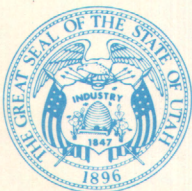
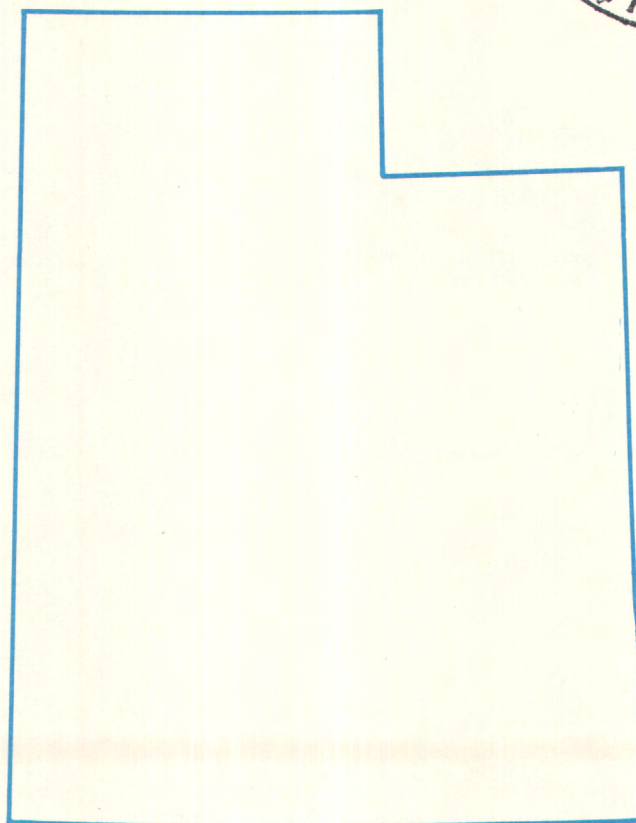
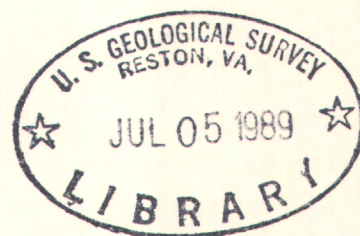


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Water Resources Data Utah Water Year 1988



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT UT-88-1
Prepared in cooperation with the State of Utah
and with other agencies

CALENDAR FOR WATER YEAR 1988

1987

OCTOBER

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1988

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SEPTEMBER

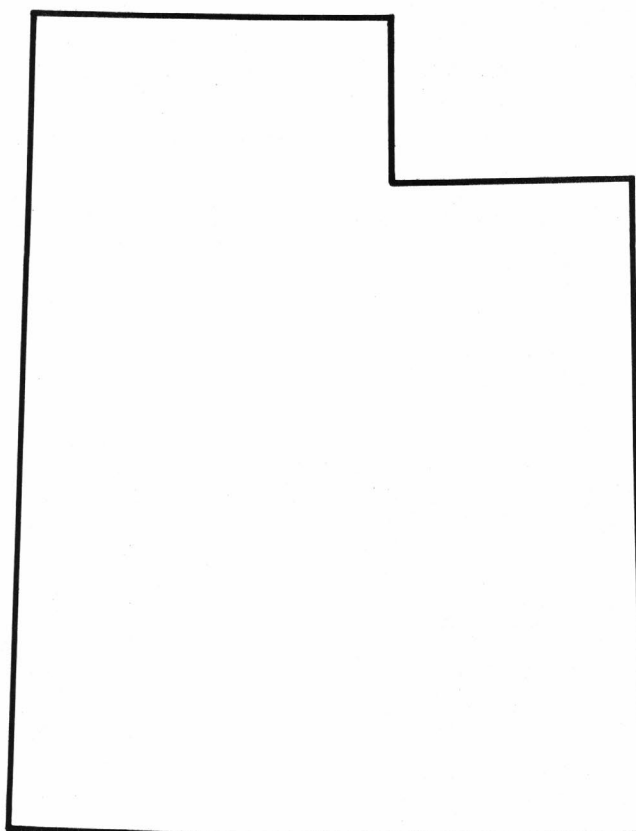
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Water Resources Data Utah

Water Year 1988

by M.D. ReMillard, L.R. Herbert, G.W. Sandberg, and G.A. Birdwell



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT UT-88-1
Prepared in cooperation with the State of Utah
and with other agencies

PREFACE

This volume of the annual hydrologic data report of Utah is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Utah are contained in one volume.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

David Allen	Michael Greene	Cynthia Smith
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15. Supplementary Notes Prepared in cooperation with the State of Utah and with other agencies.				
16. Abstract (Limit: 200 words) Water resources data for the 1988 water year for Utah consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water quality of ground water. This report contains discharge records for 178 gaging stations; stage and contents for 22 lakes and reservoirs; water quality for 20 hydrologic stations and 163 wells; miscellaneous temperature measurements and field determinations for 141 stations; and water levels for 31 observation wells. Additional water data were collected at various sites not involved in the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Utah.				
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[Letter after station name designates type of data: (d) discharge, (e) elevation or contents,
(c) chemical, (b) biological, (t) water temperature, (s) sediment.]

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GROUND-WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED

GROUND-WATER LEVELS

BEAVER COUNTY		
Well 382551112555101	Local number (C-27-10)25cbd- 1	340
Well 382020112585901	Local number (C-28-10)28cdd- 1	340
BOX ELDER COUNTY		
Well 414236112101201	Local number (B-11- 3)10abb- 4	340
Well 414411112543701	Local number (B-12- 9)30cda- 1	341
Well 415703112514501	Local number (B-14- 9) 9add- 1	341
DAVIS COUNTY		
Well 405447111524301	Local number (A- 2- 1)18abd-12	341

HYDROLOGIC STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

GROUND-WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED

GROUND-WATER LEVELS

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Well 374132113063601	Local number (C-36-11) 8aab- 1	342
Well 374053113415101	Local number (C-36-16) 6cbc- 1	342
Well 373643113415301	Local number (C-36-17) 36add- 1	343
JUAB COUNTY		
Well 395259113430401	Local number (C-11-17) 12cbb- 1	343
Well 393143111523301	Local number (C-15- 1) 12aba- 1	343
KANE COUNTY		
Well 370901112335001	Local number (C-42- 6) 19baa- 1	344
Well 370523112334702	Local number (C-42- 6) 30dcc- 2	344
MILLARD COUNTY		
Well 393046112231301	Local number (C-15- 5) 15dad- 1	344
Well 393020112362201	Local number (C-15- 7) 23bac- 1	345
Well 385844112245801	Local number (C-21- 5) 21aba- 1	345
Well 384906112330601	Local number (C-23- 6) 17baa- 1	345
SALT LAKE COUNTY		
Well 403916111575901	Local number (C- 2- 1) 9ccc- 1	346
Well 404356111503901	Local number (D- 1- 1) 16caa- 1	346
Well 403452111484301	Local number (D- 3- 1) 2ccc- 1	346
SAN JUAN COUNTY		
Well 375802109191301	Local number (D-33-24) 30dab- 1	347
Well 373830109283201	Local number (D-36-22) 22daa- 1	347
TOOELE COUNTY		
Well 403539112282901	Local number (C- 2- 6) 36dcc- 1	347
Well 401312112442301	Local number (C- 7- 8) 10cbd- 1	348
UINTAH COUNTY		
Well 403158109372201	Local number (D- 3-20) 25abc- 2	348
UTAH COUNTY		
Well 401818112014501	Local number (C- 6- 2) 14aba- 1	348
Well 402333111513401	Local number (D- 5- 1) 8dcc- 1	349
WASHINGTON COUNTY		
Well 370231113320301	Local number (C-43-15) 16dac- 1	349
WEBER COUNTY		
Well 411544111461001	Local number (A- 6- 2) 18bad- 1	349
Well 411348112013601	Local number (B- 6- 2) 26ada- 1	350

QUALITY OF GROUND WATER

Beaver County wells	352
Box Elder County wells	352
Cache County wells	352
Davis County wells	352
Iron County wells	354
Juab County wells	354
Kane County wells	354
Millard County wells	354
Piute County wells	356
Salt Lake County wells	356
San Juan County wells	356
SanPete County wells	356
Sevier County wells	356
Tooele County wells	356
Uintah County wells	356
Utah County wells	356
Washington County wells	358
Wayne County wells	358
Weber County wells	358

INTRODUCTION

Water resources data for the 1988 water year for Utah consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels and water quality of ground water. This report contains discharge records for 178 gaging stations; stage and contents for 22 lakes and reservoirs; water quality for 20 hydrologic stations, and 163 wells; miscellaneous temperature measurements and field determinations for 141 stations; and water levels for 31 observation wells. Additional water data were collected at various sites not involved in the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Utah.

Records of discharge or stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through September 30, 1969, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States."

Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled, "Ground-Water Levels and Artesian Pressures in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, Virginia, 22202.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published as an official Survey report on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report UT-88-1." For archiving and general distribution, the reports for water years 1971-74 are also identified as water-data reports. These water-data reports are for sale, in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (801) 524-5655.

COOPERATION

The U.S. Geological Survey and organizations of the State of Utah have had cooperative agreements for the systematic collection of streamflow records since 1909, for ground-water levels since 1935, and for water-quality records since 1941. Organizations that assisted in collecting data through cooperative agreement with the Geological Survey are:

Department of Natural Resources, D. C. Hansen, Executive Director
Division of Water Rights, R. Morgan, State Engineer
Division of Water Resources, D. L. Anderson, Director
Utah Geological and Mineral Survey, Genevieve Atwood, Director
Division of Wildlife Resources, W. H. Geer, Acting Director
Bear River Commission, W. N. Jibson, Chairman
Salt Lake County Commission, D. Michael Stewart, Chairman

Assistance in the form of funds was given by the Bureau of Reclamation, U.S. Department of the Interior, in collecting records for 7 gaging stations and by the Bureau of Land Management, U.S. Department of the Interior, for 3 gaging stations. Records for 10 gaging stations in Idaho in the Bear River basin and 8 in Utah were collected by the Utah Power and Light Co. under Federal Energy Regulatory Commission License.

Other district offices of the Geological Survey, Water Resources Division, obtained the records listed below:

Colorado District.--Colorado River near Colorado-Utah State line.

Wyoming District.--Bear River above Reservoir, near Woodruff, UT
Bear River at Evanston, WY
Blacks Fork near Millburne, WY
East Fork of Smiths Fork, near Robertson, WY
Green River near Green River, WY
Henrys Fork near Manilla, UT

Records for all stream-gaging stations operated by the Geological Survey in the Bear River basin in Utah, Idaho, and Wyoming are included in this report.

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

by M.D. ReMillard

Hydrologic conditions in Utah during water year 1988 varied from the northern to southern parts of the State. In general, precipitation for water year 1988 was greater than normal in southern Utah and less than normal in the northern part of the State, as indicated by 11 representative precipitation-recording sites operated by the National Oceanic and Atmospheric Administration (See figure 1 for location). Annual precipitation at 8 of the 11 sites ranged from 0.67 to 5.06 inches greater than normal. Annual precipitation at the other three sites, located in northern Utah along the Wasatch Range from Nephi to Logan, ranged from 0.71 to 5.56 inches less than normal.

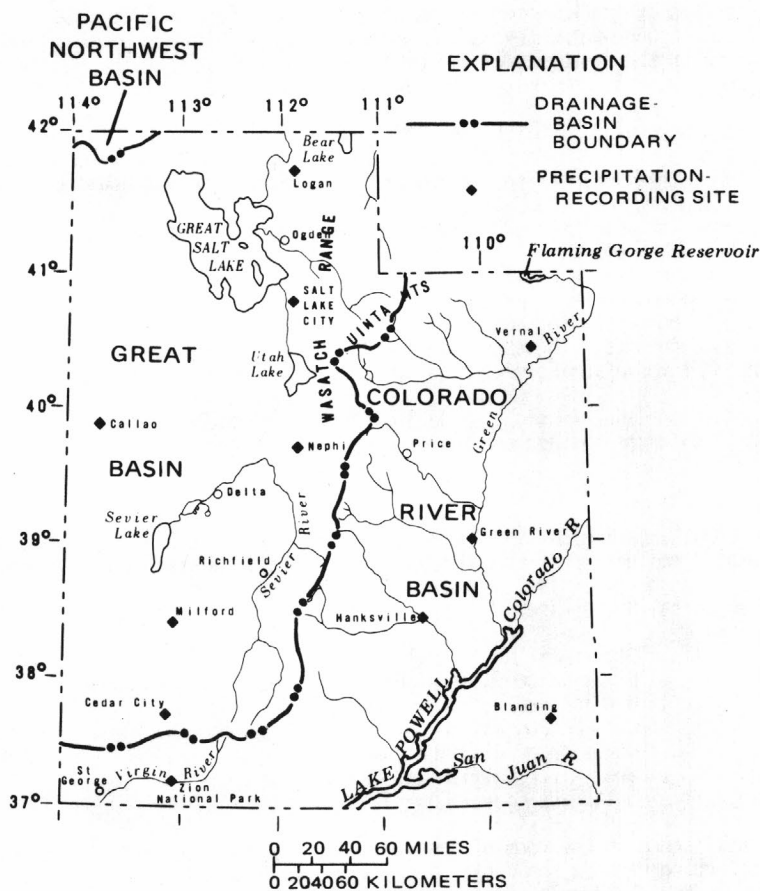


Figure 1.—Precipitation-recording sites.

Annual streamflow for water year 1988 was generally less than normal for the first time since 1981. As a result, ground-water withdrawals during the summer of 1988 were generally greater than normal because of decreased availability of streamflow (L.R. Herbert, U.S. Geological Survey, oral commun., 1989).

The Great Salt Lake reached its seasonal peak of 4,209.60 feet above sea level during October 1-5, 1988, a decrease of 2.25 feet from the 1987 peak of 4,211.85 feet above sea level. Less than normal precipitation in northern Utah, decreased streamflow, and pumping from the lake to the west desert contributed to the lake-level decline.

Precipitation at selected sites for water year 1988, in inches
(departure from normal for 1951-80)

Site	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total
Blanding	2.26 (+.80)	2.75 (+1.86)	.78 (-.51)	2.03 (+.69)	.50 (-.45)	.03 (-.77)	.78 (+.11)	1.27 (+.68)	1.40 (+1.03)	.51 (-.53)	1.82 (+.41)	1.07 (+.18)	15.20 (+3.50)
Callao	1.02 (+.57)	.89 (+.58)	.16 (-.09)	.93 (+.62)	.00	.14 (-.21)	.35 (-.08)	1.86 (+1.19)	.06 (-.66)	.08 (-.33)	.16 (-.37)	.72 (+.35)	6.37 (+1.57)
Cedar City	2.47 (+1.69)	2.58 (+1.67)	1.06 (+.41)	.72 (+.08)	.53 (-.27)	1.14 (+.08)	3.14 (+2.16)	1.16 (+.34)	.65 (+.20)	.80 (-.30)	.97 (-.20)	.10 (-.80)	15.32 (+5.06)
Green River	1.84 (+1.06)	1.24 (+.78)	.97 (+.58)	.82 (+.42)	.34 (-.03)	.57 (+.11)	.60 (+.15)	.74 (+.13)	.56 (+.22)	.04 (-.34)	1.05 (+.26)	1.00 (+.39)	9.77 (+3.73)
Hanksville	1.13 (+.50)	.68 (+.25)	.34 (+.04)	.39 (+.09)	.27 (+.05)	.80 (+.45)	.80 (+.38)	.54 (+.05)	.19 (-.04)	.11 (-.33)	.69 (-.14)	.31 (-.29)	6.25 (+1.01)
Logan	.87 (-.56)	1.32 (-.21)	1.44 (-.19)	.87 (-.81)	.18 (-1.39)	1.45 (-.30)	2.28 (+.22)	1.59 (-.12)	.76 (-.77)	T (-.45)	.16 (-.80)	.88 (-.18)	11.80 (-5.56)
Milford	.96 (+.23)	1.46 (+.77)	.98 (+.35)	1.11 (+.42)	.15 (-.59)	1.10 (+.11)	1.59 (+.63)	1.14 (+.41)	.27 (-.15)	.07 (-.54)	.79 (+.08)	.64 (-.05)	10.26 (+1.67)
Nephi	1.20 (+.13)	1.44 (+.22)	1.18 (-.08)	1.57 (+.27)	.27 (-1.00)	1.46 (.00)	1.94 (+.46)	2.04 (+.82)	.13 (-.63)	.57 (-.06)	.53 (-.42)	.46 (-.42)	12.79 (-.71)
Salt Lake City	1.18 (+.04)	1.17 (-.05)	1.10 (-.27)	1.06 (-.29)	.13 (-1.20)	.94 (-.78)	1.84 (-.37)	2.16 (+.69)	.03 (-.94)	.04 (-.68)	.22 (-.70)	.07 (-.82)	9.94 (-5.37)
Vernal	1.53 (+.71)	1.22 (+.66)	.56 (-.07)	.36 (-.14)	.08 (-.32)	.21 (-.36)	1.58 (+.89)	.85 (+.07)	.42 (-.31)	.16 (-.25)	.26 (-.41)	.82 (+.20)	8.05 (+.67)
Zion National Park	2.35 (+1.45)	3.70 (+2.50)	.53 (-.73)	2.10 (+.34)	.76 (-.95)	.71 (-1.07)	4.67 (+3.55)	.68 (-.12)	.31 (-.29)	.52 (-.46)	2.21 (+.62)	.19 (-.69)	18.73 (+4.15)

SURFACE WATER

By M.D. ReMillard

Annual streamflow for water year 1988 at seven representative gaging stations averaged 76 percent of the median annual mean discharges for water years 1946-85 (compared to 118 percent for water year 1987). On May 1, 1988, statewide snowpack was 51 percent of the 1961-85 average, 5 percent greater than on May 1, 1987 (U.S. Department of Agriculture, 1987, 1988).

The southern part of the State received greater than normal precipitation during water year 1988; Beaver River near Beaver was the only one of the seven representative stations to have greater than normal flow (121 percent of the median). The annual mean discharge for Whiterocks River near Whiterocks was near the lowest annual mean discharge that occurred during 1946-85. Mean discharges for August and September at Big Cottonwood Creek near Salt Lake City, were less than the previous lowest monthly mean discharges for 1946-85. Graphic comparisons for the representative stations are shown in figure 2.

The dry summer resulted in decreased reservoir storage. The storage in 16 major irrigation reservoirs on October 1, 1988, was 77 percent of average compared to 91 percent of average on October 1, 1987. The level of Bear Lake was 5,914.92 feet above sea level, and the lake contained 815,600 acre-feet on October 1, 1988, compared to 999,600 acre-feet on October 1, 1987.

The seasonal peak level of Great Salt Lake was 4,209.60 feet above sea level from October 1-5, 1988, a decrease of 2.25 feet from the 1987 peak of 4,211.85 feet above sea level. The lake level at the end of the water year had dropped to 4,206.85 feet, 2.75 feet lower than the 1988 peak and 5.0 feet lower than the 1987 peak. (See figures 3 and 4.) Pumping from the Great Salt Lake to the west desert continued in 1988 and was, in part, responsible for the lake-level decline. Less than normal precipitation along the Wasatch Range and increased evaporation from hotter than normal temperatures in the Great Salt Lake area also contributed to the declining lake level.

EXPLANATION

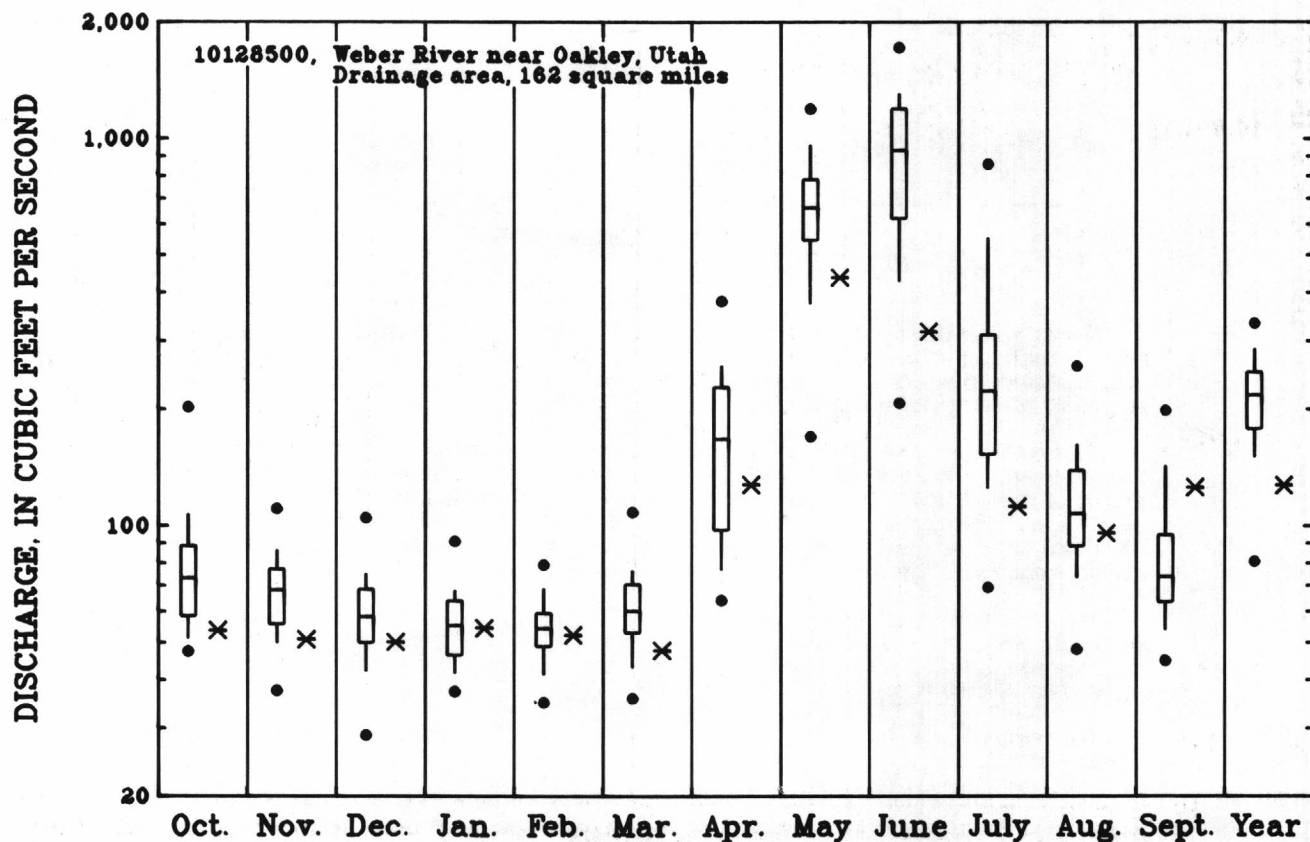
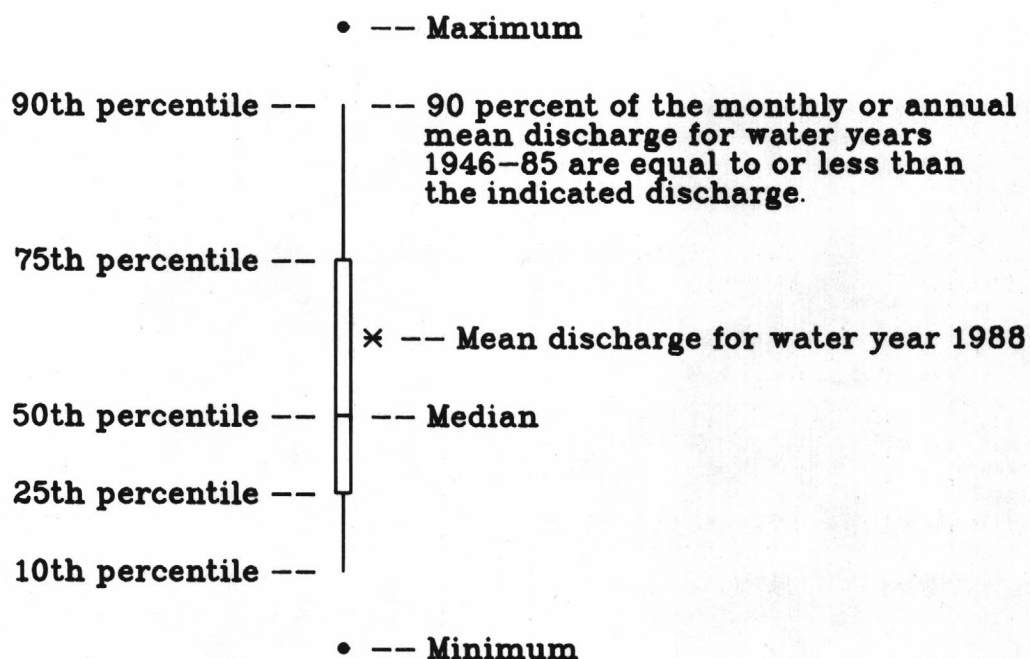


Figure 2.--Comparison of monthly and annual mean discharges for water year 1988 with monthly and annual mean discharges for water years 1946-85 at seven long-term, representative gaging stations.

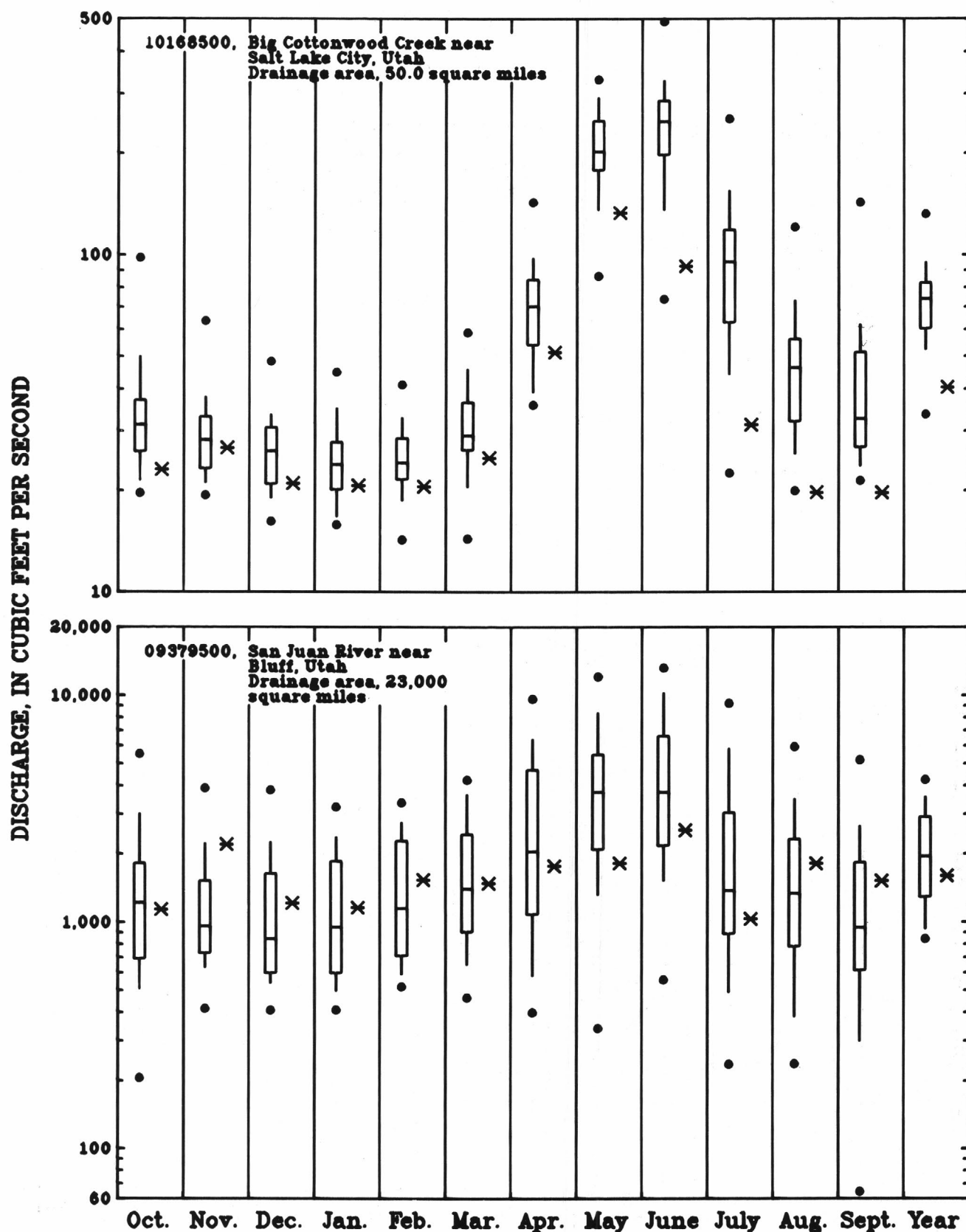


Figure 2.--Comparison of monthly and annual mean discharges for water year 1988 with monthly and annual mean discharges for water years 1946-85 at seven long-term, representative gaging stations--Continued.

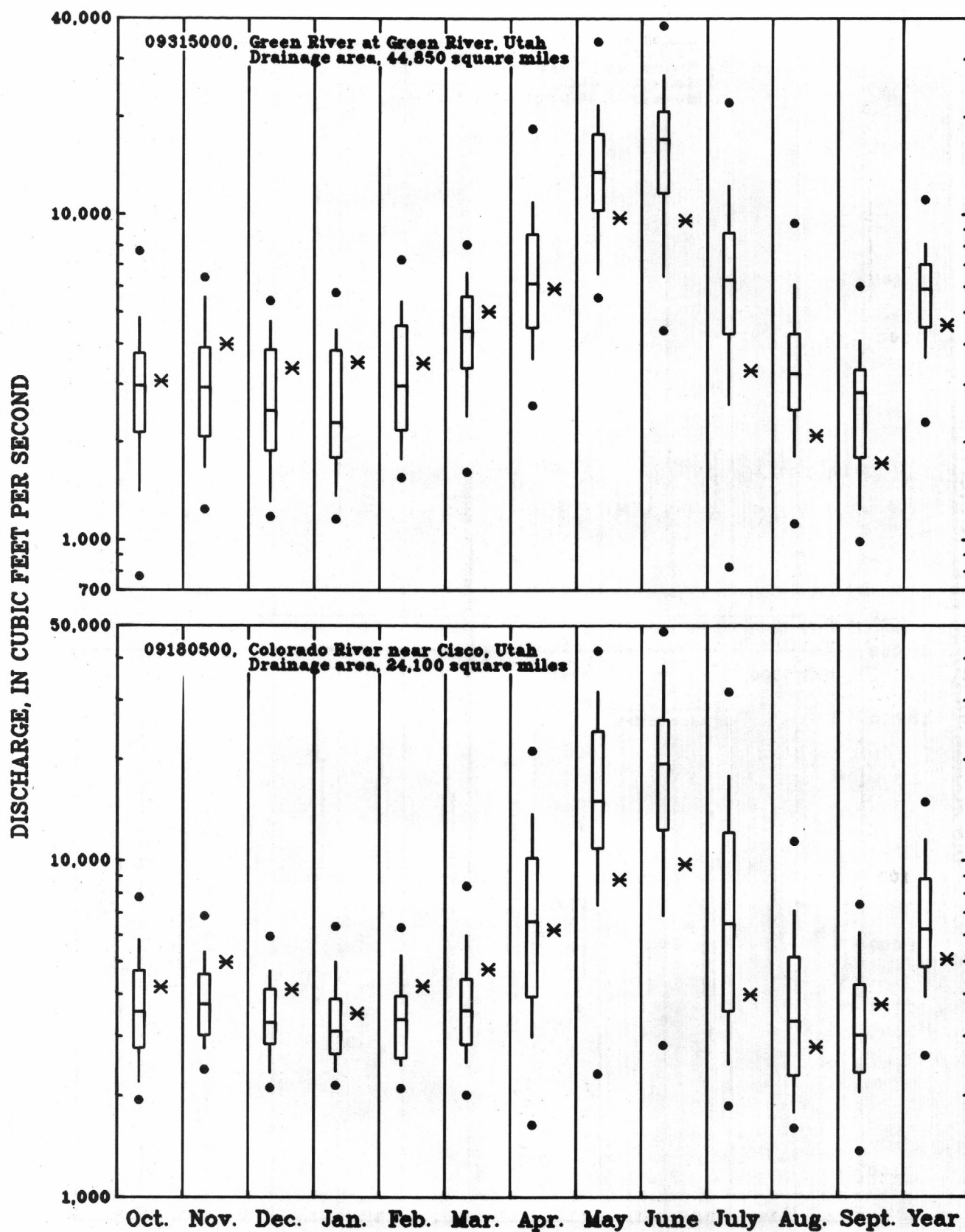


Figure 2.—Comparison of monthly and annual mean discharges for water year 1988 with monthly and annual mean discharges for water years 1946–85 at seven long-term, representative gaging stations—Continued.

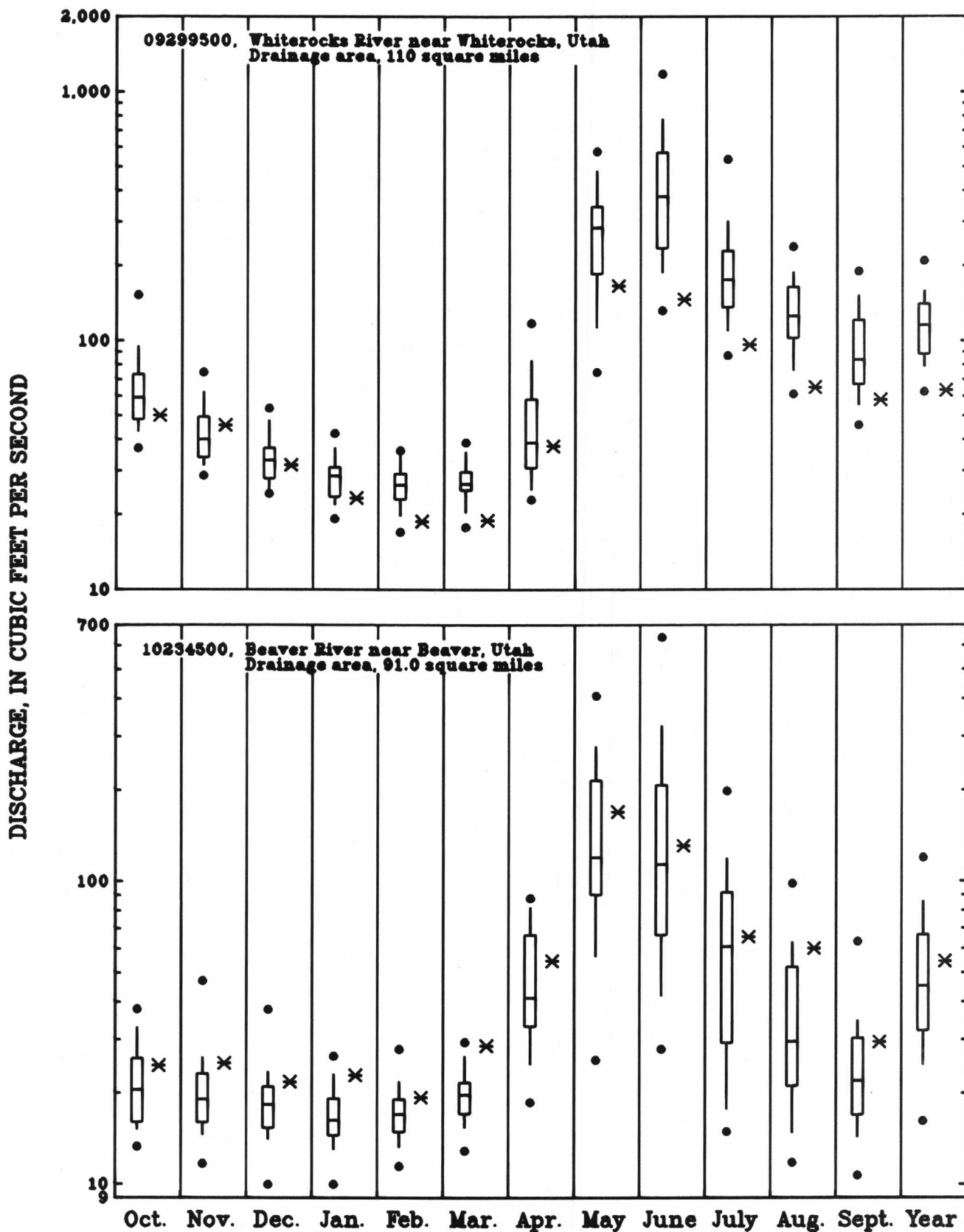


Figure 2.--Comparison of monthly and annual mean discharges for water year 1988 with monthly and annual mean discharges for water years 1946-85 at seven long-term, representative gaging stations--Continued.

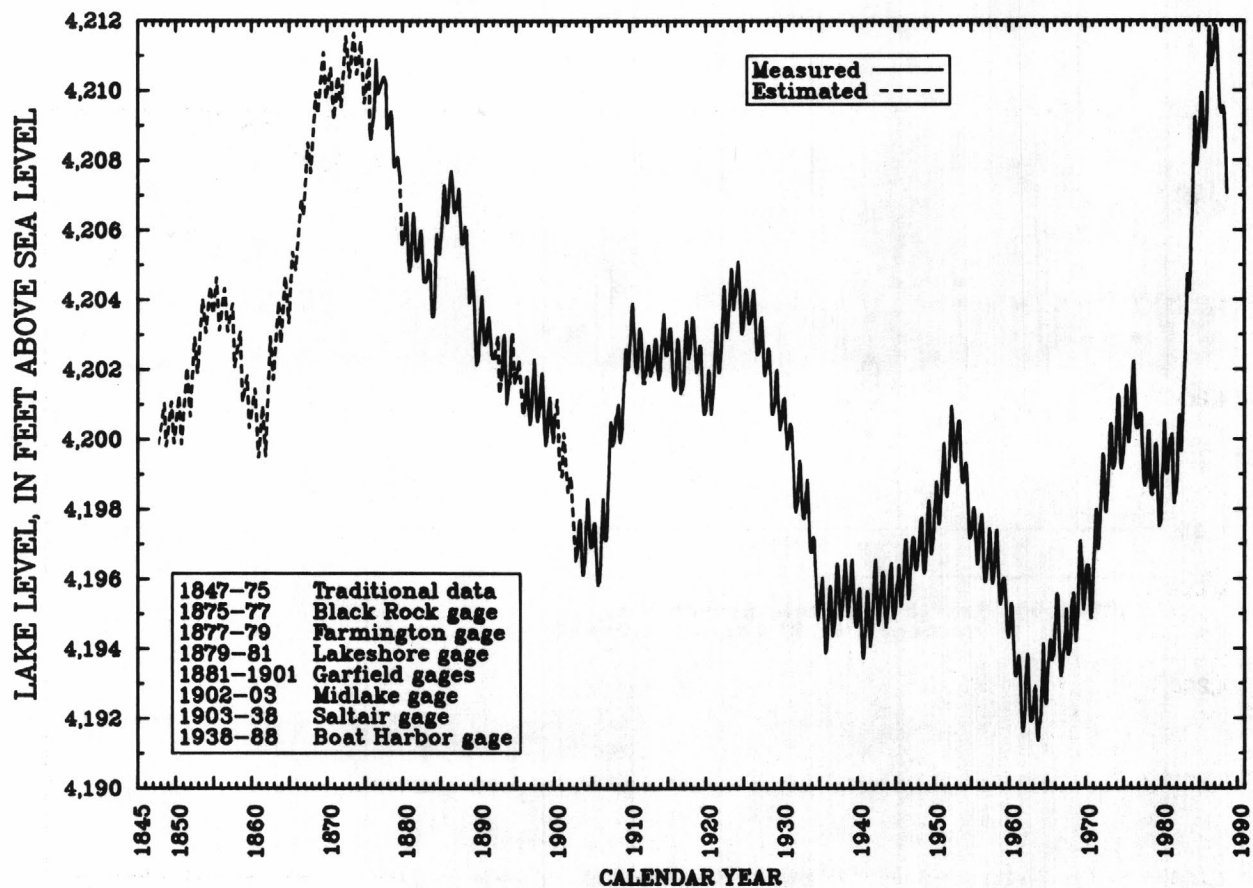


Figure 3.—Fluctuations in level of Great Salt Lake

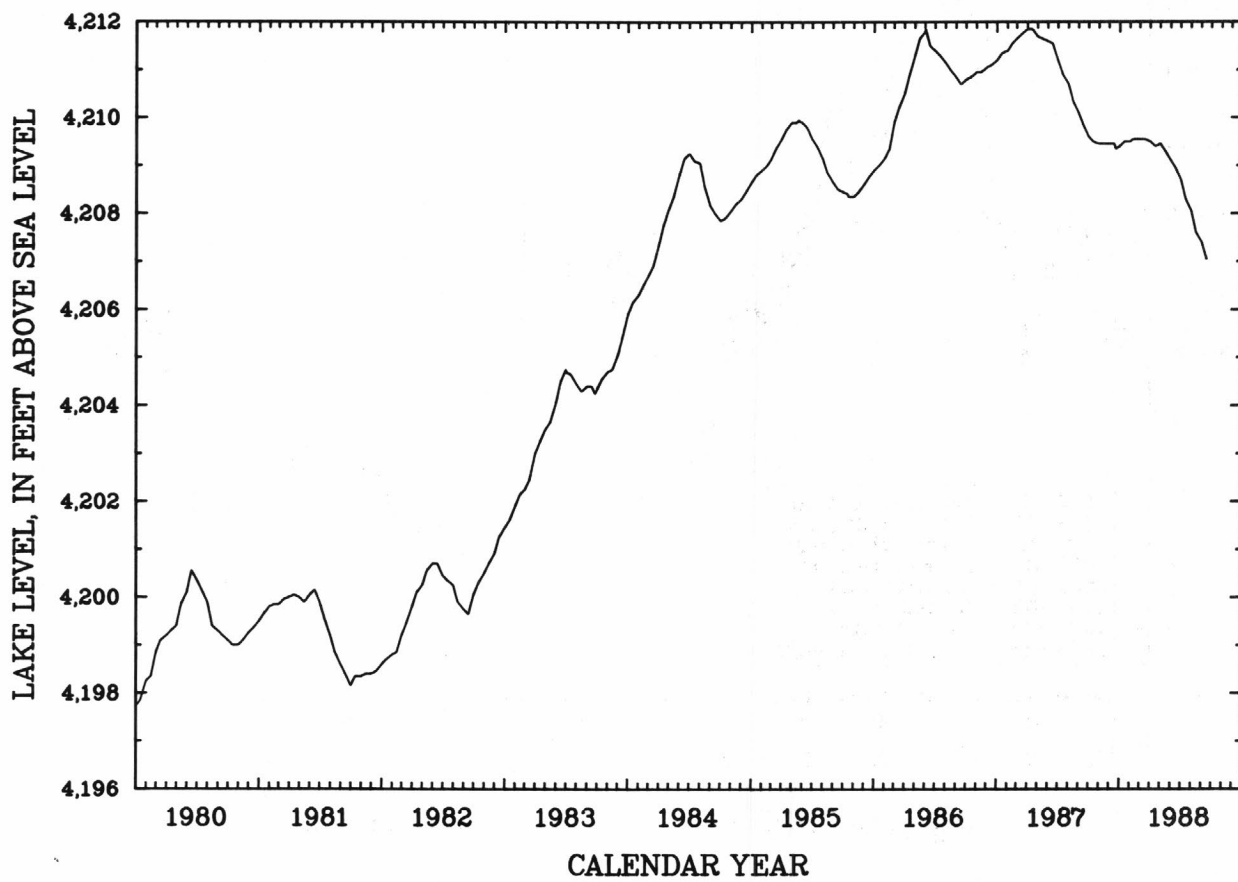


Figure 4.--Fluctuations in level of Great Salt Lake, 1980-88.

