maximum daily, 9,110 tons Apr. 25, 1971; minimum daily, 6.5 tons Jan. 16, 1970.

REMARKS.--Daily samples for chemical analysis composited by discharge. Additional samples were collected for more comprehensive definition of water quality at this station. Flow affected by ice during most of winter months. Flow regulated by diversions for irrigation upstream from station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.												
01-31	1.3	.1	.01	--	369	.50	160	270	68	.6	595	8.1
NOV.												
01-30	1.2	.3	.00	--	364	.50	145	260	73	.6	582	8.2
DEC.												
01-31	2.0	.1	.16	--	344	.47	106	250	78	.6	537	8.2
JAN.												
01-31	1.3	.1	.16	--	350	.48	96.4	250	74	.6	549	8.0
FEB.												
01-19	1.6	.2	.20	.000	354	.48	118	250	78	.6	559	8.1
20-29	2.2	.2	.24	.030	345	.47	409	220	58	.9	531	8.2
MAR.												
01-12	2.3	.5	.11	.000	430	.58	392	270	86	1.1	670	8.3
13-31	2.7	.2	.04	.020	458	.62	304	320	96	.9	709	8.0
APR.												
01-30	1.4	.2	.00	.010	404	.55	203	280	89	.8	635	7.9
MAY												
01-17	1.4	.3	.03	.000	370	.50	260	270	72	.7	596	8.1
18-31	.9	.3	.19	.000	236	.32	399	200	29	.3	402	8.0
JUNE												
01-15	1.0	.2	.01	.000	193	.26	467	170	20	.2	337	7.6
16-30	1.0	.2	.00	.000	232	.32	267	190	34	.3	419	7.3
JULY												
01-31	1.1	.2	.02	.000	305	.41	184	230	43	.5	496	8.1
AUG.												
01-31	1.8	.2	.00	.000	323	.44	132	250	50	.5	527	7.6
SEP.												
01-30	1.4	.3	.00	.000	327	.44	116	250	53	.5	536	8.0
WTD. AVG.	1.4	.2	.06	--	314	.43	--	234	55	.5	511	7.9
TIME WTD.												
AVG.	1.5	.2	.06	--	342	.47	--	250	64	.6	549	8.0
TONS												
PER DAY	.9	.1	.04	--	199	--	--	--	--	--	--	--

ANALYSES OF ADDITIONAL SAMPLES

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
DEC.												
02...	1.0	.1	.14	--	398	.54	98.9	310	97	.5	639	7.9
MAR.												
01...	2.3	.2	.42	--	393	.53	422	250	69	.9	596	7.9
JUNE												
01...	.3	.2	.33	.000	201	.27	467	170	24	.2	348	7.8
SEP.												
05...	1.2	.3	.04	.000	319	.43	116	260	67	.5	529	8.2

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
MAR.											
01...	1745	1.0	386	260	271	46	61	89	97	100	--
JUNE											
01...	1650	4.5	845	356	812	--	--	87	94	99	100

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

[illegible]

06290500 LITTLE BIGHORN RIVER BELOW PASS CREEK, NEAR WYOLA, MONT.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	162	59	26	156	131	55	120	33	11
2	234	469	296	157	110	47	105	42	12
3	180	511	248	152	94	39	110	47	14
4	162	152	66	192	346	179	120	42	14
5	157	93	39	190	225	115	130	39	14
6	155	94	39	152	118	48	130	52	18
7	150	66	27	150	96	39	130	43	15
8	151	51	21	161	80	35	110	39	12
9	149	54	22	155	77	32	120	47	15
10	146	55	22	155	73	31	125	39	13
11	144	62	24	154	74	31	120	31	10
12	143	67	26	151	60	24	115	37	11
13	142	63	24	149	49	20	115	46	14
14	145	67	26	146	49	19	110	30	8.9
15	151	58	24	145	36	14	110	48	14
16	153	72	30	147	38	15	115	33	10
17	150	68	28	143	42	16	120	58	19
18	216	216	147	138	35	13	120	39	13
19	208	401	225	136	22	8.1	110	59	18
20	190	389	200	147	87	35	115	87	27
21	181	358	175	141	49	19	120	62	20
22	167	140	63	141	34	13	120	77	25
23	160	106	46	138	27	10	120	107	35
24	159	87	37	135	23	8.4	110	121	36
25	157	75	32	144	29	11	90	98	24
26	154	66	27	141	25	9.5	80	62	13
27	162	57	25	140	33	12	90	61	15
28	147	52	21	136	28	10	100	42	11
29	137	70	26	130	33	12	105	58	16
30	141	94	36	125	31	10	115	44	14
31	152	96	39	--	--	--	120	37	12
TOTAL	5005	--	2087	4447	--	930.0	3520	--	503.9

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	110	38	11	110	99	29	407	517	568
2	105	43	12	90	62	15	305	135	111
3	100	37	10	100	65	18	267	135	97
4	80	45	9.7	110	80	24	225	117	71
5	110	99	29	115	78	24	212	99	57
6	120	51	17	125	83	28	398	805	1220
7	130	52	18	130	77	27	503	779	1160
8	130	41	14	125	74	25	317	333	285
9	130	37	13	125	132	45	316	369	315
10	125	36	12	115	87	27	366	531	525
11	110	35	10	120	104	34	373	486	489
12	100	42	11	125	73	25	363	504	494
13	90	48	12	130	95	33	327	459	405
14	95	39	10	130	108	38	313	378	319
15	100	48	13	130	111	39	286	252	195
16	110	75	22	130	145	51	272	238	175
17	120	128	41	135	224	82	273	239	176
18	120	156	51	140	159	60	256	200	138
19	110	69	20	150	176	71	248	175	117
20	105	97	27	400	329	355	244	158	104
21	105	78	22	326	254	224	235	138	88
22	110	77	23	286	128	99	226	116	71
23	100	54	15	264	135	96	228	122	75
24	90	189	46	243	36	24	269	209	152
25	80	150	32	242	87	57	238	144	93
26	70	172	33	183	62	31	227	95	58
27	50	93	13	209	102	58	215	79	46
28	65	48	8.4	1170	1910	6030	207	73	41
29	85	31	7.1	1070	949	2740	200	64	35
30	100	35	9.5	--	--	--	202	70	38
31	110	53	16	--	--	--	207	64	36
TOTAL	3165	--	587.7	6728	--	10409	8725	--	7754

06290500 LITTLE BIGHORN RIVER BELOW PASS CREEK, NEAR WYOLA, MONT.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	210	199	113	233	194	122	851	480	1100
2	210	150	85	218	141	83	989	562	1500
3	200	97	52	212	115	66	1100	630	1870
4	196	89	47	208	94	53	1130	552	1680
5	187	44	22	252	323	220	1080	440	1280
6	180	51	25	245	237	157	994	359	963
7	179	34	16	242	143	93	991	316	846
8	174	41	19	256	170	118	981	321	850
9	174	46	22	251	143	97	983	293	778
10	174	34	16	253	120	82	850	219	503
11	174	48	23	253	97	66	812	229	502
12	174	47	22	255	86	59	768	176	365
13	180	45	22	257	103	71	694	139	260
14	185	48	24	255	102	70	632	125	213
15	177	44	21	285	156	120	583	125	197
16	174	53	25	337	295	268	540	110	160
17	176	49	23	410	414	458	505	102	139
18	186	47	24	509	516	709	480	98	127
19	194	68	36	611	527	869	545	171	252
20	196	257	136	593	364	583	508	99	136
21	192	277	144	688	443	823	452	92	112
22	194	94	49	799	482	1040	431	79	92
23	196	106	56	712	267	513	411	69	77
24	183	74	37	657	187	332	409	78	86
25	182	65	32	637	183	315	392	69	73
26	186	46	23	598	155	250	386	58	60
27	177	47	22	566	135	206	363	57	56
28	174	47	22	526	113	160	342	48	44
29	177	64	31	549	123	182	320	55	48
30	209	82	46	608	155	254	306	45	37
31	--	--	--	707	245	468	--	--	--
TOTAL	5570	--	1235	13182	--	8907	19828	--	14406

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	306	92	76	170	72	33	143	59	23
2	360	260	253	174	77	36	136	61	22
3	336	111	101	201	89	48	139	63	24
4	327	71	63	181	71	35	136	58	21
5	302	48	39	167	63	28	132	53	19
6	283	71	54	149	59	24	136	52	19
7	277	46	34	145	61	24	140	62	23
8	255	77	53	151	61	25	133	65	23
9	243	64	42	148	60	24	130	72	25
10	234	62	39	141	65	25	131	76	27
11	222	64	38	137	70	26	133	69	25
12	216	57	33	138	67	25	131	67	24
13	207	72	40	139	55	21	145	79	31
14	203	67	37	139	50	19	133	79	28
15	201	73	40	157	73	31	128	53	18
16	184	93	46	156	112	47	124	54	18
17	189	67	34	156	107	45	120	34	11
18	180	70	34	150	65	26	123	46	15
19	182	72	35	164	86	38	121	49	16
20	191	66	34	154	68	28	119	41	13
21	226	97	59	151	42	17	119	38	12
22	203	77	42	145	47	18	120	35	11
23	187	45	23	143	42	16	125	39	13
24	183	39	19	160	43	19	125	36	12
25	187	71	36	143	48	19	136	39	14
26	184	83	41	139	54	20	135	57	21
27	176	73	35	136	48	18	140	73	28
28	181	68	33	134	49	18	138	48	18
29	167	72	32	130	54	19	136	34	12
30	162	69	30	130	57	20	136	66	24
31	164	67	30	140	59	22	--	--	--
TOTAL	6918	--	1505	4668	--	814	3943	--	590

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

85699
49728.6

YELLOWSTONE RIVER BASIN

99

06298000 TONGUE RIVER NEAR DAYTON, WYO.

LOCATION.--Lat 44°50'58", long 107°18'14", in NE¼NE¼NE¼ sec.11, T.56 N., R.87 W., Sheridan County, at gaging station, 0.5 mile upstream from Crystal Draw, 0.6 mile downstream from intake of Highline ditch, and 2.5 miles southwest of Dayton.

DRAINAGE AREA.--204 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1966 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 22...	1230	57	9.3	190	33	9.7	2.9	.7	146	0	5.8	1.0
NOV. 19...	1150	68	7.2	150	35	12	1.0	.4	156	0	6.6	3.1
DEC. 20...	1445	62	7.5	100	37	11	1.5	.7	156	4	4.1	.6
JAN. 17...	1400	53	7.6	100	39	14	1.5	2.2	170	0	18	1.5
FEB. 17...	1125	52	8.3	170	39	11	1.0	.2	159	0	9.1	1.0
MAR. 22...	1130	64	7.2	50	36	10	1.3	.5	154	0	7.4	1.0
APR. 20...	1330	68	7.1	100	38	8.4	1.3	.5	149	0	7.4	1.0
MAY 22...	1300	931	6.5	210	18	3.7	1.3	.7	75	0	2.5	.8
JUNE 20...	1700	612	7.1	140	23	8.7	1.0	.7	122	0	1.6	.3
JULY 23...	0910	174	7.7	190	29	9.3	1.5	.7	134	0	3.3	2.3
AUG. 22...	1545	120	6.6	70	31	9.4	5.4	.5	132	4	9.9	1.7
SEP. 20...	1030	71	6.5	160	34	9.6	1.6	.9	142	0	2.5	4.3

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 22...	.1	.3	10	135	.18	20.8	120	0	.1	240	8.2	4.5
NOV. 19...	.2	.7	20	142	.19	26.1	140	12	.0	259	8.2	2.0
DEC. 20...	.2	.9	20	145	.20	24.3	140	5	.1	265	8.4	1.0
JAN. 17...	.2	1.0	30	168	.23	24.0	160	21	.1	297	8.0	2.5
FEB. 17...	.1	1.0	20	149	.20	20.9	140	10	.0	261	8.0	.5
MAR. 22...	.1	.4	0	140	.19	24.2	130	4	.0	256	8.1	5.0
APR. 20...	.2	.2	20	137	.19	25.2	130	8	.0	258	8.3	6.0
MAY 22...	.1	.7	10	72	.10	181	60	0	.1	129	7.9	5.0
JUNE 20...	.1	.3	0	103	.14	170	93	0	.0	171	8.0	8.0
JULY 23...	.2	.0	40	120	.16	56.4	110	0	.1	234	8.2	6.5
AUG. 22...	.1	.2	20	134	.18	43.4	120	5	.2	223	8.4	14.5
SEP. 20...	.1	.0	30	130	.18	24.9	120	4	.1	246	8.2	8.5

YELLOWSTONE RIVER BASIN

06305500 GOOSE CREEK BELOW SHERIDAN, WYO.

LOCATION.--Lat 44°49'25", long 106°57'40", in SEkSWk sec.15, T.56 N., R.84 W., Sheridan County, at gaging station, 700 ft north of Sheridan city limits, and 0.2 mile downstream from Soldier Creek.

DRAINAGE AREA.--392 sq mi.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 06...	1815	123	7.3	160	62	41	26	2.7	284	0	140	3.6
NOV. 03...	1700	122	8.2	150	61	40	28	2.9	268	0	150	4.2
DEC. 01...	1315	94	8.8	0	62	42	26	2.2	276	0	150	3.5
JAN. 07...	1150	73	13	100	55	36	23	2.0	235	0	120	6.3
FEB. 02...	1035	62	14	0	62	36	24	2.2	252	0	130	5.6
MAR. 01...	1210	224	10	240	66	46	27	5.1	251	0	190	4.7
APR. 06...	1105	136	5.9	20	60	40	25	2.3	236	0	150	6.2
MAY 17...	1215	348	11	70	28	12	9.3	1.2	113	0	43	1.7
JUNE 07...	1700	612	8.3	30	14	7.0	6.0	.9	65	0	25	.7
JULY 18...	1905	90	7.2	0	56	38	27	3.5	226	7	150	3.3
AUG. 11...	1035	79	9.8	460	64	46	33	3.7	293	0	160	12
SEP. 12...	1630	120	8.9	200	59	42	29	3.3	279	0	130	5.0

YELLOWSTONE RIVER BASIN

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06305500 GOOSE CREEK BELOW SHERIDAN, WYO.--Continued

PERIOD OF RECORD.--Chemical analyses: August 1959 to September 1960, August 1961 to September 1964, October 1967 to September 1972.
Sediment records: October 1971 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 06...	.4	.4	120	424	.58	141	320	87	.6	683	8.2	15.0
NOV. 03...	.4	.0	80	426	.58	140	320	100	.7	667	8.3	--
DEC. 01...	.4	.5	90	430	.58	109	330	104	.6	690	8.0	1.0
JAN. 07...	.4	5.3	100	375	.51	73.9	280	87	.6	616	7.8	1.5
FEB. 02...	.4	1.8	90	402	.55	67.3	300	93	.6	646	7.4	.0
MAR. 01...	.4	4.7	60	479	.65	290	360	154	.6	746	8.0	1.5
APR. 06...	.3	1.1	70	408	.55	150	320	126	.6	672	8.0	8.5
MAY 17...	.2	2.2	40	165	.22	155	120	27	.4	280	7.4	15.0
JUNE 07...	.1	.3	40	94	.13	155	65	12	.3	163	7.9	20.0
JULY 18...	.4	.4	120	403	.55	97.9	300	103	.7	635	8.4	22.5
AUG. 11...	.4	7.7	120	481	.65	103	350	110	.8	768	7.6	21.0
SEP. 12...	.4	6.4	120	424	.58	137	320	91	.7	681	7.7	18.5

SUSPENDED SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
OCT. 06...	1815	15.0	123	39	13
NOV. 03...	1700	--	122	21	6.9
DEC. 01...	1315	1.0	94	11	2.8
JAN. 07...	1150	1.5	73	10	2.0
FEB. 02...	1035	.0	62	10	1.7
MAR. 01...	1210	1.5	224	125	76
APR. 06...	1105	8.5	136	6	2.2
MAY 17...	1215	15.0	348	244	229
JUNE 07...	1700	20.0	612	74	122
JULY 18...	1905	22.5	90	16	3.9
AUG. 11...	1035	21.0	79	39	8.3
SEP. 12...	1630	18.5	120	16	5.2
24...	0800	8.0	92	8	2.0

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EXTREMES.--1971-72: Continued

Water temperatures: Maximum, 26.0°C Aug. 11; minimum, freezing point on many days during October to March.

Period of record:

Specific conductance: Maximum daily, 1,490 micromhos Aug. 12, 1966, Jan. 11, 1972; minimum daily, 196 micromhos May 30, 1967.

Water temperatures: Maximum, 31.0°C July 16, 1966; minimum, freezing point on many days during winter period.

REMARKS.--During periods of backwater the site of sampling is moved upstream 0.5 mile.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED FLUO- RIDE (F)	DIS-SOLVED NITRATE (NO3)	DIS-SOLVED BORON (B)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG)	NON-CAR- BONATE HARD- NESS (MG/L)	SODIUM AD-SORP- TION RATIO	SPECIFIC CONDUCTANCE (MICRO- MHOS)	PH (UNITS)	TEMPERATURE (DEG C)
	(MG/L)	(MG/L)	(UG/L)	(MG/L)			(MG/L)	(MG/L)				
OCT. 22...	.4	.3	100	513	.70	443	360	127	.8	767	8.3	8.0
NOV. 19...	.4	.3	80	474	.64	317	360	143	.7	734	8.2	1.0
DEC. 20...	.3	1.5	90	475	.65	257	360	125	.7	750	8.0	.5
JAN. 18...	.4	1.9	70	491	.67	292	370	140	.7	734	8.2	.0
FEB. 02...	.3	1.8	90	519	.71	294	380	159	.8	810	7.7	.0
MAR. 30...	.4	.4	90	623	.85	673	430	184	1.0	914	8.2	4.5
APR. 21...	.4	.1	80	505	.69	496	350	136	.9	774	8.4	12.5
MAY 24...	.2	.9	30	193	.26	855	130	36	.5	322	7.9	10.0
JUNE 21...	.2	.8	50	225	.31	711	160	45	.5	380	7.7	--
AUG. 01...	.4	.2	100	489	.67	296	350	124	.8	765	8.1	19.5
23...	.4	.3	90	538	.73	315	380	131	.9	816	8.3	18.5
SEP. 26...	.4	.1	90	514	.70	383	380	155	.8	811	8.4	7.0

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

[illegible]

YELLOWSTONE RIVER BASIN

06312500 POWDER RIVER NEAR KAYCEE, WYO.

LOCATION.--Lat 43°41'35", long 106°31'48", in NE¼NW¼SW¼ sec.13, T.43 N., R.81 W., Johnson County, at former gaging station at D Ranch, 600 ft downstream from headgate of Sussex Irrigation Canal, 2 miles downstream from confluence of North and Middle Forks, and 6 miles east of Kaycee.

DRAINAGE AREA.--980 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: May to October 1946, March to August 1947, March 1949 to November 1950, June 1951, May 1952 to September 1954, May 1968 to September 1972.

Water temperatures: March 1950 to September 1954.

Sediment records: March 1950 to September 1953.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL- CIUM (CA) (MG/L)	DIS-SOLVED MAG- NE- SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS-SOLVED SULFATE (S04) (MG/L)	DIS-SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 06...	1100	92	4.5	50	110	42	98	2.7	223	0	400	49
NOV. 11...	1655	121	9.4	50	120	33	90	2.4	230	0	390	39
DEC. 15...	1700	92	11	50	120	47	79	2.2	268	0	380	54
JAN. 12...	1100	77	10	20	100	47	88	2.2	241	0	370	49
FEB. 08...	0800	80	13	80	100	43	74	2.2	233	0	310	47
MAR. 09...	1500	148	10	50	110	49	120	3.3	207	0	470	41
APR. 21...	1020	208	8.5	50	81	26	96	2.6	180	0	310	34
MAY 17...	1215	920	9.9	50	50	14	17	1.6	119	0	100	8.3
JUNE 14...	1300	124	11	120	81	25	52	2.6	175	5	240	22
JULY 20...	1315	1.5	8.4	50	130	63	160	4.0	252	0	610	82
AUG. 16...	1351	1.4	7.9	150	140	70	150	4.4	245	0	630	68
SEP. 13...	1220	55	7.5	40	120	44	85	2.8	211	0	420	49

DATE	DIS-SOLVED FLUO- RIDE (F) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON-CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 06...	.5	.1	140	810	1.10	201	440	257	2.0	1150	8.0	11.0
NOV. 11...	.5	1.6	110	802	1.09	262	440	251	1.9	1160	7.6	5.0
DEC. 15...	.5	2.2	80	828	1.13	206	490	270	1.5	1210	8.0	.0
JAN. 12...	.4	2.5	90	789	1.07	164	460	262	1.8	1160	8.0	.0
FEB. 08...	.4	2.4	70	713	.97	154	430	239	1.6	1030	8.0	.0
MAR. 09...	.5	4.4	90	909	1.24	363	470	300	2.4	1260	8.1	6.5
APR. 21...	.5	2.2	100	653	.89	367	310	162	2.4	979	8.1	9.0
MAY 17...	.2	2.8	30	263	.36	653	180	82	.5	421	7.9	12.0
JUNE 14...	.4	.9	70	520	.71	174	310	158	1.3	786	8.5	19.0
JULY 20...	.6	.1	150	1190	1.62	4.82	600	390	2.9	1670	8.1	14.0
AUG. 16...	.6	.2	140	1190	1.62	4.50	640	440	2.6	1600	8.2	26.0
SEP. 13...	.5	.3	110	829	1.13	123	480	310	1.7	1200	8.1	17.0

YELLOWSTONE RIVER BASIN

105

06313000 SOUTH FORK POWDER RIVER NEAR KAYCEE, WYO.

LOCATION.--Lat 43°37'10", long 106°34'36", in NE¼Sec. 9, T.42 N., R.81 W., Johnson County, at former gaging station, 200 ft upstream from bridge on old U.S. Highway 87, 0.6 mile upstream from bridge on Interstate Highway 25, 1.2 miles upstream from Murphy Creek, 6.6 miles southeast of Kaycee, and 7 miles upstream from mouth.

DRAINAGE AREA.--1,150 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: September 1949, June 1951, December 1951 to September 1953, June 1968 to September 1972.

Water temperatures: April 1951 to September 1953.

Sediment records: May 1950 to September 1953.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NESIUM (Mg) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 05...	1120	1.4	.8	20	370	110	550	12	162	0	2200	230
NOV. 09...	1010	16	9.3	150	280	64	300	6.3	177	0	1400	110
DEC. 15...	1030	.07	11	10	420	90	600	8.3	345	0	2300	170
JAN. 11...	1200	2.2	13	40	410	140	390	8.2	281	0	1900	200
FEB. 09...	1320	3.5	11	90	360	87	340	7.1	203	0	1600	140
MAR. 08...	0920	109	7.0	50	220	53	230	6.7	104	0	1100	31
APR. 20...	0900	63	8.8	40	200	49	360	5.6	151	0	1200	62
MAY 16...	0930	38	9.8	70	210	65	400	6.7	180	0	1400	78
JUNE 13...	1115	20	10	110	240	56	380	8.1	174	0	1400	67
JULY 19...	1220	2.5	8.6	80	310	82	360	8.6	147	0	1700	80
AUG. 16...	0830	2.6	9.8	180	350	98	290	9.5	160	0	1700	57
SEP. 13...	1100	2.6	8.3	100	320	85	340	9.5	176	0	1600	99

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 05...	2.1	3.6	520	3560	4.84	13.5	1400	1200	6.5	4140	8.0	15.0
NOV. 09...	1.0	9.6	230	2270	3.09	98.1	950	805	4.2	2790	7.8	.5
DEC. 15...	1.0	3.3	340	3790	5.15	.72	1400	1120	6.9	4570	7.8	.0
JAN. 11...	1.2	5.1	250	3210	4.37	19.1	1600	1370	4.2	3740	7.8	.0
FEB. 09...	1.0	4.9	410	2650	3.60	25.0	1200	1030	4.2	3130	7.7	.0
MAR. 08...	.8	4.7	100	1710	2.33	503	760	675	3.6	2040	8.0	.0
APR. 20...	1.2	12	160	1990	2.71	339	690	566	5.9	2560	7.7	3.0
MAY 16...	1.3	2.8	230	2270	3.09	233	800	652	6.2	2880	8.1	13.5
JUNE 13...	1.3	4.9	260	2250	3.06	122	820	677	5.7	2820	8.1	22.0
JULY 19...	1.4	.1	320	2580	3.51	17.4	1100	980	4.7	3150	7.9	220
AUG. 16...	1.3	.6	280	2600	3.54	18.3	1300	1170	3.5	3000	8.0	16.0
SEP. 13...	1.3	.2	280	2550	3.47	17.9	1200	1060	4.4	3090	8.2	18.5

YELLOWSTONE RIVER BASIN

06313400 SALT CREEK NEAR SUSSEX, WYO.

LOCATION.--Lat 43°37'22", Long 106°22'00", in NE¼NE¼SE¼ sec.8, T.42 N., R.79 W., Johnson County, at bridge in West Sussex Dugout Oil Field, 6.3 miles southwest of Sussex, and 12.6 miles upstream from mouth.

DRAINAGE AREA.--765 sq mi.

PERIOD OF RECORD.--Chemical analyses: September 1949, May to June 1952, October 1967 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 06...	1335	21	25	30	81	39	1600	39	685	0	1200	1500
NOV. 12...	0910	37	20	90	130	52	1300	18	598	0	1200	1100
DEC. 16...	1100	12	30	30	160	46	1700	22	955	0	1200	1700
JAN. 18...	1245	12	24	440	120	51	1500	22	915	0	1000	1500
FEB. 07...	1400	17	26	230	120	66	1400	22	740	0	1200	1400
MAR. 09...	1630	71	11	260	140	49	840	12	436	0	1200	630
APR. 21...	1215	110	9.7	50	150	86	980	12	453	0	1700	560
MAY 17...	1330	26	20	70	90	86	1600	20	732	0	1700	1300
JUNE 14...	1455	20	21	120	52	60	1800	20	728	0	1400	1500
JULY 20...	1500	17	20	30	73	69	1850	23	732	0	1500	1540
AUG. 16...	1640	15	21	110	50	50	1720	21	740	0	1200	1520
SEP. 13...	1400	24	16	80	120	57	1170	18	557	0	1300	900

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 06...	4.1	.1	2500	4830	6.57	274	360	0	37	6770	8.0	17.5
NOV. 12...	2.3	.1	1700	4160	5.66	416	550	59	24	6010	7.5	2.5
DEC. 16...	3.9	.2	2100	5340	7.26	173	600	0	31	8160	7.7	.0
JAN. 18...	3.9	.1	2100	4650	6.32	151	510	0	29	6850	7.9	.0
FEB. 07...	2.7	.3	2300	4660	6.34	214	580	0	26	6630	7.6	.0
MAR. 09...	1.2	.2	920	3070	4.18	589	550	192	16	4440	8.1	11.5
APR. 21...	1.6	.2	1100	3710	5.05	1100	730	358	16	5140	7.8	13.0
MAY 17...	2.8	.1	2000	5190	7.06	364	580	0	29	7670	7.9	24.0
JUNE 14...	2.9	.2	2300	5180	7.04	280	380	0	40	7890	8.3	26.0
JULY 20...	3.0	.2	2400	5450	7.41	250	470	0	37	8050	7.9	18.0
AUG. 16...	2.9	.2	1900	4920	6.69	199	330	0	41	7070	8.1	28.0
SEP. 13...	2.9	.4	1500	3830	5.21	248	540	83	22	5830	8.0	20.0

YELLOWSTONE RIVER BASIN

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06316400 CRAZY WOMAN CREEK AT UPPER STATION, NEAR ARVADA, WYO.

LOCATION.--Lat 44°29'15", long 106°10'25", in NW¼ sec.18, T.52 N., R.77 W., Johnson County, at former gaging station, 0.2 mile upstream from unnamed tributary, 4.5 miles upstream from mouth, and 11.5 miles south of Arvada.

DRAINAGE AREA.--945 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: November 1966 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 05...	1330	16	3.1	1000	340	220	260	7.1	285	0	2000	24
NOV. 02...	1330	28	8.5	100	140	72	100	2.2	222	0	660	9.4
30...	1145	26	9.8	160	140	75	100	2.7	237	0	680	8.8
JAN. 17...	1230	16	14	60	140	78	98	2.7	261	0	650	11
31...	1445	13	15	0	160	78	110	2.9	275	0	720	10
FEB. 29...	0830	770	5.2	20	58	12	12	6.6	74	0	150	1.7
APR. 04...	1320	44	9.5	180	140	76	110	4.2	217	0	690	8.8
MAY 15...	1315	54	9.8	360	90	51	73	2.8	171	0	440	6.0
JUNE 20...	1220	81	10	270	170	72	47	2.8	110	0	720	4.0
JULY 17...	1500	26	12	0	100	48	70	3.0	186	0	460	5.7
AUG. 15...	1600	7.8	8.6	230	220	130	180	6.7	268	0	1300	15
SEP. 11...	1330	22	8.1	160	140	78	95	4.9	235	0	670	8.3

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 05...	.9	.5	270	3000	4.08	130	1800	1570	2.7	3340	8.0	14.5
NOV. 02...	.5	.0	130	1100	1.50	83.2	640	458	1.7	1440	8.1	--
30...	.5	.2	120	1130	1.54	79.3	660	466	1.7	1520	7.9	.0
JAN. 17...	.5	1.4	110	1120	1.52	48.4	660	446	1.6	1440	7.8	.0
31...	.5	1.4	120	1240	1.69	43.5	730	504	1.8	1580	7.9	.0
FEB. 29...	.2	3.7	30	289	.39	601	190	129	.4	443	7.5	2.5
APR. 04...	.6	.3	110	1150	1.56	137	660	482	1.9	1540	8.1	7.0
MAY 15...	.4	.2	80	760	1.03	111	440	300	1.5	1070	7.9	16.5
JUNE 20...	.5	5.2	90	1090	1.48	238	720	630	.8	1400	7.2	17.0
JULY 17...	.4	.4	100	794	1.08	55.7	460	307	1.4	1120	8.0	20.0
AUG. 15...	.7	.5	150	1990	2.71	41.9	1100	880	2.4	2350	7.9	27.0
SEP. 11...	.5	.4	190	1120	1.52	66.5	670	477	1.6	1480	8.0	17.0

YELLOWSTONE RIVER BASIN

06317000 POWDER RIVER AT ARVADA, WYO.

LOCATION.--Lat 44°38'45", long 106°08'00", in NE¼NW¼ sec.21, T.54 N., R.77 W., Sheridan County, at bridge on county road, 0.1 mile south of Arvada, 0.3 mile upstream from Wild Horse Creek, and 2,500 ft downstream from gaging station.

DRAINAGE AREA.--6,050 sq mi, approximately (at gaging station).

PERIOD OF RECORD.--Chemical analyses: May to October 1946, July 1948 to September 1953, July and August 1955, April to August 1957, October 1967 to September 1972.

Water temperatures: March 1949 to September 1957, October 1967 to September 1972.

Sediment records: April 1946 to September 1957, October 1967 to September 1972.

EXTREMES.--1971-72:

Specific conductance: Maximum daily, 4,380 micromhos Aug. 17, 18; minimum daily, 789 micromhos May 25.

Water temperatures: Maximum, 26.0°C July 8; minimum, freezing point on many days during October to March.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 07...	1400	104	5.9	210	150	74	430	8.7	253	0	910	360
NOV. 02...	1100	115	6.9	40	160	62	350	6.0	267	0	840	270
30...	1355	170	7.8	220	150	62	340	5.6	287	0	780	250
JAN. 06...	1100	87	12	30	170	72	410	6.6	404	0	820	320
FEB. 01...	1300	75	15	0	180	72	410	6.9	378	0	880	310
MAR. 02...	1435	2040	7.1	360	120	37	190	5.8	174	0	590	85
APR. 05...	1300	286	7.9	60	160	47	360	6.0	279	0	820	210
MAY 16...	1400	529	9.6	140	110	39	250	5.4	204	0	640	110
JUNE 06...	0930	1220	13	590	120	38	180	4.6	201	0	590	82
JULY 06...	1240	135	9.4	90	140	64	260	7.0	222	0	700	180
AUG. 10...	1040	57	11	80	180	72	460	11	222	0	1300	200
SEP. 13...	1100	110	7.6	60	170	60	300	8.6	211	0	860	200

DATE	TIME	DIS- CHARGE (CFS)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
JULY 19...	1630	a57	1.4

a Daily mean discharge.

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)
JULY 19...	1630	a57	8.8	8.5	2480	6500	390

a Daily mean discharge.

YELLOWSTONE RIVER BASIN

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06317000 POWDER RIVER AT ARVADA, WYO.--Continued

EXTREMES.--Continued

Period of record:

Specific conductance (1967-72): Maximum daily, 7,760 micromhos Sept. 12, 1969; minimum daily, 789 micromhos May 25, 1972.

Water temperatures: Maximum (1949-54, 1967-72), 32.0°C July 16, 1954; minimum (1949-57, 1967-72), freezing point on many days during winter period.

REMARKS.--No appreciable inflow between gaging station and sampling point except during periods of intense local rainfall. Flow affected by ice Nov. 28, Dec. 5-20, Jan. 7 to Feb. 22.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 07...	.9	.3	390	2070	2.82	581	680	470	7.2	2900	8.1	15.0
NOV. 02...	.8	.1	300	1820	2.48	565	650	431	6.0	2560	8.1	--
30...	.8	.2	280	1740	2.37	799	620	385	5.9	2500	7.9	.0
JAN. 06...	.8	.9	430	2010	2.73	472	720	390	6.6	2910	8.0	.0
FEB. 01...	.8	1.1	390	2060	2.80	417	740	430	6.5	2760	7.8	.0
MAR. 02...	.6	1.7	150	1110	1.51	6110	440	297	3.9	1610	7.6	2.5
APR. 05...	.7	1.2	260	1760	2.39	1360	600	371	6.4	2470	8.0	11.5
MAY 16...	.7	2.3	210	1270	1.73	1810	430	263	5.2	1840	8.0	21.0
JUNE 06...	.6	1.0	180	1130	1.54	3720	460	295	3.7	1670	7.4	22.0
JULY 06...	.8	.5	260	1470	2.00	536	610	428	4.6	2120	7.8	22.0
AUG. 10...	.9	2.2	350	2350	3.20	362	750	568	7.3	3110	7.7	21.5
SEP. 13...	.9	1.1	300	1710	2.33	508	680	507	5.0	2410	7.9	18.5

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM
OCT. 07...	1400	15.0	104	1080	303	--	--	--	--	--	--	--
NOV. 02...	1100	--	115	1680	522	--	--	--	--	--	--	--
30...	1355	.0	170	1810	831	--	--	--	--	--	--	--
JAN. 06...	1100	.0	87	272	64	--	--	--	--	--	--	--
FEB. 01...	1300	.0	75	296	60	--	--	--	--	--	--	--
MAR. 02...	1435	2.5	2040	12800	70500	44	58	67	75	98	100	--
APR. 05...	1300	11.5	286	4210	3250	--	--	--	--	--	--	--
MAY 16...	1400	21.0	529	7360	10500	37	52	79	92	100	--	--
31...	1445	23.0	770	7040	14600	22	32	66	90	96	98	100
JUNE 06...	0930	22.0	1220	25400	83700	50	66	85	96	100	--	--
JULY 06...	1240	22.0	135	3220	1170	43	60	81	96	100	--	--
AUG. 10...	1040	21.5	57	14100	2170	90	97	98	99	100	--	--
SEP. 13...	1100	18.5	110	2630	781	--	--	--	--	--	--	--
26...	1705	14.0	69	1120	209	--	--	--	--	--	--	--

YELLOWSTONE RIVER BASIN

06317000 POWDER RIVER AT ARVADA, WYO.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

[illegible]

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

[illegible]

YELLOWSTONE RIVER BASIN

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06324000 CLEAR CREEK NEAR ARVADA, WYO.

LOCATION.--Lat 44°52'18", long 106°04'56", in SE¼ sec.36, T.57 N., R.77 W., Sheridan County, at gaging station, 600 ft downstream from Cabin Creek, 1.8 miles upstream from mouth, and 16 miles north of Arvada.

DRAINAGE AREA.--1,110 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: September 1949 to June 1954, October 1966 to September 1972.

Water temperatures: March 1950 to September 1953.

Sediment records: March 1950 to September 1953.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 07...	1700	159	6.9	200	130	66	86	6.9	279	0	560	7.3
NOV. 02...	1620	114	10	20	130	64	80	4.7	287	0	510	5.2
30...	1615	116	7.5	0	140	70	82	4.0	281	0	570	5.2
JAN. 06...	1330	51	11	220	120	85	82	4.0	317	0	560	7.3
FEB. 08...	1200	64	14	720	150	55	82	4.2	299	0	510	6.4
MAR. 02...	1000	175	7.8	180	57	24	27	7.9	113	0	200	3.6
APR. 05...	1610	195	5.9	80	95	53	71	4.2	214	0	410	4.5
MAY 16...	1625	125	2.7	330	94	51	65	3.3	211	0	390	3.3
JUNE 06...	1245	576	10	180	36	13	17	1.6	98	0	99	1.7
JULY 06...	1600	278	6.3	0	55	24	29	1.9	139	0	190	2.0
AUG. 10...	1320	132	6.8	130	83	53	61	4.9	229	0	370	5.0
SEP. 13...	1710	149	4.1	100	89	45	55	4.4	203	4	340	2.0

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 07...	.4	.6	130	1000	1.36	429	600	371	1.5	1360	8.1	13.0
NOV. 02...	.4	1.2	110	949	1.29	292	590	355	1.4	1260	8.3	--
30...	.5	1.4	110	1010	1.37	316	630	399	1.4	1390	7.9	.0
JAN. 06...	.5	3.1	100	1030	1.40	142	650	390	1.4	1420	8.0	.0
FEB. 08...	.4	6.4	110	968	1.32	167	590	345	1.5	1310	7.4	.0
MAR. 02...	.3	4.9	60	386	.53	182	240	147	.8	583	7.2	.5
APR. 05...	.4	.3	80	746	1.01	393	460	284	1.4	1080	8.2	11.0
MAY 16...	.4	.1	70	711	.97	240	440	267	1.3	1000	8.1	23.0
JUNE 06...	.1	1.1	50	228	.31	355	140	60	.6	366	7.7	20.0
JULY 06...	.3	.3	80	373	.51	280	240	130	.8	582	8.1	20.0
AUG. 10...	.3	1.0	70	699	.95	249	420	230	1.3	997	8.0	25.5
SEP. 13...	.3	.2	90	645	.88	259	410	240	1.2	932	8.4	19.5

YELLOWSTONE RIVER BASIN

06324500 POWDER RIVER AT MOORHEAD, MONT.

LOCATION (revised).--Lat 45°04'10", long 105°52'00", in NW¼ sec.8, T.9 S., R.48 E., Powder River County, at foot-bridge at former gaging station site 0.9 mile upstream from discontinued post office at Moorhead, 1 mile upstream from present gage, and at mile 185.8.

DRAINAGE AREA.--8,088 sq mi (at gaging station).

CHEMICAL ANALYSES, OCTOBER 1971 TO JULY 1972

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED CAL- CIUM (CA) (MG/L)	DIS-SOLVED MAG- NE- SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO- RIDE (CL) (MG/L)	DIS-SOLVED FLUO- RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)
OCT. 14...	1500	186	130	65	250	660	--	.4	.13
NOV. 02...	1530	281	140	64	--	730	190	--	.27
DEC. 01...	1400	237	150	67	--	--	160	--	.32
JAN. 11...	1100	122	160	72	250	690	170	.4	.64
FEB. 10...	1530	109	150	67	--	650	260	--	.60
MAR. 01...	1600	4930	94	25	62	340	22	.3	.41
APR. 04...	1530	486	140	57	220	680	120	.5	.27
MAY 11...	1400	639	96	39	--	460	97	--	.23
JUNE 08...	1400	1610	120	38	--	650	85	--	.45
JULY 06...	1000	486	86	33	120	380	66	.0	.00

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BERYL- LIUM (BE) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CAD- MIUM (CD) (UG/L)	DIS-SOLVED CHRO- MIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	CYANIDE (CN) (MG/L)
OCT. 14...	1500	186	0	0	280	2	0	7	.00
JAN. 11...	1100	122	5	0	280	1	0	5	--
FEB. 10...	1530	109	--	--	--	--	--	--	.00
MAR. 01...	1600	4930	--	--	--	--	--	--	--
APR. 04...	1530	486	0	0	260	0	0	20	.00

DATE	TIME	DIS-CHARGE (CFS)	ALDRIN (UG/L)	LINDANE (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)
OCT. 14...	1500	186	.00	.00	.0	.00	.00	.00
JAN. 11...	1100	122	.00	.00	.0	.00	.00	.00
APR. 04...	1530	486	.00	.00	.0	.00	.00	.00

06324500 POWDER RIVER AT MOORHEAD, MONT.--Continued

PERIOD OF RECORD.--Chemical analyses: February 1951 to September 1953, October 1955 to September 1957, July 1969 to July 1972 (discontinued).

Water temperatures: February 1951 to September 1953, October 1955 to September 1957.

REMARKS.--Flow regulated by reservoirs and diversions for irrigation upstream from station.

CHEMICAL ANALYSES, OCTOBER 1971 TO JULY 1972

DATE	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA, MG) (MG/L)	SODIUM AD-SORPTION RATIO	DIS-SOLVED AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (MG/L)
OCT. 14...	1440	--	723	590	4.5	.03	.11	1.6
NOV. 02...	1670	2.27	1270	610	--	.23	.51	3.5
DEC. 01...	1710	--	1090	650	--	.24	.27	1.7
JAN. 11...	1030	1.40	339	700	4.1	.09	.11	1.5
FEB. 10...	1540	2.09	453	650	--	.38	.080	1.5
MAR. 01...	676	.92	9000	340	1.5	--	--	7.0
APR. 04...	1520	2.07	2000	580	4.0	.05	.56	2.1
MAY 11...	1090	1.48	1880	400	--	.02	.90	1.8
JUNE 08...	1260	1.71	5480	460	--	.10	2.9	5.8
JULY 06...	896	1.22	1180	350	2.8	--	.53	1.8

DATE	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED MOLYBDENUM (MO) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT. 14...	0	10	.9	2	5	5	0	20
JAN. 11...	5	17	.4	31	6	1	1	20
FEB. 10...	--	--	--	--	--	--	--	--
MAR. 01...	--	30	--	--	--	--	--	--
APR. 04...	0	10	.0	3	5	9	2	20

DATE	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 14...	.00	.00	.00	.00	.00	.00	.00
JAN. 11...	.00	.00	.00	.00	.00	.00	.03
APR. 04...	.00	.00	.00	.00	.00	.00	.00

FIELD DETERMINATIONS

DATE	TIME	TEMPERATURE (DEG C)	AIR TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DIS-SOLVED OXYGEN (MG/L)	PH (UNITS)	ALKALINITY AS CaCO3 (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
OCT. 14...	1500	9.5	7.5	1850	11.2	8.2	--	100
NOV. 02...	1530	2.5	5.0	2210	--	8.2	--	270
DEC. 01...	1400	.0	--	1900	12.0	7.9	--	19
JAN. 11...	1100	.0	-3.5	1950	6.4	7.6	--	5
FEB. 10...	1530	.0	-1.0	1600	3.0	7.8	--	18
MAR. 01...	1600	.5	-5.0	850	9.2	7.5	--	100
APR. 04...	1530	10.0	15.5	1750	7.0	7.8	--	140
MAY 11...	1400	14.5	15.0	1400	8.6	8.0	--	35
JUNE 08...	1400	25.5	27.5	1700	6.0	7.8	--	4100
JULY 06...	1000	18.5	18.0	1190	7.6	8.0	149	170

CHEYENNE RIVER BASIN

06386500 CHEYENNE RIVER NEAR SPENCER, WYO.

LOCATION.--Lat 43°25', long 104°08', in NW sec.25, T.40 N., R.61 W., Niobrara County, at gaging station at old highway bridge, 1.8 miles downstream from Robbers Roost Creek, 7.5 miles northeast of Spencer, and 30 miles south of Newcastle.

DRAINAGE AREA.--5,270 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: May 1969 to June 1970.

Sediment records: June 1951 to August 1954, November 1971 to September 1972.

Prior to October 1951, published as South Fork Cheyenne River near Spencer.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM
NOV. 18...	1220	.0	1.8	35	.17	--	--	--	--	--	--	--
FEB. 24...	1640	.5	173	2180	1020	--	--	--	--	--	--	--
MAR. 09...	1500	9.5	29	402	31	--	--	--	--	--	--	--
30...	1150	6.0	4.9	52	.69	--	--	--	--	--	--	--
MAY 05...	1120	19.0	3.3	45	.40	--	--	--	--	--	--	--
17...	1510	23.5	6.1	80	1.3	--	--	--	--	--	--	--
JUNE 01...	1430	32.0	3.5	60	.57	--	--	--	--	--	--	--
14...	1715	22.5	37	14800	1480	89	98	100	--	--	--	--
29...	1305	28.0	22	1730	103	--	--	--	--	--	--	--
JULY 12...	1710	26.5	.57	24	.04	--	--	--	--	--	--	--
AUG. 24...	1505	26.5	9.9	2300	61	--	--	--	--	--	--	--
SEP. 07...	1350	18.0	57	12900	1990	82	87	91	91	92	97	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	NUMBER OF SAM- PLING POINTS	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM
AUG. 24...	1505	26.5	9.9	14	3	4	10
		BED MAT. FALL DIAM. % FINER THAN .500 MM	BED MAT. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
AUG. 24...	27	61	77	87	94	96	98

CHEYENNE RIVER BASIN

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06394000 BEAVER CREEK NEAR NEWCASTLE, WYO.

LOCATION.--Lat 43°32'07", long 104°07'02", in NW¼ sec.18, T.41 N., R.60 W., Weston County, at gaging station at highway bridge, 2.2 miles downstream from Sheep Creek, and 23 miles south of Newcastle.

DRAINAGE AREA.--1,320 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: December 1949 to September 1952, December 1952 to August 1953, October 1967 to September 1972.

Sediment records: September 1949, March 1950 to September 1957.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PD- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 14...	1430	14	9.5	0	430	100	360	5.6	149	0	1500	470
NOV. 18...	0950	24	8.5	10	500	110	360	4.4	189	0	1500	510
DEC. 15...	1305	12	11	10	550	110	300	4.4	250	0	1700	400
JAN. 20...	1015	10	13	0	460	140	210	3.8	262	0	1500	300
FEB. 16...	1640	18	12	740	480	89	310	3.3	239	0	1400	430
MAR. 09...	1200	438	5.4	110	120	38	100	5.6	104	0	510	46
30...	0945	21	12	220	390	170	660	7.7	248	0	1900	730
MAY 05...	0955	7.0	5.1	80	410	140	660	5.8	217	0	1700	770
JUNE 01...	1250	5.5	6.1	50	300	190	820	9.3	261	0	2200	670
29...	0855	82	7.5	20	120	33	150	9.3	103	0	580	79
AUG. 03...	1215	34	6.9	160	340	120	430	8.1	124	0	1400	530
24...	1135	17	4.4	200	320	49	630	9.1	99	0	1100	770
SEP. 20...	1035	5.7	.1	90	440	120	470	5.8	92	0	1700	600

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 14...	.8	.1	190	2950	4.01	112	1500	1380	4.1	3000	7.9	9.0
NOV. 18...	.9	.4	150	3110	4.23	202	1700	1550	3.8	3910	7.8	.0
DEC. 15...	1.0	.8	140	3160	4.30	102	1800	1600	3.1	3890	7.7	.5
JAN. 20...	.9	1.6	100	2770	3.77	74.8	1700	1490	2.2	3220	7.7	.0
FEB. 16...	.8	2.2	130	2860	3.89	139	1600	1400	3.4	3640	7.6	.0
MAR. 09...	.7	2.5	100	875	1.19	1030	450	365	2.0	1220	7.3	1.5
30...	.9	.8	330	3950	5.37	224	1700	1500	7.0	5200	8.0	2.0
MAY 05...	.8	.0	280	3810	5.18	72.0	1600	1420	7.2	5070	7.8	19.0
JUNE 01...	1.6	.2	540	4330	5.89	64.3	1500	1290	9.1	5500	7.9	21.5
29...	.7	1.8	140	1030	1.40	228	430	346	3.1	1490	7.6	18.0
AUG. 03...	.9	.4	260	2900	3.94	266	1300	1200	5.1	4020	7.6	14.0
24...	1.0	1.5	220	2930	3.98	134	1000	919	8.7	4250	7.6	18.0
SEP. 20...	1.1	.2	240	3380	4.60	52.0	1600	1500	5.1	4410	7.5	13.5

CHEYENNE RIVER BASIN

06395000 CHEYENNE RIVER AT EDMONT, S. DAK.

LOCATION.--Lat 43°18'20", long 103°49'14", in SW¼SE¼SE¼ sec.36, T.8 S., R.2 E., Fall River County, at gaging station, at downstream side of bridge on U.S. Highway 18 at Edgemont, 300 ft downstream from Burlington Northern Railroad bridge (corrected), and 600 ft upstream from Cottonwood Creek.

DRAINAGE AREA.--7,143 sq mi.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 20...	1130	17	410	120	530	6.4	185	0	1700	580	.2
NOV. 17...	1130	29	410	110	--	--	--	--	1600	510	--
DEC. 15...	1100	7.0	520	160	--	--	--	--	2100	590	--
JAN. 11...	1400	3.6	550	170	530	7.4	325	0	2200	570	.5
FEB. 15...	1030	25	650	220	--	--	--	--	2400	890	--
MAR. 14...	1100	242	160	51	--	--	--	--	730	110	--
APR. 12...	1100	30	410	130	560	7.9	209	0	1700	600	.5
MAY 16...	1330	32	310	180	--	--	--	--	2400	290	--
AUG. 24...	1130	40	130	42	200	8.6	125	0	660	97	.8
SEP. 12...	0930	8.1	260	80	380	8.5	148	0	1200	330	.6

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	CYANIDE (CN) (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BERYL- LIUM (BE) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT. 20...	1130	17	180	.00	0	0	0	1	6
JAN. 11...	1400	3.6	360	.00	0	0	3	0	14
APR. 12...	1100	30	70	.00	0	0	0	0	3

DATE	TIME	DIS- CHARGE (CFS)	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)
OCT. 20...	1130	18	.00	.0	.00	.00	.00	.00
JAN. 11...	1400	3.7	.00	.0	.00	.00	.00	.00
APR. 12...	1100	30	.00	.0	.00	.00	.00	.00

CHEYENNE RIVER BASIN

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06395000 CHEYENNE RIVER AT EDMONT, S. DAK.