Summary of Surface-Water Studies

Several reports that include information on surface water in Utah were released or published during water year 1988. A brief description of each report is given in the following paragraphs.

A limited-detail flood-insurance study for Morgan County (R.C. Christensen and E.B. Johnson, U.S. Geological Survey, written commun., 1988) was completed, and results were forwarded to the Federal Emergency Management Agency (FEMA). The information, which included hydrology, flood potential, flood profiles, and maps showing the areas inundated by the 100-year flood, will be included in the final report published by FEMA.

A report on a reconnaissance investigation of water quality, bottom sediment, and biota associated with irrigation drainage in the Middle Green River basin (Stephens and others, 1988) focused on selenium concentrations in water and wildlife at the Stewart Lake Waterfowl Management Area and the Ouray National Wildlife Refuge near Vernal. At Stewart Lake, selenium concentrations ranged from 14 to 140 parts per billion in water from ground-water drains and ranged from 4.9 to 26 parts per million (as dry weight) in livers of coots. The average concentration in carp collected from the lake was 31 parts per million. Liver tissue from coots at North Roadside Pond, Ouray National Wildlife Refuge, contained average selenium concentrations of 32 parts per million, which is in the range of concentrations found to be harmful to waterfowl at Kesterson National Wildlife Refuge in California.

Hydrologic data collected in Pahvant Valley and the southern part of the Sevier Desert from 1909 to 1987 are presented in a report by Susan A. Thiros (1988). In addition to information about wells including well completions, drillers' logs, water levels, flowing-well discharges, and chemical quality; the report presents data on discharge, temperature, specific conductance, and chemical quality at selected surface-water sites.

An increased demand for water for coal mining in southwestern Utah prompted a study of the geohydrology of the Navajo Sandstone in western Kane, southwestern Garfield, and southeastern Iron Counties (Freethy, 1988). In the study area, precipitation recharges to the ground-water reservoir along outcrops of the Navajo Sandstone at rates from 0.1 to 2.8 inches per year. The general direction of lateral ground-water movement is from the outcrop areas toward the incised canyons formed by tributaries of major drainages. Additional data will be required to determine the hydrology of the buried part of the Navajo Sandstone in the northern part of the area.

WATER QUALITY

MONITORING PROGRAM FOR

THE WEST DESERT PUMPING PROJECT, UTAH,

APRIL 1987-APRIL 1988

by Carole B. Burden

Introduction

During the 1986 water year, the level of Great Salt Lake reached an historic high of 4,211.85 feet above sea level. High water levels caused flooding around the perimeter of the lake. To combat the rising waters, the State used two lake-level control measures. The first consisted of installing a 300-foot wide breach in the Southern Pacific Railroad causeway. The second control measure, the West Desert Pumping Project, was designed to pump water from Great Salt Lake to an area of the Great Salt Lake Desert, the West Pond, where additional water-surface area would produce a net increase in evaporation.

The West Pond occupies a natural basin in the Great Salt Lake Desert that is partly bounded by the Bonneville Dike (south of Floating Island) and the Newfoundland Dike (south of the Newfoundland Mountains) (fig. 5). When the West Pond is filled to its capacity elevation of 4,216.5 feet above sea level, its maximum depth is about 7 feet, and it covers about 320,000 acres. The rate of inflow to the West Pond is the rate of pumpage from the lake, and the rate of outflow is controlled by elevation of the weir at the Newfoundland Dike, where brines can be released for return to Great Salt Lake. The U.S. Geological Survey monitors the level of the pond with a lake-elevation gage located near the outlet weir on the north end of the Newfoundland Dike (fig. 5). The water in the pond is also sampled monthly and analyzed for the major ions.

Monitoring Program

To determine the salt balance of the West Pond and Great Salt Lake, the quantity of brine pumped from Great Salt Lake into the West Pond, the quantity pumped from the West Pond by AMAX Magnesium Corporation (AMAX) (which has a solar-evaporation pond complex at the southern end of the pond), and the quantity stored in the pond were monitored from April 1987 to April 1988. In addition, wells were installed along the Newfoundland and Bonneville Dikes to monitor ground-water levels and quality, which could be affected by storage of brines in the West Pond.



EXPLANATION

●
7add 1,2,3

OBSERVATION WELL CLUSTER—First number and letters are reference to location. (See p. 29 for explanation of well-numbering system.) Last numbers refer to each of three wells in cluster: one shallow, one intermediate depth, and one deep well in each cluster

22ΔS

SITE IN WEST POND OF MEASUREMENTS OF TEMPERATURE AND SPECIFIC GRAVITY, APRIL 4-6, 1988—S indicates sample collected for complete chemical analysis

Figure 5.—West Pond area and data-collection sites.

Determination of Salt Loads

Brine is pumped to the West Pond from Great Salt Lake by three large pumps that have a combined pumping capacity of about 3,600 cubic feet per second. The volume of brine per month pumped to the West Pond was obtained from monthly reports prepared by Eckhoff, Watson, and Preator Engineering (EWPE) (1987-88). The dissolved-salt load entering the West Pond each month was computed from the product of the monthly volume of brine, in acre-feet, and the average concentration of dissolved solids in the brine for a given month, in tons per acre-foot. It was estimated that about 330,000,000 tons of salt was pumped from Great Salt Lake from April 1987 to April 1988.

Outflow from the West Pond is controlled by a 300-foot-long weir in the Newfoundland Dike. Outflow does not occur on a regular basis. Estimates made from information supplied by EWPE (written commun., June 15, 1988) indicated that 97,500 acre-feet of brine passed through the Newfoundland weir during November and December 1987. The total weight of salt leaving the West Pond by the weir was estimated to be about 33,400,000 tons, or about 10 percent of the salt that was pumped from Great Salt Lake.

Withdrawals of brine by AMAX Magnesium Corporation began on January 21, 1988. Pumping records supplied to EWPE by AMAX indicate that about 50,000 acre-feet of brine was pumped from the West Pond into the AMAX system from January 21 to April 6, 1988. About 12,500,000 tons of salt was estimated to have been withdrawn from the West Pond by AMAX, or about 3.8 percent of the total salt pumped from Great Salt Lake.

Evaporation causes the salinity in the West Pond to increase. Salinity in the pond is least to the north, where the pumped brine enters from the inlet canal (fig. 5), and is greatest at the southern end and at the weir in the Newfoundland Dike. The West Pond has been sampled twice for the purpose of estimating the quantity of salt stored in the pond. The first sampling was carried out by EWPE from a helicopter on December 10, 1987, and the second was from an air boat by the Utah Geological and Mineral Survey and the U.S. Geological Survey on April 4-6, 1988. During the second sampling, samples were collected at 24 sites on the West Pond (fig. 5), and field measurements of specific gravity and temperature of the brine were made.

The salt load contained in the West Pond was estimated by computing the loads for each section of the pond. Because the brine was vertically stratified, it was necessary to compute incremental loads for 1-foot sublayers within each section. The salt load for a sublayer was computed, and the total salt load for each section was calculated. Loads for all sections of the pond were then summed; 185,000,000 tons of dissolved salt was estimated in the West Pond on April 6, 1988. These salt load estimates are preliminary. Potential sources of error in the total salt load estimates may be reduced with the collection of additional data.

The salt in the brines of the West Pond is about 56 percent of the quantity of salt pumped from Great Salt Lake. Salt dissolved in Great Salt Lake prior to the pumping project was estimated to be about 4,900,000,000 tons; the salt load calculated for the West Pond from sampling in December 1987 and April 1988 was about 3.8 percent of the salt contained in Great Salt Lake.

The unsaturated sediments beneath the floor of the West Pond probably were saturated during the filling of the pond. The area inundated by outflow through the Newfoundland weir also served as a medium for storage of brine. Using data from EWPE, the U.S. Geological Survey, and others, it was estimated that the salt load which went into ground-water storage in the sediments beneath the West Pond ranged from 4,600,000 to 10,100,000 tons, and in the area inundated by outflow, the salt load ranged from 1,030,000 to 2,260,000 tons. Thus, the total salt load stored in the sediments ranged from 5,600,000 to 12,400,000 tons, which represents 1.7 to 3.8 percent of the salt pumped from Great Salt Lake.

Salt Balance of the West Pond

A salt budget was prepared using data collected during April 1987 to April 1988. The quantity of salt in the brine pumped into the West Pond during this period should approximate the salt in brine stored in the pond in April 1988, plus that which was removed from the pond by flow through the Newfoundland weir, withdrawn by AMAX Magnesium Corporation, or infiltrated to the shallow water table and added to ground-water storage. An accounting of the salt tonnage, showing the salt estimates and estimates adjusted for possible error, is shown in table 1.

The estimate in table 1 indicates that about 94,500,000 tons, or 29 percent of the salt in brine that was pumped from Great Salt Lake, is not accounted for by the budget calculations. Estimates adjusted for possible error to produce the smallest estimated inflow and the largest estimated outflows indicate that at least about 23,000,000 tons, or about 7 percent of the salt, is not accounted for in the budget.

Table 1.—Salt budget for West Pond,
April 1987 to April 1988

	Salt estimate, in tons	Salt estimate adjusted for possible error to provide a minimum value of unaccounted salt, in tons
Pumped from Great Salt Lake	330,000,000	314,000,000
West Pond storage April 6, 1988	185,000,000	235,000,000
Newfoundland weir outflow	33,400,000	
AMAX Magnesium Corporation withdrawal	12,500,000	
Ground-water storage	4,600,000	10,100,000
Unaccounted salt	94,500,000	23,000,000

Effects of West Pond on Ground Water

A major concern of the U.S. Bureau of Land Management (which administers the Federal lands in the affected area, west of the Bonneville Dike), as well as salt-extraction companies that use the shallow, briny ground water west of the pond, was that the brine stored in the pond would infiltrate to the shallow ground-water system and move westward in the subsurface, changing the chemical composition of the existing brines. To monitor changes that might occur because of the West Pond, eight clusters of observation wells were installed along the Bonneville and Newfoundland Dikes (fig. 5). Water levels and specific gravity of water in the wells were monitored monthly and samples of water for chemical analysis were collected quarterly.

Ground-Water Gradients

To determine the effect of the West Pond on ground-water gradients, hydrostatic pressures for the nine wells near the north end of the Bonneville Dike were computed for each month for which complete sets of water levels and specific-gravity values were available. The hydrostatic heads were computed, in equivalent feet of fresh water, and plotted. Equipotential lines were constructed for a section through the area where the wells are located (fig. 6). The equipotential contours for July 1987 indicated that the gradients were almost horizontal for a distance of about 400 feet west of the dike. By February 1988, however, a slight westward gradient, less than 1 foot per 400 feet, from the dike had developed, and by May the gradient had steepened to about 3 feet per 400 feet across the section. The highest level of the West Pond also occurred in May (fig. 7).

In June 1988, the level of the West Pond began to decrease. Although the gradient of equivalent fresh-water head was still westward from the dike at shallower depths (above an elevation of about 4,197 feet), the gradient was substantially less than that in May when the pond level was higher.

Chemical Composition

Although the West Pond apparently changed the gradients so that ground-water movement was westward from the Bonneville Dike, it is unlikely that pond brine has moved westward from the West Pond very far past the dike. The chemical composition of the brines in the pond is considerably different from that of the shallow ground water in the wells near the dike. The chemical composition of brine from the West Pond, ground water from a well near the Bonneville Dike, and ground water from a well several miles west near the Bonneville Salt Flats is shown in figure 8. The chemical composition of the water from the two wells is very similar but considerably different from that of the West Pond. The major differences are in the percentages of magnesium and sulfate. If changes in chemical composition of ground water were to occur west of the dike because of movement of brines from the pond, the percentages of magnesium and sulfate should increase with time. The variation of chemical composition of water from well (B-1-15)7cab-3 during June 1987 to July 1988 is shown in figure 9. This well is located about 125 feet west of the Bonneville Dike, and it is 30 feet deep. Even though the specific gravity (fig. 10) and concentration of dissolved solids fluctuated in water from this well, the chemical composition has not changed substantially, and there is no indication of an increasing trend in magnesium and sulfate concentrations.

Plans for Future Monitoring

Monitoring of the level and chemical quality of water in the West Pond and in observation wells near the dikes, as well as inflow and pumpage by AMAX, is continuing in 1989. However, if dry-weather trends in the northern part of the State continue and the level of Great Salt Lake remains the same or begins to drop, further pumping into the West Pond may be halted and the monitoring program discontinued.

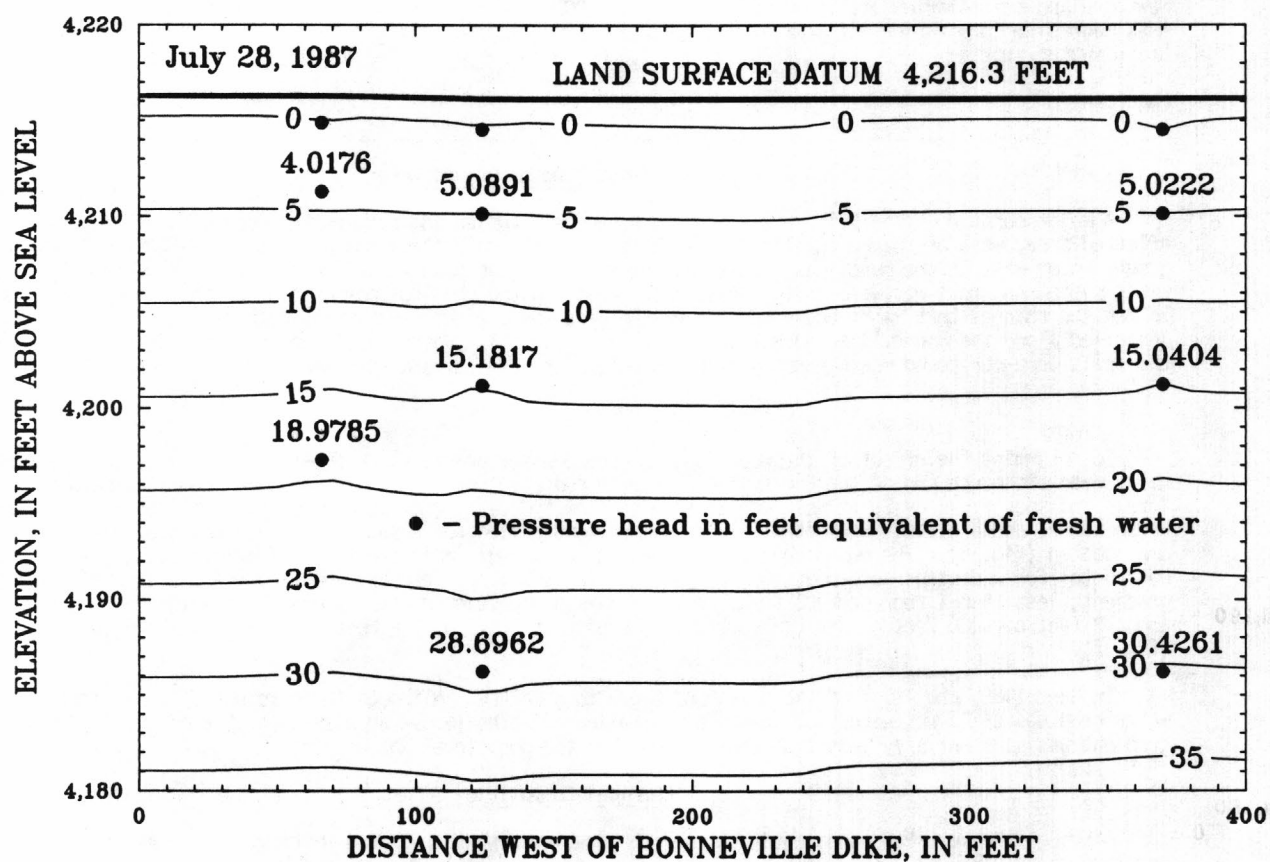


Figure 6.--Equipotential contours along a section west of the Bonneville Dike, July 1987 - September 1988.

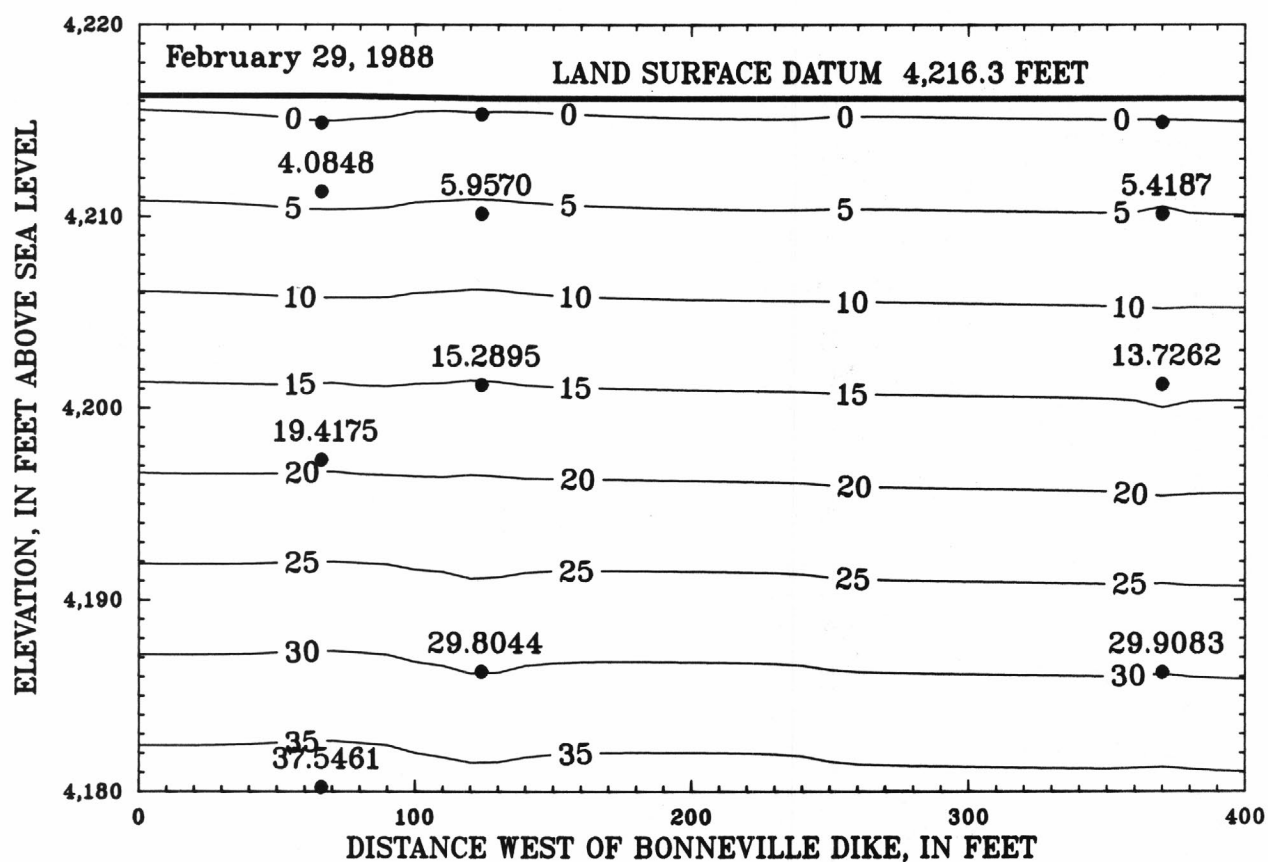


Figure 6.--Equipotential contours along a section west of the Bonneville Dike, July 1987 - September 1988 -- Continued

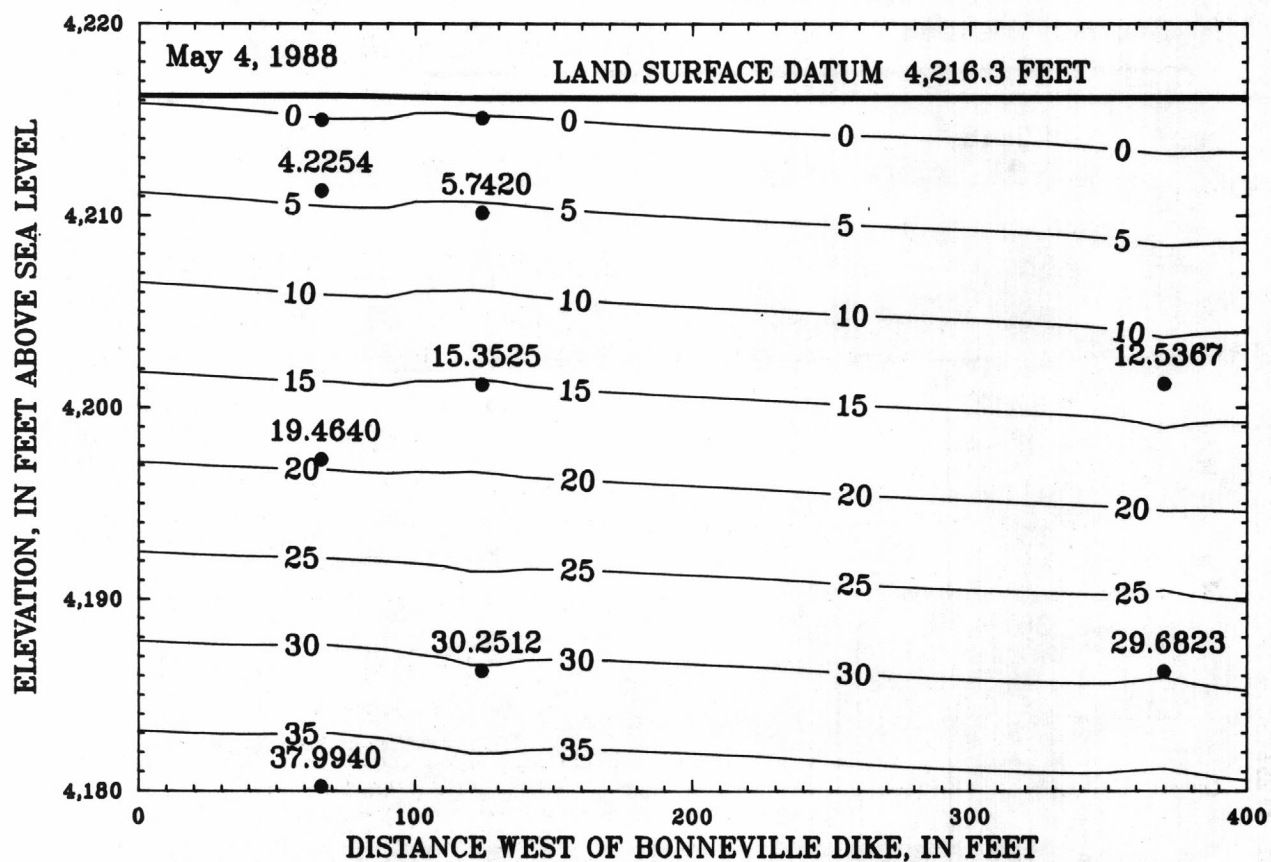


Figure 6.--Equipotential contours along a section west of the Bonneville Dike, July 1987 - September 1988 -- Continued

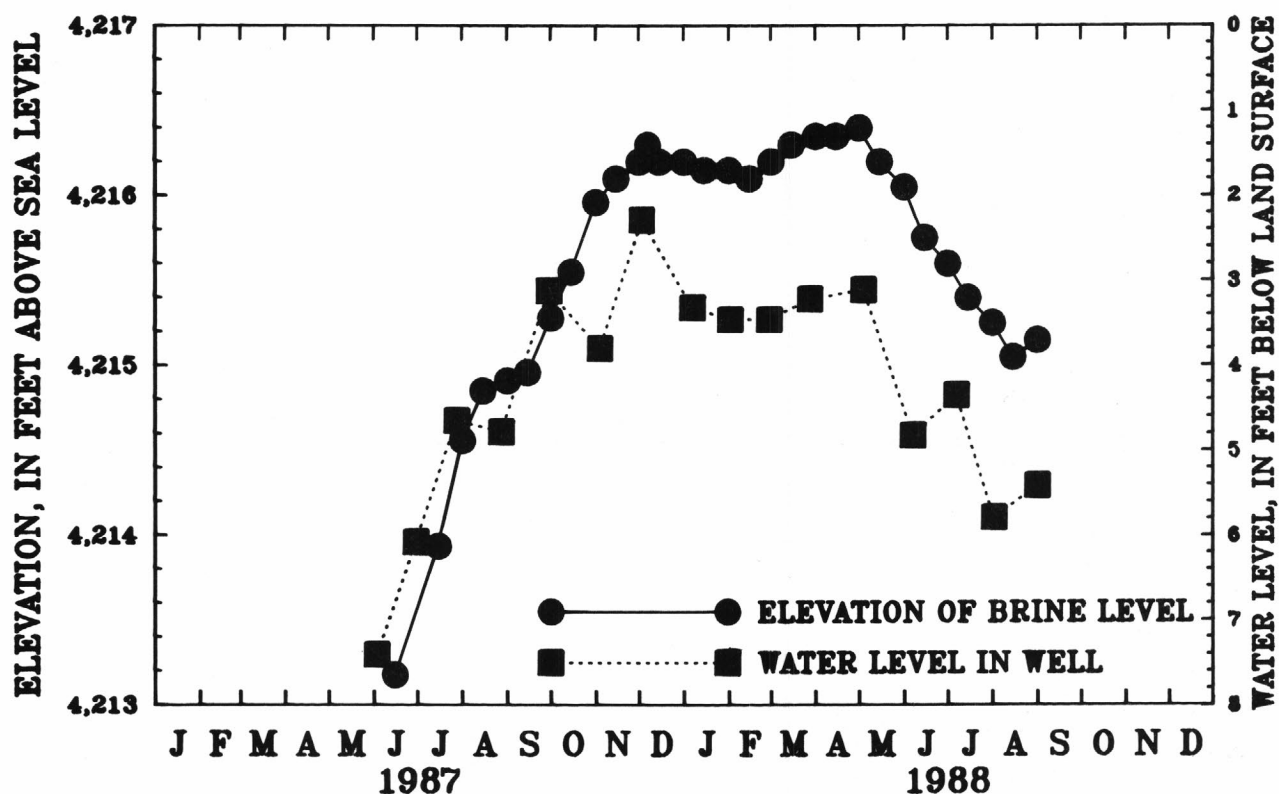


Figure 7.--Elevation of the brine level in the West Pond and water levels in well (B-1-15)7cab-3, 1987-88.

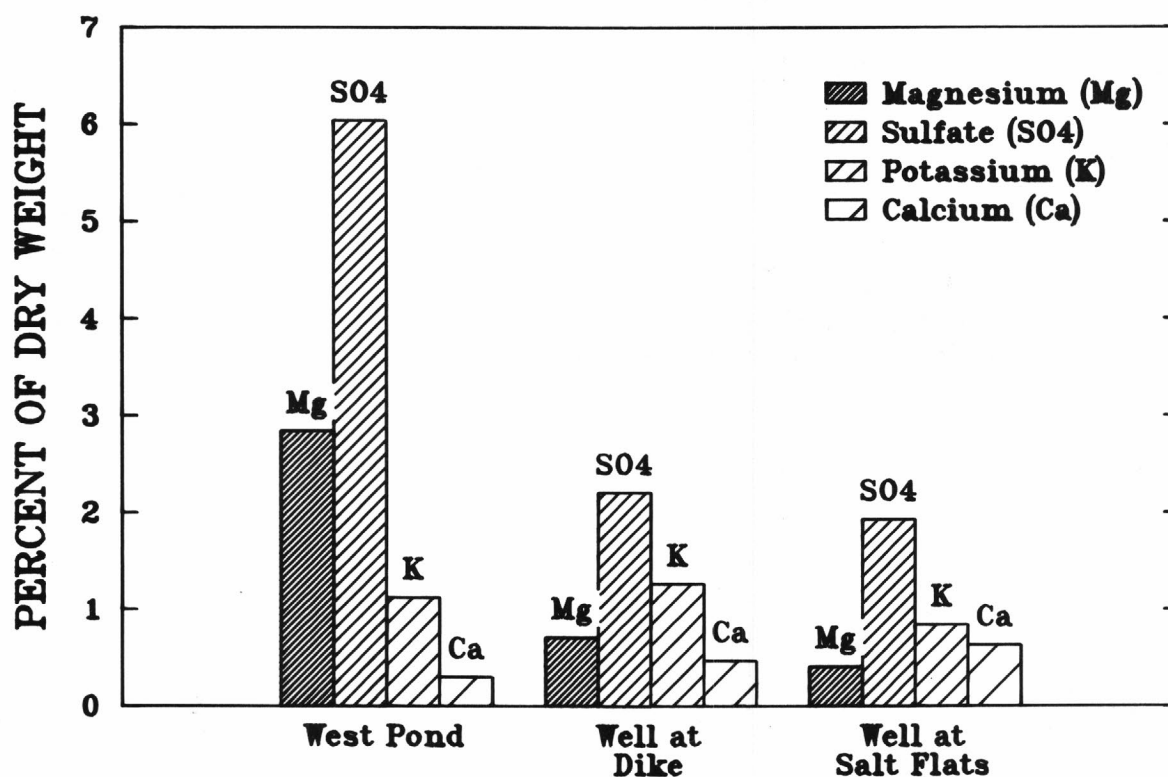


Figure 8.--Chemical composition of brine in West Pond and of ground-water at Bonneville Dike and in Salt Flats

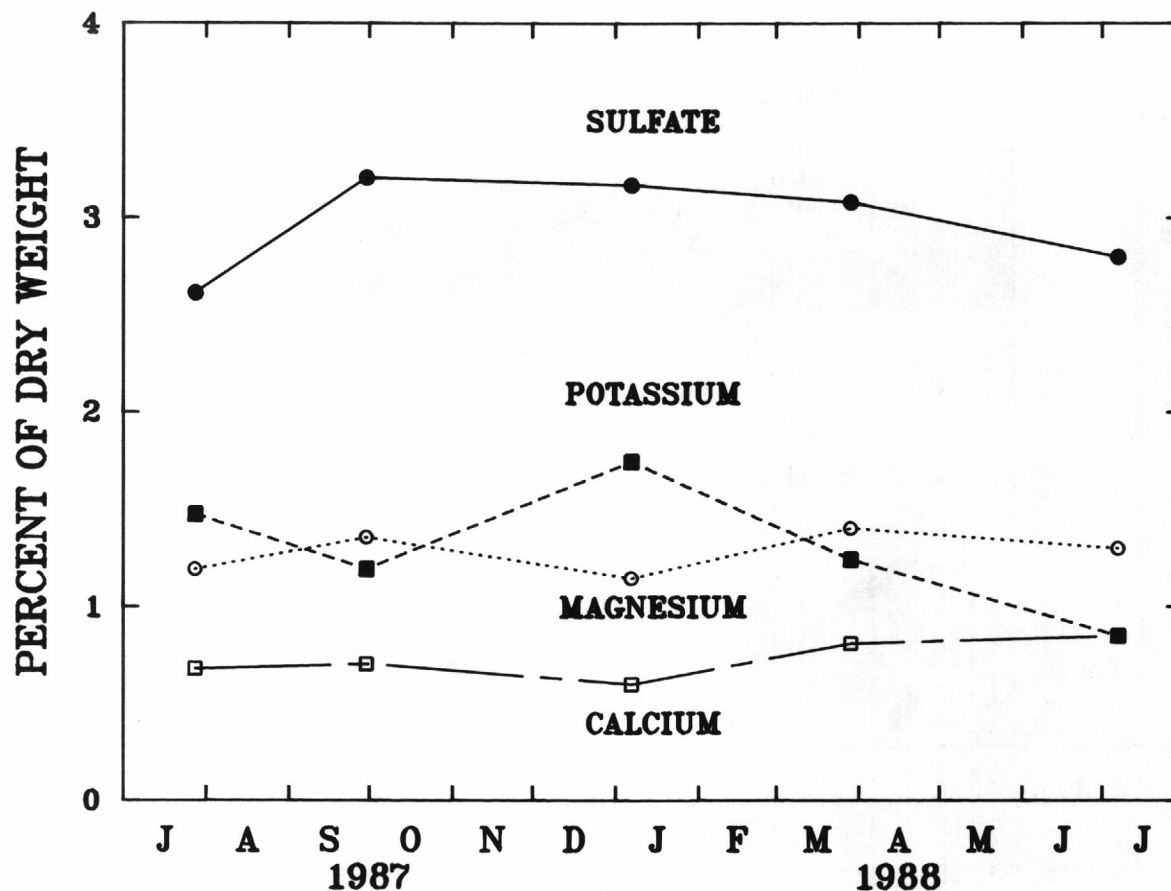


Figure 9.--Variation of chemical composition of water in well (B-1-15)7cab-3, July 1987 – July 1988.

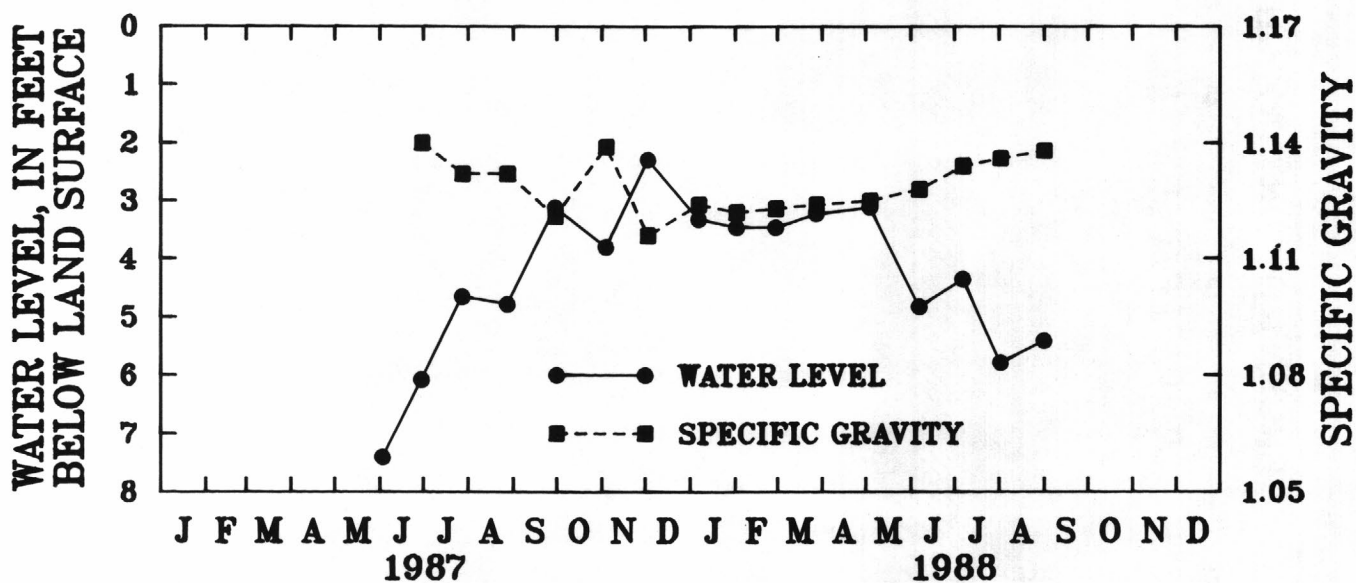


Figure 10.--Variation of water level and specific gravity, well (B-1-15)7cab-3 at Bonneville Dike, June 1987–September 1988.

GROUND WATER

By Gail E. Cordy

Summary of Conditions

According to a study completed in the spring of 1988 (Cordy and others, 1988, table 2), the estimated withdrawal of water from wells in Utah during calendar year 1987 was 773,000 acre-feet. This value is about 85,000 acre-feet or 12 percent more than the estimate for 1986 and about 15,000 acre-feet or 2 percent more than the average annual withdrawal for 1977-86. The increase in withdrawal was predominantly for irrigation and public supply. Withdrawal for irrigation was about 435,000 acre-feet, which is 42,000 acre-feet more than the estimate for 1986 (fig. 11). Public-supply withdrawal was about 191,000 acre-feet, an increase of 31,000 acre-feet from 1986. Other withdrawals, in acre-feet, for calendar year 1987 included: 79,000 for industry, 8,000 more than during 1986; and 65,000 for domestic and stock use, 1,000 more than during 1986. The areas of major ground-water development from which most of the ground water is withdrawn from wells in Utah are shown in figure 12. Other areas of less substantial ground-water development are also shown in figure 12.

The quantity of water withdrawn from wells is related to demand and availability of water from other sources, which in turn, are related to local climatic conditions. In general, as precipitation increases, greater supplies of surface water are available, and ground water-withdrawal decreases (fig. 11). Calendar year 1987 is the sixth consecutive year of generally greater than average precipitation in Utah, although greater than average precipitation was not so widespread as in the preceding five years.

Graphs of cumulative departure from average annual precipitation for 33 stations throughout Utah were shown by Cordy and others (1988). Of the 33 stations, 20 stations recorded precipitation for 1987 that was greater than the average annual value (positive departure). Most of the stations in southwestern and southeastern Utah had greater than average precipitation for 1987, with the largest positive departure, about 6 inches, recorded at Blanding. Less than average precipitation (negative departure) for 1987 was recorded at 13 stations, largely in the valleys of central Utah and along the Wasatch Range from Salt Lake City to Logan. The largest negative departure, about 8 inches, was recorded at both Pine View Dam, east of Ogden, and Silver Lake, east of Salt Lake City.

Of the 15 areas of major ground-water development in Utah (fig. 12), only Parowan Valley and the Milford area had decreases in ground-water withdrawals in 1987 compared to 1986. Withdrawals in the upper and central Sevier Valleys and the upper Fremont River Valley as well as the central Virgin River area were equal to 1986 estimates. For the areas of less substantial ground-water development, the combined total withdrawals were greater in 1987 than in 1986.

Withdrawals in 6 of the 15 areas of major ground-water development exceeded the 1977-86 annual average withdrawal, and withdrawals were less than or equal to the average in the remaining 9 areas. The combined total withdrawal in 1987 for other areas of less substantial development (fig. 12), was less than the 1977-86 average. The estimated withdrawal of water from wells in 1986 and 1987 and the 1977-86 average annual withdrawal for each of the 15 areas of major ground-water development and other areas in Utah combined are shown in the following table.