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1972.

REMARKS.--Miscellaneous samples for chemical data published for water year 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 20...	.04	220	3780	5.14	183	1500	1400	5.9	4550	7.9	8.5
NOV. 17...	.14	--	3300	4.49	266	--	--	--	4250	7.8	2.5
DEC. 15...	.05	--	3880	5.28	73.6	2000	--	--	5180	7.6	.0
JAN. 11...	.14	260	4280	5.82	42.3	2100	1800	5.1	5130	7.6	.0
FEB. 15...	.91	--	5440	7.40	367	2500	--	--	6510	7.6	.0
MAR. 14...	.29	--	1330	1.81	869	610	--	--	1790	7.8	5.0
APR. 12...	.00	260	3860	5.25	315	1600	1400	6.2	4640	8.2	14.5
MAY 16...	.03	--	4200	5.71	366	1500	--	--	4880	8.2	27.0
AUG. 24...	.54	--	1310	1.78	141	500	400	3.9	1590	7.9	20.5
SEP. 12...	.13	--	2600	3.54	56.9	980	860	5.3	3190	8.0	16.5

DATE	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MOLYBDENUM (MO) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED VANADIUM (V) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT. 20...	2	.1	2	18	4	0	2.3	20
JAN. 11...	10	.1	2	7	3	1	3.3	420
APR. 12...	0	.3	9	5	2	0	4.4	20

DATE	ENDRIN (UG/L)	HEPTACHLOR (UG/L)	HEPTACHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 20...	.00	.00	.00	.00	.00	.00	.00
JAN. 11...	.00	.00	.00	.00	.00	.00	.00
APR. 12...	.00	.00	.00	.00	.00	.00	.00

FIELD DETERMINATIONS

DATE	TIME	DISCHARGE (CFS)	DIS-SOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	PH (UNITS)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	TEMPERATURE (DEG C)	AIR TEMPERATURE (DEG C)
OCT. 20...	1130	17	10.8	1.5	8.1	--	75	8.5	13.5
NOV. 17...	1130	29	11.8	1.1	8.4	--	3	2.5	2.0
DEC. 15...	1100	7.0	8.6	1.0	8.0	--	4	.0	-3.5
JAN. 11...	1400	3.6	10.5	.5	7.7	--	<1	.0	.0
FEB. 15...	1030	25	12.3	2.0	7.6	--	44	.0	5.0
MAR. 14...	1100	242	11.4	2.2	8.2	--	50	5.0	8.0
APR. 12...	1100	30	8.7	1.1	8.1	--	10	14.5	14.0
MAY 16...	1330	32	7.1	.8	7.9	--	4	27.0	36.5
AUG. 24...	1130	40	7.4	1.4	8.5	--	--	20.5	29.5
SEP. 12...	0930	8.1	7.6	1.2	--	--	1190	16.5	22.0

CHEYENNE RIVER BASIN

06427850 BELLE FOURCHE RIVER AT DEVILS TOWER, WYO.

LOCATION.--Lat 44°35'22", long 104°42'12", in NW¼SE¼SE¼ sec.7, T.53 N., R.65 W., Crook County, at bridge 0.2 mile west of entrance to Devils Tower National Monument.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 13...	1510	40	10	50	240	55	79	7.4	217	0	810	5.6
NOV. 16...	1140	23	6.5	0	240	71	72	6.3	195	0	890	6.3
DEC. 14...	1300	13	9.1	50	310	80	100	7.6	320	0	1100	10
JAN. 19...	1215	13	10	50	260	95	88	6.9	325	0	980	8.4
FEB. 15...	1200	15	10	50	240	74	86	6.6	228	0	910	6.0
MAR. 28...	1350	523	3.3	50	68	27	64	6.5	160	0	280	6.4
MAY 03...	1845	72	5.1	30	200	63	75	5.8	234	0	710	5.2
31...	0855	93	10	0	160	51	50	6.7	257	0	500	4.3
JUNE 27...	1045	95	7.9	70	97	33	54	8.1	113	0	410	2.3
AUG. 01...	1520	18	5.7	120	180	65	76	8.1	218	0	710	5.7
23...	0925	99	2.6	90	62	25	69	7.2	171	0	260	6.7
SEP. 19...	1010	9.7	5.9	370	180	69	95	8.4	217	0	760	6.7

CHEYENNE RIVER BASIN

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06427850 BELLE FOURCHE RIVER AT DEVILS TOWER, WYO.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 13...	.5	.1	200	1320	1.80	143	840	662	1.2	1640	7.9	10.5
NOV. 16...	.6	.2	150	1390	1.89	86.3	890	730	1.0	1740	7.9	1.5
DEC. 14...	.7	.1	180	1740	2.37	61.1	1100	837	1.3	2100	7.7	.5
JAN. 19...	.7	1.1	160	1610	2.19	56.5	1000	733	1.2	1940	7.8	.0
FEB. 15...	.6	.8	180	1460	1.99	59.1	920	733	1.2	1780	7.5	.0
MAR. 28...	.4	1.0	90	532	.72	751	280	149	1.7	799	7.7	3.5
MAY 03...	.4	.1	130	1180	1.60	229	760	568	1.2	1520	7.8	12.0
31...	.5	.7	130	917	1.25	230	620	409	.9	1190	7.9	15.5
JUNE 27...	.5	1.3	130	665	.90	171	380	287	1.2	949	7.6	19.5
AUG. 01...	.6	.1	160	1160	1.58	56.4	730	551	1.2	1410	8.1	24.5
23...	.5	.4	80	520	.71	139	260	120	1.9	793	8.0	17.5
SEP. 19...	.6	.1	200	1240	1.69	32.5	740	562	1.5	1620	7.7	16.0

06428500 BELLE FOURCHE RIVER AT WYOMING-SOUTH DAKOTA STATE LINE

LOCATION.--Lat 44°44'59", long 104°02'49", in NEkNWkNWk sec.18, T.9 N., R.1 E., Butte County, South Dakota, at county bridge, 8 miles downstream from gaging station, and 4 miles northwest of Belle Fourche, S. Dak.

DRAINAGE AREA.--3,280 sq mi, approximately (at gaging station).

PERIOD OF RECORD.--Chemical analyses: October 1965 to September 1972.

Water temperatures: October 1965 to September 1972.

EXTREMES.--1971-72.

Specific conductance: Maximum daily, 2,410 micromhos Feb. 6; minimum daily, 490 micromhos Mar. 4.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 05...	1330	201	8.3	100	110	32	85	3.1	49	0	520	3.3
NOV. 16...	1600	62	7.6	0	240	75	82	6.6	183	0	920	5.2
DEC. 14...	1555	18	10	10	370	110	110	8.5	311	0	1300	10
JAN. 11...	1245	35	10	50	410	47	110	7.9	299	0	1200	10
FEB. 15...	1650	30	11	100	280	80	82	7.9	239	0	1000	7.3
MAR. 29...	0950	669	5.5	100	90	31	65	6.3	174	0	340	6.5
APR. 27...	0730	110	8.2	320	220	68	87	7.2	203	0	820	6.1
MAY 31...	1240	326	12	30	130	46	55	7.9	175	0	480	3.3
JUNE 27...	1525	224	12	50	140	47	72	7.9	167	0	560	5.0
JULY 20...	1105	98	12	0	180	57	100	7.7	147	0	770	5.0
AUG. 23...	1230	140	8.7	110	190	55	69	8.1	146	0	720	4.7
SEP. 19...	1250	36	9.1	50	240	80	98	9.5	186	0	970	6.0

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED BERYL- LIUM (BE) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)
OCT. 05...	1330	201	0	0	0	2	1
JAN. 11...	1245	35	0	1	0	14	7
APR. 27...	0730	110	--	1	0	2	2

DATE	TIME	DIS- CHARGE (CFS)	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)
OCT. 05...	1330	201	.00	.0	.00	.00	.00	.00
JAN. 11...	1245	35	.00	.0	.00	.00	.00	.00
APR. 27...	0730	110	.00	.0	.00	.00	.00	.00

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	CYANIDE (CN) (MG/L)
OCT. 05...	1330	201	.11	.88	.8	.00
JAN. 11...	1245	35	.05	.28	1.3	.00
APR. 27...	0730	110	.06	.25	4.2	.00
JULY 20...	1105	98	--	--	1.8	--

06428500 BELLE FOURCHE RIVER AT WYOMING-SOUTH DAKOTA STATE LINE.--Continued

EXTREMES.--1971-72: Continued

Water temperatures: Maximum, 30.0°C Aug. 13; minimum, freezing point on many days during January to February.

Period of record:

Specific conductance: Maximum daily, 2,840 micromhos Jan. 17, 1970; minimum daily, 461 micromhos Apr. 12, 1971.

Water temperatures: Maximum, 30.0°C Aug. 13, 1972; minimum, freezing point on many days during winter period.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED FLUORIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 05...	.6	1.3	140	788	1.07	428	400	360	1.8	1020	7.3	10.5
NOV. 16...	.8	.4	150	1420	1.93	238	910	760	1.2	1750	7.9	2.5
DEC. 14...	.9	.2	200	2070	2.82	101	1400	1150	1.3	2370	7.8	.5
JAN. 11...	.9	.4	200	1960	2.67	185	1200	955	1.4	2250	7.9	.0
FEB. 15...	.7	1.0	190	1590	2.16	129	1000	804	1.1	1890	7.8	.0
MAR. 29...	.5	.8	100	634	.86	1150	350	207	1.5	938	7.8	2.5
APR. 27...	.6	.2	130	1320	1.80	392	820	653	1.3	1630	8.0	7.5
MAY 31...	.7	.7	140	821	1.12	723	510	366	1.1	1120	7.7	18.5
JUNE 27...	.8	1.2	170	933	1.27	564	550	413	1.3	1260	7.7	22.0
JULY 20...	.7	.6	180	1210	1.65	320	700	579	1.7	1540	8.0	16.0
AUG. 23...	.7	.2	150	1120	1.52	423	700	580	1.1	1430	7.4	19.5
SEP. 19...	.8	.1	220	1510	2.05	147	930	777	1.4	1820	7.8	17.5

DATE	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MOLYB- DENUM (MO) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED SILVER (AG) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL MERCURY (HG) (UG/L)
OCT. 05...	0	3	4	0	10	8	.3
JAN. 11...	590	0	22	0	20	3	.4
APR. 27...	40	0	9	0	130	12	.3

DATE	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 05...	.00	.00	.00	.00	.00	.00	.00
JAN. 11...	.00	.00	.00	.00	.00	.00	.00
APR. 27...	.00	.00	.00	.00	.00	.00	.00

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)
OCT. 05...	1330	201	9.7	7.6	1100	--	2000
JAN. 11...	1245	35	9.7	7.5	2100	--	50
APR. 27...	0730	110	10.6	8.3	1500	--	31
JULY 20...	1105	98	8.8	8.1	1540	570	260

CHEYENNE RIVER BASIN

06428500 BELLE FOURCHE RIVER AT WYOMING-SOUTH DAKOTA STATE LINE.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

[illegible]

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

[illegible]

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LOCATION.--Lat 44°34'26", long 104°02'54", in NW¼NW¼ sec.18, T.7 N., R.1 E., Butte County, S. Dak., at gaging station, 800 ft downstream from State line, 5.7 miles upstream from Crow Creek, and 12 miles southwest of Belle Fourche, S. Dak.

PERIOD OF RECORD.--Chemical analyses: May 1969 to June 1970.
Sediment records: October 1971 to September 1972.

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT DIS- CHARGE (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
OCT.					
05...	1020	11.5	44	34	4.0
NOV.					
17...	0950	5.5	44	24	2.9
DEC.					
15...	0850	3.0	40	24	2.6
JAN.					
11...	1630	2.0	41	14	1.5
FEB.					
16...	1105	5.5	40	74	8.0
MAR.					
29...	1140	6.0	40	50	5.4
APR.					
26...	1600	--	46	76	9.4
MAY					
31...	1500	17.0	94	246	62
JUNE					
27...	1700	18.0	65	168	29
JULY					
20...	1010	13.0	50	102	14
AUG.					
23...	1430	15.5	52	70	9.8
SEP.					
22...	1440	13.5	49	16	2.1

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	NUMBER OF SAMP- LING POINTS	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.
					% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM
AUG. 23...	1430	15.5	52	14	4	6	8
		BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.
		% FINER THAN .500 MM	% FINER THAN 1.00 MM	% FINER THAN 2.00 MM	% FINER THAN 4.00 MM	% FINER THAN 8.00 MM	% FINER THAN 16.0 MM
AUG. 23...	12	16	19	22	28	37	63

PLATTE RIVER BASIN

06620000 NORTH PLATTE RIVER NEAR NORTHGATE, COLO.

LOCATION.--Lat 40°56'10", long 106°20'21", in SW¼SE¼ sec.11, T.11 N., R.80 W., Jackson County, at gaging station, 350 ft downstream from bridge on State Highway 125, 0.8 mile upstream from Camp Creek, 4.2 miles northwest of Northgate, and 4.4 miles south of Colorado-Wyoming State line,

DRAINAGE AREA.--1,431 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1965 to September 1972.

Water temperatures: October 1965 to September 1966, June 1971 to September 1972.

Sediment records: October 1971 to September 1972.

EXTREMES.--1971-72:

Water temperatures: Maximum, 22.0°C July 29, Aug. 9, 13; minimum, freezing point on many days during October to April.

Period of record:

Water temperatures: Maximum, 22.0°C Aug. 15, 25, 1971, July 29, Aug. 9, 13, 1972; minimum, freezing point on many days during winter period.

REMARKS.--Temperature recorder at gaging station, record furnished by Wyoming Game and Fish Commission.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV. 30...	1200	a165	14	150	30	6.8	13	1.3	122	0	24	1.5
DEC. 20...	1520	a54	14	180	31	5.7	13	1.8	129	0	20	2.1
JAN. 21...	1730	a76	13	120	28	6.2	13	1.6	120	0	22	1.7
FEB. 25...	1200	a120	13	240	32	8.9	16	3.6	135	0	35	4.2
MAR. 23...	1700	a474	8.9	470	29	6.7	17	2.6	110	0	40	3.4
MAY 24...	1940	644	11	250	30	2.8	15	2.1	104	0	31	2.6
JUNE 12...	1645	2440	15	350	33	4.9	14	2.8	138	0	20	2.0
JULY 13...	0900	867	11	90	45	13	22	1.6	212	0	30	2.7
AUG. 16...	0830	112	5.6	180	27	10	12	1.6	128	0	21	5.0

a Daily mean discharge.

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
NOV. 30...	.5	.2	30	151	.21	67.3	100	0	.6	262	7.7	.0
DEC. 20...	.5	.3	30	152	.21	22.2	100	0	.6	255	7.5	.0
JAN. 21...	.5	.4	10	146	.20	30.0	95	0	.6	240	7.5	.0
FEB. 25...	.4	.5	30	180	.24	58.3	120	9	.6	294	7.4	.0
MAR. 23...	.5	.6	20	163	.22	209	100	10	.7	276	7.9	2.0
MAY 24...	.4	.4	50	147	.20	256	85	0	.7	235	7.9	13.0
JUNE 12...	.5	.7	60	161	.22	1060	100	0	.6	267	7.7	9.0
JULY 13...	.6	.6	60	231	.31	541	160	0	.7	386	8.0	15.5
AUG. 16...	.5	.6	20	146	.20	44.2	110	5	.5	246	8.1	14.0

SUSPENDED SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
OCT. 06...	1340	8.5	143	19	7.3	MAR. 23...	1700	2.0	a474	47	60
NOV. 30...	1200	.0	a165	8	3.6	MAY 24...	1940	13.0	644	48	83
DEC. 20...	1520	.0	a54	12	1.7	JUNE 12...	1645	9.0	2440	44	290
JAN. 21...	1730	.0	a76	8	1.6	JULY 13...	0900	15.5	867	9	21
FEB. 25...	1200	.0	a120	6	1.9	AUG. 16...	0830	14.0	112	4	1.2

a Daily mean discharge.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	6.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
2	6.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	9.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	9.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	11.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	12.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	13.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	10.5	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	11.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	11.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	10.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	10.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	8.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	10.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	9.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	8.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	9.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	8.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	6.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	6.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	5.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
22	8.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	1.0
23	6.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.5
24	6.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0
25	9.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	1.0
26	6.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	1.0
27	6.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0
28	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	0.0	0.0
31	0.5	0.0	---	---	0.0	0.0	0.0	0.0	---	---	1.0	0.0
MONTH	13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	0.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	4.0	0.0	8.5	3.5	16.0	13.0	20.5	14.0	19.5	14.0	16.0	12.0
2	4.0	1.0	10.0	3.5	17.0	13.0	19.5	14.0	16.5	14.0	15.0	10.5
3	8.0	0.5	11.0	5.0	16.0	13.5	20.0	12.0	19.0	11.5	15.5	11.0
4	7.0	1.5	13.0	6.0	16.0	13.0	20.0	12.0	19.5	12.0	15.5	9.5
5	9.0	3.0	11.5	8.5	15.5	13.0	---	13.0	19.5	14.0	14.0	11.0
6	7.0	4.5	9.5	6.5	16.5	12.0	---	---	21.0	13.0	13.0	10.5
7	8.5	2.0	7.0	5.0	18.5	14.0	---	---	20.0	13.0	14.5	11.0
8	10.5	4.0	10.5	6.5	16.5	14.0	---	---	19.5	14.5	18.0	10.0
9	10.0	4.0	10.5	8.0	15.5	12.0	---	---	22.0	13.5	15.5	10.5
10	9.0	4.5	10.5	8.0	19.5	13.5	---	---	20.0	13.0	14.5	10.5
11	8.5	5.5	10.5	8.0	19.5	15.0	---	---	20.5	14.0	15.0	9.0
12	8.5	4.0	9.0	6.0	19.5	15.5	---	---	20.5	13.0	16.5	10.0
13	8.0	3.5	10.0	5.0	18.0	15.0	---	---	22.0	13.5	16.5	9.5
14	6.5	3.0	13.5	6.0	17.0	13.5	---	---	19.0	14.0	16.5	9.0
15	6.5	2.0	14.5	8.5	18.5	15.0	---	---	20.5	15.0	16.0	8.5
16	10.5	3.5	16.0	9.5	18.0	15.0	---	---	20.5	13.5	15.0	8.5
17	11.0	5.5	15.0	11.0	17.0	14.5	---	---	18.5	13.0	15.5	8.0
18	9.0	5.0	14.5	10.0	17.0	14.0	---	---	20.0	13.5	15.0	8.5
19	7.0	3.5	13.0	10.0	15.5	13.5	---	---	17.0	14.5	13.0	10.5
20	6.5	3.5	13.5	9.0	18.0	14.0	---	---	19.0	13.0	14.0	8.5
21	8.5	3.0	14.5	9.5	17.0	13.5	---	---	18.5	11.5	13.5	6.0
22	9.0	4.0	11.5	9.5	16.5	14.0	---	---	17.0	11.0	14.0	7.0
23	10.5	3.5	12.0	8.0	18.0	14.0	---	---	15.0	10.0	13.5	8.5
24	11.5	5.0	13.5	8.0	18.0	13.5	---	---	14.0	9.0	12.0	6.5
25	11.5	6.5	14.5	9.0	18.5	14.5	---	---	15.5	8.5	11.0	7.0
26	9.0	3.0	15.0	10.0	18.0	14.0	---	---	17.0	11.0	9.5	4.5
27	4.0	1.0	14.5	10.5	18.5	14.0	---	---	19.0	11.0	12.0	5.5
28	7.0	2.0	15.0	10.5	19.5	13.5	20.5	13.0	19.0	12.0	11.5	6.5
29	10.5	3.5	15.0	10.5	19.0	14.5	22.0	13.0	16.5	14.0	11.0	5.5
30	10.5	5.5	16.0	10.5	20.0	14.5	20.5	14.5	18.5	11.0	13.0	5.0
31	---	---	16.5	11.5	---	---	19.5	15.5	16.5	12.0	---	---
MONTH	11.5	0.0	16.5	3.5	20.0	12.0	---	---	22.0	8.5	18.0	4.5
YEAR	22.0	0.0										

PLATTE RIVER BASIN

06623800 ENCAMPMENT RIVER ABOVE HOG PARK CREEK, NEAR ENCAMPMENT, WYO.
(Hydrologic bench-mark station)

LOCATION.--Lat 41°01'25", long 106°49'27", in NE¼SW¼ sec.10, T.12 N., R.84 W., Carbon County, Medicine Bow National Forest, at gaging station, 0.6 mile upstream from Hog Park Creek, and 13 miles south of Encampment.

DRAINAGE AREA.--72.7 sq mi.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 12...	1600	32	11	40	7.7	1.4	2.3	0.9	35	0	2.5	0.5
DEC. 21...	0930	25	13	60	7.7	1.7	2.3	1.3	37	0	4.0	.7
JAN. 20...	1500	20	13	40	9.0	1.7	2.2	1.4	38	0	3.3	1.7
FEB. 24...	1400	19	14	30	9.7	1.9	2.3	.9	40	0	3.7	.9
MAR. 23...	1400	25	14	50	8.1	1.8	3.0	.8	39	0	3.6	.3
APR. 20...	1000	37	13	120	7.9	1.4	2.3	1.0	33	0	6.8	1.8
MAY 24...	1400	356	8.6	100	4.6	1.0	1.5	.6	22	0	5.5	1.3
JUNE 22...	1345	424	6.9	90	4.7	.7	.7	.7	19	0	5.2	1.2
JULY 12...	1000	104	8.8	70	5.7	1.2	1.6	.7	25	0	3.5	1.0
AUG. 24...	1530	39	11	60	5.8	1.1	1.9	4.8	34	0	4.6	.4
SEP. 19...	1515	28	11	60	8.6	1.8	2.9	.9	38	0	7.3	.7

DATE	TIME	DIS- CHARGE (CFS)	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- AZINON (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)
AUG. 24...	1530	39	.00	.0	.00	.00	.00	.00	.00	.00

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED NATURAL URANIUM (U) (UG/L)	DIS- SOLVED RA-226 (PLAN- CHET COUNT) (PC/L)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L)	TOTAL FIL- TRABLE RESIDUE (MG/L)	SUS- PENDE GROSS ALPHA AS U-NAT. (UG/L)	SUS- PENDE GROSS BETA AS SR90 /Y90 (PC/L)	SUS- PENDE GROSS BETA AS CS-137 (PC/L)
SEP. 19...	1515	28	.17	<.1	<.5	1.7	2.1	45	<.4	<.4	<.4

DATE	TIME	DIS- CHARGE (CFS)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 12...	1600	32	1.3	.050	--	--
DEC. 21...	0930	25	.3	.050	--	--
JAN. 20...	1500	20	1.7	.010	--	--
FEB. 24...	1400	19	1.2	--	.10	--
MAR. 23...	1400	25	1.3	--	.020	--
APR. 20...	1000	37	1.5	--	.030	--
MAY 24...	1400	356	1.0	--	.020	--
JUNE 22...	1345	424	1.1	--	.030	--
JULY 12...	1000	104	.3	--	.010	--
AUG. 24...	1530	39	.3	--	.010	3.0
SEP. 19...	1515	28	.8	--	.030	--

PLATTE RIVER BASIN

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06623800 ENCAMPMENT RIVER ABOVE HOG PARK CREEK, NEAR ENCAMPMENT, WYO.--Continued

PERIOD OF RECORD.--Chemical analyses: May 1968 to September 1972.
Sediment records: October 1970 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 12...	0.1	0.13	10	44	0.06	3.80	25	0	0.2	60	7.4	10.0
DEC. 21...	.1	.12	0	50	.07	3.37	26	0	.2	65	7.3	.0
JAN. 20...	.1	.17	10	52	.07	2.81	29	0	.2	65	7.7	.0
FEB. 24...	.1	.07	0	54	.07	2.77	32	0	.2	66	7.3	.0
MAR. 23...	.1	.05	10	51	.07	3.44	28	0	.2	63	7.5	.0
APR. 20...	.1	.12	20	51	.07	8.81	25	0	.2	60	7.3	.0
MAY 24...	.0	.07	10	34	.05	33.2	16	0	.2	36	8.0	7.0
JUNE 22...	.1	.03	40	30	.04	34.3	15	0	.1	33	6.2	11.0
JULY 12...	.3	.02	10	35	.05	9.83	19	0	.2	46	7.7	9.0
AUG. 24...	.1	.02	10	47	.06	4.95	19	0	.2	61	7.3	11.0
SEP. 19...	.2	.01	10	52	.07	3.99	29	0	.2	65	7.5	11.5

DATE	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
AUG. 24...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	TIME	DIS- CHARGE (CFS)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT IN BOTTOM DE- POSITS (UG/KG)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)
AUG. 24...	1530	39	<.2	<.2	<1.0	<.2	<.2	<.2	<.2	<.2	<.2	<.2

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)
MAY 24...	1400	356	3	0	0	2	0	8	.4
JUNE 22...	1345	424	0	0	--	1	2	0	.1

PLATTE RIVER BASIN

06623800 ENCAMPMENT RIVER ABOVE HOG PARK CREEK, NEAR ENCAMPMENT, WYO.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
OCT. 12...	1600	32	7.9	6.7	60	0
DEC. 21...	0930	25	--	--	--	1
JAN. 20...	1500	20	10.5	7.4	71	4
FEB. 24...	1400	19	9.8	6.6	67	1
MAR. 23...	1400	25	10.2	7.1	74	6
APR. 20...	1000	37	10.7	6.7	76	4
MAY 24...	1400	356	9.8	7.9	36	0
JUNE 22...	1345	424	8.5	7.4	41	3
JULY 12...	1000	104	8.6	7.8	46	65
AUG. 24...	1530	39	8.3	7.9	64	86
SEP. 19...	1515	28	8.0	7.9	68	80

SUSPENDED SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
OCT. 12...	1600	10.0	32	3	.26
DEC. 21...	0930	.0	25	8	.54
JAN. 20...	1500	.0	20	2	.11
FEB. 24...	1400	.0	19	2	.10
MAR. 23...	1400	.0	25	2	.13
APR. 20...	1000	.0	37	3	.30
MAY 24...	1400	7.0	356	6	5.8
JUNE 22...	1345	11.0	424	4	4.6
JULY 12...	1000	9.0	104	3	.84
AUG. 24...	1530	11.0	39	2	.21
SEP. 19...	1515	11.5	28	4	.30

PLATTE RIVER BASIN

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06625000 ENCAMPMENT RIVER AT MOUTH, NEAR ENCAMPMENT, WYO.

LOCATION.--Lat 41°18'12", long 106°42'53", in NE¼NW¼ sec.3, T.15 N., R.83 W., Carbon County, at gaging station, 0.5 mile upstream from mouth, and 8 miles northeast of Encampment.

DRAINAGE AREA.--265 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1965 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NESIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 06...	1630	104	23	90	34	3.9	15	2.4	101	4	40	7.9
NOV. 22...	1700	83	23	100	39	3.5	15	2.0	110	0	41	10
DEC. 29...	1100	77	24	80	36	4.7	15	2.4	104	0	42	9.4
JAN. 19...	1430	79	23	80	35	3.6	14	2.2	98	0	40	8.4
FEB. 23...	1730	76	22	90	33	5.1	14	1.6	99	0	40	8.6
MAR. 23...	0930	84	18	130	32	3.1	14	1.4	88	0	35	8.3
MAY 16...	0930	547	9.7	100	8.7	1.8	4.0	.5	36	0	8.2	2.1
JUNE 13...	1030	1650	9.5	90	8.3	1.3	2.7	.5	31	0	5.8	1.3
JULY 13...	1230	121	24	70	35	5.2	13	1.9	121	0	30	5.7
AUG. 24...	2000	53	36	50	59	7.2	27	4.4	168	7	69	13
SEP. 21...	1015	50	29	100	50	5.1	21	3.5	148	0	53	12

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 06...	.3	.1	30	180	.24	50.5	100	10	.6	274	8.5	9.5
NOV. 22...	.4	.4	20	188	.26	42.1	110	20	.6	300	8.1	1.0
DEC. 29...	.3	.6	30	186	.25	38.7	110	25	.6	306	8.0	.0
JAN. 19...	.3	.7	30	175	.24	37.3	100	20	.6	278	7.9	.0
FEB. 23...	.3	.5	20	174	.24	35.7	100	19	.6	276	8.1	.0
MAR. 23...	.3	.2	20	155	.21	35.2	92	20	.6	252	7.9	5.0
MAY 16...	.1	.2	0	53	.07	78.3	29	0	.3	73	7.3	14.5
JUNE 13...	.2	.2	20	45	.06	200	26	1	.2	67	7.6	7.0
JULY 13...	.4	.2	20	174	.24	56.8	110	11	.5	276	8.1	15.0
AUG. 24...	.5	.1	60	306	.42	43.8	180	31	.9	464	8.5	13.0
SEP. 21...	.4	.2	220	248	.34	33.5	150	29	.8	388	7.8	7.5

PLATTE RIVER BASIN

06628550 NORTH PLATTE RIVER NEAR SARATOGA, WYO.

LOCATION.--Lat 41°32'22", long 106°52'52", in NW¼NW¼NW¼ sec.17, T.18 N., R.84 W., Carbon County, temperature recorder on right bank, at upstream side of Pick Bridge, 0.8 mile downstream from Cottonwood Draw, and 7 miles northwest of Saratoga.

PERIOD OF RECORD.--October 1971 to September 1972.

EXTREMES.--1971-72:

Water temperatures: Maximum, 24.5°C Aug. 13; minimum, probably freezing point during November to March when stream was ice covered.

REMARKS.--No record Oct. 28 to Mar. 21 when recorder did not record proper temperatures.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS THERMOGRAPH)

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	5.0	---	---	---	---	---	---	---	---	---	---
2	5.0	3.0	---	---	---	---	---	---	---	---	---	---
3	5.5	1.5	---	---	---	---	---	---	---	---	---	---
4	6.0	2.5	---	---	---	---	---	---	---	---	---	---
5	7.5	3.5	---	---	---	---	---	---	---	---	---	---
6	8.5	4.5	---	---	---	---	---	---	---	---	---	---
7	8.5	5.0	---	---	---	---	---	---	---	---	---	---
8	8.0	5.0	---	---	---	---	---	---	---	---	---	---
9	7.5	4.0	---	---	---	---	---	---	---	---	---	---
10	8.5	4.5	---	---	---	---	---	---	---	---	---	---
11	8.5	5.0	---	---	---	---	---	---	---	---	---	---
12	8.5	5.5	---	---	---	---	---	---	---	---	---	---
13	6.5	4.5	---	---	---	---	---	---	---	---	---	---
14	7.0	4.0	---	---	---	---	---	---	---	---	---	---
15	6.5	4.5	---	---	---	---	---	---	---	---	---	---
16	5.0	3.5	---	---	---	---	---	---	---	---	---	---
17	6.5	4.5	---	---	---	---	---	---	---	---	---	---
18	5.5	2.5	---	---	---	---	---	---	---	---	---	---
19	3.5	1.0	---	---	---	---	---	---	---	---	---	---
20	4.5	1.5	---	---	---	---	---	---	---	---	---	---
21	3.5	2.0	---	---	---	---	---	---	---	---	---	---
22	5.0	2.5	---	---	---	---	---	---	---	---	7.5	3.5
23	4.5	2.0	---	---	---	---	---	---	---	---	5.5	3.5
24	4.0	3.0	---	---	---	---	---	---	---	---	4.5	3.0
25	5.5	3.5	---	---	---	---	---	---	---	---	7.0	3.0
26	4.5	2.5	---	---	---	---	---	---	---	---	5.0	4.0
27	3.5	1.5	---	---	---	---	---	---	---	---	5.0	3.5
28	---	---	---	---	---	---	---	---	---	---	5.0	3.5
29	---	---	---	---	---	---	---	---	---	---	5.0	3.5
30	---	---	---	---	---	---	---	---	---	---	5.0	3.5
31	---	---	---	---	---	---	---	---	---	---	4.5	3.0
MONTH	8.5	1.0	---	---	---	---	---	---	---	---	---	---

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	4.5	2.5	8.5	4.5	12.5	11.5	19.5	16.0	22.0	16.5	19.0	15.0
2	5.0	3.0	10.0	5.5	12.0	11.5	19.5	16.0	19.5	17.0	17.5	14.0
3	6.5	3.0	10.5	7.0	12.0	11.5	19.5	16.0	20.5	15.0	18.5	14.0
4	6.5	3.5	12.5	8.0	12.0	11.0	19.5	15.0	20.0	15.5	18.5	14.5
5	8.5	4.5	12.5	10.0	12.0	11.0	20.0	15.0	20.5	16.0	17.5	15.0
6	9.0	6.5	10.5	8.5	13.0	10.0	19.0	16.0	22.0	15.5	17.0	14.0
7	8.0	5.5	8.5	7.5	13.5	11.5	19.0	15.5	22.0	16.5	16.5	13.5
8	9.5	5.5	10.5	7.0	13.5	12.0	20.5	15.5	23.0	17.0	16.5	13.5
9	9.5	6.5	11.0	9.5	12.5	11.5	19.0	16.5	23.0	17.5	17.5	13.5
10	8.5	7.0	10.5	9.0	14.5	11.5	19.5	16.0	23.0	18.0	16.0	14.0
11	10.0	7.5	9.5	7.0	15.5	13.0	20.0	16.0	23.0	17.0	16.0	12.5
12	10.0	7.0	9.0	7.5	15.5	13.5	21.0	16.5	24.0	18.0	17.0	12.5
13	8.5	6.5	9.0	7.0	15.0	13.5	21.0	16.5	24.5	17.5	17.0	12.5
14	7.0	5.0	12.0	6.5	14.5	12.5	22.0	17.0	24.0	18.5	17.0	12.0
15	6.5	4.0	13.5	9.5	15.0	13.5	22.0	17.0	21.5	17.5	17.0	12.5
16	9.5	5.0	13.0	10.5	15.5	13.5	22.5	17.5	22.5	18.0	16.0	12.0
17	10.0	7.0	12.5	9.5	15.0	13.5	22.5	17.0	23.5	17.5	16.0	12.0
18	10.5	7.5	13.0	10.5	14.5	12.5	22.5	17.5	21.0	18.5	16.5	12.5
19	8.5	7.0	11.5	10.5	14.5	12.5	20.5	17.5	19.0	17.5	16.5	13.5
20	8.0	5.5	12.5	10.0	15.0	12.5	20.5	16.5	20.0	15.5	15.5	12.5
21	8.0	5.0	12.0	10.0	15.5	13.5	20.0	16.5	20.0	15.5	15.0	10.5
22	9.0	6.5	10.5	8.0	15.5	14.0	21.0	15.5	20.5	15.5	15.0	11.0
23	10.0	5.0	10.5	8.5	15.5	13.5	22.0	16.0	18.0	14.5	15.0	12.0
24	12.0	6.5	10.5	9.0	16.0	13.5	20.0	17.0	16.5	12.5	13.0	10.5
25	10.5	8.5	11.5	9.0	16.5	14.0	21.0	17.5	18.0	13.0	13.5	10.0
26	8.5	4.5	11.0	9.5	16.0	13.5	19.5	17.0	19.5	15.0	11.5	9.0
27	7.0	4.0	12.0	9.5	17.0	14.5	20.0	15.5	21.0	14.5	13.5	9.0
28	9.5	5.0	11.5	10.0	19.0	14.0	21.0	15.0	21.5	16.0	13.5	10.5
29	11.5	7.0	11.5	10.0	20.0	16.0	22.0	16.0	19.0	17.0	13.0	9.5
30	9.5	7.0	12.0	10.0	20.0	16.0	21.5	17.5	19.5	15.5	13.5	9.0
31	---	---	12.5	11.0	---	---	21.0	17.5	20.0	15.5	---	---
MONTH	12.0	2.5	13.5	4.5	20.0	10.0	22.5	15.0	24.5	12.5	19.0	9.0

PLATTE RIVER BASIN

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06630000 NORTH PLATTE RIVER ABOVE SEMINOLE RESERVOIR, NEAR SINCLAIR, WYC.

LOCATION.--Lat 41°52'20", long 107°03'25", in SW¼SW¼ sec.13, T.22 N., R.86 W., Carbon County, at gaging station, 6.5 miles northeast of Sinclair, and 14 miles upstream from high-water line of Seminole Reservoir at elevation 6,357 ft.

DRAINAGE AREA.--8,134 sq mi (at gaging station), of which 4,073 sq mi (including 3,959 sq mi in Great Divide Basin in southern Wyoming) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: December 1960 to March 1967, January 1968 to September 1972.

Water temperatures: December 1960 to March 1967, January 1968 to September 1969, October 1971 to September 1972.

EXTREMES.--1971-72:

Water temperatures: Maximum, not determined; minimum, freezing point on many days during November to March.

Period of record:

Water temperatures: Maximum (1960-66, 1969), 24.0°C Aug. 7, 1964; minimum, freezing point on many days during winter periods in most years.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 13...	1330	455	16	50	50	14	28	2.9	143	0	110	9.4
NOV. 24...	1600	500	17	0	60	13	29	2.2	159	0	130	10
DEC. 22...	1300	763	20	70	56	12	26	2.4	154	0	100	9.6
JAN. 18...	1630	310	17	160	59	7.9	25	2.7	156	0	95	9.4
FEB. 22...	1730	505	13	90	58	12	26	3.8	131	0	130	12
MAR. 21...	1245	1070	11	400	40	11	23	2.8	125	0	81	7.1
APR. 18...	1400	878	14	100	40	8.4	21	2.1	117	0	73	6.7
MAY 17...	1115	1450	11	130	29	6.8	17	1.9	96	0	55	4.7
JUNE 14...	2000	5410	13	140	27	5.0	14	1.6	95	0	37	2.3
JULY 12...	1000	583	13	50	48	14	28	2.3	182	0	83	6.0
AUG. 23...	1935	212	16	30	49	14	32	3.0	152	0	100	12
SEP. 20...	1145	210	11	70	49	14	31	2.8	151	0	100	12

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 13...	.5	.2	60	302	.41	371	180	63	.9	468	8.2	9.0
NOV. 24...	.5	.2	40	337	.46	455	200	70	.9	527	8.0	.5
DEC. 22...	.5	.2	60	303	.41	624	190	64	.8	496	8.0	.0
JAN. 18...	.4	.2	30	294	.40	246	180	52	.8	452	8.1	.0
FEB. 22...	.3	.7	50	318	.43	434	200	93	.8	497	7.6	.0
MAR. 21...	.5	.5	40	238	.32	688	140	37	.8	386	7.8	6.0
APR. 18...	.4	.2	40	224	.30	531	140	44	.8	366	7.9	10.0
MAY 17...	.4	.2	50	173	.24	677	100	21	.7	288	7.9	13.5
JUNE 14...	.4	.4	50	148	.20	2160	88	10	.6	241	8.0	16.0
JULY 12...	.5	.2	70	284	.39	447	180	31	.9	455	8.3	17.0
AUG. 23...	.6	.1	70	307	.42	176	180	55	1.0	485	8.3	15.0
SEP. 20...	.6	.2	220	299	.41	170	180	56	1.0	490	8.2	12.5

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS THERMOGRAPH)

		OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY		MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1		11.0	8.5	0.5	0.5	0.5	0.5	0.0	0.0	1.0	0.5	0.0	0.0
2		8.5	6.0	0.5	0.5	0.5	0.5	0.5	0.0	1.0	0.5	0.0	0.0
3		8.0	4.5	0.5	0.5	0.5	0.5	1.0	0.5	0.5	0.5	0.0	0.0
4		9.0	6.0	0.5	0.0	0.5	0.5	1.0	0.0	0.5	0.5	0.0	0.0
5		11.0	7.5	0.0	0.0	0.5	0.5	0.0	0.0	0.5	0.5	0.0	0.0
6		12.0	8.5	0.0	0.0	0.5	0.5	0.0	0.0	0.5	0.5	0.0	0.0
7		12.0	9.0	0.0	0.0	1.0	0.5	0.0	0.0	0.5	0.0	0.0	0.0
8		12.0	9.5	0.0	0.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
9		11.5	8.5	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
10		12.0	9.0	0.0	0.0	0.5	0.5	0.0	0.0	0.5	0.0	0.5	0.0
11		12.0	9.5	0.0	0.0	0.5	0.5	0.0	0.0	1.0	0.5	2.5	0.5
12		11.5	9.0	0.0	0.0	0.5	0.5	0.0	0.0	0.5	0.5	4.0	1.5
13		10.0	8.5	0.0	0.0	0.5	0.0	0.0	0.0	0.5	0.0	4.5	3.5
14		10.0	7.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	3.0
15		9.5	8.0	1.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	4.0	2.0
16		8.5	6.5	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	5.5	3.0
17		9.5	7.5	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	7.0	4.0
18		9.0	5.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	7.5	5.0
19		6.0	4.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	7.5	6.0
20		6.5	4.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	4.5
21		6.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	3.5
22		8.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	5.0
23		8.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	5.5
24		8.0	6.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	3.5
25		8.5	7.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	7.0	3.5
26		8.0	6.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	6.0	3.0
27		7.0	2.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	4.0	1.0
28		2.5	0.5	0.5	0.5	0.0	0.0	0.5	0.0	0.0	0.0	4.0	1.5
29		0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.0	0.0	3.5	2.0
30		0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5	---	---	3.0	1.5
31		0.5	0.5	---	---	0.0	0.0	1.0	0.5	---	---	4.0	1.5
MONTH		12.0	0.5	1.5	0.0	1.0	0.0	1.0	0.0	1.0	0.0	8.0	0.0
		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY		MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1		5.0	1.5	9.0	6.0	15.5	13.5	---	---	---	---	---	---
2		5.5	3.5	10.0	6.5	15.0	13.0	---	---	---	---	---	---
3		7.0	2.5	11.0	8.0	15.0	13.5	---	---	---	---	---	---
4		6.5	4.5	13.0	9.0	14.5	13.0	---	---	---	---	---	---
5		8.5	4.5	13.0	10.5	13.5	12.5	---	---	---	---	---	---
6		9.5	7.0	12.5	10.5	14.5	12.5	---	---	---	---	---	---
7		9.0	6.5	11.5	10.0	---	13.5	---	---	---	---	---	---
8		10.0	6.5	11.5	8.5	---	---	---	---	---	---	---	---
9		10.0	7.5	12.5	10.0	---	---	---	---	---	---	---	---
10		9.5	8.0	11.5	10.0	---	---	---	---	---	---	---	---
11		9.5	8.5	10.5	9.5	---	---	---	---	---	---	---	---
12		10.0	8.0	10.0	8.5	---	---	---	---	---	---	---	---
13		9.0	7.0	10.5	8.5	---	---	---	---	---	---	---	---
14		7.0	6.0	12.5	8.5	---	---	---	---	---	---	---	---
15		9.5	6.0	14.0	10.5	---	---	---	---	---	---	---	---
16		9.5	6.0	16.0	12.0	---	---	---	---	---	---	---	---
17		10.0	7.5	15.5	13.0	---	---	---	---	---	---	---	---
18		10.0	8.0	14.5	12.5	---	---	---	---	---	---	---	---
19		8.5	6.0	14.0	12.5	---	---	---	---	---	---	---	---
20		8.0	6.0	14.5	12.0	---	---	---	---	---	---	14.5	12.0
21		9.0	6.5	14.0	12.5	---	---	---	---	---	---	14.5	10.5
22		9.0	6.5	13.0	11.0	---	---	---	---	---	---	15.0	12.0
23		10.5	6.0	12.5	10.5	---	---	---	---	---	---	14.5	13.0
24		12.0	7.5	13.0	11.0	---	---	---	---	---	---	13.0	11.0
25		12.5	9.0	13.5	11.0	---	---	---	---	---	---	12.0	10.5
26		9.0	6.0	13.5	11.5	---	---	---	---	---	---	11.5	9.0
27		8.5	5.5	14.5	11.5	---	---	---	---	---	---	13.0	9.5
28		10.0	7.0	14.0	12.0	---	---	---	---	---	---	12.5	10.5
29		11.5	8.0	14.0	12.0	---	---	---	---	---	---	11.5	9.0
30		10.5	8.0	14.5	11.5	---	---	---	---	---	---	11.5	9.0
31		---	---	15.0	12.0	---	---	---	---	---	---	---	---
MONTH		12.5	1.5	16.0	6.0	---	---	---	---	---	---	---	---

06634600 LITTLE MEDICINE BOW RIVER NEAR MEDICINE BOW, WYO.

LOCATION.--Lat 41°56'55", long 106°10'13", in NE¼Sec. 21, T.23 N., R.78 W., Carbon County, at bridge on State Highway 487 and 3.8 miles north of Medicine Bow.

DRAINAGE AREA.--966 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1965 to September 1972.
Sediment records: October 1971 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 06...	1430	14	13	90	76	13	70	4.2	171	0	230	8.4
NOV. 09...	1050	15	16	0	100	22	92	5.1	220	0	360	11
JAN. 17...	1615	1.7	13	90	120	28	84	3.8	207	0	400	12
FEB. 09...	1300	2.5	17	50	120	31	98	4.2	218	0	440	13
MAR. 09...	1145	165	11	300	37	4.8	17	4.2	109	0	61	2.2
APR. 17...	1730	54	13	110	45	12	36	2.6	118	0	130	5.0
MAY 15...	1630	257	14	100	36	8.2	20	2.3	95	0	87	3.8
JUNE 15...	1530	54	17	250	71	22	45	4.0	195	3	200	5.3
JULY 12...	1535	5.0	6.5	50	120	67	140	3.5	257	0	640	32
AUG. 15...	1545	7.0	15	120	85	25	81	5.6	189	3	320	15
SEP. 30...	1030	9.2	13	20	85	21	80	4.6	170	0	320	7.7
DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 06...	.4	.2	80	500	.68	18.9	240	100	2.0	781	8.3	16.5
NOV. 09...	.6	.7	50	716	.97	29.0	340	160	2.2	1030	8.3	.0
JAN. 17...	.5	.2	80	764	1.04	3.51	410	240	1.8	1080	8.0	.0
FEB. 09...	.5	.2	80	829	1.13	5.60	420	241	2.1	1150	7.9	.0
MAR. 09...	.1	.7	20	192	.26	85.5	110	21	.7	301	7.6	1.0
APR. 17...	.3	.2	40	303	.41	44.2	160	63	1.2	472	7.9	10.0
MAY 15...	.2	.4	30	218	.30	151	120	42	.8	337	7.9	15.0
JUNE 15...	.4	.3	70	462	.63	67.4	260	95	1.2	694	8.4	23.5
JULY 12...	.7	.3	170	1140	1.55	15.4	580	369	2.5	1560	8.2	25.5
AUG. 15...	.5	.2	50	643	.87	12.2	310	150	2.0	913	8.4	21.0
SEP. 30...	.4	.1	80	617	.84	15.3	300	161	2.0	918	8.3	4.5

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM
OCT. 06...	1430	16.5	14	126	4.8	--	--	--	--	--
JAN. 17...	1615	.0	1.7	18	.08	--	--	--	--	--
FEB. 09...	1300	.0	2.5	6	.04	--	--	--	--	--
MAR. 09...	1145	1.0	165	593	264	--	--	--	--	--
APR. 17...	1730	10.0	54	242	35	--	--	--	--	--
MAY 15...	1630	15.0	257	862	598	41	60	89	97	100
JUNE 15...	1530	23.5	54	100	15	--	--	--	--	--
JULY 12...	1535	25.5	5.0	12	.16	--	--	--	--	--
AUG. 15...	1545	21.0	7.0	20	.38	--	--	--	--	--
SEP. 30...	1030	4.5	9.2	136	3.4	--	--	--	--	--

PLATTE RIVER BASIN

06635000 MEDICINE BOW RIVER ABOVE SEMINOLE RESERVOIR, NEAR HANNA, WYO.

LOCATION.--Lat 42°00'35", long 106°30'45", in SE¼NW¼ sec.34, T.24 N., R.81 W., Carbon County, at gaging station, 15 ft downstream from bridge on county road, 2 miles upstream from Troublesome Creek, 9 miles upstream from high-water line of Seminole Reservoir at elevation 6,357 ft, and 10 miles north of Hanna.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 07...	1400	48	3.6	140	130	63	150	3.8	183	0	720	34
NOV. 09...	1445	62	7.1	50	140	66	120	2.9	198	0	650	30
DEC. 30...	1530	56	6.8	80	120	56	94	2.9	188	0	520	30
JAN. 18...	1000	38	7.6	80	120	59	84	2.7	215	0	500	27
FEB. 10...	1245	43	7.1	140	120	58	84	2.4	180	0	500	28
MAR. 20...	1530	208	6.8	70	79	36	64	1.9	143	0	330	16
APR. 18...	1000	207	8.5	50	78	44	82	2.8	146	0	400	18
MAY 15...	1930	428	11	60	56	21	46	2.6	117	0	220	9.9
JUNE 15...	1100	831	9.5	140	51	22	37	1.9	139	0	180	6.7
JULY 12...	1345	68	15	40	83	22	73	4.9	192	0	300	8.3
AUG. 22...	1625	22	4.2	210	130	52	92	4.6	151	1	570	31
SEP. 21...	1600	22	4.7	60	140	59	120	4.9	165	0	640	44

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
JULY 17...	1020	49	8.8	8.6	1420	15.0
AUG. 29...	0935	44	7.6	8.2	845	15.5
SEP. 28...	0940	74	9.2	8.0	865	7.0

PLATTE RIVER BASIN

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06635000 MEDICINE BOW RIVER ABOVE SEMINOLE RESERVOIR, NEAR HANNA, WYO.--Continued

DRAINAGE AREA.--2,338 sq mi, of which 396 sq mi is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: July 1965 to September 1972.