Area	Estimated withdrawals from wells, in acre-feet		
	1986 total	1987 total	1977-86 average annual
Curlew Valley	26,000	29,000	27,000
Cache Valley	23,000	26,000	26,000
East Shore area	66,000	67,000	47,000
Salt Lake Valley	104,000	122,000	116,000
Tooele Valley	21,000	22,000	26,000
Utah and Goshen Valleys	75,000	103,000	92,000
Juab Valley	10,000	22,000	15,000
Sevier Desert	11,000	15,000	22,000
Upper and central Sevier Valleys and upper Fremont River Valley	22,000	22,000	24,000
Pahvant Valley	60,000	66,000	70,000
Cedar Valley, Iron County	19,000	21,000	27,000
Parowan Valley	24,000	22,000	26,000
Escalante Valley			
Milford area	46,000	44,000	52,000
Beryl-Enterprise area	93,000	97,000	87,000
Central Virgin River area	20,000	20,000	20,000
Other areas	68,000	75,000	81,000
Totals (rounded)	688,000	773,000	758,000

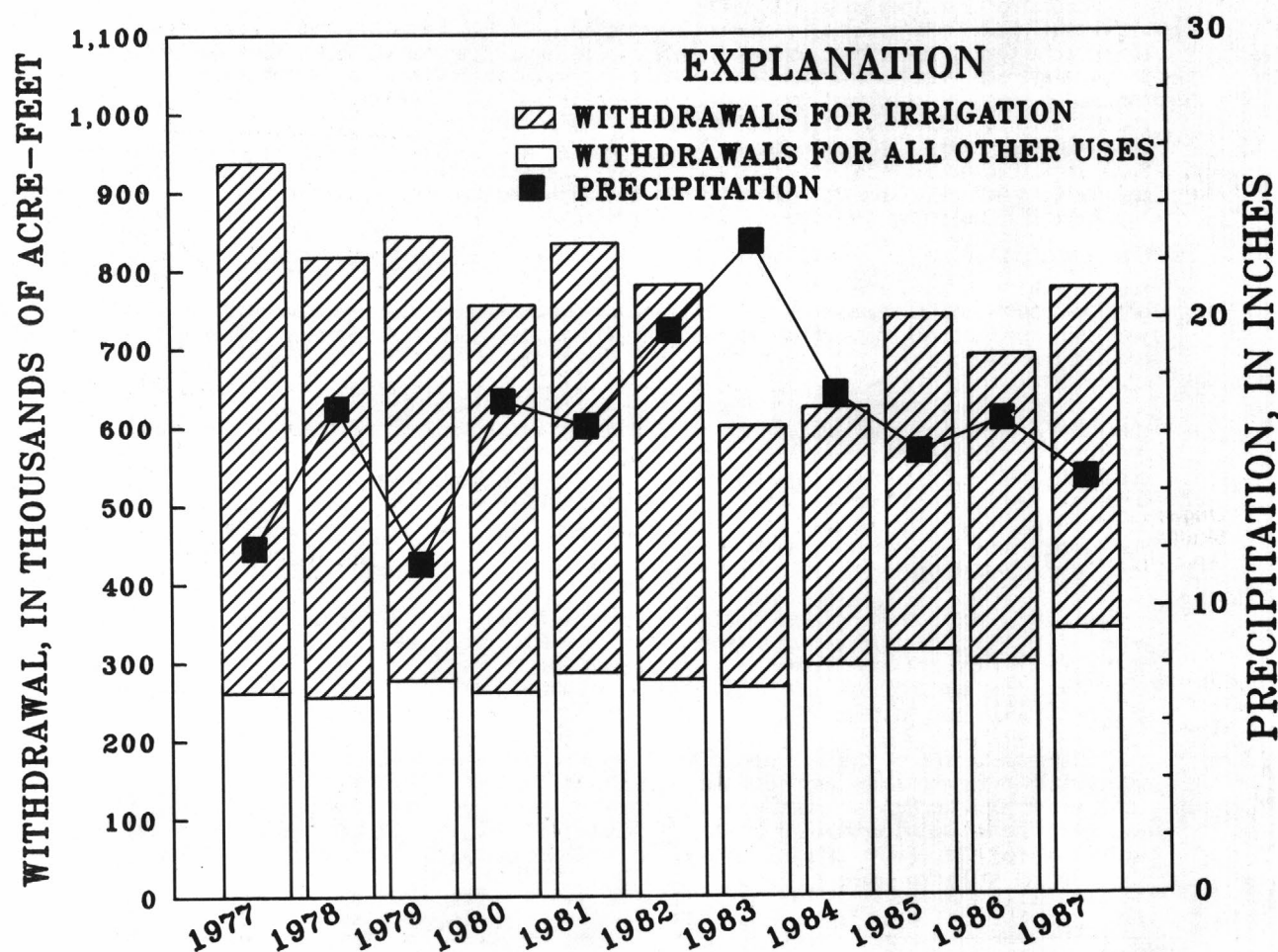
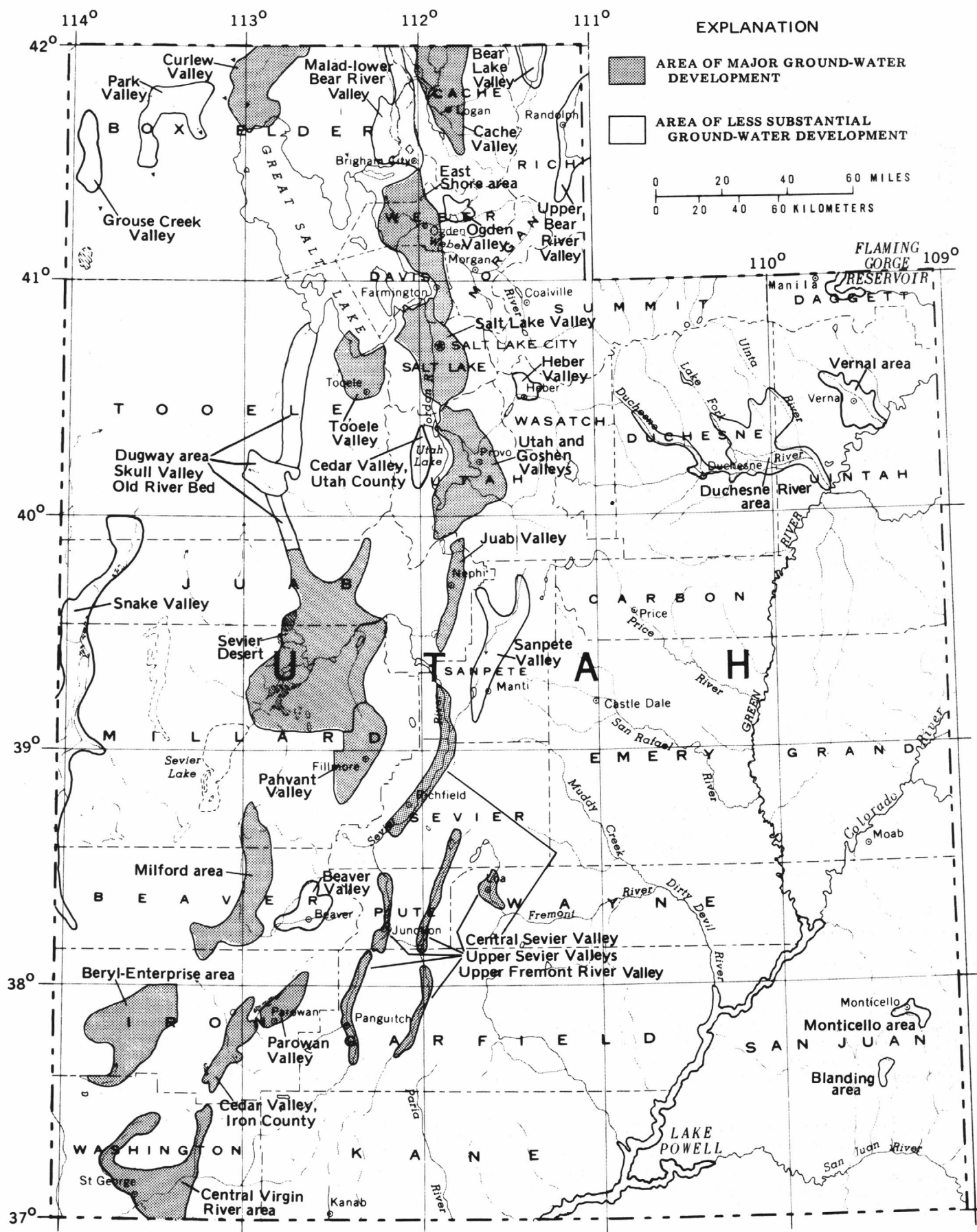


Figure 11.--Annual ground-water withdrawal in Utah and average annual precipitation for 33 climatic stations, calendar years 1977-87.

The number of wells drilled during calendar year 1987, as indicated by well-drillers' reports filed with the Utah Division of Water Rights, totaled 543 or 10 percent more than the number reported for 1986. However, only 159 wells were for new appropriations of ground water, and 98 were replacement wells. The remaining 286 wells include test wells and monitoring wells used for locating and studying ground water. Thirty wells of 12 inches or more in diameter were drilled in 1987 for public supply, irrigation, or industrial use.

Measurements of water levels in 776 wells during February and March 1988 indicate that water levels declined in about 80 percent of the wells when compared with measurements for a similar period in 1987. Declines occurred in more than 90 percent of the wells surveyed in Salt Lake, Tooele, Cache, and Juab Valleys and the East Shore and Beryl-Enterprise areas. Decreased precipitation and increased ground-water withdrawals in 1987 compared to 1986 probably are the causes of the water-level declines in these and other areas of the State.

Rises in water levels occurred in about 40 percent of the wells surveyed in Pahvant, Curlew, and Cedar (Iron Co.) Valleys, the central Virgin River area, the Sevier Desert (artesian aquifer), and in Utah and Goshen Valleys (water-table aquifer). Rises in water levels in these and other areas probably are related to local decreases in pumping caused by the local availability of greater supplies of surface water in 1987 than in 1986, or to increases in recharge caused by greater local precipitation in 1987 than in 1986, or a combination of both.



REFERENCES CITED

- Cordy, G.E., and others, 1988, Ground-water conditions in Utah, spring of 1988: Utah Department of Natural Resources Cooperative Investigations Report 28, 81 p.
- Chapman, William, and Sappington, Walter, 1986, Basin contours at northern section of Great Salt Lake Desert, Utah: U.S. Geological Survey Open-File Report 86-009, scale 1:96,000, 1 sheet.
- Eckoff, Watson, and Preator Engineering, 1987-88, West Desert pumping project--Monthly operations and environmental conditions report: Salt Lake City, Utah, unpublished monthly data reports.
- Freethy, G.W., 1988, Geohydrology of the Navajo Sandstone in western Kane, southwestern Garfield, and southeastern Iron Counties, Utah: U.S. Geological Survey Water-Resources Investigations Report 88-4040, 43 p.
- Stephens, D.W., Waddell, Bruce, and Miller, J.B., 1988, Reconnaissance investigation of water quality, bottom sediment, and biota associated with irrigation drainage in the Middle Green River basin, Utah, 1986-87: U.S. Geological Survey Water-Resources Investigations Report 88-4011, 70 p.
- Thiros, S.A., 1988, Selected hydrologic data for Pahvant Valley and adjacent areas, Millard County, Utah, 1987: U.S. Geological Survey Open-File Report 88-195, 151 p.
- U.S. Department of Agriculture, 1987, Utah water supply outlook and Federal-State-Private cooperative snow surveys: Salt Lake City, Utah, Soil Conservation Service, May 1, 1987.
- 1988, Utah water supply outlook and Federal-State-Private cooperative snow surveys: Salt Lake City, Utah, Soil Conservation Service, May 1, 1988.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting English units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equal to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warmblooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory, they are defined as all organisms that produce blue colonies hours when incubated at $44.5^{\circ}\text{C} + 0.2^{\circ}\text{C}$ on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestines of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as Gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms which produce red or pink colonies within 48 hours at $35^{\circ}\text{C} + 1.0^{\circ}\text{C}$ on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter micro-organisms, such as bacteria.

Chemical-oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure, as used in this report, is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic foot per second (Ft^3/s , ft^3/s) 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 or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

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

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a $0.45\ \mu\text{m}$ membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or non-contributing areas, within the area unless other-wise noted.

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 a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Epilimnion is the uppermost region of a stratified lake which is characterized as having water of nearly uniform temperature, and dissolved oxygen concentrations generally near saturation.

Eutrophic is a condition in which the water in the lake, pond, or reservoir is enriched with plant nutrients such as nitrogen and phosphorus which results in large amounts of plant and algal production. As the plants and algae die and sink to the bottom, an organic sediment is created which removes oxygen from the water as it decays.

Eutrophication is the natural process of enrichment and aging of a body of water that may be accelerated by the activities of man. Pertains to water bodies in which primary production of high because of a large supply of available nutrients.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents polyvalent cations and is expressed as the equivalent concentration of calcium carbonate (CaCO_3).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

Hypolimnion is the lower region of a stratified lake which is characterized as having water with cooler temperatures, and low to very low concentrations of dissolved oxygen.

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

Meso-eutrophic is intermediate stage in lake classification between the oligotrophic and eutrophic stages, in which primary production occurs at a greater rate than in oligotrophic lakes, but at a lesser rate than in eutrophic lakes. This is due to a moderate supply of nutrients.

Micrograms per liter (UG/L, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in solution as mass (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 mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L , and is based on the mass of dry sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a geodetic datum derived from a general adjustment of the the first-order level nets of both the United States and Canada, formerly called "MEAN SEA LEVEL."

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle-size is the diameter, in millimeters (mm), of a particle determined by either 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).

Particle-size classification used in this report agrees with recommendation 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
Silt004 - .062	Sedimentation
Sand062 - 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.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population in terms of types, numbers, mass or volume.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Sediment is solid material that originates mostly from disintegrated rocks and is transported 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 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.

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) \times discharge (ft^3/s) \times 0.0027.

Suspended-sediment load is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

Total sediment load or total load is a term which refers to the total sediment (bed load plus suspended-sediment load) that is in transport. It is not synonymous with total-sediment discharge.

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

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

Stage-discharge relation is the relation between gage height (stage) and volume of water, per unit of time, flowing in a channel.

Stratification is a natural process in which bodies of standing water become colder near the bottom and warmer near the surface. The two layers are separated by a thinner middle layer characterized by a rapidly changing temperature profile.

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 surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Surface area of a lake is that area outlined on the latest U.S.G.S topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the material retained on a 0.45-micrometer filter.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 m membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

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

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

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined all of the constituent in the sample.)

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross-section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1980, is called the "1980 water year".

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

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.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary entering between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indentation in a list of stations in the front of the report. Each indentation represents one rank. This downstream order and system of indentation show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in a series of 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 03041000, which appears just to the left of the station name, includes a 2-digit part number "03" plus the 6-digit downstream order number "041000."

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The 8-digit, downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The well and miscellaneous site number system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, and the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits are a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and miscellaneous site are the same, assign sequential numbers "01," "02," etc. as one would for wells. See figure 13.

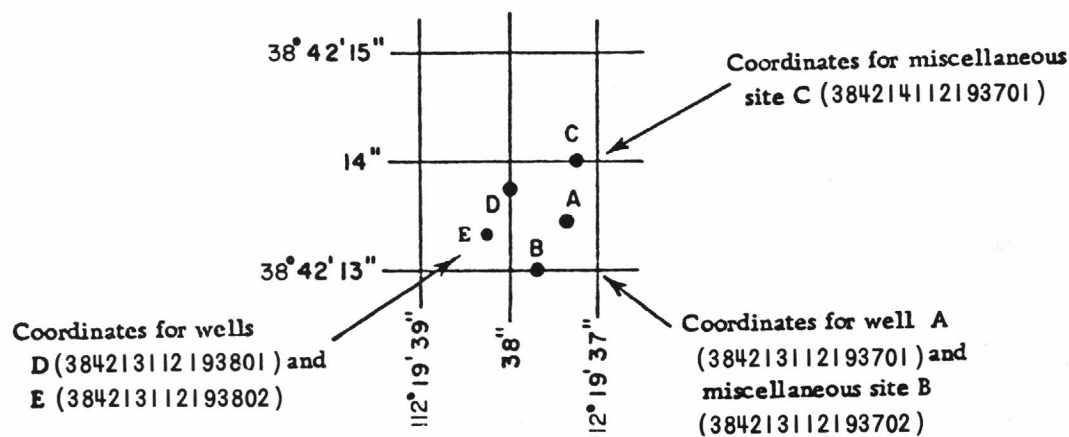


Figure 13.-- System for numbering wells and miscellaneous sites (latitude and longitude).

In addition to the well number that is based on latitude and longitude given for each well, another well number is given that is based on the U.S. Bureau of Land Management's system of land subdivision. This well number is familiar to the water users of Utah and shows the location of the well by quadrant, township, range, section, and position within the section. See figure 14. The capital letter at the beginning of the location number indicates the quadrant in which the well is located. Four quadrants are formed by the intersection of the base line and the principal meridian—A indicates the northeast quadrant, B the northwest, C the southwest, and D the southeast. 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 counter-clockwise 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 are inventoried. For example, (C-16-9)15daa-2 indicates a well in the northeast quarter of the southeast quarter of sec. 15, T.16 S., R.9 W., and shows that this is the second well inventoried in the quarter-quarter-quarter section. The capital letter C indicates that the township is south of the Salt Lake Base Line and that the range is west of the Salt Lake Meridian.

In addition to the Salt Lake Base Line and Salt Lake Meridian, which apply to most of Utah, the Uintah Base Line and Meridian are the basis for describing locations in a small, irregularly shaped area of northeastern Utah. The quadrants, townships, ranges, sections, and parts of sections are designated in the same way as for the Salt Lake Base Line and Meridian. For any location in the Uintah area, however, the letter "U" precedes the parenthesis.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is a network of sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National stream-quality accounting network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS

Collection and Computation of Data

The base data collected at gaging stations (fig. 15) consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, Book 3, Chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams and weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying

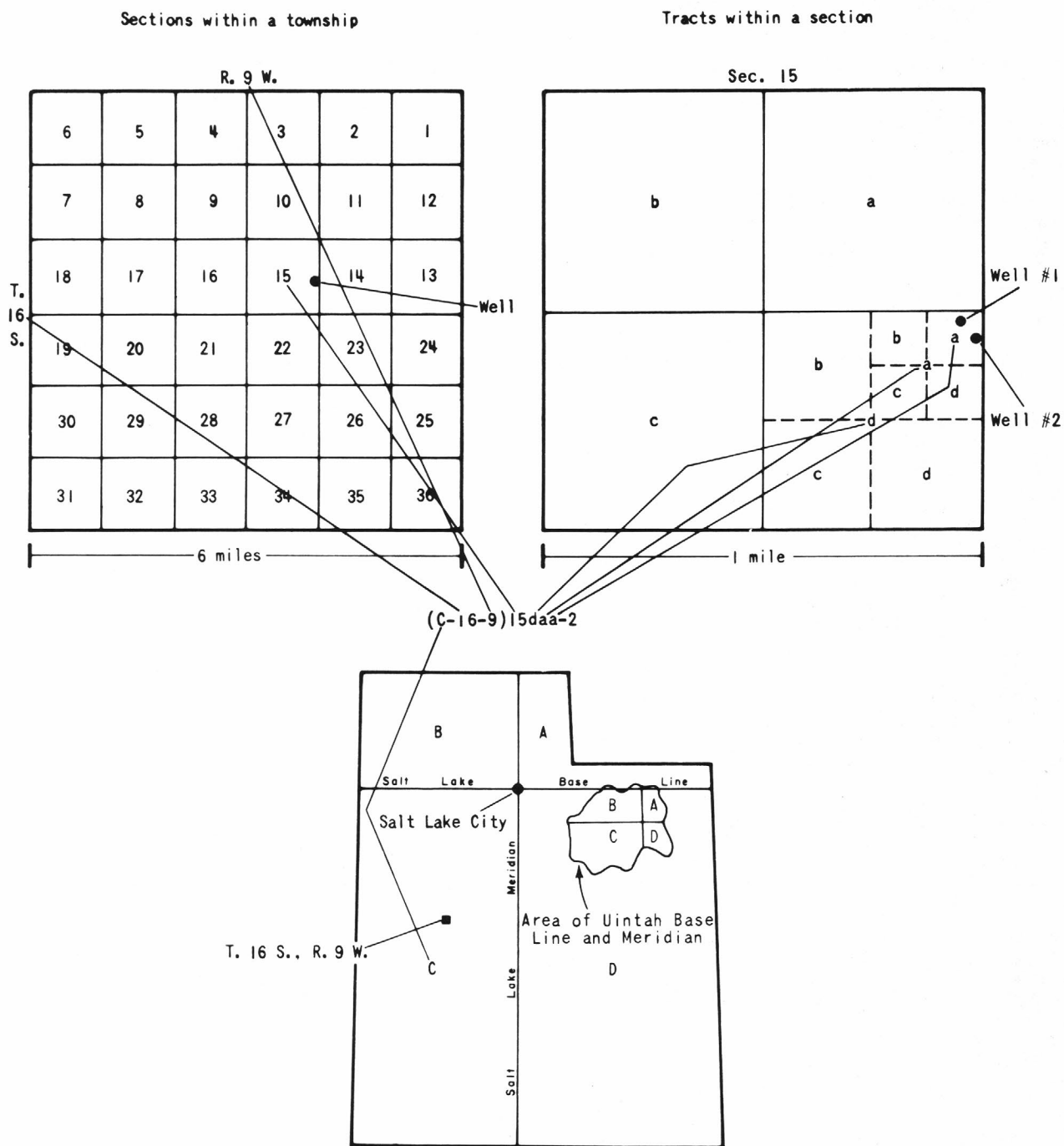


Figure 14.-- System for numbering wells (township and range).

the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations, the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some northern stream-gaging stations the stage-discharge relation is affected by ice in the winter, and computation of the discharge in the usual manner is impossible. Discharge for periods of ice effect is computed on the basis of gage height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys, the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise, daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station tabulations of the daily and monthly figures. For gaging stations on streams or canals, a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs, a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year which begins on October 1 and ends on September 30.

The description of the gaging stations gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information obtained later. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water years October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. For all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use, the datum of the present gage referred to National Geodetic Vertical Datum of 1929; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum of 1929 is explained in "DEFINITION OF TERMS" on page 23.

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations, information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than percent. Under "EXTREMES," the extremes for the period of record are given first, information available outside the period of record is given second, and those for the current year are given last. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. Peak discharges for some stations are listed with "EXTREMES FOR THE CURRENT YEAR"; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

Skeleton rating tables are published, immediately following "EXTREMES," for stream-gaging stations where they serve a useful purpose and the dates of applicability can be easily identified.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage relation, or if any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

Discharge measurements made at sites other than continuous-record stations are listed in a single table.

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

Accuracy of Field Data and Computed Results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good," within 10 percent; and "fair," within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubicfeet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a

reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Data Available

Information of a more detailed nature than that published for most of the gaging stations such as discharge measurements, gage-height records, and rating tables is available from the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

Records of Discharge Collected by Agencies

Other Than the Geological Survey

Records of discharge not published by the Geological Survey, but for which an index is maintained by the Office of Water Data Coordination, were collected in Utah at 25 sites during the 1986 water year by the following agencies: Records at 13 sites were collected by the U.S. Forest Service, at 4 sites by the Weber River Distribution System; and at 2 sites by the Salt Lake County Water Conservancy District; and at 1 site each by the following: Ogden River Water Users, Clear Lake Waterfowl Management Area, Metropolitan Water District of Salt Lake City, Utah Department of Natural Resources, U.S. Army Corps of Engineers, and U.S. Bureau of Reclamation. The Office of Water Data Coordination, Water Resources Division, U.S. Geological Survey, Reston, Virginia 22092, maintains an index of these sites. Information on records of specific sites can be obtained from that office upon request.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

Surface-water samples for analyses usually are collected at or near gaging stations (fig. 16). The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, water temperature, sediment discharge, etc.); extremes for the current year; and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, date of sampling, or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water Analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

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 mixing of the stream. Some streams must be sampled at several verticals to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum and minimum values for each constituent measured, and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record.

Specific conductance and temperature only were measured at 141 stations in Utah, usually at 1-month intervals (fig. 17). In the tables on pages 316 to 338 a few data are shown as 50 (less than) micromhos or 8,000 (more than) micromhos. Discharge records and detailed information on locations of these stations are given in this report.

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once daily, the water temperatures are taken at about the same time each day. Large streams have a small diel 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 recording instruments are used, maximum and minimum temperatures for each day are published.

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). 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 data 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.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the Data

Only ground-water level data from selected wells with continuous recorders from a basic network of observation wells are published herein (fig. 18). This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. (See figures 13 and 14.)

Measurements are made in many types of wells, under varying conditions of access and at different temperatures; hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to either the National Geodetic Vertical Datum of 1929 or land-surface datum (lsd). National Geodetic Vertical Datum of 1929 is the datum plane on which the National network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum above the National Geodetic Vertical Datum of 1929 is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (EOM).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

ACCESS TO WATSTORE DATA

The National WATER Data STORAGE and RETRIEVAL System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey as its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's district offices (see address given on the back of the title page).

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

- 1-D1. Water temperature--influential factors, field measurement, and data presentation, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. Guidelines for collection and field analysis of ground-water samples for selected unstable constituents, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. Application of surface geophysics to ground-water investigations, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-E1. Application of borehole geophysics to water-resources investigations, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 3-A1. General field and office procedures for indirect discharge measurements, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. Measurement of peak discharge by the slope-area method, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. Measurement of peak discharge at culverts by indirect methods, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. Measurement of peak discharge at width contractions by indirect methods, by H. J. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. General procedure for gaging streams, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. Stage measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. Discharge measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. Measurement of time of travel and dispersion in streams by dye tracing, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.
- 3-A10. Discharge ratings at gaging stations, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. Measurement of discharge by moving-boat method, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A12. Fluorometric procedures for dye tracing, by J. F. Wilson, Jr., E. D. Cobb, and F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 41 pages.
- 3-A13. Computation of continuous records of streamflow, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. Use of flumes in measuring discharge, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. Computation of water-surface profiles in open channels, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-A16. Measurement of discharge using tracers, by F. A. Kilpatrick and E. D. Cobb: USGS--TWRI Book 3, Chapter A16. 1985. 52 pages.
- 3-A17. Acoustic velocity meter systems, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.
- 3-B1. Aquifer-test design, observation, and data analysis, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

- 3-B2. Introduction to ground-water hydraulics, a programed test for self-instruction, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. Type curves for selected problems of flow to wells in confined aquifers, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-B5. Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems--An introduction, by O. L. Franke, T. E. Reilly, and G. D. Bennett: USGS--TWRI Book 3, Chapter B5. 1987. 15 pages.
- 3-B6. The principle of superposition and its application in ground-water hydraulics, by T. E. Reilly, O. L. Franke, and G. D. Bennett: USGS--TWRI Book 3, Chapter B6. 1987. 28 pages.
- 3-C1. Fluvial sediment concepts, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. Field methods for measurement of fluvial sediment, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. Computation of fluvial-sediment discharge, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. Some statistical tools in hydrology, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. Frequency curves, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. Low-flow investigations, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. Storage analyses for water supply, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. Regional analyses of streamflow characteristics, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. Computation of rate and volume of stream depletion by wells, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. Methods for determination of inorganic substances in water and fluvial sediments, by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.
- 5-A2. Determination of minor elements in water by emission spectroscopy, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
- 5-A3. Methods for analysis of organic substances in water, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.
- 5-A4. Methods for collection and analysis of aquatic biological and microbiological samples, edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.
- 5-A5. Methods for determination of radioactive substances in water and fluvial sediments, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-A6. Quality assurance practices for the chemical and biological analyses of water and fluvial sediments, by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.
- 5-C1. Laboratory theory and methods for sediment analysis, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 6-A1. A modular three-dimensional finite-difference ground-water flow model, by M. G. McDonald and A. W. Harbaugh: USGS--TWRI Book 6, Chapter A1. 1988. 586 pages.
- 7-C1. Finite difference model for aquifer simulation in two dimensions with results of numerical experiments, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. Computer model of two-dimensional solute transport and dispersion in ground water, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
- 7-C3. A model for simulation of flow in singular and interconnected channels, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.
- 8-A1. Methods of measuring water levels in deep wells, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. Installation and service manual for U.S. Geological Survey manometers, by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
- 8-B2. Calibration and maintenance of vertical-axis type current meters, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

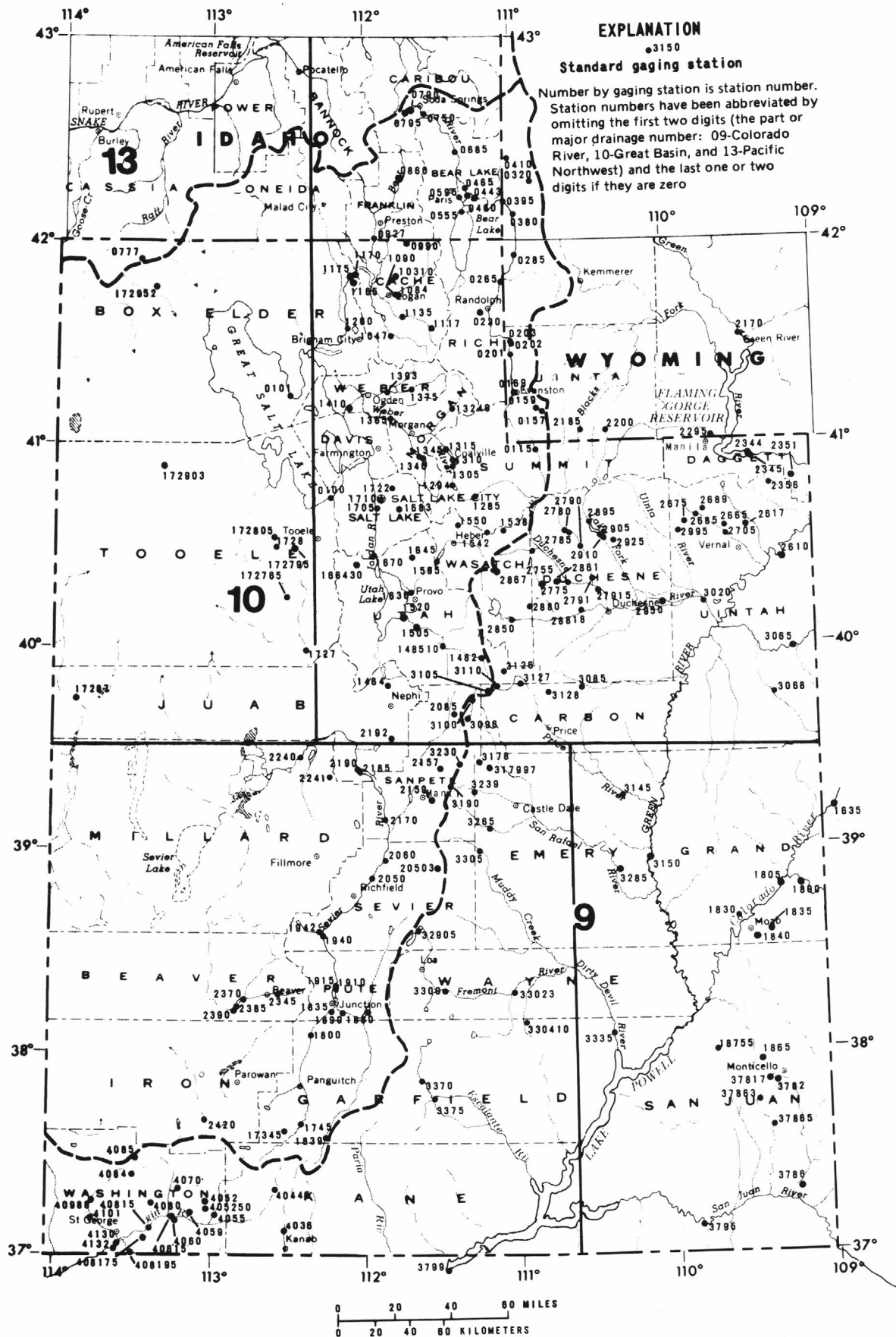
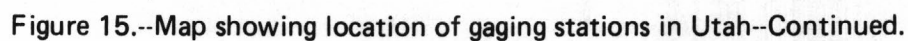


Figure 15.-Map showing location of gaging stations in Utah.



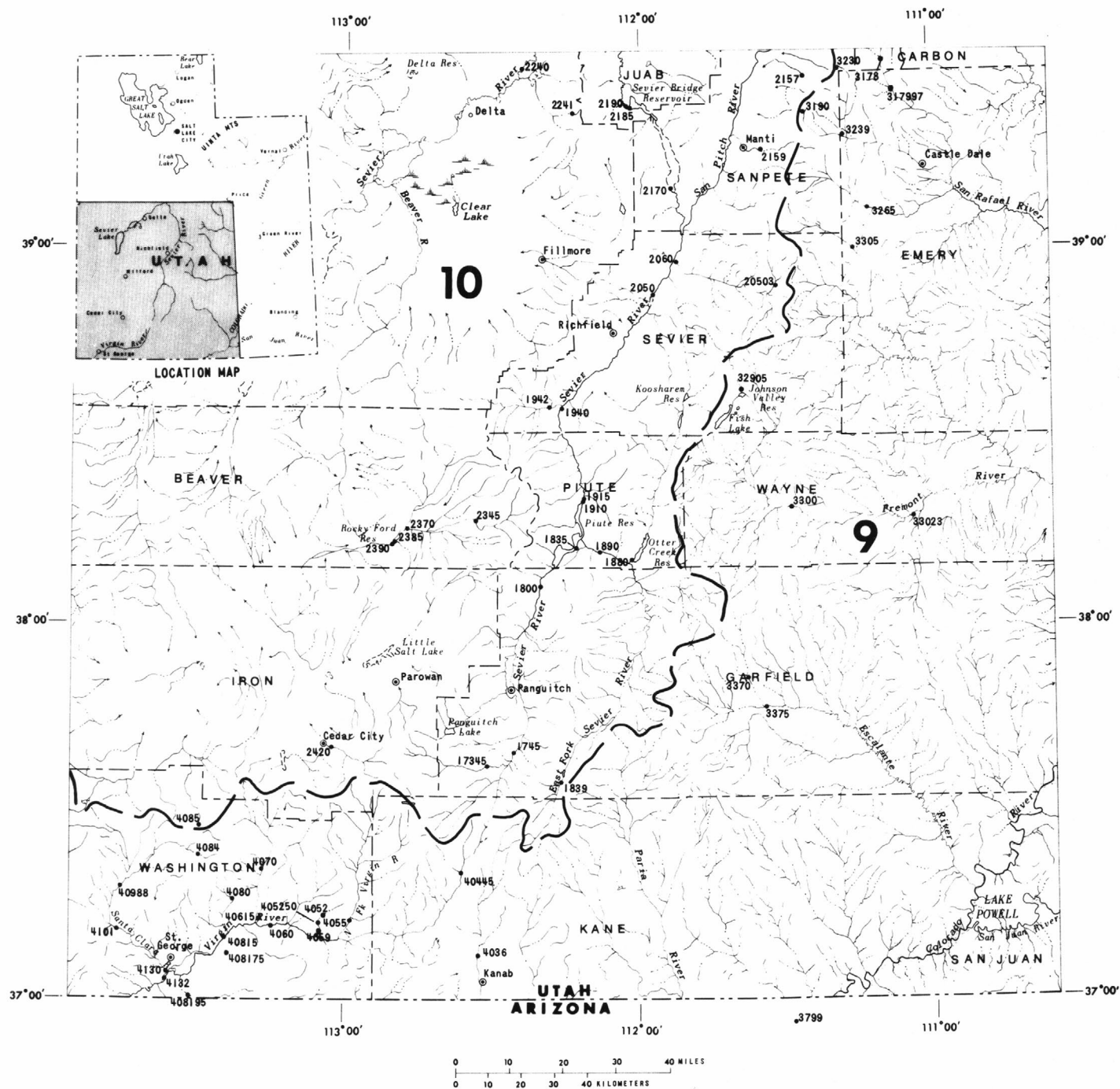
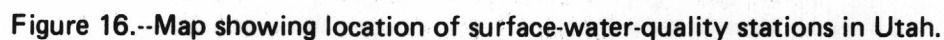


Figure 15.--Map showing location of gaging stations in Utah--Continued.



HYDROLOGIC-DATA STATION RECORDS

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COLORADO RIVER MAIN STEM

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 39°07'45", long 109°01'36", in SE¼NW¼ sec.5, T. 11 S., R. 104 W., Mesa County, Hydrologic Unit 14010005, on right bank 0.7 mi downstream from McDonald Creek, 12 mi southwest of Mack, Colo., and 1.5 mi upstream from Colorado-Utah State line.

DRAINAGE AREA.--17,843 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WRD Colo. 1974: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,325 ft above National Geodetic Vertical Datum of 1929, from topographic map. May 1951, to October 1979, water-stage recorder at site 5.7 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 9 to Feb. 13. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation. (Records include all return flow from irrigated areas).

AVERAGE DISCHARGE.--37 years, 6,364 ft³/s; 4,611,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 69,800 ft³/s, May 27, 1984, gage height, 16.12 ft, (from highwater mark); minimum daily, 960 ft³/s, Sept. 7, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,400 ft³/s at 0630 May 19, gage height, 5.92 ft; minimum daily, 2,280 ft³/s, July 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3980	4640	4160	3100	3230	5280	5260	5790	10200	7320	2780	3110
2	3920	5000	4070	2900	2990	5210	4980	7120	8820	6700	2990	3430
3	3900	5400	4130	2950	3280	4690	4840	7130	7840	6210	2960	3310
4	3870	5060	4240	3060	3310	4990	4880	6460	8350	6030	2780	3050
5	3890	4860	4340	3150	3310	4910	5000	5920	10700	5920	2580	3060
6	3940	5490	4530	3250	2990	4820	4500	5860	13400	5680	2520	3020
7	3970	5210	4360	3500	2990	4770	4630	6370	13800	5290	2720	3020
8	3910	5100	4200	3200	3200	4830	4980	6440	13400	4700	2850	3000
9	3880	4970	4000	3060	3350	4790	5650	5960	12700	4340	2910	2900
10	3990	4830	3800	2640	3410	4700	5810	5410	12100	4070	2800	2890
11	4060	4770	3980	2680	3400	4700	5320	5040	11700	3920	2630	2990
12	4130	4740	3820	2840	3390	4530	5200	4850	11700	3840	2530	3410
13	4190	4730	3500	2960	3570	4110	5130	5350	10700	3660	2590	5510
14	4420	4600	3300	2740	4130	4100	5470	6670	9950	3430	2570	5830
15	4690	4700	3200	2680	4220	4470	6320	8530	8260	3280	2570	4900
16	4530	4650	3400	2600	4220	4410	7170	10300	7690	2930	2630	4630
17	4470	4580	3460	2760	4240	4480	7260	11400	7630	2820	2650	4370
18	4440	4500	3520	2860	4150	4340	7280	13100	7520	2770	2790	4150
19	4450	4400	3700	2940	4110	4240	6920	15000	7380	2710	2820	4060
20	4460	4340	3800	2990	4140	4090	6310	14500	7460	2550	2810	3980
21	4420	4400	3860	3000	4170	4120	6200	12500	7950	2460	2750	4020
22	4420	4390	3840	2920	4490	4180	6710	10700	7730	2330	3240	4080
23	4330	4360	3800	3200	4670	4330	6850	9070	7530	2340	3300	4080
24	4380	4380	3500	3540	4600	4380	6720	8100	7130	2360	3210	3990
25	4460	4290	3360	3600	4680	4400	6420	7900	7540	2350	3100	3920
26	4520	4280	3400	3600	4690	4490	6050	8190	7110	2290	2980	3750
27	4450	4300	3480	3440	4800	4610	5670	8560	6730	2280	3160	3670
28	4440	4260	3550	3300	4890	4870	5420	9350	6510	2360	3300	3550
29	4470	4180	3600	3440	5180	5210	5350	10000	6270	2380	3370	3440
30	4590	4080	3540	3310	---	5350	5350	11400	7450	2370	3360	3450
31	4700	---	3300	3280	---	5280	---	12100	---	2500	3240	---
TOTAL	132270	139490	116740	95490	113800	143680	173650	265070	273250	114190	89490	112570
MEAN	4267	4650	3766	3080	3924	4635	5788	8551	9108	3684	2887	3752
MAX	4700	5490	4530	3600	5180	5350	7280	15000	13800	7320	3370	5830
MIN	3870	4080	3200	2600	2990	4090	4500	4850	6270	2280	2520	2890
AC-FT	262400	276700	231600	189400	225700	285000	344400	525800	542000	226500	177500	223300

CAL YR 1987 TOTAL 2384700 MEAN 6533 MAX 22000 MIN 3200 AC-FT 4730000
WTR YR 1988 TOTAL 1769690 MEAN 4835 MAX 15000 MIN 2280 AC-FT 3510000

NOTE.--Water-quality records for the current year are published in the report "Water Resources Data for Colorado, 1988."

DOLORES RIVER BASIN

09180000 DOLORES RIVER NEAR CISCO, UT

LOCATION.--Lat 38°47'50", long 109°11'40", in SW¼SE¼ sec. 18, T. 23 S., R. 25 E., Grand County, Hydrologic Unit 14030004, on left bank 0.2 mi downstream from Line Canyon, 9.1 mi upstream from mouth, 13.5 mi downstream from Colorado-Utah State line, and 13.9 mi southeast of Cisco.

DRAINAGE AREA.--4,580 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733.

REVISED RECORDS.--WDR UT-75-1: 1974.

GAGE.--Water-stage recorder. Altitude of gage is 4,165 ft from river-profile map. Dec. 6, 1950 to Apr. 18, 1967, at site 200 ft downstream at different datum; Apr. 19, 1967 to Sept. 3, 1975 at site 10 ft downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Macphee Reservoir, capacity, 381,000 acre-ft, since 1986. Many diversions for irrigation above station.

AVERAGE DISCHARGE.--36 years (1951-86), 845 ft³/s, 612,200 acre-ft/yr, prior to construction of Macphee Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,400 ft³/s Apr. 21, 1958, gage height, 9.84 ft at different datum; minimum, 3.4 ft³/s Sept. 23, 1956.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 6	1900	*2,520	*9.44				

Minimum discharge, 124 ft³/s Jan. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	188	367	253	210	e200	750	660	945	e1310	885	273	310
2	216	418	256	172	e210	566	574	943	1150	794	472	563
3	225	480	275	180	e190	528	528	898	1090	683	432	371
4	237	398	291	166	e180	473	566	1250	1110	667	345	296
5	239	365	299	e160	e170	442	702	1780	1240	661	268	250
6	237	1200	362	e175	e170	409	820	1790	1400	747	236	231
7	207	1200	357	e182	e180	389	948	e1700	1450	606	223	221
8	173	e760	313	e181	e190	383	1400	e1670	1510	576	227	203
9	174	e500	289	e170	e200	354	e1500	e1640	1500	546	287	194
10	177	e454	282	e169	e190	324	e1300	e1600	e1350	493	254	173
11	177	e375	272	e160	e200	315	e800	e1160	1250	479	217	176
12	187	e360	291	e170	e210	312	e750	945	1120	451	196	224
13	205	e300	245	e172	e220	286	e840	729	1000	412	241	736
14	227	355	224	e160	e230	265	e910	767	952	387	189	1140
15	295	e360	248	e150	e230	304	e960	844	799	366	180	595
16	418	e360	211	e170	e220	295	e1050	923	852	344	168	461
17	331	e300	211	e180	e260	304	e1120	993	734	340	155	386
18	295	e270	269	e190	e270	286	e990	1200	730	328	219	323
19	e290	e220	305	e170	e270	281	e960	1450	707	302	278	271
20	e270	e240	307	e160	e275	268	e810	1640	714	281	192	251
21	e245	e250	271	e170	e350	278	e790	2190	730	263	166	250
22	e263	e300	257	e180	e430	298	e840	1930	834	262	376	244
23	250	e300	264	e190	e490	361	e820	1560	793	247	327	264
24	260	e280	272	e170	544	452	e890	1260	844	227	224	274
25	284	e270	199	e180	634	590	e950	1160	848	216	212	257
26	317	e250	239	e190	645	653	e950	1180	834	203	185	239
27	327	e260	234	e200	630	718	e890	1140	830	192	201	234
28	312	e270	249	e210	656	1110	e950	1130	753	199	371	215
29	305	e250	226	e210	797	1370	863	1190	927	245	423	209
30	301	e240	214	e190	---	982	851	1440	1070	211	352	204
31	338	---	224	e190	---	782	---	e1470	---	214	280	---
TOTAL	7970	11952	8209	5527	9441	15128	26982	40517	30431	12827	8169	9765
MEAN	257	398	265	178	326	488	899	1307	1014	414	264	325
MAX	418	1200	362	210	797	1370	1500	2190	1510	885	472	1140
MIN	173	220	199	150	170	265	528	729	707	192	155	173
AC-FT	15810	23710	16280	10960	18730	30010	53520	80370	60360	25440	16200	19370

CAL YR 1987 TOTAL 500383 MEAN 1371 MAX 7320 MIN 168 AC-FT 992500
WTR YR 1988 TOTAL 186918 MEAN 511 MAX 2190 MIN 150 AC-FT 370800

e Estimated

DOLORES RIVER BASIN

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09180000 DOLORES RIVER NEAR CISCO, UT--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1951 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1951 to September 1959, October 1964 to September 1981, March 1982 to current year.

WATER TEMPERATURES: March 1951 to September 1959, October 1964 to September 1981, March 1982 to current year.

SUSPENDED-SEDIMENT DISCHARGE: March 1951 to December 1953, October 1957 to September 1964.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 21,600 microsiemens July 9, 1977; minimum, 240 microsiemens June 22, 1983.

WATER TEMPERATURES: Maximum, 29.0°C Aug. 14, 1958, July 18, 1977; minimum, 0.0°C on many days during winter period each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 4,720 microsiemens Dec. 20; minimum, 500 microsiemens June 9, 10.

WATER TEMPERATURES: Maximum, 27.0°C July 16-28; minimum, 0.0°C many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT , 1987										
26...	1330	317	2810	8.30	16.0	13.0	--	9.40	662	--
NOV										
30...	1300	226	2600	8.30	1.5	0.5	15	12.8	659	--
DEC										
21...	1015	285	1960	8.30	0.0	0.5	--	12.7	650	--
MAR , 1988										
21...	1045	280	2840	8.40	11.0	8.0	20	11.7	659	--
APR										
28...	1000	1010	880	8.30	16.0	12.5	90	8.60	650	--
MAY										
27...	1010	1020	580	8.20	22.0	17.5	59	7.80	652	--
JUN										
22...	1015	862	1290	8.10	30.5	22.5	22	7.10	657	220
JUL										
22...	1100	245	1970	8.30	36.5	23.0	7.9	7.00	659	140
AUG										
23...	1230	310	2500	8.10	30.0	23.0	--	6.90	650	--
SEP										
06...	1000	224	1420	8.20	23.0	18.0	--	8.00	660	--

DATE	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3
OCT , 1987										
26...	--	390	93	39	460	71	10	15	--	--
NOV										
30...	--	400	94	39	380	67	9	15	4	188
DEC										
21...	--	420	100	41	350	63	8	19	--	--
MAR , 1988										
21...	--	490	110	51	440	65	9	16	39	388
APR										
28...	--	230	58	21	83	43	2	5.6	0	346
MAY										
27...	--	200	53	16	48	34	2	3.3	0	338
JUN										
22...	280	210	56	18	160	61	5	7.9	0	256
JUL										
22...	290	340	86	31	260	61	6	11	0	374
AUG										
23...	--	420	100	41	380	66	8	12	--	--
SEP										
06...	--	420	110	36	120	38	3	7.7	--	--

DOLORES RIVER BASIN

09180000 DOLORES RIVER NEAR CISCO, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
OCT , 1987										
26...	300	680	0.3	6.6	1690	1680	2.30	1450	--	--
NOV										
30...	260	630	0.3	7.5	1530	1520	2.08	934	--	<0.01
DEC										
21...	260	600	0.3	7.7	1400	1440	1.90	1080	--	--
MAR , 1988										
21...	350	590	0.3	5.8	1780	1670	2.42	1350	0.14	0.01
APR										
28...	150	110	0.2	7.6	521	509	0.71	1420	--	--
MAY										
27...	100	57	0.3	6.0	368	355	0.5	1010	--	<0.01
JUN										
22...	130	250	0.3	6.1	707	686	0.96	1650	--	<0.01
JUL										
22...	240	410	0.4	5.2	1150	1130	1.56	761	--	<0.01
AUG										
23...	320	580	0.4	6.9	1540	1520	2.09	1290	--	--
SEP										
06...	340	160	0.4	7.5	872	874	1.19	527	--	--

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
OCT , 1987										
26...	0.14	--	0.24	0.31	--	--	--	--	<0.01	--
NOV										
30...	0.16	0.36	0.28	0.36	0.34	0.7	<0.01	<0.01	<0.01	--
DEC										
21...	0.18	--	0.42	0.54	--	--	--	--	<0.01	--
MAR , 1988										
21...	0.15	0.23	0.14	0.18	0.37	0.6	<0.01	<0.01	<0.01	--
APR										
28...	--	0.07	--	--	0.23	0.3	0.06	0.02	--	--
MAY										
27...	0.11	0.03	<0.01	--	0.67	0.7	0.03	<0.01	<0.01	--
JUN										
22...	0.15	0.01	<0.01	--	0.49	0.5	0.07	0.03	0.02	0.06
JUL										
22...	0.26	0.02	<0.01	--	0.58	0.6	0.03	<0.01	<0.01	--
AUG										
23...	0.86	--	0.13	0.17	--	--	--	--	0.01	0.03
SEP										
06...	0.84	--	0.02	0.03	--	--	--	--	0.01	0.03

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)
OCT , 1987		
26...	1330	90
DEC		
21...	1015	90
AUG , 1988		
23...	1230	120
SEP		
06...	1000	80

DOLORES RIVER BASIN

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09180000 DOLORES RIVER NEAR CISCO, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
NOV , 1987											
30...	1300	<10	1	200	<10	1	1	<1	3	<10	<5
MAR , 1988											
21...	1045	<10	<1	100	<10	<1	<1	<1	1	20	<5
APR											
28...	1000	<10	<1	110	<0.5	<1	1	<3	4	16	<5
JUN											
22...	1015	20	1	76	<0.5	<1	<1	<3	2	8	<5

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STROM- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV , 1987										
30...	40	30	<0.1	2	1	1	<1.0	1200	4	<10
MAR , 1988										
21...	40	20	0.1	3	4	1	<1.0	1400	7	<10
APR										
28...	22	3	<0.1	<10	<1	1	<1.0	630	<6	8
JUN										
22...	21	5	<0.1	<10	4	<1	<1.0	700	<6	6

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4510	---	2420	---	---	---	920	1030	550	---	2190	1210
2	3400	---	2860	---	---	---	1180	1140	---	1170	2310	---
3	4690	2270	3290	---	---	---	1260	990	---	1150	---	2370
4	4610	2200	3130	---	---	1880	1600	---	660	1090	1390	1740
5	---	---	2790	---	---	2030	1700	890	620	1240	---	1450
6	4070	---	2210	---	---	2260	1420	630	590	1270	1200	1400
7	3190	2290	---	---	---	2350	1040	590	550	1280	1430	1510
8	3150	1360	---	---	---	2380	---	560	510	1150	1700	1770
9	3150	1210	2100	---	---	---	700	550	500	1210	1980	1970
10	3190	1010	2270	---	---	---	680	540	500	1360	---	2150
11	3670	1320	2460	---	---	---	690	560	---	---	2160	2270
12	4010	2080	2780	2300	---	2880	770	590	590	---	1730	2350
13	3950	2340	2920	2460	---	2940	880	650	680	1650	2000	---
14	3850	---	3190	2820	---	2980	850	880	880	1470	1920	1210
15	3760	2190	3250	---	---	2970	---	910	880	1780	1810	900
16	3630	2590	3370	---	---	3040	770	930	1060	1810	2250	1140
17	3110	2770	---	---	---	3030	810	---	1000	---	2380	1370
18	1990	2670	---	---	---	3030	---	---	880	1910	---	1480
19	2280	2500	---	---	---	3060	---	720	980	1890	2490	1590
20	2370	2700	4720	---	2100	2820	780	670	1080	1900	2680	1750
21	2490	3050	2670	---	2450	2930	790	730	1280	1950	2350	2020
22	2650	2970	2470	---	---	2930	940	670	1280	---	2380	1940
23	2870	2780	---	---	2210	3020	870	540	1140	2060	2480	1980
24	2890	---	---	---	---	3090	960	550	---	2050	3180	1940
25	2900	2650	---	---	2350	2400	960	600	1100	2100	1470	1870
26	2880	2510	---	---	2460	1620	920	620	1080	2160	---	1740
27	2840	2510	2740	---	2170	820	---	630	1060	2330	1690	1770
28	---	2730	2860	---	---	870	860	640	1010	1810	2030	---
29	2440	---	2920	---	---	1060	880	680	1140	2300	1860	---
30	---	2570	3740	---	---	---	940	640	740	2370	1490	2060
31	2460	---	3190	---	---	1430	---	580	---	2450	1480	---
MEAN	3250	---	---	---	---	---	970	700	860	1730	2000	1730

DOLORES RIVER BASIN

09180000 DOLORES RIVER NEAR CISCO, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	---	5.0	---	---	---	12.0	14.0	22.0	---	26.0	23.0
2	17.0	---	5.0	---	---	---	12.0	14.0	---	24.0	26.0	---
3	17.0	14.0	6.0	---	---	---	12.0	14.0	---	24.0	---	22.0
4	17.0	12.0	6.0	---	---	6.0	14.0	---	22.0	24.0	26.0	22.0
5	---	---	5.0	---	---	8.0	14.0	14.0	22.0	24.0	---	22.0
6	18.0	---	5.0	---	---	8.0	15.0	14.0	22.0	24.0	26.0	21.0
7	18.0	12.0	---	---	---	8.0	14.0	14.0	22.0	24.0	25.0	21.0
8	18.0	12.0	---	---	---	8.0	---	14.0	23.0	24.0	25.0	21.0
9	18.0	11.0	5.0	---	---	---	14.0	14.0	23.0	24.0	25.0	20.0
10	18.0	11.0	5.0	---	---	---	14.0	14.0	22.0	26.0	---	20.0
11	18.0	10.0	3.0	---	---	---	14.0	14.0	---	---	25.0	17.0
12	18.0	10.0	3.0	.0	---	8.0	14.0	14.0	22.0	---	24.0	17.0
13	17.0	10.0	1.0	.0	---	8.0	14.0	14.0	22.0	26.0	24.0	---
14	16.0	---	1.0	.0	---	8.0	14.0	16.0	22.0	26.0	24.0	17.0
15	16.0	8.0	1.0	---	---	8.0	---	16.0	22.0	26.0	24.0	17.0
16	14.0	8.0	1.0	---	---	8.0	15.0	16.0	23.0	27.0	25.0	17.0
17	14.0	8.0	---	---	---	8.0	15.0	---	23.0	---	25.0	17.0
18	14.0	6.0	---	---	---	8.0	---	---	23.0	27.0	---	17.0
19	14.0	6.0	---	---	---	8.0	---	17.0	23.0	27.0	24.0	16.0
20	14.0	6.0	1.0	---	.0	8.0	14.0	18.0	23.0	27.0	24.0	16.0
21	14.0	5.0	2.0	---	.0	8.0	14.0	18.0	24.0	27.0	24.0	16.0
22	14.0	5.0	2.0	---	---	10.0	14.0	18.0	23.0	---	25.0	16.0
23	14.0	5.0	---	---	.0	10.0	12.0	18.0	23.0	27.0	25.0	17.0
24	14.0	---	---	---	---	10.0	12.0	18.0	---	27.0	25.0	17.0
25	14.0	5.0	---	---	.0	10.0	12.0	18.0	23.0	27.0	25.0	17.0
26	14.0	5.0	---	---	.0	10.0	12.0	18.0	23.0	27.0	---	17.0
27	14.0	4.0	.0	---	.0	11.0	---	17.0	23.0	27.0	25.0	17.0
28	---	4.0	.0	---	---	11.0	15.0	18.0	23.0	27.0	25.0	---
29	14.0	---	.0	---	---	11.0	15.0	17.0	23.0	26.0	25.0	---
30	---	4.0	.0	---	---	---	15.0	17.0	24.0	26.0	25.0	17.0
31	14.0	---	.0	---	---	11.0	---	18.0	---	26.0	25.0	---
MEAN	15.5	---	---	---	---	---	13.5	16.0	22.5	26.0	25.0	18.5

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE WATER (DEG C)	SED. SUSP. SIEVE DIAM. PERCENT FINER THAN .062 MM	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
NOV , 1987						
30...	1300	226	0.5	54	114	70
MAR , 1988						
21...	1045	280	8.0	100	40	30
MAY						
27...	1010	1020	17.5	--	264	727
JUN						
22...	1015	862	22.5	87	115	268
JUL						
22...	1100	245	23.0	98	24	16

09180500 COLORADO RIVER NEAR CISCO, UT

LOCATION.--Lat 38°48'38", long 109°17'34", in NW¼NW¼ sec. 17, T. 23 S., R. 24 E., Grand County, Hydrologic Unit 14030005, on left bank 1 mi downstream from Dolores River, 11 mi south of Cisco, 36 mi downstream from Colorado-Utah State line, 97 mi upstream from Green River, and 235 mi upstream from San Juan River, at mile 1,022.3 from Arizona-Sonora.

DRAINAGE AREA.--24,100 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1895 to current year (1895 to 1910, calendar-year estimates only). Monthly discharge only for some periods, published in WSP 1313. Published as Grand River near Moab, October 1913 to November 1914, and as Grand River near Cisco, November 1914 to September 1917.

REVISED RECORDS.--WSP 918: 1913, 1937. WSP 1313: 1918-22.

GAGE.--Water-stage recorder. Altitude of gage is 4,090 ft from river-profile map. Prior to Nov. 10, 1914, several staff and chain gages at bridge near Moab, 31 mi downstream at datum, 3,937.73 ft above mean sea level.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diversions above station for irrigation and power, including several transmountain diversions. Flow regulated by Blue Mesa Reservoir (see station 09124600) since Nov. 27, 1965.

AVERAGE DISCHARGE.--77 years (1911-88), 7,746 ft³/s, 5,612,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,800 ft³/s June 19, 1917, gage height, 19.7 ft; minimum recorded, 558 ft³/s July 21, 1934, gage height, 0.44 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood on July 4, 1884 reached a discharge of about 125,000 ft³/s, from flood record at Fruita, Colorado.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 26,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 19	1450	*14,800	*7.09				

Minimum discharge, 2,120 ft³/s Aug. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3840	4780	4200	e3500	e3600	e5500	5400	5870	11300	8480	2820	3000
2	3840	5050	4200	e3300	e3400	e5440	5160	6890	9730	7640	3110	3350
3	3780	5750	4200	e3400	e3700	4930	4910	7490	8650	7020	3220	3380
4	3780	5420	4340	e3500	e3700	5070	4900	7060	8510	6790	2950	3030
5	3740	5290	4470	e3600	e3700	5050	5120	6980	10300	6620	2600	2890
6	3820	7500	4650	e3650	e3500	4950	5050	6650	13100	6500	2490	2850
7	3820	6450	4700	e3900	e3500	4860	4890	6980	14200	6140	2600	2810
8	3800	5630	4410	e3600	e3600	4920	5580	7300	14000	5560	2710	2780
9	3740	5350	4340	e3500	e3800	4870	6290	6920	13400	4990	2870	2730
10	3770	5080	4370	e3100	e3800	4870	6550	6430	12800	4650	2780	2630
11	3830	4940	4320	e3100	e3800	4740	6090	5640	12300	4380	2580	2710
12	3920	4850	4200	e3300	e3900	4650	5710	5140	12100	4280	2380	2960
13	4000	4840	4250	e3400	e4050	4380	5870	5090	11500	4110	2420	4850
14	4170	4870	4040	e3200	e4330	3980	5950	6080	10600	3830	2380	6860
15	4570	5100	3930	e3100	e4420	4430	6710	7890	9380	3580	2360	5430
16	4690	4920	3660	e3000	e4420	4450	7610	9720	8440	3320	2380	4880
17	4470	4790	3680	e3200	e4440	4540	8080	10900	8270	2780	2360	4520
18	4400	4700	3800	e3300	e4350	4380	7810	12300	8170	2700	2470	4240
19	4370	4590	4240	e3400	e4310	4280	7700	14100	8090	2690	2700	4080
20	4380	4560	4290	e3500	e4440	3980	6950	14300	8030	2560	2590	3970
21	4370	4470	4280	e3400	e4390	3930	6660	13500	8480	2410	2510	3990
22	4350	4610	4140	e3300	e4700	4010	6910	11700	8550	2290	2910	4150
23	4280	4600	4050	e3600	e4600	4220	7200	10000	8370	2230	3240	4070
24	4290	4610	4110	e3900	e4800	4320	7090	8790	7950	2230	3060	3980
25	4420	4560	3970	e4000	e4880	4530	6910	8260	8250	2240	2940	3930
26	4520	4490	3760	e4100	e4910	4600	6540	8460	8110	2210	2810	3760
27	4530	4470	3810	e3900	e5020	4690	6210	8780	7720	2160	3060	3650
28	4570	4470	3780	e3700	e5120	5190	5840	9400	7490	2220	3120	3530
29	4570	4370	3980	e3800	e5410	5860	5610	10100	7290	2310	3400	3370
30	4740	4230	4040	e3700	---	5810	5570	11300	7910	2290	3310	3360
31	4770	---	e3700	e3700	---	5610	---	12400	---	2320	3140	---
TOTAL	130140	149340	127910	108650	122590	147040	186870	272420	292990	123530	86270	111740
MEAN	4198	4978	4126	3505	4227	4743	6229	8788	9766	3985	2783	3725
MAX	4770	7500	4700	4100	5410	5860	8080	14300	14200	8480	3400	6860
MIN	3740	4230	3660	3000	3400	3930	4890	5090	7290	2160	2360	2630
AC-FT	258100	296200	253700	215500	243200	291700	370700	540300	581100	245000	171100	221600
CAL YR 1987	TOTAL	2882240	MEAN	7897	MAX	30500	MIN	3000	AC-FT	5717000		
WTR YR 1988	TOTAL	1859490	MEAN	5081	MAX	14300	MIN	2160	AC-FT	3688000		

e Estimated

COLORADO RIVER MAIN STEM

09180500 COLORADO RIVER NEAR CISCO, UT--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1928 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1941 to September 1952, October 1954 to September 1981, March 1982 to current year.

WATER TEMPERATURES: May 1949 to September 1959, October 1964 to September 1981, March 1982 to current year.

SUSPENDED-SEDIMENT DISCHARGE: May 1930 to September 1984.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 4,820 microsiemens Dec. 13, 1957; minimum daily, 291 microsiemens May 31, 1953.

WATER TEMPERATURES: Maximum, 29.0°C July 29, 1966; minimum, 0.0°C on many days during winter period most years.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 69,000 mg/L Oct. 27, 1951; minimum daily mean, 4 mg/L Aug. 22, 1960.

SEDIMENT LOADS: Maximum daily, 2,790,000 tons Oct. 14, 1941; minimum daily, 14 tons Aug. 22, 1960.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,890 microsiemens July 28; minimum daily, 480 microsiemens June 8.

WATER TEMPERATURES: Maximum, 27.0°C July 21-28; minimum observed, 0.0°C many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT , 1987											
26...	1200	4570	1550	8.40	14.0	11.0	--	9.70	660	--	--
NOV											
25...	1000	4320	1260	8.20	6.0	3.0	12	12.1	662	--	--
MAR , 1988											
22...	1030	3750	1160	8.30	20.0	9.0	32	10.0	655	--	--
APR											
27...	1000	6310	830	8.20	19.0	12.0	85	8.90	660	--	--
MAY											
26...	0930	8270	680	8.10	22.5	18.0	61	8.00	660	--	--
JUN											
14...	0935	8240	570	8.30	28.0	18.0	43	7.80	660	110	140
JUL											
19...	0930	2660	1420	8.40	29.0	22.0	24	7.20	660	130	280
AUG											
25...	1300	2800	1500	8.20	33.0	24.0	--	7.10	660	--	--
SEP											
06...	1300	2790	1450	8.30	32.0	21.0	--	7.70	660	--	--

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3
OCT , 1987										
26...	460	120	39	140	39	3	5.8	--	--	--
NOV										
25...	390	97	35	130	42	3	5.0	0	196	161
MAR , 1988										
22...	310	75	29	130	48	3	4.7	20	366	333
APR										
27...	260	67	23	73	37	2	4.2	0	358	293
MAY										
26...	240	64	20	52	32	2	2.5	0	342	280
JUN										
14...	210	57	16	43	31	1	2.0	0	288	236
JUL										
19...	440	110	39	120	37	3	5.0	20	352	329
AUG										
25...	470	120	42	130	37	3	5.4	--	--	--
SEP										
06...	510	130	44	110	32	2	4.5	--	--	--

COLORADO RIVER MAIN STEM

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09180500 COLORADO RIVER NEAR CISCO, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
OCT , 1987										
26...	370	150	0.4	9.8	961	915	1.31	11900	--	--
NOV										
25...	300	140	0.4	11	844	819	1.15	9840	--	<0.01
MAR , 1988										
22...	240	140	0.3	8.7	740	718	1.01	7490	--	<0.01
APR										
27...	190	78	0.3	9.9	535	524	0.73	9110	--	--
MAY										
26...	170	45	0.3	10	442	438	0.6	9870	--	<0.01
JUN										
14...	140	38	0.3	8.2	359	366	0.49	7990	--	<0.01
JUL										
19...	390	130	0.4	6.6	850	894	1.16	6100	0.79	0.01
AUG										
25...	440	120	0.4	10	1000	971	1.36	7560	--	--
SEP										
06...	460	98	0.4	9.9	980	960	1.33	7380	--	--

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
OCT , 1987										
26...	0.70	--	0.06	0.08	--	--	--	--	0.02	0.06
NOV										
25...	0.68	0.04	0.05	0.06	0.46	0.5	0.02	<0.01	0.01	0.03
MAR , 1988										
22...	0.30	0.07	0.02	0.03	0.33	0.4	0.03	0.01	0.01	0.03
APR										
27...	--	0.06	--	--	1.0	1.1	0.10	0.03	--	--
MAY										
26...	0.43	0.02	<0.01	--	0.98	1.0	0.03	0.02	0.01	0.03
JUN										
14...	0.42	0.03	0.01	0.01	0.37	0.4	0.20	0.03	0.02	0.06
JUL										
19...	0.80	<0.01	0.07	0.09	--	0.9	0.07	0.03	0.01	0.03
AUG										
25...	1.10	--	0.05	0.06	--	--	--	--	0.03	0.09
SEP										
06...	1.00	--	0.02	0.03	--	--	--	--	0.02	0.06

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
NOV , 1987											
25...	1000	<10	1	85	<0.5	<1	2	<3	3	6	<5
MAR , 1988											
22...	1030	<10	<1	60	<0.5	<1	<1	<3	1	8	<5
APR											
27...	1000	<10	1	89	<0.5	<1	1	<3	4	13	<5
JUN											
14...	0935	50	1	49	<0.5	<1	<1	<3	7	42	<5
JUL											
19...	0930	<10	1	100	0.9	<1	2	<3	1	10	<5

COLORADO RIVER MAIN STEM

09180500 COLORADO RIVER NEAR CISCO, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV , 1987										
25...	40	8	<0.1	<10	3	5	<1.0	1000	<6	10
MAR , 1988										
22...	45	14	<0.1	<10	2	4	<1.0	800	<6	<3
APR										
27...	31	3	<0.1	<10	3	3	<1.0	680	<6	8
JUN										
14...	24	3	<0.1	<10	4	3	<1.0	510	<6	7
JUL										
19...	57	5	<0.1	<10	2	9	<1.0	1300	<6	<3

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)
OCT , 1987		
26...	1200	90
AUG , 1988		
25...	1300	110
SEP		
06...	1300	100

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1350	1260	1150	1200	1080	1050	860	860	560	840	1500	1430
2	1330	1280	1190	1220	1060	---	870	840	610	790	1520	1490
3	1440	1260	1240	1230	1040	1050	900	750	680	800	1400	1520
4	1390	1210	1210	1160	1040	1100	910	740	710	830	1380	1490
5	1390	1190	1270	1230	---	1120	920	760	670	870	1330	1400
6	1400	1260	1180	1190	1060	1050	910	780	550	900	1390	1410
7	1360	1240	1120	1260	1060	1060	910	810	490	930	1420	1430
8	1360	1150	1180	1230	1060	1030	980	780	480	950	1480	1460
9	1350	1170	1180	1170	1090	1030	940	760	490	1020	1530	1480
10	1340	1150	1150	1120	1110	1020	860	780	500	1060	1520	1490
11	1360	1140	1140	---	1090	1010	830	820	520	1110	1520	1460
12	1360	1170	1180	1100	1050	1010	810	850	530	1150	1470	1500
13	1360	1170	1170	1150	1050	1040	810	890	550	1160	1510	1560
14	1350	1160	1170	1150	1050	1070	800	880	600	1180	1520	1320
15	1380	1150	1180	1160	1020	1100	---	760	630	1190	1510	1340
16	1370	1190	1150	1150	1040	1130	780	630	700	1220	1510	1320
17	1340	1200	1200	1150	1060	1070	720	560	730	1300	1520	1310
18	1310	1190	1230	1190	1040	1090	690	570	740	1350	1520	1310
19	1300	1170	1230	1180	1030	1050	710	520	740	1370	1550	1330
20	1290	1190	1310	---	1000	1050	760	500	740	1400	1520	1350
21	1290	1190	1190	1090	1020	1080	730	530	760	1420	1480	1370
22	1290	1200	1160	1140	1030	1110	760	560	730	1450	1410	1360
23	1290	1210	1130	1230	1040	1060	740	610	720	1450	1600	1370
24	1300	1200	1140	1320	1040	1130	730	660	720	1500	1550	1360
25	1320	1200	1180	1200	1000	1100	750	710	740	1500	1470	1330
26	1320	1170	1200	1160	1000	1030	780	720	740	1500	1440	1320
27	1320	1190	1200	1180	990	920	800	700	740	1520	1490	1330
28	1310	1170	1180	1150	1040	890	830	660	840	1890	1590	1350
29	1300	1190	1200	1140	1020	920	850	630	840	1530	1540	1350
30	1340	1170	1230	1140	---	---	850	590	860	1530	1500	1370
31	1280	---	1210	1120	---	960	---	550	---	1540	1470	---
MEAN	1340	1190	1190	1180	1040	1050	820	700	660	1230	1490	1400

COLORADO RIVER MAIN STEM

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09180500 COLORADO RIVER NEAR CISCO, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	14.0	5.0	.0	.0	4.0	12.0	14.0	17.0	24.0	26.0	23.0
2	16.0	14.0	5.0	.0	.0	---	12.0	14.0	16.0	24.0	26.0	22.0
3	16.0	14.0	6.0	.0	.0	6.0	12.0	14.0	22.0	24.0	26.0	22.0
4	16.0	12.0	6.0	.0	.0	6.0	12.0	14.0	22.0	24.0	26.0	22.0
5	17.0	12.0	6.0	.0	---	6.0	12.0	14.0	22.0	24.0	26.0	21.0
6	17.0	12.0	6.0	.0	.0	8.0	12.0	14.0	23.0	24.0	26.0	20.0
7	17.0	12.0	6.0	.0	.0	8.0	12.0	14.0	22.0	24.0	25.0	20.0
8	17.0	12.0	5.0	.0	.0	8.0	12.0	14.0	22.0	24.0	25.0	20.0
9	17.0	10.0	5.0	.0	.0	6.0	14.0	14.0	22.0	24.0	25.0	19.0
10	17.0	10.0	5.0	.0	.0	6.0	14.0	14.0	21.0	24.0	25.0	19.0
11	17.0	9.0	4.0	---	.0	6.0	14.0	14.0	21.0	24.0	25.0	18.0
12	17.0	9.0	4.0	.0	.0	6.0	14.0	14.0	21.0	24.0	24.0	18.0
13	17.0	9.0	2.0	.0	.0	8.0	15.0	14.0	21.0	26.0	24.0	18.0
14	16.0	8.0	2.0	.0	.0	8.0	15.0	16.0	21.0	26.0	24.0	18.0
15	16.0	8.0	2.0	.0	.0	8.0	---	16.0	21.0	26.0	24.0	18.0
16	16.0	8.0	2.0	.0	.0	8.0	15.0	16.0	22.0	26.0	25.0	18.0
17	14.0	8.0	2.0	.0	.0	8.0	15.0	16.0	23.0	26.0	25.0	18.0
18	14.0	6.0	2.0	.0	.0	8.0	15.0	17.0	23.0	26.0	23.0	17.0
19	14.0	6.0	2.0	.0	.0	8.0	15.0	17.0	23.0	26.0	23.0	17.0
20	14.0	6.0	2.0	---	.0	8.0	14.0	17.0	23.0	26.0	23.0	17.0
21	12.0	5.0	3.0	.0	.0	8.0	14.0	17.0	24.0	27.0	24.0	17.0
22	12.0	5.0	3.0	.0	.0	10.0	14.0	17.0	23.0	27.0	25.0	17.0
23	12.0	5.0	3.0	.0	.0	10.0	12.0	17.0	23.0	27.0	25.0	17.0
24	12.0	5.0	3.0	.0	.0	10.0	12.0	17.0	23.0	27.0	25.0	17.0
25	12.0	5.0	.0	.0	1.0	10.0	12.0	17.0	23.0	27.0	25.0	17.0
26	12.0	4.0	1.0	.0	1.0	10.0	12.0	17.0	22.0	27.0	25.0	17.0
27	12.0	4.0	.5	.0	1.0	10.0	15.0	17.0	22.0	27.0	25.0	17.0
28	12.0	4.0	.0	.0	2.0	10.0	15.0	17.0	22.0	27.0	25.0	17.0
29	12.0	4.0	.0	.0	4.0	10.0	15.0	16.0	22.0	26.0	25.0	17.0
30	12.0	4.0	.0	.0	---	---	15.0	16.0	23.0	26.0	25.0	17.0
31	12.0	---	.0	.0	---	11.0	---	17.0	---	26.0	25.0	---
MEAN	14.5	8.0	3.0	.0	.5	8.0	13.5	15.5	22.0	25.5	25.0	18.5

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE WATER (DEG C)	SED. SUSP. SIEVE DIAM. PERCENT FINER THAN .062 MM	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
NOV , 1987						
25...	1000	4320	3.0	92	55	642
MAR , 1988						
22...	1030	3750	9.0	95	91	921
MAY						
26...	0930	8270	18.0	--	415	9270
JUN						
14...	0935	8240	18.0	51	349	7760
JUL						
19...	0930	2660	22.0	84	90	646

TRIBUTARIES BETWEEN DOLORES RIVER AND GREEN RIVER

09183000 COURTHOUSE WASH NEAR MOAB, UT

LOCATION.--Lat $38^{\circ}36'46''$, long $109^{\circ}34'45''$, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 22, T. 25 S., R. 21 E., Grand County, Hydrologic Unit 14030005, on left bank 0.6 mi upstream from bridge on U.S. Highway 191, 0.8 mi upstream from mouth and 3.0 mi northwest of Moab.

DRAINAGE AREA.--162 mi².

PERIOD OF RECORD.--October 1949 to September 1955, April to September 1957, July 1966 to current year. Records for station at site 5 mi upstream published as "at Arches Highway Crossing near Moab" September 1958 to July 1966, not equivalent at all times due to possibility that some summer storm runoff would be from intermediate area.

GAGE.--Water-stage recorder. Altitude of gage is 3,980 ft from river-profile map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No regulation or diversions above station.

AVERAGE DISCHARGE.--28 years (1949-55, 1967-88), 1.81 ft³/s, 1,310 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,300 ft³/s Aug. 5, 1957, gage height, 9.38 ft, from rating curve extended above 500 ft³/s on basis of slope-area measurement of peak flow; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 6	0200	*759	*2.37	No other peak greater than base discharge.			

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	1.4	e.39	e.24	e.23	e.75	1.0	.28	.00	.05	.01	.06
2	.06	1.9	e.39	e.21	e.23	e.88	.61	.26	.00	.04	.03	.05
3	.06	.43	e.40	e.22	e.24	e.96	.59	.31	.00	.04	.02	.05
4	.07	.16	e.40	e.22	e.22	1.1	.54	.36	.00	.05	.02	.05
5	.07	41	e.43	e.25	e.18	.87	.54	.35	.00	.05	.01	.06
6	.07	e.83	e.41	e.27	e.18	.97	.44	.25	.00	.02	.02	.06
7	.07	e.2.4	e.41	e.28	e.17	1.0	.46	.25	.02	.00	.09	.06
8	.07	e.1.1	e.39	e.27	e.18	.77	.39	.26	.05	.00	.03	.06
9	.07	e.35	e.37	e.26	e.20	.96	.23	.27	.05	.00	.03	.06
10	.07	e.22	e.39	e.26	e.21	4.8	.28	.25	.06	e.03	.03	.07
11	.07	e.18	e.39	e.23	e.23	6.2	.39	.24	.05	e.04	.03	.07
12	.08	e.16	e.37	e.20	e.24	1.0	.46	.26	.07	e.04	.03	.13
13	2.2	e.20	e.36	e.17	e.23	.69	.48	.25	.07	e.03	.03	17
14	.27	e.21	e.34	e.13	e.22	.90	3.3	.25	.08	e.03	.02	e.2.1
15	.13	e.24	e.33	e.14	e.24	1.1	11	.25	.08	e.02	.03	e.93
16	.10	e.1.6	e.32	e.17	e.25	1.0	2.3	.23	.07	e.03	.03	e.36
17	.10	e.42	e.32	e.18	e.25	.71	2.0	4.8	.07	e.03	.02	e.18
18	.10	e.40	e.33	e.21	e.25	.68	1.6	61	.07	e.04	.03	e.10
19	.10	e.41	e.32	e.25	e.23	.83	1.6	29	.07	e.04	.03	e.07
20	.10	e.41	e.32	e.13	e.26	.86	1.3	.64	.06	e.03	.05	e.06
21	.10	e.45	e.33	e.11	e.26	.80	1.1	.23	.06	.01	.05	e.05
22	.10	e.45	e.35	e.15	e.30	.65	1.4	.15	.06	.01	.04	e.06
23	.10	e.44	e.37	e.17	e.35	.67	1.9	.07	.04	.01	.04	e.05
24	6.7	e.44	e.31	e.14	e.40	.47	1.6	.02	.03	.02	.03	e.06
25	10	e.44	e.30	e.16	e.39	.52	1.1	.00	.02	.01	.03	e.07
26	e.85	e.43	e.29	e.16	e.42	.63	.68	.00	.04	.01	11	e.06
27	e.13	e.43	e.30	e.15	e.46	.67	.54	.00	.08	.03	1.4	e.06
28	.12	e.43	e.29	e.16	e.49	.33	.47	.00	.06	.03	e.57	e.07
29	.62	e.41	e.28	e.19	e.54	.40	.41	.00	.07	.02	e.21	e.07
30	45	e.39	e.29	e.21	---	.84	.37	.00	.06	.01	e.13	e.08
31	1.0	---	e.28	e.24	---	2.6	---	.00	---	.01	e.08	---
TOTAL	68.64	164.26	10.77	6.13	8.05	35.61	39.08	100.23	1.40	0.78	14.17	22.21
MEAN	2.21	5.48	.35	.20	.28	1.15	1.30	3.23	.047	.025	.46	.74
MAX	45	83	.43	.28	.54	6.2	11	61	.08	.05	11	17
MIN	.06	.16	.28	.11	.17	.33	.23	.00	.00	.00	.01	.05
AC-FT	136	326	21	12	16	71	78	199	2.8	1.5	28	44

CAL YR 1987	TOTAL	628.99	MEAN	1.72	MAX	185	MIN	.03	AC-FT	1250
WTR YR 1988	TOTAL	471.33	MEAN	1.29	MAX	83	MIN	.00	AC-FT	935

e Estimated

TRIBUTARIES BETWEEN DOLORES RIVER AND GREEN RIVER

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09183500 MILL CREEK ABOVE SHELEY TUNNEL NEAR MOAB, UT

LOCATION.--Lat 38°28'59", long 109°24'12", in NW¼NW¼SW¼, sec. 4, T. 27 S., R. 23 E. in San Juan County, Hydrologic Unit 14030005 on the left bank 1,000 feet above Sheley Tunnel, and 9 mi southeast of Moab.

DRAINAGE AREA.--26.8 mi².

PERIOD OF RECORD.--October 1954 to September 1959. October 1987 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,500 feet from a topographic map. Prior to Oct. 1, 1987 at different site and datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Small diversion for irrigation above the station. Sheley Tunnel, which diverts water from Mill Creek for K. E. McDougald Reservoir, is located 1,000 ft below the gage.

AVERAGE DISCHARGE.--6 years (1954-59, 1988), 12.3 ft³/s, 8,910 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 204 ft³/s Aug. 30, 1957, gage height, 3.97 ft site and datum then in use, from rating curve extended above 96 ft³/s; minimum recorded, 2.1 ft³/s Apr. 5, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 190 ft³/s Nov. 5, gage height 3.30 ft; minimum discharge, 4.9 ft³/s Mar. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	21	15	e9.3	8.5	9.4	9.8	27	e42	21	12	11
2	9.3	18	12	e8.7	8.5	8.9	9.7	24	e45	20	11	11
3	9.2	16	12	e8.0	8.5	9.0	10	24	e46	20	11	11
4	9.2	16	12	e8.8	8.6	8.9	11	24	e49	20	11	11
5	9.3	27	13	10	e8.0	8.8	11	24	e51	19	11	11
6	9.4	32	12	10	e7.0	8.9	12	25	e49	19	11	11
7	9.3	16	12	10	e7.3	9.0	15	23	47	18	11	11
8	9.6	15	11	10	7.9	8.3	16	22	43	18	10	11
9	9.7	14	12	e9.0	8.0	9.2	15	22	40	17	10	11
10	9.8	14	12	10	7.8	8.8	14	25	38	17	10	11
11	10	13	12	10	7.8	9.3	15	29	38	16	10	11
12	10	13	9.5	e10.0	7.9	8.7	18	34	38	16	10	14
13	15	13	e9.1	e9.2	8.1	8.5	22	41	36	15	9.8	15
14	16	17	e9.5	e8.8	7.9	9.1	30	49	33	14	9.6	12
15	14	17	e9.5	e9.0	8.0	8.8	29	53	32	14	9.9	11
16	16	14	10	9.2	8.0	8.6	25	57	30	13	9.8	11
17	13	14	12	9.3	8.0	8.9	22	61	29	14	9.7	11
18	12	13	12	9.5	e7.4	8.4	20	74	29	14	9.5	11
19	12	16	12	9.5	7.7	8.3	22	67	29	13	9.5	11
20	12	15	11	e9.0	7.9	8.8	22	55	28	13	9.3	11
21	12	14	11	e8.0	7.9	9.7	22	47	27	13	9.5	11
22	12	13	13	e7.0	7.9	10	20	43	27	13	9.7	11
23	12	13	11	e7.4	7.9	9.6	19	e46	26	12	9.2	11
24	12	13	11	e8.0	8.1	9.6	19	e46	25	12	9.1	11
25	13	13	e9.5	e7.3	8.2	9.7	19	e48	24	12	9.5	10
26	12	13	e8.0	e7.0	8.4	11	17	e52	24	12	11	10
27	13	13	e8.4	e7.5	8.5	13	18	e56	24	12	12	10
28	15	15	e9.5	8.4	9.0	12	20	e55	26	12	11	10
29	15	14	e9.9	8.4	9.1	10	23	e55	24	12	11	10
30	16	12	11	8.5	---	11	27	e54	22	12	11	10
31	15	---	e9.7	8.5	---	10	---	e48	---	12	12	---
TOTAL	371.1	467	341.6	273.3	233.8	292.2	552.5	1310	1021	465	320.1	332
MEAN	12.0	15.6	11.0	8.82	8.06	9.43	18.4	42.3	34.0	15.0	10.3	11.1
MAX	16	32	15	10	9.1	13	30	74	51	21	12	15
MIN	9.2	12	8.0	7.0	7.0	8.3	9.7	22	22	12	9.1	10
AC-FT	736	926	678	542	464	580	1100	2600	2030	922	635	659

WTR YR 1988 TOTAL 5979.6 MEAN 16.3 MAX 74 MIN 7.0 AC-FT 11860

e Estimated

TRIBUTARIES BETWEEN DOLORES RIVER AND GREEN RIVER

09184000 MILL CREEK NEAR MOAB, UT

LOCATION.--Lat 38°33'44", long 109°30'48", in NW¼NW¼NE¼ sec. 8, T. 26 S., R. 22 E., Grand County, Hydrologic Unit 14030005, on right bank 0.5 mi downstream from North Fork, 1.5 mi southeast of Moab, and 3.5 mi upstream from mouth.

DRAINAGE AREA.--74.9 mi².

PERIOD OF RECORD.--October, November 1914 (fragmentary), February to November 1915, February 1916 to June 1917, April to July 1918 (fragmentary), April to July 1919, July 1949 to September 1971. October 1972 to current year.

GAGE.--Water-stage recorder and sharp-crested weir. Altitude of gage is 4,240 ft from topographic map. Prior to Apr. 28, 1918, nonrecording gage and Apr. 28, 1918 to Aug. 2, 1919, July 1949 to Mar. 15, 1962, water-stage recorder, 0.4 mi upstream at various datums.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversion into Sheley Tunnel, for storage in K. E. McDougald Reservoir began in March 1981. Diversion approximately 6.0 mi above station. Records do not include approximately 5,740 acre-ft diverted during the 1988 water year.