Sediment records: October 1971 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 07...	.6	8.2	140	1200	1.63	156	590	440	2.7	1580	8.3	13.0
NOV. 09...	.6	5.6	110	1110	1.51	186	610	448	2.1	1440	8.2	.0
DEC. 30...	.5	6.2	50	922	1.25	139	520	366	1.8	1310	8.0	.0
JAN. 18...	.5	3.4	100	918	1.25	94.2	550	374	1.6	1290	8.0	.0
FEB. 10...	.5	4.0	110	894	1.22	104	540	392	1.6	1240	7.9	.0
MAR. 20...	.4	3.1	60	606	.82	340	350	233	1.5	898	7.9	4.5
APR. 18...	.4	2.6	80	709	.96	396	380	260	1.8	1020	7.8	7.5
MAY 15...	.3	.6	70	423	.58	489	220	124	1.3	639	7.9	15.0
JUNE 15...	.4	.5	100	372	.51	835	220	106	1.1	584	8.1	17.0
JULY 12...	.5	.0	70	601	.82	110	300	142	1.8	878	8.2	21.5
AUG. 22...	.5	.1	100	958	1.30	56.9	540	414	1.7	1300	8.4	21.5
SEP. 21...	.6	.2	280	1100	1.50	65.3	580	445	2.1	1500	8.2	15.0

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM
OCT. 07...	1400	13.0	48	43	5.6	--	--	--	--	--
NOV. 09...	1445	.0	62	48	8.0	--	--	--	--	--
DEC. 30...	1530	.0	56	36	5.4	--	--	--	--	--
JAN. 18...	1000	.0	38	34	3.5	--	--	--	--	--
FEB. 10...	1245	.0	43	50	5.8	--	--	--	--	--
MAR. 20...	1530	4.5	208	269	151	--	--	--	--	--
APR. 18...	1000	7.5	207	286	160	--	--	--	--	--
MAY 15...	1930	15.0	428	668	772	47	69	95	99	100
JUNE 15...	1100	17.0	831	392	880	--	--	--	--	--
JULY 12...	1345	21.5	68	106	19	--	--	--	--	--
AUG. 22...	1625	21.5	22	22	1.3	--	--	--	--	--
SEP. 30...	0855	4.0	22	872	52	85	90	100	--	--

PLATTE RIVER BASIN

06636000 NORTH PLATTE RIVER ABOVE PATHFINDER RESERVOIR, WYO.

LOCATION.--Lat 42°10'42", long 106°52'33", in NW¼NE¼SW¼ sec.34, T.26 N., R.84 W., Carbon County, at Bureau of Reclamation gaging station, 1,800 ft downstream from Kortez Dam, 1.2 miles upstream from Lost Creek, 6 miles southwest of Leo, and 5 miles upstream from high-water line of Pathfinder Reservoir at elevation 5,850 ft.

DRAINAGE AREA.--11,200 sq mi, of which 4,548 sq mi (including 3,959 sq mi in Great Divide Basin in southern Wyoming) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: August 1969 to September 1972.

REMARKS.--Discharge records furnished by Bureau of Reclamation.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TUR- BID- ITY (JTU)	TEMPER- ATURE (DEG C)
OCT.							
05...	1510	1500	7.7	7.7	305	25	12.5
NOV.							
08...	1220	971	10.0	7.9	335	15	7.0
DEC.							
06...	1210	1380	11.4	7.8	330	10	3.0
JAN.							
05...	1100	1140	11.8	7.9	445	10	1.0
31...	1120	1590	11.8	7.9	430	8	1.5
MAR.							
02...	1020	1760	12.8	7.9	425	7	1.5
APR.							
05...	1100	1710	11.6	7.6	422	3	4.0
MAY							
01...	1130	740	11.0	7.7	440	5	5.5
JUNE							
05...	1130	500	10.1	8.0	440	5	8.5
JULY							
05...	1445	500	8.8	7.8	420	5	9.0
31...	1145	688	8.2	8.1	459	7	11.5
SEP.							
06...	1230	1310	7.0	7.8	475	5	11.5

PLATTE RIVER BASIN

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06637910 ROCK CREEK AT ATLANTIC CITY, WYO.

LOCATION.--Lat 42°30'47", long 108°44'46", in NW¼SE¼ sec.2, T.29 N., R.100 W., Fremont County, at gaging station, 500 ft downstream from Slate Creek, and 1.4 miles northwest of Atlantic City.

DRAINAGE AREA.--21.3 sq mi.

PERIOD OF RECORD.--Chemical analyses: April to June 1957, November 1957 to September 1958.

Water temperatures: June to September 1957, May to September 1958, May to September 1959, April 1960 to September 1972.

Sediment records: June 1957 to September 1972.

EXTREMES.--1971-72:

Water temperatures: Maximum, 18.0°C July 15, 29; minimum, freezing point on several days during October to January.

Sediment concentrations: Maximum daily, 430 mg/l May 6; minimum daily, 8 mg/l on several days during April, August, September.

Sediment discharge: Maximum daily, 75 tons May 27; minimum daily, 0.07 ton Dec. 28, Sept. 12.

Period of record:

Water temperatures: Maximum, 23.0°C July 29, 1961; minimum, freezing point on many days during winter period.

Sediment concentrations: Maximum daily, 7,400 mg/l June 10, 1965; minimum daily, not determined.

Sediment discharge: Maximum daily, 2,900 tons June 16, 1963; minimum daily, 0.01 ton Jan. 13, 1969.

REMARKS.--Flow affected by ice Oct. 28 to Nov. 3, Dec. 4-8, 10, Jan. 3, 5, 7-15, Mar. 27.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	0.5	2.0	---	1.5	---	2.0	8.0	10.5	14.0	16.0	10.5
2	6.0	1.0	2.5	---	1.5	---	1.5	8.5	8.5	12.0	15.5	11.0
3	8.0	1.0	2.5	0.5	1.5	---	3.0	5.0	11.0	11.5	12.0	11.5
4	6.0	1.5	2.0	---	---	1.0	3.5	4.0	10.0	13.5	13.0	12.5
5	9.5	1.0	1.5	1.0	1.0	---	2.0	5.0	11.0	14.0	14.0	11.0
6	10.0	2.0	2.0	0.5	1.0	2.0	4.5	6.5	12.0	15.0	17.5	11.5
7	7.0	2.0	3.0	1.0	---	1.5	5.0	5.0	11.0	15.0	9.5	12.0
8	7.0	3.0	1.5	---	1.0	---	6.5	8.0	11.5	16.0	13.0	11.5
9	10.5	3.5	1.0	---	---	2.0	4.5	7.5	12.5	15.5	15.5	12.5
10	11.0	4.5	0.0	0.0	---	1.5	4.0	6.0	13.5	16.0	16.0	14.0
11	10.5	4.0	0.5	---	---	2.5	3.5	5.5	14.0	15.0	16.0	11.5
12	9.5	5.0	0.5	---	---	---	5.0	7.0	9.5	15.0	17.0	14.0
13	8.0	2.5	1.0	---	---	---	5.0	9.5	14.0	16.0	16.5	13.0
14	5.5	3.0	0.0	0.0	---	---	6.5	7.5	12.0	15.5	15.5	12.0
15	4.0	2.0	0.5	1.0	---	---	5.0	6.0	12.5	18.0	17.0	9.5
16	6.0	3.0	0.0	---	0.5	4.0	5.5	8.5	12.5	13.0	15.5	10.0
17	5.5	4.0	0.0	---	---	---	5.0	9.0	17.0	16.0	13.0	9.5
18	4.0	2.5	0.5	---	1.5	---	0.5	6.0	15.5	17.0	13.5	11.0
19	5.0	2.5	0.5	---	1.0	---	3.5	7.0	12.5	16.0	13.0	8.0
20	4.0	3.0	1.0	---	1.5	4.0	4.5	9.0	15.0	13.0	13.5	5.5
21	5.5	3.5	1.5	---	0.5	4.5	5.0	9.5	16.0	14.5	12.0	6.5
22	6.0	3.5	1.0	---	---	5.0	6.0	6.0	12.0	14.0	12.5	7.0
23	6.5	2.0	1.0	---	---	4.0	5.0	10.5	12.5	15.5	11.0	8.5
24	6.0	3.5	0.5	---	---	2.5	8.0	10.5	12.0	15.0	10.5	9.0
25	6.5	4.5	---	0.5	0.5	4.0	6.0	9.0	10.5	16.0	11.0	8.0
26	6.5	1.5	1.0	---	2.0	---	6.0	7.0	10.0	12.5	11.5	9.5
27	3.5	2.0	0.5	0.0	1.0	3.0	4.0	9.5	15.0	12.0	11.5	7.5
28	---	1.5	0.5	---	2.0	2.5	7.5	7.5	17.0	12.0	9.0	5.0
29	1.5	0.0	0.0	---	2.5	3.5	6.5	10.0	14.0	18.0	12.5	5.5
30	0.5	1.5	1.0	1.0	---	4.5	4.0	8.0	13.5	15.5	12.0	8.0
31	0.0	---	0.5	1.5	---	---	---	9.5	---	17.5	11.0	---
MONTH	6.5	2.5	1.0	---	---	---	4.5	7.5	12.5	15.0	13.5	10.0
YEAR	7.5											

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS- SED. FALL DIAM. % FINER THAN .062 MM	SUS- SED. FALL DIAM. % FINER THAN .125 MM	SUS- SED. FALL DIAM. % FINER THAN .250 MM	SUS- SED. FALL DIAM. % FINER THAN .500 MM	SUS- SED. FALL DIAM. % FINER THAN 1.00 MM
JUNE 01...	1550	9.0	118	134	43	66	72	86	99	100

PLATTE RIVER BASIN

06637910 ROCK CREEK AT ATLANTIC CITY, WYO.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.8	87	.62	3.7	249	2.5	8.1	39	.85
2	1.9	51	.26	3.3	258	2.3	7.7	116	2.4
3	1.7	45	.21	2.9	187	1.5	4.1	87	.96
4	1.8	70	.34	2.7	299	2.2	2.8	18	.14
5	2.0	62	.33	5.7	233	3.6	3.0	29	.23
6	2.3	49	.30	20	122	6.6	3.0	23	.19
7	2.2	20	.12	16	27	1.2	3.0	44	.36
8	2.1	21	.12	4.8	19	.25	3.0	33	.27
9	2.3	27	.17	4.6	44	.55	2.9	14	.11
10	2.3	71	.44	6.0	54	.87	5.7	54	.83
11	2.7	82	.60	5.7	43	.66	6.0	34	.55
12	2.5	90	.61	7.7	51	.96	6.0	107	1.7
13	2.4	162	1.0	6.6	32	.57	6.0	65	1.1
14	2.3	114	.71	5.7	62	.95	4.8	36	.47
15	2.7	116	.85	7.3	114	2.5	2.7	43	.31
16	3.6	129	1.3	8.8	88	2.1	2.5	43	.29
17	3.8	78	.80	10	58	1.6	2.5	68	.46
18	3.5	107	1.0	9.9	108	2.9	2.4	38	.25
19	4.7	83	1.1	9.0	62	1.5	2.3	113	.70
20	5.7	41	.63	8.5	44	1.0	2.1	354	2.0
21	5.7	40	.62	9.4	84	2.1	5.4	310	4.5
22	5.4	62	.90	5.7	106	1.6	8.1	308	6.7
23	5.4	69	1.0	6.3	95	1.6	8.5	306	7.0
24	5.1	42	.58	5.7	108	1.7	7.7	306	6.4
25	5.8	96	1.5	4.8	153	2.0	6.6	235	4.2
26	5.8	73	1.1	4.1	115	1.3	5.4	173	2.5
27	5.4	76	1.1	4.1	97	1.1	3.6	86	.84
28	5.2	58	.81	5.4	54	1.0	3.0	9	.07
29	4.9	116	1.5	8.1	18	.39	2.7	14	.10
30	4.6	172	2.1	8.1	18	.39	2.5	17	.11
31	4.0	198	2.1	--	--	--	2.7	15	.11
TOTAL	112.6	--	24.82	209.9	--	49.49	136.8	--	46.70

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.9	13	.10	2.7	13	.09	9.9	54	1.4
2	3.2	13	.11	2.9	15	.12	9.0	53	1.3
3	3.1	45	.38	2.7	12	.09	9.4	52	1.3
4	3.0	44	.36	2.5	25	.17	7.7	50	1.0
5	2.9	56	.44	4.8	43	.56	8.1	50	1.1
6	2.9	17	.13	6.7	44	.80	11	104	3.1
7	2.9	60	.47	6.7	43	.78	12	110	3.6
8	3.1	37	.31	6.7	47	.85	12	101	3.3
9	3.0	57	.46	8.2	47	1.0	15	102	4.1
10	3.0	28	.23	9.9	23	.61	19	104	5.3
11	2.9	15	.12	7.7	14	.29	21	112	6.4
12	2.8	16	.12	5.7	15	.23	18	109	5.3
13	2.8	18	.14	5.7	16	.25	18	81	3.9
14	3.0	107	.87	5.7	16	.25	16	66	2.9
15	3.3	186	1.7	6.3	28	.48	17	58	2.7
16	3.5	147	1.4	9.4	52	1.3	16	53	2.3
17	3.7	112	1.1	9.9	49	1.3	18	47	2.3
18	3.9	81	.85	9.4	63	1.6	19	41	2.1
19	4.2	64	.73	9.4	50	1.3	17	36	1.7
20	4.4	62	.74	9.0	45	1.1	14	31	1.2
21	5.0	63	.85	9.0	43	1.0	12	38	1.2
22	6.0	63	1.0	9.0	43	1.0	16	169	7.3
23	8.0	64	1.4	10	51	1.4	18	304	15
24	10	65	1.8	10	53	1.4	15	72	2.9
25	12	65	2.1	10	50	1.4	16	26	1.1
26	12	66	2.1	11	47	1.4	14	27	1.0
27	11	35	1.0	11	58	1.7	9.2	84	2.1
28	7.0	11	.21	12	60	1.9	9.9	78	2.1
29	4.4	16	.19	12	59	1.9	13	23	.81
30	3.0	15	.12	--	--	--	12	18	.58
31	2.9	11	.09	--	--	--	9.0	18	.44
TOTAL	145.8	--	21.62	226.3	--	26.27	431.2	--	90.83

PLATTE RIVER BASIN

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06637910 ROCK CREEK AT ATLANTIC CITY, WYO.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	9.4	20	.51	12	21	.68	128	182	63
2	9.9	27	.72	13	20	.70	132	166	59
3	9.4	51	1.3	14	28	1.1	132	87	31
4	15	213	8.6	12	45	1.5	135	90	33
5	22	315	19	15	160	6.5	142	80	31
6	32	76	6.6	16	430	19	130	95	33
7	24	70	4.5	16	134	5.8	111	93	28
8	16	24	1.1	19	104	5.3	145	165	63
9	15	15	.61	20	68	3.7	123	178	59
10	12	8	.26	19	45	2.3	107	117	34
11	20	78	4.2	19	36	1.8	91	88	22
12	16	59	2.5	18	125	6.1	84	59	13
13	11	115	3.4	17	41	1.9	78	50	11
14	20	66	3.6	20	57	3.1	68	52	9.5
15	22	105	6.2	25	49	3.3	63	39	6.6
16	16	132	4.4	28	46	3.5	59	37	5.9
17	25	50	3.4	32	78	6.7	54	37	5.4
18	30	58	4.7	35	123	12	53	43	6.2
19	26	32	2.2	36	47	4.6	47	26	3.3
20	22	51	3.2	36	52	5.1	44	20	2.4
21	12	50	1.6	28	57	4.3	38	28	2.9
22	12	40	1.3	24	38	2.5	35	24	2.3
23	9.9	33	.88	22	18	1.1	40	25	2.7
24	9.9	25	.67	22	17	1.0	35	24	2.3
25	12	45	1.5	24	18	1.2	32	17	1.5
26	12	38	1.2	90	129	31	28	15	1.1
27	13	131	4.6	120	233	75	23	14	.87
28	13	23	.81	122	136	45	20	14	.76
29	14	62	2.3	120	126	41	21	16	.91
30	12	47	1.5	125	130	44	22	19	1.1
31	--	--	--	120	131	42	--	--	--
TOTAL	492.5	--	97.06	1239	--	382.78	2220	--	535.74

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	22	21	1.2	4.6	12	.15	18	25	1.2
2	25	18	1.2	4.6	13	.16	19	26	1.3
3	26	15	1.1	5.1	19	.26	19	26	1.3
4	22	18	1.1	6.3	8	.14	20	24	1.3
5	19	13	.67	7.4	12	.24	28	20	1.5
6	18	13	.63	7.4	34	.68	52	24	3.4
7	20	15	.81	5.4	8	.12	46	25	3.1
8	15	16	.65	5.7	9	.14	36	24	2.3
9	13	16	.56	7.4	9	.18	9.0	25	.61
10	13	21	.74	7.0	10	.19	2.4	14	.09
11	12	16	.52	7.0	11	.21	2.5	81	.55
12	11	16	.48	6.7	21	.38	2.3	12	.07
13	7.7	16	.33	7.4	22	.44	2.9	39	.31
14	6.3	26	.44	6.9	50	.93	3.6	38	.37
15	6.7	18	.33	7.9	29	.62	3.8	8	.08
16	7.4	15	.30	8.2	12	.27	3.8	12	.12
17	7.7	20	.42	6.4	59	1.0	3.8	8	.08
18	9.4	38	.96	5.7	23	.35	4.1	9	.10
19	12	28	.91	8.2	17	.38	4.8	8	.10
20	8.5	16	.37	9.2	15	.37	6.0	20	.32
21	5.7	17	.26	9.2	14	.35	2.9	30	.23
22	11	17	.50	9.3	14	.35	2.4	61	.40
23	9.9	34	.91	9.2	10	.25	2.4	31	.20
24	7.7	29	.60	7.2	18	.35	5.4	14	.20
25	5.7	22	.34	5.3	45	.64	3.6	20	.21
26	8.5	45	1.0	11	46	1.4	2.5	13	.09
27	7.0	42	.79	11	58	1.7	5.1	9	.14
28	6.3	30	.51	9.7	24	.63	6.0	8	.13
29	5.1	40	.55	7.9	27	.58	6.0	10	.16
30	4.6	50	.62	11	24	.71	5.7	23	.35
31	4.3	25	.29	15	23	.93	--	--	--
TOTAL	357.5	--	20.09	240.3	--	15.10	329.0	--	20.31

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

6140.6

1330.81

PLATTE RIVER BASIN

06639000 SWEETWATER RIVER NEAR ALCOVA, WYO.

LOCATION.--Lat 42°27'28", long 107°11'45", in SW¼NE¼ sec.25, T.29 N., R.87 W., Natrona County, at gaging station at Dumbell Ranch, 1.0 mile downstream from Schounmaker ditch diversion dam, 13 miles upstream from high-water line of Pathfinder Reservoir at elevation 5,850 ft, and 25 miles southwest of Alcovia.

DRAINAGE AREA.--2,327 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1964 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 27...	1420	79	21	60	38	5.8	24	4.4	139	0	40	15
DEC. 09...	1330	53	31	20	45	10	31	4.9	180	0	56	18
JAN. 19...	1250	32	32	50	43	9.6	30	5.1	170	0	49	18
FEB. 15...	1600	30	37	20	62	2.3	36	5.1	183	0	63	18
MAR. 16...	1445	204	13	80	29	4.1	15	4.2	101	0	36	6.2
MAY 02...	1200	397	16	150	27	5.2	16	3.0	114	0	26	6.7
JUNE 09...	1410	1050	22	100	29	5.0	27	5.8	128	0	35	9.3
JULY 18...	2015	107	23	10	39	4.9	25	4.4	146	0	43	12
AUG. 23...	1330	24	23	110	44	10	41	5.8	177	0	66	21
SEP. 21...	1030	41	22	60	43	7.9	36	5.8	164	0	60	21

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 27...	.4	.1	40	217	.30	46.3	120	6	1.0	365	8.2	3.0
DEC. 09...	.4	.2	40	285	.39	40.8	160	12	1.1	446	8.2	.5
JAN. 19...	.4	.1	30	271	.37	23.4	150	11	1.1	426	8.0	.0
FEB. 15...	.3	.0	190	314	.43	25.4	170	20	1.2	467	8.1	.0
MAR. 16...	.2	.3	40	157	.21	835	90	7	.7	256	7.3	7.5
MAY 02...	.2	.2	40	156	.21	209	90	0	.7	280	7.8	9.5
JUNE 09...	.3	.7	80	197	.27	559	93	0	1.2	311	7.4	20.0
JULY 18...	.3	.2	0	224	.30	64.7	120	0	1.0	368	8.3	21.5
AUG. 23...	.4	.1	50	298	.41	19.3	150	5	1.5	471	8.2	14.0
SEP. 21...	.6	.1	210	277	.38	30.7	140	5	1.3	450	8.1	7.5

PLATTE RIVER BASIN

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06642000 NORTH PLATTE RIVER AT ALCOVA, WYO.
(Irrigation network station)

LOCATION.--Lat 42°34'27", long 106°41'31", in NW¼NE¼NW¼ sec.17, T.30 N., R.82 W., Natrona County, at gaging station, 0.5 mile downstream from Hogback Draw, 0.8 mile downstream from Gray Reef Dam, 1.9 miles northeast of Alcovia, and 3.8 miles downstream from Alcovia Dam.

DRAINAGE AREA.--14,771 sq mi (at gaging station), of which 4,659 sq mi (including 3,959 sq mi in Great Divide Basin in southern Wyoming) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1965 to September 1972.

Water temperatures: October 1965 to September 1969, October 1971 to September 1972.

EXTREMES.--1971-72:

Water temperatures: Maximum, 18.0°C Aug. 17, 28, Sept. 9, 12, 13; minimum, 1.0°C on several days in January.

Period of record:

Water temperatures: Maximum, 23.0°C Sept. 21, 1966; freezing point Dec. 26, 1967, Jan. 5, 1968, and on several days during 1969.

REMARKS.--Thermograph recorder at gaging station; records furnished by Pacific Power and Light Company and Bureau of Reclamation.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 27...	1700	500	9.0	50	47	16	28	3.3	134	0	120	9.4
DEC. 10...	1020	865	11	20	47	16	26	2.9	143	0	110	9.4
JAN. 19...	1630	1020	9.6	40	51	17	25	3.3	171	0	99	10
FEB. 15...	0900	987	14	30	52	13	27	3.1	145	0	100	8.6
MAR. 16...	1100	1970	8.1	70	45	14	27	2.6	134	0	100	7.5
MAY 02...	1015	777	13	30	46	12	27	2.8	131	4	100	7.3
JUNE 09...	1015	1840	11	50	44	16	22	3.0	145	0	94	6.7
JULY 18...	1915	1880	11	0	43	12	28	3.7	139	0	95	7.0
AUG. 23...	0935	1310	12	100	47	11	27	3.5	145	0	95	7.3
SEP. 21...	1220	352	12	100	47	13	27	3.0	139	0	100	8.7

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 27...	.5	.6	60	297	.40	401	180	70	.9	483	8.3	9.0
DEC. 10...	.4	.9	40	293	.40	684	180	63	.8	468	8.0	1.0
JAN. 19...	.4	1.2	30	300	.41	826	200	60	.8	462	8.2	1.5
FEB. 15...	.4	1.2	60	295	.40	786	180	61	.9	464	8.1	.5
MAR. 16...	.4	.8	50	275	.37	1460	170	60	.9	451	8.0	3.5
MAY 02...	.4	.2	50	277	.38	581	160	46	.9	439	8.4	7.5
JUNE 09...	.4	.4	50	269	.37	1340	180	61	.7	437	8.1	9.5
JULY 18...	.4	.4	50	269	.37	1370	160	46	1.0	431	8.2	13.0
AUG. 23...	.4	.7	40	275	.37	973	160	41	.9	433	8.0	14.0
SEP. 21...	.4	.7	190	280	.38	266	170	56	.9	453	8.3	15.0

06642000 NORTH PLATTE RIVER AT ALCOVA, WYO.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS THERMOGRAPH)

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	13.0	7.0	6.0	5.5	5.0	2.0	1.5	2.0	1.5	4.5	3.5
2	13.0	11.0	6.5	5.0	5.5	5.0	1.5	1.5	2.0	1.5	4.5	3.0
3	14.0	11.5	8.5	5.5	5.5	5.0	1.5	1.5	3.0	2.0	4.0	3.5
4	14.5	12.0	8.5	6.5	5.0	4.0	1.5	1.5	3.0	2.0	4.5	3.0
5	14.5	13.0	8.5	7.0	4.5	3.0	1.5	1.0	3.0	2.0	5.0	3.0
6	14.5	13.0	8.5	7.0	4.5	3.5	1.5	1.5	3.5	2.0	4.5	3.5
7	14.0	13.0	8.5	6.5	4.0	3.0	1.5	1.5	3.5	2.0	4.5	3.5
8	14.0	13.0	8.5	7.0	4.0	2.0	1.5	1.5	3.5	2.0	4.5	3.5
9	14.0	12.0	9.0	8.0	3.5	2.0	1.5	1.0	3.0	2.0	5.0	3.5
10	14.0	12.0	9.0	8.0	3.0	1.5	1.5	1.0	3.5	2.0	5.0	4.0
11	14.0	13.0	9.0	8.0	3.0	1.5	1.5	1.5	3.5	2.0	5.0	4.0
12	13.5	12.0	9.0	8.0	2.0	1.5	1.5	1.0	3.5	2.0	5.0	3.5
13	13.5	12.0	8.5	8.0	3.0	1.5	1.5	1.0	3.5	2.0	5.0	4.0
14	13.0	11.5	8.5	7.0	2.0	2.0	1.5	1.0	3.5	2.0	4.5	4.0
15	13.0	11.5	8.5	8.0	2.0	1.5	1.5	1.5	3.5	2.0	5.0	4.0
16	12.0	11.5	8.0	7.0	2.0	1.5	2.0	1.5	4.0	3.0	5.5	4.0
17	13.0	11.5	8.0	6.5	1.5	1.5	2.0	1.5	4.0	3.0	5.0	4.0
18	12.0	10.5	7.0	6.0	1.5	1.5	3.0	1.5	4.5	3.0	5.5	4.0
19	11.5	10.0	6.5	5.0	1.5	1.5	3.0	2.0	4.5	3.0	5.0	4.0
20	11.5	10.5	7.0	5.5	1.5	1.5	3.0	2.0	4.0	3.0	5.0	4.5
21	11.0	10.5	7.0	6.0	2.0	1.5	3.0	2.0	4.0	3.5	5.5	4.0
22	11.5	10.0	7.0	6.0	2.0	1.5	3.0	2.0	4.5	3.5	6.0	4.5
23	11.5	10.0	7.0	6.0	2.0	1.5	3.5	2.0	4.5	3.0	5.5	4.5
24	11.0	10.0	7.0	6.0	2.0	1.5	3.0	1.5	4.0	3.0	6.5	4.5
25	11.0	10.5	6.5	6.0	2.0	2.0	3.0	1.5	4.0	3.0	7.0	5.5
26	11.0	9.5	6.0	5.5	2.0	1.5	1.5	1.5	3.5	2.0	6.0	5.0
27	10.5	7.0	6.0	5.5	2.0	1.5	2.0	1.5	4.5	3.0	6.0	5.0
28	7.0	5.0	6.0	5.5	2.0	1.5	3.0	1.5	5.0	3.5	6.5	5.0
29	5.5	4.5	6.0	5.0	3.0	1.5	3.0	1.5	4.5	3.5	6.5	5.0
30	6.5	5.0	6.0	5.0	2.0	1.5	2.0	1.0	---	---	6.5	5.0
31	7.0	5.5	---	---	2.0	1.5	3.0	1.5	---	---	6.5	5.5
MONTH	14.5	4.5	9.0	5.0	5.5	1.5	3.5	1.0	5.0	1.5	7.0	3.0
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	5.0	9.5	7.0	10.5	8.5	13.5	11.5	15.5	14.0	16.0	14.5
2	6.5	5.5	10.5	8.0	10.5	9.0	11.5	11.0	14.5	13.5	17.0	15.0
3	7.0	5.0	12.0	9.0	10.5	9.0	13.0	11.0	15.5	13.5	17.0	15.5
4	7.0	5.5	13.0	9.5	10.5	9.0	13.5	11.0	16.0	14.0	17.0	15.5
5	8.0	5.5	11.5	9.5	10.0	9.0	13.5	11.5	16.0	14.0	16.5	15.5
6	8.0	6.0	10.5	9.5	11.0	9.0	13.5	11.5	16.0	14.0	16.5	15.0
7	8.5	6.0	11.0	9.5	11.0	9.5	14.0	12.0	16.0	14.0	17.0	15.5
8	8.5	6.0	11.5	9.0	11.0	9.5	14.0	12.0	16.0	14.0	17.0	15.5
9	8.0	6.0	11.5	9.5	11.0	9.5	14.0	12.0	16.5	14.5	18.0	16.0
10	8.5	6.5	11.0	9.5	11.0	9.5	14.0	12.0	16.0	14.0	17.0	15.5
11	8.5	6.5	11.0	9.5	11.0	9.5	14.5	12.0	16.5	14.5	17.0	15.5
12	9.0	7.0	10.5	9.0	11.5	9.5	14.5	13.0	16.5	14.5	18.0	15.5
13	8.5	6.5	11.0	9.0	11.5	9.5	15.0	13.0	16.5	14.5	18.0	16.0
14	7.0	6.0	12.0	9.0	11.0	10.0	15.0	13.0	16.5	14.5	17.0	15.0
15	8.5	5.5	13.5	10.0	11.5	10.0	15.0	13.0	16.5	14.5	17.0	15.0
16	8.5	6.0	13.0	10.0	11.5	10.0	15.0	13.0	17.0	14.5	16.5	14.5
17	8.5	6.5	14.0	10.0	12.0	10.5	14.5	12.0	18.0	14.5	16.5	14.5
18	8.0	6.0	13.0	10.5	11.5	10.0	15.0	13.0	16.5	15.5	17.0	15.0
19	6.0	5.5	10.5	9.0	11.0	10.0	14.0	13.0	16.0	15.5	16.5	15.5
20	8.5	5.5	11.5	9.0	12.0	10.5	15.0	13.0	16.5	15.0	16.0	14.5
21	9.0	6.0	12.0	9.5	12.0	10.5	15.0	13.5	17.0	15.0	16.5	14.5
22	8.5	6.0	11.5	9.5	12.0	11.0	15.0	13.0	16.5	15.0	16.5	14.5
23	9.0	6.5	10.5	8.5	12.0	11.0	15.5	13.0	16.0	15.0	16.5	14.5
24	9.0	6.5	10.0	8.5	12.0	10.5	14.5	13.0	16.5	15.0	15.5	14.0
25	9.5	7.0	10.0	8.5	12.0	11.0	15.0	13.0	16.5	15.0	15.0	13.5
26	7.0	6.0	10.0	8.5	12.0	11.0	---	---	16.5	15.0	15.0	13.5
27	8.0	6.5	10.0	8.5	12.0	11.0	15.0	13.5	16.5	15.5	16.0	14.0
28	10.5	6.5	9.5	8.5	14.0	11.0	15.5	13.5	18.0	15.5	15.0	14.0
29	10.0	8.5	10.0	8.5	13.5	11.0	15.5	13.5	16.5	15.5	15.5	14.0
30	9.5	7.0	10.5	8.5	13.5	11.5	15.0	13.5	17.0	15.0	15.5	14.0
31	---	---	10.5	8.5	---	---	15.0	13.5	16.5	15.5	---	---
MONTH	10.5	5.0	14.0	7.0	14.0	8.5	15.5	11.0	18.0	13.5	18.0	13.5
YEAR	18.0	1.0										

PLATTE RIVER BASIN

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06643000 BATES CREEK NEAR ALCOVA, WYO.

LOCATION.--Lat 42°40'34", long 106°36'09", in SE¼SE¼ sec.1, T.31 N., R.82 W., Natrona County, at former gaging station, 2.8 miles upstream from mouth, and 10.5 miles northeast of Alcova.

DRAINAGE AREA.--393 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1970 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TUR- BID- ITY (JTU)	TEMPER- ATURE (DEG C)
OCT. 06...	1320	6.9	12.8	8.3	1560	2	11.5
NOV. 08...	1100	19	11.6	8.2	1460	5	2.5
DEC. 06...	1520	20	14.2	8.2	1430	6	3.0
JAN. 05...	1500	11	13.5	8.0	1400	6	.0
31...	1420	15	14.0	7.9	1270	10	.0
MAR. 02...	1320	28	13.5	7.9	775	140	3.5
APR. 05...	1300	22	10.4	7.7	950	30	10.0
MAY 01...	1330	101	10.0	7.9	445	150	7.0
JUNE 05...	1310	78	8.3	7.8	1170	2500	13.5
JULY 05...	1330	.63	11.1	7.9	2900	4	22.0
AUG. 07...	1430	.20	11.0	7.8	2670	3	24.5
SEP. 06...	1420	6.0	10.2	8.1	1650	10	17.0

PLATTE RIVER BASIN

06644085 NORTH PLATTE RIVER AT MILLS, WYO.

LOCATION.--Lat 47°50'31", long 106°21'33", in NW¼NE¼SE¼ sec.7, T.33 N., R.79 W., Natrona County, at railroad bridge, 700 ft upstream from Casper Creek, 900 ft east of Mills City limits, and 0.2 mile upstream from bridge on U.S. Highways 20 and 26.

PERIOD OF RECORD.--Chemical analyses: July 1970 to September 1972.

REMARKS.--Discharge records furnished by Bureau of Reclamation.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TUR- BID- ITY (JTU)	TEMPER- ATURE (DEG C)
OCT.							
05...	1235	1330	10.4	8.4	985	8	12.0
12...	1700	1120	11.0	8.5	630	15	12.5
18...	1645	1160	10.4	--	--	25	--
26...	1700	660	12.6	8.6	760	7	10.0
NOV.							
01...	1415	730	12.4	8.4	800	15	.0
08...	1355	1090	13.1	7.8	600	7	4.5
DEC.							
07...	1025	1120	14.0	8.2	585	7	.0
JAN.							
06...	1200	790	13.6	7.8	650	4	.0
FEB.							
01...	1200	1010	13.8	8.0	580	9	.0
MAR.							
03...	1435	1730	12.9	7.9	500	25	2.5
APR.							
05...	1345	1680	13.1	8.2	545	15	9.0
MAY							
01...	1430	1080	9.8	8.3	600	140	7.0
08...	1320	480	11.4	8.3	780	10	11.5
15...	1200	520	8.7	8.3	800	50	15.0
22...	1440	670	10.0	8.4	655	25	16.0
30...	1520	2350	10.0	8.4	515	45	13.5
JUNE							
05...	1400	2380	10.1	8.4	530	280	12.5
12...	1220	2640	9.2	8.2	430	25	13.5
19...	1220	3050	8.9	8.3	440	15	11.0
26...	1230	3240	9.4	8.3	448	30	13.0
JULY							
05...	1020	3360	9.0	8.2	620	15	13.0
10...	1200	3340	9.2	8.1	460	--	14.5
17...	1310	2240	9.8	8.5	505	8	16.0
24...	1510	2240	10.1	8.3	507	15	17.0
31...	1410	2340	7.8	8.2	515	20	16.0
AUG.							
07...	1545	1090	10.4	8.2	467	20	20.0
14...	1155	1340	8.5	8.2	520	20	17.0
21...	1235	1340	9.2	8.1	560	15	17.0
28...	1350	1210	9.3	7.4	560	23	18.5
SEP.							
06...	1510	1210	10.4	8.3	590	15	15.5
13...	1035	585	8.8	8.4	710	8	14.0
19...	1730	480	9.4	8.6	725	10	15.5
25...	1300	390	10.4	8.6	784	6	11.0

PLATTE RIVER BASIN

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06644120 MIDDLE FORK CASPER CREEK NEAR BUCKNUM, WYO.

LOCATION.--Lat 43°01'10", long 106°36'30", in NE¼ sec.12, T.35 N., R.82 W., Natrona County, at culvert on county road, 0.6 mile east of Bucknum, and 10 miles east of Natrona.

PERIOD OF RECORD.--Chemical analyses: July 1970 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
SEP. 05...	1730	.01	61	29	190	8.2	223	0	490	13	.5

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
SEP. 05...	.02	270	89	916	1.25	.02	5.0	1300	8.0	18.0

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TUR- BID- ITY (JTU)	TEMPER- ATURE (DEG C)
OCT. 05...	1330	.00					
NOV. 08...	1500	.25	8.5	6.6	4400	25	.5
DEC. 07...	1420	.16	6.4	7.8	5300	20	.0
JAN. 06...	1330	.00					
31...	1535	.00					
MAR. 03...	1620	11	12.2	7.5	630	40	.5
APR. 05...	1450	.34	9.9	8.2	4150	10	12.0
MAY 01...	1600	20	9.3	8.0	960	190	8.0
JUNE 05...	1500	.40	7.0	8.3	3950	30	19.0
JULY 05...	1215	.10	8.8	9.5	7000	3	24.0
AUG. 07...	1630	.00					
SEP. 06...	1645	.00					

PLATTE RIVER BASIN

06644500 CASPER CREEK AT CASPER, WYO.

LOCATION.--Lat 42°50'52", long 106°21'52", in NW¼NE¼ sec.7, T.33 N., R.79 W., Natrona County, at Bureau of Reclamation gaging station, 700 ft upstream from bridge on U.S. Highways 20 and 26, 0.4 mile upstream from mouth, and 2 miles west of city hall in Casper.

DRAINAGE AREA.--668 sq mi, of which 98 sq mi is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: July 1970 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
AUG. 07...	1745	19	170	120	470	8.7	305	0	1500	65	.8
DATE	TIME	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS AC-FT) PER DAY)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
AUG. 07...	7-8	7-8	920	670	2860	3.89	148	6.7	3160	8.2	26.0

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TUR- BID- ITY (JTU)	TEMPER- ATURE (DEG C)
OCT.							
05...	1200	9.5	15.2	8.5	5300	2	12.5
12...	1630	8.6	14.8	8.5	4900	4	14.0
18...	1615	11	14.2	8.4	5200	15	5.0
26...	1630	8.7	15.0	8.6	5300	5	12.0
NOV.							
01...	1230	9.6	13.0	8.3	5000	15	.0
08...	1600	8.0	11.2	7.7	6000	9	4.5
DEC.							
07...	1200	7.2	13.6	8.1	5400	5	.0
JAN.							
06...	1105	5.6	13.6	7.9	4800	5	.0
FEB.							
01...	1110	6.9	13.0	8.0	5100	7	.0
MAR.							
02...	1515	92	12.8	7.9	1900	120	3.5
APR.							
05...	1600	10	9.4	8.3	6300	9	16.0
MAY							
01...	1700	11	9.5	8.5	6400	14	10.5
08...	1300	11	9.6	8.2	5900	8	14.0
15...	1140	9.4	8.1	8.2	6050	6	18.0
22...	1510	6.7	8.4	8.3	5900	4	21.5
30...	1445	5.9	10.2	8.2	5250	3	26.5
JUNE							
05...	1600	15	8.3	8.3	5500	25	19.0
12...	1140	10	9.6	8.3	5300	6	23.0
19...	1130	12	9.4	8.2	3900	8	11.5
26...	1200	14	9.6	8.3	3520	15	20.5
JULY							
05...	0950	39	9.9	8.2	3800	6	15.0
10...	1130	11	9.7	8.2	3420	--	22.5
17...	1430	11	9.4	8.3	3400	7	26.0
24...	1530	14	8.1	8.2	3200	20	25.0
31...	1430	11	7.5	8.4	3190	9	21.0
AUG.							
07...	1745	19	7.4	8.1	3260	20	26.0
14...	1345	13	8.0	8.2	3500	10	26.0
21...	1345	13	8.8	8.1	3560	7	26.0
28...	1450	19	8.6	7.7	3520	15	26.5
SEP.							
06...	1640	14	9.4	8.2	4020	9	17.0
13...	1155	15	10.6	8.3	4180	7	17.0
19...	1700	11	9.6	8.5	3750	6	17.5
25...	1230	10	11.2	8.4	4080	7	12.0

PLATTE RIVER BASIN

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06644550 NORTH PLATTE RIVER AT CASPER, WYO.

LOCATION.--Lat 42°51'26", long 106°19'09", in SE&SE&NW& sec.4, T.33 N., R.79 W., Natrona County, at bridge on service road, 800 ft west of Center Street exit from Interstate Highway 25, and 0.6 mile northwest of Casper Post Office.

PERIOD OF RECORD.--Chemical analyses: October 1971 to September 1972.

Water temperatures: October 1971 to September 1972.

Sediment records: October 1971 to September 1972.

EXTREMES.--1970-71:

Water temperatures: Maximum, 22.0°C Aug. 16, 17, 28; minimum, freezing point Oct. 28 to Nov. 1.

REMARKS.--Temperature recorder in Bureau of Reclamation gaging station 0.3 mile upstream from sampling site; records furnished by Pacific Power and Light Company and Bureau of Reclamation.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TUR- BID- ITY (JTU)	TEMPER- ATURE (DEG C)
OCT.							
05...	1130	1330	10.0	8.3	610	6	11.0
12...	1515	1130	10.6	8.3	680	15	12.0
18...	1545	1170	10.4	8.3	730	35	7.0
26...	1415	670	11.8	8.4	830	7	9.0
NOV.							
01...	1030	740	13.5	8.6	820	9	.0
08...	1630	1100	11.6	8.4	650	9	4.5
DEC.							
07...	0940	1130	14.8	8.0	650	7	.0
JAN.							
06...	0925	600	13.9	7.9	730	4	.0
FEB.							
01...	0910	1020	14.0	8.1	610	7	.0
MAR.							
03...	1355	1820	14.6	8.1	570	20	2.5
APR.							
05...	1700	1690	12.8	8.7	610	10	9.5
MAY							
01...	1730	1090	9.8	8.4	695	120	8.0
08...	1430	493	11.6	8.4	960	10	12.0
15...	1000	530	8.3	8.1	900	60	12.5
22...	1540	680	9.4	8.5	705	30	15.0
30...	1545	2360	9.7	8.2	535	40	14.0
JUNE							
05...	1645	2400	8.8	8.0	730	400	12.5
12...	1030	2650	9.1	8.5	480	25	12.5
19...	1015	3060	8.7	8.4	460	15	12.0
26...	1020	3260	9.0	8.2	458	30	12.0
JULY							
05...	0920	3400	8.8	8.2	470	10	12.5
10...	1015	3350	8.8	8.2	460	--	14.0
17...	1515	2250	10.0	8.5	535	6	17.0
24...	1600	2250	9.9	8.5	560	15	18.5
31...	1500	2310	7.7	8.4	520	20	17.0
AUG.							
07...	1830	1660	10.0	8.4	600	30	21.0
14...	1120	1350	8.2	8.3	885	15	17.0
21...	1130	1350	8.7	8.2	680	20	16.0
28...	1300	1230	8.9	7.4	520	30	17.5
SEP.							
06...	1710	1100	10.3	8.4	640	25	15.0
13...	1000	600	8.7	8.4	820	9	13.5
19...	1600	490	9.6	8.4	820	10	15.5
25...	1340	400	10.4	8.5	860	5	10.5

PLATTE RIVER BASIN

06644550 NORTH PLATTE RIVER AT CASPER, WYO.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	9.0	0.5	0.0	3.5	1.5	1.0	1.0	1.0	1.0	5.5	3.0
2	9.0	7.0	1.0	0.5	2.0	1.0	1.0	1.0	1.5	1.0	4.5	1.5
3	10.5	7.0	1.0	0.5	2.0	1.0	1.0	1.0	1.5	1.0	4.0	2.0
4	13.0	10.0	5.0	0.5	1.5	1.0	1.5	1.0	1.5	1.0	4.0	1.0
5	15.0	11.0	4.5	2.0	1.0	1.0	1.5	1.5	1.0	1.0	6.0	1.5
6	15.0	11.5	3.5	1.0	1.5	1.0	1.5	1.5	1.5	1.0	7.0	5.0
7	14.5	11.5	4.5	1.0	1.0	1.0	1.5	1.5	1.5	1.0	5.5	3.5
8	13.5	10.5	5.5	3.0	1.0	1.0	1.5	1.0	1.5	1.0	5.5	3.0
9	13.5	9.5	6.5	3.5	1.5	1.0	1.5	1.0	1.5	1.0	7.0	4.5
10	15.0	11.0	7.0	4.5	1.0	1.0	1.5	1.5	1.5	1.0	8.5	5.5
11	14.5	11.0	8.0	5.5	1.0	1.0	1.5	1.0	1.5	1.0	7.0	5.5
12	---	---	8.5	6.0	1.0	1.0	1.0	0.5	1.5	1.0	7.0	5.0
13	---	---	7.0	5.5	1.0	1.0	1.0	0.5	1.5	1.0	8.5	5.5
14	---	---	7.0	5.0	1.0	1.0	1.0	0.5	1.5	1.0	7.0	5.0
15	10.0	8.5	6.5	5.0	1.5	1.0	1.0	1.0	1.5	1.0	6.5	4.0
16	9.0	7.0	5.5	4.5	1.5	1.0	1.0	1.0	1.5	1.0	7.0	5.0
17	11.0	8.5	5.0	3.0	1.5	1.0	1.0	1.0	1.5	1.0	8.5	6.0
18	---	---	3.5	1.5	1.5	1.0	1.5	1.0	1.5	1.0	8.5	5.5
19	---	---	1.5	1.0	1.5	1.0	1.5	1.5	1.5	1.0	8.0	5.5
20	9.5	5.5	4.0	1.5	1.5	1.0	1.5	1.5	1.5	1.0	6.0	5.5
21	9.5	8.0	5.0	3.0	1.5	1.0	1.5	1.0	1.5	1.0	8.0	4.5
22	10.0	7.0	6.0	4.0	1.5	1.5	1.5	1.0	1.5	1.0	9.0	5.5
23	10.5	8.0	6.0	4.0	1.5	1.0	1.5	1.0	3.5	1.0	8.0	6.0
24	10.5	8.0	5.5	3.5	1.5	1.0	1.5	1.0	3.5	2.0	8.0	5.0
25	11.0	9.0	5.0	4.0	1.5	1.0	1.0	1.0	4.0	1.5	9.0	5.5
26	10.0	7.0	4.5	3.5	1.0	1.0	1.0	1.0	2.0	1.0	8.0	4.5
27	9.5	2.0	5.0	4.0	1.5	1.0	1.5	1.0	5.0	1.5	6.0	3.0
28	2.0	0.0	4.5	3.5	1.5	1.0	1.5	1.0	7.0	4.0	6.5	3.5
29	0.0	0.0	4.0	2.0	1.5	1.0	1.0	1.0	7.0	4.5	6.5	4.0
30	0.5	0.0	4.0	2.0	1.5	1.0	1.0	1.0	---	---	5.5	4.0
31	0.5	0.0	---	---	1.0	1.0	1.5	1.0	---	---	6.5	4.5
MONTH	15.0	0.0	8.5	0.0	3.5	1.0	1.5	0.5	7.0	1.0	9.0	1.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	4.0	10.0	7.0	17.0	13.5	17.0	15.0	20.5	16.0	15.5	13.5
2	8.5	5.0	13.5	8.0	17.0	13.5	15.5	11.0	19.0	16.5	18.5	14.0
3	7.0	3.5	15.5	10.0	16.0	13.5	13.0	10.5	19.0	15.0	19.0	15.0
4	8.5	5.0	17.0	11.5	15.5	13.0	15.5	11.5	20.5	16.5	19.5	14.5
5	10.5	6.0	15.0	11.0	14.5	13.0	16.5	14.0	21.0	16.5	18.0	15.5
6	9.0	7.0	11.0	9.5	16.0	12.0	16.0	15.0	21.5	17.0	16.5	13.5
7	10.0	6.5	12.0	8.5	18.0	14.0	16.5	14.0	21.5	17.0	18.0	14.5
8	11.5	7.0	14.0	10.5	18.0	14.5	17.0	14.5	21.0	18.0	18.5	14.5
9	10.5	8.0	13.0	10.5	17.0	14.5	17.0	15.0	---	---	19.0	15.0
10	10.5	8.0	11.0	10.0	16.5	14.0	18.0	15.0	---	---	18.5	15.5
11	13.0	9.5	12.0	9.5	17.0	14.0	18.5	15.5	---	---	18.0	15.0
12	10.5	9.0	13.0	9.5	16.5	14.0	18.5	15.5	---	---	18.5	15.0
13	9.5	6.5	14.5	10.5	16.0	14.0	19.0	16.0	---	---	18.0	15.0
14	8.5	6.0	18.0	11.5	15.5	13.5	19.5	16.0	---	---	17.0	14.0
15	11.0	6.0	19.5	14.0	15.5	13.5	19.5	15.5	---	---	17.0	14.0
16	13.0	8.5	21.0	15.0	16.0	13.5	19.5	15.5	22.0	17.0	16.0	13.0
17	11.0	9.5	19.5	15.5	15.5	13.5	18.5	15.0	22.0	18.0	16.5	13.0
18	10.5	6.5	19.0	15.5	15.5	13.5	20.0	15.5	20.5	18.0	17.0	13.5
19	6.5	5.0	17.0	13.5	14.5	13.0	19.0	14.5	18.5	16.5	16.5	14.5
20	10.0	5.0	18.5	13.0	14.5	11.0	16.5	13.0	18.5	15.5	15.5	13.0
21	11.5	8.0	18.5	15.0	16.0	13.0	19.5	15.5	20.5	15.5	15.0	11.0
22	13.0	8.5	17.0	13.5	16.0	14.0	19.5	16.0	20.0	16.0	15.0	11.5
23	13.0	8.5	18.0	13.0	16.0	14.0	20.0	15.0	18.0	14.5	15.5	13.0
24	14.5	9.0	16.5	13.5	16.0	14.0	19.5	15.5	18.0	13.5	13.5	10.0
25	13.0	10.0	15.5	12.0	16.0	14.0	---	---	19.5	15.0	13.0	10.0
26	10.5	7.0	14.5	12.0	15.0	13.0	---	---	20.0	15.5	13.0	8.5
27	9.0	6.5	14.0	11.5	15.5	14.0	---	---	21.0	16.0	14.0	10.5
28	14.0	8.0	14.5	11.5	16.0	13.5	19.5	16.0	22.0	16.5	13.5	11.0
29	14.0	10.5	14.0	11.5	16.5	14.5	20.0	16.0	20.0	17.0	13.0	10.0
30	13.5	10.0	15.5	11.0	17.0	14.5	19.5	16.5	20.0	16.0	14.0	10.5
31	---	---	17.0	13.0	---	---	18.0	16.0	19.0	15.5	---	---
MONTH	14.5	3.5	21.0	7.0	18.0	11.0	20.0	10.5	---	---	19.5	8.5
YEAR	22.0	0.0										

PLATTE RIVER BASIN

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06644550 NORTH PLATTE RIVER AT CASPER, WYO.--Continued

SUSPENDED SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
OCT. 26...	1540	9.0	1150	18	56
DEC. 08...	1500	.5	700	28	53
JAN. 06...	1450	.0	600	36	58
FEB. 10...	1330	.0	1100	63	187
MAR. 07...	1610	3.0	2000	586	3160
APR. 06...	0845	9.5	1700	74	340
MAY 08...	1655	12.0	500	18	24
JUNE 09...	1540	15.0	2400	444	2880
JULY 07...	1535	13.0	3400	90	826
AUG. 08...	1040	17.0	1600	63	272
SEP. 14...	0840	13.0	600	20	32
30...	1500	--	1000	34	92

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM	BED MAT. FALL DIAM. % FINER THAN .500 MM
MAY 08...	1655	12.0	500	0	0	2	9

DATE	1.00 MM	2.00 MM	4.00 MM	8.00 MM	16.0 MM	32.0 MM
MAY 08...	16	21	30	45	62	84

PLATTE RIVER BASIN

06645000 NORTH PLATTE RIVER BELOW CASPER, WYO.

LOCATION.--Lat 42°51'45", long 106°13'00", in NW¼NW¼ sec.4, T.33 N., R.78 W., Natrona County, at Mystery Bridge, 0.3 mile upstream from Claude Creek, 0.5 mile north of U.S. Highways 20 and 87, 5.5 miles east of city hall in Casper, and 9.5 miles downstream from Casper Creek.