AVERAGE DISCHARGE.--30 years (1950-71, 1973-80), 14.3 ft³/s, 10,360 acre-ft/yr, prior to diversion to Sheley Tunnel. 8 years (1981-88), 14.4 ft³/s, 10,430 acre-ft/yr, since diversion to Sheley Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded discharge, about 5,110 ft³/s Aug. 21, 1953, gage height, 10.74 ft from floodmark, site and datum then in use from rating curve extended above 700 ft³/s on basis of slope-area measurements at gage heights 8.24 ft, 8.62 ft, 9.81 ft, and 11.1 ft; maximum gage height, 11.6 ft Aug. 26, 1961, site and datum then in use; minimum recorded, 0.2 ft³/s Feb. 15, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 6	0030	*561	*3.88	No other peak greater than base discharge.			
Minimum, 4.2 ft ³ /s Oct. 18-23.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	26	13	e7.0	e8.1	8.2	5.7	23	18	11	10	5.6
2	7.1	19	11	e6.6	e8.3	6.2	5.4	14	14	11	11	5.4
3	7.1	5.9	15	e6.8	e9.0	5.2	5.5	11	18	11	10	5.3
4	7.1	5.3	19	e7.0	e8.4	5.2	6.1	11	19	11	7.7	5.4
5	7.1	32	21	e7.3	e7.8	5.4	6.1	9.1	22	11	7.6	5.5
6	7.1	138	19	7.5	e8.2	5.9	5.4	9.7	24	11	7.8	5.5
7	7.1	36	15	7.3	e8.6	5.9	7.7	7.1	23	11	8.3	5.5
8	7.1	31	14	7.3	e9.0	5.5	13	6.4	21	11	7.8	5.4
9	7.0	27	13	7.8	e9.1	7.1	9.9	5.9	18	11	7.6	5.5
10	5.0	9.0	9.5	7.5	e9.3	6.9	8.6	9.1	15	11	7.7	5.8
11	4.9	9.2	7.0	7.3	e9.3	6.1	8.7	8.7	15	10	7.8	6.0
12	5.0	12	6.1	e7.0	e8.6	6.1	12	13	15	10	7.8	8.7
13	13	17	6.0	e6.8	e7.9	5.9	19	18	15	10	7.4	13
14	13	54	6.9	e6.1	e8.0	6.1	32	18	14	10	7.2	6.3
15	5.3	81	6.9	e6.5	e8.0	6.0	71	31	14	10	7.5	6.0
16	4.6	31	7.8	e7.0	7.7	6.0	22	21	14	10	7.6	5.8
17	4.3	15	8.3	7.4	7.8	6.4	16	34	14	10	7.3	5.6
18	4.2	14	11	7.7	8.2	6.4	9.3	91	14	10	8.1	5.4
19	4.2	17	12	e6.9	8.2	6.4	12	105	13	10	5.9	5.6
20	4.2	19	12	e5.8	8.1	6.9	14	37	13	9.9	6.6	5.3
21	4.2	20	11	e6.2	8.4	7.9	12	26	12	9.7	9.2	5.6
22	4.2	21	12	e6.1	8.7	9.1	10	19	11	9.6	8.3	5.6
23	4.2	20	13	e6.4	8.7	8.3	8.4	15	11	9.6	6.2	5.4
24	5.1	12	11	e6.2	8.7	7.7	9.1	16	11	9.6	6.0	5.6
25	5.4	9.9	13	e6.3	8.8	7.4	10	16	11	9.5	6.0	5.5
26	4.5	11	13	e6.2	8.8	7.9	9.7	18	11	11	5.9	5.5
27	6.6	11	6.8	e6.8	9.2	10	8.4	24	11	10	6.6	5.5
28	5.8	13	6.8	e6.8	9.9	11	9.8	28	12	9.9	6.0	5.4
29	5.6	16	7.7	e7.5	9.7	6.7	12	27	11	9.6	5.9	5.5
30	7.6	17	8.4	e8.0	---	7.8	19	27	11	10	6.3	5.6
31	5.0	---	7.2	e8.2	---	6.6	---	26	---	10	6.6	---
TOTAL	189.6	749.3	343.4	215.3	248.5	214.2	397.8	725.0	445	318.4	231.7	177.8
MEAN	6.12	25.0	11.1	6.95	8.57	6.91	13.3	23.4	14.8	10.3	7.47	5.93
MAX	13	138	21	8.2	9.9	11	71	105	24	11	11	13
MIN	4.2	5.3	6.0	5.8	7.7	5.2	5.4	5.9	11	9.5	5.9	5.3
AC-FT	376	1490	681	427	493	425	789	1440	883	632	460	353

CAL YR 1987 TOTAL 5041.2 MEAN 13.8 MAX 138 MIN 4.2 AC-FT 10000
WTR YR 1988 TOTAL 4256.0 MEAN 11.6 MAX 138 MIN 4.2 AC-FT 8440

e Estimated

TRIBUTARIES BETWEEN DOLORES RIVER AND GREEN RIVER

55

09186500 Indian Creek above Cottonwood Creek, near Monticello, Ut

LOCATION (REVISED).--Lat 37°58'20", long 109°31'07", in SW¼NW¼NW¼, sec. 28, T. 32 S., R. 22 E., San Juan County, Hydrologic Unit 14030005, on right bank, 0.8 mi upstream from intermittent right bank tributary, 8 mi upstream from Cottonwood Creek and 12 mi northwest of Monticello.

DRAINAGE AREA.--31.2 mi².

PERIOD OF RECORD.--October 1949 to September 1971, April to September 1988.

REVISED RECORDS.--WSP 1213: 1950(M). WSP 1633: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,290 ft (by barometer).

REMARKS.--Records fair. Indian Creek tunnel diverts water above station to San Juan River basin for irrigation and municipal supply.

AVERAGE DISCHARGE.--22 years (water years 1949-71), 4.40 ft³/s, 3,190 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 2,330 ft³/s Aug. 28, 1971, gage height, 12.45 ft from slope-area measurement; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 205 ft³/s July 26, gage height, 5.36 ft; minimum daily discharge 1.0 ft³/s Sept. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	34	36	4.4	2.7	1.9
2	---	---	---	---	---	---	---	34	31	4.3	3.1	1.6
3	---	---	---	---	---	---	---	30	23	8.4	2.2	1.5
4	---	---	---	---	---	---	---	28	23	4.5	1.9	1.5
5	---	---	---	---	---	---	---	28	25	3.9	1.8	1.4
6	---	---	---	---	---	---	e8.6	28	26	3.5	1.9	1.3
7	---	---	---	---	---	---	12	28	24	3.2	3.6	1.3
8	---	---	---	---	---	---	16	27	22	3.1	2.4	1.2
9	---	---	---	---	---	---	17	25	20	3.4	1.9	1.0
10	---	---	---	---	---	---	16	24	19	3.4	1.8	3.1
11	---	---	---	---	---	---	17	27	19	3.0	1.7	3.0
12	---	---	---	---	---	---	19	36	13	2.7	1.8	15
13	---	---	---	---	---	---	24	48	12	2.4	1.6	5.0
14	---	---	---	---	---	---	27	53	11	2.3	1.4	2.4
15	---	---	---	---	---	---	27	55	10	2.2	1.2	2.1
16	---	---	---	---	---	---	29	57	9.2	2.3	1.4	1.7
17	---	---	---	---	---	---	30	60	8.7	2.1	1.7	1.6
18	---	---	---	---	---	---	27	66	8.4	1.9	1.7	1.5
19	---	---	---	---	---	---	26	65	7.9	1.7	1.5	1.4
20	---	---	---	---	---	---	25	60	7.2	1.7	1.3	1.3
21	---	---	---	---	---	---	24	52	6.8	1.5	1.5	1.4
22	---	---	---	---	---	---	24	46	6.5	1.4	1.6	1.6
23	---	---	---	---	---	---	22	44	6.3	1.3	1.4	1.6
24	---	---	---	---	---	---	21	43	5.8	1.5	1.3	1.6
25	---	---	---	---	---	---	20	42	5.5	2.5	1.6	1.5
26	---	---	---	---	---	---	19	42	5.5	9.8	4.0	1.5
27	---	---	---	---	---	---	19	46	5.6	2.6	3.2	1.4
28	---	---	---	---	---	---	19	47	6.9	2.5	1.9	1.3
29	---	---	---	---	---	---	20	48	5.8	2.0	1.6	1.4
30	---	---	---	---	---	---	25	48	4.9	2.1	3.4	1.5
31	---	---	---	---	---	---	---	43	---	2.6	2.2	---
TOTAL	---	---	---	---	---	---	---	1314	415.0	94.2	62.3	65.6
MEAN	---	---	---	---	---	---	---	42.4	13.8	3.04	2.01	2.19
MAX	---	---	---	---	---	---	---	66	36	9.8	4.0	15
MIN	---	---	---	---	---	---	---	24	4.9	1.3	1.2	1.0
AC-FT	---	---	---	---	---	---	---	2610	823	187	124	130

e Estimated

COLORADO RIVER MAIN STEM

09187550 INDIAN CREEK BELOW BOGUS POCKET, NEAR MONTICELLO, UT

LOCATION.--Lat 38°09'06", long 109°37'30", in SE¼NW¼, sec. 28, T. 30 S., R. 21 E., San Juan County, Hydrologic Unit 14030005, on left bank, 4 mi east of Canyonlands National Park, the Needles Section.

DRAINAGE AREA.--262 mi².

PERIOD OF RECORD.--March 1983 to April 5, 1988 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 4,980 ft from topographic map.

REMARKS.--Records poor. Diversions for irrigation of 600 acres above gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,600 ft³/s Aug. 20, 1984, gage height, 11.95 ft; minimum, no flow several days in July and August, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 475 ft³/s Nov. 6, gage height, 6.49 ft; minimum 0.38 ft³/s Oct. 1-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.45	e25	e6.4	e5.3	e1.9	e14	15	---	---	---	---	---
2	.45	e18	e6.5	e4.0	e2.0	e14	16	---	---	---	---	---
3	.44	e9.6	e6.6	e4.0	e1.8	13	16	---	---	---	---	---
4	.44	e7.5	e6.9	e4.2	e1.7	13	15	---	---	---	---	---
5	.48	e6.0	e6.8	e4.6	e1.5	13	e16	---	---	---	---	---
6	.50	e79	e6.7	e4.8	e1.6	13	---	---	---	---	---	---
7	.50	8.5	e6.6	e5.0	e1.7	13	---	---	---	---	---	---
8	.61	6.3	e6.7	e4.9	e1.9	14	---	---	---	---	---	---
9	.65	5.1	e6.4	e4.0	e2.0	13	---	---	---	---	---	---
10	.71	4.4	e6.5	e4.2	e2.2	13	---	---	---	---	---	---
11	.77	3.7	e6.7	e4.1	e2.1	13	---	---	---	---	---	---
12	.90	3.1	e6.6	e4.3	e2.0	12	---	---	---	---	---	---
13	1.8	3.2	e6.0	e2.8	e1.9	14	---	---	---	---	---	---
14	4.4	7.6	e5.8	e2.4	e1.9	14	---	---	---	---	---	---
15	4.8	4.8	e5.9	e2.3	e2.3	14	---	---	---	---	---	---
16	2.6	3.7	e6.1	e2.5	e2.2	14	---	---	---	---	---	---
17	2.4	e6.4	e6.0	e2.6	e2.1	15	---	---	---	---	---	---
18	2.4	e6.2	e7.4	e3.0	e2.0	14	---	---	---	---	---	---
19	2.3	e6.0	e8.0	e2.0	e2.5	14	---	---	---	---	---	---
20	2.1	e6.2	e10	e1.0	e3.0	14	---	---	---	---	---	---
21	2.2	e6.4	e11	e1.0	e6.0	13	---	---	---	---	---	---
22	2.1	e6.5	e12	e1.1	e7.2	13	---	---	---	---	---	---
23	2.6	e6.3	e14	e1.2	e8.0	15	---	---	---	---	---	---
24	1.8	e6.1	e9.0	e1.2	e8.0	14	---	---	---	---	---	---
25	1.9	e6.3	e6.5	e1.2	e8.8	13	---	---	---	---	---	---
26	2.5	e6.6	e6.0	e1.3	e9.4	14	---	---	---	---	---	---
27	2.1	e6.1	e6.4	e1.4	e11	16	---	---	---	---	---	---
28	2.3	e6.3	e6.3	e1.6	e12	16	---	---	---	---	---	---
29	2.5	e6.2	e6.5	e1.8	e13	16	---	---	---	---	---	---
30	3.2	e6.3	e6.1	e1.9	---	16	---	---	---	---	---	---
31	2.4	---	e5.2	e1.8	---	16	---	---	---	---	---	---
TOTAL	55.30	283.4	223.6	87.5	123.7	433	---	---	---	---	---	---
MEAN	1.78	9.45	7.21	2.82	4.27	14.0	---	---	---	---	---	---
MAX	4.8	79	14	5.3	13	16	---	---	---	---	---	---
MIN	.44	3.1	5.2	1.0	1.5	12	---	---	---	---	---	---
AC-FT	110	562	444	174	245	859	---	---	---	---	---	---

CAL YR 1987 TOTAL 5130.12 MEAN 14.1 MAX 90 MIN .08 AC-FT 10180

e Estimated

GREEN RIVER BASIN

57

09217000 GREEN RIVER NEAR GREEN RIVER, WY

LOCATION.--Lat 41°30'59", long 109°26'54", in NW¼ NE¼ NE¼ sec. 26, T. 18 N., R. 107 W., Sweetwater County, Hydrologic Unit 14040106, on right bank 0.1 mi downstream from Bitter Creek, 1.0 mi southeast of town of Green River, and 4.0 mi upstream from high-water line of Flaming Gorge Reservoir.

DRAINAGE AREA.--About 14,000 mi², of which 4,260 mi², including 3,959 mi² in Great Divide Basin in southern Wyoming, is probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1951 to current year.

REVISED RECORDS.--WSP 1713: 1957. WDR-76-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,060 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 18-23, 26-28, and Dec. 13 to Apr. 12. Records good except those for estimated daily discharges, which are poor. Some regulation by Fontenelle Reservoir since August 1963. (See sta 09211150.) Natural flow of stream affected by transbasin diversions, storage reservoirs, power development, and diversions for irrigation of about 223,000 acres upstream from station. National Weather Service satellite telemeter at station.

AVERAGE DISCHARGE.--37 years, 1,766 ft³/s, 1,279,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,800 ft³/s, Sept. 7, 1965, gage height, 8.53 ft, caused by emergency release from Fontenelle Reservoir; minimum daily discharge, 170 ft³/s, Nov. 16, 1955.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge observed, 22,200 ft³/s, June 19, 1918, at site 1.5 mi upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,460 ft³/s, June 1, gage height, 4.03 ft; minimum daily, 211 ft³/s, Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	667	663	464	300	330	460	750	996	4330	1650	399	244
2	667	663	578	280	310	450	850	1030	4430	1640	418	242
3	672	663	534	280	300	440	1000	994	3940	1500	511	244
4	668	645	507	300	300	430	1200	981	3050	1260	533	245
5	660	648	539	320	300	450	1100	993	2540	1140	505	250
6	670	678	501	330	320	500	1050	999	2050	1140	504	252
7	657	763	469	330	330	560	1100	998	1940	1120	500	237
8	577	822	423	330	340	600	1200	996	2640	1100	486	214
9	517	813	424	330	350	560	1300	992	3680	1100	477	211
10	502	821	659	330	350	560	1200	984	3820	997	467	217
11	476	822	595	350	350	600	1100	994	4240	873	471	221
12	473	780	460	350	350	500	1210	1010	3810	804	496	223
13	493	694	400	350	350	450	1220	1010	3310	798	492	236
14	542	668	400	350	350	430	1210	998	2170	799	488	292
15	543	654	400	350	330	450	1220	997	1880	732	507	299
16	590	638	400	350	330	500	1360	1000	1880	631	487	262
17	584	633	400	350	330	500	1500	1010	2340	620	413	257
18	576	600	400	350	330	500	1630	1350	2220	608	377	251
19	567	550	380	330	330	560	1880	1590	1910	606	373	239
20	564	550	350	300	340	640	1990	1910	1780	615	376	256
21	560	520	350	320	360	700	2020	2540	1750	621	351	262
22	571	450	350	330	360	800	2060	3570	1740	640	340	258
23	580	370	350	330	360	760	2060	3580	1710	766	339	258
24	592	385	300	330	360	725	2030	2530	1760	771	285	258
25	620	485	250	330	390	720	2000	2380	1780	779	264	259
26	661	450	270	330	410	720	1710	2420	1790	643	258	252
27	655	400	280	350	430	800	1220	2420	1790	432	245	261
28	655	380	300	350	440	750	1200	3100	1730	422	250	282
29	656	389	300	350	450	740	1210	3290	1760	424	259	284
30	656	451	310	350	---	720	1070	3320	1650	411	257	268
31	663	---	310	350	---	720	---	3350	---	406	250	---
TOTAL	18534	18048	12653	10280	10180	18295	41650	54332	75420	26048	12378	7534
MEAN	598	602	408	332	351	590	1388	1753	2514	840	399	251
MAX	672	822	659	350	450	800	2060	3580	4430	1650	533	299
MIN	473	370	250	280	300	430	750	981	1650	406	245	211
AC-FT	36760	35800	25100	20390	20190	36290	82610	107800	149600	51670	24550	14940

CAL YR 1987 TOTAL 543204 MEAN 1488 MAX 7050 MIN 250 AC-FT 1077000
WTR YR 1988 TOTAL 305352 MEAN 834 MAX 4430 MIN 211 AC-FT 605700

NOTE.--Water-quality records for the current year are published in the report "Water Resources Data for Wyoming, 1988."

GREEN RIVER BASIN

09218500 BLACKS FORK NEAR MILLBURNE, WY

LOCATION.--Lat 41°01'54", long 110°34'43", in NW¼ NE¼ SW¼ sec.11, T.12 N., R.117 W., Uinta County, Hydrologic Unit 14040107, on left bank 0.4 mi downstream from Meeks Cabin Dam, 2.7 mi north of Utah-Wyoming State line, and 17 mi southwest of Millburne.

DRAINAGE AREA.--152 mi².

PERIOD OF RECORD.--July 1939 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 929: 1940.

GAGE.--Water-stage recorder. Datum of gage is 8,512.27 ft above National Geodetic Vertical Datum of 1929 (Bureau of Reclamation bench mark). Prior to Oct. 1, 1971, at several sites about 2.0 mi downstream at various datums.

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by Meeks Cabin Reservoir, capacity, 32,470 acre-ft, since June 1971. No diversion upstream from station.

AVERAGE DISCHARGE.--49 years, 163 ft³/s, 118,100 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,530 ft³/s, June 7, 1957, from rating curve extended above 1,500 ft³/s; maximum gage height, 6.46 ft in gage well, 6.76 ft from floodmarks, June 12, 1965, site and datum then in use; minimum daily discharge, 1.0 ft³/s, Sept. 15, 16, 1983, due to regulation by Meeks Cabin Dam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 766 ft³/s, May 30, gage height, 4.05 ft; minimum daily, 8.6 ft³/s, Mar. 2-15, 29, 30, and Apr. 8-10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	27	15	19	18	13	9.1	9.5	723	445	115	83
2	54	27	15	19	18	8.6	9.1	9.5	702	442	124	82
3	52	27	15	19	18	8.6	9.1	9.7	687	437	129	82
4	52	26	15	19	18	8.6	9.1	10	686	433	128	82
5	53	27	16	19	18	8.6	9.1	10	688	380	128	82
6	51	27	16	19	17	8.6	9.1	9.9	691	342	128	72
7	51	27	16	19	17	8.6	8.8	9.5	691	347	128	63
8	51	27	16	20	17	8.6	8.6	9.5	612	351	128	63
9	51	27	16	20	17	8.6	8.6	9.5	561	345	117	63
10	51	25	16	20	17	8.6	8.6	11	551	340	109	63
11	51	21	16	20	17	8.6	8.9	12	544	337	109	63
12	46	21	16	20	17	8.6	9.1	12	542	296	109	63
13	39	21	16	20	17	8.6	9.1	13	537	263	109	65
14	39	21	16	20	17	8.6	9.1	13	511	259	109	67
15	37	21	16	20	17	8.6	9.3	13	492	258	107	66
16	35	21	16	20	17	8.9	9.2	131	491	257	108	66
17	33	21	16	21	18	9.1	9.1	257	490	254	109	66
18	33	22	16	21	18	9.1	9.1	321	492	251	109	67
19	33	19	16	21	18	9.1	9.1	501	491	205	109	66
20	33	15	16	21	18	9.1	9.1	597	487	168	109	74
21	33	15	17	20	18	9.1	9.5	623	496	168	106	81
22	33	15	17	19	18	9.1	9.5	645	501	166	104	81
23	33	15	17	19	18	9.1	9.5	645	502	165	96	81
24	33	14	17	19	18	9.1	9.5	646	501	165	89	80
25	33	14	18	18	18	9.1	9.5	647	497	165	89	81
26	33	15	18	19	18	9.1	9.5	658	496	140	89	81
27	33	15	18	19	18	9.1	9.1	678	491	122	89	54
28	33	15	18	19	18	8.9	9.1	710	473	116	89	33
29	31	15	18	19	18	8.6	9.1	728	458	115	89	32
30	28	15	19	19	---	8.6	9.1	725	454	115	87	32
31	28	---	19	19	---	8.7	---	727	---	115	84	---
TOTAL	1251	618	512	606	511	277.2	273.7	9400.1	16538	7962	3332	2034
MEAN	40.4	20.6	16.5	19.5	17.6	8.94	9.12	303	551	257	107	67.8
MAX	55	27	19	21	18	13	9.5	728	723	445	129	83
MIN	28	14	15	18	17	8.6	8.6	9.5	454	115	84	32
AC-FT	2480	1230	1020	1200	1010	550	543	18650	32800	15790	6610	4030
CAL YR 1987	TOTAL	56255	MEAN	154	MAX	1200	MIN	12	AC-FT	111600		
WTR YR 1988	TOTAL	43315.0	MEAN	118	MAX	728	MIN	8.6	AC-FT	85920		

GREEN RIVER BASIN

59

09220000 EAST FORK OF SMITHS FORK NEAR ROBERTSON, WY

LOCATION.--Lat 41°03'15", long 110°23'52", in NE¼ NW¼ NE¼ sec.5, T.12 N., R.115 W., Uinta County, Hydrologic Unit 14040107, Wasatch National Forest, on left bank 60 ft downstream from bridge, 1.0 mi upstream from Gilbert Creek, 6.1 mi downstream from State Line Reservoir, and 9.0 mi south of Robertson.

DRAINAGE AREA.--53.0 mi².

PERIOD OF RECORD.--July 1939 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1313. Prior to Oct. 1, 1978, published as East Fork of Smith Fork near Robertson.

REVISED RECORDS.--WSP 979: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,470 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 12, 1957, at datum 3.96 ft higher.

REMARKS.--Estimated daily discharges: May 1-10 and Sept. 28-30. Records fair. Flow completely regulated by State Line Reservoir, 6.1 mi upstream, total capacity, 14,000 acre-ft, dead storage is about 2,000 acre-ft, since May 1979.

COOPERATION.--Records provided by Office of the Wyoming State Engineer and reviewed by the Geological Survey.

AVERAGE DISCHARGE.--32 years (water years 1940-71), 47.1 ft³/s, 34,120 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,450 ft³/s, June 10, 1965, gage height, 6.75 ft; no flow part of each day Apr. 17-22, 24, 25, 1950; minimum gage height, 3.26 ft, present datum, Apr. 22, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 325 ft³/s, June 5, gage height, 5.35 ft; minimum daily during period of operation, 12 ft³/s, May 1-4, 15, 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	12	137	132	61	53
2	---	---	---	---	---	---	---	12	118	108	61	45
3	---	---	---	---	---	---	---	12	116	108	61	45
4	---	---	---	---	---	---	---	12	186	108	60	45
5	---	---	---	---	---	---	---	13	291	107	58	45
6	---	---	---	---	---	---	---	13	282	107	58	45
7	---	---	---	---	---	---	---	13	217	107	58	45
8	---	---	---	---	---	---	---	14	173	100	58	41
9	---	---	---	---	---	---	---	14	153	80	57	36
10	---	---	---	---	---	---	---	14	141	80	57	36
11	---	---	---	---	---	---	---	14	128	80	58	36
12	---	---	---	---	---	---	---	15	120	80	60	36
13	---	---	---	---	---	---	---	15	108	79	60	36
14	---	---	---	---	---	---	---	14	101	79	58	36
15	---	---	---	---	---	---	---	12	98	80	58	31
16	---	---	---	---	---	---	---	12	108	112	58	25
17	---	---	---	---	---	---	---	19	128	132	58	25
18	---	---	---	---	---	---	---	45	132	132	75	25
19	---	---	---	---	---	---	---	53	130	132	110	25
20	---	---	---	---	---	---	---	78	132	132	110	24
21	---	---	---	---	---	---	---	98	134	132	108	24
22	---	---	---	---	---	---	---	98	137	130	108	25
23	---	---	---	---	---	---	---	98	141	108	107	26
24	---	---	---	---	---	---	---	98	165	67	105	25
25	---	---	---	---	---	---	---	98	165	66	80	25
26	---	---	---	---	---	---	---	141	165	66	58	24
27	---	---	---	---	---	---	---	278	165	66	58	24
28	---	---	---	---	---	---	---	252	162	63	58	24
29	---	---	---	---	---	---	---	244	162	61	57	24
30	---	---	---	---	---	---	---	207	162	61	57	24
31	---	---	---	---	---	---	---	165	---	61	57	---
TOTAL	---	---	---	---	---	---	---	2183	4557	2956	2147	980
MEAN	---	---	---	---	---	---	---	70.4	152	95.4	69.3	32.7
MAX	---	---	---	---	---	---	---	278	291	132	110	53
MIN	---	---	---	---	---	---	---	12	98	61	57	24
AC-FT	---	---	---	---	---	---	---	4330	9040	5860	4260	1940

GREEN RIVER BASIN

09229500 HENRYS FORK NEAR MANILA, UT

LOCATION.--Lat 41°00'45", long 109°40'20", in NW¼ NW¼ sec.23, T.12 N., R.109 W., Sweetwater County, WY, Hydrologic Unit 14040106, on right bank 0.8 mi north of Wyoming-Utah State line, 1.3 mi upstream from normal high-water line of Flaming Gorge Reservoir at elevation 6,045 ft, and 3.0 mi northeast of Manila, UT.

DRAINAGE AREA.--520 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1928 to current year. Prior to October 1971, published as "at Linwood, UT."

REVISED RECORDS.--WSP 1443: 1955. WDR WY-76-2: 1970.

GAGE.--Water-stage recorder. Elevation of gage is 6,060 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1957, nonrecording gages or water-stage recorder at several sites about 2.0 mi downstream at various datums. Oct. 1, 1957, to Dec. 2, 1965, water-stage recorders at sites about 1.0 mi upstream at different datums.

REMARKS.--Estimated daily discharges: Nov. 16 to Mar. 7. Records fair except those for estimated daily discharges, which are poor. Peoples Irrigation Canal diverts 5.9 mi upstream. Natural flow of stream affected by transbasin diversions, small storage reservoirs, diversions for irrigation, and return flow from irrigated areas. National Weather Service satellite telemeter at station.

AVERAGE DISCHARGE.--60 years, 86.2 ft³/s, 62,450 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge determined, 6,750 ft³/s, Aug. 3, 1936, gage height, 7.19 ft, site and datum then in use, from floodmarks, from rating curve extended above 570 ft³/s on basis of slope-area measurement of peak flow; higher discharge occurred July 15, 1959, gage height, 9.42 ft, site and datum then in use, discharge not determined; no flow for several days in 1933-35, 1939-40.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 543 ft³/s, May 18, gage height, 5.31 ft; minimum daily, 2.6 ft³/s, Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	67	45	40	55	90	69	117	149	34	4.1	3.3
2	48	62	50	36	50	80	99	127	128	25	3.9	3.1
3	48	69	60	38	45	65	145	166	117	19	4.8	3.0
4	45	71	80	44	45	60	166	201	125	26	9.5	2.9
5	45	67	75	48	48	58	150	171	232	26	11	2.7
6	44	69	80	50	52	58	144	141	271	21	13	2.7
7	44	71	85	50	55	58	176	120	191	15	27	2.7
8	43	74	80	47	58	57	195	114	124	15	9.0	2.7
9	43	67	70	47	60	90	130	113	93	12	6.4	2.6
10	45	65	75	50	62	89	109	88	68	11	4.9	2.8
11	48	68	80	55	64	70	120	69	47	10	5.2	2.9
12	48	69	65	52	66	62	126	77	32	8.3	5.6	2.8
13	53	72	50	48	70	68	128	89	33	7.3	5.8	3.6
14	79	77	40	50	65	65	118	124	31	7.1	6.7	3.6
15	71	74	32	54	65	73	111	169	22	6.4	7.0	3.4
16	61	52	35	54	62	64	119	199	16	6.3	7.9	3.2
17	58	50	45	50	58	60	117	318	11	6.7	7.9	3.4
18	56	45	50	48	58	61	117	485	10	6.7	7.7	3.4
19	57	45	55	46	60	70	139	362	11	7.0	7.9	3.5
20	55	55	50	42	60	109	118	240	16	6.3	8.1	3.7
21	54	65	50	45	64	162	117	190	19	4.4	8.4	3.7
22	52	70	50	48	70	201	137	188	21	4.6	7.9	4.1
23	54	65	45	50	70	147	141	209	39	3.9	7.7	4.0
24	55	65	40	52	70	138	140	238	51	4.2	6.5	4.3
25	57	60	30	54	75	103	125	239	36	4.5	5.5	4.4
26	56	55	29	56	80	159	114	239	26	4.1	4.8	4.3
27	54	50	34	60	85	195	98	286	45	3.6	4.4	4.3
28	55	45	37	56	90	140	94	291	72	3.7	4.2	4.4
29	56	42	40	60	90	96	102	254	89	3.6	4.2	4.6
30	57	42	42	60	---	89	98	223	58	3.9	3.9	4.8
31	66	---	42	59	---	83	---	178	---	4.1	3.4	---
TOTAL	1655	1848	1641	1549	1852	2920	3762	6025	2183	320.7	224.3	104.9
MEAN	53.4	61.6	52.9	50.0	63.9	94.2	125	194	72.8	10.3	7.24	3.50
MAX	79	77	85	60	90	201	195	485	271	34	27	4.8
MIN	43	42	29	36	45	57	69	69	10	3.6	3.4	2.6
AC-FT	3280	3670	3250	3070	3670	5790	7460	11950	4330	636	445	208

CAL YR 1987 TOTAL 36011 MEAN 98.7 MAX 827 MIN 15 AC-FT 71430
WTR YR 1988 TOTAL 24084.9 MEAN 65.8 MAX 485 MIN 2.6 AC-FT 47770

NOTE.--Water-quality records for the current year are published in the report "Water Resources Data for Wyoming, 1988."

09234400 FLAMING GORGE RESERVOIR AT FLAMING GORGE DAM, UT

LOCATION.--Lat 40°54'23", long 109°25'15", in NW¼NE¼ sec.15, T.2 N., R.22 E., Daggett County, Hydrologic Unit 14040106, at Flaming Gorge Dam on Green River, 1.8 mi southwest of Dutch John, and 4.9 mi northeast of Greendale.

DRAINAGE AREA.--19,350 mi², of which about 4,260 mi², including 3,959 mi² in Great Divide Basin in southern Wyoming, is probably noncontributing.

PERIOD OF RECORD.--November 1962 to current year.

REVISED RECORDS.--WDR UT-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by Bureau of Reclamation). Prior to Jan. 1, 1964, on left bank 600 ft upstream from face of dam.

REMARKS.--Records excellent. Reservoir is formed by concrete arch-type dam; storage began Nov. 1, 1962; mass concrete of dam completed Nov. 15, 1962. Total capacity, 3,789,000 acre-ft, consisting of the following: Dead storage, 39,700 acre-ft below elevation 5,740 ft; inactive usable storage, 233,500 acre-ft between elevations 5,740 ft and 5,871 ft; active usable storage, 3,516,000 acre-ft between elevations 5,871 ft and 6,040 ft (top of conservation pool). Reservoir is used for flood control, storage replacement to meet downstream requirements under the Colorado River Compact of 1922, and power development. Figures given herein represent usable contents. Transbasin diversions and diversions for irrigation above station.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 3,911,000 acre-ft July 13, 1983, elevation, 6,043.80 ft; minimum, 582,900 acre-ft Apr. 26, 1965, elevation, 5908.90 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 3,484,000 acre-ft Oct. 1, elevation, 6,033.51 ft; minimum observed, 3,000,000 acre-ft Mar. 18-20, elevation, 6,020.65 ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

6,020	2,977,000	6,030	3,346,000
6,025	3,157,000	6,035	3,543,000

RESERVOIR STORAGE, IN THOUSANDS OF AC-FT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
INSTANTANEOUS OBSERVATIONS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3484	3418	3318	3211	3099	3015	3020	3075	3173	3249	3199	3145
2	3480	3415	3315	3206	3096	3013	3023	3074	3182	3250	3196	3144
3	3477	3411	3313	3202	3094	3009	3022	3075	3188	3251	3194	3142
4	3475	3408	3311	3199	3091	3009	3023	3074	3194	3252	3193	3141
5	3473	3403	3308	3196	3088	3008	3023	3077	3198	3252	3193	3139
6	3471	3402	3304	3192	3086	3007	3024	3078	3199	3250	3192	3138
7	3469	3400	3301	3188	3082	3007	3024	3079	3200	3250	3191	3136
8	3467	3399	3298	3185	3077	3004	3027	3080	3202	3249	3190	3135
9	3464	3396	3294	3182	3073	3004	3028	3081	3207	3248	3189	3133
10	3462	3394	3291	3179	3070	3004	3030	3080	3212	3247	3187	3132
11	3460	3389	3289	3176	3067	3003	3031	3080	3219	3246	3185	3130
12	3458	3387	3285	3172	3064	3003	3033	3081	3224	3245	3183	3128
13	3456	3385	3282	3168	3060	3002	3034	3081	3228	3243	3181	3127
14	3454	3382	3277	3162	3057	3001	3035	3081	3229	3241	3179	3124
15	3453	3378	3274	3159	3053	3002	3037	3082	3230	3238	3176	3122
16	3451	3374	3270	3153	3048	3002	3039	3083	3232	3236	3175	3120
17	3447	3370	3267	3151	3045	3001	3040	3087	3233	3234	3172	3119
18	3445	3365	3266	3147	3044	3000	3043	3092	3235	3232	3170	3117
19	3443	3361	3263	3142	3040	3000	3046	3097	3238	3229	3168	3115
20	3441	3357	3260	3138	3038	3000	3049	3101	3238	3226	3166	3114
21	3439	3353	3254	3134	3035	3002	3053	3107	3238	3224	3165	3112
22	3436	3350	3251	3131	3031	3004	3057	3115	3239	3221	3162	3111
23	3434	3346	3248	3128	3030	3005	3062	3122	3238	3220	3160	3109
24	3432	3342	3244	3126	3026	3007	3065	3129	3237	3220	3158	3107
25	3430	3339	3241	3121	3023	3010	3067	3132	3237	3217	3156	3105
26	3428	3336	3238	3117	3020	3013	3073	3138	3242	3214	3154	3103
27	3425	3333	3237	3113	3018	3016	3074	3142	3243	3213	3153	3102
28	3423	3330	3233	3111	3016	3018	3074	3148	3245	3211	3152	3100
29	3421	3326	3227	3109	3015	3018	3072	3154	3247	3206	3150	3099
30	3421	3322	3221	3106	---	3019	3070	3158	3248	3204	3148	3098
31	3420	---	3216	3102	---	3020	---	3166	---	3202	3146	---
MAX	3484	3418	3318	3211	3099	3020	3074	3166	3248	3252	3199	3145
MIN	3420	3322	3216	3102	3015	3000	3020	3074	3173	3202	3146	3098
(#)	6031.91	6029.37	6026.59	6023.49	6021.08	6021.21	6022.62	6025.25	6027.43	6026.20	6024.71	6023.38
(*)	-66	-98	-106	-114	-87	+5	+50	+96	+82	-46	-56	-48

CAL YR 1987 (*) -40

WTR YR 1988 (*) -388

(#) Elevation, in feet, at end of month.

(*) Change in contents, in thousands of acre-feet.

GREEN RIVER BASIN

09234500 GREEN RIVER NEAR GREENDALE, UT

LOCATION.--Lat 40°54'30", long 109°25'20", in NW¼NW¼SE¼ sec. 15, T. 2 N., R. 22 E., Daggett County, Hydrologic Unit 14040106, Ashley National Forest on right bank 0.5 mi downstream from Flaming Gorge Dam, 2 mi south of Dutch John, 4 mi northeast of Greendale, and 407 mi from mouth.

DRAINAGE AREA.--19,350 mi², approximately, including about 4,260 mi² which is probably noncontributing. This noncontributing area includes 3,959 mi² in Great Divide Basin in southern Wyoming.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1950 to current year.

REVISED RECORDS.--WDR UT-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,594.48 ft NGVD of 1929. Prior to Sept. 2, 1959, water-stage recorder at site 2.2 mi upstream at different datum. Sept. 3, 1959, to Sept. 30, 1985, at datum 5.0 ft lower.

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by Flaming Gorge Reservoir 0.5 mi upstream, beginning Nov. 1, 1962 (see station 09234400).

AVERAGE DISCHARGE.--38 years, 2,169 ft³/s, 1,571,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,600 ft³/s June 12, 1957, gage height, 10.60 ft, site and datum then in use; maximum gage height, 14.51 ft May 12, June 6, 1986, datum then in use; minimum, 2.3 ft³/s Mar. 20, 22, 27, 28, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,180 ft³/s Feb. 16, gage height, 11.41 ft; minimum, 226 ft³/s Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1920	2110	2140	2770	2210	1080	1150	1240	1300	1290	1510	1030
2	2070	2110	1960	2910	1970	2640	929	1510	1190	1090	1930	1000
3	1990	2080	2280	2580	1800	2500	1000	1130	1900	1190	1390	911
4	2010	2000	2150	1770	1480	1730	1360	1930	1180	1070	924	915
5	1650	2240	2440	2090	1890	1440	1150	893	1090	1490	980	915
6	1750	1930	1980	2620	2170	1010	1290	1540	1100	1710	926	916
7	1720	1830	2280	2520	2480	1550	882	1900	2830	1690	927	915
8	1480	1870	2190	2440	2720	2330	1090	1110	2070	1820	950	915
9	1750	2320	2360	2070	2500	1570	891	1740	1220	1080	902	924
10	1760	2570	2350	2040	2340	1590	922	1780	1620	1050	1570	899
11	1400	2570	1970	1890	1770	1630	1180	1060	1060	1950	1080	898
12	1610	2500	2210	2350	1920	1250	1590	1480	1030	1310	1170	1090
13	1390	2570	2180	2380	2250	1130	1190	1580	2430	1610	1480	1030
14	1650	2560	2360	2980	2390	965	1300	1740	1360	1610	1120	1350
15	1800	2580	2220	2260	2820	981	1170	1100	1620	2210	1610	1100
16	1790	2600	2210	3170	3280	1010	1070	917	1770	1480	1240	1260
17	1800	2600	1900	2210	1690	1310	1080	922	1920	1570	1600	879
18	1910	2610	1630	2780	1620	971	1690	948	1080	1740	1660	872
19	1300	2590	2190	2890	2080	1220	891	1170	1090	1790	1390	1030
20	1690	2580	1980	2640	2240	928	1400	942	2050	1750	1220	885
21	1540	2570	3050	1920	1740	941	1320	944	2110	1500	993	894
22	2240	2500	2340	1730	2660	964	1730	950	2070	1760	1350	895
23	1830	2210	2510	2320	1500	968	1010	1210	1700	1160	1420	1140
24	1840	2190	1910	1840	2810	1090	1330	957	2000	1590	1670	1030
25	1820	2270	1840	2750	2010	866	1090	1440	1170	1970	1180	1450
26	1680	2260	1860	2460	2410	1050	1420	1290	862	1670	1160	886
27	1850	2250	1680	2220	2040	877	1790	1230	860	1160	888	889
28	1740	2260	2460	1760	1520	1210	1940	1030	1240	1770	888	892
29	2230	2240	3030	1880	1890	1370	2540	968	1740	2240	1090	890
30	1930	2250	3270	2160	---	1060	1840	979	1210	1470	1130	1280
31	1830	---	3190	2480	---	1320	---	1680	---	2110	890	---
TOTAL	54970	69820	70120	72880	62200	40551	39235	39310	45872	48900	38238	29980
MEAN	1773	2327	2262	2351	2145	1308	1308	1268	1529	1577	1233	999
MAX	2240	2610	3270	3170	3280	2640	2540	1930	2830	2240	1930	1450
MIN	1300	1830	1630	1730	1480	866	882	893	860	1050	888	872
AC-FT	109000	138500	139100	144600	123400	80430	77820	77970	90990	96990	75850	59470
CAL YR 1987	TOTAL	703735	MEAN	1928	MAX	4030	MIN	742	AC-FT	1396000		
WTR YR 1988	TOTAL	612076	MEAN	1672	MAX	3280	MIN	860	AC-FT	1214000		

GREEN RIVER BASIN

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09234500 GREEN RIVER NEAR GREENDALE, UT--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1956 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1956 to September 1959, October 1963 to current year.

WATER TEMPERATURES: October 1956 to September 1959, October 1963 to current year.

SEDIMENT DATA: October 1956 to September 1959.

INSTRUMENTATION.--Specific conductance recorder December 1986 to current year; temperature recorder December 1986 to current year.

REMARKS.--Storage in Flaming Gorge Reservoir began on Nov. 1, 1962. Samples for daily records are taken inside Penstock. Extremes are given for two separate periods--water years 1957-62, and water years 1964 to current year. Extremes for the 1963 water year (October 1962 to September 1963) are not included. Unpublished daily records of specific conductance obtained before 1965 were included in the determination of extremes for period of daily record and are available in files of district office. Daily records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF DAILY RECORD (water years 1957-62, 1964 to current year).--

SPECIFIC CONDUCTANCE (water years 1957-58, 1960-62): Maximum daily, 1,340 microsiemens Aug. 30, 1961; minimum daily, 325 microsiemens June 2, 1961.

WATER TEMPERATURES (water years 1957-59): Maximum, 24.0°C July 24, 25, 1959; minimum, 0.0°C on many days during winter period each year.

SPECIFIC CONDUCTANCE (water years 1964 to current year): Maximum daily, 1,060 microsiemens Nov. 9, 1971; minimum recorded, 550 microsiemens June 25, July 4.

WATER TEMPERATURES: Maximum observed, 15.0°C Aug. 17, 1987; minimum recorded 1.6°C Mar. 1, 2, 1987.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 709 microsiemens Apr. 2; minimum recorded, 553 microsiemens Sept. 28.

WATER TEMPERATURES: Maximum recorded, 15.7°C July 22, 25; minimum recorded, 2.0°C Jan. 24.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BARO-METRIC PRES-SURE (MM OF HG)	HARD-NESS TOTAL (MG/L AS CaCO3)	HARD-NESS NONCARB WH WAT TOT FLD (MG/L AS CaCO3)
NOV , 1987										
17...	1445	2690	660	8.30	-5.0	8.5	8.00	627	240	93
MAR , 1988										
31...	1150	855	690	8.40	4.0	4.0	9.70	620	240	82
MAY										
26...	1345	941	610	8.50	28.0	11.0	11.4	680	240	87
JUL										
28...	1110	920	660	8.40	--	14.5	9.00	626	250	97
DATE	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS Cl)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
NOV , 1987										
17...	60	23	47	29	1	2.5	152	190	15	0.3
MAR , 1988										
31...	60	22	47	30	1	2.2	159	180	15	0.3
MAY										
26...	58	23	48	30	1	2.2	153	170	16	0.3
JUL										
28...	58	25	100	46	3	2.4	151	180	15	0.2
DATE	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHOUS TOTAL (MG/L AS P)
NOV , 1987										
17...	4.7	439	434	0.6	3190	<0.086	0.3	--	--	0.01
MAR , 1988										
31...	6.3	446	428	0.61	1030	0.20	<0.2	--	--	0.02
MAY										
26...	3.8	433	413	0.59	1100	0.10	2.8	2.9	13	0.02
JUL										
28...	8.4	438	480	0.6	1090	0.20	0.2	0.4	1.8	<0.01

GREEN RIVER BASIN

09234500 GREEN RIVER NEAR GREENDALE, UT--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	627	617	621	637	633	635	647	645	646	656	651	653
2	630	618	623	639	632	635	647	643	645	659	653	655
3	629	618	622	639	632	635	647	643	645	660	656	658
4	628	611	620	638	634	636	645	643	644	660	657	658
5	626	614	619	637	634	635	647	643	645	662	659	661
6	629	609	619	637	635	636	647	643	645	663	660	661
7	628	616	622	637	635	636	649	644	646	665	659	661
8	626	617	621	638	635	637	647	644	646	664	657	662
9	626	620	622	639	636	637	648	644	646	662	657	660
10	629	621	624	640	636	637	650	646	648	668	657	662
11	629	620	625	638	635	636	649	644	646	671	658	665
12	630	619	624	638	636	637	650	646	648	660	657	658
13	628	622	625	640	638	639	651	647	650	663	657	660
14	625	620	622	640	636	638	653	649	650	665	661	663
15	628	624	625	643	638	641	653	648	650	672	662	666
16	630	622	625	645	641	643	656	650	653	666	661	663
17	626	622	624	646	642	644	658	653	655	669	663	666
18	629	621	625	645	642	643	654	650	652	670	661	665
19	628	621	625	646	641	644	652	648	650	666	661	663
20	628	625	626	647	641	644	652	649	650	668	665	667
21	631	626	628	645	640	642	654	648	651	667	660	662
22	629	624	626	645	641	643	656	648	651	666	662	664
23	628	625	627	647	643	645	653	649	650	666	660	662
24	629	625	627	646	642	644	653	649	650	662	660	661
25	632	624	628	646	643	645	654	649	651	666	661	664
26	630	628	629	646	643	644	654	652	653	668	663	665
27	631	628	629	648	643	645	656	652	654	667	664	666
28	633	627	630	648	645	646	656	652	654	667	665	666
29	630	627	628	648	645	646	663	653	658	668	665	666
30	633	628	630	647	645	646	658	653	656	668	666	667
31	635	631	632	---	---	---	656	651	654	669	666	667
MONTH	635	609	625	648	632	640	663	643	650	672	651	662
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	669	666	667	685	681	683	697	691	694	643	621	634
2	669	666	668	687	682	684	709	685	689	640	624	630
3	670	668	669	687	677	683	692	685	688	643	624	635
4	670	668	669	681	671	674	693	680	688	649	633	643
5	670	668	669	683	676	681	685	679	682	654	634	642
6	671	669	670	688	676	684	689	684	687	650	627	638
7	673	669	670	676	670	674	695	687	690	638	624	631
8	674	670	672	681	676	679	688	676	681	634	614	625
9	672	671	672	689	676	681	682	678	680	633	620	628
10	672	667	669	681	674	677	688	682	686	629	620	626
11	673	667	671	682	676	679	691	686	688	634	625	629
12	674	671	673	684	675	680	692	688	690	637	628	633
13	674	665	670	683	675	679	692	687	689	636	609	628
14	673	668	671	687	680	682	692	689	691	635	628	630
15	677	668	673	705	683	688	694	687	690	632	626	630
16	671	668	670	689	680	685	692	686	689	633	620	629
17	673	667	671	689	684	686	691	685	688	627	618	623
18	674	672	673	687	684	686	692	657	679	624	614	620
19	675	671	673	689	685	687	663	648	657	622	612	618
20	675	670	672	691	687	689	665	642	655	621	611	616
21	676	672	674	697	690	692	670	649	659	620	610	616
22	675	666	670	690	683	686	670	635	655	623	615	619
23	678	670	674	696	679	689	658	637	649	625	612	619
24	680	675	677	705	679	683	647	598	636	625	610	619
25	678	674	676	686	677	681	655	603	633	620	607	613
26	682	676	678	688	685	686	646	618	637	617	605	612
27	682	677	679	690	680	685	653	638	646	616	608	612
28	683	677	679	699	682	686	658	629	644	618	604	613
29	687	681	683	691	685	687	652	642	646	622	603	614
30	---	---	---	699	684	690	660	633	648	622	606	614
31	---	---	---	707	689	695	---	---	---	620	607	615
MONTH	687	665	672	707	670	684	709	598	671	654	603	624

09234500 GREEN RIVER NEAR GREENDALE, UT--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	622	610	615	652	643	648	663	657	660	683	678	680
2	624	615	618	647	637	644	665	657	662	680	673	677
3	627	618	622	648	639	644	668	659	664	679	674	677
4	625	619	622	656	646	650	665	660	662	680	676	678
5	629	616	623	655	646	650	666	660	663	679	675	684
6	631	621	627	663	646	652	667	660	663	578	574	576
7	631	616	624	656	646	651	663	658	661	577	569	573
8	629	619	624	659	648	653	663	658	661	574	570	572
9	631	623	626	660	648	655	669	662	663	574	571	573
10	632	623	627	657	648	653	665	660	662	573	568	571
11	633	621	628	656	644	651	665	660	662	572	566	569
12	635	626	630	652	643	648	667	661	664	571	568	569
13	637	627	631	654	645	650	669	659	666	571	568	569
14	641	626	633	656	648	652	670	663	665	570	564	568
15	637	627	633	656	643	650	674	663	667	567	564	565
16	641	630	633	659	647	652	671	665	668	567	563	565
17	644	631	636	656	651	653	671	664	668	565	563	564
18	643	636	639	656	650	652	674	665	670	567	560	563
19	637	630	634	656	650	654	672	665	669	568	559	576
20	640	632	636	655	651	653	671	668	669	563	558	561
21	643	634	637	658	648	653	673	668	671	564	561	562
22	643	635	639	660	647	653	673	668	670	564	557	561
23	644	635	638	660	650	655	673	664	671	561	556	560
24	646	634	640	660	656	658	673	666	670	561	559	560
25	648	636	643	658	649	653	671	666	668	561	558	560
26	651	636	644	660	651	656	673	668	671	562	558	560
27	651	645	648	659	654	657	677	671	675	560	558	559
28	653	642	649	671	653	656	678	674	676	557	553	555
29	647	642	643	667	656	659	679	674	676	557	556	557
30	650	644	647	666	655	662	683	675	678	558	555	557
31	---	---	---	667	653	660	682	677	679	---	---	---
MONTH	653	610	633	671	637	653	683	657	668	683	553	581

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	13.4	12.2	12.9	10.5	9.8	10.2	6.6	6.4	6.5	3.7	3.6	3.7
2	13.1	11.9	12.6	10.2	9.7	10.0	6.5	6.3	6.4	3.8	3.6	3.7
3	13.0	11.8	12.6	10.3	9.9	10.1	6.3	6.1	6.3	3.9	3.7	3.8
4	13.2	11.8	12.5	10.0	9.6	9.8	6.2	6.0	6.2	4.0	3.8	3.9
5	13.4	12.4	13.0	9.8	9.5	9.7	6.2	6.0	6.1	4.0	3.9	4.0
6	13.0	12.5	12.8	9.7	9.1	9.5	6.2	5.7	6.1	4.0	3.8	3.9
7	12.8	12.0	12.5	10.0	9.4	9.9	6.0	5.6	5.8	3.9	3.9	3.9
8	12.9	12.0	12.5	10.0	9.6	9.8	5.9	5.8	5.9	4.0	3.5	3.8
9	12.9	12.1	12.6	9.7	9.4	9.6	5.8	5.8	5.8	3.7	3.3	3.6
10	12.6	11.8	12.3	9.6	9.3	9.5	5.9	5.8	5.8	3.9	3.4	3.6
11	12.5	11.7	12.1	9.5	9.4	9.5	5.9	5.7	5.8	4.0	3.3	3.7
12	12.5	11.7	12.2	9.4	9.2	9.3	5.7	5.5	5.7	3.3	3.1	3.2
13	12.4	11.9	12.2	9.3	8.9	9.1	5.5	5.4	5.5	3.4	3.0	3.3
14	12.4	12.0	12.3	9.3	8.9	9.1	5.4	5.3	5.3	3.6	3.3	3.5
15	12.1	11.6	11.9	9.2	8.9	9.1	5.3	5.1	5.2	3.9	3.4	3.7
16	11.9	11.3	11.7	8.9	8.7	8.9	5.1	5.0	5.1	3.5	3.3	3.4
17	12.0	11.5	11.8	8.7	8.5	8.6	5.0	4.9	5.0	3.7	3.5	3.6
18	12.1	11.3	11.7	8.5	8.3	8.4	4.9	4.8	4.9	3.6	2.8	3.3
19	11.9	11.3	11.6	8.2	7.9	8.1	4.9	4.8	4.9	3.1	2.8	3.0
20	11.6	11.3	11.5	8.0	7.5	7.8	4.8	4.7	4.8	3.4	3.1	3.3
21	11.4	10.9	11.2	7.7	7.4	7.6	4.7	4.6	4.7	3.3	2.3	2.6
22	11.4	11.0	11.3	7.7	7.6	7.7	4.7	4.6	4.7	3.0	2.6	2.9
23	11.3	11.1	11.2	7.7	7.5	7.6	4.6	4.5	4.6	3.0	2.1	2.5
24	11.2	11.0	11.1	7.5	7.4	7.5	4.5	4.3	4.4	2.2	2.0	2.1
25	11.3	10.7	11.0	7.4	7.2	7.3	4.3	4.2	4.3	2.7	2.2	2.5
26	11.1	10.7	11.0	7.2	7.1	7.2	4.3	4.2	4.2	2.7	2.6	2.7
27	10.8	10.6	10.7	7.1	7.0	7.1	4.3	4.1	4.2	2.8	2.6	2.8
28	10.9	10.4	10.7	7.0	6.8	6.9	4.1	4.0	4.1	2.9	2.7	2.8
29	10.9	10.7	10.9	6.8	6.7	6.8	4.2	4.1	4.1	3.0	2.8	2.9
30	10.8	10.5	10.7	6.7	6.6	6.6	4.1	3.9	4.0	3.0	2.8	3.0
31	10.7	10.2	10.6	---	---	---	4.0	3.7	3.9	3.0	2.9	3.0
MONTH	13.4	10.2	11.8	10.5	6.6	8.6	6.6	3.7	5.2	4.0	2.0	3.3

GREEN RIVER BASIN

09234500 GREEN RIVER NEAR GREENDALE, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	3.1	2.9	3.0	3.9	3.5	3.6	4.2	3.6	3.9	8.3	7.2	7.7
2	3.1	3.0	3.1	3.6	3.5	3.6	4.5	3.8	4.1	8.4	7.4	8.0
3	3.2	3.0	3.1	3.7	3.5	3.6	4.5	3.9	4.2	7.7	7.2	7.4
4	3.2	3.0	3.1	3.6	3.4	3.5	4.4	4.1	4.3	7.4	6.9	7.1
5	3.2	3.1	3.1	3.8	3.5	3.6	4.6	4.2	4.4	7.7	6.9	7.4
6	3.3	3.1	3.2	3.8	3.5	3.6	4.9	4.4	4.6	7.9	6.8	7.5
7	3.3	3.1	3.2	3.4	3.2	3.3	4.9	4.4	4.6	8.3	7.6	7.9
8	3.3	3.1	3.2	3.5	3.3	3.4	5.1	4.4	4.8	8.5	8.0	8.3
9	3.3	3.2	3.2	3.6	3.3	3.5	5.3	4.7	5.0	8.4	8.0	8.2
10	3.2	2.9	3.0	3.4	3.2	3.3	5.6	4.8	5.0	8.7	8.2	8.5
11	3.3	2.9	3.1	3.5	3.3	3.4	5.2	4.7	4.9	8.9	8.3	8.6
12	3.4	3.1	3.3	3.6	3.2	3.4	5.2	4.7	4.9	8.9	8.1	8.5
13	3.3	2.8	3.1	3.5	3.2	3.3	5.4	4.7	4.9	11.3	8.1	8.8
14	3.3	2.9	3.1	3.7	3.2	3.4	5.0	4.7	4.8	9.7	8.5	9.2
15	3.3	3.0	3.2	3.8	3.4	3.6	5.0	4.7	4.8	9.9	9.0	9.4
16	3.1	2.8	3.0	3.7	3.3	3.5	5.1	4.7	4.9	9.5	8.8	9.2
17	3.3	2.9	3.1	3.8	3.3	3.5	5.1	4.7	4.9	10.1	9.0	9.4
18	3.3	3.1	3.2	4.0	3.4	3.6	5.8	4.7	5.1	10.2	9.2	9.7
19	3.5	3.1	3.2	3.9	3.4	3.6	6.4	5.7	6.0	10.7	9.6	10.1
20	3.3	3.0	3.1	4.1	3.5	3.7	6.5	5.5	6.1	10.5	9.5	9.9
21	3.5	3.1	3.3	4.2	3.6	3.8	6.3	5.3	5.8	11.1	9.6	10.2
22	3.2	2.9	3.1	4.1	3.7	3.9	6.3	5.3	5.8	10.5	9.3	9.9
23	3.5	3.0	3.2	4.2	3.7	3.9	6.4	5.6	5.9	10.5	9.3	9.9
24	3.3	3.1	3.3	4.3	3.7	3.9	7.3	5.9	6.4	11.2	9.3	10.0
25	3.4	3.2	3.3	4.2	3.7	3.9	8.0	6.1	6.9	11.3	10.1	10.6
26	3.6	3.2	3.4	4.2	3.8	4.0	7.4	6.4	6.9	11.3	10.4	10.9
27	3.6	3.3	3.4	4.3	3.9	4.1	6.8	6.3	6.6	11.1	10.3	10.6
28	3.7	3.4	3.5	4.1	3.7	3.9	7.5	6.3	6.7	11.5	10.1	10.7
29	3.7	3.4	3.6	4.0	3.7	3.8	7.0	6.5	6.9	10.7	9.6	10.2
30	---	---	---	3.8	3.6	3.7	7.8	6.2	6.9	10.8	9.4	10.1
31	---	---	---	4.0	3.6	3.7	---	---	---	10.8	9.3	10.1
MONTH	3.7	2.8	3.2	4.3	3.2	3.6	8.0	3.6	5.4	11.5	6.8	9.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	10.5	9.6	10.2	13.5	12.2	12.8	14.2	12.9	13.7	13.5	12.2	12.9
2	10.5	9.7	10.1	14.0	12.8	13.3	14.0	12.4	13.2	13.6	12.6	13.0
3	10.4	9.4	9.8	14.0	12.9	13.5	13.6	12.3	13.0	13.7	12.0	12.8
4	10.4	9.7	10.1	13.5	12.0	12.7	14.2	13.2	13.6	13.1	11.9	12.4
5	10.7	9.6	10.2	13.1	12.4	12.8	13.9	12.8	13.3	13.2	12.0	12.5
6	10.4	9.5	10.0	13.1	11.4	12.5	13.9	12.7	13.3	12.9	12.2	12.5
7	10.8	9.8	10.3	13.0	12.0	12.5	14.1	13.4	13.7	14.2	12.3	13.2
8	10.8	10.0	10.4	13.0	11.6	12.3	14.3	13.4	13.8	13.6	12.5	13.2
9	11.1	9.9	10.6	13.0	11.4	12.2	14.0	12.8	13.5	12.9	12.3	12.6
10	10.8	9.9	10.4	12.9	11.8	12.3	14.2	13.1	13.6	13.9	12.3	13.1
11	11.5	10.1	10.7	13.3	11.9	12.6	14.1	13.3	13.7	13.4	12.0	12.8
12	11.1	9.8	10.6	14.4	12.6	13.6	14.1	12.7	13.4	12.1	11.1	11.7
13	11.4	10.2	10.7	14.2	12.9	13.6	14.0	12.6	13.2	12.3	11.2	11.9
14	11.2	9.7	10.7	14.0	12.7	13.4	13.6	12.3	13.2	13.2	12.0	12.7
15	11.9	10.3	10.9	14.9	12.7	13.8	13.1	11.9	12.5	13.7	12.9	13.3
16	12.4	10.9	11.3	14.9	13.0	13.8	13.2	12.1	12.7	13.4	12.7	13.1
17	11.9	10.3	11.3	14.2	13.2	13.8	13.1	12.0	12.5	13.5	12.6	13.2
18	11.5	10.6	11.0	14.3	13.6	13.9	12.9	11.4	12.1	13.5	12.4	13.1
19	12.6	11.2	11.8	14.5	13.5	13.7	13.4	11.8	12.6	13.4	12.1	13.0
20	12.8	11.3	11.8	14.2	13.3	13.8	14.0	13.1	13.6	13.0	11.6	12.4
21	12.2	10.8	11.9	15.1	13.3	14.2	14.1	13.2	13.5	12.5	11.9	12.2
22	13.0	11.6	12.3	15.7	13.4	14.5	14.4	13.3	13.8	12.4	11.9	12.2
23	12.6	11.6	12.4	15.0	13.6	14.3	14.4	13.2	13.7	12.4	11.9	12.1
24	12.7	11.4	12.0	14.6	13.5	14.1	14.5	13.1	13.9	12.1	11.5	11.8
25	11.6	10.7	11.2	15.7	14.0	14.9	14.9	13.6	14.4	11.9	11.4	11.7
26	12.9	10.9	12.1	15.1	13.4	14.2	14.7	13.9	14.2	11.9	11.5	11.8
27	12.5	11.2	11.7	14.6	13.4	14.0	14.2	13.4	13.7	13.1	11.6	12.1
28	12.2	11.1	11.6	14.8	11.5	14.0	13.8	13.1	13.6	13.7	12.6	13.2
29	13.2	12.1	12.6	14.1	12.4	13.5	14.1	13.3	13.7	13.4	12.8	13.1
30	12.9	12.3	12.6	13.9	12.2	13.0	13.8	11.5	13.1	12.9	12.3	12.6
31	---	---	---	14.8	12.6	13.6	13.7	11.4	13.0	---	---	---
TOTAL	13.2	9.4	11.1	15.7	11.4	13.5	14.9	11.4	13.4	14.2	11.1	12.6

GREEN RIVER BASIN

09234500 GREEN RIVER NEAR GREENDALE, UT--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM FLOW INSTAN- TANEOUS (CFS)	TEMPER- ATURE- WATER (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
NOV , 1987					
17...	1445	2690	8.5	14	102
MAR , 1988					
31...	1150	855	4.0	42	97
MAY					
26...	1345	941	11.0	13	33
JUL					
28...	1110	920	14.5	5	13

GREEN RIVER BASIN

09235100 CROUSE CREEK NEAR VERNAL, UT

LOCATION.--Lat 40°47'43", long 109°05'26", in NW¼SE¼NE¼, sec. 28, T. 1 N., R. 25 E., Daggett County.
Hydrologic Unit 14040106, on left bank 5.0 mi upstream from mouth and 41 mi northeast of Vernal.

DRAINAGE AREA (REVISED).--30.2 mi².

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,520 ft from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33 ft³/s Apr. 8, 1987, gage height, 6.29 ft from floodmarks;
minimum discharge, 0.37 ft³/s July 19, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 6.3 ft³/s Oct. 6-10; minimum discharge, 0.37 ft³/s July 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.7	e1.1	.97	1.0	e2.0	1.5	1.4	1.2	2.1	1.2	.79
2	1.3	1.7	e.98	.89	1.0	e1.8	1.7	1.4	1.2	2.0	1.3	.73
3	4.9	1.7	e1.0	.85	1.1	e1.6	2.0	1.5	1.2	1.5	2.0	1.4
4	5.8	1.7	e1.1	.87	1.0	e1.7	2.1	1.4	1.2	1.4	2.5	1.0
5	6.0	1.6	e1.2	.88	1.1	e1.3	1.9	1.4	1.1	1.1	2.2	.71
6	6.3	1.7	e1.3	.92	1.1	e1.5	1.8	1.3	1.2	.90	2.3	.70
7	6.3	1.7	e1.2	.92	1.1	e1.5	1.8	1.3	1.6	.87	2.4	.67
8	6.3	1.7	e1.1	.92	1.1	e1.2	1.8	1.4	2.0	.83	2.4	.64
9	6.3	1.7	e1.2	.92	1.1	e1.5	1.5	1.4	2.1	.77	2.4	.64
10	6.3	1.6	e1.3	.92	1.1	e1.6	1.5	1.4	2.1	.75	2.3	.64
11	6.1	1.6	e1.3	.92	1.1	e1.8	1.5	1.4	1.8	.73	2.4	1.1
12	3.4	1.6	e1.2	.92	1.1	e1.3	1.4	3.2	2.1	.67	2.4	.79
13	2.1	e1.5	e1.0	.89	1.1	e1.5	1.4	3.3	1.7	.60	2.3	.78
14	2.3	e1.2	e.80	.92	1.1	e1.9	1.4	3.3	1.6	.54	2.2	.79
15	2.1	e1.7	e.85	.92	1.2	e2.0	1.4	3.3	2.0	.49	2.2	.85
16	1.9	e1.4	e.90	.92	1.1	e1.3	1.3	3.3	2.0	.46	2.4	.78
17	1.9	e1.2	e1.4	.92	1.1	e1.4	1.4	3.4	2.1	.45	2.3	.73
18	1.9	e1.1	e1.5	.92	1.1	e1.9	1.4	3.4	2.1	.42	2.3	.72
19	1.8	e1.3	e1.5	.92	1.1	e1.6	1.4	3.4	2.0	.42	2.3	.84
20	1.8	e1.3	e1.5	.91	1.2	e1.8	1.4	2.2	2.1	.70	2.3	.87
21	1.8	e1.3	e1.3	.97	1.2	e2.0	1.6	1.3	2.1	.89	2.4	.87
22	1.8	e1.3	1.5	.97	1.2	e2.1	2.0	1.2	2.1	.95	2.5	.87
23	1.8	e1.2	1.3	.97	1.2	e1.9	2.1	1.2	2.1	1.1	1.5	.87
24	1.7	e1.2	1.2	.97	1.2	e1.8	2.2	1.1	2.1	1.2	.79	.87
25	1.7	e1.3	1.1	.97	1.5	e1.8	1.9	1.1	2.1	1.1	.77	.87
26	1.7	e1.3	1.1	.97	e1.6	e2.0	1.8	1.2	2.1	1.1	.73	.87
27	1.7	e1.3	1.1	.97	e1.7	e2.1	1.7	1.2	2.2	1.1	.75	.87
28	1.7	e1.2	1.0	.97	e1.8	e1.9	1.6	1.1	2.3	.97	.74	.87
29	1.7	e1.3	1.0	.97	e1.9	e1.7	1.5	1.1	2.4	.84	.73	.87
30	1.7	e1.2	.97	.99	---	1.6	1.5	1.1	2.4	.85	.74	.87
31	1.7	---	.97	1.0	---	1.5	---	1.2	---	1.0	.78	---
TOTAL	95.1	43.3	35.97	28.94	35.2	52.6	49.5	56.9	56.3	28.80	56.53	24.87
MEAN	3.07	1.44	1.16	.93	1.21	1.70	1.65	1.84	1.88	.93	1.82	.83
MAX	6.3	1.7	1.5	1.0	1.9	2.1	2.2	3.4	2.4	2.1	2.5	1.4
MIN	1.3	1.1	.80	.85	1.0	1.2	1.3	1.1	1.1	.42	.73	.64
AC-FT	189	86	71	57	70	104	98	113	112	57	112	49
CAL YR 1987	TOTAL	668.65	MEAN	1.83	MAX	14	MIN	.80	AC-FT	1330		
WTR YR 1988	TOTAL	564.01	MEAN	1.54	MAX	6.3	MIN	.42	AC-FT	1120		

e Estimated

GREEN RIVER BASIN

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09235600 POT CREEK ABOVE DIVERSIONS, NEAR VERNAL, UT

LOCATION.--Lat 40°46'05", long 109°19'06", in NE¼ sec. 3, T. 1 S., R. 23 E., Uintah County, Hydrologic Unit 14040106, on left bank 0.3 mi upstream from Matt Warner Reservoir, and 27 mi northeast of Vernal.

DRAINAGE AREA.--24.6 mi².

PERIOD OF RECORD.--September 1957 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,550 ft from topographic map. Prior to Aug. 26, 1965, at site 0.2 mi downstream at different datum. Prior to July 28, 1978 datum of gage 1.20 ft higher at same site.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversion above station.

AVERAGE DISCHARGE.--31 years, 4.04 ft³/s, 2,930 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 286 ft³/s May 10, 1973, gage height, 3.55 ft; maximum gage height recorded, 5.29 ft Apr. 3, 1985 (backwater from ice); no flow at times, most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 30 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 2	0710	*24	*2.99				

Minimum daily discharge, no flow, many days July - September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.28	.66	e.80	e.17	e.37	e.38	e.27	12	3.1	.26	.00	.00
2	.26	.71	e.98	e.16	e.37	e.32	e.39	16	2.7	.29	.10	.00
3	.28	.60	e1.1	e.17	e.40	e.30	e.70	13	2.3	.25	.27	.00
4	.28	.56	e1.3	e.20	e.30	e.34	e1.1	12	1.9	.45	.25	.00
5	.31	.49	e1.4	e.23	e.27	e.30	e1.5	11	1.7	.36	.11	.00
6	.32	.95	e1.1	e.26	e.23	e.32	e2.2	11	1.4	.19	.05	.00
7	.32	.92	e.90	e.22	e.24	e.28	e4.0	10	1.2	.12	.21	.00
8	.35	.80	e.76	e.19	e.27	e.24	e7.0	11	1.1	.08	.17	.00
9	.38	.73	e.62	e.19	e.31	e.28	e6.0	11	1.1	.06	.11	.00
10	.38	.75	e.56	e.21	e.34	e.30	8.1	9.6	.98	.06	.00	.00
11	.34	.71	e.52	e.23	e.26	e.33	8.5	8.5	.92	.24	.00	.00
12	.36	.71	e.54	e.20	e.22	e.28	12	8.3	.89	.24	.00	.00
13	.60	.71	e.58	e.19	e.20	e.25	14	9.0	.88	.11	.00	.17
14	1.2	.74	e.46	e.21	e.20	e.32	12	9.9	.84	.00	.00	.17
15	.85	.55	e.31	e.25	e.20	e.40	12	10	.81	.00	.00	.15
16	.51	e.54	e.31	e.28	e.21	e.23	13	9.7	.81	.00	.00	.10
17	.42	e.63	e.38	e.32	e.23	e.25	14	10	.77	.00	.00	.06
18	.49	e.72	e.42	e.37	e.26	e.31	13	12	.70	.00	.00	.05
19	.53	e.80	e.38	e.27	e.24	e.38	17	11	.66	.00	.00	.05
20	.46	e.72	e.41	e.20	e.23	e.34	15	8.9	.56	.00	.00	.07
21	.44	e.68	e.39	e.17	e.23	e.37	17	7.4	.50	.00	.00	.07
22	.45	e.74	e.36	e.21	e.23	e.39	18	6.3	.53	.00	.00	.20
23	.38	e.88	e.38	e.26	e.24	e.35	16	5.6	.46	.00	.00	.20
24	.41	e.66	e.42	e.22	e.25	e.37	18	5.0	.52	.00	.00	.16
25	.74	e.73	e.32	e.23	e.26	e.40	16	4.6	.36	.00	.00	.14
26	.55	e.80	e.23	e.23	e.28	e.36	14	4.2	.39	.00	.00	.13
27	.45	e.90	e.17	e.23	e.30	e.34	12	3.6	.47	.00	.00	.14
28	.41	e1.0	e.19	e.18	e.31	e.31	11	3.3	.49	.00	.00	.13
29	.41	e.88	e.21	e.21	e.32	e.29	11	2.9	.53	.00	.00	.12
30	.45	e.73	e.19	e.28	---	e.32	10	2.7	.33	.00	.00	.12
31	.53	---	e.18	e.32	---	e.29	---	2.8	---	.00	.00	---
TOTAL	14.14	22.00	16.87	7.06	7.77	9.94	304.76	262.3	29.90	2.71	1.27	2.23
MEAN	.46	.73	.54	.23	.27	.32	10.2	8.46	1.00	.087	.041	.074
MAX	1.2	1.0	1.4	.37	.40	.40	18	16	3.1	.45	.27	.20
MIN	.26	.49	.17	.16	.20	.23	.27	2.7	.33	.00	.00	.00
AC-FT	28	44	33	14	15	20	604	520	59	5.4	2.5	4.4

CAL YR 1987 TOTAL 1812.68 MEAN 4.97 MAX 93 MIN .17 AC-FT 3600
WTR YR 1988 TOTAL 680.95 MEAN 1.86 MAX 18 MIN .00 AC-FT 1350

e Estimated

GREEN RIVER BASIN

09261000 GREEN RIVER NEAR JENSEN, UT

LOCATION.--Lat 40°24'34", long 109°14'05", in NE¼SW¼SE¼ sec. 5, T. 5 S., R. 24 E., Uintah County, Hydrologic Unit 14060001, Dinosaur National Monument, on right bank 300 ft upstream from highway bridge, 1 mi downstream from Cub Creek and Chew Ranch, 4 mi southeast of Dinosaur National Monument headquarters, 6.5 mi northeast of Jensen, 12 mi upstream from Brush Creek, and 313.9 mi from mouth.

DRAINAGE AREA.--29,660 mi², approximately, including about 4,260 mi², which probably is noncontributing. This noncontributing area includes 3,959 mi² in Great Divide Basin in southern Wyoming.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1903 to December 1904, June to August 1905 (gage heights only), March to September 1906, July to October 1914, August to December 1915, October 1946 to current year. Prior to October 1946, published as "at Jensen," except October to December 1903, which was published as "near Vernal."

REVISED RECORDS.--WSP 1243: 1904(m). WRD UT-73: 1972. WDR UT-76-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,758 ft from river-profile map. Prior to Oct. 1, 1946, nonrecording gages at site 15 mi downstream at different datums. Dec. 13, 1946 to Sept. 30, 1948, water-stage recorder at present site at datum 1.50 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair. Transbasin diversions and diversions for irrigation above station. Flow regulated by Flaming Gorge Reservoir (see station 09234400) 93.1 mi upstream beginning Nov. 1, 1962.

AVERAGE DISCHARGE.--43 years (1903-04, 1946-88), 4,526 ft³/s, 3,279,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,000 ft³/s May 18, 1984; gage height, 14.66 ft; minimum observed, 102 ft³/s Dec. 6, 1904.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,500 ft³/s May 21, gage height, 8.40 ft; minimum daily discharge, 828 ft³/s Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2150	2470	2670	e3700	e3000	2600	2380	5440	10500	4250	2010	1140
2	2390	2570	2680	e3300	e3300	2230	2480	6300	9210	3790	2130	904
3	2450	2700	2320	e3400	2070	2680	2140	7580	7900	3490	2060	1020
4	2650	3150	2790	e2700	1950	3740	2020	6860	7320	3030	2000	970
5	2380	2400	2740	e2200	1620	3070	2250	6520	8340	2790	1560	882
6	2230	3060	3130	e2600	1880	2530	3030	5670	8810	2610	1190	880
7	2280	2840	2650	e2900	3170	2630	3360	5800	10100	3130	1210	867
8	2060	2560	2900	e2700	2760	2410	3200	7220	11200	2860	1190	842
9	2220	2380	2700	e2600	2900	3260	3180	6540	11100	2950	1150	839
10	2000	2970	2820	e2300	2650	3270	3880	5620	10200	2690	1130	828
11	2110	3330	3000	e2200	2610	2490	3600	6010	9540	2010	1200	867
12	1900	3320	2570	e2400	2020	2430	3180	5450	9140	2160	1650	844
13	2000	3240	2500	e2600	1880	2180	3150	5650	8550	2390	1200	890
14	2050	3290	2300	e2900	2360	2060	3600	7170	8310	1970	1270	1110
15	2070	3320	2550	e3200	2570	1840	4340	8740	8040	2280	1590	1120
16	2260	3300	2570	e3000	2790	1740	5510	9920	7030	2370	1220	1310
17	1920	3330	2720	e3400	3300	1570	6080	9910	7220	2490	1740	1310
18	2440	3290	2490	e2700	2400	1580	6840	10300	6880	1990	1290	1470
19	2280	3180	1880	e3200	1470	1760	7710	11100	6510	2080	1780	1130
20	2260	3070	2420	e3400	2290	1820	7070	13700	5870	2070	1820	1120
21	2140	3050	2190	e2800	2300	1980	7450	13700	6410	2060	1470	1270
22	1880	3080	3420	e2500	2280	2110	7700	11000	6550	1820	1350	1170
23	2600	3150	2960	e2200	2920	3310	7790	8900	6450	1770	1120	1170
24	2600	2810	2770	e2600	2140	3860	6890	7920	5930	2000	1500	1240
25	2380	2740	2220	e2400	3030	3570	5880	7720	5790	1540	1520	1310
26	2360	2860	1990	e3000	3070	3190	5470	8040	5190	1960	1760	1400
27	2340	2720	2280	e2400	2470	2920	5150	8910	4420	2050	1250	1550
28	2260	2660	1880	e2200	2750	2650	5330	9090	4030	1650	1210	1160
29	2450	2730	2750	e1900	2120	2930	5340	9460	3810	1460	977	1120
30	2860	2720	3450	e2400	---	3410	5520	9880	4550	2270	943	1130
31	2770	---	e3600	e2700	---	2790	---	10300	---	2060	1110	---
TOTAL	70740	88290	81910	84500	72070	80610	141520	256420	224900	74040	44600	32863
MEAN	2282	2943	2642	2726	2485	2600	4717	8272	7497	2388	1439	1095
MAX	2860	3330	3600	3700	3300	3860	7790	13700	11200	4250	2130	1550
MIN	1880	2380	1880	1900	1470	1570	2020	5440	3810	1460	943	828
AC-FT	140300	175100	162500	167600	143000	159900	280700	508600	446100	146900	88460	65180
CAL YR 1987	TOTAL	1237690	MEAN	3391	MAX	10700	MIN	1200	AC-FT	2455000		
WTR YR 1988	TOTAL	1252463	MEAN	3422	MAX	13700	MIN	828	AC-FT	2484000		

e Estimated

GREEN RIVER BASIN

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09261000 GREEN RIVER NEAR JENSEN, UT--Continued

WATER-QUALITY RECORDS

LOCATION.--Daily specific conductance and temperature data collected at bridge on U.S. Highway 40, at town of Jensen, 8 mi downstream from gaging station.

PERIOD OF RECORD.--June 1947 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1947 to September 1952, October 1961 to current year.

WATER TEMPERATURES: March 1949 to September 1959, October 1961 to current year.

SUSPENDED-SEDIMENT DISCHARGE: May 1948 to September 1979.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 2,330 microsiemens Sept. 10, 1963; minimum daily, 176 microsiemens May 24, 1963.

WATER TEMPERATURES: Maximum, 30.0°C July 11, 1958; minimum, 0.0°C on many days during winter period each year.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 40,600 mg/L Aug. 23, 1960; minimum daily mean, 9 mg/L Oct. 7-11, 1953, Nov. 22, 1962, and Sept. 1, 1972.

SEDIMENT LOADS: Maximum daily, 2,500,000 tons Mar. 29, 1962; minimum daily, 10 tons on many days in 1962 and 1963.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum observed, 830 microsiemens Mar. 30; minimum observed, 302 microsiemens May 25.

WATER TEMPERATURES: Maximum, 23.0°C Aug. 1, 3; minimum observed, 0.0°C Dec. 16, January.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	HARD- NESS TOTAL (MG/L AS CAC03)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CAC03
OCT , 1987										
08...	1700	1640	623	8.50	25.5	14.0	8.80	636	230	79
NOV										
17...	1145	3280	674	8.40	3.5	4.5	10.4	637	240	89
DEC										
16...	1315	2110	664	8.30	-4.5	0.0	12.9	640	260	97
MAR , 1988										
30...	1130	3390	830	8.40	6.0	2.5	11.2	630	260	100
APR										
28...	1300	5050	430	8.20	24.5	12.5	9.60	635	190	72
MAY										
25...	1115	7990	302	8.30	28.0	17.0	8.60	639	120	33
JUN										
29...	1110	3580	363	8.30	27.5	21.5	8.10	670	130	34
JUL										
27...	1045	2130	660	8.40	32.0	22.5	7.40	640	240	89
AUG										
31...	1130	1330	710	--	34.5	22.5	7.70	635	240	86

GREEN RIVER BASIN

09261000 GREEN RIVER NEAR JENSEN, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT , 1987										
08...	55	22	50	32	1	2.7	149	160	22	0.3
NOV										
17...	58	24	50	31	1	2.9	155	180	21	0.3
DEC										
16...	63	24	52	30	1	3.2	159	150	20	0.3
MAR , 1988										
30...	55	29	72	38	2	2.1	154	260	24	0.4
APR										
28...	44	19	32	27	1	2.5	116	120	11	0.2
MAY										
25...	29	11	19	26	0.8	1.2	85	74	7.4	0.3
JUN										
29...	33	11	25	30	1	1.6	94	74	9.8	0.2
JUL										
27...	56	24	53	32	2	2.6	150	170	19	0.2
AUG										
31...	53	25	57	34	2	2.9	150	180	25	0.2

DATE	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)
OCT , 1987										
08...	3.2	417	405	0.57	1850	<0.10	<0.01	--	--	--
NOV										
17...	4.5	434	434	0.59	3840	<0.10	0.02	0.03	0.01	0.03
DEC										
16...	5.6	446	414	0.61	2540	0.16	0.04	0.05	0.01	0.03
MAR , 1988										
30...	8.9	571	547	0.78	5230	0.61	0.05	0.06	0.03	0.09
APR										
28...	9.9	314	309	0.43	4280	0.22	0.04	0.05	0.03	0.09
MAY										
25...	9.2	204	203	0.28	4400	0.10	<0.01	--	<0.01	--
JUN										
29...	6.9	229	218	0.31	2210	<0.10	<0.01	--	<0.01	--
JUL										
27...	3.2	413	418	0.56	2380	<0.10	0.01	0.01	0.01	0.03
AUG										
31...	2.4	440	436	0.6	1580	<0.10	0.01	0.01	0.01	0.03

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)
OCT , 1987		
08...	1700	80
NOV		
17...	1145	150
DEC		
16...	1315	70
MAR , 1988		
30...	1130	100
APR		
28...	1300	40
MAY		
25...	1115	30
JUN		
29...	1110	50
JUL		
27...	1045	80
AUG		
31...	1130	80

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SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
ONCE-DAILY

[illegible]

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
ONCE-DAILY

[illegible]

GREEN RIVER BASIN

09261000 GREEN RIVER NEAR JENSEN, UT--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
OCT , 1987					
08...	1700	1640	14.0	9	39
NOV					
17...	1145	3280	4.5	39	345
DEC					
16...	1315	2110	0.0	26	148
MAR , 1988					
30...	1130	3390	2.5	1760	16100
APR					
28...	1300	5050	12.5	372	5070
MAY					
25...	1115	7990	17.0	336	7250
JUN					
29...	1110	3580	21.5	894	8640
JUL					
27...	1045	2130	22.5	44	253
AUG					
31...	1130	1330	22.5	89	320

GREEN RIVER BASIN

75

09261700 BIG BRUSH CREEK ABOVE RED FLEET RESERVOIR, NEAR VERNAL, UT

LOCATION.--Lat 40°35'20", long 109°27'53", in NW¼SE¼NE¼ sec. 5, T. 3 S., R. 22 E., Uintah County, Hydrologic Unit 14060002, on right bank 950 ft below State Highway 44, 5.5 mi upstream from Little Brush Creek, and 10.5 mi northeast of Vernal.

DRAINAGE AREA.--77.2 mi².

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,625 ft from topographic map. Prior to September 1980, water-stage recorder at site 250 ft upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Water from Oaks Park Reservoir (capacity 6,250 acre-ft), near headwaters, is diverted through Oaks Park Canal to Ashley Creek basin.