DRAINAGE AREA.--16,533 sq mi, of which 4,790 sq mi (including 3,959 sq mi in Great Divide Basin in southern Wyoming) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 06...	0830	1200	10	0	58	19	44	3.3	146	0	180	14
NOV. 08...	1545	1100	8.5	70	71	17	54	3.3	161	0	210	14
DEC. 06...	1500	1170	8.8	100	60	21	49	3.1	160	0	190	13
JAN. 12...	1500	750	11	80	62	19	46	3.3	156	0	180	15
FEB. 08...	1715	1050	13	60	58	19	44	3.3	154	0	170	13
MAR. 08...	1630	2200	11	260	56	20	46	3.3	146	0	170	12
APR. 24...	1030	1020	11	160	62	20	61	3.3	153	0	220	14
MAY 30...	1430	2360	11	0	50	16	40	3.3	147	0	140	11
JUNE 20...	1500	3000	10	110	46	17	31	3.0	146	0	120	8.3
JULY 07...	1545	3460	9.7	90	52	11	27	3.0	145	0	110	8.0
JULY 18...	1000	2180	10	140	48	17	36	3.0	145	0	140	8.3
AUG. 30...	0915	1240	11	30	55	19	42	3.5	158	0	160	11
SEP. 28...	1545	600	8.4	50	73	25	69	4.2	165	0	270	17

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BERYL- LIUM (BE) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL MERCURY (HG) (UG/L)
OCT. 06...	0830	1200	0	0	0	0	1	.2
JAN. 12...	1500	750	--	0	0	0	2	.3
APR. 24...	1030	1020	--	0	0	0	2	.5

DATE	TIME	DIS- CHARGE (CFS)	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)
OCT. 06...	0830	1200	.00	.0	.00	.00	.00	.00
JAN. 12...	1500	750	.00	.0	.00	.00	.00	.00
APR. 24...	1030	1020	.00	.0	.00	.00	.00	.00

PLATTE RIVER BASIN

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06645000 NORTH PLATTE RIVER BELOW CASPER, WYO.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1950 to August 1952, August 1957 to September 1959, October 1967 to September 1972.

Water temperatures: June 1949 to September 1952, August 1957 to September 1959.

Sediment records: April 1947 to September 1952.

REMARKS.--Discharge records furnished by Bureau of Reclamation.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 06...	.4	1.6	80	403	.55	1310	220	100	1.3	621	8.1	12.0
NOV. 08...	.5	3.9	80	462	.63	1370	240	108	1.5	694	7.7	4.5
DEC. 06...	.5	2.3	80	427	.58	1350	240	109	1.4	671	8.0	.0
JAN. 12...	.4	2.9	80	412	.56	834	230	102	1.3	637	8.1	.0
FEB. 08...	.5	2.7	70	398	.54	1130	220	94	1.3	606	7.9	.0
MAR. 08...	.5	3.4	50	391	.53	2320	220	100	1.3	594	7.7	4.0
APR. 24...	.4	3.4	60	467	.64	1290	240	110	1.7	717	7.9	9.0
MAY 30...	.4	2.0	60	348	.47	2220	190	69	1.3	545	7.8	14.0
JUNE 20...	.4	1.3	60	309	.42	2500	190	65	1.0	499	8.2	13.5
JULY 07...	.5	.6	50	293	.40	2740	180	61	.9	475	8.3	13.0
AUG. 18...	.4	1.0	70	330	.45	1940	190	71	1.1	526	8.3	16.0
SEP. 30...	.4	1.8	60	383	.52	1280	220	90	1.2	597	8.1	16.0
SEP. 28...	.5	3.9	80	552	.75	894	290	155	1.8	846	8.1	12.0

DATE	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MOLYBDENUM (MO) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)
OCT. 06...	2	40	3	0	0	30	2
JAN. 12...	1	20	2	1	0	8	4
APR. 24...	1	30	4	1	0	20	14

DATE	ENDRIN (UG/L)	HEPTACHLOR (UG/L)	HEPTACHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 06...	.00	.00	.00	.00	.00	.00	.00
JAN. 12...	.00	.00	.00	.00	.00	.00	.00
APR. 24...	.00	.00	.00	.00	.00	.00	.00

PLATTE RIVER BASIN

06645000 NORTH PLATTE RIVER BELOW CASPER, WYO.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	CYANIDE (CN) (MG/L)
OCT. 06...	0830	1200	.11	.10	1.7	.00
NOV. 08...	1545	1100	.50	--	4.7	--
DEC. 06...	1500	1170	.34	.18	.6	--
JAN. 12...	1500	750	.19	.10	2.5	.00
FEB. 08...	1715	1050	.19	.12	2.6	--
MAR. 08...	1630	2200	.19	.29	1.8	--
APR. 24...	1030	1020	.07	.14	3.2	.00
MAY 30...	1430	2360	.19	.20	1.4	--
JUNE 20...	1500	3000	--	.20	2.5	--
JULY 18...	1000	2180	--	--	1.2	--
AUG. 30...	0915	1240	--	--	1.0	--
SEP. 28...	1545	600	--	--	1.6	--

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)
OCT. 06...	0830	1200	9.8	8.3	640	--	200
NOV. 08...	1545	1100	11.2	8.5	720	--	13800
DEC. 06...	1500	1170	11.8	8.4	650	--	27500
JAN. 12...	1500	750	11.4	7.9	690	--	6500
FEB. 08...	1715	1050	10.4	7.9	640	--	4600
MAR. 08...	1630	2200	10.7	8.2	580	--	2700
APR. 24...	1030	1020	11.7	8.9	715	--	1300
MAY 30...	1430	2360	9.7	8.4	575	--	0
JUNE 20...	1500	3000	9.3	8.4	521	--	10
JULY 18...	1000	2180	9.1	8.6	510	1500	40
AUG. 30...	0915	1240	7.6	8.3	640	18000	2000
SEP. 28...	1545	1000	10.4	8.5	895	20000	340

PLATTE RIVER BASIN

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06646600 DEER CREEK BELOW MILLAR WASTEWAY, AT GLENROCK, WYO.

LOCATION.--Lat 42°51'50", long 105°51'56", in NW¼NW¼ sec.4, T.33 N., R.75 W., Converse County, at gaging station, 900 ft downstream from bridge on U.S. Highways 20 and 87 in Glenrock, and 0.5 mile upstream from mouth.

DRAINAGE AREA.--213 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1972.

Water temperatures: October 1967 to September 1972.

EXTREMES.--1971-72:

Specific conductance: Maximum daily, 1,340 micromhos Aug. 10; minimum daily, 171 micromhos May 20.

Water temperatures: Maximum, 23.0°C Aug. 21; minimum, freezing point Jan. 12, 13.

Period of record:

Specific conductance: Maximum daily, 2,080 micromhos Sept. 9, 1969; minimum daily, 137 micromhos Apr. 16, 1971.

Water temperatures: Maximum, 28.0°C Aug. 15, 1969; minimum, freezing point on many days during winter period most years.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV.												
03...	1245	43	14	0	92	46	55	2.9	319	0	250	19
DEC.												
02...	1330	35	14	0	88	42	40	1.8	306	0	230	6.3
JAN.												
07...	1445	28	13	30	78	39	33	1.6	281	0	190	7.3
31...	1345	27	14	10	81	38	33	1.6	264	0	180	5.2
MAR.												
09...	1400	76	13	50	45	18	15	2.1	165	0	71	4.2
31...	1400	70	12	50	41	14	18	1.2	147	0	67	5.4
APR.												
28...	1030	190	14	80	24	10	8.0	.9	89	0	44	1.3
MAY												
09...	1415	409	12	120	22	8.4	6.7	.9	79	0	36	2.1
24...	1200	265	13	40	25	10	10	.9	92	0	44	2.3
JUNE												
08...	1630	89	17	310	50	23	24	1.4	195	0	100	2.0
JULY												
12...	1710	8.7	15	30	67	59	96	2.8	328	0	320	24
AUG.												
08...	1835	1.5	16	110	98	54	130	3.3	403	0	340	40
SEP.												
13...	1740	2.7	13	140	97	63	95	3.0	383	0	360	18

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
NOV.												
03...	.5	.0	150	637	.87	74.0	420	158	1.2	943	8.2	2.0
DEC.												
02...	.4	.1	100	572	.78	54.1	390	139	.9	878	7.9	1.0
JAN.												
07...	.4	.6	80	499	.68	37.7	360	129	.8	727	8.0	1.0
31...	.4	1.1	70	488	.66	35.6	360	143	.8	759	7.9	.5
MAR.												
09...	.3	.8	50	250	.34	51.3	190	55	.5	415	7.8	7.0
31...	.2	.2	50	231	.31	43.7	160	39	.6	380	8.1	4.0
APR.												
28...	.2	.3	20	147	.20	75.4	100	27	.3	241	7.8	6.5
MAY												
09...	.1	.4	30	128	.17	141	89	24	.3	192	7.8	9.5
24...	.2	.3	30	151	.21	108	100	25	.4	239	7.9	12.5
JUNE												
08...	.3	.2	80	315	.43	75.7	220	60	.7	500	8.3	19.0
JULY												
12...	.5	.1	300	740	1.01	17.4	410	141	2.1	1110	8.2	22.5
AUG.												
08...	.7	.2	390	885	1.20	3.58	470	139	2.6	1290	8.1	22.0
SEP.												
13...	.6	.2	270	838	1.14	6.11	500	186	1.8	1230	8.1	17.5

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	0.5	0.0	1.5	0.5	0.0	0.0	0.0	0.0	5.0	3.0
2	10.0	7.0	1.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	3.5	1.5
3	10.0	6.5	3.0	1.5	0.5	0.0	0.0	0.0	0.0	0.0	3.0	1.5
4	11.0	8.5	4.0	3.0	1.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0
5	13.0	10.0	5.0	4.0	0.5	0.0	0.0	0.0	0.0	0.0	5.0	0.0
6	13.5	11.0	5.0	4.5	0.5	0.0	0.0	0.0	0.0	0.0	6.5	3.5
7	13.5	11.0	5.0	4.5	0.5	0.0	0.0	0.0	0.0	0.0	5.0	3.5
8	13.0	10.5	5.5	5.0	0.5	0.0	0.0	0.0	0.0	0.0	4.5	1.0
9	12.0	10.0	6.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	6.0	3.0
10	13.0	10.5	6.5	5.5	---	---	0.0	0.0	0.0	0.0	8.0	4.0
11	13.0	11.0	6.5	6.0	---	---	0.0	0.0	0.0	0.0	6.0	4.5
12	12.0	11.0	7.0	6.5	---	---	0.0	0.0	0.0	0.0	6.0	2.0
13	11.0	9.5	7.0	6.5	---	---	0.0	0.0	0.0	0.0	7.0	3.0
14	10.5	9.0	6.5	6.0	---	---	0.0	0.0	0.0	0.0	6.0	4.0
15	9.5	8.5	6.0	6.0	---	---	0.0	0.0	0.0	0.0	6.0	2.0
16	9.0	8.0	6.0	6.0	---	---	0.0	0.0	0.0	0.0	6.5	3.0
17	10.0	8.5	6.0	5.0	---	---	0.0	0.0	0.0	0.0	8.0	4.0
18	10.0	8.5	5.0	4.5	---	---	0.0	0.0	0.0	0.0	8.0	4.0
19	8.5	7.0	4.5	4.0	---	---	0.0	0.0	0.0	0.0	7.0	4.5
20	9.0	7.0	4.5	4.0	---	---	0.0	0.0	0.0	0.0	4.5	4.0
21	9.0	8.0	5.0	4.5	---	---	0.0	0.0	0.0	0.0	6.0	2.0
22	9.0	8.0	5.5	4.5	---	---	0.0	0.0	0.0	0.0	8.5	3.5
23	9.5	8.0	---	---	---	---	0.0	0.0	0.0	0.0	7.0	5.5
24	10.0	9.0	---	---	0.0	0.0	0.0	0.0	0.0	0.0	7.0	4.0
25	10.5	9.5	---	---	0.0	0.0	0.0	0.0	0.0	0.0	8.5	4.0
26	10.0	9.0	4.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	3.5
27	10.0	6.5	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	1.0
28	6.5	4.0	3.5	3.0	0.0	0.0	0.0	0.0	1.0	0.0	4.5	1.0
29	5.0	4.0	3.5	1.5	0.0	0.0	0.0	0.0	6.0	1.0	5.0	1.5
30	5.0	0.0	2.0	0.5	0.0	0.0	0.0	0.0	---	---	4.5	2.0
31	0.0	0.0	---	---	0.0	0.0	0.0	0.0	---	---	5.0	1.5
MONTH	13.5	0.0	7.0	0.0	---	---	0.0	0.0	6.0	0.0	8.5	0.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	2.0	8.0	4.5	19.0	13.0	18.5	15.0	19.5	17.0	15.0	13.0
2	7.0	4.5	11.0	4.5	18.5	14.5	16.5	11.5	19.5	18.5	16.0	11.5
3	7.0	3.0	13.0	6.5	18.0	15.0	11.5	10.0	18.5	18.0	17.0	14.0
4	7.0	3.5	15.0	8.0	17.0	13.5	15.0	10.0	19.5	16.0	18.5	13.5
5	10.0	4.5	13.0	9.0	15.5	14.0	17.0	12.0	20.5	16.5	17.0	14.5
6	9.0	7.0	9.0	6.5	17.0	12.0	16.0	14.5	21.0	17.0	15.5	13.0
7	9.0	5.0	9.5	5.5	19.0	14.0	16.0	13.5	21.0	18.0	16.5	13.0
8	10.5	5.0	11.0	7.0	18.5	15.0	16.5	13.5	22.0	18.5	17.0	13.5
9	9.0	5.5	10.0	9.0	17.0	15.0	16.0	14.5	21.0	18.0	18.0	14.0
10	9.5	6.0	9.0	6.0	19.0	14.5	16.0	14.5	22.0	18.5	17.0	14.5
11	10.5	7.0	9.5	5.0	19.0	14.5	16.5	14.5	21.5	19.5	17.0	14.0
12	10.0	8.0	9.5	6.5	19.0	14.5	17.0	15.0	22.0	19.0	18.0	14.0
13	8.0	4.5	10.0	6.0	18.5	14.0	19.5	15.5	22.0	19.0	17.0	13.5
14	6.0	3.5	14.0	6.5	16.5	13.5	19.0	17.0	21.5	19.0	16.5	12.0
15	9.0	3.0	16.0	9.5	18.0	13.5	19.5	17.0	21.5	19.5	16.0	11.0
16	11.0	5.0	17.0	11.0	18.0	13.5	20.0	17.0	22.0	19.0	15.5	11.5
17	9.5	7.0	16.0	11.5	17.0	14.0	19.0	17.0	22.0	19.0	16.0	11.0
18	8.0	4.5	15.5	11.0	16.5	13.0	19.0	16.5	21.0	19.0	15.5	11.5
19	6.0	4.0	13.5	10.0	15.0	13.0	19.0	16.5	20.0	18.0	15.5	13.5
20	8.5	2.0	15.5	9.0	15.0	11.0	16.5	15.0	19.5	17.0	14.5	11.0
21	10.5	4.5	15.5	12.0	16.5	11.5	18.0	15.0	19.5	17.0	15.0	9.0
22	10.5	6.0	14.5	10.5	16.5	13.5	18.5	16.5	20.5	17.0	15.0	10.0
23	12.0	6.0	16.0	10.0	17.0	14.0	18.5	16.0	19.5	17.0	15.0	11.0
24	12.0	6.0	16.5	11.0	17.0	13.5	18.5	16.5	18.0	15.5	11.5	8.5
25	11.0	6.5	16.0	11.5	16.5	13.5	19.0	17.0	18.5	14.5	11.5	8.0
26	8.5	4.5	15.0	11.5	16.0	12.0	18.5	17.0	19.5	15.0	11.5	6.5
27	6.0	5.0	14.5	10.5	16.5	13.0	19.5	16.5	20.5	16.0	14.0	8.5
28	11.5	4.5	14.0	10.5	18.0	13.5	19.0	18.0	21.0	16.5	13.5	9.5
29	11.5	6.5	14.0	11.5	18.5	14.0	19.5	18.0	19.5	18.0	11.0	8.5
30	10.0	7.0	16.0	10.0	18.5	14.5	19.5	18.5	19.5	16.0	12.0	8.0
31	---	---	17.0	11.5	---	---	19.5	18.5	18.5	15.0	---	---
MONTH	12.0	2.0	17.0	4.5	19.0	11.0	20.0	10.0	22.0	14.5	18.5	6.5
YEAR	22.0	0.0										

EXTREMES.--1971-72:

Specific conductance: Maximum daily, 972 micromhos Sept. 28; minimum daily, 302 micromhos Jan. 26.
Water temperatures: Maximum, 24.5°C Aug. 10, 16; minimum, 2.0°C Jan. 18, 28, 29, Feb. 3, 4.

Period of record:

Specific conductance: Maximum daily, 1,670 micromhos June 17, 1967; minimum daily, 302 micromhos Jan. 26, 1972.

Water temperatures: Maximum, 34.0°C July 2, 1970; minimum, freezing point on several days during winter periods in 1960-64.

REMARKS.--No appreciable inflow between sampling point and gaging station. Minimum temperature observed during water year: 1.5°C Feb. 1.

DATE	DIS-SOLVED FLUO-RIDE (F)	DIS-SOLVED NITRATE (NO3)	DIS-SOLVED BORON (B)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON-CAR- BONATE HARD- NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT- ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
	(MG/L)	(MG/L)	(UG/L)	(MG/L)								
NOV. 02...	.5	3.2	80	534	.73	842	290	150	1.7	830	8.2	7.0
DEC. 01...	.4	2.3	80	452	.61	1420	250	120	1.3	714	8.0	2.5
JAN. 17...	.5	2.6	80	410	.56	1330	230	91	1.3	646	8.0	4.0
FEB. 01...	.4	3.0	70	399	.54	1230	230	113	1.3	629	7.8	1.5
MAR. 10...	.4	3.0	60	373	.51	2320	220	94	1.2	582	7.8	8.0
31...	.4	2.0	50	385	.52	2040	220	92	1.2	597	7.9	5.5
MAY 09...	.3	2.5	80	476	.65	1140	250	128	1.6	741	8.0	13.0
JUNE 08...	.4	1.9	70	362	.49	2080	200	75	1.2	571	7.9	20.0
JULY 06...	.5	.9	60	302	.41	2630	180	60	.9	488	8.3	16.5
AUG. 08...	.4	1.7	60	403	.55	1610	240	110	1.3	611	8.1	23.0
SEP. 11...	.5	1.5	90	474	.64	1220	250	109	1.6	720	8.4	20.5
27...	.5	1.2	280	631	.86	760	310	173	2.1	955	8.6	20.5

[illegible]

PLATTE RIVER BASIN

06647020 NORTH PLATTE RIVER NEAR CAREYHURST, WYO.

LOCATION.--Lat 42°51'21", long 105°40'00", in NW¼SE¼SW¼ sec.6, T.33 N., R.73 W., Converse County, temperature recorder 0.5 mile upstream from Box Elder Creek and 0.6 mile northeast of Careyhurst.

PERIOD OF RECORD.--Water temperatures: January 1969 to September 1972.

EXTREMES.--1971-72:

Water temperatures: Maximum, 26.0°C Aug. 8, 10-12, 14; minimum, freezing point on many days during December to February.

Period of record:

Water temperatures: Maximum, 32.0°C July 4, 1970; minimum, freezing point on many days in winter months of 1969 and 1972.

REMARKS.--Records furnished by the Wyoming Game and Fish Commission.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	13.0	6.0	3.5	4.0	3.0	3.5	2.0	1.5	1.0	6.5	4.5
2	13.0	9.0	6.0	3.0	3.5	1.5	3.0	1.0	2.0	0.0	5.0	2.0
3	13.0	9.0	8.5	3.0	4.0	1.5	3.0	1.0	3.0	0.0	4.5	3.0
4	14.5	11.0	6.5	3.0	3.0	1.0	2.0	0.5	4.0	1.0	4.5	1.5
5	16.5	13.0	6.5	3.5	1.5	0.0	3.5	0.0	4.0	1.0	5.5	1.0
6	17.0	14.0	6.0	4.0	1.0	0.0	3.5	2.0	4.0	1.0	8.0	4.5
7	16.5	14.0	6.0	3.0	1.0	0.0	5.5	3.0	3.5	1.0	7.0	5.0
8	15.5	13.5	7.0	4.5	2.0	0.0	4.0	0.5	4.0	1.0	5.0	3.0
9	16.0	11.5	8.0	6.0	4.5	1.0	1.5	0.0	2.0	1.0	7.0	4.0
10	16.5	13.5	9.0	6.0	4.5	1.5	3.0	0.5	4.5	0.0	9.0	5.5
11	16.5	14.0	9.5	7.0	4.0	1.5	2.0	0.5	4.5	0.5	8.5	6.5
12	16.0	14.0	10.5	8.0	3.5	1.0	3.0	0.5	4.5	0.5	7.0	6.0
13	14.5	12.0	10.0	7.0	3.5	1.5	1.5	0.5	3.5	1.0	9.0	5.5
14	13.0	11.0	9.5	6.5	3.0	1.5	1.0	0.0	4.5	0.5	8.5	6.5
15	11.5	9.5	8.5	6.5	3.0	1.0	3.0	0.5	4.5	0.5	8.0	5.0
16	12.0	9.5	8.5	7.0	1.0	0.5	4.0	1.0	5.5	2.0	8.5	5.5
17	14.0	11.0	8.0	5.5	4.0	1.0	3.5	1.5	5.0	2.0	8.5	6.0
18	13.5	10.0	5.5	3.5	4.0	1.5	4.0	1.5	6.5	2.0	9.5	6.5
19	11.5	9.0	3.5	1.0	3.5	1.5	4.5	2.0	6.0	1.5	9.0	6.5
20	12.0	9.0	6.0	3.0	3.0	1.5	4.5	1.5	5.0	1.5	6.5	5.5
21	11.5	9.5	5.5	4.0	4.0	1.5	3.5	2.0	4.5	1.5	7.0	4.5
22	13.0	10.0	6.5	4.0	4.0	2.0	4.0	1.5	5.5	1.5	9.0	5.5
23	13.5	10.0	7.0	5.5	4.5	3.0	4.0	1.5	4.5	1.5	9.0	7.0
24	13.0	10.5	6.5	4.5	4.0	1.5	3.0	0.5	3.5	1.5	9.0	6.0
25	14.0	12.0	6.0	4.5	5.0	3.0	1.5	0.0	4.0	1.0	9.5	5.5
26	13.5	11.0	5.5	4.0	3.5	1.0	0.5	0.0	3.0	0.0	9.0	5.5
27	13.5	8.0	5.5	4.5	3.5	1.0	3.0	0.0	4.5	1.0	6.0	3.0
28	8.0	4.0	5.5	4.0	4.5	1.5	3.5	0.5	5.5	1.5	6.0	3.5
29	5.0	2.0	5.0	3.5	4.0	2.0	2.0	0.0	7.0	0.0	7.0	4.5
30	6.5	4.5	4.5	3.5	3.0	1.0	2.0	0.0	---	---	6.0	4.5
31	9.5	5.0	---	---	3.0	0.5	4.0	0.5	---	---	6.0	4.0
MONTH	17.0	2.0	10.5	1.0	5.0	0.0	5.5	0.0	7.0	0.0	9.5	1.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	4.5	10.0	8.0	20.5	16.0	20.5	17.0	22.0	17.0	17.0	15.0
2	9.0	6.5	12.0	8.0	19.5	16.5	19.0	14.0	21.5	19.5	19.0	14.0
3	9.5	5.5	15.0	10.5	19.5	16.0	14.0	12.0	21.0	18.5	20.5	16.0
4	9.0	5.5	16.5	11.5	18.0	14.5	16.0	11.5	23.0	19.0	21.0	16.0
5	11.0	7.0	15.5	13.0	19.0	16.5	19.0	14.0	24.0	20.0	20.0	18.0
6	11.5	9.5	13.0	8.5	---	---	18.5	16.0	25.0	20.0	18.5	14.5
7	10.5	8.5	11.5	8.0	---	---	18.0	15.5	25.0	21.5	19.5	15.5
8	12.0	8.5	14.0	9.5	---	---	19.5	15.5	26.0	22.0	20.5	16.0
9	11.0	9.5	13.0	11.0	20.0	18.0	19.0	16.5	25.5	21.5	21.0	18.0
10	11.5	9.0	11.0	8.5	21.0	17.0	20.0	16.5	26.0	21.5	21.0	18.5
11	13.5	10.5	11.0	7.0	21.0	17.0	20.5	16.5	26.0	21.5	20.0	18.0
12	13.0	10.5	13.0	10.0	20.0	17.0	21.0	18.0	26.0	22.0	20.5	18.5
13	10.5	8.5	13.0	9.0	20.5	17.0	21.0	18.5	25.5	22.0	21.0	18.5
14	9.0	6.5	15.5	10.5	19.0	16.0	20.5	18.5	26.0	20.5	20.0	17.0
15	10.5	6.0	18.0	13.0	19.5	15.5	23.0	19.0	25.0	22.0	20.5	16.5
16	13.0	9.0	20.5	15.0	19.5	16.0	23.5	19.0	25.5	21.5	18.5	15.0
17	12.0	10.0	21.0	16.0	19.0	16.0	21.5	18.5	25.5	21.5	19.0	16.0
18	10.0	7.0	19.5	16.0	18.0	15.0	23.0	17.0	24.0	21.0	19.5	16.5
19	8.5	6.0	18.0	15.0	17.0	14.0	21.5	19.0	21.5	19.0	19.5	18.0
20	9.0	4.5	19.0	13.5	16.5	13.0	19.0	15.5	21.0	19.0	19.0	16.5
21	11.0	6.5	19.0	16.0	18.0	13.5	20.5	17.0	21.5	18.5	18.5	14.0
22	11.0	8.0	19.0	14.5	18.5	15.5	21.5	19.0	22.0	18.5	18.0	14.5
23	13.5	8.5	20.0	14.5	19.0	15.5	23.0	19.0	20.5	18.0	18.5	16.0
24	13.5	9.0	20.5	15.5	19.0	15.5	22.0	19.5	19.5	18.0	16.0	14.5
25	11.5	8.5	19.5	15.5	18.5	15.5	23.5	20.0	20.0	16.0	16.5	14.0
26	10.5	7.0	18.5	14.5	18.0	14.5	22.0	19.5	20.5	16.5	16.0	13.0
27	7.0	6.5	16.5	14.0	18.5	14.5	22.0	18.5	21.5	18.0	18.5	15.0
28	12.0	6.5	15.5	14.0	19.5	14.5	23.5	19.0	23.0	18.5	19.0	15.5
29	13.0	9.0	16.5	14.0	20.0	15.5	23.5	19.5	21.5	19.0	16.0	13.5
30	12.0	9.5	18.5	13.0	19.5	16.5	22.0	19.0	22.0	17.0	16.0	13.0
31	---	---	19.5	14.5	---	---	20.5	18.5	20.5	17.0	---	---
MONTH	13.5	4.5	21.0	7.0	21.0	13.0	23.5	11.5	26.0	16.0	21.0	13.0
YEAR	26.0	0.0										

LOCATION.--Lat 42°51'08", long 105°29'27", in NE¼NW¼ sec.10, T.33 N., R.72 W., Converse County, Fort Fetterman Reservation, temperature recorder at bridge on Ross Road 0.2 mile downstream from Fetterman Creek, 0.4 mile downstream from La Prele Creek, and 0.7 mile east of Orpha.

EXTREMES.--1971-72:

Water temperatures: Maximum, 27.0°C Aug. 12; minimum, freezing point on many days during October to February.

Period of record:

Water temperatures: Maximum, 29.5°C July 4, 1970; minimum, freezing point on many days during winter period.

REMARKS.--Records furnished by Wyoming Game and Fish Commission and Pacific Power and Light Company.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	11.0	6.0	3.0	2.0	0.5	2.0	0.5	1.0	0.5	6.0	4.0
2	11.0	7.0	4.5	1.5	1.5	0.0	1.0	0.0	0.5	0.0	5.0	3.0
3	10.5	7.0	5.5	1.5	2.0	0.0	0.0	0.0	1.0	0.5	4.5	3.0
4	13.0	9.0	4.5	3.0	2.0	1.0	0.0	0.0	3.0	0.0	4.0	1.5
5	14.5	11.5	4.0	1.0	1.0	0.0	0.0	0.0	3.5	1.0	5.0	1.5
6	15.5	12.0	3.5	1.5	0.5	0.0	1.0	0.0	4.0	1.0	8.0	5.0
7	15.0	13.0	4.0	1.0	0.0	0.0	3.5	0.0	3.0	1.0	6.5	4.5
8	14.0	11.5	5.0	3.0	0.5	0.0	3.0	0.0	3.5	1.0	5.5	3.0
9	14.5	11.0	6.0	3.5	1.0	0.5	0.5	0.0	3.0	1.0	7.0	4.0
10	15.0	12.0	8.0	5.0	1.5	0.0	1.0	0.0	3.0	0.0	9.0	5.5
11	15.0	12.0	8.0	5.5	1.5	0.0	1.5	0.0	4.0	0.0	9.0	7.0
12	14.0	12.0	8.5	6.0	1.0	0.0	1.0	0.0	4.0	0.5	8.5	6.0
13	13.0	10.5	8.5	5.5	1.5	0.0	---	---	3.5	1.5	9.0	6.0
14	11.0	10.0	7.0	4.5	1.5	0.0	---	---	3.5	0.5	8.5	6.5
15	10.0	8.0	6.5	5.0	1.5	0.0	---	---	3.5	0.0	8.0	5.0
16	9.0	8.0	6.0	5.0	0.5	0.0	---	---	4.5	1.5	8.5	5.5
17	11.5	9.0	5.5	3.0	1.0	0.0	---	---	3.0	1.5	9.0	6.5
18	11.0	8.0	3.0	1.0	2.0	1.0	---	---	4.5	1.0	10.0	6.5
19	9.5	7.0	1.5	0.0	2.0	0.5	---	---	4.5	1.0	9.0	6.5
20	10.5	8.0	4.0	1.0	2.0	0.5	---	---	4.0	1.0	6.5	5.5
21	9.5	8.5	4.0	3.0	3.0	0.5	---	---	3.5	1.0	7.0	4.5
22	10.5	8.0	4.5	2.0	3.0	1.5	---	---	4.5	0.5	9.5	5.5
23	11.0	8.5	5.5	3.5	3.5	2.0	---	---	3.5	1.0	8.5	7.0
24	11.5	10.0	5.0	3.0	3.5	1.0	---	---	3.0	0.5	9.0	6.0
25	13.0	10.0	5.0	4.0	4.5	3.0	2.0	0.5	3.0	0.5	9.0	6.0
26	11.5	9.5	4.0	3.0	3.0	0.5	0.5	0.0	3.0	0.0	9.0	5.0
27	10.0	4.0	4.5	3.5	1.0	0.0	0.5	0.0	4.5	1.0	5.5	3.5
28	4.0	1.0	4.0	3.0	3.0	0.0	1.5	0.0	5.5	2.0	5.5	3.5
29	1.0	0.0	3.0	1.5	2.0	0.5	1.0	0.5	6.0	0.5	6.5	4.0
30	3.5	0.0	2.0	1.0	1.0	0.0	1.5	0.5	---	---	5.5	4.5
31	6.5	2.0	---	---	1.0	0.0	2.0	0.5	---	---	5.5	4.5
MONTH	15.5	0.0	8.5	0.0	4.5	0.0	---	---	6.0	0.0	10.0	1.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	4.5	9.0	7.0	20.5	16.0	21.0	18.0	21.5	17.0	18.0	15.0
2	9.0	6.5	11.5	7.0	19.5	17.0	19.5	14.0	21.0	19.0	19.0	14.0
3	9.0	5.0	14.0	9.5	19.5	17.0	14.0	12.0	20.0	18.0	20.5	16.5
4	8.5	6.0	16.0	11.0	19.0	16.0	16.0	11.5	22.0	19.0	21.0	16.5
5	11.0	7.0	15.0	12.0	17.0	15.0	19.0	14.5	23.5	20.0	19.5	18.0
6	11.0	9.5	12.0	9.0	18.5	14.0	18.5	17.0	24.5	20.5	18.5	15.5
7	10.5	8.5	11.0	7.0	19.5	16.0	18.5	16.0	25.0	21.0	19.5	16.0
8	11.5	8.0	13.5	10.0	20.0	17.0	19.5	16.0	26.0	21.5	20.5	16.0
9	11.0	9.0	13.0	11.0	20.0	17.0	19.5	17.0	25.5	21.5	21.5	18.0
10	11.0	9.0	11.0	8.5	21.0	16.5	20.0	17.0	26.0	22.0	21.0	18.5
11	13.5	10.0	10.0	7.0	21.0	17.0	20.5	17.0	26.0	22.0	19.5	17.0
12	12.0	10.0	11.0	8.5	20.0	18.0	21.0	18.0	27.0	22.0	21.5	17.0
13	10.0	7.0	11.0	8.0	20.5	18.0	21.5	19.0	26.5	23.0	21.0	17.0
14	8.0	6.5	14.0	9.0	19.0	16.5	20.5	18.5	25.5	21.5	21.5	16.0
15	10.0	6.0	16.0	11.0	20.0	16.0	22.0	18.5	25.5	23.0	21.0	15.5
16	12.0	8.0	18.5	13.5	20.0	16.5	23.0	19.0	26.0	21.5	19.0	15.5
17	11.5	10.0	18.5	14.5	19.0	17.0	21.0	19.0	26.0	22.0	19.5	15.5
18	10.0	6.5	18.5	14.5	18.5	16.0	22.0	18.5	24.5	20.5	19.0	15.0
19	6.5	5.5	16.0	13.5	17.0	14.5	21.0	18.0	22.0	20.0	19.0	16.5
20	9.0	4.5	16.5	12.0	16.5	13.5	18.5	16.0	22.0	19.0	18.5	15.0
21	11.0	6.5	18.0	14.5	18.0	14.0	20.5	16.5	22.0	19.0	18.5	13.0
22	10.0	8.0	16.5	13.5	19.5	15.5	22.0	19.0	23.0	18.5	18.5	14.0
23	12.0	8.0	18.0	13.0	19.5	16.0	23.0	18.5	21.0	18.0	18.0	14.5
24	13.0	9.0	18.5	14.5	19.0	16.5	22.0	19.5	20.0	16.5	15.5	12.0
25	11.5	8.5	18.0	15.0	19.0	16.0	23.0	19.5	20.5	16.5	16.0	11.0
26	10.0	6.0	17.0	14.5	18.5	15.0	23.0	19.5	21.0	16.5	14.5	10.5
27	6.5	6.0	15.5	13.5	18.0	15.5	22.0	19.5	22.0	18.0	17.0	13.0
28	11.5	5.5	15.0	13.5	19.5	15.5	23.0	19.0	23.5	18.5	18.0	13.5
29	12.0	9.0	15.5	13.5	20.5	16.5	23.5	19.5	21.0	20.0	15.5	12.0
30	11.0	9.0	16.5	12.0	20.0	17.0	23.0	19.0	21.5	18.5	16.0	11.5
31	---	---	19.0	14.5	---	---	21.0	19.0	20.5	18.0	---	---
MONTH	13.5	4.5	19.0	7.0	21.0	13.5	23.5	11.5	27.0	16.5	21.5	10.5
YEAR	27.0	0.0										

PLATTE RIVER BASIN

06652000 NORTH PLATTE RIVER AT ORIN, WYO.

LOCATION.--Lat 42°39'02", long 105°09'46", in SW¼SW¼ sec.17, T.31 N., R.69 W., Converse County, at bridge on U.S. Highway 87, 630 ft upstream from gaging station, 0.2 mile upstream from Shawnee Creek, and 1.5 miles east of Orin.

DRAINAGE AREA.--18,847 sq mi, of which 5,152 sq mi (including 3,959 sq mi in Great Divide Basin in southern Wyoming) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: July 1966 to September 1972.
Sediment records: November 1971 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV. 03...	1515	793	9.9	0	85	21	74	4.2	195	0	270	20
DEC. 22...	1340	1270	10	100	69	18	51	3.8	182	0	190	13
JAN. 24...	1440	1350	11	40	64	18	50	3.6	168	0	190	14
FEB. 12...	1200	1350	12	50	73	17	52	3.7	178	0	190	15
25...	1520	1580	13	100	68	22	61	4.7	171	0	230	13
MAR. 27...	1220	2510	11	40	58	16	42	2.6	155	0	160	10
MAY 09...	1145	2240	12	100	38	12	32	2.1	104	0	120	7.1
JUNE 07...	1040	2630	15	110	54	16	41	3.7	148	0	150	9.3
JULY 13...	1000	3080	13	50	54	13	34	3.0	156	0	120	8.3
AUG. 09...	1800	1510	9.0	90	59	22	50	3.7	171	0	180	11
SEP. 07...	1030	1150	10	100	63	21	58	4.2	184	0	210	14
27...	1100	490	3.4	50	71	32	94	4.6	171	0	330	24

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
NOV. 03...	.5	3.6	90	583	.79	1250	300	140	1.9	861	8.1	4.0
DEC. 22...	.4	2.2	80	447	.61	1530	250	101	1.4	685	8.3	.0
JAN. 24...	.4	3.4	60	434	.59	1580	240	102	1.4	650	7.9	.0
FEB. 12...	.5	2.7	80	456	.62	1660	250	100	1.4	695	8.2	.0
25...	.4	5.0	70	502	.68	2140	260	120	1.6	744	8.3	3.0
MAR. 27...	.4	2.0	60	374	.51	2530	210	83	1.3	575	8.0	5.0
MAY 09...	.3	1.4	50	272	.37	1650	140	55	1.2	433	7.8	10.5
JUNE 07...	.4	2.4	80	364	.50	2580	200	79	1.3	573	8.0	18.0
JULY 13...	.4	1.2	60	327	.44	2720	190	62	1.1	512	8.2	19.0
AUG. 09...	.4	1.3	50	425	.58	1730	240	100	1.4	638	8.3	25.5
SEP. 07...	.4	1.3	100	469	.64	1460	240	89	1.6	714	8.3	16.0
27...	.5	.3	290	646	.88	855	310	170	2.3	991	8.1	11.0

PLATTE RIVER BASIN

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06652000 NORTH PLATTE RIVER AT ORIN, WYO.--Continued

SUSPENDED SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)
NOV. 04...	0830	3.0	830	42	94
DEC. 22...	1340	.0	1270	77	264
JAN. 24...	1440	.0	1350	56	204
FEB. 25...	1520	3.0	1580	856	3650
MAR. 27...	1220	5.0	2510	143	969
MAY 09...	1145	10.5	2240	355	2150
JUNE 09...	1340	20.5	2260	644	3930
JULY 13...	1000	19.0	3080	208	1730
AUG. 09...	1800	25.5	1510	101	412
SEP. 08...	1020	17.0	1170	102	322
20...	0920	13.0	725	34	67

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	NUMBER OF SAM- PLING POINTS	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM
SEP. 27...	1100	11.0	490	16	1	1	4
DATE	BED MAT. FALL DIAM. % FINER THAN .500 MM	BED MAT. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP. 27...	27	63	76	88	95	99	100

PLATTE RIVER BASIN

06652800 NORTH PLATTE RIVER BELOW GLENDO RESERVOIR, WYO.

LOCATION.--Lat 42°27'25", long 104°56'50", in SW¼SW¼NW¼ sec.30, T.29 N., R.67 W., Platte County, at gaging station opposite Sand Draw, 1.3 miles upstream from Horseshoe Creek, 3.1 miles downstream from Glendo Dam, and 5.2 miles southeast of Glendo.

DRAINAGE AREA.--19,507 sq mi, of which 5,174 sq mi (including 3,959 sq mi in Great Divide Basin in southern Wyoming) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1966 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL- CIUM (CA) (MG/L)	DIS-SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO- RIDE (CL) (MG/L)
NOV.												
04...	1105	1.6	6.6	10	70	30	70	5.6	218	0	250	16
30...	1415	2.0	8.9	0	70	34	70	5.3	223	0	260	16
JAN.												
20...	1225	2.6	12	20	74	39	65	5.3	250	0	260	18
FEB.												
02...	1145	3.2	12	50	81	36	72	5.6	226	0	280	24
MAR.												
08...	1300	3230	10	50	70	25	57	3.7	187	1	210	15
31...	1530	2750	7.3	50	65	24	56	3.7	177	0	210	14
MAY												
10...	1050	1170	4.7	0	60	22	50	3.5	172	0	190	12
JUNE												
07...	1620	3160	5.5	90	57	18	51	3.7	152	4	180	12
JULY												
13...	1900	4980	7.0	50	52	18	40	3.5	159	0	150	8.3
AUG.												
10...	1320	4580	8.5	60	53	18	40	3.7	160	0	150	8.7
SEP.												
07...	1615	3340	12	160	59	16	49	4.4	171	0	170	11

DATE	DIS-SOLVED FLUO- RIDE (F) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
NOV.												
04...	.5	.2	110	556	.76	2.40	300	121	1.8	833	8.1	5.0
30...	.5	.1	100	575	.78	3.11	320	137	1.7	887	7.9	3.0
JAN.												
20...	.5	.5	80	600	.82	4.21	340	135	1.5	900	8.0	.5
FEB.												
02...	.5	.7	120	619	.84	5.35	350	165	1.7	931	7.5	.0
MAR.												
08...	.4	1.7	90	488	.66	4260	280	125	1.5	738	8.4	4.0
31...	.4	1.6	80	469	.64	3480	260	115	1.5	723	8.0	5.5
MAY												
10...	.4	.8	80	427	.58	1350	240	99	1.4	673	8.3	8.0
JUNE												
07...	.4	.6	80	406	.55	3460	220	89	1.5	631	8.5	14.0
JULY												
13...	.4	1.0	30	354	.48	4760	200	70	1.2	573	8.0	16.0
AUG.												
10...	.4	.8	70	359	.49	4440	210	79	1.2	563	8.1	20.5
SEP.												
07...	.5	.5	80	404	.55	3640	220	80	1.5	630	8.1	19.0

PLATTE RIVER BASIN

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06656000 NORTH PLATTE RIVER BELOW GUERNSEY RESERVOIR, WYO.

LOCATION.--Lat 42°16'50", long 104°45'15", in SE¼SE¼ sec.27, T.27 N., R.66 W., Platte County, at gaging station, 1 mile northwest of Guernsey and 1.1 miles downstream from Guernsey Dam.

DRAINAGE AREA.--20,196 sq mi (at gaging station), of which 5,175 sq mi (including 3,959 sq mi in Great Divide Basin in southern Wyoming) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: December 1950 to September 1958, October 1965 to September 1972.

Water temperatures: October 1951, April to September 1952, March to September 1953, May 1954 to September 1958, October 1965 to September 1966, April 1967 to September 1968.

Sediment records: April 1947 to June 1953.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV.												
04...	1455	1.7	13	0	75	19	51	4.2	239	0	160	11
DEC.												
02...	1630	1.8	14	0	73	27	51	4.4	256	0	170	14
JAN.												
13...	1130	1.9	15	0	70	28	50	4.4	256	0	170	16
FEB.												
04...	1200	3.2	17	50	76	28	50	4.7	248	0	170	14
MAR.												
01...	1125	2010	9.1	0	72	25	58	4.0	200	0	220	15
24...	1210	2020	4.0	100	66	23	55	3.0	173	0	210	14
31...	1135	2000	6.6	40	64	23	56	4.0	174	0	210	14
MAY												
09...	1940	1130	3.7	420	60	23	49	3.5	170	0	190	13
JUNE												
07...	1750	3060	6.1	90	58	19	51	3.3	162	1	180	12
JULY												
13...	1500	5120	9.0	50	57	15	42	3.3	160	0	160	8.7
AUG.												
10...	1745	4650	8.2	60	54	19	40	3.7	162	0	150	8.7
SEP.												
07...	1330	3020	10	150	55	19	47	4.4	170	0	170	9.3

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
NOV.												
04...	.5	.3	120	456	.62	2.09	260	64	1.4	705	8.0	6.5
DEC.												
02...	.5	.0	70	480	.65	2.33	300	90	1.3	743	7.9	4.0
JAN.												
13...	.5	.5	90	479	.65	2.46	290	80	1.3	745	8.1	5.0
FEB.												
04...	.5	1.8	90	487	.66	4.21	310	107	1.2	757	8.0	3.0
MAR.												
01...	.5	2.4	100	500	.68	2710	280	116	1.5	754	8.3	3.0
24...	.5	.8	80	461	.63	2510	260	118	1.5	712	8.2	7.5
31...	.4	1.4	80	463	.63	2500	260	117	1.5	724	8.3	5.0
MAY												
09...	.4	.3	90	424	.58	1290	240	101	1.4	671	8.3	10.0
JUNE												
07...	.4	.8	80	411	.56	3400	220	85	1.5	644	8.4	16.0
JULY												
13...	.4	1.1	80	371	.50	5130	210	79	1.3	584	8.1	18.0
AUG.												
10...	.4	.3	90	362	.49	4550	210	77	1.2	564	8.1	22.0
SEP.												
07...	.4	1.2	80	400	.54	3260	220	81	1.4	619	7.9	19.0

PLATTE RIVER BASIN

06657000 NORTH PLATTE RIVER AT RECORDER STATION, BELOW WHALEN, WYO.

LOCATION.--Lat 42°14'20", long 104°36'29", in NE¼SW¼ sec.12, T.26 N., R.65 W., Goshen County, at gaging station, 0.2 mile downstream from Cottonwood Draw, 2.5 miles downstream from Whalen Dam, and 4.8 miles northwest of Fort Laramie.

DRAINAGE AREA.--20,384 sq mi, of which 5,178 sq mi (including 3,959 sq mi in Great Divide Basin in southern Wyoming) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: July 1970 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TUR- BID- ITY (JTU)	TEMPER- ATURE (DEG C)
OCT.							
01...	1100	282	11.7	8.2	685	10	15.0
08...	1115	282	12.3	8.2	650	10	13.0
15...	1100	23	8.2	8.0	680	10	12.0
22...	1130	24	9.5	7.8	670	10	8.0
NOV.							
04...	1115	12	12.0	8.0	700	10	10.0
09...	1100	11	12.5	8.1	730	10	6.0
16...	1115	13	10.6	8.2	830	10	4.0
23...	1130	8.4	12.0	7.9	800	10	6.0
DEC.							
02...	1130	9.8	11.3	8.1	850	10	4.0
10...	1130	4.1	11.7	8.0	1030	10	2.0
15...	1130	8.5	11.2	8.2	930	10	4.0
22...	1130	7.8	11.0	7.8	900	10	5.0
29...	1130	7.6	10.3	7.7	970	25	4.0
JAN.							
18...	1115	7.0	11.4	7.8	930	10	4.0
FEB.							
23...	1100	305	12.6	8.1	970	15	5.0
MAR.							
22...	1330	2060	12.3	8.6	740	10	11.0
APR.							
18...	1130	266	10.0	8.1	560	10	7.0
MAY							
19...	1100	262	10.8	8.1	790	15	16.0
JUNE							
16...	1100	2090	10.8	8.2	510	5	18.0
JULY							
07...	1115	1530	12.0	7.9	760	10	20.0
14...	1100	1570	10.9	8.2	880	15	21.0
21...	1100	1360	9.3	7.9	760	15	20.0
28...	1100	1180	8.8	7.8	690	30	22.0
AUG.							
04...	1100	860	8.6	8.1	680	20	20.0
11...	1100	1240	9.0	7.8	715	10	21.0
18...	1100	1370	9.0	8.3	755	15	22.0
25...	1100	1000	9.8	8.2	760	10	20.0
SEP.							
01...	1100	672	8.2	7.8	560	15	17.0
08...	1300	234	12.6	8.1	628	15	21.0
15...	1115	280	9.4	7.7	785	10	18.0
22...	1120	187	10.2	8.0	682	15	17.5
29...	1100	254	7.8	7.9	940	15	13.0

PLATTE RIVER BASIN

165

06660500 LARAMIE RIVER AT TWO RIVERS, WYO.

LOCATION.--Lat 41°28'22", long 105°43'30", in NW¼NE¼SW¼ sec.5, T.17 N., R.74 W., Albany County, at gaging station at old Two Rivers Post Office, 0.6 mile upstream from Little Laramie River, and 14 miles northwest of Laramie.

DRAINAGE AREA.--1,224 sq mi, of which 188 sq mi is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: June 1966 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NESIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 01...	1430	39	3.0	20	66	32	45	2.2	128	4	260	16
NOV. 29...	1100	62	12	0	68	31	39	2.2	153	0	240	15
DEC. 07...	1330	44	13	0	76	33	48	2.4	168	0	270	18
JAN. 17...	1215	22	13	190	75	36	41	3.3	193	0	240	18
FEB. 10...	1715	37	11	60	57	25	30	2.2	143	0	170	14
MAR. 10...	1630	165	11	420	46	15	21	1.6	106	0	120	8.8
APR. 17...	1315	16	5.1	170	95	48	65	3.5	198	0	360	28
MAY 15...	1215	7.4	5.5	60	120	50	96	3.3	223	0	490	34
JUNE 23...	1510	270	15	140	63	25	40	2.6	157	0	200	11
JULY 13...	1210	44	7.4	50	100	51	88	3.7	229	0	430	22
AUG. 16...	1430	18	10	80	110	56	88	4.0	220	0	460	32
SEP. 27...	1430	11	4.7	50	160	97	140	5.4	243	0	830	54

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 01...	.5	.1	100	495	.67	52.1	300	188	1.1	744	8.4	8.5
NOV. 29...	.5	.6	70	482	.66	80.7	300	174	1.0	730	7.8	.0
DEC. 07...	.3	.7	110	541	.74	64.3	320	182	1.2	804	7.9	.0
JAN. 17...	.5	.5	110	523	.71	31.1	340	182	1.0	811	8.0	.0
FEB. 10...	.4	3.5	70	379	.52	37.9	240	123	.8	589	8.3	.0
MAR. 10...	.3	3.6	50	279	.38	124	180	93	.7	448	8.0	3.0
APR. 17...	.5	.4	130	700	.95	30.2	440	278	1.4	1030	8.0	15.5
MAY 15...	.6	.2	130	917	1.25	18.3	520	337	1.9	1300	8.1	17.0
JUNE 23...	.4	1.2	100	435	.59	317	260	131	1.1	671	7.6	18.5
JULY 13...	.6	.5	120	819	1.11	97.3	470	282	1.8	1170	8.0	19.5
AUG. 16...	.7	.2	100	866	1.18	42.1	500	320	1.7	1210	8.1	26.0
SEP. 27...	.9	.2	450	1420	1.93	42.2	810	611	2.2	1890	8.2	14.0

PLATTE RIVER BASIN

06661500 LITTLE LARAMIE RIVER AT TWO RIVERS, WYO.

LOCATION.--Lat 41°28'07", long 105°43'56", in SE¼SE¼SE¼ sec.6, T.17 N., R.74 W., Albany County, at gaging station at old Two Rivers Post Office, 0.5 mile upstream from mouth, and 14 miles northwest of Laramie.

DRAINAGE AREA.--376 sq mi, of which 58 sq mi is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: July 1965 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NESIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 01...	1400	18	4.0	60	41	13	18	1.8	152	0	64	6.7
NOV. 29...	1200	20	9.4	0	58	20	26	1.6	195	0	110	5.2
DEC. 07...	1250	8.8	11	0	62	20	27	1.8	211	0	110	7.3
JAN. 17...	1115	4.8	9.7	120	55	20	24	2.4	201	0	98	5.8
FEB. 10...	1855	14	9.8	80	47	16	20	1.3	164	0	79	5.2
MAR. 10...	1735	95	8.9	200	43	11	19	2.3	128	0	75	7.3
APR. 17...	1340	39	8.1	130	66	23	38	2.1	195	0	160	9.4
MAY 15...	1235	31	9.1	0	78	30	75	2.3	240	0	250	19
JUNE 23...	1535	177	12	150	44	18	26	3.5	189	0	80	5.0
JULY 13...	1145	70	6.6	80	35	11	14	.9	143	0	47	1.7
AUG. 16...	1400	10	3.1	140	31	14	16	1.6	134	0	53	5.0
SEP. 27...	1405	3.1	4.5	90	49	21	32	2.3	177	0	120	6.7

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 01...	.3	.2	50	224	.30	10.9	160	35	.6	383	8.2	9.0
NOV. 29...	.4	.2	20	330	.45	17.8	230	70	.8	540	8.0	.0
DEC. 07...	.2	.2	50	342	.47	8.13	240	67	.8	548	7.9	.0
JAN. 17...	.4	.1	160	315	.43	4.08	220	55	.7	521	7.7	.0
FEB. 10...	.4	.1	30	259	.35	9.79	180	45	.6	431	8.3	.0
MAR. 10...	.3	.6	30	231	.31	59.3	150	45	.7	380	7.6	1.0
APR. 17...	.4	.2	70	401	.55	42.2	260	100	1.0	645	8.0	13.0
MAY 15...	.6	.2	70	581	.79	48.6	320	123	1.8	884	8.0	15.0
JUNE 23...	.4	.4	70	283	.38	135	180	25	.8	471	7.9	18.0
JULY 13...	.3	.2	10	187	.25	35.3	130	13	.5	326	8.0	19.0
AUG. 16...	.3	.2	20	190	.26	5.13	140	30	.6	322	8.3	24.5
SEP. 27...	.5	.2	190	322	.44	2.70	210	65	1.0	531	8.2	11.0

PLATTE RIVER BASIN

167

06670500 LARAMIE RIVER NEAR FORT LARAMIE, WYO.

LOCATION.--Lat 42°12'05", long 104°32'06", in NW¼SW¼NW¼ sec.27, T.26 N., R.64 W., Goshen County, at gaging station, at bridge on county road, 0.7 mile upstream from mouth, 0.8 mile southwest of Fort Laramie, 1.0 mile east of Old Fort Laramie, 1.4 miles downstream from Deer Creek, and 5.5 miles downstream from point of diversion to Gering-Fort Laramie Canal.

DRAINAGE AREA.--4,564 sq mi, of which 631 sq mi is probably noncontributing. Drainage area at mouth, 4,565 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1965 to September 1972.

Water temperatures: October 1965 to September 1972.

Sediment records: October 1971 to September 1972.

EXTREMES.--1971-72:

Specific conductance: Maximum daily, 997 micromhos Jan. 30; minimum daily, 502 micromhos May 22.

Water temperatures: Maximum, 26.0°C June 11, 27; minimum, freezing point on many days during December to February.

Period of record:

Specific conductance: Maximum daily, 1,020 micromhos July 11, 1969; minimum daily, 309 micromhos May 21, 1970.

Water temperatures: Maximum, 27.0°C July 12, 1969; minimum, freezing point on many days during winter period most years.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PD- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 11...	1225	147	31	110	92	28	64	5.3	273	0	220	22
NOV. 09...	1410	199	26	260	70	42	57	4.4	287	0	190	21
DEC. 22...	1230	168	28	0	97	22	53	4.4	283	0	180	18
JAN. 18...	1130	151	30	40	78	37	55	4.4	299	0	180	22
FEB. 08...	1135	148	31	40	100	24	55	4.4	295	0	190	20
MAR. 21...	1030	201	25	50	85	23	51	3.7	261	0	170	17
MAY 08...	1615	176	23	40	69	22	44	3.7	229	0	140	15
JUNE 05...	1630	83	25	60	77	17	52	4.6	240	0	150	16
JULY 06...	1430	108	26	30	86	25	54	5.4	278	0	190	18
AUG. 08...	1245	67	29	50	89	29	61	5.6	287	0	210	18
SEP. 11...	1840	82	26	80	87	27	59	5.4	272	0	210	19

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 11...	.6	2.1	140	600	.82	238	340	116	1.5	866	8.1	12.0
NOV. 09...	.5	2.7	110	557	.76	299	350	115	1.3	831	8.1	4.5
DEC. 22...	.7	3.6	90	546	.74	248	340	108	1.3	833	8.3	1.5
JAN. 18...	.7	4.2	50	562	.76	229	350	105	1.3	851	8.2	1.0
FEB. 08...	.6	4.3	100	576	.78	230	360	118	1.3	851	8.0	.0
MAR. 21...	.7	2.4	90	502	.68	272	300	86	1.3	762	8.2	8.5
MAY 08...	.5	1.3	80	432	.59	205	260	72	1.2	659	8.1	16.5
JUNE 05...	.6	.2	80	461	.63	103	260	63	1.4	689	8.0	20.0
JULY 06...	.6	.9	100	542	.74	158	320	92	1.3	823	8.1	20.5
AUG. 08...	.6	.9	50	580	.79	105	340	105	1.4	852	8.1	21.5
SEP. 11...	.6	.9	110	565	.77	125	330	107	1.4	858	8.0	18.0

06670500 LARAMIE RIVER NEAR FORT LARAMIE, WYO.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

[illegible]

PLATTE RIVER BASIN

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06670500 LARAMIE RIVER NEAR FORT LARAMIE, WYO.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	4.5	4.0	0.5	0.0	8.0	10.5	11.0	22.0	22.5	23.5	11.0
2	9.5	4.5	2.0	0.5	0.0	7.0	10.5	13.5	23.0	14.0	20.0	16.0
3	12.5	5.0	1.5	0.0	1.0	5.5	11.5	16.0	23.0	16.0	17.5	20.0
4	13.0	6.0	0.5	0.0	1.0	5.5	11.5	18.0	20.0	19.5	21.5	20.0
5	15.0	4.5	0.5	0.5	3.0	7.5	14.0	15.5	21.0	21.5	25.0	17.0
6	16.0	4.0	1.5	1.0	---	9.5	13.0	13.0	24.0	20.5	23.5	17.0
7	15.5	4.0	0.0	2.0	1.0	6.5	12.0	15.5	24.5	22.0	24.0	18.0
8	13.5	5.0	0.0	1.0	2.0	9.5	12.0	17.0	24.0	23.0	25.0	20.0
9	13.0	5.5	0.5	---	0.0	10.0	13.0	14.5	22.0	21.5	24.5	21.0
10	14.5	7.0	0.5	1.0	1.0	12.0	14.0	11.5	22.5	22.0	25.5	20.0
11	14.5	8.0	0.0	1.0	1.0	12.0	15.0	14.0	26.0	22.5	25.5	20.0
12	13.0	8.5	0.5	0.5	2.0	12.0	15.0	13.0	22.5	23.0	25.5	21.0
13	12.0	7.5	0.5	0.0	3.0	13.0	12.0	14.0	24.0	24.5	24.5	20.5
14	13.0	9.0	0.5	0.0	3.0	9.5	9.5	17.0	21.0	23.0	25.0	20.0
15	10.0	5.5	1.0	1.0	4.0	11.0	13.0	18.0	22.5	22.5	23.0	19.5
16	9.0	4.5	0.5	1.5	4.0	11.0	13.0	20.0	24.0	24.0	24.5	19.0
17	9.5	4.0	2.0	2.0	3.5	11.0	15.0	20.0	20.0	20.0	22.0	19.5
18	11.0	3.0	2.0	1.0	4.0	12.5	9.5	18.0	24.0	23.0	24.0	18.5
19	11.0	1.0	1.5	2.0	6.0	11.0	6.5	18.0	20.0	21.5	22.0	18.0
20	11.0	5.0	2.0	4.0	7.0	9.0	10.0	21.0	20.5	16.5	21.5	17.0
21	9.0	4.5	2.0	3.0	7.0	12.0	14.0	21.5	20.0	22.5	22.0	16.0
22	11.0	5.5	2.5	2.0	7.0	13.0	14.0	20.0	21.0	23.0	21.0	18.0
23	11.0	4.5	4.0	3.5	7.0	10.5	15.5	19.5	23.0	23.5	20.0	17.0
24	12.0	5.5	4.0	1.0	6.5	12.0	15.5	19.0	24.5	21.5	20.0	16.0
25	12.5	5.5	5.0	0.0	5.5	12.0	15.0	20.0	22.5	22.5	21.5	15.5
26	12.5	5.0	4.0	0.0	4.0	7.0	9.0	20.0	22.5	21.5	20.5	14.0
27	9.5	4.5	3.0	0.0	7.0	8.0	8.0	19.0	26.0	24.0	21.5	16.0
28	5.0	5.0	2.5	0.5	10.0	8.0	12.0	19.0	24.5	24.0	21.0	16.0
29	3.0	4.0	1.5	0.0	11.0	7.5	11.0	16.0	24.5	24.5	19.0	15.0
30	3.0	3.5	1.0	0.0	---	6.5	13.0	20.0	22.0	25.0	21.0	16.0
31	5.5	---	1.0	---	---	6.5	---	22.0	---	18.0	19.5	---
MONTH	11.0	5.0	1.5	1.0	4.0	9.5	12.5	17.0	22.5	21.5	22.5	18.0
YEAR	12.5											

SUSPENDED SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)
OCT.					
04...	1610	13.0	150	26	11
NOV.					
09...	1410	4.5	199	102	55
DEC.					
22...	1230	1.5	168	82	37
JAN.					
18...	1130	1.0	151	92	38
FEB.					
08...	1135	.0	148	94	38
MAR.					
21...	1030	8.5	201	80	43
MAY					
08...	1615	16.5	176	70	33
JUNE					
05...	1630	20.0	83	26	5.8
JULY					
06...	1430	20.5	108	44	13
AUG.					
15...	1045	19.5	47	53	6.7
SEP.					
19...	1445	17.0	55	30	4.5

PLATTE RIVER BASIN

06670900 NORTH PLATTE RIVER NEAR LINGLE, WYO.
(Main channel)

LOCATION.--Lat 42°06'13", long 104°21'02", in SW¼SE¼ sec.30, T.25 N., R.62 W., Goshen County, at gaging station, at bridge over main channel on State Highway 0805, 1.8 miles upstream from mouth of Rawhide Creek, and 2.1 miles south of Lingle.

DRAINAGE AREA.--25,095 sq mi, of which 5,809 sq mi (including 3,959 sq mi in Great Divide Basin in southern Wyoming) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1972.

Sediment records: July 1969 to September 1972.

REMARKS.--Chemical and sediment records, and indicated discharges, are for main channel.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
08...	1520	424	19	20	73	23	57	4.8	201	0	190	13
NOV.												
09...	1625	313	27	10	89	24	61	5.5	281	0	200	17
DEC.												
22...	1425	242	27	10	88	24	57	5.1	283	0	190	18
JAN.												
18...	1545	218	29	0	89	25	58	7.0	291	0	190	18
FEB.												
08...	1420	209	30	10	93	24	52	5.9	295	0	190	20
MAR.												
21...	1630	2180	9.0	40	69	21	58	4.9	208	0	190	15
MAY												
09...	1045	462	14	20	67	20	49	6.9	210	0	170	14
JUNE												
06...	1245	972	7.3	10	63	20	48	4.3	188	0	170	12
20...	1845	2040	6.6	100	61	20	50	4.1	188	0	170	12
JULY												
07...	1230	1540	8.1	20	61	19	50	4.2	184	0	170	13
21...	0830	1270	9.7	200	57	18	45	4.1	180	0	150	10
AUG.												
07...	1515	869	12	20	61	19	51	4.5	189	0	160	10
30...	1430	808	13	70	61	19	48	4.9	197	0	160	13
SEP.												
12...	1130	370	21	20	78	22	59	5.3	238	0	180	15
29...	1200	392	19	50	78	21	58	5.0	232	0	190	16

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT.												
08...	.5	.59	90	482	.66	552	280	110	1.5	768	8.0	14.0
NOV.												
09...	.5	1.1	110	567	.77	479	320	90	1.5	837	8.1	5.0
DEC.												
22...	.7	1.2	40	554	.75	362	320	86	1.4	830	8.1	5.0
JAN.												
18...	.7	1.3	110	566	.77	333	320	86	1.4	840	8.1	6.0
FEB.												
08...	.5	1.2	100	566	.77	319	330	89	1.2	849	8.1	5.5
MAR.												
21...	.6	.35	90	471	.64	2770	260	88	1.6	735	8.2	9.5
MAY												
09...	.5	.49	80	447	.61	558	250	77	1.4	674	7.9	13.0
JUNE												
06...	.5	.25	80	419	.57	1100	240	85	1.4	669	7.4	18.0
20...	.4	.37	80	418	.57	2070	230	80	1.4	665	7.8	18.5
JULY												
07...	.4	.32	80	418	.57	1740	230	80	1.4	641	8.1	18.0
21...	.5	.25	90	384	.52	1320	220	69	1.3	622	7.5	17.0
AUG.												
07...	.4	.31	90	412	.56	967	230	75	1.5	638	8.3	22.5
30...	.4	.33	90	418	.57	912	230	69	1.4	668	7.8	20.5
SEP.												
12...	.5	.64	110	501	.68	501	290	90	1.5	769	7.9	19.0
29...	.5	.54	120	504	.69	533	280	91	1.5	788	8.0	12.0

PLATTE RIVER BASIN

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06670900 NORTH PLATTE RIVER NEAR LINGLE, WYO.--Continued
(Main channel)

SUSPENDED SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
FEB.					
08...	1420	5.5	209	59	33
MAR.					
21...	1630	9.5	2180	66	388
MAY					
09...	1045	13.0	462	54	67
JUNE					
06...	1245	18.0	972	132	346
JULY					
07...	1230	18.0	1540	54	225
AUG.					
07...	1515	22.5	869	44	103
14...	1750	26.5	1240	57	191
SEP.					
12...	1130	19.0	370	30	30

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM	BED MAT. FALL DIAM. % FINER THAN .500 MM
AUG.							
14...	1750	26.5	1240	0	0	0	21
SEP.							
12...	1130	19.0	370	0	1	1	23

DATE	BED MAT. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
AUG.						
14...	58	79	93	98	99	100
SEP.						
12...	71	85	94	99	100	--

PLATTE RIVER BASIN

06670990 RAWHIDE CREEK ABOVE INTERSTATE CANAL, NEAR LINGLE, WYO.

LOCATION.--Lat 42°12'17", long 104°15'42", 1n SW¼SW¼ sec.24, T.26 N., R.62 W., Goshen County, near Interstate Canal crossing and 6.5 miles northeast of Lingle.

PERIOD OF RECORD.--Chemical analyses: July 1970 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO2)	DIS-SOLVED CALCIUM (CA)	DIS-SOLVED SODIUM (NA)	DIS-SOLVED POTASSIUM (K)	BICARBONATE (HCO3)	CARBONATE (CO3)	DIS-SOLVED SULFATE (SO4)	DIS-SOLVED CHLORIDE (CL)	DIS-SOLVED FLUORIDE (F)
			(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
MAR. 22...	1200	7.1	35	50	73	8.8	351	0	43	14	.8
SEP. 15...	1230	1.1	36	56	110	12	325	0	170	19	.7
DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	COLOR (PLATINUM-COBALT UNITS)
MAR. 22...	.04	100	.030	.55	7.82	170	0	2.4	610	8.0	30
SEP. 15...	.03	160	.030	.79	1.72	210	0	3.3	885	7.7	30

FIELD DETERMINATIONS

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED OXYGEN (MG/L)	PH (UNITS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TURBIDITY (JTU)	TEMPERATURE (DEG C)
OCT. 01...	1200	2.2	11.7	8.0	760	15	13.0
08...	1215	2.2	10.3	8.1	675	10	12.0
15...	1200	2.0	10.0	8.2	670	10	8.0
22...	1230	2.4	10.7	8.0	690	10	9.0
NOV. 04...	1230	3.0	13.1	7.8	720	10	7.0
09...	1230	4.1	10.8	8.1	800	10	3.0
16...	1215	3.0	12.2	8.5	615	10	5.0
23...	1230	3.1	13.8	8.2	605	10	3.0
DEC. 02...	1230	2.6	13.2	8.4	650	10	2.0
10...	1230	3.9	12.0	7.8	880	10	1.0
15...	1230	3.3	10.8	7.9	620	10	1.0
22...	1230	2.8	11.6	7.7	780	10	3.0
29...	1230	3.7	10.0	7.7	850	25	2.0
JAN. 18...	1215	1.6	12.5	8.1	850	5	1.0
FEB. 23...	1200	12	9.6	8.2	620	10	3.0
MAR. 22...	1200	7.1	10.5	8.0	560	10	13.0
APR. 18...	1230	4.2	11.8	7.8	450	15	6.0
MAY 19...	1200	3.6	9.6	8.2	950	15	20.0
JUNE 16...	1200	11	7.2	7.8	520	10	20.0
JULY 07...	1230	1.7	8.4	8.2	780	20	22.0
14...	1200	.96	6.2	7.6	980	25	21.0
21...	1200	1.1	6.4	7.5	1150	20	20.0
28...	1200	1.1	6.4	7.5	925	85	22.0
AUG. 04...	1200	.99	6.8	7.8	965	20	19.0
11...	1200	.34	5.2	7.3	1100	5	23.0
18...	1200	.46	5.0	7.5	1130	10	22.0
25...	1200	.61	6.2	7.6	985	10	18.0
SEP. 01...	1200	.92	6.4	7.2	605	5	14.0
08...	1140	1.3	6.8	7.9	1040	65	16.0
15...	1230	1.1	6.6	7.7	925	15	17.0
22...	1005	.84	6.8	7.4	1000	15	12.0
29...	1200	.80	6.9	7.6	1050	15	13.0

PLATTE RIVER BASIN

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06671000 RAWHIDE CREEK NEAR LINGLE, WYO.

LOCATION.--Lat 42°07'32", long 104°19'36", in SEkNE4, sec.20, T.25 N., R.62 W., Goshen County, at gaging station, 200 ft upstream from bridge on U.S. Highway 26, 1 mile east of Lingle, and 1 mile upstream from mouth.

DRAINAGE AREA.--522 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1970 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
MAR. 22...	1100	15	47	56	110	11	317	0	150	18	.7
SEP. 15...	1030	34	38	57	91	10	258	0	180	14	.6
DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)
MAR. 22...	1.2	120	.060	.77	23.0	190	0	3.4	788	8.1	20
SEP. 15...	.64	120	.050	.73	49.0	200	0	2.8	817	8.0	10

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TUR- BID- ITY (JTU)	TEMPER- ATURE (DEG C)
OCT.							
01...	1015	38	12.3	8.1	815	15	14.0
08...	1030	36	11.8	8.1	775	15	11.0
15...	1000	24	11.2	8.0	840	10	11.0
22...	1030	25	11.3	8.0	900	10	10.0
29...	1100	22	12.1	8.0	750	20	7.0
NOV.							
04...	1015	22	12.3	8.1	970	15	9.0
09...	1000	22	11.1	8.1	940	10	7.0
16...	1015	18	10.8	8.4	920	20	9.0
23...	1015	18	12.6	8.1	910	15	7.0
DEC.							
02...	1030	20	12.0	8.3	870	15	4.0
10...	1030	17	11.8	8.2	1000	15	4.0
15...	1030	17	12.2	8.2	950	20	4.0
22...	1030	18	12.0	8.1	450	10	6.0
29...	1030	18	11.8	8.0	970	25	5.0
JAN.							
18...	1030	15	11.1	7.9	1050	10	7.0
FEB.							
23...	1015	18	11.0	8.5	740	25	6.0
MAR.							
22...	1100	15	12.6	8.2	665	15	13.0
APR.							
18...	1030	15	12.4	7.9	580	10	10.0
MAY							
19...	1030	7.5	10.6	8.0	1000	20	19.0
JUNE							
16...	1000	22	8.9	8.1	520	10	18.0
JULY							
07...	1015	5.1	11.5	8.1	760	25	19.0
14...	1000	4.7	10.7	8.2	890	25	20.0
21...	1000	14	8.8	8.0	800	20	17.0
28...	1000	22	8.5	7.7	762	20	20.0
AUG.							
04...	1000	12	9.3	8.0	775	15	16.0
11...	1000	5.7	9.8	7.7	920	20	19.0
18...	1000	12	8.8	7.9	830	25	18.0
25...	1000	24	9.0	8.2	855	15	16.0
SEP.							
01...	1000	30	8.4	7.9	625	15	15.0
08...	1100	34	9.3	8.0	858	40	16.0
15...	1030	34	8.4	7.8	810	25	16.0
22...	0930	15	9.4	7.6	888	30	12.0
29...	1000	31	8.0	8.0	890	10	11.0

PLATTE RIVER BASIN

06672500 CHERRY CREEK DRAIN NEAR TORRINGTON, WYO.

LOCATION.--Lat 42°02'22", long 104°10'07", in SW¼NW¼ sec.23, T.24 N., R.61 W., Goshen County, at bridge on county road, 50 ft upstream from gaging station, 0.6 mile upstream from mouth, and 2 miles southeast of Torrington.

DRAINAGE AREA.--356 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1972 (discontinued).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT.												
08...	1745	17	47	13	380	458	56	170	0	13	8.5	14.0
NOV.												
10...	1600	14	48	14	460	546	18	180	0	15	8.5	8.5
DEC.												
28...	1715	7.9	45	12	470	601	0	160	0	16	8.3	2.5
JAN.												
19...	1445	13	48	15	600	582	0	180	0	19	8.2	4.5
FEB.												
09...	1315	11	41	12	420	328	131	150	0	15	8.4	2.5
MAR.												
22...	1145	8.1	45	14	640	602	34	170	0	21	8.7	13.5
MAY												
10...	0815	10	47	15	650	675	0	180	0	21	8.3	8.5
JUNE												
07...	1300	55	61	19	140	273	0	230	7	4.0	7.4	23.0
21...	0855	33	56	17	190	343	0	210	0	5.7	8.0	16.0
JULY												
07...	1415	39	59	17	160	300	0	220	0	4.7	8.0	21.5
21...	1130	51	28	16	150	330	0	140	0	5.6	7.8	18.0
AUG.												
07...	1200	48	64	17	190	349	0	230	0	5.5	7.9	18.5
30...	1700	72	59	17	170	329	0	220	0	5.0	7.8	20.0
SEP.												
12...	1930	53	57	18	160	315	0	220	0	4.7	7.9	19.5

PLATTE RIVER BASIN

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06674500 NORTH PLATTE RIVER AT WYOMING-NEBRASKA STATE LINE

LOCATION.--Lat 41°59'25", long 104°02'57", in SW¼NE¼SE¼ sec.4, T.23 N., R.58 W., Scottsbluff County, Nebraska, at bridge on Nebr. State Highway 86, 650 ft downstream from gaging station, 0.3 mile downstream from Wyoming-Nebraska State line, and 0.5 mile south of Henry, Nebr.

DRAINAGE AREA.--26,177 sq mi, of which 5,888 sq mi (including 3,959 sq mi in Great Divide Basin in southern Wyoming) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1965 to September 1972.

Water temperatures: October 1965 to September 1972.

Sediment records: October 1971 to September 1972.

EXTREMES.--1971-72:

Specific conductance: Maximum daily, 962 micromhos Jan. 28; minimum daily, 494 micromhos Jan. 26.

Water temperatures: Maximum, 22.0°C Aug. 16; minimum, freezing point Dec. 8, 9, Jan. 4.

Period of record:

Specific conductance: Maximum daily, 1,010 micromhos Jan. 28, 1966, Jan. 8, Oct. 16, 1970, Jan. 7, 1971; minimum daily, 243 micromhos Dec. 2, 1967.

Water temperatures: Maximum, 27.0°C July 4, 25, 1967; minimum, freezing point on many days during winter period.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (SD4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
04...	1230	663	26	20	81	19	78	6.0	262	0	210	19
NOV.												
08...	1115	410	27	50	90	18	88	6.3	296	0	220	19
DEC.												
06...	1015	372	27	0	91	18	76	5.3	295	0	210	21
JAN.												
10...	1030	320	29	50	88	21	84	6.0	302	0	210	20
FEB.												
08...	1300	320	32	30	89	21	82	6.0	296	0	210	20
MAR.												
08...	1200	2130	10	110	74	24	65	4.2	211	0	220	17
APR.												
27...	1500	556	22	0	70	18	120	7.0	249	0	250	24
MAY												
30...	0950	1760	7.8	10	62	20	56	4.6	191	0	180	14
JUNE												
21...	0800	1950	9.6	0	61	21	51	4.4	197	0	180	12
JULY												
21...	0920	1250	13	230	61	18	54	7.2	199	0	170	14
AUG.												
30...	1530	940	18	20	65	20	65	5.8	223	0	180	14
SEP.												
29...	1315	545	24	50	77	20	80	6.7	248	0	210	16

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT.												
04...	.6	4.0	120	572	.78	1020	280	65	2.0	845	7.9	12.5
NOV.												
08...	.6	5.4	150	616	.84	682	300	57	2.2	886	8.1	5.5
DEC.												
06...	.4	5.7	100	596	.81	599	300	58	1.9	879	8.3	2.0
JAN.												
10...	.6	6.5	110	617	.84	533	300	52	2.1	870	8.2	1.5
FEB.												
08...	.6	6.0	110	615	.84	531	310	67	2.0	890	8.1	5.0
MAR.												
08...	.5	2.5	80	520	.71	2990	280	107	1.7	783	8.1	3.5
APR.												
27...	.5	7.0	130	638	.87	958	250	46	3.3	953	7.8	7.5
MAY												
30...	.4	1.5	80	441	.60	2100	240	83	1.6	684	8.0	14.0
JUNE												
21...	.4	1.9	60	437	.59	2300	240	78	1.4	691	8.0	16.5
JULY												
21...	.5	2.4	90	438	.60	1480	230	67	1.6	691	7.9	17.0
AUG.												
30...	.5	2.7	100	481	.65	1220	240	57	1.8	736	8.2	21.5
SEP.												
29...	.5	4.6	120	560	.76	824	270	67	2.1	861	8.2	13.0

PLATTE RIVER BASIN

06674500 NORTH PLATTE RIVER AT WYOMING-NEBRASKA STATE LINE--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
OCT. 04...	1230	663	.07	.050	2.4
NOV. 08...	1115	410	.22	--	2.4
DEC. 06...	1015	372	.05	.030	2.3
JAN. 10...	1030	320	.17	.050	2.6
FEB. 08...	1300	320	.12	.050	.7
MAR. 08...	1200	2130	.15	.070	2.1
APR. 27...	1500	556	.50	.35	4.3
MAY 30...	0950	1760	.05	.090	1.3
JUNE 21...	0800	1950	.09	.080	.8
JULY 21...	0920	1250	--	--	.1
AUG. 30...	1530	940	--	--	1.2
SEP. 29...	1315	545	--	--	1.0

DATE	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 04...	.00	.00	.00	.00	.00	.00	.00
JAN. 10...	.00	.00	.00	.00	.00	.00	.00
APR. 27...	.00	.00	.00	.00	.00	.00	.00

DATE	TIME	DIS- CHARGE (CFS)	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)
OCT. 04...	1230	663	.00	.0	.00	.00	.00	.00
JAN. 10...	1030	320	.00	.0	.00	.00	.00	.00
APR. 27...	1500	556	.00	.0	.00	.00	.00	.00

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SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

[illegible]

PLATTE RIVER BASIN

06674500 NORTH PLATTE RIVER AT WYOMING-NEBRASKA STATE LINE--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)
OCT. 04...	1230	663	9.2	--	910	--	720
NOV. 08...	1115	410	11.8	--	900	--	28
DEC. 06...	1015	372	11.0	--	870	--	80
JAN. 10...	1030	320	10.9	--	930	--	60
FEB. 08...	1300	320	10.8	--	880	--	4
MAR. 08...	1200	2130	11.2	--	--	--	1
APR. 27...	1500	556	10.6	--	--	--	3600
MAY 30...	0950	1760	9.6	--	730	--	210
JUNE 21...	0800	1950	8.5	--	710	--	79
JULY 21...	0920	1280	8.5	8.3	605	3100	92
AUG. 30...	1530	940	8.1	8.3	790	180	87
SEP. 29...	1315	545	9.4	7.9	945	3600	74

SUSPENDED SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)
OCT. 04...	1230	12.5	663	22	39
NOV. 10...	1410	9.5	435	84	99
DEC. 28...	1615	3.0	358	50	48
JAN. 19...	1135	4.5	319	77	66
FEB. 09...	1115	4.0	317	74	63
MAR. 22...	1445	9.0	2370	121	774
MAY 09...	1550	13.5	559	122	184
JUNE 07...	1045	20.5	1060	143	409
JULY 05...	1545	20.0	1720	168	780
AUG. 08...	1715	25.0	956	120	310
SEP. 19...	1215	--	600	102	165

06676550 HORSE CREEK AT WYXCROSS RANCH, NEAR LA GRANGE, WYO.

LOCATION.--Lat 41°40'35", long 104°12'11", in SW¼NW¼ sec.28, T.20 N., R.61 W., Goshen County, at bridge on private road, 300 ft downstream from gaging station, 0.2 mile upstream from Hawk Springs ditch, 1.5 miles downstream from WyCross ditch, 2.6 miles upstream from Bear Creek, and 3.3 miles northwest of La Grange.

DRAINAGE AREA.--680 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1972 (discontinued).
Sediment records: July 1969 to September 1972 (discontinued).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 18...	1630	3.7	46	20	59	15	50	7.9	329	0	47	8.8
NOV. 10...	1020	2.5	49	20	58	16	61	7.6	378	0	35	8.1
DEC. 23...	1450	52	45	20	56	13	29	5.9	269	0	32	6.7
JAN. 21...	1420	60	45	30	57	14	29	8.0	269	0	40	7.2
FEB. 07...	1150	39	51	20	61	13	26	6.3	287	0	30	7.8
MAR. 23...	1245	19	44	20	59	13	38	6.2	288	0	35	7.6
MAY 10...	1215	35	45	30	58	14	45	9.9	328	0	27	8.1
JUNE 07...	1630	2.7	42	20	62	16	56	9.1	360	0	37	9.3
21...	1230	2.5	45	200	65	17	54	8.8	389	0	35	10
JULY 05...	1015	2.4	46	20	65	16	51	7.9	365	0	32	11
21...	1250	1.7	46	100	61	17	57	9.7	384	0	33	9.0
AUG. 09...	1210	2.7	43	20	49	13	46	6.5	308	0	23	6.9
30...	1820	3.1	43	130	57	15	45	8.3	327	0	34	8.8
SEP. 13...	1320	5.6	44	30	55	15	45	7.4	321	0	31	7.9

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 18...	.7	.55	110	399	.54	3.99	210	0	1.5	579	7.9	11.5
NOV. 10...	.9	.55	110	424	.58	2.86	210	0	1.8	634	7.8	7.5
DEC. 23...	.9	.87	10	325	.44	45.6	190	0	.9	493	8.0	4.5
JAN. 21...	.9	.91	70	338	.46	54.8	200	0	.9	479	7.9	2.0
FEB. 07...	.7	1.1	70	342	.47	36.0	210	0	.8	497	8.0	2.5
MAR. 23...	.8	.71	70	348	.47	17.9	200	0	1.2	510	8.1	8.5
MAY 10...	.8	.60	100	372	.51	35.2	200	0	1.4	552	8.0	9.5
JUNE 07...	1.0	.41	110	411	.56	3.00	220	0	1.6	631	7.3	24.0
21...	1.0	.46	120	429	.58	2.90	230	0	1.5	665	7.5	18.5
JULY 05...	1.0	.29	110	411	.56	2.66	230	0	1.5	626	7.9	14.5
21...	1.1	.30	170	424	.58	1.95	220	0	1.7	658	7.9	22.0
AUG. 09...	1.0	.15	100	341	.46	2.49	180	0	1.5	519	7.6	22.5
30...	.9	.45	100	375	.51	3.14	200	0	1.4	578	7.9	21.5
SEP. 13...	1.0	.29	100	366	.50	5.53	200	0	1.4	552	7.8	17.0

SUSPENDED SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)
FEB. 07...	1150	2.5	39	124	13
MAR. 23...	1245	8.5	19	23	1.2
MAY 10...	1215	9.5	35	186	18
JUNE 07...	1630	24.0	2.7	36	.26
JULY 05...	1015	14.5	2.4	12	.08
AUG. 09...	1210	22.5	2.7	68	.50
14...	1225	24.0	6.2	162	2.7
SEP. 13...	1320	17.0	5.6	22	.33

PLATTE RIVER BASIN

06676550 HORSE CREEK AT WYCROSS RANCH, NEAR LA GRANGE, WYO.--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	NUMBER OF SAM- PLING POINTS	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM
AUG. 14...	1225	24.0	6.2	3	3	6	15
SEP. 13...	1320	17.0	5.6	--	4	14	25

DATE	BED MAT. FALL DIAM. % FINER THAN .500 MM	BED MAT. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
AUG. 14...	28	37	42	50	65	88	100
SEP. 13...	40	52	57	66	84	96	100

PLATTE RIVER BASIN

06677010 HORSE CREEK AT LOWER STATION, NEAR YODER, WYO.

LOCATION.--Lat 41°53'10", long 104°14'53", in SE&SE& sec.12, T.22 N., R.62 W., Goshen County, at gaging station, 1.5 miles upstream from Fort Laramie Canal siphon, 3.2 miles southeast of Yoder, and 3.8 miles downstream from Lone Tree Creek.

DRAINAGE AREA.--1,320 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1972 (discontinued).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 18...	1540	2.0	34	20	41	599	0	170	0	1.4	8.2	12.0
DEC. 23...	1245	1.8	45	18	410	626	0	190	0	13	8.3	2.5
JAN. 21...	1035	3.0	46	17	220	478	0	180	0	7.0	8.2	1.0
FEB. 07...	1445	1.6	46	21	410	720	0	200	0	13	8.3	.0
MAR. 23...	0930	.95	50	24	540	810	0	220	0	16	8.3	8.0
MAY 10...	1000	14	47	19	180	509	0	200	0	5.6	8.1	10.0
JUNE 07...	1430	.10	27	26	540	750	0	170	0	18	7.9	30.0
JULY 21...	1105	.71	23	21	450	843	0	140	0	16	8.2	18.0
JULY 05...	1215	2.2	25	18	340	633	0	140	0	13	8.4	23.0
JULY 21...	1210	.00										
AUG. 09...	0930	.68	21	19	330	706	0	130	0	13	8.0	20.0
SEP. 13...	1510	.44	17	24	590	765	60	140	0	22	8.7	23.0

PART 9. COLORADO RIVER BASIN

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GREEN RIVER BASIN

09188500 GREEN RIVER AT WARREN BRIDGE, NEAR DANIEL, WYO.

LOCATION.--Lat 43°01'08", long 110°07'03", in SE¼SE¼NE¼ sec.8, T.35 N., R.111 W., Sublette County, at bridge on U.S. Highways 187 and 189, 100 ft downstream from gaging station, 3.4 miles upstream from Beaver Creek, and 12 miles north of Daniel.

DRAINAGE AREA.--468 sq mi.

PERIOD OF RECORD.--Chemical analyses: May 1962 to September 1964, October 1967 to September 1972 (discontinued).
Water temperatures: May 1962 to September 1964.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 22...	1115	239	3.4	30	60	13	3.5	.9	109	0	110	1.5
NOV. 15...	1245	a205	5.2	40	74	15	4.1	.9	125	0	140	1.0
DEC. 02...	1030	a135	5.9	300	85	18	6.6	.9	152	0	170	1.7
JAN. 25...	0915	a115	7.3	50	82	18	4.1	.9	137	0	160	1.0
FEB. 28...	1515	a140	7.9	40	89	20	7.3	1.4	153	0	170	4.7
APR. 04...	1700	a182	7.0	40	82	16	2.7	.9	140	0	160	1.2
MAY 16...	1400	1650	6.0	50	54	6.7	3.3	.9	141	0	50	1.8
JUNE 13...	1300	3960	3.6	90	25	3.5	2.0	.7	75	0	18	2.0
JULY 12...	1500	1440	3.2	50	23	4.3	1.0	.5	61	0	27	.7
AUG. 08...	1340	640	3.0	20	33	5.7	4.1	.9	70	0	50	1.7
SEP. 06...	1630	445	4.3	40	45	9.3	2.7	.9	93	0	77	1.7

a Daily mean discharge.

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 22...	.3	.1	20	251	.34	162	200	111	.1	408	8.0	4.0
NOV. 15...	.4	.0	30	306	.42	169	240	137	.1	478	8.2	.5
DEC. 02...	.4	.2	40	360	.49	131	280	155	.2	553	8.1	.0
JAN. 25...	.4	.3	10	347	.47	108	280	168	.1	527	7.8	.0
FEB. 28...	.4	.5	20	377	.51	143	300	170	.2	574	8.1	.0
APR. 04...	.3	.1	20	334	.45	164	270	155	.1	526	8.1	.0
MAY 16...	.2	.3	10	192	.26	855	160	44	.1	329	7.8	9.0
JUNE 13...	.1	.5	20	93	.13	994	77	15	.1	168	7.5	10.5
JULY 12...	.1	.1	20	90	.12	350	75	25	.1	163	7.9	16.0
AUG. 08...	.2	.1	10	133	.18	230	110	53	.2	226	8.2	19.0
SEP. 06...	.3	.0	20	187	.25	225	150	74	.1	307	8.3	12.0

GREEN RIVER BASIN

09192600 GREEN RIVER NEAR BIG PINEY, WYO.

LOCATION.--Lat 42°34'14", long 109°56'58", in NE&NE&NE& sec.21, T.30 N., R.110 W., Sublette County, at bridge on State Secondary Highway 1801, 1.9 miles upstream from New Fork River, 8.4 miles northeast of Big Piney, and 16.2 miles southwest of Boulder.

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 05...	1200	387	6.7	0	63	17	12	1.6	182	0	95	4.2
NOV. 13...	1050	498	6.3	620	68	17	7.2	1.1	181	0	98	2.5
DEC. 04...	0915	215	8.0	0	86	20	6.0	1.6	220	0	120	1.5
JAN. 26...	1530	199	7.7	20	77	18	6.6	1.3	187	0	110	1.3
FEB. 27...	1345	211	6.9	50	80	19	7.2	1.1	211	0	110	2.2
MAR. 29...	1740	472	9.0	30	70	19	15	2.1	225	0	91	3.2
APR. 30...	0720	1400	10	40	59	17	9.3	1.6	214	0	54	3.1
JUNE 16...	0825	7430	7.1	90	40	11	4.8	1.2	162	0	21	1.7
JULY 14...	0705	1800	5.0	140	37	9.6	5.3	.9	137	0	30	1.3
AUG. 10...	1645	996	4.3	30	39	7.8	4.3	1.2	113	0	47	1.7
SEP. 07...	1430	830	5.7	40	53	9.5	6.4	1.2	146	0	62	1.7

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 05...	.2	.1	20	289	.39	302	220	71	.3	462	8.2	8.0
NOV. 13...	.3	.1	10	290	.39	390	240	92	.2	466	8.0	1.0
DEC. 04...	.3	.0	20	354	.48	206	290	110	.2	565	7.9	.0
JAN. 26...	.3	.5	0	318	.43	171	260	107	.2	519	7.8	.0
FEB. 27...	.3	.5	30	329	.45	187	280	107	.2	529	7.9	.0
MAR. 29...	.3	.1	20	320	.44	408	260	75	.4	513	7.8	.0
APR. 30...	.2	.2	20	259	.35	979	220	44	.3	440	8.1	4.5
JUNE 16...	.2	.2	40	166	.23	3330	140	7	.2	298	7.9	14.0
JULY 14...	.1	.2	30	157	.21	763	130	18	.2	275	8.2	17.0
AUG. 10...	.2	.1	40	161	.22	433	130	37	.2	281	8.1	20.0
SEP. 07...	.2	.0	20	212	.29	475	170	50	.2	352	8.2	14.0

GREEN RIVER BASIN

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09205000 NEW FORK RIVER NEAR BIG PINEY, WYO.

LOCATION.--Lat 42°34'02", long 109°55'46", in SE¼NE¼NE¼ sec.22, T.30 N., R.110 W., Sublette County, at gaging station, 35 ft upstream from old highway bridge, 3.4 miles upstream from mouth, and 9.5 miles northeast of Big Piney.

DRAINAGE AREA.--1,230 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1965 to September 1972.
Water temperatures: October 1965 to September 1969.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NESIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 05...	1330	424	10	20	33	3.0	12	2.0	119	0	19	5.2
NOV. 13...	1240	460	9.1	160	26	5.6	9.0	1.3	103	0	16	3.3
DEC. 04...	0830	a215	9.6	0	31	6.8	9.8	1.8	128	0	16	5.2
JAN. 26...	1220	a165	10	60	23	3.4	8.5	1.6	87	0	13	2.1
FEB. 27...	1600	a225	9.6	170	26	2.3	7.9	1.3	93	0	13	2.1
MAR. 29...	1635	490	9.7	200	26	6.0	14	2.1	113	0	19	4.3
APR. 30...	0800	658	7.1	50	20	3.7	6.7	.7	77	0	9.9	2.5
JUNE 16...	1130	6830	5.9	240	10	2.5	3.5	1.2	49	0	5.8	1.7
JULY 14...	0930	1930	8.0	90	18	3.7	4.8	1.2	81	0	3.3	1.7
AUG. 10...	1510	742	7.3	50	20	3.5	7.0	2.1	83	1	9.1	1.7
SEP. 07...	1730	530	10	70	25	5.3	9.1	1.9	110	0	13	2.7

a Daily mean discharge.

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 05...	.2	.2	50	143	.19	164	95	0	.5	241	8.2	9.5
NOV. 13...	.2	.0	30	121	.16	150	88	4	.4	217	8.1	4.0
DEC. 04...	.2	.0	20	143	.19	83.0	100	0	.4	243	7.9	.0
JAN. 26...	.2	.6	10	105	.14	46.8	71	0	.4	186	7.4	.0
FEB. 27...	.2	.9	30	109	.15	66.2	75	0	.4	185	7.6	.0
MAR. 29...	.2	.2	30	137	.19	181	89	0	.6	236	7.7	2.0
APR. 30...	.2	.1	20	89	.12	158	64	1	.4	153	7.5	3.5
JUNE 16...	.1	.2	40	55	.07	1010	36	0	.3	92	7.8	16.0
JULY 14...	.2	.2	20	81	.11	422	60	0	.3	144	8.0	17.0
AUG. 10...	.2	.1	20	93	.13	186	64	0	.4	159	8.4	18.0
SEP. 07...	.2	.1	40	121	.16	173	84	0	.4	203	8.3	15.0

GREEN RIVER BASIN

09207700 DRY PINEY CREEK NEAR BIG PINEY, WYO.

LOCATION.--Lat 42°23'25", long 110°15'09", in NW¼NE¼ sec.27, T.28 N., R.113 W., Sublette County, at gaging station, 8.3 miles upstream from mouth, and 16.3 miles southwest of Big Piney.

DRAINAGE AREA.--67 sq mi, approximately.

PERIOD OF RECORD.--Water temperatures: April 1966 to September 1972.

Sediment records: April 1966 to September 1972.

EXTREMES.--1971-72:

Water temperatures: Maximum, 28.0°C June 16; minimum, freezing point on several days during November, December, February and March.

Sediment concentrations: Maximum daily, 2,430 mg/l Apr. 6; minimum daily, 7 mg/l Aug. 17.

Sediment discharge: Maximum daily, 193 tons June 6; minimum daily, 0.04 tons Dec. 14, Jan. 2-4.

Period of record:

Water temperatures: Maximum, 28.0°C June 12, 1971, June 16, 1972; minimum, freezing point on many days during winter period.

Sediment concentrations: Maximum daily, 10,100 mg/l Mar. 30, 1971; minimum daily, no flow for many days most years.

Sediment discharge: Maximum daily, 409 tons Mar. 30, 1971; minimum daily, 0 tons on many days most years.