AVERAGE DISCHARGE.--9 years, 47.3 ft³/s, 34,270 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 375 ft³/s June 2, 1983, gage height, 2.40 ft; maximum gage height, 3.06 ft May 23, 1980 at different datum; minimum daily, 9.5 ft³/s Feb. 5, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 214 ft³/s May 18, gage height, 1.85 ft; minimum daily, 11 ft³/s Jan. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	21	19	e14	e15	16	16	99	96	45	33	21
2	22	22	18	e12	e14	16	16	79	113	45	33	20
3	22	24	19	e11	e13	15	18	76	96	43	35	20
4	22	22	18	e11	e14	15	17	73	88	41	34	20
5	21	21	18	e13	e12	15	17	81	81	40	32	20
6	21	22	18	e17	e13	15	17	87	73	39	32	19
7	21	23	18	e21	14	16	23	78	63	38	33	19
8	21	22	18	e18	14	18	27	72	64	37	32	19
9	21	21	18	e16	14	15	24	68	66	38	32	18
10	20	21	18	e14	14	15	25	69	60	39	32	18
11	20	20	17	e16	14	16	25	93	52	36	31	19
12	20	20	17	e17	14	17	29	135	48	37	30	19
13	21	21	17	e18	15	15	37	167	47	38	29	19
14	23	21	e15	e14	15	15	46	183	54	38	29	19
15	23	21	e13	e13	14	15	67	192	52	37	29	18
16	21	21	16	e15	14	14	93	200	49	37	29	17
17	20	20	16	e17	15	14	102	204	40	37	28	17
18	20	20	17	e19	15	14	92	208	38	37	29	17
19	20	20	17	e22	15	14	95	203	37	37	29	17
20	19	20	17	e16	15	16	95	194	36	36	28	17
21	19	20	17	e12	15	21	98	191	35	36	28	17
22	19	20	16	e14	15	19	85	184	39	36	27	17
23	19	20	16	e16	15	16	69	177	37	37	27	17
24	19	20	e15	e13	15	16	64	169	38	36	26	16
25	20	20	e12	e15	15	16	57	157	36	35	26	16
26	19	20	e13	e18	15	17	49	142	38	34	26	16
27	18	20	e15	e16	15	21	47	129	37	34	26	16
28	18	20	e15	e14	15	17	46	110	40	35	25	15
29	18	19	e16	e15	16	16	58	102	45	34	23	15
30	20	19	e17	e16	---	16	69	94	46	33	23	15
31	19	---	e16	e14	---	16	---	86	---	33	22	---
TOTAL	628	621	512	477	419	497	1523	4102	1644	1158	898	533
MEAN	20.3	20.7	16.5	15.4	14.4	16.0	50.8	132	54.8	37.4	29.0	17.8
MAX	23	24	19	22	16	21	102	208	113	45	35	21
MIN	18	19	12	11	12	14	16	68	35	33	22	15
AC-FT	1250	1230	1020	946	831	986	3020	8140	3260	2300	1780	1060
CAL YR 1987	TOTAL	17574	MEAN	48.1	MAX	236	MIN	12	AC-FT	34860		
WTR YR 1988	TOTAL	13012	MEAN	35.6	MAX	208	MIN	11	AC-FT	25810		

e Estimated

GREEN RIVER BASIN

09266500 ASHLEY CREEK NEAR VERNAL, UT

LOCATION.--Lat 40°34'39", long 109°37'17", in NE¼NW¼NE¼ sec. 12, T. 3 S., R. 20 E., Uintah County, Hydrologic Unit 14060002, on right bank 0.8 mi upstream from head of Utah Power & Light Co.'s canal, 4.5 mi upstream from Dry Fork, and 10 mi northwest of Vernal.

DRAINAGE AREA.--101 mi².

PERIOD OF RECORD.--October 1911 to April 1912, August to December 1912, October 1913 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 6,230.61 ft NGVD of 1929. Prior to Nov. 14, 1917, nonrecording and water-stage recorder at several sites within 1.5 mi of present site at various datums. Nov. 14, 1917 to July 30, 1968, water-stage recorder at site 75 ft downstream at various datums.

REMARKS.--No estimated daily discharges. Records good. Flow increased since July 1940 by water released from Oaks Park Reservoir, capacity, 6,250 acre-ft on Big Brush Creek and diverted to Ashley Creek basin for irrigation. City of Vernal pipeline, capacity, approximately 11 ft³/s, diverts water from tributary spring about 1,000 ft above station (diversion began Aug. 1, 1941); at times, part of this flow is returned to Ashley Creek 2.5 mi below station. Prior to September 1961, pipeline capacity was approximately 5 ft³/s and the return flow entered Ashley Creek 0.5 mi below station.

AVERAGE DISCHARGE.--75 years (1913-88), 101 ft³/s, 73,170 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 3,500 ft³/s June 11, 1965, gage height, 4.42 ft, datum then in use from rating table extended above 1,060 ft³/s; maximum gage height, 6.09 ft June 16, 1929, datum then in use; minimum, 3.2 ft³/s Mar. 16, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 17	2000	*1,220	*4.06	No other peak greater than base discharge.			

Minimum daily discharge, 19 ft³/s, Mar. 25, Apr. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	29	27	26	27	23	19	124	187	110	56	41
2	49	30	27	26	27	22	20	94	182	102	55	45
3	48	32	27	25	28	22	22	103	175	95	67	45
4	47	32	27	25	27	21	22	101	191	101	69	47
5	47	31	28	25	27	21	21	117	200	95	62	47
6	46	31	28	26	26	21	22	123	182	81	59	35
7	46	32	28	27	26	21	24	110	161	77	61	32
8	45	31	27	26	26	20	26	102	144	71	59	31
9	41	30	28	25	26	21	24	91	129	84	67	31
10	41	29	28	24	29	21	22	93	127	88	73	31
11	40	29	28	24	30	21	23	152	121	84	71	34
12	39	28	28	25	31	21	25	308	116	83	76	36
13	40	28	28	24	30	21	28	489	110	85	74	36
14	43	28	27	24	31	20	31	517	99	86	73	36
15	43	28	26	24	30	20	40	521	85	82	72	35
16	36	25	26	24	31	20	50	597	82	80	76	34
17	33	25	26	24	30	20	55	763	82	79	75	33
18	32	25	27	24	31	20	63	616	84	75	72	32
19	31	25	28	24	30	20	69	407	86	70	71	32
20	31	26	28	23	30	20	75	333	92	69	69	34
21	31	27	28	23	30	21	78	320	100	65	68	34
22	30	27	28	23	30	22	70	328	109	64	69	36
23	30	26	28	22	29	20	60	327	111	64	69	38
24	30	26	28	22	30	20	61	337	118	64	68	37
25	30	27	28	22	29	19	56	302	111	61	66	35
26	30	26	28	22	26	21	52	265	122	60	66	34
27	30	27	28	25	22	23	51	286	114	62	66	34
28	30	27	26	28	22	22	50	247	124	69	46	34
29	30	27	26	28	22	20	53	238	125	65	36	33
30	29	27	27	28	---	20	80	222	115	61	34	33
31	29	---	27	27	---	20	---	199	---	59	33	---
TOTAL	1157	841	849	765	813	644	1292	8832	3784	2391	1978	1075
MEAN	37.3	28.0	27.4	24.7	28.0	20.8	43.1	285	126	77.1	63.8	35.8
MAX	50	32	28	28	31	23	80	763	200	110	76	47
MIN	29	25	26	22	22	19	19	91	82	59	33	31
AC-FT	2290	1670	1680	1520	1610	1280	2560	17520	7510	4740	3920	2130
CAL YR 1987	TOTAL	36138	MEAN	99.0	MAX	800	MIN	24	AC-FT	71680		
WTR YR 1988	TOTAL	24421	MEAN	66.7	MAX	763	MIN	19	AC-FT	48440		

GREEN RIVER BASIN

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09267500 MOSBY CANAL NEAR LAPOINT, UT

LOCATION.--Lat 40°36'30", long 109°53'00", in sec. 27, T. 2 S., R. 18 E. (unsurveyed), Uintah County, Hydrologic Unit 14060002, on left bank 4.5 mi southeast of Paradise Park Reservoir, 8 mi downstream from diversion from Dry Fork, and 16 mi northwest of Lapoint.

PERIOD OF RECORD.--July 1954 to current year. Seasonal records only since October 1984.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 9,500 ft from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. No flow is assumed November to April. Canal began diverting in 1942 or 1943 from Dry Fork for irrigation in Deep Creek basin. Since 1975 flow regulated by Julius Park Reservoir, capacity 200 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 37 ft³/s June 16, 17, 1969; no flow for extended periods each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	e1.0	26	18	6.4	3.8
2	---	---	---	---	---	---	---	e1.1	25	17	7.7	3.7
3	---	---	---	---	---	---	---	1.1	25	16	15	3.5
4	---	---	---	---	---	---	---	1.4	24	17	10	3.2
5	---	---	---	---	---	---	---	1.4	25	19	7.3	3.1
6	---	---	---	---	---	---	---	1.1	27	17	6.8	3.1
7	---	---	---	---	---	---	---	1.0	27	16	9.2	3.1
8	---	---	---	---	---	---	---	.96	28	15	8.8	2.9
9	---	---	---	---	---	---	---	.88	28	14	11	2.8
10	---	---	---	---	---	---	---	1.2	28	14	8.5	3.2
11	---	---	---	---	---	---	---	2.0	26	13	7.3	5.4
12	---	---	---	---	---	---	---	2.2	25	12	7.0	4.6
13	---	---	---	---	---	---	---	1.9	25	11	6.4	4.6
14	---	---	---	---	---	---	---	1.5	24	10	5.7	5.6
15	---	---	---	---	---	---	---	1.2	23	9.7	6.0	5.4
16	---	---	---	---	---	---	---	1.0	23	9.4	7.6	4.8
17	---	---	---	---	---	---	---	16	21	9.3	5.7	3.9
18	---	---	---	---	---	---	---	18	20	8.6	5.3	3.4
19	---	---	---	---	---	---	---	20	20	8.2	5.0	3.2
20	---	---	---	---	---	---	---	23	19	8.1	4.7	3.2
21	---	---	---	---	---	---	---	21	18	7.6	4.9	3.3
22	---	---	---	---	---	---	---	21	17	6.9	5.5	4.5
23	---	---	---	---	---	---	---	22	17	7.3	4.8	4.7
24	---	---	---	---	---	---	---	26	18	7.3	4.3	3.9
25	---	---	---	---	---	---	---	27	17	7.0	4.1	3.3
26	---	---	---	---	---	---	---	28	18	7.1	4.0	2.9
27	---	---	---	---	---	---	---	28	19	8.3	5.0	2.8
28	---	---	---	---	---	---	---	28	18	9.5	4.5	2.8
29	---	---	---	---	---	---	---	28	18	7.7	4.1	2.7
30	---	---	---	---	---	---	---	27	19	6.5	3.9	2.7
31	---	---	---	---	---	---	---	26	---	6.5	3.8	---
TOTAL	---	---	---	---	---	---	---	379.94	668	344.0	200.3	110.1
MEAN	---	---	---	---	---	---	---	12.3	22.3	11.1	6.46	3.67
MAX	---	---	---	---	---	---	---	28	28	19	15	5.6
MIN	---	---	---	---	---	---	---	.88	17	6.5	3.8	2.7
AC-FT	---	---	---	---	---	---	---	754	1320	682	397	218

e Estimated

GREEN RIVER BASIN

09268500 NORTH FORK OF DRY FORK NEAR DRY FORK, UT

LOCATION.--Lat 40°38'34", long 109°48'37", in NE¼NW¼SE¼ sec. 17, T. 2 S., R. 19 E., Uintah County, Hydrologic Unit 14060002, Ashley National Forest, on left bank 2 mi upstream from mouth, and 9.5 mi northwest of town of Dry Fork.

DRAINAGE AREA.--8.62 mi².

PERIOD OF RECORD.--April 1946 to current year.

REVISED RECORDS.--WSP 2125: Drainage area. WDR UT-77-1: 1976.

GAGE.--Water-stage recorder. Datum of gage is 8,284.28 ft NGVD of 1929 (levels by Utah Water and Power Board).

REMARKS.--Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--42 years, 6.84 ft³/s, 4,960 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 249 ft³/s June 19, 1983, gage height, 3.68 ft; no flow for part of Apr. 21, 1961, May 1, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 17	1900	*33	*2.63				

Minimum daily, 0.79 ft³/s Sept. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	1.8	e1.2	e1.0	e1.3	e2.1	e1.4	e6.4	10	5.2	2.0	1.1
2	2.3	2.2	e1.4	e.96	e1.3	e2.2	e1.4	e4.6	9.7	4.9	2.0	.94
3	2.3	2.1	e1.7	e.90	e1.3	e2.1	e1.4	e2.8	9.1	5.0	2.8	.90
4	2.2	2.0	e1.5	e.84	e1.2	e1.9	e1.3	e3.5	8.4	6.2	2.0	.89
5	2.2	1.8	e1.4	e.90	e1.1	e1.9	e1.3	4.0	7.9	6.2	1.9	.86
6	2.2	2.0	e1.4	e1.0	e1.0	e1.9	e1.3	4.3	7.5	5.0	1.9	.84
7	2.2	1.8	e1.8	e1.2	e1.1	e2.1	e1.4	3.8	7.4	4.6	1.8	.83
8	2.1	1.7	e1.2	e1.1	e1.3	e1.7	e1.7	3.6	7.2	4.6	1.8	.80
9	2.1	1.6	e1.4	e1.0	e1.4	e1.9	e2.5	3.4	7.2	4.5	1.7	.79
10	2.1	1.6	e1.7	e1.0	e1.6	e2.1	e2.7	4.3	7.1	4.5	1.6	.83
11	2.1	1.6	e1.5	e1.1	e1.6	e2.1	e2.1	7.3	6.9	4.3	1.6	1.0
12	2.0	1.6	e1.3	e1.1	e1.5	e1.6	e1.9	12	6.8	4.1	1.6	.96
13	2.5	1.6	e1.3	e1.0	e1.3	e1.3	e1.7	15	6.7	4.0	1.5	1.1
14	2.5	1.6	e1.0	e.94	e1.5	e1.2	e2.0	16	6.4	3.8	1.4	1.0
15	2.4	1.5	e.90	e.90	e1.5	e1.4	e3.6	16	6.2	3.6	1.5	1.0
16	2.3	1.4	e1.1	e1.0	e1.5	e1.2	e3.8	18	6.0	3.5	1.4	.95
17	2.2	1.5	e1.3	e1.1	e1.3	e1.5	e4.5	22	5.7	3.4	1.3	.88
18	2.2	e1.1	e1.3	e1.2	e1.2	e1.7	e3.2	21	5.5	3.3	1.3	.84
19	2.1	e1.2	e1.2	e1.2	e1.2	e1.9	e1.9	16	5.2	3.2	1.3	.86
20	2.0	e1.4	e1.2	e1.0	e1.3	e1.9	e1.5	14	5.0	3.1	1.3	.84
21	2.0	e1.4	e1.2	e.90	e1.5	e2.1	e1.2	14	4.8	2.9	1.3	.95
22	1.9	e1.4	e1.1	e.90	e1.7	e2.3	e1.2	13	4.6	2.8	1.3	1.1
23	1.9	e1.3	e1.1	e.94	e1.6	e2.1	e1.2	13	4.8	2.7	1.3	1.0
24	1.9	e1.3	e1.0	e1.0	e1.6	e2.0	e1.2	13	4.6	2.5	1.2	.88
25	1.9	e1.5	e.86	e.94	e1.6	e2.1	e1.2	13	4.3	2.4	1.2	.84
26	1.8	e1.4	e.84	e.94	e1.7	e2.1	e1.1	12	5.0	2.5	1.2	.84
27	1.7	e1.3	e1.0	e.94	e1.8	e1.9	e1.0	11	5.9	2.9	1.2	.84
28	1.7	e1.2	e1.0	e.90	e1.9	e1.6	e1.2	11	5.7	2.7	1.2	.84
29	1.7	e1.3	e1.0	e1.0	e2.1	e1.4	e2.9	11	6.2	2.3	1.1	.84
30	1.8	e1.3	e1.1	e1.1	---	e1.6	e7.0	11	6.3	2.2	1.1	.84
31	1.8	---	e1.1	e1.2	---	e1.5	---	11	---	2.1	1.1	---
TOTAL	64.5	46.5	38.10	31.20	42.0	56.4	61.8	331.0	194.1	115.0	46.9	27.18
MEAN	2.08	1.55	1.23	1.01	1.45	1.82	2.06	10.7	6.47	3.71	1.51	.91
MAX	2.5	2.2	1.8	1.2	2.1	2.3	7.0	22	10	6.2	2.8	1.1
MIN	1.7	1.1	.84	.84	1.0	1.2	1.0	2.8	4.3	2.1	1.1	.79
AC-FT	128	92	76	62	83	112	123	657	385	228	93	54

CAL YR 1987 TOTAL 2085.53 MEAN 5.71 MAX 34 MIN .71 AC-FT 4140
WTR YR 1988 TOTAL 1054.68 MEAN 2.88 MAX 22 MIN .79 AC-FT 2090

e Estimated

GREEN RIVER BASIN

79

09268900 BROWNIE CANYON CREEK ABOVE SINKS, NEAR DRY FORK, UT

LOCATION.--Lat 40°39'34", long 109°45'01", in NE¼NE¼SE¼ sec. 11, T. 2 S., R. 19 E. (unsurveyed), Uintah County, Hydrologic Unit 14060002, Ashley National Forest, on right bank 4.5 mi upstream from mouth and 8.5 mi northwest of town of Dry Fork.

DRAINAGE AREA.--8.24 mi².

PERIOD OF RECORD.--October 1960 to current year. Published as East Fork of Dry Fork above sinks, near Dry Fork prior to October 1967.

REVISED RECORDS.--WDR UT-86-1: 1983, 1984 (p).

GAGE.--Water-stage recorder. Altitude of gage is 8,300 ft from topographic map. Prior to July 28, 1978 at 0.53 ft higher datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversion above station.

AVERAGE DISCHARGE.--28 years, 13.4 ft³/s, 9,710 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 425 ft³/s June 18, 1983, gage height, 3.52 ft, from rating curve extended above 200 ft³/s on basis of slope-conveyance study; no flow for part of Apr. 23, 1961.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 17	1830	*173	*2.46	No other peak greater than base discharge.			

Minimum daily, 1.2 ft³/s Jan. 3, Mar. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	3.8	2.4	e1.5	e2.1	e2.0	1.5	14	24	8.7	5.2	3.7
2	4.4	4.5	2.5	e1.4	e2.1	e2.0	1.5	11	23	8.5	5.3	3.5
3	4.4	4.4	2.4	e1.2	e2.1	e1.7	1.5	10	22	8.4	6.9	3.4
4	4.3	3.8	2.3	e1.5	e1.9	e1.7	1.5	10	19	8.9	5.3	3.3
5	4.1	3.5	2.3	e1.7	e1.5	e1.5	1.5	11	18	8.4	5.1	3.3
6	3.9	3.9	2.3	e1.8	e1.5	e1.7	1.8	11	18	7.9	5.9	3.3
7	3.9	3.4	2.3	e1.7	e1.6	e1.6	2.1	9.7	18	7.7	5.6	3.3
8	3.9	3.7	2.2	e1.6	e1.8	e1.5	2.2	8.8	18	7.7	5.8	3.1
9	3.8	3.4	2.2	e1.5	e2.0	e1.9	3.0	8.4	17	7.5	5.5	3.0
10	3.7	3.5	2.2	e1.8	e2.2	e1.8	3.3	11	17	7.6	5.2	3.2
11	3.6	3.4	2.2	e2.0	e2.2	e1.6	2.6	25	16	7.4	5.1	3.6
12	3.6	3.3	2.1	e1.8	e2.0	e1.4	3.2	53	16	7.1	5.0	3.2
13	4.6	3.3	e2.0	e1.6	e1.7	e1.3	4.3	73	15	6.9	5.0	3.4
14	4.6	3.3	e1.8	e1.4	e1.8	e1.3	5.5	68	15	6.7	4.9	3.3
15	4.2	e3.2	e1.6	e1.5	e1.8	e1.4	7.6	65	14	6.6	5.2	3.2
16	3.8	e3.2	e2.0	e1.7	e1.7	e1.2	9.2	70	13	6.4	5.0	3.1
17	3.7	e3.0	e2.8	e1.9	e1.6	e1.3	11	88	12	6.3	4.8	2.9
18	3.6	e2.6	e2.2	e2.1	e1.6	e1.4	11	73	12	6.2	4.8	2.9
19	3.6	e2.9	e2.0	e2.1	e1.6	e1.5	10	46	11	6.0	4.7	2.9
20	3.5	e3.0	e2.0	e1.7	e1.7	e1.5	8.5	37	11	5.8	4.4	2.9
21	3.5	3.2	e1.8	e1.3	e1.8	e1.8	7.3	34	10	5.5	4.4	3.1
22	3.6	3.0	e1.8	e1.4	e1.8	e2.0	5.8	32	9.9	5.6	4.4	3.4
23	3.6	2.9	e1.8	e1.8	e1.6	e1.7	5.9	31	11	5.5	4.2	3.0
24	3.7	2.8	e1.7	e1.8	e1.6	e1.4	5.7	31	9.8	5.4	4.1	2.8
25	3.7	2.7	e1.5	e1.8	e1.7	1.9	5.2	30	9.0	5.4	4.1	2.8
26	3.5	2.7	e1.3	e1.7	e1.8	1.6	5.1	28	10	5.3	4.1	2.7
27	3.4	2.7	e1.5	e1.7	e1.9	1.5	5.1	27	9.2	8.8	4.0	2.6
28	3.4	2.5	e1.6	e1.6	e2.0	1.4	5.5	25	9.7	7.8	3.9	2.5
29	3.3	2.5	e1.6	e1.9	e2.0	1.6	7.4	25	10	6.1	3.8	2.5
30	3.8	2.5	e1.6	e1.9	---	1.5	12	25	9.2	5.5	3.8	2.5
31	3.7	---	e1.5	e2.0	---	1.5	---	25	---	5.3	3.8	---
TOTAL	119.0	96.6	61.5	52.4	52.7	49.2	157.8	1015.9	426.8	212.9	149.3	92.4
MEAN	3.84	3.22	1.98	1.69	1.82	1.59	5.26	32.8	14.2	6.87	4.82	3.08
MAX	4.6	4.5	2.8	2.1	2.2	2.0	12	88	24	8.9	6.9	3.7
MIN	3.3	2.5	1.3	1.2	1.5	1.2	1.5	8.4	9.0	5.3	3.8	2.5
AC-FT	236	192	122	104	105	98	313	2020	847	422	296	183

CAL YR 1987	TOTAL	4753.5	MEAN	13.0	MAX	101	MIN	1.0	AC-FT	9430
WTR YR 1988	TOTAL	2486.5	MEAN	6.79	MAX	88	MIN	1.2	AC-FT	4930

e Estimated

GREEN RIVER BASIN

09270500 DRY FORK AT MOUTH, NEAR DRY FORK, UT

LOCATION.--Lat 40°31'35", long 109°36'18", in SE¼NE¼SW¼ sec. 30, T. 3 S., R. 21 E., Uintah County, Hydrologic Unit 14060002, on left bank 900 ft upstream from mouth and 4 mi southeast of town of Dry Fork.

DRAINAGE AREA.--115 mi².

PERIOD OF RECORD.--July 1954 to current year.

REVISED RECORD.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,842.9 ft NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges, which are poor. Several diversions above station for irrigation, including Mosby Canal (see station 09267500) which began diverting water for irrigation in Deep Creek basin during 1942 or 1943.

AVERAGE DISCHARGE.--34 years, 28.1 ft³/s, 20,360 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,920 ft³/s June 21, 1983, gage height, 6.98 ft; no flow for several periods in 1956-61, 1963, 1966, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 18	0800	*68	*3.41				

Minimum daily discharge, .21 ft³/s, Sept. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	3.6	3.4	e2.0	e2.5	e2.6	1.7	2.4	37	4.5	.89	.40
2	2.5	3.6	2.8	e1.8	e2.6	e2.6	1.8	2.7	32	3.9	1.2	.33
3	2.5	3.6	2.7	e1.7	e2.5	e2.5	2.0	2.4	29	3.9	1.5	.28
4	2.5	3.4	2.6	e2.1	e2.3	2.5	2.0	2.3	27	4.2	1.1	.24
5	2.5	3.3	2.6	e2.3	e1.9	2.5	1.8	2.2	24	3.9	.99	.23
6	2.5	4.9	2.8	e2.6	e1.9	2.3	1.8	2.1	22	3.4	.94	.23
7	2.5	3.8	2.8	e2.4	e2.0	2.7	1.9	2.1	21	3.3	1.0	.23
8	2.6	3.5	2.8	e2.3	e2.1	2.6	1.8	2.2	21	3.0	.94	.22
9	2.6	3.3	2.9	e2.3	e2.2	2.3	1.7	2.2	18	3.0	.86	.21
10	2.6	3.4	2.6	e2.4	e2.3	2.0	1.7	2.1	17	3.0	.81	.25
11	2.6	3.3	2.8	e2.7	e2.2	2.0	1.7	1.9	17	2.2	.75	.50
12	2.7	3.3	3.1	e2.3	e2.0	2.3	1.7	1.8	14	1.0	.75	.47
13	3.9	3.3	2.7	e2.0	e2.0	2.3	1.7	1.7	11	.96	.72	.73
14	4.4	3.5	e2.6	e1.9	e2.2	2.5	1.7	1.6	10	.90	.67	.67
15	3.4	3.3	e2.4	e2.0	e2.2	2.0	3.0	4.7	8.5	.85	.79	.65
16	3.1	3.1	e2.9	e2.2	e2.2	1.7	2.4	13	8.2	.84	.90	.61
17	3.2	3.0	e3.3	e2.4	e2.1	2.0	2.1	16	7.6	.84	.76	.55
18	3.3	2.6	e3.0	e2.5	e2.0	2.4	2.1	49	7.0	.84	.70	.48
19	3.2	2.4	e3.0	e2.1	e2.0	2.3	2.3	37	6.3	.82	.62	.44
20	3.1	2.5	3.1	e1.9	e1.9	2.4	2.2	32	5.6	.82	.59	.45
21	3.2	2.4	2.8	e1.7	e2.2	2.6	3.2	28	5.3	.77	.75	.54
22	3.3	2.5	2.9	e2.1	e2.3	2.5	4.6	29	4.6	.72	.75	.92
23	3.3	2.6	2.6	e2.2	e2.3	2.2	3.5	33	4.2	.69	.64	.85
24	3.3	2.5	2.4	e2.1	e2.2	2.1	2.8	35	3.9	.62	.52	.82
25	3.6	2.5	e2.2	e2.0	e2.2	2.0	2.7	38	3.9	.56	.45	.74
26	3.4	2.5	e2.0	e2.1	e2.3	2.3	2.6	38	6.0	.70	.55	.71
27	3.3	2.3	e2.2	e2.1	e2.4	2.2	2.4	36	5.5	.66	.64	.67
28	3.3	2.3	e2.4	e1.9	e2.5	2.0	2.3	37	6.4	.76	.57	.64
29	3.3	2.9	e2.5	e2.1	e2.6	1.9	2.2	32	5.9	.77	.55	.64
30	4.2	3.0	e2.4	e2.4	---	1.8	2.1	39	5.1	.85	.49	.68
31	3.8	---	e2.3	e2.4	---	1.6	---	40	---	.86	.44	---
TOTAL	96.2	92.2	83.6	67.0	64.1	69.7	67.5	566.4	394.0	54.13	23.83	15.38
MEAN	3.10	3.07	2.70	2.16	2.21	2.25	2.25	18.3	13.1	1.75	.77	.51
MAX	4.4	4.9	3.4	2.7	2.6	2.7	4.6	49	37	4.5	1.5	.92
MIN	2.5	2.3	2.0	1.7	1.9	1.6	1.7	1.6	3.9	.56	.44	.21
AC-FT	191	183	166	133	127	138	134	1120	781	107	47	31

CAL YR 1987 TOTAL 8783.7 MEAN 24.1 MAX 306 MIN 1.2 AC-FT 17420
WTR YR 1988 TOTAL 1594.04 MEAN 4.36 MAX 49 MIN .21 AC-FT 3160

e Estimated

GREEN RIVER BASIN

81

09275500 WEST FORK DUCHESNE RIVER NEAR HANNA, UT

LOCATION.--Lat 40°27'01", long 110°53'01", in SE¼NE¼SE¼ sec. 27, T. 1 N., R. 9 W., Uinta Meridian, Duchesne County, Hydrologic Unit 14060003, on left bank 1,500 ft upstream from Wolf Creek, and 7.1 mi northwest of Hanna.

DRAINAGE AREA.--61.6 mi².

PERIOD OF RECORD.--May to October 1904 (gage heights only, fragmentary), August 1921 to March 1922, October 1922 to September 1923, October 1945 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,218 ft from topographic map. Prior to Oct. 1, 1923, non-recording gages at approximately same site at different datums. Oct. 1, 1923 to Sept. 3, 1986 at datum 1.0 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. One small diversion for irrigation of about 100 acres above station. On March 27, 1986, the U.S. Bureau of Reclamation began diverting water from the West Fork into the Strawberry Aqueduct for transmountain diversion to Strawberry Reservoir. The diversion gates are located several miles above the station.

AVERAGE DISCHARGE.--41 years (1922-23, 1945-85), 49.9 ft³/s, 36,150 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 758 ft³/s June 5, 1967, maximum gage height, 4.40 ft June 4, 1952, datum then in use; minimum discharge recorded, 0.19 ft³/s Mar. 29, 1975, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 245 ft³/s May 16, gage-height, 3.47 ft; minimum daily discharge, 8.9 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	16	e11	11	10	12	15	39	39	22	15	9.3
2	13	19	e11	11	10	11	16	39	40	22	15	9.3
3	13	21	12	e10	e9.8	11	18	39	43	21	18	9.4
4	13	16	12	e11	e9.6	11	20	38	48	22	16	9.3
5	13	16	12	11	e9.4	11	19	40	48	21	14	9.5
6	13	19	12	11	e10	e11	21	44	41	19	13	9.4
7	13	17	12	11	11	e11	25	42	36	18	14	9.4
8	13	15	e11	10	11	e10	24	40	36	18	13	9.1
9	13	14	13	11	11	e11	21	39	34	17	13	9.0
10	12	14	13	11	11	11	21	40	36	17	12	9.1
11	12	14	14	e11	11	e11	24	51	37	17	12	9.4
12	13	13	e12	e11	12	e10	28	80	36	16	13	10
13	15	14	e11	e10	12	e11	31	116	36	15	12	13
14	16	15	e10	e11	12	e10	35	140	35	14	11	12
15	15	9.6	e9.4	e11	12	e11	38	158	36	14	11	12
16	14	e9.6	10	11	10	11	39	172	36	14	12	11
17	13	e9.8	14	11	e9.8	e10	40	167	35	13	11	11
18	13	10	15	11	e10	e10	39	78	35	13	10	11
19	13	e9.6	14	e11	e11	e11	37	58	35	13	10	11
20	13	e10	12	e10	11	e11	36	45	35	13	11	12
21	13	e11	12	e11	11	e12	41	43	34	12	11	17
22	13	e11	12	13	11	e12	37	43	28	12	11	17
23	13	12	12	13	11	13	34	43	19	13	9.7	12
24	15	12	12	13	e11	14	32	43	22	13	9.2	11
25	14	e12	e9.5	13	e11	15	33	43	25	15	9.2	11
26	14	e12	e11	13	e11	18	28	41	30	15	9.6	11
27	14	e12	12	13	e12	18	31	40	34	16	11	10
28	13	e12	12	13	e12	16	34	39	29	18	10	9.1
29	14	e12	11	12	12	e14	38	39	27	16	9.8	9.0
30	16	e12	11	12	---	15	38	41	24	15	9.6	8.9
31	16	---	11	11	---	16	---	39	---	15	9.4	---
TOTAL	421	399.6	365.9	353	315.6	379	893	1919	1029	499	365.5	321.2
MEAN	13.6	13.3	11.8	11.4	10.9	12.2	29.8	61.9	34.3	16.1	11.8	10.7
MAX	16	21	15	13	12	18	41	172	48	22	18	17
MIN	12	9.6	9.4	10	9.4	10	15	38	19	12	9.2	8.9
AC-FT	835	793	726	700	626	752	1770	3810	2040	990	725	637
CAL YR 1987	TOTAL	7633.5	MEAN	20.9	MAX	80	MIN	9.4	AC-FT	15140		
WTR YR 1988	TOTAL	7260.8	MEAN	19.8	MAX	172	MIN	8.9	AC-FT	14400		

e Estimated

GREEN RIVER BASIN

09277500 DUCHESNE RIVER NEAR TABIONA, UT

LOCATION.--Lat 40°08'01", long 110°36'06", in SE¼SW¼SE¼ sec. 18, T. 2 S., R. 6 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, on left bank on upstream side of bridge on State Highway 35, 6 mi upstream from Rock Creek, and 7 mi southeast of Tabiona.

DRAINAGE AREA.--356 mi².

PERIOD OF RECORD.--October 1918 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,190 ft from topographic map. Prior to Oct. 15, 1934, non-recording gage, and Oct. 16, 1934 to Nov. 6, 1953, water-stage recorder at site 0.5 mi upstream at various datums. Nov. 7, 1953 to Nov. 7, 1972, at site 1 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Several diversions above station for irrigation, including a transmountain diversion through Duchesne Tunnel 20 mi upstream.

AVERAGE DISCHARGE.--70 years, 202 ft³/s, 146,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,260 ft³/s June 16, 1963, gage height, 7.97 ft from floodmarks, caused by failure of Little Deer Creek Dam 20 mi upstream. Rating curve extended above 400 ft³/s on basis of slope-area measurement and area-velocity study of peak flow; minimum recorded, 27 ft³/s Oct. 17, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 17	0700	*469	*2.63				

Minimum daily discharge, 37 ft³/s July 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	130	113	e92	88	100	82	120	110	79	50	55
2	73	133	117	e96	89	92	86	122	97	77	52	54
3	72	138	116	e100	87	91	92	115	87	79	52	54
4	73	130	113	e110	e85	89	95	113	91	78	44	55
5	75	127	115	e120	e80	86	94	111	98	74	43	58
6	75	139	113	110	e85	89	94	111	98	64	44	57
7	76	128	115	e105	90	84	100	112	93	59	48	55
8	75	123	108	e102	88	79	104	104	86	54	46	55
9	78	124	115	98	87	84	94	85	83	47	47	55
10	79	125	115	97	89	85	93	77	81	46	48	56
11	83	126	115	97	86	79	95	75	80	46	50	57
12	84	124	102	95	88	76	101	84	77	45	48	62
13	96	123	e90	e90	86	77	108	135	80	48	49	71
14	101	128	e85	e90	92	75	115	193	79	49	52	63
15	101	119	e78	95	90	82	131	224	80	49	53	57
16	104	116	e90	95	89	77	130	294	80	44	53	60
17	102	124	107	96	85	73	132	420	80	44	49	72
18	103	111	112	99	89	72	136	294	80	40	51	73
19	111	117	e100	94	85	75	134	213	81	42	49	77
20	115	118	e90	e90	88	81	127	172	82	41	50	79
21	113	119	e95	e95	88	88	137	148	83	38	53	84
22	115	124	e100	e100	89	88	141	156	78	37	52	87
23	114	116	e95	e100	90	81	133	166	72	39	52	81
24	116	118	e88	e95	90	85	128	168	67	40	53	77
25	115	120	e80	e90	94	85	127	154	69	41	55	75
26	117	117	e90	e95	96	95	119	143	75	47	56	77
27	117	113	e105	e95	97	99	123	139	86	53	59	74
28	116	113	e105	95	105	88	116	132	83	50	61	67
29	121	116	e110	91	105	82	118	127	84	48	64	63
30	134	113	e105	91	---	88	116	133	82	47	64	63
31	130	---	e96	91	---	80	---	125	---	49	56	---
TOTAL	3058	3672	3178	3009	2600	2605	3401	4765	2502	1594	1603	1973
MEAN	98.6	122	103	97.1	89.7	84.0	113	154	83.4	51.4	51.7	65.8
MAX	134	139	117	120	105	100	141	420	110	79	64	87
MIN	72	111	78	90	80	72	82	75	67	37	43	54
AC-FT	6070	7280	6300	5970	5160	5170	6750	9450	4960	3160	3180	3910

CAL YR 1987	TOTAL	46286	MEAN	127	MAX	498	MIN	72	AC-FT	91810
WTR YR 1988	TOTAL	33960	MEAN	92.8	MAX	420	MIN	37	AC-FT	67360

e Estimated

GREEN RIVER BASIN

83

09278000 SOUTH FORK ROCK CREEK NEAR HANNA, UT

LOCATION.--Lat 40°32'54", long 110°41'37", in SW¼SW¼SW¼ sec. 21, T. 2, N., R. 7 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, Ashley National Forest, on right bank 175 ft upstream from road bridge, 0.5 mi upstream from mouth, and 10.6 mi northeast of Hanna.

DRAINAGE AREA.--15.7 mi².

PERIOD OF RECORD.--August 1953 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,860 ft from river-profile map. Prior to July 23, 1974, at site 75 ft downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Pipeline capacity approximately 1.5 ft³/s that provides water for small hydroelectric plant and irrigation for dude ranch lying below station, diverts water from creek a short distance above station at times in summer months. Since May, 1988 a transmountain diversion approximately 1 mile above the gage, in association with the Bureau of Reclamation stillwater project can divert entire flow at times.

AVERAGE DISCHARGE.--35 years, 13.7 ft³/s, 9,930 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 216 ft³/s June 6, 1986, gage height, 3.15 ft, from floodmarks; minimum not determined, occurred during winter period of no gage height record.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 60 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 17	1700	*52	*2.39				

Minimum daily discharge, 2.2 ft³/s Mar. 12-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	5.7	e3.4	2.8	2.5	2.5	2.3	8.5	31	17	8.2	5.3
2	8.3	5.9	e3.5	2.6	2.5	2.3	2.6	8.3	29	17	8.3	5.3
3	8.5	5.5	e3.5	2.6	2.5	2.3	2.9	7.8	30	16	9.7	5.2
4	8.3	4.8	3.4	2.7	2.5	2.3	2.9	7.6	34	16	8.2	5.2
5	8.3	4.6	3.4	2.8	2.4	2.3	2.9	8.0	38	15	7.8	5.1
6	8.3	5.1	3.4	2.7	2.4	2.3	3.6	8.3	39	15	7.6	5.1
7	8.0	4.6	3.4	2.6	2.3	2.3	4.4	7.6	36	14	7.6	5.0
8	8.0	4.4	3.3	2.6	2.3	2.3	4.3	7.4	32	14	7.3	5.0
9	7.5	e4.3	3.3	2.6	2.3	2.4	5.3	7.7	34	14	7.1	4.9
10	7.4	e4.2	3.3	2.6	2.4	2.3	5.3	8.8	33	13	7.0	5.0
11	7.4	e4.2	3.2	2.6	2.4	2.3	5.2	12	32	12	6.9	5.1
12	7.2	e4.3	3.2	2.6	2.5	2.2	6.2	17	31	12	6.9	5.2
13	8.4	4.4	3.2	2.5	2.5	2.2	7.0	22	30	12	6.7	5.6
14	7.8	4.3	e2.9	2.6	2.5	2.2	7.2	25	28	11	6.5	5.5
15	7.2	e4.5	e2.4	2.6	2.5	2.2	8.1	28	19	11	6.5	5.3
16	6.9	e4.4	e2.5	2.6	2.5	2.2	8.6	34	5.0	11	6.4	5.1
17	6.6	e4.3	e2.9	2.6	2.4	2.2	9.3	45	4.9	10	6.3	4.9
18	6.6	e4.4	e3.1	2.6	2.5	2.2	9.0	39	4.8	9.9	6.2	4.7
19	6.3	e3.9	e3.3	2.5	2.4	2.2	8.6	34	4.7	9.8	6.1	4.7
20	6.2	e4.3	3.2	2.5	2.3	2.4	8.2	32	14	9.4	6.2	4.7
21	6.5	e4.3	3.1	2.5	2.3	2.5	7.8	32	23	9.2	6.1	4.8
22	5.9	4.2	3.0	2.5	2.4	2.5	7.2	34	23	9.0	5.9	4.9
23	5.9	4.2	2.9	2.5	2.3	2.3	6.6	36	21	8.8	5.8	4.7
24	6.0	e4.1	2.9	2.5	2.4	2.3	6.8	36	21	8.7	5.7	4.7
25	5.7	e3.9	2.8	2.5	2.4	2.4	6.2	35	21	8.7	5.7	4.5
26	5.6	e3.6	2.8	2.5	2.4	2.6	7.2	36	22	9.1	5.6	4.5
27	5.3	e3.3	2.8	2.5	2.5	2.9	6.0	39	21	8.9	5.6	4.4
28	5.2	e3.1	2.8	2.5	2.5	2.7	6.6	38	20	9.5	5.5	4.3
29	5.5	e3.4	2.8	2.5	2.5	e2.4	7.4	39	19	8.9	5.4	4.4
30	5.8	e3.3	2.8	2.5	---	2.3	8.6	36	18	8.6	5.3	4.3
31	5.4	---	2.8	2.5	---	2.3	---	33	---	8.4	5.3	---
TOTAL	214.3	129.5	95.3	79.8	70.3	72.8	184.3	762.0	718.4	356.9	205.4	147.4
MEAN	6.91	4.32	3.07	2.57	2.42	2.35	6.14	24.6	23.9	11.5	6.63	4.91
MAX	8.5	5.9	3.5	2.8	2.5	2.9	9.3	45	39	17	9.7	5.6
MIN	5.2	3.1	2.4	2.5	2.3	2.2	2.3	7.4	4.7	8.4	5.3	4.3
AC-FT	425	257	189	158	139	144	366	1510	1420	708	407	292

CAL YR 1987	TOTAL	4932.5	MEAN	13.5	MAX	80	MIN	2.2	AC-FT	9780
WTR YR 1988	TOTAL	3036.4	MEAN	8.30	MAX	45	MIN	2.2	AC-FT	6020

e Estimated

GREEN RIVER BASIN

09278500 ROCK CREEK NEAR HANNA, UT

LOCATION.--Lat 40°32'44", long 110°39'20", in NE¼NE¼NE¼ sec. 26, T. 2 N., R. 7 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, Ashley National Forest, on right bank 1.2 mi downstream from South Fork and 11.5 mi northeast of Hanna.

DRAINAGE AREA.--122 mi².

PERIOD OF RECORD.--July 1949 to September 1969, August 1974 to September 1988 (discontinued).

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,620 ft from river-profile map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow partially regulated by Upper Stillwater Reservoir 3 mi upstream, beginning Nov. 3, 1987. Total capacity, 32,000 acre-ft.