REMARKS.--Flow affected by ice Oct. 29 to Dec. 14, Mar. 12-19, 22-24, 27, 28.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1.0	4.0	---	1.5	2.0	4.0	13.0	19.5	---	---	---
2	10.5	---	---	---	0.5	3.0	5.5	9.0	12.0	14.0	15.0	19.0
3	11.0	4.0	0.0	---	0.0	4.5	4.0	15.0	11.5	22.0	22.5	18.0
4	14.0	3.0	---	---	3.0	5.5	4.5	14.0	16.0	24.0	22.5	10.0
5	13.0	---	2.0	---	2.5	5.0	5.5	13.0	---	24.0	13.5	---
6	9.0	3.0	---	---	4.0	7.5	5.0	---	19.0	16.5	22.5	14.0
7	---	2.0	---	---	2.0	2.0	7.0	14.0	22.0	19.0	24.0	19.0
8	14.0	4.0	---	---	3.0	4.0	3.5	15.0	20.0	21.0	22.5	17.0
9	14.0	4.0	---	---	3.0	5.0	5.0	12.0	21.0	16.0	22.0	---
10	---	4.0	---	---	2.5	7.0	5.0	10.5	14.5	14.0	21.5	15.0
11	8.5	3.0	---	---	1.0	4.0	3.5	5.5	21.0	21.0	---	---
12	7.0	5.0	---	---	1.5	4.0	8.5	9.0	20.0	25.0	23.0	16.0
13	10.0	0.0	---	---	1.5	---	4.0	16.0	20.0	25.0	---	17.0
14	---	1.5	---	---	3.0	2.0	7.0	17.0	19.5	---	24.0	15.0
15	10.0	0.5	---	---	3.5	2.5	5.0	7.0	24.0	24.0	18.0	18.0
16	6.0	0.0	---	---	4.0	4.0	7.0	7.0	28.0	---	22.0	9.0
17	7.0	0.0	---	---	4.0	4.5	6.0	16.0	14.0	23.0	---	11.5
18	4.5	4.0	---	0.5	5.0	2.0	7.5	19.0	17.5	---	---	4.0
19	4.0	---	---	3.0	2.5	3.0	5.0	---	13.0	24.0	19.0	13.0
20	8.0	2.0	---	4.0	3.0	6.0	10.0	13.0	26.0	19.0	19.0	11.5
21	10.0	0.0	---	3.0	4.0	3.0	9.0	7.0	17.5	20.0	12.5	8.0
22	---	0.5	---	3.0	3.0	4.5	9.5	10.0	22.0	21.0	---	9.0
23	7.5	---	---	2.5	2.5	4.0	12.0	15.0	14.0	22.0	12.0	10.0
24	5.0	4.0	---	1.5	3.0	3.5	12.0	14.5	16.0	19.0	---	9.0
25	8.0	---	---	3.0	3.0	6.0	7.0	18.0	13.0	24.0	---	---
26	4.5	3.0	---	0.5	3.5	3.5	11.0	17.0	17.0	16.0	10.0	10.0
27	2.0	---	---	1.0	2.5	4.0	14.0	19.0	21.5	14.0	12.0	9.0
28	---	0.0	---	1.0	3.0	0.0	14.0	9.5	21.5	27.0	---	9.0
29	---	1.0	---	2.0	2.0	2.0	12.0	19.0	23.5	---	14.5	10.0
30	---	2.0	---	3.0	---	3.5	4.0	19.0	---	15.0	19.5	10.0
31	2.0	---	---	2.0	---	4.0	---	24.0	---	20.0	17.0	---
MONTH	---	2.0	---	---	2.5	4.0	7.0	13.5	18.5	20.5	---	12.5

09207700 DRY PINEY CREEK NEAR BIG PINEY, WYO.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.3	23	.20	2.1	86	.49	1.5	105	.43
2	3.5	46	.43	2.2	45	.27	1.4	91	.34
3	3.5	60	.57	2.3	49	.30	1.3	75	.26
4	3.0	35	.28	2.5	93	.63	1.2	72	.23
5	2.6	34	.24	2.4	86	.56	1.1	203	.60
6	2.6	59	.41	2.4	75	.49	1.0	165	.45
7	2.4	53	.34	2.5	78	.53	.96	62	.16
8	2.1	39	.22	2.6	70	.49	.90	59	.14
9	2.2	48	.29	2.8	62	.47	.80	56	.12
10	2.1	46	.26	2.9	63	.49	.70	54	.10
11	2.0	41	.22	3.0	71	.58	.54	48	.07
12	1.9	51	.26	3.0	79	.64	.49	43	.06
13	2.0	34	.18	2.9	94	.74	.48	39	.05
14	2.0	29	.16	2.9	124	.97	.46	34	.04
15	2.1	38	.22	2.7	106	.77	.47	36	.05
16	2.6	44	.31	2.6	114	.80	.49	38	.05
17	3.9	82	.86	2.4	135	.87	.50	40	.05
18	3.7	84	.84	2.2	105	.62	.54	41	.06
19	2.7	46	.34	2.3	76	.47	.52	41	.06
20	2.6	63	.44	2.4	105	.68	.54	44	.06
21	2.4	32	.21	2.6	145	1.0	.54	47	.07
22	2.1	11	.06	2.4	309	2.3	.56	50	.08
23	2.3	58	.36	2.7	243	1.8	.60	52	.08
24	2.7	120	.87	2.5	127	.86	.64	54	.09
25	3.1	72	.60	2.6	79	.55	.68	55	.10
26	2.7	32	.23	2.4	103	.67	.64	53	.09
27	2.7	20	.15	2.2	97	.58	.60	50	.08
28	2.3	20	.12	2.0	112	.60	.54	45	.07
29	2.2	23	.14	1.8	144	.70	.50	40	.05
30	2.1	24	.14	1.6	116	.50	.49	35	.05
31	2.2	57	.34	--	--	--	.50	--	--
TOTAL	79.6	--	10.29	74.3	--	21.42	22.18	--	4.14

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.52	35	.05	.41	78	.09	.84	203	.46
2	.50	33	.04	.40	100	.11	.85	175	.40
3	.47	35	.04	.39	83	.09	.88	148	.35
4	.45	37	.04	.41	89	.10	.90	155	.38
5	.48	39	.05	.43	88	.10	.96	150	.39
6	.50	41	.06	.45	75	.09	1.1	136	.40
7	.52	43	.06	.47	80	.10	1.3	137	.48
8	.54	45	.07	.47	76	.10	1.5	132	.53
9	.56	49	.07	.46	69	.09	2.0	326	1.8
10	.60	51	.08	.45	68	.08	3.0	375	3.0
11	.62	53	.09	.44	62	.07	4.3	148	1.7
12	.60	55	.09	.47	67	.09	6.2	150	2.5
13	.58	57	.09	.52	71	.10	7.7	309	6.4
14	.55	59	.09	.50	69	.09	9.6	235	6.1
15	.54	61	.09	.55	77	.11	11	415	12
16	.58	62	.10	.62	78	.13	12	960	31
17	.62	86	.15	.66	82	.15	11	500	15
18	.65	100	.18	.66	84	.15	10	460	12
19	.68	75	.14	.64	65	.11	9.5	800	21
20	.70	63	.12	.63	86	.15	9.1	569	14
21	.67	69	.12	.66	97	.17	8.7	703	19
22	.63	112	.19	.71	103	.20	9.0	1150	28
23	.60	92	.15	.76	103	.21	10	770	21
24	.58	116	.18	.80	103	.22	10	910	25
25	.52	74	.10	.80	92	.20	10	630	17
26	.48	67	.09	.79	112	.24	9.1	650	16
27	.47	83	.11	.78	218	.46	11	790	23
28	.45	72	.09	.82	212	.47	13	1060	37
29	.44	65	.08	.88	199	.47	8.2	250	5.5
30	.43	79	.09	--	--	--	7.8	475	10
31	.42	62	.07	--	--	--	7.4	570	11
TOTAL	16.95	--	2.97	17.23	--	4.74	207.93	--	342.39

09207700 DRY PINEY CREEK NEAR BIG PINEY, WYO.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	8.0	450	9.9	14	770	29	38	320	33
2	10	885	27	18	740	36	47	520	66
3	11	1450	43	20	700	38	50	520	70
4	12	1150	40	24	864	56	50	530	72
5	18	1760	91	30	1020	83	53	560	80
6	26	2430	171	32	640	55	68	1050	193
7	20	1760	95	31	750	63	59	550	88
8	15	870	32	32	890	77	78	880	185
9	15	880	36	31	670	56	65	550	97
10	15	850	34	26	470	33	61	450	74
11	17	1040	48	27	400	29	60	480	78
12	15	1700	69	25	400	27	57	300	46
13	14	786	30	25	550	37	54	340	50
14	11	660	27	27	520	38	50	400	54
15	14	916	33	31	530	44	47	300	38
16	16	780	34	34	570	52	45	290	35
17	17	750	34	35	450	43	46	300	37
18	14	730	28	35	440	42	43	250	29
19	13	620	22	37	480	48	43	230	27
20	14	850	41	40	470	51	38	220	23
21	15	949	40	37	350	35	35	250	24
22	16	780	34	36	280	27	34	250	23
23	12	650	21	34	290	27	39	240	25
24	17	1060	49	35	370	35	36	270	26
25	19	930	48	37	320	32	48	960	174
26	14	760	29	36	350	34	33	270	24
27	17	900	41	36	260	25	29	200	16
28	22	1010	60	36	240	23	27	190	14
29	24	1080	70	37	270	27	24	310	20
30	20	1020	55	37	280	28	23	310	19
31	--	--	--	39	350	37	--	--	--
TOTAL	471.0	--	1391.9	974	--	1267	1380	--	1690
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	21	200	11	6.2	92	1.5	4.8	198	2.6
2	20	172	9.3	6.6	86	1.5	210	210	3.5
3	19	178	9.1	5.8	40	.63	4.8	69	.89
4	18	164	8.0	5.5	20	.30	3.7	37	.37
5	17	143	6.6	5.4	25	.36	4.9	68	.90
6	16	127	5.5	4.5	26	.32	6.2	111	1.9
7	15	132	5.3	4.0	15	.16	5.2	38	.53
8	14	158	6.0	3.9	9	.09	4.2	21	.24
9	13	126	4.4	4.1	21	.23	3.9	22	.23
10	12	101	3.3	3.6	15	.15	4.0	15	.16
11	12	108	3.5	3.3	16	.14	3.9	11	.12
12	12	114	3.7	3.1	14	.12	3.5	10	.09
13	11	96	2.9	3.5	14	.13	3.2	16	.14
14	10	70	1.9	4.5	34	.41	3.3	12	.11
15	10	100	2.7	5.4	75	1.1	3.1	10	.08
16	10	80	2.2	5.0	20	.27	2.8	14	.11
17	9.8	70	1.9	5.0	7	.09	2.7	16	.12
18	10	60	1.8	4.1	13	.14	2.7	10	.07
19	9.1	62	1.5	5.0	37	.50	3.0	9	.07
20	9.4	66	1.7	5.5	52	.77	3.1	14	.12
21	10	64	1.7	6.0	232	4.8	3.0	17	.14
22	8.9	44	1.1	5.5	430	6.4	3.0	17	.14
23	8.2	30	.71	5.5	200	3.0	3.0	15	.12
24	8.0	78	1.7	5.0	85	1.1	3.0	16	.13
25	8.0	114	2.5	4.0	66	.87	3.2	21	.18
26	7.7	96	2.1	4.5	50	.61	3.1	28	.23
27	9.1	150	3.7	4.0	39	.42	3.6	25	.24
28	8.2	98	2.2	3.7	36	.36	4.1	21	.23
29	7.0	44	.03	3.5	28	.26	3.7	15	.15
30	6.1	62	1.0	3.6	22	.21	3.5	40	.38
31	6.2	90	1.5	3.6	46	.45	--	--	--
TOTAL	355.7	--	111.24	143.7	--	27.39	112.3	--	14.29

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

3854.69

4887.77

GREEN RIVER BASIN

187

09209400 GREEN RIVER NEAR LA BARGE, WYO.

LOCATION.--Lat 42°11'34", long 110°09'45", in SE¼SE¼NW¼ sec.33, T.26 N., R.112 W., Lincoln County, at bridge 0.7 mile north of La Barge, 6.5 miles upstream from gaging station, and 9.5 miles upstream from Muddy Creek.

DRAINAGE AREA.--3,910 sq mi, approximately (at gaging station).

PERIOD OF RECORD.--Chemical analyses: October 1963 to September 1972.
Water temperatures: October 1963 to September 1972.

EXTREMES.--1971-72:

Specific conductance: Maximum daily, 485 micromhos Mar. 18; minimum daily, 213 micromhos June 15.
Water temperatures: Maximum, 21.0°C Aug. 8, 9; minimum, freezing point on many days during October to March.

Period of record:

Specific conductance: Maximum daily, 734 micromhos Jan. 22, 1968; minimum daily, 145 micromhos May 30, 1969.
Water temperatures: Maximum, 24.0°C Aug. 7, 1970; minimum, freezing point on many days during winter period.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 10...	1225	938	7.2	150	46	14	14	1.8	182	0	53	3.6
NOV. 14...	1200	1140	9.1	90	49	12	13	1.3	158	0	58	3.5
DEC. 02...	1305	700	7.3	100	55	16	17	1.6	204	0	64	5.0
JAN. 19...	1220	625	9.4	60	56	11	13	1.3	177	0	59	2.9
FEB. 27...	1115	650	8.7	50	54	15	13	1.1	181	0	70	4.2
MAR. 29...	1320	1200	9.6	180	55	16	20	2.3	201	0	70	5.2
APR. 27...	1715	1990	9.4	20	48	15	13	1.4	186	0	46	3.8
JUNE 14...	0940	16100	7.0	90	28	7.4	5.3	1.2	116	0	16	2.0
JULY 12...	1450	4000	7.4	90	32	9.8	9.0	1.4	139	0	21	1.7
AUG. 09...	1715	1860	4.8	60	34	9.5	9.1	1.4	131	0	34	1.7
SEP. 14...	1530	1350	5.4	40	38	11	9.6	1.4	134	0	42	2.7

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHDS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 10...	.2	.1	40	230	.31	583	180	31	.5	397	8.3	10.5
NOV. 14...	.3	.0	20	224	.30	689	170	40	.4	385	8.0	.0
DEC. 02...	.3	.4	40	268	.36	507	200	33	.5	455	8.2	.0
JAN. 19...	.2	.5	10	240	.33	405	180	35	.4	404	7.8	.0
FEB. 27...	.3	.7	50	256	.35	449	200	52	.4	430	7.7	.0
MAR. 29...	.2	.1	30	278	.38	901	200	35	.6	456	7.9	1.5
APR. 27...	.2	.1	20	228	.31	1230	180	27	.4	390	8.0	10.5
JUNE 14...	.2	.2	40	124	.17	5390	100	5	.2	221	7.9	14.5
JULY 12...	.1	.2	0	151	.21	1630	120	6	.4	262	8.2	18.0
AUG. 09...	.2	.1	50	159	.22	799	120	13	.4	274	8.1	21.0
SEP. 14...	.2	.2	30	177	.24	645	140	30	.4	306	8.0	14.0

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 10...	1225	938	9.1	8.4	--
NOV. 14...	1200	1140	11.1	8.4	--
DEC. 02...	1305	700	11.6	8.3	--
JAN. 19...	1220	625	7.2	8.2	398
FEB. 27...	1115	650	8.1	8.3	--
MAR. 29...	1320	1200	11.4	9.1	460
JUNE 14...	0800	16100	7.5	8.4	--
JULY 12...	1450	4000	13.3	8.3	300
AUG. 09...	1715	1860	8.2	8.5	262
SEP. 14...	1530	1350	9.4	8.2	--

[illegible]

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09209400 GREEN RIVER NEAR LA BARGE, WYO.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

[illegible]

LOCATION.--Lat 42°01'16", long 110°02'57", in NW¼NW¼NE¼ sec.31, T.24 N., R.111 W., Sweetwater County, at bridge 1.0 mile east of Fontenelle, 3.6 miles downstream from gaging station, and 4.6 miles downstream from Fontenelle Dam.

Water temperatures: October 1967 to September 1972.

Specific conductance: Maximum daily, 481 micromhos Mar. 9; minimum daily, 258 micromhos June 25.

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 06...	1525	1100	5.3	20	42	12	16	1.3	130	11	62	3.1
NOV. 11...	1430	361	6.9	50	54	10	24	1.6	145	4	96	3.5
DEC. 03...	0900	1290	5.9	0	45	14	15	1.3	165	0	59	3.1
JAN. 18...	1650	1110	7.9	200	53	17	19	1.6	189	0	78	4.8
MAR. 05...	1520	744	8.2	50	56	17	23	1.4	180	0	92	7.3
28...	1325	1740	8.1	30	56	16	20	1.4	179	0	94	5.5
APR. 27...	0925	3120	9.0	80	48	16	20	1.6	178	0	72	5.2
JUNE 14...	2030	14500	8.2	50	37	8.5	9.8	1.9	140	0	31	2.7
JULY 13...	1230	3920	7.3	60	34	12	10	1.6	146	0	31	2.0
AUG. 11...	1215	1910	7.4	170	38	11	12	1.4	149	0	40	3.3
SEP. 13...	1230	1300	5.8	60	38	11	12	1.4	149	0	38	2.7

[illegible]

EXTREMES.--1971-72: Continued

Water temperatures: Maximum, 20.5°C Aug. 12, 13; minimum, 1.5°C Feb. 11.

Period of record:

Specific conductance: Maximum daily, 701 micromhos Dec. 23, 1967; minimum daily, 253 micromhos June 13, 1969.
Water temperatures: Maximum, 20.5°C Aug. 12, 13, 1972; minimum, freezing point Nov. 27, Dec. 21, 1967,
Feb. 1, 1968.

REMARKS.--Temperature recorder at gaging station 3.6 miles upstream from sampling point October to December 1971; record furnished by Wyoming Game and Fish Commission. Maximum water temperature recorded during period; 13.5°C Oct. 1-6; minimum water temperature recorded during period, 2.0°C on many days during December.

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 06...	.3	.0	40	217	.30	644	160	35	.6	355	8.7	12.0
NOV. 11...	.3	.4	30	272	.37	265	180	54	.8	448	8.4	6.0
DEC. 03...	.2	.0	30	225	.31	784	170	35	.5	385	8.1	2.5
JAN. 18...	.3	.4	40	275	.37	824	200	45	.6	442	8.3	3.0
MAR. 05...	.3	.7	50	294	.40	591	210	62	.7	480	8.1	6.0
28...	.2	.2	40	289	.39	1360	200	53	.6	464	7.9	4.0
APR. 27...	.2	.1	20	260	.35	2190	190	44	.6	436	8.0	6.5
JUNE 14...	.2	.4	50	169	.23	6620	130	15	.4	295	7.9	15.5
JULY 13...	.1	.3	70	170	.23	1800	140	20	.4	294	8.2	17.0
AUG. 11...	.2	.3	50	187	.25	964	140	18	.4	320	8.3	20.5
SEP. 13...	.2	.2	40	182	.25	639	140	18	.4	321	8.3	17.0

[illegible]

GREEN RIVER BASIN

09211200 GREEN RIVER BELOW FONTENELLE RESERVOIR, WYO.--Continued

TEMPERATURE (°C) OF WATER, OCTOBER TO DECEMBER 1971
(THERMOGRAPH RECORD)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	12.0	8.5	7.0	3.0	2.0	---	---	---	---	---	---
2	13.5	11.5	8.5	6.5	3.0	2.0	---	---	---	---	---	---
3	13.5	11.5	8.0	6.0	3.0	2.0	---	---	---	---	---	---
4	13.5	12.0	7.0	5.5	3.0	2.0	---	---	---	---	---	---
5	13.5	12.0	7.0	6.0	3.5	2.0	---	---	---	---	---	---
6	13.5	11.5	6.5	6.0	3.5	3.0	---	---	---	---	---	---
7	13.0	11.0	6.5	6.0	3.5	3.0	---	---	---	---	---	---
8	12.0	11.0	6.5	6.0	3.0	2.0	---	---	---	---	---	---
9	11.5	10.5	6.5	5.5	3.5	3.0	---	---	---	---	---	---
10	11.5	10.5	6.5	5.5	3.5	3.0	---	---	---	---	---	---
11	11.5	10.5	6.5	5.0	3.5	3.0	---	---	---	---	---	---
12	11.5	10.0	6.0	5.5	3.5	3.0	---	---	---	---	---	---
13	11.0	10.0	6.0	5.5	3.5	3.0	---	---	---	---	---	---
14	11.5	10.0	6.0	5.5	3.5	3.0	---	---	---	---	---	---
15	11.5	10.5	5.5	5.0	3.5	2.0	---	---	---	---	---	---
16	11.0	10.5	5.5	4.5	3.0	2.0	---	---	---	---	---	---
17	11.0	10.5	5.0	4.5	3.0	2.0	---	---	---	---	---	---
18	11.0	10.5	5.0	4.5	3.0	2.0	---	---	---	---	---	---
19	11.0	10.0	5.0	4.0	3.0	2.0	---	---	---	---	---	---
20	11.0	10.0	5.0	4.0	3.5	3.0	---	---	---	---	---	---
21	11.0	10.0	4.5	4.0	3.5	3.0	---	---	---	---	---	---
22	11.0	10.0	4.5	4.0	3.5	3.0	---	---	---	---	---	---
23	11.0	10.0	4.5	4.0	3.5	3.0	---	---	---	---	---	---
24	11.0	10.0	4.5	4.0	3.5	3.0	---	---	---	---	---	---
25	10.5	10.0	4.0	3.5	3.5	3.0	---	---	---	---	---	---
26	10.5	9.5	4.0	3.5	3.5	3.0	---	---	---	---	---	---
27	10.0	9.5	4.0	3.5	3.0	2.0	---	---	---	---	---	---
28	9.5	8.5	3.5	3.0	3.0	2.0	---	---	---	---	---	---
29	9.0	8.5	3.5	3.0	3.0	2.0	---	---	---	---	---	---
30	8.5	8.0	3.5	3.0	3.0	2.0	---	---	---	---	---	---
31	8.5	8.0	---	---	---	---	---	---	---	---	---	---
MONTH	13.5	8.0	8.5	3.0	3.5	2.0	---	---	---	---	---	---

GREEN RIVER BASIN

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09213500 BIG SANDY RIVER NEAR FARSON, WYO.

LOCATION.--Lat 42°19'01", long 109°29'06", in NW¼SE¼NW¼ sec.17, T.27 N., R.106 W., Sublette County, at gaging station, at Eden Canal diversion, about 1 mile upstream from high-water line of Big Sandy Reservoir, 14.5 miles north of Farson, and 24.5 miles upstream from Little Sandy Creek.

DRAINAGE AREA.--322 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1962 to September 1964.
Sediment records: October 1971 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL- CIUM (CA) (MG/L)	DIS-SOLVED MAG- NE- SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO- RIDE (CL) (MG/L)	
FEB. 03...	1600	2.0	11	110	19	0.6	12	1.1	54	0	28	2.5	
DATE	TIME	DIS-SOLVED FLUO- RIDE (F) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (SUM OF CONSPI- TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON-CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
FEB. 03...	0.2	0.4	10	102	0.14	0.56	51	7	0.7	172	7.4	0.0	

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
OCT. 22...	1400	4.5	44	22	2.6	--	--	--	--	--	--
NOV. 16...	1600	.0	22	36	2.1	--	--	--	--	--	--
DEC. 22...	1330	.0	20	64	3.5	--	--	--	--	--	--
JAN. 19...	1740	.0	10	625	17	--	--	--	--	--	--
FEB. 03...	1600	.0	2.0	4	.02	--	--	--	--	--	--
FEB. 23...	1650	.0	17	18	.83	--	--	--	--	--	--
MAR. 30...	1515	.0	76	286	59	--	--	--	--	--	--
MAY 04...	1040	9.5	93	159	40	--	--	--	--	--	--
JUNE 15...	1200	12.0	774	392	819	23	39	74	86	95	100
JULY 10...	1530	19.5	234	126	80	--	--	--	--	--	--
AUG. 07...	1500	22.5	75	128	26	--	--	--	--	--	--
SEP. 11...	1530	16.5	61	54	8.9	--	--	--	--	--	--
SEP. 27...	0950	4.5	42	58	6.6	--	--	--	--	--	--

GREEN RIVER BASIN

09216000 BIG SANDY RIVER BELOW EDEN, WYO.

LOCATION.--Lat 42°00'37", long 109°34'57", in NE¼SE¼SW¼ sec.31, T.24 N., R.107 W., Sweetwater County, at gaging station, 0.1 mile downstream from Simpson Gulch, 8.0 miles southwest of Eden, and 12.5 miles downstream from Little Sandy Creek.

DRAINAGE AREA.--1,610 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1964, October 1967 to September 1972.
Sediment records: October 1971 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NESIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 10...	1610	37	9.9	40	260	93	370	3.8	226	0	1500	63
NOV. 16...	1730	43	11	150	220	100	280	2.7	229	0	1300	48
DEC. 06...	1000	a33	13	310	230	79	340	3.1	240	0	1400	54
JAN. 27...	1200	a26	14	30	240	87	340	3.1	239	0	1400	49
FEB. 24...	1215	a28	14	60	240	90	350	3.3	239	0	1400	54
MAR. 28...	0945	122	9.3	820	100	32	190	2.1	168	0	600	31
MAY 03...	1615	28	8.8	50	220	91	480	3.7	254	0	1600	81
JUNE 15...	1645	608	9.6	130	32	6.1	35	1.2	77	0	110	6.0
JULY 12...	1500	88	13	200	140	47	190	3.0	201	0	730	32
AUG. 11...	1500	71	13	20	180	55	230	3.3	239	0	900	45
SEP. 15...	1300	49	11	40	240	74	320	3.7	265	0	1300	53

a Daily mean discharge.

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 10...	1.0	1.9	320	2410	3.28	241	1000	815	5.0	3040	8.1	16.0
NOV. 16...	.9	2.3	230	2050	2.79	238	950	762	3.9	2570	8.1	1.0
DEC. 06...	.9	2.8	290	2220	3.02	198	910	713	4.9	2810	8.0	.0
JAN. 27...	.9	3.0	260	2260	3.07	159	950	754	4.8	2450	7.8	.0
FEB. 24...	.9	2.5	280	2300	3.13	174	970	774	4.9	2760	8.2	.0
MAR. 28...	.6	.9	150	1050	1.43	346	380	242	4.2	1390	7.4	1.0
MAY 03...	.9	.4	380	2650	3.60	200	920	712	6.9	3100	7.8	17.0
JUNE 15...	.2	.2	60	237	.32	389	100	37	1.5	3950	7.7	17.5
JULY 12...	.7	2.3	240	1260	1.71	299	540	375	3.5	1700	8.2	21.5
AUG. 11...	.8	4.1	230	1550	2.11	297	680	484	3.9	1990	8.2	21.5
SEP. 15...	.9	3.6	290	2140	2.91	283	900	683	4.6	2660	8.1	13.0

GREEN RIVER BASIN

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09216000 BIG SANDY RIVER BELOW EDEN, WYO.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT.					
10...	1610	37	10.6	8.5	--
NOV.					
16...	1730	a43	10.6	8.5	--
DEC.					
06...	1000	a33	10.5	8.2	--
JAN.					
27...	1200	a26	10.2	8.0	--
FEB.					
24...	1215	28	11.2	8.3	--
MAR.					
28...	0945	122	10.3	8.3	--
MAY					
03...	1615	28	9.7	8.4	3400
JUNE					
15...	1645	608	8.0	8.5	--

a Daily mean discharge.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
OCT.											
10...	1610	16.0	37	33	3.3	--	--	--	--	--	--
NOV.											
16...	1730	1.0	43	42	4.9	--	--	--	--	--	--
DEC.											
06...	1000	.0	a33	46	4.1	--	--	--	--	--	--
JAN.											
27...	1200	.0	a26	92	6.5	--	--	--	--	--	--
FEB.											
24...	1215	.0	a28	49	3.7	--	--	--	--	--	--
MAR.											
28...	0945	1.0	122	496	163	70	86	93	94	98	100
MAY											
03...	1615	17.0	28	42	3.2	--	--	--	--	--	--
JUNE											
15...	1645	17.5	608	76	125	--	--	48	50	68	100
JULY											
12...	1500	21.5	88	45	11	--	--	--	--	--	--
AUG.											
11...	1500	21.5	71	42	8.1	--	--	--	--	--	--
SEP.											
15...	1300	13.0	49	35	4.6	--	--	--	--	--	--
27...	0900	6.0	44	30	3.6	--	--	--	--	--	--

a Daily mean discharge.

09216300 GREEN RIVER AT BIG ISLAND, NEAR GREEN RIVER WYO.

LOCATION.--Lat 41°45'52", long 109°44'05", in SW¼SE¼ sec.26, T.21 N., R.109 W., Sweetwater County, at Big Island bridge, 6.3 miles downstream from Dry Creek, 9.5 miles downstream from Big Sandy River, and 21 miles north-west of town of Green River.

PERIOD OF RECORD.--Chemical analyses: August 1966 to September 1972.

REMARKS.--Water discharge computed by adding the discharge of Big Sandy River below Eden to that of Green River below Fontenelle Reservoir.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NESIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 10...	1005	1120	4.8	40	52	20	39	1.6	160	3	150	6.0
NOV. 14...	1015	1140	6.5	20	60	16	41	1.3	167	0	160	6.7
DEC. 02...	1715	1320	5.0	130	54	19	38	1.6	175	0	140	6.7
JAN. 18...	1740	1140	6.6	50	53	16	18	1.3	180	0	79	4.6
MAR. 05...	1040	779	8.0	70	66	29	57	1.4	199	0	220	12
APR. 05...	0545	1820	8.1	120	60	19	47	1.9	175	0	160	8.6
MAY 03...	1505	3130	7.1	100	55	18	32	1.6	192	0	110	7.3
31...	1445	6810	7.3	10	48	14	18	1.6	176	0	65	3.0
JULY 12...	1230	3950	7.2	40	39	14	17	1.2	149	0	62	4.7
AUG. 09...	1400	3070	7.1	80	43	17	27	1.6	153	0	94	4.7
SEP. 08...	1550	1640	6.5	40	49	15	32	1.4	145	5	120	5.0

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 10...	.3	.1	50	356	.48	1080	210	74	1.2	580	8.4	10.5
NOV. 14...	.3	.2	80	375	.51	1150	220	83	1.2	592	8.1	4.0
DEC. 02...	.3	.3	70	353	.48	1260	210	66	1.1	574	8.3	.0
JAN. 18...	.3	.4	40	268	.36	825	200	52	.6	441	8.1	1.5
MAR. 05...	.4	.7	50	488	.66	1030	280	125	1.5	728	8.0	4.0
APR. 05...	.2	.4	70	396	.54	1950	230	86	1.4	625	7.9	4.0
MAY 03...	.2	.1	80	324	.44	2740	210	52	1.0	523	8.0	10.0
31...	.3	.2	20	243	.33	4470	180	36	.6	405	8.0	14.5
JULY 12...	.3	.1	30	219	.30	2340	150	28	.6	366	8.2	16.5
AUG. 09...	.2	.2	60	270	.37	2240	180	54	.9	431	8.2	20.5
SEP. 08...	.3	.1	60	304	.41	1350	180	53	1.0	488	8.5	17.5

GREEN RIVER BASIN

197

09216950 BITTER CREEK NEAR GREEN RIVER, WYO.

LOCATION.--Lat 41°31'25", long 109°25'41", in NE¼SE¼ sec.24, T.18 N., R.107 W., Sweetwater County, 0.3 mile south of Interstate Highway 80, 1.7 miles east of town of Green River, and 1.9 miles upstream from mouth.

PERIOD OF RECORD.--Chemical analyses: August 1966 to September 1972 (discontinued).
Sediment records: August 1966 to September 1972 (discontinued).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 10...	0815	1.4	3.8	20	89	53	440	20	245	0	620	390
JAN. 23...	1600	3.4	14	200	60	35	210	8.5	189	0	320	210
APR. 03...	1700	18	9.2	150	160	150	470	11	315	0	1300	330

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 10...	1.1	27	590	1770	2.41	6.69	440	239	9.1	2410	7.5	5.5
JAN. 23...	.9	2.3	360	953	1.30	8.75	300	145	5.3	1560	7.5	.0
APR. 03...	.9	11	640	2580	3.51	125	1000	742	6.4	3480	7.7	10.5

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 10...	0815	1.4	7.7	8.6	1870
JAN. 23...	1600	3.4	9.4	8.6	1340
APR. 03...	1700	18	8.7	8.2	3580

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM
OCT. 10...	0815	5.5	1.4	100	.38	--	--	--
JAN. 23...	1600	.0	3.4	616	5.7	--	--	--
APR. 03...	1700	10.5	18	1910	93	82	95	100

GREEN RIVER BASIN

09217000 GREEN RIVER NEAR GREEN RIVER, WYO.

LOCATION.--Lat 41°30'59", long 109°26'54", in NW¼NE¼NE¼ sec.26, T.18 N., R.107 W., Sweetwater County, at bridge on State Highway 530 in town of Green River, 0.8 mile upstream from Bitter Creek, 1 mile upstream from gaging station, and 5 miles upstream from high-water line of Flaming Gorge Reservoir.

DRAINAGE AREA.--10,000 sq mi, approximately (at gaging station), of which 300 sq mi is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: May 1951 to September 1972.

Water temperatures: May 1951 to September 1972.

Sediment records: May 1951 to September 1972.

EXTREMES.--1971-72:

Specific conductance: Maximum daily, 821 micromhos Nov. 4; minimum daily, 294 micromhos June 22.

Water temperatures: Maximum, 22.0°C July 29, 30, Aug. 7-9; minimum, freezing point on many days during October to March.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 08...	1745	1190	3.5	10	48	19	44	1.8	129	27	150	5.2
NOV. 11...	1625	a650	5.4	20	57	22	55	1.8	185	0	190	6.9
DEC. 06...	1450	a1400	6.0	10	53	19	38	1.9	182	0	130	6.2
JAN. 23...	1415	a1510	14	30	110	40	180	5.1	250	0	510	54
MAR. 03...	1730	a1110	7.2	20	60	22	57	2.1	200	0	190	8.3
APR. 05...	1145	1940	6.6	20	59	21	41	2.1	192	0	150	9.9
MAY 17...	0910	5190	7.3	30	52	17	22	2.0	198	0	84	5.1
JUNE 16...	1200	15400	8.1	300	37	12	13	2.2	150	0	46	3.3
JULY 11...	1830	4400	9.3	30	39	13	18	1.5	129	0	75	4.0
AUG. 08...	1745	2140	5.5	30	44	15	27	1.5	154	0	99	4.8
SEP. 06...	1515	1700	4.7	30	48	17	38	1.6	158	0	120	5.6

a Daily mean discharge.

09217000 GREEN RIVER NEAR GREEN RIVER, WYO.--Continued

EXTREMES.--1971-72: Continued

Sediment concentrations: Maximum daily, 800 mg/l June 15; minimum daily, 2 mg/l on several days during December, January, September.

Sediment discharge: Maximum daily, 32,000 tons June 15; minimum daily, 5.5 tons Sept. 23.

Period of record:

Specific conductance: Maximum daily, 1,270 micromhos Nov. 26, 1966; minimum daily, 219 micromhos May 22, 1954.

Water temperatures: Maximum, 26.0°C July 8, 22, 1961, July 24, 1962; minimum, freezing point on many days during winter period.

Sediment concentrations: Maximum daily, 15,000 mg/l Aug. 11, 1963; minimum daily, 0 mg/l Sept. 18, 1962.

Sediment discharge: Maximum daily, 110,000 tons Mar. 28, 1962; minimum daily, 0 tons Sept. 18, 1962.

REMARKS.--Flow affected by ice Oct. 28 to Nov. 13, 19--22, Nov. 28 to Dec. 6, Jan. 24 to Mar. 13. Temperature recorder at gaging station 1 mile downstream from sampling site. Maximum water temperature recorded, 22.5°C July 29, Aug. 7-9.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 08...	.5	.02	60	363	.49	1170	200	47	1.4	564	8.5	14.0
NOV. 11...	.2	.04	90	430	.58	755	230	81	1.6	674	8.2	.0
DEC. 06...	.2	.00	50	344	.47	1300	210	61	1.1	547	8.2	.0
JAN. 23...	.7	.56	220	1040	1.41	4240	440	230	3.7	1460	7.7	.0
MAR. 03...	.1	.17	170	446	.61	1340	240	76	1.6	672	8.0	.0
APR. 05...	.3	.00	50	384	.52	2010	230	76	1.2	593	8.3	5.5
MAY 17...	.2	.02	50	287	.39	4020	200	37	.7	474	8.0	12.0
JUNE 16...	.2	.04	50	196	.27	8170	140	19	.5	320	7.1	18.0
JULY 11...	.2	.00	40	224	.30	2660	150	45	.6	359	8.4	19.0
AUG. 08...	.4	.00	60	273	.37	1580	170	45	.9	438	7.7	23.5
SEP. 06...	.3	.05	60	313	.43	1440	190	60	1.2	503	8.1	15.5

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 08...	1745	1190	9.6	9.0	--
NOV. 11...	1625	a650	12.2	8.7	--
DEC. 06...	1450	a1400	11.2	8.4	--
JAN. 23...	1415	a1510	9.8	8.7	--
FEB. 06...	1045	a1310	9.7	8.7	650
MAR. 03...	1730	a1110	11.1	8.4	680
APR. 05...	1145	1940	10.6	8.4	620
MAY 17...	0910	5190	8.2	8.3	--
JUNE 16...	1200	15400	7.8	8.1	330
JULY 11...	1830	4400	7.9	8.8	352
AUG. 08...	1745	2140	8.8	8.8	412
SEP. 06...	1515	1700	8.5	8.6	510

a Daily mean discharge.

GREEN RIVER BASIN

09217000 GREEN RIVER NEAR GREEN RIVER, WYO.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

[illegible]

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

[illegible]

GREEN RIVER BASIN

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09217000 GREEN RIVER NEAR GREEN RIVER, WYO.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS THERMOGRAPH)

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	10.0	---	---	0.0	0.0	---	---	---	---	---	---
2	10.0	10.0	---	---	0.0	0.0	---	---	---	---	---	---
3	10.0	10.0	---	---	0.0	0.0	---	---	---	---	---	---
4	12.0	10.0	---	---	0.5	0.0	---	---	---	---	---	---
5	13.0	12.0	---	---	0.5	0.0	---	---	---	---	---	---
6	14.0	12.5	---	---	0.0	0.0	---	---	---	---	---	---
7	14.0	12.5	---	---	---	---	---	---	---	---	---	---
8	14.0	12.5	---	---	---	---	---	---	---	---	---	---
9	14.0	12.5	---	---	---	---	---	---	---	---	---	---
10	13.5	12.5	---	---	---	---	---	---	---	---	---	---
11	13.5	12.0	0.0	0.0	---	---	---	---	---	---	---	---
12	12.5	11.5	0.0	0.0	---	---	---	---	---	---	---	---
13	12.0	11.0	0.0	0.0	---	---	---	---	---	---	---	---
14	11.0	10.5	0.0	0.0	---	---	---	---	---	---	3.5	1.0
15	11.0	10.0	0.0	0.0	---	---	---	---	---	---	4.0	2.0
16	---	---	0.0	0.0	---	---	---	---	---	---	4.5	2.0
17	---	---	0.0	0.0	---	---	---	---	---	---	5.5	2.5
18	---	---	1.0	0.0	---	---	---	---	---	---	5.5	3.5
19	---	---	1.0	1.0	---	---	---	---	---	---	5.5	3.5
20	---	---	1.0	0.5	---	---	---	---	---	---	4.5	2.5
21	---	---	0.5	0.0	---	---	---	---	---	---	6.0	2.5
22	---	---	0.0	0.0	---	---	---	---	---	---	6.0	3.5
23	---	---	0.0	0.0	---	---	---	---	---	---	6.0	4.5
24	---	---	0.0	0.0	---	---	---	---	---	---	4.5	2.0
25	---	---	0.0	0.0	---	---	---	---	---	---	5.5	2.5
26	---	---	0.0	0.0	---	---	---	---	---	---	5.5	2.5
27	---	---	0.0	0.0	---	---	---	---	---	---	3.0	1.0
28	---	---	0.0	0.0	---	---	---	---	---	---	3.0	1.5
29	---	---	0.0	0.0	---	---	---	---	---	---	3.5	1.5
30	---	---	0.0	0.0	---	---	---	---	---	---	3.0	1.5
31	---	---	---	---	---	---	---	---	---	---	4.5	1.5
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.5	3.0	8.0	4.5	14.5	14.0	17.5	16.5	21.0	18.5	18.5	16.0
2	6.5	4.5	10.0	6.0	14.5	13.5	17.5	15.5	20.5	18.0	17.0	15.5
3	7.0	4.0	10.5	7.5	14.0	13.5	16.5	14.5	21.0	16.5	18.0	15.0
4	7.0	4.0	11.5	8.0	14.0	13.5	17.0	14.5	21.0	18.0	17.5	15.5
5	7.0	4.0	11.5	9.0	14.5	14.0	17.5	16.0	21.0	17.5	17.5	15.5
6	7.0	6.0	10.5	8.5	14.5	14.0	18.0	17.0	21.5	18.0	15.5	14.0
7	7.0	5.0	10.0	9.0	15.5	14.5	18.0	17.0	22.5	18.5	15.5	13.0
8	8.0	5.0	11.0	8.5	15.5	15.0	18.0	16.0	22.5	19.0	17.0	14.0
9	7.5	5.0	11.0	9.5	16.5	15.0	18.0	16.5	22.5	18.5	16.5	15.0
10	7.5	5.5	11.0	9.0	16.5	15.5	18.5	17.0	22.0	18.5	17.0	14.5
11	7.5	5.5	11.0	9.0	17.0	15.5	19.0	17.5	22.0	18.5	17.0	14.5
12	7.5	6.0	10.5	9.0	17.0	16.0	19.5	17.0	22.0	19.0	16.5	14.0
13	6.0	3.5	12.0	9.5	17.0	15.5	20.0	17.5	21.5	19.0	16.5	14.0
14	5.0	3.0	13.0	10.5	17.5	16.0	19.5	17.5	21.5	19.0	16.5	13.5
15	8.0	4.5	13.0	11.0	17.5	16.5	20.5	18.0	21.0	18.0	16.0	14.0
16	8.5	5.0	13.0	11.0	17.0	16.0	20.5	18.0	20.5	18.0	15.0	12.5
17	8.0	6.0	12.0	10.5	17.0	16.0	20.5	17.5	20.5	17.5	15.0	12.0
18	7.0	5.0	12.0	10.5	17.0	16.0	20.5	18.0	20.0	17.5	14.5	12.5
19	5.5	3.0	11.5	11.0	17.5	16.0	19.5	17.5	19.0	17.0	15.0	14.0
20	6.5	3.0	11.5	10.0	17.5	16.5	19.5	17.5	20.0	17.0	14.0	12.0
21	7.5	5.5	11.5	10.0	17.5	16.5	19.5	17.0	20.5	17.5	14.0	11.0
22	8.0	6.0	11.0	10.0	17.5	17.0	20.0	16.5	20.0	17.5	14.0	11.5
23	9.0	5.5	11.5	10.0	17.0	16.5	20.5	17.0	19.5	16.5	14.0	12.5
24	10.0	6.5	12.0	11.0	17.0	16.0	20.5	18.0	16.5	15.0	12.5	10.5
25	8.5	5.5	12.5	11.5	16.5	15.5	20.0	17.5	17.5	14.5	12.0	10.0
26	7.0	4.5	12.5	12.0	16.5	15.5	20.0	18.0	19.0	15.5	11.0	9.0
27	9.5	6.0	13.0	12.0	17.0	16.0	20.5	17.0	19.0	16.0	12.0	10.0
28	10.5	7.0	13.5	12.5	18.0	16.5	21.0	17.0	20.0	17.0	12.0	10.5
29	9.5	7.5	13.0	12.0	18.0	17.0	22.5	18.0	19.5	17.5	12.0	10.0
30	8.0	6.5	13.5	12.5	18.0	17.0	21.5	19.0	19.0	17.0	12.0	10.0
31	---	---	14.0	13.0	---	---	21.5	18.5	18.5	17.0	---	---
MONTH	10.5	3.0	14.0	4.5	18.0	13.5	22.5	14.5	22.5	14.5	18.5	9.0

09217000 GREEN RIVER NEAR GREEN RIVER, WYO.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1340	24	87	1100	15	45	1300	12	42
2	1250	36	122	1100	10	30	1300	16	56
3	1200	45	146	950	12	31	1220	12	40
4	1190	23	74	750	15	30	1320	13	46
5	1180	19	61	585	8	13	1400	15	57
6	1160	19	60	900	11	27	1400	9	34
7	1180	12	38	1100	22	65	1450	8	31
8	1180	16	51	1250	23	78	1400	7	26
9	1180	15	48	1300	33	116	1370	14	52
10	1160	8	25	1250	25	84	1400	118	446
11	1160	12	38	650	26	46	1400	230	869
12	1160	16	50	470	17	22	1370	40	148
13	1170	22	69	800	19	41	1400	2	7.6
14	1180	16	51	1140	25	77	1450	2	7.8
15	1180	20	64	1120	23	70	1450	3	12
16	1190	20	64	1120	30	91	1450	2	7.8
17	1220	16	53	1110	16	48	1450	13	51
18	1220	28	92	1100	9	27	1460	4	16
19	1190	14	45	1050	16	45	1470	2	7.9
20	1170	11	35	1060	39	105	1480	2	8.0
21	1170	9	28	1050	19	54	1490	2	8.0
22	1170	12	38	1110	11	33	1500	8	32
23	1170	9	28	1110	10	30	1500	4	16
24	1170	15	47	1100	13	39	1470	7	28
25	1230	23	76	1200	14	45	1490	4	16
26	1180	49	156	1340	14	51	1510	3	12
27	1200	20	65	1340	13	47	1490	4	16
28	1150	31	96	1330	20	72	1480	3	12
29	920	36	89	1320	41	146	1450	2	7.8
30	920	36	89	1300	21	74	1370	2	7.4
31	1010	21	57	--	--	--	1300	5	18
TOTAL	36150	--	2042	32045	--	1682	43990	--	2138.3
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1290	2	7.0	1450	10	39	1120	12	36
2	1300	2	7.0	1400	6	23	1120	9	27
3	1300	13	46	1360	23	84	1110	29	87
4	1250	71	240	1310	17	60	1100	47	141
5	1300	25	88	1300	12	42	1120	29	88
6	1300	17	60	1310	130	460	1150	31	96
7	1310	5	18	1340	34	123	1200	84	272
8	1350	3	11	1350	9	33	1350	99	361
9	1340	2	7.2	1350	35	128	1500	123	498
10	1300	6	21	1360	29	106	1650	163	726
11	1300	81	284	1380	9	34	1650	168	748
12	1300	39	137	1370	21	78	1550	331	1390
13	1300	6	21	1370	12	44	1420	156	598
14	1300	3	11	1370	27	100	1380	139	518
15	1300	9	32	1360	17	62	1590	193	829
16	1310	46	163	1350	11	40	1990	248	1330
17	1350	36	131	1340	22	80	2200	347	2060
18	1360	23	84	1350	48	175	2170	222	1300
19	1400	22	83	1370	42	155	2140	198	1140
20	1420	26	100	1400	32	121	2180	213	1250
21	1500	33	134	1410	26	99	2180	162	954
22	1500	35	142	1400	37	140	2160	119	694
23	1510	16	65	1390	24	90	2160	135	787
24	1550	137	573	1380	26	97	2140	192	1110
25	1550	33	138	1350	58	211	2120	149	853
26	1500	34	138	1280	50	173	2080	94	528
27	1500	16	65	1220	15	49	2050	108	598
28	1500	12	49	1180	9	29	2040	80	441
29	1450	16	63	1130	14	43	2010	41	223
30	1450	26	102	--	--	--	1980	36	192
31	1450	25	98	--	--	--	1960	30	159
TOTAL	42840	--	3118.2	38930	--	2918	53580	--	20034

09217000 GREEN RIVER NEAR GREEN RIVER, WYO.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1950	69	363	3170	63	539	6510	84	1480
2	1960	30	159	3170	49	419	7010	91	1720
3	1940	21	110	3150	34	289	7450	68	1370
4	1940	16	84	3150	35	298	7530	91	1850
5	1980	26	139	3190	36	310	7710	93	1940
6	1940	20	105	3200	223	1930	8300	228	5110
7	1950	43	226	3220	116	1010	8860	172	4110
8	1980	29	155	3220	44	383	9360	132	3340
9	2020	56	305	3220	41	356	10100	110	3000
10	2010	71	385	3490	64	603	11400	120	3690
11	1980	55	294	3880	82	859	11800	122	3890
12	2060	49	273	4230	141	1610	11800	79	2520
13	2430	90	590	4350	121	1420	12900	136	4740
14	2780	102	766	4370	81	956	13800	160	5960
15	2860	87	672	4370	44	519	14800	800	32000
16	2860	82	633	4680	95	1200	15400	160	6650
17	2860	59	456	5210	199	2800	15000	88	3560
18	2880	39	303	5240	109	1540	14500	73	2860
19	2910	54	424	5400	85	1240	14100	206	7840
20	3010	92	748	5710	65	1000	13200	69	2460
21	3130	78	659	5760	97	1510	11900	69	2220
22	3150	76	646	5730	70	1080	10600	82	2350
23	3150	42	357	6020	103	1670	9160	71	1760
24	3130	88	744	6310	105	1790	7970	106	2280
25	3130	55	465	6330	105	1790	8090	84	1830
26	3150	33	281	6330	116	1980	8550	40	923
27	3170	81	693	6380	77	1330	9260	38	950
28	3170	54	462	6410	85	1470	9770	35	923
29	3170	36	308	6460	44	767	9570	26	672
30	3170	34	291	6510	98	1720	8490	26	596
31	--	--	--	6510	66	1160	--	--	--
TOTAL	77820	--	12096	148370	--	35548	314890	--	114594

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	7120	23	442	2610	14	99	1680	16	73
2	6670	23	360	2400	24	156	1680	7	32
3	6510	19	334	2280	33	203	1680	3	14
4	5940	16	257	2080	9	51	1660	3	13
5	5890	22	350	2100	9	51	1700	44	202
6	5860	21	332	2160	12	70	1730	100	467
7	5280	12	171	2170	9	53	1700	19	87
8	4440	14	168	2160	13	76	1660	25	90
9	4370	14	165	2120	14	80	1650	11	49
10	4370	19	224	1920	70	363	1640	7	31
11	4400	19	226	1980	38	203	1640	7	31
12	4100	32	354	1990	15	81	1650	12	53
13	4020	12	130	1980	26	139	1270	19	65
14	3980	14	150	1980	33	176	1220	7	23
15	3980	21	226	1920	15	78	1080	3	8.7
16	3940	14	149	1920	23	119	864	4	9.3
17	3900	16	168	1950	10	53	851	3	6.9
18	3860	21	219	1950	10	53	854	3	6.9
19	3800	28	287	1960	10	53	870	4	9.4
20	3600	25	243	1990	4	21	864	5	12
21	3200	13	86	1990	12	64	856	7	16
22	3080	18	150	1960	9	48	881	4	9.5
23	3120	18	152	1950	12	63	1020	2	5.5
24	3120	15	84	1920	12	62	1070	4	12
25	3120	11	93	1880	6	30	1080	8	23
26	2990	18	145	1840	6	30	1080	9	26
27	2930	15	119	1780	5	24	918	9	22
28	2780	8	60	1740	11	52	910	9	22
29	2690	7	51	1710	7	32	1050	7	20
30	2660	7	50	1680	9	41	1050	6	17
31	2660	11	79	1660	13	58	--	--	--
TOTAL	128380	--	6324	61730	--	2682	37864	--	1456.2

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

1016589
204332.7

EXTREMES.--1971-72:

Specific conductance: Maximum daily, 3,570 micromhos Sept. 27; minimum daily, 387 micromhos May 21.

Water temperatures: Maximum, 23.0°C Aug. 10, 22, 27; minimum, freezing point on many days during October to March.

Period of record:

Specific conductance: Maximum daily, 5,140 micromhos Jan. 26, 1963; minimum daily, 387 micromhos May 21, 1972.

Water temperatures: Maximum, 28.0°C July 20, 1970; minimum, freezing point on many days during winter period.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED FLUO- RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON-CAR- BONATE HARD- NESS (MG/L)	SODIUM AD-SORP- TION RATIO	SPECIFIC CONDUCTANCE (MICRO- MHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 09...	1.0	.02	410	1670	2.27	194	650	430	5.1	2280	8.2	9.0
NOV. 13...	.6	.66	290	1260	1.71	340	520	290	4.0	1760	7.9	.0
DEC. 03...	.6	.14	260	1180	1.60	213	510	280	3.5	1670	8.0	.0
JAN. 22...	.2	.08	50	351	.48	56.9	220	62	1.1	561	8.0	.0
MAR. 04...	.3	.16	180	669	.91	497	230	75	3.7	1010	7.8	.0
APR. 06...	.4	.02	170	702	.95	375	340	130	2.6	1030	7.9	8.5
MAY 18...	.3	.09	70	299	.41	638	160	41	1.3	475	7.8	14.0
JUNE 14...	.5	.06	210	560	.76	839	280	120	1.9	860	7.7	19.0
JULY 11...	1.2	.07	570	1980	2.69	294	800	560	5.1	2620	8.2	23.5
AUG. 09...	1.0	.01	410	1570	2.14	220	700	540	3.8	2050	7.9	17.5
SEP. 07...	1.2	.03	470	1990	2.71	253	890	690	3.9	2550	8.3	17.5

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

[illegible]

GREEN RIVER BASIN

09222000 BLACKS FORK NEAR LYMAN, WYO.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SED- IMENT (MG/L)	SUS- PEN- DED SED- IMENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
OCT. 09...	1115	9.0	43	42	4.9	--	--	--	--	--	--
NOV. 13...	1130	.0	a100	289	78	--	--	--	--	--	--
DEC. 03...	1600	.0	a67	66	12	--	--	--	--	--	--
JAN. 22...	1045	.0	a60	144	23	--	--	--	--	--	--
MAR. 04...	1325	.0	a275	1840	1370	58	63	80	87	95	100
APR. 06...	1440	8.5	198	533	285	--	--	--	--	--	--
MAY 18...	1555	14.0	790	3210	6850	11	17	55	78	90	99
JULY 11...	1805	23.5	55	44	6.5	--	--	--	--	--	--
AUG. 09...	0940	17.5	52	46	6.5	--	--	--	--	--	--
SEP. 07...	1645	17.5	47	94	12	--	--	--	--	--	--
28...	1115	--	91	58	14	--	--	--	--	--	--

a Daily mean discharge.

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM	BED MAT. FALL DIAM. % FINER THAN .500 MM	BED MAT. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM
SEP. 28...	1115	91	1	2	21	81	96	97	98	100

09224450 HAMS FORK NEAR GRANGER, WYO.

LOCATION.--Lat 41°35'56", long 109°59'28", in center of sec.30, T.19 N., R.111 W., Sweetwater County, at railroad bridge, 1.2 miles northwest of Granger, and 1.8 miles upstream from mouth.

DRAINAGE AREA.--670 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: July 1965 to September 1972.
Sediment records: October 1971 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
09...	1215	115	1.2	120	59	19	25	1.6	195	0	100	12
NOV.												
13...	1420	34	4.0	20	93	26	49	1.8	217	0	210	27
DEC.												
05...	1410	18	1.1	100	92	28	50	1.6	247	0	210	26
JAN.												
20...	1325	11	7.3	30	120	29	74	1.8	287	0	280	35
MAR.												
04...	1625	46	5.2	60	85	25	46	1.6	214	0	190	28
APR.												
06...	1640	226	4.2	20	81	21	40	1.6	229	0	150	21
MAY												
18...	1810	1260	6.6	70	62	11	18	2.1	209	0	54	7.3
JUNE												
14...	0830	1100	8.0	80	60	13	17	1.9	225	0	48	8.3
JULY												
11...	0845	126	6.9	10	73	20	36	1.9	262	0	110	12
AUG.												
09...	1050	30	3.0	40	69	24	48	1.9	220	0	160	18
SEP.												
07...	1230	12	6.5	40	75	25	47	2.3	231	0	180	18
28...	1230	10	2.7	30	69	24	47	2.1	194	0	170	19

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (R) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT.												
09...	.3	.2	70	315	.43	97.8	220	60	.7	536	8.2	11.5
NOV.												
13...	.4	.0	70	520	.71	47.7	340	162	1.2	813	7.9	.0
DEC.												
05...	.4	.1	80	533	.72	25.9	340	137	1.2	834	8.0	.0
JAN.												
20...	.4	.8	80	687	.93	20.4	420	185	1.6	957	7.8	.0
MAR.												
04...	.4	.4	50	483	.66	60.0	310	134	1.1	748	7.9	.0
APR.												
06...	.3	.2	60	428	.58	261	290	102	1.0	690	8.0	9.0
MAY												
18...	.3	.2	40	265	.36	902	200	29	.6	438	8.2	14.0
JUNE												
14...	.3	.3	60	268	.36	796	200	15	.5	447	8.1	16.0
JULY												
11...	.4	.1	70	392	.53	133	270	55	1.0	635	8.3	18.5
AUG.												
09...	.3	.2	100	438	.60	35.5	270	90	1.3	692	8.1	17.5
SEP.												
07...	.5	.1	100	464	.63	15.0	290	101	1.2	726	8.0	15.0
28...	.4	.1	100	429	.58	11.6	270	111	1.2	708	8.3	10.5

SUSPENDED SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDIM- ENT (MG/L)	SUS- PENDED SEDIM- ENT DIS- CHARGE (T/DAY)
OCT.					
09...	1215	11.5	115	15	4.7
NOV.					
13...	1420	.0	34	12	1.1
DEC.					
05...	1410	.0	18	25	1.2
JAN.					
20...	1325	.0	11	98	2.9
MAR.					
04...	1625	.0	46	12	1.5
APR.					
06...	1640	9.0	226	190	116
MAY					
18...	1810	14.0	1260	184	626
JUNE					
14...	0830	16.0	1100	74	220
JULY					
11...	0845	18.5	126	27	9.2
AUG.					
09...	1050	17.5	30	46	3.7
SEP.					
07...	1230	15.0	12	46	1.5
28...	1230	10.5	10	40	1.1

GREEN RIVER BASIN

09224700 BLACKS FORK NEAR LITTLE AMERICA, WYO.

LOCATION.--Lat 41°32'46", long 109°41'34", in NEkNEkNEk sec.15, T.18 N., R.109 N., Sweetwater County, at gaging station, 200 ft upstream from bridge on U.S. Highway 30, 4.2 miles upstream from Meadow Springs Wash, and 8.5 miles east of Little America.

DRAINAGE AREA.--3,100 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: March 1951 to September 1972.

Water temperatures: March 1951 to September 1963, December 1964 to September 1972.

Sediment records: October 1967 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 09...	1540	120	4.1	10	130	75	300	4.5	252	0	970	84
NOV. 12...	1610	a126	11	10	110	53	250	4.7	346	24	600	93
DEC. 04...	1600	a123	11	20	120	48	180	3.8	301	0	550	77
JAN. 22...	1430	a81	12	290	110	44	210	4.6	324	0	500	59
FEB. 07...	1000	a97	11	40	100	36	100	3.6	325	0	290	53
MAR. 04...	1045	a450	10	30	71	26	190	4.2	239	1	360	69
APR. 04...	1815	402	8.0	10	93	39	110	4.8	282	0	310	74
MAY 18...	1110	1740	8.1	40	57	18	32	2.7	218	0	83	22
JUNE 17...	1000	1370	9.7	60	70	21	48	2.7	234	0	140	21
JULY 12...	1045	212	8.3	160	99	40	130	3.7	259	0	380	55
AUG. 09...	1130	86	6.3	40	130	55	190	4.4	219	0	710	59
SEP. 07...	1000	71	4.8	40	110	47	200	4.1	202	0	640	57

a Daily mean discharge.

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 09...	1540	120	10.2	8.6	--
NOV. 12...	1610	a126	12.4	8.7	--
DEC. 04...	1600	a123	11.2	8.6	--
JAN. 22...	1430	a81	10.0	8.6	--
FEB. 07...	1000	a97	8.5	8.4	1230
MAR. 04...	1045	a450	10.1	8.9	1280
APR. 04...	1815	402	9.7	8.5	1180
MAY 18...	0905	1740	8.3	8.5	582
JUNE 17...	1000	1370	8.1	8.4	690
JULY 12...	1045	212	7.9	8.6	1200
AUG. 09...	1130	86	7.9	8.8	1650
SEP. 07...	1000	71	9.1	8.4	1600

a Daily mean discharge.

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EXTREMES. 1971-72:

Specific conductance: Maximum daily, 2,290 micromhos Oct. 8; minimum daily, 441 micromhos May 16.

Water temperatures: Maximum, 24.0°C July 14; minimum, freezing point on several days during December to February.

Period of record:

Specific conductance: Maximum daily (1951-64), 1965-72), 6,010 micromhos Oct. 1, 1953; minimum daily, 411 micromhos May 13, 1969.

Water temperatures (1951-62, 1966-72): Maximum, 29.0°C July 15, 16, 1955; minimum, freezing point on many days during winter period.

DATE	DIS-SOLVED FLUO- RIDE (F)	DIS-SOLVED NITRITE PLUS NITRATE (N)	DIS-SOLVED BORON (B)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON-CAR- BONATE HARD- NESS (MG/L)	SODIUM AD-SORP- TION RATIO	SPECIFIC CONDUCTANCE (MICRO- MHOS)	PH (UNITS)	TEMPERATURE (DEG C)
	(MG/L)	(MG/L)	(UG/L)	(MG/L)								
OCT. 09...	.6	.01	460	1690	2.30	548	630	430	5.2	2440	8.3	15.5
NOV. 12...	.5	.13	710	1320	1.80	449	490	170	4.9	1850	8.5	.0
DEC. 04...	.5	.13	270	1140	1.55	379	500	250	3.5	1620	8.1	.0
JAN. 22...	.7	.35	230	1100	1.50	241	460	190	4.3	1580	8.1	.0
FEB. 07...	.4	.33	220	756	1.03	198	400	130	2.2	1150	7.8	.0
MAR. 04...	.3	.18	330	850	1.16	1030	280	87	4.9	1270	8.7	.0
APR. 04...	.5	.02	180	778	1.06	844	390	160	2.4	1180	8.3	8.5
MAY 18...	.3	.00	90	330	.45	1550	220	38	.9	538	8.1	15.0
JUNE 17...	.4	.08	130	428	.58	1580	260	69	1.3	686	7.6	16.5
JULY 12...	.6	.01	230	844	1.15	483	410	200	2.8	1250	7.7	19.0
AUG. 09...	.8	.00	340	1260	1.71	293	550	370	3.5	1750	8.0	21.0
SEP. 07...	.7	.02	320	1160	1.58	222	470	300	4.0	1630	8.3	12.0

[illegible]

GREEN RIVER BASIN

09224700 BLACKS FORK NEAR LITTLE AMERICA, WYO.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

[illegible]

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL	SUS. SED. FALL	SUS. SED. FALL	SUS. SED. FALL	SUS. SED. FALL	SUS. SED. FALL
						DIAM. % FINER THAN .004 MM	DIAM. % FINER THAN .016 MM	DIAM. % FINER THAN .062 MM	DIAM. % FINER THAN .125 MM	DIAM. % FINER THAN .250 MM	DIAM. % FINER THAN .500 MM
OCT. 09...	1540	15.5	120	20	6.5	--	--	--	--	--	--
NOV. 12...	1610	.0	a126	124	42	--	--	--	--	--	--
DEC. 04...	1600	.0	a123	127	42	--	--	--	--	--	--
JAN. 22...	1430	.0	a81	72	16	--	--	--	--	--	--
MAR. 04...	1045	.0	a450	450	547	--	--	78	97	100	--
APR. 04...	1815	8.5	402	325	353	--	--	--	--	--	--
MAY 18...	1110	15.0	1740	2460	11600	18	29	59	81	99	100
JUNE 17...	1000	16.5	1370	794	2940	--	--	--	--	--	--
JULY 12...	1045	19.0	212	118	68	--	--	--	--	--	--
AUG. 09...	1130	21.0	86	25	5.8	--	--	--	--	--	--
SEP. 07...	1000	12.0	71	46	8.8	--	--	--	--	--	--
28...	1420	11.0	36	45	4.4	--	--	--	--	--	--

a Daily mean discharge.

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.
				% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM
SEP. 28...	1420	11.0	36	1	1	2	5
		BED MAT. FALL DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
		% FINER THAN 1.00 MM	% FINER THAN 2.00 MM	% FINER THAN 4.00 MM	% FINER THAN 8.00 MM	% FINER THAN 16.0 MM	% FINER THAN 32.0 MM
SEP. 28...		7	8	11	21	43	89

GREEN RIVER BASIN

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09226000 HENRYS FORK NEAR LONETREE, WYO.

LOCATION.--Lat 41°00'23", long 110°16'13", in NE¼SE¼NW¼ sec.21, T.12 N., R.114 W., Uinta County, at gaging station, 0.6 mile downstream from Wasatch National Forest boundary, 1 mile downstream from West Fork, 1.5 miles downstream from Utah-Wyoming State line, and 7 miles southwest of Lonetree.

DRAINAGE AREA.--56 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: August 1969 to September 1972 (discontinued).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
JUNE 15...	1230	161	4.1	160	5.8	.3	1.1	.5	21	0	1.6	1.0
DATE	TIME	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
JUNE 15...		.1	30	25	.03	10.9	16	0	.1	40	7.2	7.5

FIELD DETERMINATION

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
JUNE 15...	1230	161	9.2	8.1	75

GREEN RIVER BASIN

09229500 HENRYS FORK NEAR MANILA, UTAH
(Formerly published as Henrys Fork at Linwood, Utah)

LOCATION.--Lat 41°00'45", long 109°40'20", in NW¼NW¼ sec.23, T.12 N., R.109 W., Sweetwater County, Wyoming, at gaging station, 0.8 mile north of Wyoming-Utah State line, 1.3 miles upstream from normal high-water line of Flaming Gorge Reservoir, and 3 miles northeast of Manila, Utah.

DRAINAGE AREA.--520 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1951 to September 1972.
Water temperatures: March 1951 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 08...	1215	36	22	10	150	79	58	9.3	278	0	570	17
NOV. 12...	1320	99	20	20	120	55	44	8.1	263	0	380	14
DEC. 04...	1200	a51	22	20	150	74	53	8.9	313	0	500	20
JAN. 19...	1330	a43	19	40	140	62	42	11	291	0	430	17
MAR. 03...	1100	243	15	40	82	29	35	7.9	210	0	230	12
APR. 04...	1045	55	17	10	120	53	42	7.0	284	0	350	17
MAY 17...	1435	102	15	40	76	30	23	5.9	196	0	190	10
JUNE 15...	1600	295	18	80	79	31	21	5.6	217	0	200	8.6
JULY 11...	1200	33	31	60	160	69	59	10	299	0	530	21
AUG. 02...	1130	2.8	23	60	190	100	81	12	296	0	800	29
SEP. 08...	1200	9.7	24	80	200	100	74	12	283	0	790	28

a Daily mean discharge.

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 08...	1215	36	9.7	8.7	--
NOV. 12...	1320	99	11.8	8.4	--
DEC. 04...	1200	a51	11.5	8.3	--
JAN. 19...	1330	a43	10.2	8.0	1140
FEB. 06...	1345	a46	10.6	8.1	1160
MAR. 03...	1100	243	10.6	8.3	770
APR. 04...	1045	55	10.1	8.4	1040
MAY 17...	1435	102	8.3	8.5	--
JUNE 15...	1600	295	8.5	8.3	730
JULY 11...	1200	33	8.8	8.9	1310
AUG. 02...	1130	2.8	9.3	8.7	--
SEP. 08...	1200	9.7	10.5	8.1	1710

a Daily mean discharge.

GREEN RIVER BASIN

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09229500 HENRYS FORK NEAR MANILA, UTAH.--Continued

EXTREMES.--1971-72:

Specific conductance: Maximum daily, 1,860 micromhos Aug. 17; minimum daily, 449 micromhos June 1.

Water temperatures: Maximum, 24.5°C June 30, July 3, 15, 16; minimum, freezing point on many days during October to February.

Period of record:

Specific conductance: Maximum daily, 3,750 micromhos Oct. 15, 1961; minimum daily, 385 micromhos June 16, 1968.

Water temperatures: Maximum, 29.0°C July 29, 1968; minimum, freezing point on many days during winter period.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 08...	.7	.03	240	1040	1.41	101	700	470	1.0	1430	8.0	10.5
NOV. 12...	.4	.15	170	772	1.05	206	530	310	.8	1100	8.0	.0
DEC. 04...	.5	.04	210	983	1.34	135	680	420	.9	1340	7.9	.0
JAN. 19...	.1	.11	170	865	1.18	100	600	370	.7	1210	7.8	.0
MAR. 03...	.3	.12	110	515	.70	338	320	150	.8	777	7.9	1.0
APR. 04...	.4	.00	160	746	1.01	111	520	280	.8	1060	8.2	7.0
MAY 17...	.3	.11	130	447	.61	123	310	150	.6	676	8.1	14.0
JUNE 15...	.4	.03	130	471	.64	375	320	150	.5	720	7.7	17.0
JULY 11...	.6	.02	230	1030	1.40	91.8	680	440	1.0	1390	8.1	16.5
AUG. 02...	.8	.08	360	1380	1.88	10.4	890	640	1.2	1800	7.8	18.5
SEP. 08...	.7	.13	300	1370	1.86	35.9	910	680	1.1	1750	8.1	14.5

SUSPENDED SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
SEP. 08...	1200	14.5	9.7	36	.94

GREEN RIVER BASIN

09229500 HENRYS FORK NEAR MANILA, UTAH.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

[illegible]

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

[illegible]

09234500 GREEN RIVER NEAR GREENDALE, UTAH
(Irrigation network station)

LOCATION.--Lat 40°54'30", long 109°25'20", in NW¼SE¼ sec.15, T.2 N., R.22 E., Daggett County, at gaging station, 0.5 mile downstream from Flaming Gorge Dam, 2 miles south of Dutch John, and 4 miles northeast of Greendale.

DRAINAGE AREA.--15,100 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1956 to September 1972.

Water temperatures: October 1956 to September 1959, October 1963 to September 1972.

Sediment records: October 1956 to September 1959.

EXTREMES.--1971-72:

Specific conductance: Maximum observed, 1,060 micromhos Nov. 9; minimum daily, 660 micromhos Jan. 3.

Water temperatures: Maximum, 9.0°C on many days during October and November; minimum, 4.5°C on many days during January to May.

Period of record (See REMARKS below):

Specific conductance (1956-58, 1959-62): Maximum daily, 1,340 micromhos Aug. 30, 1961; minimum daily, 325 micromhos June 2, 1961.

Specific conductance (1964-72): Maximum observed, 1,060 micromhos Nov. 9, 1971; minimum daily, 606 micromhos Nov. 14, 22, 1963, Feb. 10-19, 1964.

Water temperatures (1956-59): Maximum, 24.0°C Jan. 24, 25, 1959; minimum, freezing point on many days during winter period each year.

Water temperatures (1964-72): Maximum, 14.0°C Nov. 11, 1963; minimum, 2.0°C on several days in 1964.

REMARKS.--Storage in Flaming Gorge Reservoir began on Nov. 1, 1962. Extremes are given above for two separate periods--1956-62, and 1964-72. Extremes for the 1963 water year (October 1962 to September 1963) are not included.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 12...	1000	2290	6.1	67	25	64	2.5	184	0	220	18	.4
NOV. 09...	1030	4080	7.5	80	29	78	3.3	263	0	270	21	.3
DEC. 06...	1030	4230	--	58	24	59	2.9	184	0	210	16	--
JAN. 17...	1030	2800	--	63	23	53	4.2	185	0	190	29	--
FEB. 07...	1200	3110	--	83	24	51	3.0	184	0	200	18	--
MAR. 23...	1000	1050	--	65	24	55	5.6	198	0	200	20	--
APR. 24...	0930	3390	5.9	74	25	54	3.1	204	0	210	18	.4
MAY 23...	0800	4330	4.9	65	24	50	2.8	192	0	190	16	.3
JUNE 06...	0900	3720	4.8	64	23	48	2.7	193	0	190	13	.1
JULY 03...	0800	2340	4.6	67	24	52	2.9	193	0	190	16	.2
AUG. 02...	0700	4100	5.2	63	24	54	2.6	191	0	200	14	.3
SEP. 05...	0800	1020	4.8	66	24	52	2.6	194	0	210	14	.2

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 12...	.47	100	496	.67	3070	270	120	1.7	775	7.7	7.0
NOV. 09...	.62	110	621	.84	6840	320	100	1.9	1060	7.8	7.0
DEC. 06...	.27	--	462	.63	5280	240	93	1.6	752	7.9	6.0
JAN. 17...	.26	--	454	.62	3430	250	100	1.5	695	8.1	4.0
FEB. 07...	.29	--	471	.64	3960	310	160	1.3	703	8.2	3.0
MAR. 23...	.46	--	470	.64	1330	260	99	1.5	736	8.1	4.5
APR. 24...	.46	100	493	.67	4510	290	120	1.4	723	8.0	5.0
MAY 23...	.53	80	450	.61	5260	260	100	1.3	706	6.9	5.0
JUNE 06...	.46	90	443	.60	4930	250	96	1.3	708	7.4	5.0
JULY 03...	.50	80	454	.62	2870	270	110	1.4	716	8.2	5.5
AUG. 02...	.61	90	460	.63	5090	260	99	1.5	736	7.8	7.0
SEP. 05...	.63	90	472	.64	1300	260	100	1.4	736	8.1	7.0

GREEN RIVER BASIN

09234500 GREEN RIVER NEAR GREENDALE, UTAH--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

FIELD DETERMINATIONS

DATE	DIS- SOLVED OXYGEN (MG/L)
OCT.	
12...	7.7
NOV.	
09...	6.9
JAN.	
17...	9.8
MAR.	
23...	9.7
APR.	
24...	9.8
MAY	
23...	9.7
JUNE.	
05...	8.2
JULY	
03...	9.8
AUG.	
02...	7.8
SEP.	
05...	9.6

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	760	740	700	---	680	700	---	715	705	---	710	730
2	---	755	695	---	685	700	---	720	705	---	710	730
3	---	760	690	660	690	700	705	720	---	---	715	730
4	760	765	---	670	690	---	720	705	---	---	710	730
5	760	765	---	670	---	---	730	700	705	700	700	730
6	755	---	700	680	---	705	725	---	705	690	725	735
7	750	---	685	670	685	695	725	---	705	695	715	740
8	760	760	690	---	690	700	---	720	705	---	710	730
9	---	760	680	---	690	710	---	720	710	---	715	735
10	---	755	675	670	690	710	730	720	---	700	750	735
11	---	760	---	670	690	---	710	710	---	700	720	735
12	760	755	---	670	---	---	730	720	705	700	720	735
13	760	---	680	670	---	720	730	---	710	695	725	735
14	765	---	680	670	690	720	735	---	710	700	725	735
15	760	760	680	---	690	710	---	725	710	700	715	735
16	---	750	690	---	690	715	---	710	700	705	720	765
17	---	740	690	675	700	700	720	710	---	700	720	745
18	755	735	---	675	700	---	720	710	---	700	720	735
19	755	735	---	665	---	---	725	710	700	700	720	735
20	770	---	680	675	---	705	725	---	700	705	720	740
21	775	---	685	670	---	720	---	---	705	700	720	740
22	775	725	680	---	700	715	---	720	705	700	715	735
23	---	730	690	---	700	730	---	715	705	710	720	735
24	---	725	---	670	700	715	710	720	---	700	730	735
25	---	---	---	665	700	---	720	720	---	705	725	740
26	765	705	---	675	---	---	715	720	700	705	730	735
27	765	---	685	680	---	725	715	---	705	700	725	735
28	760	---	690	665	710	725	730	---	700	705	720	735
29	765	710	690	---	710	715	---	---	700	705	720	735
30	---	715	645	---	---	710	---	725	710	710	725	735
31	---	---	---	670	---	695	---	730	---	705	720	---
MONTH	---	---	---	---	---	---	---	---	---	701	720	736

GREEN RIVER BASIN

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09234500 GREEN RIVER NEAR GREENDALE, UTAH--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	8.0	8.5	---	4.5	4.5	---	5.0	5.5	---	6.5	8.0
2	---	8.0	8.5	---	4.5	4.5	---	4.5	5.5	---	6.5	8.0
3	---	8.0	8.5	5.5	4.5	4.5	5.0	5.0	---	---	6.5	8.0
4	8.0	8.0	---	5.5	4.5	---	5.0	5.0	---	---	6.5	8.0
5	8.0	8.0	---	5.5	---	---	5.0	5.0	6.0	6.5	8.0	8.0
6	8.0	---	8.0	5.5	---	4.5	4.5	---	6.0	6.5	8.0	8.0
7	8.0	---	8.0	5.5	4.5	4.5	4.5	---	6.0	6.5	7.5	8.0
8	8.0	8.0	8.0	---	4.5	4.5	---	5.0	6.0	---	7.5	8.0
9	---	8.0	8.0	---	4.5	4.5	---	5.0	6.0	---	8.0	8.0
10	---	9.0	8.0	5.0	4.5	4.5	4.5	5.0	---	6.5	8.0	0.0
11	---	9.0	---	5.0	4.5	---	4.5	5.0	---	6.5	8.0	8.0
12	8.0	9.0	---	5.0	---	---	4.5	5.0	6.0	6.5	8.0	8.0
13	8.0	---	7.5	5.0	---	4.5	4.5	---	6.0	6.5	8.0	8.0
14	8.0	---	7.0	5.0	4.5	4.5	5.0	---	6.0	6.5	8.0	8.0
15	8.0	9.0	7.0	---	4.5	4.5	---	5.0	6.0	6.5	8.0	8.0
16	---	9.0	7.0	---	4.5	4.5	---	5.0	6.0	6.5	8.0	8.0
17	---	9.0	7.0	5.0	4.5	4.5	5.0	5.0	---	6.5	8.0	0.0
18	8.0	9.0	---	5.0	4.5	---	4.5	5.0	---	6.5	8.0	8.0
19	8.0	9.0	---	5.0	---	---	4.5	5.0	6.0	6.5	8.0	8.0
20	8.0	---	6.5	4.5	---	4.5	4.5	---	6.0	6.5	8.0	8.0
21	8.0	---	6.5	4.5	---	4.5	---	---	6.0	6.5	8.0	8.0
22	8.0	8.5	6.5	---	4.5	4.5	---	5.0	6.0	6.5	8.0	8.0
23	---	8.5	6.5	---	4.5	4.5	---	5.5	6.0	6.5	8.0	8.0
24	---	8.5	---	4.5	4.5	4.5	4.5	5.5	---	6.5	8.0	8.0
25	---	---	---	4.5	4.5	---	4.5	5.5	---	6.5	8.0	8.0
26	9.0	8.5	---	4.5	---	---	4.5	5.5	6.0	6.5	8.0	8.0
27	8.0	---	6.0	4.5	---	4.5	4.5	---	6.5	6.5	8.0	8.0
28	8.0	---	6.0	4.5	4.5	5.0	4.5	---	6.5	6.5	8.0	8.0
29	8.0	8.5	6.0	---	4.5	5.0	---	---	6.5	6.5	8.0	8.0
30	---	8.5	6.0	---	---	5.0	---	5.5	6.5	6.5	8.0	8.0
31	---	---	---	4.5	---	5.0	---	5.5	---	6.5	8.0	---
MONTH	---	---	---	---	---	---	---	---	---	6.5	8.0	7.5

GREEN RIVER BASIN

09257000 LITTLE SNAKE RIVER NEAR DIXON, WYO.

LOCATION.--Lat 41°01'42", long 107°32'55", in SEkNWk sec.8, T.12 N., R.90 W., Carbon County, at highway bridge, 200 ft downstream from gaging station, 800 ft upstream from Willow Creek, and 0.8 mile west of Dixon.

DRAINAGE AREA.--988 sq mi.

PERIOD OF RECORD.--Sediment records: October 1971 to September 1972.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SEDIM- ENT (MG/L)	SUS- PEN- DED SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
OCT.											
07...	0845	9.0	68	7	1.3	--	--	--	--	--	--
NOV.											
23...	1200	1.5	116	14	4.4	--	--	--	--	--	--
DEC.											
21...	1530	.0	117	12	3.8	--	--	--	--	--	--
JAN.											
19...	1215	.0	104	7	2.0	--	--	--	--	--	--
FEB.											
09...	1745	.0	99	8	2.1	--	--	--	--	--	--
MAR.											
09...	1730	3.0	542	506	740	40	61	92	98	100	--
MAY											
18...	1530	12.5	1840	205	1020	--	--	73	83	97	100
JUNE											
14...	1300	--	1620	80	350	--	--	--	--	--	--
JULY											
19...	1230	--	3.9	8	.08	--	--	--	--	--	--
SEP.											
06...	1300	--	14	29	1.1	--	--	--	--	--	--
29...	1240	13.0	11	38	1.1	--	--	--	--	--	--

GREEN RIVER BASIN

09259700 LITTLE SNAKE RIVER NEAR BAGGS, WYO.

LOCATION.--Lat 41°00'17", long 107°54'59", in SW¼ sec.18, T.12 N., R.94 W., Carbon County, at former gaging station, 600 ft upstream from Wyoming-Colorado State line, 0.5 mile upstream from Scandinavian Wash, and 15 miles west of Baggs.

DRAINAGE AREA.--3,020 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: July 1965 to September 1972.

REMARKS.--Water discharge obtained from rating table for outside gage at sampling site defined by discharge measurements made at station 09257000, Little Snake River near Dixon, 9.2 miles upstream.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 07...	1015	75	13	20	51	9.2	41	2.2	207	0	72	13
JAN. 19...	0830	100	20	190	51	12	32	2.0	201	0	63	10
MAR. 10...	0830	500	9.6	220	43	14	46	2.8	154	0	120	10

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 07...	.4	.1	60	304	.41	61.6	160	0	1.4	483	8.3	9.5
JAN. 19...	.3	.2	50	290	.39	78.3	180	15	1.0	458	8.0	.0
MAR. 10...	.4	1.5	60	321	.44	433	170	44	1.6	516	7.8	1.0

FIELD DETERMINATIONS

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 07...	1015	75	8.7	8.4	480
JAN. 19...	0830	100	10.5	7.9	480
MAR. 10...	0830	500	10.4	8.0	470

PART 10. THE GREAT BASIN

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GREAT SALT LAKE BASIN

BEAR RIVER BASIN

10020100 BEAR RIVER ABOVE RESERVOIR, NEAR WOODRUFF, UTAH

LOCATION.--Lat 41°26'05", long 111°01'00", in NW¼NW¼ sec.29, T.17 N., R.120 W., Uinta County, Wyoming, at gaging station, 9.3 miles upstream from Woodruff Narrows Dam, and 10 miles southeast of Woodruff.

DRAINAGE AREA.--780 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 06...	1245	80	4.2	54	19	14	2.4	250	0	24	11	.2
NOV. 10...	0800	110	11	57	15	11	2.0	231	0	16	9.4	.2
DEC. 15...	1530	118	8.7	58	21	11	1.3	268	0	16	11	.2
JAN. 20...	1200	81	9.8	54	18	12	1.6	253	0	16	9.4	.2
FEB. 24...	1430	127	12	65	19	13	2.0	270	0	22	13	.2
MAR. 22...	1625	600	8.7	60	27	18	2.3	270	0	45	19	.3
JUNE 01...	1045	1380	5.7	27	6.8	4.8	1.2	110	0	9.9	4.0	.1
JULY 07...	1300	53	8.9	56	20	15	3.3	259	0	25	13	.3
AUG. 16...	1015	5.8	12	39	38	35	5.6	305	0	40	32	.3
SEP. 19...	1530	12	9.4	56	32	33	4.6	306	0	49	29	.3

DATE	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 06...	.1	60	252	.34	54.4	210	5	.4	443	8.2	10.0
NOV. 10...	.3	40	235	.32	69.8	200	11	.3	422	8.0	--
DEC. 15...	.5	20	260	.35	82.8	230	10	.3	464	8.0	.0
JAN. 20...	.9	40	247	.34	54.0	210	2	.4	428	7.9	.0
FEB. 24...	.2	50	279	.38	95.7	240	19	.4	493	7.7	.0
MAR. 22...	.2	60	314	.43	509	260	39	.5	550	7.8	7.5
JUNE 01...	.4	30	114	.16	425	95	5	.2	207	7.7	13.0
JULY 07...	.6	80	269	.37	38.5	220	8	.4	475	7.9	--
AUG. 16...	.3	90	352	.48	5.51	260	10	1.0	615	8.1	17.0
SEP. 19...	.2	110	364	.50	11.8	270	19	.9	646	8.1	13.5

10039500 BEAR RIVER AT BORDER, WYO.

LOCATION.--Lat 42°12'40", long 111°03'11", in NE¼NE¼ sec.15, T.14 S., R.46 E., Bear Lake County, Idaho, at gaging station, 0.2 mile west of Wyoming-Idaho State line, 0.5 mile west of Border, and 2.1 miles upstream from Thomas Fork.

DRAINAGE AREA.--2,490 sq. mi., approximately.

PERIOD OF RECORD.--Chemical analyses: October 1965 to September 1972.
Water temperatures: October 1965 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	BICAR- BONATE (HC03)	CAR- BONATE (C03)	DIS-	DIS-
			SOLVED SILICA (SI02) (MG/L)	SOLVED IRON (FE) (UG/L)	SOLVED CAL- CIUM (CA) (MG/L)	SOLVED MAG- NE- SIUM (MG) (MG/L)	SOLVED SODIUM (NA) (MG/L)	SOLVED PO- TAS- SIUM (K) (MG/L)			SOLVED SULFATE (SO4) (MG/L)	SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 01...	0800	314	5.4	50	66	21	20	1.6	250	0	58	21
NOV. 09...	0910	290	7.7	110	68	26	22	2.2	274	0	69	23
11...	1515	414	7.9	--	69	24	22	1.8	269	0	71	23
DEC. 02...	1130	260	6.3	0	68	28	24	1.6	268	0	67	27
JAN. 18...	0745	265	8.0	130	66	25	20	2.0	270	0	58	20
FEB. 25...	1450	316	--	--	63	21	16	2.2	249	0	50	17
MAR. 07...	1310	710	7.8	80	50	15	19	3.7	198	0	35	20
APR. 08...	1245	996	9.0	70	64	23	30	2.3	253	0	68	23
MAY 20...	0815	2250	7.4	20	57	18	13	2.3	231	0	38	11
31...	1830	1700	8.0	--	52	17	13	1.6	229	0	31	12
JUNE 13...	0820	3080	12	90	58	21	34	3.7	259	0	49	30
JULY 11...	1155	828	8.9	50	53	27	25	1.9	273	0	44	22
AUG. 09...	1740	283	8.6	70	60	28	25	1.9	265	0	59	25
SEP. 12...	1520	242	7.6	40	64	22	24	1.9	247	0	67	20

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

[illegible]

EXTREMES.--1971-72:

Period of record:

Specific conductance: Maximum daily, 883 micromhos July 21, 1966; minimum daily, 312 micromhos Apr. 3, 1969.
Water temperatures: Maximum, 23.0°C Aug. 7, 1970, Aug. 9, 1972; minimum, freezing point on many days during winter period.

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 01...	.2	.1	60	317	.43	269	250	45	.5	541	8.2	6.5
NOV. 09...	.2	.3	60	354	.48	277	280	55	.6	573	8.2	.0
11...	.1	--	50	352	.48	393	270	50	.6	594	8.2	.0
DEC. 02...	.3	.0	30	354	.48	249	280	60	.6	594	8.0	.0
JAN. 18...	.2	.7	50	333	.45	238	270	49	.5	581	7.9	.0
FEB. 25...	--	--	--	--	--	--	240	40	.4	505	7.9	.0
MAR. 07...	.2	2.2	30	250	.34	479	180	18	.6	443	7.7	.0
APR. 08...	.2	.7	70	344	.47	925	250	42	.8	588	8.2	7.5
MAY 20...	.2	.4	40	260	.35	1580	210	21	.4	448	8.2	10.0
31...	.2	--	60	248	.34	1140	200	12	.4	439	7.7	16.0
JUNE 13...	.3	.5	90	336	.46	2790	230	18	1.0	568	7.8	16.0
JULY 11...	.2	.3	70	316	.43	706	240	16	.7	557	8.2	17.0
AUG. 09...	.2	.2	70	338	.46	258	260	43	.7	568	8.1	21.5
SEP. 12...	.2	.1	50	328	.45	214	250	47	.7	560	8.2	15.0

[illegible]

PART 13. SNAKE RIVER BASIN

FLAT CREEK BASIN

13018300 CACHE CREEK NEAR JACKSON, WYO.
(Hydrologic bench-mark station)

LOCATION.--Lat 43°27'08", long 110°42'12", in SW¼SW¼SE¼ sec.1, T.40 N., R.116 W., Teton County, Teton National Forest, at gaging station, 0.7 mile upstream from Salt Lick Draw, 2.4 miles southeast of Jackson, and 4 miles upstream from mouth.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 04...	1615	11	5.1	20	46	14	2.5	.5	216	0	7.8	1.2
NOV. 08...	1530	7.2	5.2	--	45	14	2.0	.5	213	0	4.5	1.2
DEC. 01...	1300	6.2	5.8	60	50	16	2.6	.7	237	0	13	.8
JAN. 17...	1515	5.3	5.3	60	47	15	2.2	.7	228	0	5.3	.8
MAR. 08...	1100	4.3	5.6	10	48	15	2.6	.6	224	0	5.6	1.4
APR. 09...	0900	5.0	5.6	10	50	17	3.0	.8	229	0	8.1	1.9
MAY 15...	1620	36	5.7	50	54	13	2.9	1.4	220	0	7.0	.9
JUNE 12...	1300	109	4.3	30	45	12	1.5	.5	198	0	6.1	2.0
JULY. 10...	1555	38	6.3	40	43	13	1.6	.6	209	0	5.9	1.2
AUG. 07...	1500	19	.0	40	44	14	1.6	.6	202	0	5.7	1.0
SEP. 05...	1845	12	4.8	50	45	14	1.8	.5	205	0	6.7	1.3

DATE	TIME	DIS- CHARGE (CFS)	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- AZINON (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)
OCT. 04...	1615	11	.00	.0	.00	.00	.00	.00	.00	.00
SEP. 05...	1845	12	.00	.0	.00	.00	.00	.00	.00	.00

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)
APR. 09...	0900	5.0	6	0	0	2	3	30	--
JUNE 12...	1300	109	0	0	0	1	3	8	.0

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DRAINAGE AREA.--10 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: July 1965 to September 1972.
Sediment records: June 1968 to September 1972.

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 04...	.3	.10	10	184	.25	5.07	170	0	.1	329	8.2	4.5
NOV. 08...	.1	.24	10	178	.24	3.48	170	0	.1	324	8.2	1.0
DEC. 01...	.3	.11	10	206	.28	3.79	190	0	.1	367	8.0	.0
JAN. 17...	.0	.05	20	189	.26	2.60	180	0	.1	321	8.1	1.0
MAR. 08...	.0	.03	0	189	.26	2.14	180	0	.1	329	8.2	1.0
APR. 09...	.1	.07	20	200	.27	2.86	190	7	.1	363	8.1	1.5
MAY 15...	.5	.07	20	194	.26	18.5	190	8	.1	345	8.1	6.0
JUNE 12...	.0	.00	10	169	.23	49.7	160	0	.1	298	7.8	6.0
JULY 10...	.0	.06	20	175	.24	17.5	160	0	.1	300	8.3	10.0
AUG. 07...	.0	.00	20	166	.23	8.52	170	2	.1	308	8.2	10.0
SEP. 05	.1	.01	10	175	.24	5.67	170	2	.1	314	8.1	7.0

[illegible][illegible]

FLAT CREEK BASIN

13018300 CACHE CREEK NEAR JACKSON, WYO.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.						
04...	1615	11	1.4	.030	--	--
NOV.						
08...	1530	7.2	2.5	.050	--	--
DEC.						
01...	1300	6.2	2.2	--	--	--
JAN.						
17...	1515	5.3	2.2	.020	--	--
MAR.						
08...	1100	4.3	1.0	--	.010	--
APR.						
09...	0900	5.0	1.0	--	.020	--
MAY						
15...	1620	36	.9	--	.020	--
JUNE						
12...	1300	109	.8	--	.010	--
JULY						
10...	1555	38	.9	--	.020	--
AUG.						
07...	1500	19	1.0	--	.010	--
SEP.						
05...	1845	12	1.0	--	.030	2.5

FIELD DETERMINATIONS

DATE	TIME	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
OCT.					
04...	1615	12.1	8.4	325	9
NOV.					
08...	1430	11.5	8.4	315	44
DEC.					
01...	1300	11.8	8.4	340	1
JAN.					
17...	1515	10.7	8.6	289	190
MAR.					
08...	1100	10.9	8.5	353	0
APR.					
09...	0900	10.4	8.6	362	4
MAY					
15...	1620	9.7	8.5	300	14
JUNE					
12...	1300	10.4	8.4	310	2
JULY					
10...	1555	10.0	8.6	316	11
AUG.					
07...	1500	11.5	8.6	--	3
SEP.					
05...	1845	9.6	8.9	311	8

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM
OCT.										
04...	1615	4.5	11	4	.12	--	--	--	--	--
NOV.										
08...	1430	1.0	7.2	4	.08	--	--	--	--	--
DEC.										
01...	1300	.0	6.2	18	.30	--	--	--	--	--
JAN.										
17...	1515	1.0	5.3	42	.60	--	--	--	--	--
MAR.										
08...	1100	1.0	4.3	12	.14	--	--	--	--	--
APR.										
09...	0900	1.5	5.0	4	.05	--	--	--	--	--
MAY										
15...	1620	6.0	36	132	13	28	39	78	89	100
JUNE										
12...	1300	6.0	109	134	39	--	--	--	--	--
JULY										
10...	1555	10.0	38	40	4.1	--	--	--	--	--
AUG.										
07...	1500	10.0	19	12	.62	--	--	--	--	--
SEP.										
05...	1845	7.0	12	16	.52	--	--	--	--	--

a Daily mean discharge.

SNAKE RIVER MAIN STEM

225

13022500 SNAKE RIVER ABOVE RESERVOIR, NEAR ALPINE, WYO.

LOCATION.--Lat 43°11'47", long 110°53'18", Lincoln County, sampling at bridge at Astoria Springs, Teton County,
3 miles downstream from Hoback River, 13 miles upstream from gaging station, and 15 miles northeast of Alpine.

DRAINAGE AREA.--3,465 sq mi (at gaging station).

PERIOD OF RECORD.--Chemical analyses: October 1965 to September 1972.

Water temperatures: October 1965 to September 1966.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 01...	1450	3330	13	20	47	10	6.0	1.6	138	0	56	3.8
NOV. 08...	1700	2150	13	0	54	10	7.2	1.6	143	0	65	4.2
DEC. 01...	1715	1980	11	0	54	12	6.6	1.6	146	0	64	4.2
JAN. 17...	1510	1700	12	70	54	11	7.2	1.8	149	0	67	3.5
MAR. 07...	1805	2520	13	90	47	11	8.7	1.9	134	0	58	5.7
APR. 08...	1610	4100	13	50	44	8.9	8.0	1.4	133	0	41	5.2
MAY 20...	1135	17100	10	50	33	6.6	6.7	1.4	118	0	25	2.6
JUNE 12...	1645	20900	8.6	110	36	3.8	2.2	1.4	113	0	16	1.7
JULY 11...	0850	10500	10	40	33	8.0	4.1	1.4	116	0	29	1.7
AUG. 08...	0955	6200	12	20	36	7.9	6.0	1.6	117	0	35	2.7
SEP. 06...	1100	5880	12	40	36	6.3	7.0	1.6	109	0	38	4.0

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 01...	.4	.1	40	206	.28	1850	160	47	.2	337	8.1	5.5
NOV. 08...	.5	.2	30	227	.31	1320	180	63	.2	371	8.2	3.0
DEC. 01...	.5	.0	20	226	.31	1210	180	60	.2	374	8.0	.5
JAN. 17...	.5	.2	40	231	.31	1060	180	58	.2	372	8.1	.0
MAR. 07...	.6	.5	50	213	.29	1450	160	50	.3	344	7.8	2.5
APR. 08...	.5	.2	50	187	.25	2070	150	41	.3	313	8.2	6.5
MAY 20...	.4	.4	50	144	.20	6650	110	13	.3	246	8.0	6.0
JUNE 12...	.2	.3	30	126	.17	7110	100	7	.1	217	8.0	11.0
JULY 11...	.3	.3	20	145	.20	4110	120	25	.2	250	8.0	11.5
AUG. 08...	.5	.2	30	159	.22	2660	120	24	.2	270	8.2	14.0
SEP. 06...	.5	.1	40	159	.22	2520	120	31	.3	266	8.0	12.0

SALT RIVER BASIN

13027500 SALT RIVER ABOVE RESERVOIR, NEAR ETNA, WYO.

LOCATION.--Lat 43°04'47", long 111°02'12", in SW¼NE¼ sec.28, T.36 N., R.119 W., Lincoln County, temperature recorder at gaging station, 3.4 miles northwest of Etna, and at mile 8.0.

DRAINAGE AREA.--829 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1965 to September 1972.

Water temperatures: October 1965 to September 1966, October 1971 to September 1972.

EXTREMES.--1971-72:

Water temperatures: Maximum, 17.5°C July 12, 29; minimum, freezing point on many days during winter period.

REMARKS.--No thermograph record Nov. 9 to Dec. 1, Dec. 8 to Feb. 22, Mar. 10-29, Mar. 31 to Apr. 7, June 20 to July 4 due to clock stoppages.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2)	DIS- SOLVED IRON (FE)	DIS- SOLVED CAL- CIUM (CA)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA)	DIS- SOLVED PO- TAS- SIUM (K)	BICAR- BONATE (HCO3)	CAR- BONATE (CO3)	DIS- SOLVED SULFATE (SO4)	DIS- SOLVED CHLO- RIDE (CL)	
			(MG/L)	(UG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
DCT.													
OCT.	01...	1040	974	8.8	30	64	17	11	1.1	236	0	35	14
NOV.	08...	1740	804	7.9	10	65	14	12	1.1	222	0	37	12
DEC.	02...	0755	715	6.7	0	64	18	13	.9	238	0	38	17
JAN.	17...	1600	468	9.6	190	65	17	10	1.1	238	0	36	11
MAR.	07...	1700	598	7.9	80	63	19	10	.9	244	0	27	12
APR.	08...	1500	1470	8.9	40	62	16	16	1.2	229	0	26	20
MAY	20...	1045	3560	7.2	10	56	11	10	1.2	211	0	19	9.5
JUNE	12...	1745	2830	6.7	190	57	12	7.9	1.4	214	0	21	8.3
JULY	11...	0945	1200	8.1	60	60	19	9.0	1.2	255	0	26	8.7
AUG.	08...	0900	804	8.1	30	67	17	9.0	.9	259	0	25	7.0
SEP.	06...	1015	897	8.1	50	62	18	12	1.4	245	0	33	12
DATE		DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TJFNTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT.	01...	.1	3.8	40	271	.37	713	230	36	.3	459	8.1	6.0
NOV.	08...	.2	3.5	30	262	.36	569	220	38	.4	454	8.0	5.0
DEC.	02...	.2	3.4	20	278	.38	537	240	45	.4	496	7.9	1.0
JAN.	17...	.2	4.3	30	271	.37	342	230	35	.3	459	8.2	1.5
MAR.	07...	.0	8.4	10	268	.36	433	240	40	.3	465	7.9	6.5
APR.	08...	.2	4.4	30	267	.36	1060	220	32	.5	474	8.2	8.0
MAY	20...	.1	1.3	30	218	.30	2100	180	7	.3	389	8.2	8.0
JUNE	12...	.2	1.2	20	221	.30	1690	190	14	.2	394	8.2	17.0
JULY	11...	.1	4.5	20	262	.36	849	230	21	.3	452	8.1	12.0
AUG.	08...	.2	8.2	20	269	.37	584	240	28	.3	467	8.0	10.0
SEP.	06...	.2	3.4	20	270	.37	654	230	29	.3	469	8.1	9.5

SALT RIVER BASIN

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13027500 SALT RIVER ABOVE RESERVOIR, NEAR ETNA, WYO.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS THERMOGRAPH)

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.5	6.0	4.5	4.5	---	---	---	---	---	---	6.0	4.0
2	8.0	6.5	5.0	4.5	1.0	1.0	---	---	---	---	4.5	2.5
3	9.0	7.0	5.0	4.5	1.5	1.0	---	---	---	---	5.5	3.5
4	9.0	7.0	5.0	4.5	2.0	1.0	---	---	---	---	5.0	3.5
5	10.0	7.0	5.5	4.5	1.0	0.0	---	---	---	---	6.5	4.0
6	10.5	8.0	5.0	4.5	2.0	0.5	---	---	---	---	6.5	4.5
7	10.5	8.0	4.5	4.5	1.0	0.5	---	---	---	---	6.5	3.5
8	10.0	8.0	5.0	4.5	---	---	---	---	---	---	7.0	3.5
9	10.0	7.5	---	---	---	---	---	---	---	---	---	3.5
10	10.0	7.5	---	---	---	---	---	---	---	---	---	---
11	10.0	8.0	---	---	---	---	---	---	---	---	---	---
12	9.5	7.5	---	---	---	---	---	---	---	---	---	---
13	9.0	7.0	---	---	---	---	---	---	---	---	---	---
14	8.5	7.5	---	---	---	---	---	---	---	---	---	---
15	7.5	6.5	---	---	---	---	---	---	---	---	---	---
16	7.0	7.0	---	---	---	---	---	---	---	---	---	---
17	7.0	6.5	---	---	---	---	---	---	---	---	---	---
18	7.0	5.5	---	---	---	---	---	---	---	---	---	---
19	7.5	5.5	---	---	---	---	---	---	---	---	---	---
20	7.5	6.5	---	---	---	---	---	---	---	---	---	---
21	8.0	7.0	---	---	---	---	---	---	---	---	---	---
22	8.0	6.0	---	---	---	---	---	---	---	---	---	---
23	8.0	6.0	---	---	---	---	---	---	5.0	4.0	---	---
24	7.5	6.5	---	---	---	---	---	---	4.5	3.5	---	---
25	7.5	6.5	---	---	---	---	---	---	6.0	3.0	---	---
26	6.5	6.0	---	---	---	---	---	---	4.0	2.0	---	---
27	6.0	5.5	---	---	---	---	---	---	5.0	3.0	---	---
28	5.5	5.0	---	---	---	---	---	---	6.0	5.0	---	---
29	5.0	4.5	---	---	---	---	---	---	6.5	5.0	---	---
30	4.5	4.5	---	---	---	---	---	---	---	---	6.5	---
31	4.5	4.5	---	---	---	---	---	---	---	---	8.0	4.0
MONTH	10.5	4.5	---	---	---	---	---	---	---	---	---	---

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	5.0	8.5	4.5	15.5	11.5	---	---	15.0	12.0	12.5	10.0
2	---	---	9.5	5.5	13.5	11.0	---	---	16.0	12.0	13.5	9.0
3	---	---	10.5	6.5	12.5	10.0	---	---	16.0	10.5	13.5	9.5
4	---	---	9.5	6.5	15.5	10.5	---	---	14.0	10.5	13.5	9.5
5	---	---	11.0	6.5	14.5	12.0	16.5	---	15.0	9.5	12.5	10.0
6	---	---	9.5	7.0	15.5	11.5	16.5	12.5	15.5	10.0	12.0	9.5
7	---	---	9.0	7.0	15.0	12.0	16.5	11.5	15.0	10.0	13.0	9.0
8	8.5	---	8.0	6.5	14.0	11.0	16.5	12.0	15.0	10.0	12.5	9.0
9	9.0	6.0	9.0	5.0	14.5	11.5	16.0	11.5	15.5	10.0	11.5	9.5
10	7.5	6.5	9.5	6.5	16.5	12.0	16.5	12.0	15.5	10.5	11.0	9.0
11	7.0	5.0	9.5	6.5	17.5	12.5	17.0	12.0	15.0	10.5	12.0	8.5
12	6.5	4.0	10.5	6.5	17.0	12.0	17.5	12.0	15.5	11.0	11.5	8.5
13	6.0	5.0	12.0	7.0	16.5	11.5	17.0	12.5	15.0	11.0	11.5	7.5
14	8.5	4.0	12.5	7.5	16.5	11.5	16.5	12.5	13.5	10.5	11.5	7.5
15	10.0	6.5	13.5	8.5	15.0	12.0	17.0	12.0	13.0	10.0	11.5	7.5
16	9.5	7.0	14.0	8.5	16.5	12.0	17.0	12.0	13.5	9.5	11.5	7.5
17	9.0	7.0	12.0	8.5	16.0	13.0	16.5	12.0	14.0	9.5	11.0	7.5
18	7.5	6.0	13.5	8.5	15.0	10.5	16.5	11.5	13.5	10.0	10.0	7.5
19	7.0	5.5	11.0	7.5	15.5	11.0	15.0	12.0	11.5	10.0	10.0	8.5
20	9.5	5.5	10.5	8.0	---	---	14.0	12.0	12.5	9.0	9.5	7.0
21	8.5	6.5	11.5	8.0	---	---	13.5	11.0	12.5	9.0	10.0	6.5
22	9.5	5.5	10.0	8.0	---	---	15.5	10.0	13.0	9.0	9.5	7.0
23	10.5	6.0	11.5	7.5	---	---	16.5	11.0	12.5	9.5	8.5	6.5
24	10.0	7.0	11.5	8.5	---	---	16.0	11.5	12.5	9.0	8.5	5.5
25	8.5	7.0	13.0	8.0	---	---	16.0	12.5	13.5	9.0	8.0	5.5
26	9.5	6.0	14.0	8.5	---	---	14.0	11.0	14.5	10.0	6.5	5.0
27	10.5	6.0	14.5	9.5	---	---	16.0	11.0	14.5	9.5	6.5	6.0
28	11.0	6.5	15.0	10.0	---	---	17.0	11.5	14.5	9.5	6.0	4.5
29	10.0	7.0	15.5	10.0	---	---	17.5	12.0	13.5	11.0	8.0	4.5
30	7.5	5.5	16.0	11.0	---	---	15.5	12.5	14.0	10.0	8.0	4.5
31	---	---	16.0	11.0	---	---	15.5	12.0	13.0	10.0	---	---
MONTH	---	---	16.0	4.5	---	---	17.5	10.0	16.0	9.0	13.5	4.5

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES IN WYOMING, EXCLUDING GRAND TETON NATIONAL PARK 229

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED (SUM OF TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON-CAR- BONATE HARD- NESS (MG/L)	SODIUM AD-SORP- TION RATIO (MG/L)	SPE-CIFIC CON-DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
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PLATTE RIVER BASIN--Continued

06673000 ARNOLD DRAIN NEAR TORRINGTON, WYO.
(LAT 42 02 20 LONG 104 07 47)

MAY 23...	0.5	0.7	80	416	0.57	2.28	210	74	1.3	617	7.4	27.0
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DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO- PHOS- PHATE (PO4) (MG/L)	DIS-SOLVED (SUM OF BORON TUENTS) (B) (UG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON-CAR- CONATE HARD- NESS (MG/L)	SODIUM AD-SORP- TION RATIO (MG/L)	SPE-CIFIC CON-DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
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BEAR RIVER BASIN--Continued

10020300 BEAR RIVER BELOW RESERVOIR, NEAR WOODRUFF, UTAH
(LAT 41 30 20 LONG 111 00 50)

NOV. 09...	0.2	0.5	0.09	60	231	0.31	18.7	190	2	0.5	419	8.3
MAY 30...	.2	.12	.03	60	165	.22	566	140	7	.3	305	7.6

10026500 BEAR RIVER NEAR RANDOLPH, UTAH
(LAT 41 48 02 LONG 111 04 20)

NOV. 10...	0.1	0.19	0.15	70	332	0.45	100	250	0	0.7	624	7.9
MAY 31...	.3	.03	.03	100	273	.37	610	210	7	.7	490	7.7
AUG. 11...	.3	.00	.00	80	375	.51	77.0	270	7	.8	658	8.1

10041000 THOMAS FORK NEAR WYOMING-IDAHO STATE LINE
(LAT 42 24 10 LONG 111 01 30)

NOV. 11...	0.1	0.08	0.18	40	694	0.94	58.1	250	47	4.4	1250	8.0
MAY 31...	.2	.02	.09	50	316	.43	257	220	12	1.1	564	7.9

230 ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES IN WYOMING, EXCLUDING GRAND TETON NATIONAL PARK

INSTANTANEOUS SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

YELLOWSTONE RIVER BASIN

06206550 SUNLIGHT CREEK NEAR CLARK, WYO
(LAT 44 45 48 LONG 109 25 58)

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM
MAY 01...	1415	4.0	76	11	2.3	--	--	--	--	--	--	--
JUNE 08...	1355	7.0	1070	550	1590	11	26	56	70	87	97	100
AUG. 09...	0940	8.5	185	4	2.0	--	--	--	--	--	--	--

06206650 PAT OHARA CREEK NEAR CLARK, WYO.
(LAT 44 43 54 LONG 109 13 01)

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)
MAY 01...	1225	6.5	13	434	15
AUG. 01...	1720	17.5	2.4	716	4.6

GREEN RIVER BASIN

09214500 LITTLE SANDY CREEK ABOVE EDEN, WYO.
(LAT 42 14 12 LONG 109 18 44)

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)
MAY 04...	1350	12.0	27	50	3.6

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

CHEYENNE RIVER BASIN

06426500 BELLE FOURCHE RIVER BELOW MOORCROFT, WYO.
(LAT 44 17 45 LONG 104 58 35)

DATE	TIME	DIS- CHARGE (CFS)	NUMBER OF SAM- PLING POINTS	BED MAT. FALL DIAM. % FINER THAN .004 MM	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM
SEP. 22...	1130	.10	3	1	3	4	10

DATE	BED MAT. FALL DIAM. % FINER THAN .500 MM	BED MAT. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. FALL DIAM. % FINER THAN 2.00 MM	BED MAT. FALL DIAM. % FINER THAN 4.00 MM	BED MAT. FALL DIAM. % FINER THAN 8.00 MM	BED MAT. FALL DIAM. % FINER THAN 16.0 MM	BED MAT. FALL DIAM. % FINER THAN 32.0 MM
SEP. 22...	23	32	40	59	86	99	100

GREEN RIVER BASIN

09218500 BLACKS FORK NEAR MILLBURNE, WYO.
(LAT 41 01 54 LONG 110 34 43)

DATE	TIME	DIS- CHARGE (CFS)	NUMBER OF SAM- PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP. 28...	0950	85	10	1	4	22

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES IN GRAND TETON NATIONAL PARK, WYOMING

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (MG/L)	DIS- SOLVED IRON (UG/L)	DIS- SOLVED CAL- CIUM (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG/L)	DIS- SOLVED SODIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (MG/L)	BICAR- BONATE (MG/L)	CAR- BONATE (MG/L)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED CHLO- RIDE (MG/L)
SNAKE RIVER BASIN												
13010200	SNAKE RIVER ABOVE JACKSON LAKE NEAR FLAGG RANCH, WYO. (LAT 44 05 21 LONG 110 41 38)											
AUG. 31...	1414	2000	33	20	14	2.6	20	3.4	70	0	21	12
PILGRIM CREEK BASIN												
13010440	PILGRIM CREEK AT ABANDONED FORD NEAR MORAN, GRAND TETON NATIONAL PARK (LAT 43 55 08 LONG 110 33 53)											
JULY 26...	1420	48	8.0	20	25	4.6	3.9	0.7	107	0	5.8	1.0
SEP. 21...	1500	14	7.8	20	28	4.8	4.8	.6	123	0	6.2	.6
SNAKE RIVER BASIN												
13011100	SPRING CREEK BELOW JACKSON LAKE DAM, NEAR MORAN, GRAND TETON NATIONAL PARK (LAT 43 51 32 LONG 110 35 00)											
JULY 24...	1050	27	15	110	27	4.8	5.6	1.2	111	0	6.7	1.0
PACIFIC CREEK BASIN												
13011445	TWO OCEAN LAKE NEAR MORAN, GRAND TETON NATIONAL PARK (LAT 43 54 11 LONG 110 30 04)											
SEP. 01...	1030	--	3.0	20	21	3.7	5.4	2.2	81	7	4.7	0.8
13011480	EMMA MATILDA LAKE NEAR MORAN, GRAND TETON NATIONAL PARK (LAT 43 52 38 LONG 110 30 27)											
SEP. 01...	1500	--	0.3	20	20	5.0	8.9	1.1	98	0	4.9	1.2
BUFFALO FORK BASIN												
13011980	LAVA CREEK NEAR MORAN, GRAND TETON NATIONAL PARK (LAT 43 50 31 LONG 110 27 23)											
JULY 24...	1410	38	6.1	20	26	3.6	4.4	0.6	105	0	6.4	1.0
COTTONWOOD CREEK BASIN												
13012780	LEIGH LAKE OUTLET NEAR JENNY LAKE LODGE, GRAND TETON NATIONAL PARK (LAT 43 47 54 LONG 110 43 40)											
SEP. 07...	1130	45	2.2	20	2.8	0.4	0.6	0.7	12	0	5.1	0.0
13012790	CASCADE CREEK NEAR JENNY LAKE LODGE, GRAND TETON NATIONAL PARK (LAT 43 45 54 LONG 110 44 39)											
SEP. 07...	1530	49	2.1	20	3.9	0.8	0.4	0.6	17	0	3.6	0.9
13012800	COTTONWOOD CREEK AT OUTLET OF JENNY LAKE, NEAR MOOSE, GRAND TETON NATIONAL PARK (LAT 43 45 03 LONG 110 43 29)											
SEP. 27...	1200	71	2.0	10	3.2	0.6	0.5	0.5	13	0	5.1	0.6
13012900	TAGGART CREEK NEAR MOOSE, GRAND TETON NATIONAL PARK (LAT 43 41 37 LONG 110 43 54)											
SEP. 22...	1210	11	1.8	20	4.0	0.9	0.4	0.5	19	0	4.1	1.8
SNAKE RIVER BASIN												
13013100	BLACKTAIL PONDS AT OUTLET, NEAR MOOSE, GRAND TETON NATIONAL PARK (LAT 43 40 05 LONG 110 41 54)											
JULY 25...	1610	12	17	10	57	14	6.2	1.8	211	0	40	1.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON-CAR- BONATE HARD- NESS (MG/L)	SODIUM AD-SORP- TION RATIO	SPE-CIFIC CON-DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
SNAKE RIVER BASIN--Continued												
13010200 SNAKE RIVER ABOVE JACKSON LAKE NEAR FLAGG RANCH, WYO. (LAT 44 05 21 LONG 110 41 38)												
AUG. 31...	1.9	0.01	160	143	0.19	772	46	0	1.3	197	7.8	16.0
PILGRIM CREEK BASIN--Continued												
13010440 PILGRIM CREEK AT ABANDONED FORD NEAR MORAN, GRAND TETON NATIONAL PARK (LAT 43 55 08 LONG 110 33 53)												
JULY 26...	0.0	0.00	0	102	0.14	13.3	81	0	0.2	170	8.2	13.5
SEP. 21...	.1	.00	10	113	.15	4.30	90	0	.2	190	8.5	11.0
SNAKE RIVER BASIN--Continued												
13011100 SPRING CREEK BELOW JACKSON LAKE DAM, NEAR MORAN, GRAND TETON NATIONAL PARK (LAT 43 51 32 LONG 110 35 00)												
JULY 24...	0.2	0.00	10	116	0.16	8.33	87	0	0.3	185	7.1	12.0
PACIFIC CREEK BASIN--Continued												
13011445 TWO OCEAN LAKE NEAR MORAN, GRAND TETON NATIONAL PARK (LAT 43 54 11 LONG 110 30 04)												
SEP. 01...	0.1	0.02	20	88	0.12	--	68	0	0.3	140	8.6	18.0
13011480 EMMA MATILDA LAKE NEAR MORAN, GRAND TETON NATIONAL PARK (LAT 43 52 38 LONG 110 30 27)												
SEP. 01...	0.1	0.00	40	90	0.12	--	70	0	0.5	160	8.7	19.0
BUFFALO FORK BASIN--Continued												
13011980 LAVA CREEK NEAR MORAN, GRAND TETON NATIONAL PARK (LAT 43 50 31 LONG 110 27 23)												
JULY 24...	0.0	0.00	40	100	0.14	10.3	80	0	0.2	175	7.7	14.0
COTTONWOOD CREEK BASIN--Continued												
13012780 LEIGH LAKE OUTLET NEAR JENNY LAKE LODGE, GRAND TETON NATIONAL PARK (LAT 43 47 54 LONG 110 43 40)												
SEP. 07...	0.1	0.01	0	18	0.02	.11	9	0	0.1	15	7.1	15.5
13012790 CASCADE CREEK NEAR JENNY LAKE LODGE, GRAND TETON NATIONAL PARK (LAT 43 45 54 LONG 110 44 39)												
SEP. 07...	0.1	0.09	10	21	0.03	1.40	13	0	0.0	30	6.9	8.0
13012800 COTTONWOOD CREEK AT OUTLET OF JENNY LAKE, NEAR MOOSE, GRAND TETON NATIONAL PARK (LAT 43 45 03 LONG 110 43 29)												
SEP. 27...	0.1	0.02	0	19	0.03	3.66	10	0	0.1	30	7.3	11.0
13012900 TAGGART CREEK NEAR MOOSE, GRAND TETON NATIONAL PARK (LAT 43 41 37 LONG 110 43 54)												
SEP. 22...	0.1	0.02	30	23	0.03	0.71	14	0	0.0	30	7.3	10.5
SNAKE RIVER BASIN--Continued												
13013100 BLACKTAIL PONDS AT OUTLET, NEAR MOOSE, GRAND TETON NATIONAL PARK (LAT 43 40 05 LONG 110 41 54)												
JULY 25...	0.4	0.33	40	243	0.33	7.74	200	27	0.2	415	8.0	11.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES IN GRAND TETON NATIONAL PARK, WYOMING

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
DITCH CREEK BASIN												
13013550	ANTELOPE SPRING NEAR KELLY, NEAR GRAND TETON NATIONAL PARK (LAT 43 42 13 LONG 110 36 26)											
JULY 25...	1315	.32	42	10	60	13	2.3	3.5	241	0	5.8	1.0
13013600	DITCH CREEK NEAR MOOSE, GRAND TETON NATIONAL PARK (LAT 43 39 52 LONG 110 41 44)											
SEP. 26...	1215	4.3	15	20	46	19	6.8	2.5	183	0	77	2.4
SNAKE RIVER BASIN												
13013650	SNAKE RIVER AT MOOSE, GRAND TETON NATIONAL PARK (LAT 43 39 15 LONG 110 42 52)											
OCT. 14...	1130	1570	16	20	21	4.5	8.5	1.9	90	0	9.5	3.8
13013800	STEWART DRAW NEAR MOOSE, GRAND TETON NATIONAL PARK (LAT 43 38 26 LONG 110 45 58)											
JULY 27...	1125	8.5	4.5	20	3.1	0.9	0.6	0.6	16	0	2.5	0.0
GROS VENTRE RIVER BASIN												
13014400	GROS VENTRE RIVER AT LOWER SLIDE LAKE, NEAR KELLY, NEAR GRAND TETON NATIONAL PARK (LAT 43 37 44 LONG 110 32 40)											
OCT. 13...	1315	266	5.8	10	51	13	7.4	1.0	160	0	71	1.2

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES IN GRAND TETON NATIONAL PARK, WYOMING

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CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
DITCH CREEK BASIN--Continued												
13013550	ANTELOPE SPRING NEAR KELLY, NEAR GRAND TETON NATIONAL PARK (LAT 43 42 13 LONG 110 36 26)											
JULY 25...	0.4	0.04	0	247	0.34	0.21	200	6	0.1	380	7.3	4.5
13013600	DITCH CREEK NEAR MOOSE, GRAND TETON NATIONAL PARK (LAT 43 39 52 LONG 110 41 44)											
SEP. 26...	0.7	0.01	40	260	0.35	3.03	190	43	0.2	430	8.2	6.0
SNAKE RIVER BASIN--Continued												
13013650	SNAKE RIVER AT MOOSE, GRAND TETON NATIONAL PARK (LAT 43 39 15 LONG 110 42 52)											
OCT. 14...	0.4	0.00	60	110	0.15	484	71	0	0.4	180	7.7	8.0
13013800	STEWART DRAW NEAR MOOSE, GRAND TETON NATIONAL PARK (LAT 43 38 26 LONG 110 45 58)											
JULY 27...	0.0	0.03	10	20	0.03	0.46	11	0	0.1	25	6.5	8.0
GROS VENTRE RIVER BASIN--Continued												
13014400	GROS VENTRE RIVER AT LOWER SLIDE LAKE, NEAR KELLY, NEAR GRAND TETON NATIONAL PARK (LAT 43 37 44 LONG 110 32 40)											
OCT. 13...	0.1	0.01	20	229	.31	161	180	50	0.2	383	8.0	7.0

ANALYSES OF SAMPLES OF GROUND WATER IN WYOMING
CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

WELL NUMBER	GEOLOGIC SOURCE 1/	WELL DEPTH (FT)	DATE OF COLLEC- TION	WATER TEMPER- ATURE (°C)	SILICA (SIO ₂) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	SODIUM (NA) (MG/L)	PO- TAS- SIUM (K) (MG/L)
MISSOURI RIVER BASIN Campbell County										
45-71-14da	(a)	4750	3- 2-72	37.0	15	200	12	22	440	0.0
45-71-36bb	---	5000	1-18-72	40.0	18	50	8.3	0	480	5.8
46-71-34ad	(a)	4820	10-15-71	47.0	22	90	8.3	.2	500	3.8
47-69- 7db	(a)	3353	10-15-71	38.5	20	120	2.5	.4	450	2.2
49-69- 7ac	211FXHL	2700	2- 8-72	28.5	15	30	2.7	1.2	390	1.6
51-69-34dc	(a)	2365	10-15-71	16.0	11	60	2.1	.4	320	1.1
Converse County										
33-75- 8dbb	331MDSN	8591	7-20-72	65.5	30	---	360	82	490	37
33-75-20aa	331MDSN	9154	7-24-72	64.5	35	---	160	30	100	12
33-76-16caa	331MDSN	6954	7-25-72	60.0	37	---	410	64	540	51
33-76-33cb	331MDSN	8770	7-24-72	58.5	11	---	69	22	29	4.0
Crook County										
52-63-25dc	337PHSP	1123	7-12-72	9.5	12	---	62	15	2.2	1.9
Goshen County										
19-60- 4cdd4	111ALVL	39	6- 9-72	11.0	50	20	67	12	39	7.0
19-60- 8abb2	123BRUL	150	6-13-72	13.5	57	0	24	11	59	5.6
19-60-17bdd	123BRUL	350	6-12-72	13.0	53	20	36	5.1	35	5.4
19-60-29aca	123BRUL	--	6-13-72	13.5	57	0	29	2.9	36	4.0
19-61- 1ccd	123BRUL	300	6-12-72	15.0	60	10	49	17	51	6.7
19-61- 1ccdb	123BRUL	--	6- 9-72	13.0	55	50	54	12	56	5.8
19-61- 3bdb	111ALVL	50	6-13-72	9.5	47	0	65	11	36	5.6
19-61-10aca	123BRUL	150	6- 9-72	12.5	49	20	71	5.6	35	6.7
19-61-10bba	123BRUL	150	6- 9-72	11.5	50	20	66	12	33	6.7
19-61-11abc	123BRUL	151	6- 9-72	12.0	56	10	56	11	48	5.8
20-60-30bdd	123BRUL	120	6- 9-72	9.5	52	30	62	7.8	37	5.1
20-61-22ada	123BRUL	86	6-13-72	11.5	54	20	60	11	32	5.8
20-61-26cbb	123BRUL	210	6- 9-72	12.5	53	20	64	8.7	28	6.3
20-61-30dba1	123BRUL	80	6-12-72	11.5	55	0	20	6.5	217	7.9
20-61-30dba2	123BRUL	60	6-12-72	11.5	67	20	20	4.9	190	7.9
20-61-32cad3	123BRUL	93	6-12-72	10.5	51	10	49	10	76	7.2
20-61-33cbc	111ALVL	60	6-12-72	14.0	42	30	56	14	51	6.7
20-61-33cdd1	111ALVL	48	6-12-72	10.5	50	20	70	13	39	6.3
23-62- 5bbb	123CDRN	90	5-25-72	10.0	8.8	40	3.5	.3	180	4.0
24-60- 3add2	111TRRC	110	5-24-72	16.0	45	30	110	7.7	50	.7
24-60-32bdc2	111ALVL	71	5-22-72	23.0	27	100	37	60	230	4.4
24-61- 6bca	111ALVL	54	5-24-72	9.0	39	50	100	20	72	12
24-61-17abd2	111ALVL	30	5-24-72	13.0	28	50	98	24	70	7.0
24-61-31bbb	211LNCE	160	5-25-72	15.0	11	50	4.3	1.4	250	5.1
25-61- 7dcd2	211LNCE	787	5-24-72	18.0	13	40	6.2	1.1	282	3.3
25-61-35dab	111TRRC	178	5-23-72	17.0	38	50	75	14	48	6.7
25-62-15cdc	111ALVL	30	5-24-72	15.0	44	20	97	9.5	72	16
Johnson County										
41-78- 1bc	331MDSN	10020	7-19-72	72.0	74	--	290	56	500	35
41-81- 9c	331MDSN	2882	7-19-72	--	29	--	230	59	340	26
42-80-30bdb	331MDSN	4689	7-19-72	43.0	25	--	290	72	450	26
42-81-25cbd	331MDSN	4246	7-19-72	38.0	26	--	280	80	450	28
43-80-34dd	331MDSN	9300	7-19-72	68.5	52	--	330	59	460	26
Laramie County										
12-60- 6ddd1	123BRUL	125	6- 5-72	10.5	56	10	38	16	43	7.0
12-61-19bbb	111TRRC	152	6- 5-72	11.5	43	0	53	4.3	11	4.6
12-62- 2bcb	111TRRC	104	6- 5-72	11.0	47	0	50	6.7	14	4.4
12-62- 9cbc	111TRRC	140	6- 5-72	11.0	43	0	67	9.5	11	5.1
12-63- 4daa	123BRUL	--	6- 2-72	12.0	43	0	50	8.2	13	4.2
12-63-14aad	123BRUL	--	6- 2-72	10.5	43	0	57	6.7	16	4.0
13-60- 5add	123BRUL	120	6- 5-72	10.5	55	0	56	14	38	6.5
13-60-18dbb	123BRUL	85	6- 5-72	10.5	49	10	57	12	23	6.5
13-60-30bcd	123BRUL	85	6- 5-72	10.0	49	0	66	7.6	28	6.5
13-63-33adc	123BRUL	--	6- 2-72	14.0	43	0	48	8.8	13	4.6
13-68- 3bba	121OGLL	187	6- 8-72	11.0	21	0	44	3.8	5.4	1.9

See footnotes at end of table, p. 240

ANALYSES OF SAMPLES OF GROUND WATER IN WYOMING

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CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA, MG) (MG/L)	SPECI- FIC- COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
MISSOURI RIVER BASIN--Continued										
Campbell County--Continued										
996	15	3.3	89	5.9	0.2	120	1090	40	1720	8.5
b1140	b0	12	62	6.4	.5	220	1150	20	b1840	b8.3
b1565	b0	3.3	66	7.9	.2	290	1210	22	b2025	b8.2
b990	b16	95	31	6.6	.1	360	1100	8	b1750	b8.6
793	0	130	30	5.2	.2	570	970	12	1540	8.3
b460	b45	200	18	4.0	.1	170	823	7	b1240	b9.0
Converse County--Continued										
95	0	1400	560	4.0	0.0	710	2970	1200	4140	7.6
124	0	510	100	1.4	.2	110	1010	510	1450	7.9
112	0	1600	620	4.4	.0	1200	3340	1300	4600	7.4
129	0	190	18	1.2	.0	80	409	260	658	7.8
Crook County--Continued										
259	0	7.4	1.7	0.4	0.8	10	230	220	410	7.8
Goshen County--Continued										
316	0	36	8.0	0.7	2.5	60	377	220	572	8.0
206	0	36	21	.5	12	100	327	100	485	8.0
189	0	19	5.3	.4	12	30	264	110	374	8.0
176	0	12	2.7	.4	9.9	30	241	84	334	8.0
294	0	47	8.3	.5	3.8	100	387	190	566	7.8
261	0	72	13	.7	6.4	150	403	180	594	8.0
292	0	39	8.3	.7	3.3	60	359	210	554	7.8
287	0	35	8.0	.7	3.7	0	356	200	530	8.1
301	0	34	7.0	.7	3.4	50	361	220	546	8.0
270	0	48	12	.6	5.2	30	375	180	553	8.0
290	0	30	5.3	.6	.4	40	342	190	928	8.0
269	0	34	7.7	.6	6.8	50	344	200	518	7.9
275	0	28	7.3	.7	4.0	60	335	200	506	8.0
502	0	88	30	1.3	3.2	210	676	77	1010	8.0
462	0	63	24	.9	3.7	130	605	70	894	8.1
367	0	25	8.3	1.0	1.8	90	409	170	624	8.0
317	0	40	10	.7	4.2	120	381	200	591	7.9
331	0	36	7.3	.7	2.1	90	388	230	597	7.8
330	7	58	43	1.1	.2	120	465	10	b820	b8.8
223	0	200	12	.5	21	50	549	300	b885	b7.8
446	0	180	29	1.6	.3	150	736	120	b1190	b7.7
278	0	240	18	.6	13	70	651	340	b940	b6.9
302	0	200	17	.6	21	100	610	340	b915	b8.0
427	0	160	23	.6	.2	140	665	17	b1080	b8.3
727	0	4.9	8.3	3.4	4.2	440	684	20	b1160	b9.8
183	0	180	12	.4	4.8	60	471	240	b690	b7.2
262	0	210	17	.5	2.3	40	595	280	b860	b8.9
Johnson County--Continued										
110	0	940	700	3.4	0.0	400	2640	950	3980	7.3
134	0	850	440	3.4	.0	120	2040	810	3030	7.8
115	0	1100	590	3.9	.0	420	2600	1000	3850	7.7
117	0	1100	580	4.3	.0	560	2590	1000	3800	7.8
98	0	1100	650	3.9	.1	350	2740	1100	4010	7.6
Laramie County--Continued										
219	0	57	15	0.7	6.2	80	347	160	510	7.8
183	0	12	4.7	1.0	4.0	30	228	150	346	7.9
184	0	15	5.3	.7	11	40	244	150	363	7.9
194	0	27	19	1.0	17	10	295	210	457	7.8
179	0	15	8.3	.4	18	40	248	160	377	7.9
180	0	22	12	.4	21	50	270	170	409	7.8
231	0	56	19	.8	8.4	60	368	200	542	8.0
214	0	40	15	.7	10	40	318	190	476	7.8
247	0	34	12	.7	8.7	80	334	200	505	7.8
180	0	13	6.7	.5	17	40	243	160	362	7.8
142	0	14	3.3	.6	5.3	20	169	130	281	7.8

ANALYSES OF SAMPLES OF GROUND WATER IN WYOMING
CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

WELL NUMBER	GEOLOGIC SOURCE 1/	WELL DEPTH (FT)	DATE OF COLLEC- TION	WATER TEMPER- ATURE (°C)	SILICA (SiO ₂) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS SOLVED CAL- CIUM (CA) (MG/L)	DIS SOLVED MAG- NE- SIUM (MG)	SODIUM (NA) (MG/L)	PO- TAS- SIUM (K) (MG/L)
MISSOURI RIVER BASIN--Continued Laramie County--Continued										
13-68- 4adc	121OGLL	255	6- 8-72	11.0	23	40	48	4.9	5.4	1.6
13-68-24aad	121OGLL	270	6- 8-72	11.5	24	50	45	4.8	6.4	1.6
13-63-24cca	123BRUL	155	6- 2-72	15.0	41	0	77	8.0	15	6.3
14-60- 6dbb	123BRUL	50	6- 1-72	11.5	55	0	37	8.9	17	4.0
14-60- 8bba	123BRUL	77	6- 6-72	11.0	57	20	44	11	19	4.2
14-60- 8bcc	123BRUL	80	6- 1-72	13.0	53	0	42	10	15	4.2
14-60-16dcc	123BRUL	100	6- 1-72	11.0	42	190	72	11	20	4.9
14-60-17abb	123BRUL	80	6- 1-72	11.0	52	0	43	12	17	3.3
14-60-19abc	123BRUL	110	6- 1-72	11.5	46	0	47	9.4	15	3.0
14-60-21cbc	123BRUL	83	6- 1-72	11.5	39	0	64	10	16	4.0
14-60-29bbc	123BRUL	78	6- 1-72	11.5	42	50	58	9.0	14	3.7
14-60-29cbd	123BRUL	100	6- 5-72	10.5	53	0	49	8.0	17	4.0
14-60-32abb	123BRUL	80	6- 5-72	11.0	55	0	65	11	24	3.5
14-61-25cbb	123BRUL	120	6- 5-72	11.5	42	0	61	4.8	11	4.2
14-61-34aab	123BRUL	110	6- 5-72	10.5	54	0	52	8.9	16	3.5
14-62- 7dbbl	122ARKR	254	6- 6-72	11.0	50	30	60	11	11	4.4
14-68-14cad	121OGLL	163	6- 8-72	10.0	40	30	78	6.6	11	3.7
14-68-23ddc	121OGLL	250	6- 8-72	10.5	28	0	46	3.8	4.3	2.1
14-68-34aab	121OGLL	235	6- 8-72	11.0	33	0	46	4.4	5.4	2.1
14-68-36bca	121OGLL	214	6- 8-72	11.0	21	20	41	3.6	4.8	1.9
15-60-29bad	123BRUL	108	6- 6-72	11.5	51	0	46	3.6	10	3.3
15-69- 6aca	123BRUL	182	6- 8-72	9.5	22	20	55	11	14	2.8
15-69-21dcc	123BRUL	223	6- 8-72	9.0	22	40	30	4.6	46	3.3
15-69-34aaa	123BRUL	312	6- 8-72	8.0	50	20	53	5.9	18	5.1
16-61- 1cba	121OGLL	230	6- 7-72	12.0	52	0	43	5.8	8.6	4.2
16-61-10cca	121OGLL	190	6- 7-72	12.0	50	0	36	6.4	7.5	3.5
17-60-20ada	122ARKR	304	6- 7-72	13.0	44	20	41	5.2	7.5	3.0
17-60-28aaa	122ARKR	260	6- 7-72	13.0	41	90	58	8.1	11	4.4
17-60-29abb	122ARKR	300	6- 7-72	13.5	47	0	45	6.5	12	3.5
17-60-34cac	121OGLL	340	6- 7-72	13.0	53	50	45	5.3	11	4.0
Natrona County										
39-79-11aad	331MDSN	5688	7-25-72	82.0	49	--	260	49	380	21
40-79- 2ad	331MDSN	7467	7-25-72	--	41	--	450	60	440	35
40-79-31bca	331MDSN	6155	7-25-72	72.0	40	--	300	46	440	30
Platte County										
21-65-16ccc1	122ARKR	397	10- 1-71	14.0	50	20	48	5.2	16	4.9
21-65-16ccc1	122ARKR	397	10- 3-71	13.5	50	20	49	5.0	16	5.1
28-66-28ba	317HRVL	168	7-27-72	--	29	--	60	26	9	5.6
Weston County										
41-60- 7bd	217LKOT	2200	7-11-72	14.0	8.4	--	15	3.1	390	2.3
46-62-18bdc	337PHSP	2677	6-14-72	14.5	11	--	61	28	1.1	1.9
46-63-10dca	337PHSP	2592	7-11-72	23.5	13	--	74	26	1.5	1.4
46-63-15bd	337PHSP	3072	7-11-72	--	13	--	64	27	2.2	1.4
46-63-17cbc	337PHSP	3605	6-15-72	26.5	14	--	61	28	1.5	1.4
46-64-23cc	337PHSP	5125	6-15-72	--	19	--	56	28	2.9	1.9
46-66-25dbb	337PHSP	8780	6-15-72	79.0	46	--	180	46	9.0	4.2
47-60- 4ada	337PHSP	380	7-12-72	7.5	12	--	58	24	2.2	1.4
48-65-25cc	337PHSP	3161	7-11-72	--	13	--	92	40	2.9	2.1
GREEN RIVER BASIN Lincoln County										
19-116-32cal	217ASPN	--	6-14-72	12.5	11	1000	23	5.1	2200	3.5
19-119-32dad1	124WSTC	Spring	6-13-72	6.5	7.9	50	55	25	5.3	1.2
25-115-14bal	217BRRV	Spring	8-14-72	7.0	11	160	120	21	24	2.7
29-116-28bcb	227NGST	Spring	10-15-71	3.5	5.3	20	29	5.5	1.4	.9
Sublette County										
27-115-22b1	237TYNS	Spring	10-15-71	6.5	10	10	64	25	5.4	0.8
29-115-16dda1	211BLDB	Spring	10-15-71	6.5	6.9	20	43	7.3	19	2.8

See footnotes at end of table, p. 240

ANALYSES OF SAMPLES OF GROUND WATER IN WYOMING
CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA, MG) (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
MISSOURI RIVER BASIN--Continued Laramie County--Continued										
159	0	9.9	2.3	0.4	7.7	10	181	140	303	7.8
156	0	9.9	4.3	.6	3.7	20	177	130	289	8.1
214	0	37	31	.9	2.7	40	324	220	516	7.5
171	0	13	5.0	.6	8.9	20	233	130	326	7.8
184	0	20	8.3	.5	12	30	266	150	393	8.1
189	0	13	5.0	.6	6.9	30	243	150	347	7.9
243	0	36	10	.6	20	40	347	230	506	7.7
194	0	20	7.7	.8	5.1	30	256	160	371	7.9
188	0	18	8.0	.8	5.0	30	244	160	363	7.8
207	0	31	10	.7	21	30	298	200	456	7.8
195	0	23	8.3	.8	20	20	275	180	412	7.9
180	0	26	10	.7	13	50	269	160	387	7.9
250	0	35	12	.6	8.0	70	337	210	508	7.7
187	0	21	6.7	.9	11	40	255	170	393	7.8
184	0	25	10	.7	15	50	275	170	410	7.8
190	0	21	12	.6	26	50	289	190	439	8.0
250	0	30	7.3	.8	.9	20	301	220	476	7.8
153	0	8.2	1.7	.4	6.5	10	176	130	284	7.9
162	0	8.2	2.0	.4	5.8	20	187	130	290	7.9
141	0	9.9	2.3	.6	3.2	20	157	120	259	8.0
149	0	12	5.0	.4	13	30	217	130	313	7.8
235	0	14	4.3	.6	3.2	40	242	180	413	7.8
205	0	16	5.7	.6	1.3	20	231	93	381	7.6
211	0	19	6.0	.7	2.4	30	264	160	392	7.8
160	0	12	3.7	.4	8.0	30	217	130	311	8.0
137	0	12	4.3	.4	8.0	20	195	120	274	8.0
131	0	12	5.7	.2	19	10	202	120	296	8.3
183	0	25	12	.3	20	30	270	180	419	8.0
165	0	15	5.7	.3	11	20	227	140	335	8.2
166	0	12	5.0	.4	7.0	40	224	140	322	7.8
Natrona County--Continued										
104	0	970	470	3.7	0.0	420	2260	860	3310	7.3
96	0	1400	620	4.7	.0	470	3130	1400	4360	7.3
119	0	1000	560	4.5	.0	450	2480	950	3780	7.3
Platte County--Continued										
175	0	21	6.3	0.8	8.1	50	246	140	b342	b7.9
171	0	21	6.3	.8	7.2	40	244	140	b325	7.7
284	0	18	8.7	.5	15	50	312	260	527	7.9
Weston County--Continued										
209	0	690	13	0.5	0.1	70	1230	50	1810	7.9
296	0	21	1.3	.3	.7	20	271	270	488	7.9
295	0	51	1.3	.4	.9	20	315	290	538	7.8
293	0	24	1.7	.5	1.0	10	279	270	496	7.7
299	0	20	1.3	.3	.9	30	275	260	478	7.8
275	0	33	1.7	.4	.7	20	279	250	465	7.8
177	0	460	4.3	3.1	.5	20	834	630	1060	7.6
298	0	2.5	1.7	.2	.8	10	249	240	444	8.0
275	0	170	1.7	3.6	.7	20	457	390	713	7.7
GREEN RIVER BASIN--Continued Lincoln County--Continued										
439	4	0.8	3100	2.0	0.0	390	5570	78	10200	8.4
281	0	12	6.7	.3	2.6	40	254	240	485	8.2
282	0	170	16	.5	c.20	60	505	390	780	7.6
122	0	2.8	1.2	.0	c.13	10	107	95	185	8.0
Sublette County--Continued										
187	0	190	1.9	0.1	c0.18	20	390	260	642	7.6
202	0	8.8	1.9	.1	c.13	40	190	140	343	7.1

ANALYSES OF SAMPLES OF GROUND WATER IN WYOMING
CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

WELL NUMBER	GEOLOGIC SOURCE 1/	WELL DEPTH (FT)	DATE OF COLLEC- TION	WATER TEMPER- ATURE (°C)	SILICA (SiO ₂) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	SODIUM (NA) (MG/L)	PO- TAS- SIUM (K) (MG/L)
GREEN RIVER BASIN--Continued Sweetwater County										
14-99- 9d	124LNEY	Spring	5-24-72	7.0	14	--	21	11	160	1.9
14-99-16d	124LNEY	Spring	5-24-72	7.0	18	--	86	47	140	1.2
Uinta County										
12-118- 1dbal	124BRDG	Spring	9-14-72	5.5	31	200	51	13	9.1	2.7
13-117-35dbc1	124BRDG	Spring	6-15-72	5.5	9.8	30	52	14	7.1	1.4
14-117-12dac1	124BRDG	Spring	6-14-72	6.5	18	70	66	19	12	1.9
BEAR RIVER BASIN Lincoln County										
19-121-25aad	121FWKS	Spring	7- 6-72	11.0	41	50	58	24	58	5.1
21-118- 2cc2	124WSTC	350	10-18-71	7.5	7.1	420	3.1	.6	410	2.7
Uinta County										
14-121-14dcc1	217GNNT	665	9-12-72	11.0	7.5	270	23	14	65	4.3
15-121-27da1	124WSTC	190	9-12-72	11.0	6.4	440	30	26	24	5.3
18-119-31cbc	217GNNT	Spring	7- 6-72	12.0	8.4	40	34	38	25	4.6
SNAKE RIVER BASIN Lincoln County										
30-116- 9bb1	227NGGT	Spring	7- 7-72	4.5	8.5	90	25	7.5	1.5	0.9
30-118-35acl	217GNNT	Spring	7- 9-72	4.5	9.2	0	57	8.8	5.1	.7
32-116-28cl	237TYNS	Spring	7-15-72	5.0	7.1	10	89	23	2.1	.4
33-116-12bl	317WLLS	Spring	7-13-72	4.5	3.3	20	45	13	.9	.3
35-116-36bl	211BLDB	Spring	7-12-72	6.0	5.7	20	37	11	9.3	1.0
37-115-31cbl	317TSLP	Spring	7-10-72	4.0	4.5	10	41	9.2	.3	.3
Teton County										
42-115-11aac	331MDSN	197	7-27-72	19	16	10	54	19	6.4	2.1
42-116- 3dda	111ALVL	37	7-11-72	7.0	16	20	30	6.1	8.2	1.5
42-116-18dac	112GLCL	60	7-21-72	7.0	4.3	10	41	11	1.0	.6
44-118-12daa	331MDSN	670	10-16-71	7.5	7.2	0	27	13	.5	.9
44-118-12dab	331MDSN	676	10-16-71	--	5.3	--	34	11	.5	1.8
45-113- 7dbb	111ALVL	40	7-12-72	6.0	21	10	32	6.1	3.9	1.1

a 211FXHL and 211LNCE.

b Field determination.

c Nitrite plus nitrate (NO₂ + NO₃).

1/ GEOLOGIC SOURCE

111 ALVL	alluvial deposits	211 FXHL	Fox Hills Sandstone
111 TRRC	terrace deposits	211 LNCE	Lance Formation
112 GLCL	glacial deposits	217 ASPN	Aspen Shale
121 FWKS	Powkes Formation	217 BRRV	Bear River Formation
121 OGLL	Ogallala Formation	217 GNNT	Gannett Group
122 ARKR	Arikaree Formation	217 LKOT	Lakota Formation
123 BRUL	Brule Formation	227 NGGT	Nugget Sandstone
123 CDRN	Chadron Formation	237 TYNS	Thaynes Limestone
124 BRDG	Bridger Formation	317 HRVL	Hartville Formation
124 LNEY	Laney Shale Member of Green River Formation	317 TSLP	Tensleep Sandstone
124 WSTC	Wasatch Formation	317 WLLS	Wells Formation
211 BLDB	Blind Bull Formation	331 MDSN	Madison Limestone
		337 PHSP	Pahasapa Limestone

ANALYSES OF SAMPLES OF GROUND WATER IN WYOMING

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CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	SULFATE (SO ₄) (MG/L)	CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRATE (NO ₃) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA, MG) (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
GREEN RIVER BASIN--Continued Sweetwater County--Continued										
278	0	210	5.0	0.3	0.6	50	567	99	861	8.3
337	0	420	5.3	.3	.9	70	881	410	1230	7.9
Uinta County--Continued										
200	0	31	5.5	0.2	c0.38	30	244	180	386	7.1
232	0	5.8	2.0	.1	3.3	30	210	189	367	8.2
298	0	6.6	13	.3	1.4	40	284	242	496	8.2
BEAR RIVER BASIN--Continued Lincoln County--Continued										
313	0	52	42	0.4	0.9	110	436	240	696	8.2
354	33	300	250	1.8	c.11	460	1180	10	1980	8.4
Uinta County--Continued										
230	0	25	37	0.8	c0.11	50	291	120	521	7.6
251	0	12	11	1.9	c.34	60	242	180	432	7.6
262	0	42	31	.5	2.2	110	315	240	568	8.2
SNAKE RIVER BASIN--Continued Lincoln County										
106	0	4.1	1.7	0.1	0.6	20	102	93	178	8.1
237	0	7.1	2.1	.0	c.32	20	208	180	352	8.0
153	0	190	1.0	.3	c.07	20	388	320	605	6.8
196	0	10	1.0	.3	c.27	50	171	170	310	6.6
172	0	21	1.0	.4	c.16	50	172	140	303	7.9
165	0	3.1	1.0	.4	c.38	0	143	140	264	7.6
Teton County										
175	0	75	2.0	0.8	0.7	30	262	210	b440	b7.4
124	0	11	4.0	.4	.07	40	139	100	b225	b7.8
183	0	6.9	1.0	.1	.06	20	156	150	b280	b7.3
139	0	5.8	1.7	.0	.8	10	125	120	b220	b7.7
154	0	4.9	1.0	.0	.1	10	135	130	258	8.0
129	0	11	1.0	.0	.05	0	140	110	b215	b7.1

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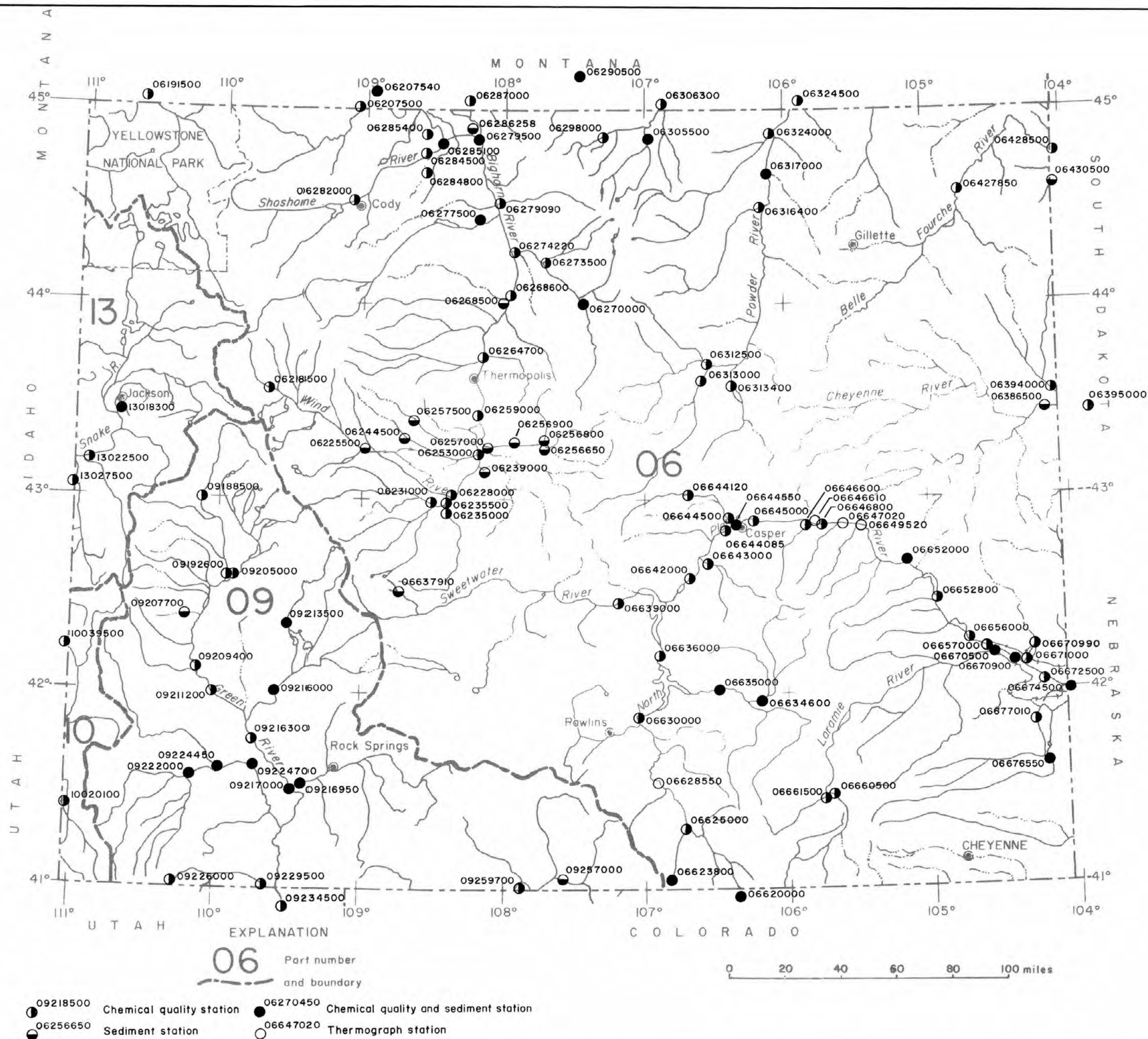


Figure 1.--Map of Wyoming showing locations of sites where data were obtained on the quality of surface water.

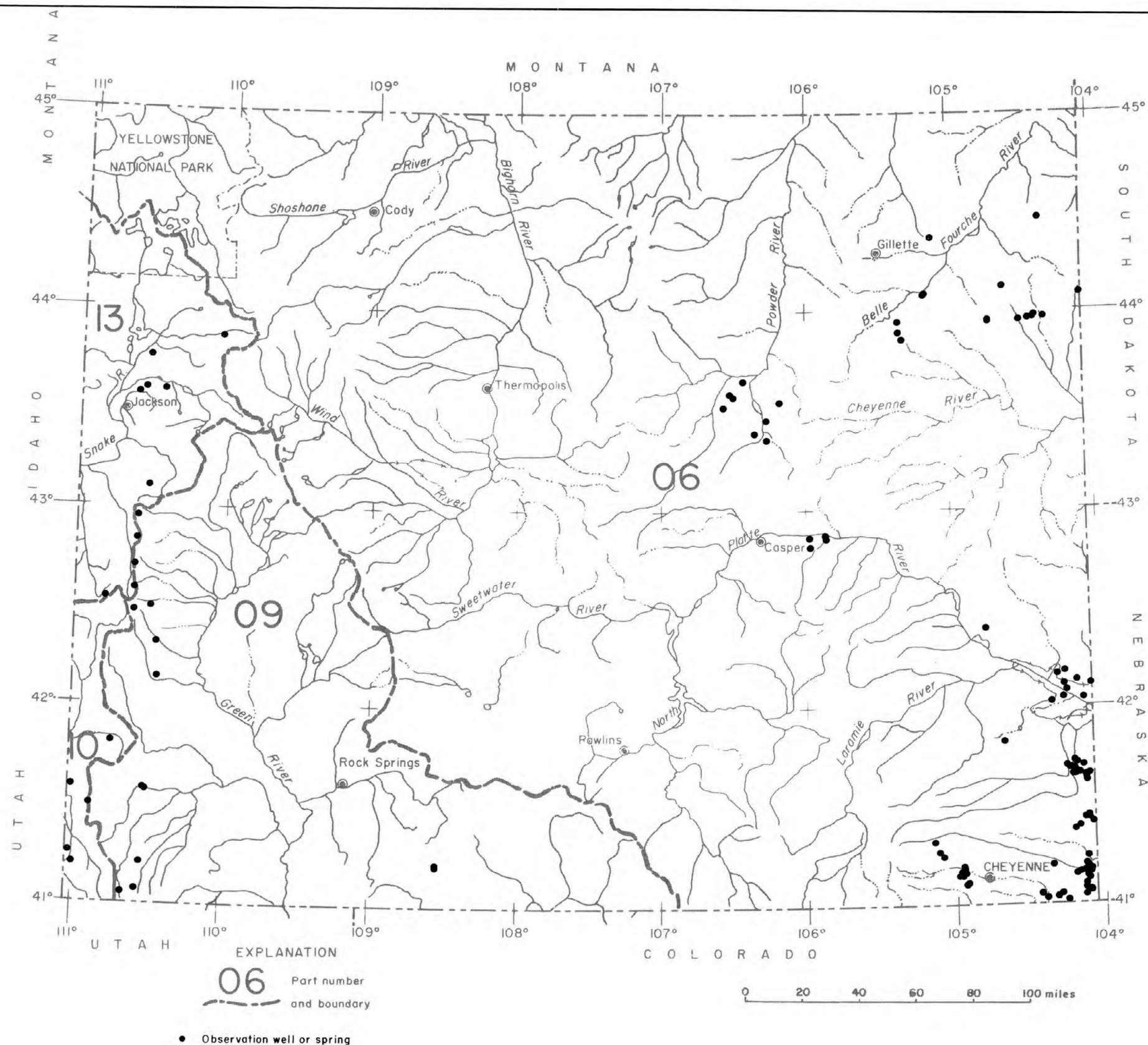


Figure 2.—Map of Wyoming showing locations of sites where data were obtained on the quality of ground water.



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