AVERAGE DISCHARGE.--33 years (1950-69, 1975-87), 157 ft³/s, 113,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,710 ft³/s June 3, 1986, gage height, 8.31 ft, maximum gage height, 8.60 ft June 13, 1953; minimum recorded, 4.4 ft³/s Feb. 7, 1977, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 4	0100	*653	*4.91				

Minimum daily discharge, 8.2 ft³/s Jan. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	52	31	8.7	10	11	24	18	107	46	246	47
2	52	57	32	e8.5	9.7	11	24	17	97	47	248	43
3	51	54	32	e8.2	e9.1	11	25	17	74	86	246	43
4	51	e35	32	8.7	e8.9	11	26	17	210	119	238	43
5	49	e16	32	8.9	8.7	11	25	18	479	308	239	43
6	48	18	32	9.4	8.5	11	26	18	358	480	237	43
7	47	23	32	11	8.6	11	27	18	231	472	221	42
8	47	30	32	11	8.9	e9.0	30	18	170	478	207	42
9	47	30	34	11	10	11	32	19	120	524	203	41
10	47	33	36	12	11	11	33	19	90	588	209	32
11	46	29	34	12	10	11	34	23	77	579	214	32
12	46	31	31	12	8.7	e10	34	30	57	568	219	32
13	56	41	31	11	8.7	11	35	38	56	565	196	35
14	59	42	e27	11	e8.6	e10	37	43	54	563	147	33
15	53	30	e26	11	8.8	11	38	48	53	560	108	39
16	49	28	26	11	9.1	11	38	57	55	556	84	40
17	48	e30	27	10	e9.6	11	40	74	55	558	71	40
18	47	31	15	10	10	11	39	229	51	554	63	39
19	45	e33	12	10	10	10	33	351	51	551	60	38
20	43	e35	12	e9.6	11	12	33	272	51	556	58	37
21	43	e34	11	10	10	12	34	276	50	567	57	35
22	44	e33	9.7	9.9	10	12	33	316	50	574	69	33
23	45	32	e9.6	10	10	12	32	427	48	562	71	32
24	46	e32	e9.1	9.9	9.7	11	32	526	49	530	61	29
25	46	e31	e9.1	e9.8	9.3	12	32	478	47	537	57	31
26	44	e32	e9.2	10	11	13	31	371	53	544	54	32
27	43	32	9.1	10	11	13	28	490	50	543	53	32
28	43	32	9.1	10	12	12	15	362	48	476	51	32
29	44	32	9.1	10	11	12	16	402	47	295	51	29
30	51	30	9.0	10	---	12	18	247	46	235	50	27
31	50	---	8.7	10	---	15	---	165	---	236	50	---
TOTAL	1483	998	668.7	314.6	281.9	352.0	904	5404	2984	13857	4138	1096
MEAN	47.8	33.3	21.6	10.1	9.72	11.4	30.1	174	99.5	447	133	36.5
MAX	59	57	36	12	12	15	40	526	479	588	248	47
MIN	43	16	8.7	8.2	8.5	9.0	15	17	46	46	50	27
AC-FT	2940	1980	1330	624	559	698	1790	10720	5920	27490	8210	2170

CAL YR 1987 TOTAL 54950.7 MEAN 151 MAX 1210 MIN 8.7 AC-FT 109000
WTR YR 1988 TOTAL 32481.2 MEAN 88.7 MAX 588 MIN 8.2 AC-FT 64430

e Estimated

GREEN RIVER BASIN

85

09279000 ROCK CREEK NEAR MOUNTAIN HOME, UT

LOCATION.--Lat 40°29'36", long 110°34'39", in SE¼NW¼SW¼ sec. 9, T. 1 N., R. 6 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, Uintah and Ouray Indian Reservation, on right bank at Lower Stillwater damsite "B", 0.1 mi upstream from Corral Creek, 6.8 mi downstream from South Fork, and 11.9 mi northwest of Mountain Home.

DRAINAGE AREA.--147 mi².

PERIOD OF RECORD.--October 1937 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,250 ft from river-profile map. Prior to Apr. 12, 1939, non-recording gage at site 300 ft upstream at different datum.

REMARKS.--Records good. Flow partially regulated by Upper Stillwater Reservoir 8 mi upstream, beginning Nov. 3, 1987. Total capacity, 32,000 acre-ft.

AVERAGE DISCHARGE.--50 years (1938-87), 175 ft³/s, 126,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,920 ft³/s June 18, 1971, gage height, 5.98 ft; maximum gage height, 6.26 ft June 4, 1986, from floodmarks; minimum recorded, 7.0 ft³/s Mar. 13, 1940, Mar. 20, 1942 (probably caused by ice jams above station).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 723 ft³/s June 5, gage height, 4.14 ft; minimum daily, 25 ft³/s, Jan. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	66	47	27	28	31	39	33	103	70	271	59
2	78	74	49	26	28	30	40	31	93	71	273	58
3	77	69	49	25	28	30	42	31	76	95	277	57
4	76	58	48	26	28	29	42	31	163	133	267	56
5	75	39	48	27	27	30	42	31	539	287	267	56
6	73	43	48	28	27	29	43	32	404	528	266	55
7	72	41	63	27	27	29	44	31	238	527	246	54
8	72	48	51	28	27	29	45	30	159	526	224	53
9	71	48	52	28	29	29	46	31	117	561	220	53
10	70	50	52	29	29	29	46	30	99	625	220	46
11	69	47	47	29	31	29	46	33	90	624	225	45
12	69	48	e43	28	28	28	47	36	73	619	228	45
13	79	53	39	29	28	29	48	42	71	612	209	50
14	83	61	35	28	31	29	50	46	71	610	158	46
15	76	51	38	28	28	29	53	48	68	607	123	48
16	71	44	40	28	27	28	50	55	70	609	101	51
17	69	e47	44	27	31	29	51	69	70	611	89	51
18	68	49	39	28	29	29	54	176	68	609	81	50
19	65	51	33	27	29	29	49	342	68	610	76	50
20	63	53	29	28	29	30	47	240	69	612	75	50
21	62	54	31	28	29	32	51	240	69	615	74	50
22	63	52	29	27	29	32	50	277	68	618	79	48
23	63	50	29	27	30	31	47	429	66	610	83	49
24	64	48	27	27	30	30	46	549	66	596	75	44
25	64	51	27	27	29	31	46	550	67	605	70	46
26	62	50	28	27	30	33	44	427	75	618	66	47
27	59	47	28	27	31	33	44	539	73	620	65	47
28	60	49	28	27	33	31	34	433	73	571	63	46
29	59	48	28	28	32	29	31	444	72	372	61	46
30	66	45	27	28	---	31	32	227	70	274	60	44
31	66	---	27	28	---	30	---	177	---	271	59	---
TOTAL	2142	1534	1203	852	842	927	1349	5690	3408	15316	4651	1500
MEAN	69.1	51.1	38.8	27.5	29.0	29.9	45.0	184	114	494	150	50.0
MAX	83	74	63	29	33	33	54	550	539	625	277	59
MIN	59	39	27	25	27	28	31	30	66	70	59	44
AC-FT	4250	3040	2390	1690	1670	1840	2680	11290	6760	30380	9230	2980
CAL YR 1987	TOTAL	63861	MEAN	175	MAX	1330	MIN	27	AC-FT	126700		
WTR YR 1988	TOTAL	39414	MEAN	108	MAX	625	MIN	25	AC-FT	78180		

e Estimated

GREEN RIVER BASIN

09279100 ROCK CREEK NEAR TALMAGE, UT

LOCATION.--Lat 40°18'40", long 110°29'36", in SE¼NE¼NW¼ sec. 18, T. 2 S., R. 5 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, Uintah and Ouray Indian Reservation, on left bank 1.5 mi upstream from mouth, 4.1 mi southwest of Talmage and 11.1 mi northwest of Duchesne.

DRAINAGE AREA.--238 mi².

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,119.3 ft NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges, which are fair. Upper Stillwater Dam (total capacity 32,000 acre-feet) completed, and storage started, in November 1987.

AVERAGE DISCHARGE.--24 years (1964-87), 188 ft³/s, 136,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,470 ft³/s June 6, 1986, gage height, 4.57 ft; minimum recorded, 6.0 ft³/s Nov. 28, 1976, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 5	0900	*592	*2.71				

Minimum daily discharge, 35 ft³/s, Mar. 11, 16, 31, May 8, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	75	e61	e39	e40	e42	40	40	127	59	227	53
2	67	84	e63	e37	e40	e40	47	38	105	59	228	52
3	65	81	e62	e36	e40	e39	48	40	86	66	234	51
4	65	74	e62	e37	e40	39	49	37	81	128	222	51
5	65	49	e62	e38	e39	37	48	37	438	194	217	51
6	64	53	e62	e40	e39	38	48	37	378	453	223	51
7	64	49	70	e39	e39	e37	51	37	248	456	213	49
8	65	53	e65	e40	e39	e37	51	35	169	454	194	49
9	65	56	e65	e40	e41	e36	51	35	136	475	190	49
10	65	56	e65	e41	e41	36	52	36	102	547	191	46
11	65	57	62	e41	e43	35	53	36	92	547	196	43
12	65	55	e57	e40	e40	e36	55	39	75	540	198	44
13	74	57	51	e41	e40	e37	56	43	69	536	195	53
14	84	73	43	e40	e43	e37	58	49	67	536	151	50
15	76	62	e48	e40	e40	e36	66	52	63	534	116	48
16	71	56	e52	e40	e39	35	62	57	65	535	92	50
17	68	62	e56	e39	e44	36	62	74	65	535	76	51
18	67	e63	e49	e40	e39	e36	65	122	63	533	68	50
19	66	e66	e43	e39	e39	37	62	362	61	533	63	48
20	64	e68	e39	e40	e39	38	56	257	62	533	62	48
21	64	e69	e42	e40	e39	42	63	255	64	533	66	49
22	64	e66	e40	e40	e39	42	63	275	60	532	62	50
23	64	e63	e40	e39	e40	39	58	360	60	527	74	48
24	68	e61	e39	e39	e40	37	55	448	57	510	64	44
25	68	e64	e39	e39	e39	38	56	494	57	509	60	43
26	66	e63	e40	e39	e40	41	52	356	64	529	58	45
27	64	e60	e40	e39	e41	42	53	450	67	527	57	45
28	63	e63	e40	e39	e42	39	45	378	67	507	55	45
29	64	e61	e40	e40	e44	e37	38	381	66	337	54	45
30	77	e59	e39	e40	---	39	38	256	60	236	52	41
31	74	---	e39	e40	---	35	---	222	---	229	54	---
TOTAL	2088	1878	1575	1221	1168	1175	1601	5338	3174	13229	4012	1442
MEAN	67.4	62.6	50.8	39.4	40.3	37.9	53.4	172	106	427	129	48.1
MAX	84	84	70	41	44	42	66	494	438	547	234	53
MIN	63	49	39	36	39	35	38	35	57	59	52	41
AC-FT	4140	3730	3120	2420	2320	2330	3180	10590	6300	26240	7960	2860

CAL YR 1987 TOTAL 59100 MEAN 162 MAX 1060 MIN 39 AC-FT 117200
WTR YR 1988 TOTAL 37901 MEAN 104 MAX 547 MIN 35 AC-FT 75180

e Estimated

GREEN RIVER BASIN

87

09279150 DUCHESNE RIVER ABOVE KNIGHT DIVERSION, NEAR DUCHESNE, UT

LOCATION.--Lat 40°16'14", long 110°26'31", in NE¼NW¼NW¼ sec. 34, T. 2 S., R. 5 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, on left bank at downstream edge of bridge on State Highway 35, 1.7 mi upstream from Knight diversion dam, 3.9 mi downstream from Rock Creek, and 7.7 mi north-northwest of Duchesne.

DRAINAGE AREA.--623 mi².

PERIOD OF RECORD.--April 1970 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,840 ft from topographic map. Prior to Apr. 25, 1973, at site 150 ft upstream at different gage datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Several diversions above station for irrigation, including a transmountain diversion to the Great Basin through Duchesne Tunnel.

AVERAGE DISCHARGE.--18 years, 374 ft³/s, 271,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,970 ft³/s June 6, 1986, gage height, 7.52 ft, from flood-marks; minimum, 37 ft³/s Jan. 31, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 25	1200	*675	*5.17	June 5	1300	675	5.17

Minimum daily discharge, 97 ft³/s Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	209	172	145	136	159	138	165	217	118	279	103
2	147	218	187	145	135	148	150	168	182	115	280	102
3	142	219	185	153	e130	144	153	158	155	118	289	103
4	141	208	179	166	e125	147	156	152	144	178	269	102
5	140	184	183	183	e120	139	156	153	486	223	259	102
6	140	197	179	192	e125	145	156	150	449	496	263	102
7	139	187	189	161	e130	139	163	155	322	497	260	100
8	140	185	180	e155	e135	133	167	145	225	506	240	99
9	142	188	182	158	138	142	159	123	192	533	231	99
10	142	190	186	154	143	140	160	110	158	612	235	99
11	143	190	184	148	133	132	161	101	146	619	252	97
12	144	187	147	142	139	128	165	106	136	609	254	102
13	172	188	136	e140	134	131	173	146	128	596	247	122
14	192	207	125	e135	136	129	180	197	126	589	202	122
15	186	189	120	e140	138	140	204	219	123	585	166	113
16	183	175	134	141	136	136	200	260	121	585	146	116
17	181	193	163	141	125	127	196	374	122	581	128	129
18	181	174	177	143	136	128	206	321	122	580	121	126
19	184	185	162	138	128	136	201	511	127	582	117	131
20	190	191	145	e135	134	142	182	385	123	577	111	136
21	187	192	143	e130	134	154	199	356	126	580	112	140
22	188	197	154	138	136	156	206	375	118	575	112	147
23	188	182	153	145	134	145	190	462	113	574	119	129
24	192	183	136	140	136	141	183	563	107	563	112	113
25	193	190	123	139	139	141	185	617	108	566	112	112
26	189	183	e130	e135	142	154	176	463	115	592	111	117
27	189	175	e150	139	147	157	180	541	127	602	113	120
28	186	176	165	139	160	141	171	479	127	585	112	113
29	190	181	169	139	164	134	166	470	126	414	112	103
30	217	173	166	141	---	145	160	366	119	293	109	101
31	210	---	149	140	---	133	---	324	---	283	103	---
TOTAL	5306	5696	4953	4540	3948	4366	5242	9115	4990	14926	5576	3400
MEAN	171	190	160	146	136	141	175	294	166	481	180	113
MAX	217	219	189	192	164	159	206	617	486	619	289	147
MIN	139	173	120	130	120	127	138	101	107	115	103	97
AC-FT	10520	11300	9820	9010	7830	8660	10400	18080	9900	29610	11060	6740

CAL YR 1987	TOTAL	104807	MEAN	287	MAX	1730	MIN	120	AC-FT	207900
WTR YR 1988	TOTAL	72058	MEAN	197	MAX	619	MIN	97	AC-FT	142900

e Estimated

GREEN RIVER BASIN

09285000 STRAWBERRY RIVER NEAR SOLDIER SPRINGS, UT

LOCATION.--Lat 40°08'00", long 111°01'27", in SE¼SW¼NW¼ sec. 16, T. 2 S., R. 10 W., Uintah Meridian, Wasatch County, Hydrologic Unit 14060004, on left bank 300 ft below Soldier Creek Dam, 1.5 mi upstream from Willow Creek, and 3.4 mi south of Soldier Springs.

DRAINAGE AREA.--213 mi², includes approximately 170 mi² tributary to Strawberry Reservoir, which includes area above diversion dams on Indian and Trail Hollow Creeks.

PERIOD OF RECORD.--October 1942 to September 1956, October 1963 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,360 ft from topographic map. Prior to June 1, 1971, water-stage recorder at site about 0.2 mi upstream at different datum. From June 1, 1971 to Aug. 8, 1974, at site about 0.8 mi downstream at different datum. From Aug. 25, 1983 to Sept. 10, 1985 at site about 300 ft downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Strawberry Reservoir since July 14, 1912. Capacity, 1,106,500 acre-ft since June 30, 1973; 283,000 acre-ft prior to June 30, 1973. New earthfilled dam located 7 mi below old dam was completed in September 1972 and storage began June 30, 1973. The elevation of the new reservoir reached the elevation of the old reservoir on March 15 and the old dam was breached on June 6, 1985. Water Hollow Tunnel will divert 600 ft³/s to the reservoir during spring runoff when series of tunnels and small reservoirs are completed on Rock Creek, West Fork Duchesne River, and Currant Creek. Several old transmountain diversions upstream to the reservoir. Transmountain diversions from the reservoir and upstream tributaries to the Great Basin.

AVERAGE DISCHARGE.--23 years (1943-56, 1964-72), 31.0 ft³/s, 22,500 acre-ft/yr prior to completion of Soldier Creek Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,020 ft³/s May 4, 1952, gage height, 3.84 ft, site and datum then in use, from rating curve extended above 550 ft³/s; minimum daily, 0.23 ft³/s July and August 1973.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 30 ft³/s May 31; minimum daily, 8.5 ft³/s Mar. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e13	13	13	14	14	13	11	26	29	26	25	27
2	e14	13	13	14	14	12	12	26	27	26	25	27
3	e14	13	13	14	14	12	12	27	27	26	25	28
4	e15	13	13	12	13	12	15	27	27	26	25	28
5	e16	12	13	11	13	12	18	28	27	26	25	28
6	15	13	12	13	12	11	17	28	27	26	25	28
7	14	12	13	13	12	11	16	27	27	26	25	28
8	14	12	13	13	11	12	15	28	26	26	24	28
9	14	13	13	13	11	12	12	28	27	26	26	28
10	14	13	13	13	10	12	25	27	27	26	27	28
11	15	13	13	13	11	13	25	27	27	26	27	29
12	15	13	13	13	11	13	25	28	27	26	27	28
13	15	13	13	13	10	13	25	28	27	26	27	28
14	15	13	15	12	9.7	12	25	28	27	26	26	26
15	15	13	20	12	8.7	12	26	28	26	25	26	25
16	14	13	20	12	12	12	27	28	25	25	26	25
17	13	13	17	12	13	12	27	27	26	25	26	25
18	13	13	13	12	13	14	28	26	26	26	26	25
19	14	13	13	12	12	13	28	26	26	25	26	25
20	14	13	13	12	12	13	28	27	26	25	26	25
21	13	13	13	14	11	13	28	26	26	25	26	24
22	13	13	13	14	11	13	28	26	26	25	26	23
23	14	14	13	14	12	12	28	27	25	25	26	24
24	14	15	13	14	12	11	28	27	25	25	26	24
25	14	15	13	14	12	9.2	28	27	26	25	27	25
26	14	15	13	13	12	9.7	27	26	26	25	27	24
27	13	15	13	13	12	9.3	26	25	25	25	27	22
28	13	15	13	13	12	8.5	26	25	25	25	27	22
29	13	16	13	13	12	9.5	26	25	26	25	26	23
30	13	14	13	14	---	11	26	28	26	25	26	22
31	13	---	14	14	---	11	---	30	---	25	27	---
TOTAL	433	402	423	403	342.4	363.2	688	837	790	790	806	772
MEAN	14.0	13.4	13.6	13.0	11.8	11.7	22.9	27.0	26.3	25.5	26.0	25.7
MAX	16	16	20	14	14	14	28	30	29	26	27	29
MIN	13	12	12	11	8.7	8.5	11	25	25	25	24	22
AC-FT	859	797	839	799	679	720	1360	1660	1570	1570	1600	1530
CAL YR 1987	TOTAL	7205	MEAN	19.7	MAX	29	MIN	11	AC-FT	14290		
WTR YR 1988	TOTAL	7049.6	MEAN	19.3	MAX	30	MIN	8.5	AC-FT	13980		

e Estimated

09286100 RED CREEK ABOVE RESERVOIR, NEAR FRUITLAND, UT

LOCATION.--Lat 40°19'48", long 110°51'43", in SW¼SE¼SE¼, sec. 2, T. 2 S., R. 9 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, on left bank 2 mi above Red Creek Dam and 9.2 mi north of Fruitland.

DRAINAGE AREA.--31.4 mi².

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,320 ft from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. No regulation or diversions above gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49 ft³/s, Apr. 15, 1987, gage height, 2.15 ft; minimum discharge, .09 ft³/s, Sept. 8, 9, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 12 ft³/s, Apr. 16, May 8; minimum discharge, .09 ft³/s, Sept. 8, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	3.1	e2.1	1.8	2.0	e2.7	5.8	9.0	7.6	2.1	1.2	.23
2	1.6	3.1	e2.3	1.6	2.0	2.4	6.0	7.3	7.0	1.9	.95	.20
3	1.5	3.1	e2.5	1.6	1.9	2.2	6.5	7.5	6.6	2.1	1.3	.26
4	1.5	2.5	e2.4	1.6	1.8	2.2	9.0	7.6	6.1	2.0	1.2	.22
5	1.5	2.5	e2.6	1.7	1.8	2.1	5.8	7.5	5.7	1.9	.92	.26
6	1.5	4.3	e2.6	1.8	1.8	2.1	7.2	8.3	5.2	1.7	.78	.27
7	1.6	3.6	e2.5	1.7	1.8	1.9	9.2	7.9	4.9	1.5	1.1	.19
8	1.5	2.8	e2.4	1.7	1.8	2.6	9.5	7.4	4.8	1.3	.97	.18
9	1.5	2.5	e2.2	1.6	1.9	2.3	6.5	7.1	4.6	1.3	.76	.17
10	1.5	2.5	e2.4	1.7	2.0	2.0	e7.0	7.0	4.4	1.3	.68	.20
11	1.6	2.5	e2.4	1.7	1.9	2.3	e7.6	8.0	4.2	1.3	.66	.26
12	1.5	2.5	e2.2	1.7	2.1	1.9	8.2	9.5	4.3	.99	.71	.39
13	2.2	2.5	e1.9	1.6	2.2	2.0	8.4	10	4.4	1.1	.65	.97
14	2.6	2.5	e1.7	1.6	2.0	2.4	9.2	11	4.1	1.0	.56	1.2
15	2.2	e2.3	e1.7	1.6	2.0	1.8	11	10	3.9	.92	.51	1.0
16	1.9	e2.2	e2.0	1.6	2.0	1.7	12	11	3.7	.76	.53	.89
17	1.9	e2.4	e2.3	1.6	2.1	1.8	10	11	3.5	.63	.51	1.0
18	1.9	e2.3	e2.7	1.7	2.0	2.0	9.5	12	3.6	.55	.52	.67
19	1.8	e2.1	e2.5	1.6	2.0	2.3	8.4	10	3.4	.48	.49	.69
20	1.8	e2.2	e2.1	1.6	2.0	3.1	7.9	8.8	3.2	.53	.47	.72
21	1.8	e2.4	e1.8	1.7	2.3	4.1	8.4	8.4	3.2	.59	.63	.89
22	1.9	e2.3	e2.2	1.7	2.4	4.7	7.9	8.1	2.9	.58	.63	1.1
23	2.0	e2.2	e2.2	1.7	2.4	3.1	6.7	8.0	2.8	.56	.54	1.2
24	2.3	e2.3	e1.9	1.8	e2.6	3.3	6.2	7.8	2.6	.62	.38	1.1
25	2.2	e2.2	e1.6	1.7	e2.9	3.5	6.2	7.6	2.5	.71	.31	1.0
26	2.1	e2.1	e1.7	1.8	e3.1	5.8	5.2	7.4	3.4	1.5	.37	.97
27	2.0	e2.1	e1.8	1.8	e3.3	7.9	6.7	7.0	4.0	1.8	.44	1.0
28	1.9	e2.3	e1.9	1.9	e3.4	7.2	7.4	6.8	3.8	1.2	.40	1.1
29	2.1	e2.2	e2.0	2.0	e3.0	8.2	7.4	6.5	3.1	1.2	.42	.89
30	3.0	e2.2	e2.1	2.0	---	5.4	8.4	8.1	2.5	1.4	.31	1.0
31	3.1	---	e2.0	2.0	---	5.6	---	8.3	---	1.2	.27	---
TOTAL	59.2	75.8	66.7	53.2	64.5	102.6	235.2	261.9	126.0	36.72	20.17	20.22
MEAN	1.91	2.53	2.15	1.72	2.22	3.31	7.84	8.45	4.20	1.18	.65	.67
MAX	3.1	4.3	2.7	2.0	3.4	8.2	12	12	7.6	2.1	1.3	1.2
MIN	1.5	2.1	1.6	1.6	1.8	1.7	5.2	6.5	2.5	.48	.27	.17
AC-FT	117	150	132	106	128	204	467	519	250	73	40	40
CAL YR 1987	TOTAL	1776.4	MEAN	4.87	MAX	24	MIN	1.2	AC-FT	3520		
WTR YR 1988	TOTAL	1122.21	MEAN	3.07	MAX	12	MIN	.17	AC-FT	2230		

e Estimated

GREEN RIVER BASIN

09286700 CURRANT CREEK BELOW CURRANT CREEK DAM, NEAR FRUITLAND, UT

LOCATION.--Lat 40°19'51", long 111°02'56", in NE¼SE¼SE¼ sec. 6, T. 2 S., R. 10 W., Uintah Meridian, Wasatch County, Hydrologic Unit 14060004, on left bank 700 ft below Currant Creek Dam, 1.0 mi above Red Ledge Hollow, and 14 mi northwest of Fruitland.

DRAINAGE AREA.--48.0 mi².

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,550 ft from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Currant Creek Reservoir, total capacity, 15,670 acre-ft.

AVERAGE DISCHARGE.--5 years, 21.6 ft³/s, 15,650 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 558 ft³/s May 14, 1984, gage height, 5.58 ft; minimum daily, 0.63 ft³/s April 10, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 46 ft³/s Oct. 29, gage height, 2.44 ft; minimum daily discharge, 5.5 ft³/s Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	8.5	7.9	6.3	6.6	6.6	7.4	21	24	25	10	7.1
2	7.1	8.5	8.0	6.6	6.6	6.6	7.3	21	24	25	10	7.2
3	7.1	8.5	7.9	6.6	6.6	6.6	7.3	21	24	25	10	7.2
4	7.6	8.5	7.9	6.6	6.6	6.8	7.4	21	24	24	10	7.3
5	7.9	8.5	8.0	6.5	6.6	6.8	17	21	24	24	10	7.3
6	7.9	8.7	7.9	6.2	6.6	6.9	22	21	24	21	10	7.3
7	7.9	8.5	8.0	6.1	6.6	7.1	22	21	24	17	10	7.3
8	7.9	8.5	7.9	6.1	6.5	7.1	22	21	24	17	10	7.4
9	8.0	8.5	7.9	6.1	6.3	7.1	22	21	24	17	10	7.4
10	8.1	8.5	8.0	6.1	6.3	7.1	22	21	24	17	10	7.4
11	8.2	8.5	8.0	6.2	6.3	7.3	22	21	24	17	8.4	7.4
12	8.1	8.5	8.1	6.2	6.4	7.3	23	21	24	18	7.6	7.5
13	8.0	8.5	7.8	6.1	6.5	7.3	23	21	24	17	7.6	7.6
14	8.5	8.7	7.7	6.1	6.4	7.3	24	21	24	16	7.6	7.5
15	9.3	8.5	7.6	6.1	6.3	7.3	22	21	24	14	7.6	7.2
16	9.7	8.5	7.6	6.3	6.3	7.3	22	21	25	12	7.6	7.1
17	9.7	8.5	7.6	6.3	6.3	7.3	22	21	25	11	7.4	7.3
18	9.7	8.5	7.6	6.3	6.3	7.6	22	21	25	11	6.2	7.3
19	9.7	8.5	7.9	6.3	6.5	7.6	22	21	25	11	6.0	7.1
20	9.7	8.5	7.9	6.3	6.6	7.6	22	21	25	10	7.4	5.7
21	9.7	8.5	7.9	6.2	6.6	7.9	22	22	25	10	7.3	5.7
22	9.1	8.3	7.8	6.2	6.6	7.9	21	23	25	8.9	7.3	5.7
23	9.1	8.2	7.3	6.3	6.6	7.8	21	23	25	8.2	7.3	5.7
24	9.1	8.2	7.3	6.3	6.6	7.7	21	23	25	8.2	7.3	6.0
25	9.1	8.3	7.3	6.3	6.6	7.6	21	23	25	8.2	7.3	6.9
26	9.0	8.4	7.6	6.3	6.7	7.6	21	23	25	8.1	7.4	6.4
27	8.8	8.2	7.5	6.3	6.8	7.6	21	23	25	8.7	7.3	6.4
28	8.8	8.2	7.3	6.3	6.8	7.6	21	23	25	12	7.3	6.2
29	10	8.2	6.7	6.4	6.6	7.6	21	24	25	10	7.3	5.5
30	8.1	8.2	6.5	6.6	---	7.6	21	24	25	10	7.1	5.5
31	8.5	---	6.3	6.6	---	7.6	---	24	---	10	7.1	---
TOTAL	266.5	253.1	236.7	195.2	189.1	227.1	591.4	675	735	451.3	253.4	204.6
MEAN	8.60	8.44	7.64	6.30	6.52	7.33	19.7	21.8	24.5	14.6	8.17	6.82
MAX	10	8.7	8.1	6.6	6.8	7.9	24	24	25	25	10	7.6
MIN	7.1	8.2	6.3	6.1	6.3	6.6	7.3	21	24	8.1	6.0	5.5
AC-FT	529	502	469	387	375	450	1170	1340	1460	895	503	406
CAL YR 1987	TOTAL	4316.0	MEAN	11.8	MAX	23	MIN	6.3	AC-FT	8560		
WTR YR 1988	TOTAL	4278.4	MEAN	11.7	MAX	25	MIN	5.5	AC-FT	8490		

GREEN RIVER BASIN

91

09288000 CURRANT CREEK NEAR FRUITLAND, UT

LOCATION.--Lat 40°12'01", long 110°54'25", in NE¼SE¼SW¼ sec. 21, T. 3 S., R. 9 W., Uintah Meridian, Wasatch County, Hydrologic Unit 14060004, on left bank 30 ft downstream from Deep Creek, 150 ft upstream from bridge on U.S. Highway 40 and 3.5 mi southwest of Fruitland.

DRAINAGE AREA.--140 mi².

PERIOD OF RECORD.--October 1934 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 6,670 ft from topographic map. Aug. 6, 1952 to Nov. 8, 1966, water-stage recorder at site 150 ft downstream at datum 1.30 ft lower. See WSP 1733 for history of changes prior to Aug. 6, 1952.

REMARKS.--No estimated daily discharges. Records good. Currant Creek feeder canal, constructed by the Bureau of Reclamation in 1936, diverts water from headwaters of Currant Creek to Strawberry Reservoir, from which it is diverted through Strawberry Tunnel to the Great Basin for irrigation in Strawberry Valley project. Beginning in 1962, Deep Creek was diverted intermittently into private fish ponds and entered Currant Creek 400 ft below gage. However, since approximately 1976 when the upstream pond washed out Deep Creek has been entering Currant Creek 30 ft above gage. Flow partially regulated by Currant Creek Reservoir 15 miles upstream, beginning Oct. 4, 1982. Total capacity, 15,670 acre-ft.

AVERAGE DISCHARGE.--48 years (water years 1935-82), 46.0 ft³/s, 33,330 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,260 ft³/s May 4, 1952, gage height, 2.72 ft, site and datum then in use; maximum gage height, 5.92 ft, Jan. 27, 1974, backwater from ice; minimum recorded, 3.6 ft³/s Aug. 9, 10, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 104 ft³/s June 26, gage height, 1.91 ft; minimum, 13 ft³/s Dec. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	32	32	30	32	33	32	45	43	38	27	26
2	26	31	32	27	32	31	34	44	42	37	26	25
3	26	32	32	30	31	32	35	44	41	35	27	25
4	26	31	32	33	27	32	35	44	42	35	27	23
5	26	31	32	34	31	32	36	44	43	35	26	25
6	26	37	33	33	33	33	45	44	43	36	26	25
7	25	33	33	29	34	32	47	44	43	30	28	25
8	25	32	31	31	34	30	47	44	43	30	26	24
9	27	32	34	32	33	32	45	44	41	30	24	24
10	25	32	34	34	32	31	45	44	40	32	24	24
11	25	32	34	33	32	30	46	43	41	32	23	24
12	25	32	27	30	32	28	46	41	41	31	22	26
13	31	32	21	26	31	28	47	44	41	30	22	28
14	30	33	23	33	32	28	46	43	40	29	24	26
15	29	32	26	35	32	31	46	44	40	28	25	26
16	29	31	31	30	32	30	45	44	40	26	25	25
17	28	33	34	34	32	28	45	45	40	26	24	24
18	29	29	36	34	33	29	44	44	40	25	23	24
19	29	33	34	31	30	32	44	43	40	23	22	25
20	29	32	28	26	31	35	45	43	40	24	23	25
21	29	31	33	33	31	36	49	42	39	25	24	24
22	29	31	33	32	31	33	48	43	38	25	24	25
23	30	31	33	35	30	31	45	44	38	24	24	24
24	30	30	31	34	30	30	43	44	37	25	23	24
25	29	31	26	34	30	33	44	44	36	25	23	24
26	29	31	28	36	30	37	44	43	45	25	26	22
27	29	29	32	35	31	36	43	43	40	24	27	23
28	29	32	34	35	33	32	43	43	40	28	25	24
29	31	31	35	36	34	31	44	42	39	29	24	25
30	34	31	34	35	---	32	45	45	38	26	24	25
31	31	---	32	34	---	32	---	44	---	27	24	---
TOTAL	872	950	970	1004	916	980	1303	1352	1214	895	762	739
MEAN	28.1	31.7	31.3	32.4	31.6	31.6	43.4	43.6	40.5	28.9	24.6	24.6
MAX	34	37	36	36	34	37	49	45	45	38	28	28
MIN	25	29	21	26	27	28	32	41	36	23	22	22
AC-FT	1730	1880	1920	1990	1820	1940	2580	2680	2410	1780	1510	1470
CAL YR 1987	TOTAL	14134	MEAN	38.7	MAX	65	MIN	21	AC-FT	28030		
WTR YR 1988	TOTAL	11957	MEAN	32.7	MAX	49	MIN	21	AC-FT	23720		

GREEN RIVER BASIN

09288180 STRAWBERRY RIVER NEAR DUCHESNE, UT

LOCATION.--Lat 40°09'17", long 110°33'15", in SE¼SW¼SW¼ sec. 3, T. 4 S., R. 6 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060004, on right bank 150 ft downstream from County Road bridge, 2,000 ft upstream from maximum high-water line of Starvation Reservoir, and 7.9 mi west of Duchesne.

DRAINAGE AREA.--917 mi² (includes approximately 170 mi² tributary to Strawberry Reservoir).

PERIOD OF RECORD.--May 1968 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,722 ft (Rabbit Gulch Quadrangle which gives bridge elevation).

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Strawberry Reservoir since July 14, 1912. Capacity, 1,106,500 acre-ft since June 30, 1973; 283,000 acre-ft prior to June 30, 1973. New earthfilled dam located 7 mi below old dam was completed in September 1972 and storage began June 30, 1973. The elevation of new reservoir reached the elevation of the old reservoir on March 15 and the old dam was breached on June 6, 1985. Water Hollow Tunnel will divert 600 ft³/s to the reservoir during spring runoff when series of tunnels and small reservoirs are completed on Rock Creek, West Fork Duchesne River, and Currant Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,090 ft³/s May 31, 1983, gage height, 8.29 ft; maximum gage height, 10.16 ft Jan. 2, 1983, result of an ice jam; minimum recorded, 17 ft³/s June 20, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 240 ft³/s May 18, gage height 5.15 ft; minimum daily, 65 ft³/s July 21-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	106	102	e87	e97	e100	96	136	142	101	70	71
2	96	106	112	e82	e95	e95	98	141	126	99	69	71
3	97	106	108	e90	e90	e98	101	144	119	98	72	72
4	95	105	92	e96	e85	e98	104	147	112	97	68	71
5	95	103	88	e100	e93	e98	106	148	111	99	68	72
6	94	131	87	e95	e100	e100	112	148	108	99	70	75
7	90	118	88	e90	e102	e97	121	154	103	95	70	77
8	90	107	87	e96	e100	e93	122	154	101	92	73	74
9	91	115	97	e96	e98	e98	117	152	101	91	69	73
10	90	117	88	e100	e95	e95	117	147	101	90	70	73
11	90	115	92	e97	e100	e90	118	145	98	90	69	71
12	92	113	86	e90	e96	e86	119	146	101	87	69	78
13	101	111	e66	e80	e92	e86	119	153	99	84	69	88
14	107	113	e70	e100	e97	e91	120	171	98	81	68	88
15	105	109	e78	e105	e95	e96	129	188	100	79	68	84
16	102	106	e87	e92	e95	e91	126	197	103	75	71	81
17	105	107	e97	e100	e95	e86	126	217	102	73	70	82
18	103	96	e104	e100	e100	e90	128	235	103	71	68	82
19	104	109	e94	e90	e90	e100	133	223	101	70	70	83
20	103	118	e85	e82	e94	e105	132	210	103	68	72	84
21	102	116	e100	e100	e93	e110	141	200	100	65	73	84
22	101	113	e97	e97	e92	e105	149	193	99	65	71	87
23	99	107	e95	e105	e92	e100	141	e185	104	65	68	83
24	102	110	e88	e100	e92	97	140	e175	100	65	67	81
25	104	110	e80	e105	e92	97	137	e170	99	66	69	80
26	103	96	e85	e110	e93	105	140	e160	104	67	74	78
27	103	98	e92	e105	e96	108	134	e150	119	67	82	77
28	102	97	e98	e105	e100	99	133	144	112	69	79	76
29	104	112	e100	e110	e105	e94	133	137	114	70	75	76
30	112	104	e98	e105	---	99	131	152	108	69	72	76
31	111	---	e94	e100	---	94	---	158	---	68	71	---
TOTAL	3090	3274	2835	3010	2764	3001	3723	5180	3191	2475	2194	2348
MEAN	99.7	109	91.5	97.1	95.3	96.8	124	167	106	79.8	70.8	78.3
MAX	112	131	112	110	105	110	149	235	142	101	82	88
MIN	90	96	66	80	85	86	96	136	98	65	67	71
AC-FT	6130	6490	5620	5970	5480	5950	7380	10270	6330	4910	4350	4660
CAL YR 1987	TOTAL	44447	MEAN	122	MAX	222	MIN	66	AC-FT	88160		
WTR YR 1988	TOTAL	37085	MEAN	101	MAX	235	MIN	65	AC-FT	73560		

e Estimated

GREEN RIVER BASIN

93

09289500 LAKE FORK RIVER ABOVE MOON LAKE, NEAR MOUNTAIN HOME, UT

LOCATION.--Lat 40°36'24", long 110°31'35", in SW¼SE¼SE¼ sec. 35, T. 3 N., R. 6 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, Ashley National Forest, on right bank 2,000 ft upstream from head of Moon Lake at maximum stage, 2 mi upstream from Brown Duck Creek, 16 mi northeast of Mountain Home.

DRAINAGE AREA.--77.9 mi².

PERIOD OF RECORD.--April 1933 to September 1934 (published as West Fork of Lake Fork above Moon Lake, near Mountain Home); July 1942 to September 1955; October 1963 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 8,180 ft from topographic map. April 1933 to September 1934, at site 2.5 mi upstream at different datum. July 13, 1942 to Oct. 1, 1984, at datum 1.00 ft lower.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--38 years (water years 1943-55, 1964-88), 114 ft³/s, 82,590 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,700 ft³/s June 26, 1944, gage height, 5.27 ft, datum then in use, from rating curve extended above 700 ft³/s; minimum daily recorded, 13 ft³/s Apr. 14, 1933.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 4	2100	*789	*3.93				

Minimum daily discharge, 28 ft³/s, Jan. 4, Sept. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	54	e43	e32	e39	e47	e50	e63	194	100	50	33
2	45	57	e45	e30	e38	e45	e52	e57	198	95	51	32
3	45	55	e48	e30	e37	e43	e54	e62	322	90	73	32
4	44	50	e49	e28	e35	e47	e52	56	514	92	61	31
5	43	49	e50	e30	e33	e45	e50	56	566	87	53	31
6	42	55	e52	e34	e34	e44	e52	59	442	81	51	30
7	42	51	e52	e33	e36	e43	e56	56	332	77	53	30
8	42	51	e46	e32	e37	e41	e56	54	282	74	49	29
9	42	49	e43	e31	e39	e43	e50	54	270	74	48	29
10	43	51	e47	e32	e40	e45	e52	56	246	71	47	32
11	42	49	e50	e34	e42	e44	e54	73	223	66	49	34
12	43	49	e48	e36	e41	e43	e56	103	203	63	63	33
13	49	49	e44	e33	e39	e42	e61	162	177	61	59	39
14	51	50	e38	e32	e41	e40	e66	242	168	59	56	39
15	49	48	e34	e32	e41	e42	e70	349	165	57	54	38
16	46	52	e32	e35	e40	e43	e65	480	163	55	51	38
17	47	48	e43	e36	e38	e40	e60	563	167	54	47	34
18	46	e47	e42	e37	e36	e40	e60	409	160	e53	44	32
19	45	e43	e40	e35	e37	e45	e60	321	161	e53	42	32
20	44	e45	e37	e32	e40	e48	e58	279	153	e51	42	32
21	45	e46	e38	e31	e38	e54	e60	302	156	e49	42	32
22	45	e47	e36	e32	e45	e52	e59	390	143	47	40	35
23	46	e49	e33	e34	e43	e50	e54	479	134	47	37	33
24	47	e49	e32	e35	e41	e48	e54	505	124	46	36	31
25	47	e48	e32	e34	e40	e50	e56	461	118	48	36	30
26	47	e47	e32	e33	e42	e55	e51	501	149	56	36	29
27	46	e46	e35	e33	e42	e58	e56	492	150	69	36	29
28	47	e44	e37	e34	e45	e55	e56	450	152	83	35	28
29	48	e45	e36	e35	e47	e50	e58	407	126	59	34	28
30	52	e45	e35	e37	---	e50	e60	267	107	53	33	28
31	52	---	e34	e41	---	e50	---	217	---	51	33	---
TOTAL	1418	1468	1263	1033	1146	1442	1698	8025	6465	2021	1441	963
MEAN	45.7	48.9	40.7	33.3	39.5	46.5	56.6	259	215	65.2	46.5	32.1
MAX	52	57	52	41	47	58	70	563	566	100	73	39
MIN	42	43	32	28	33	40	50	54	107	46	33	28
AC-FT	2810	2910	2510	2050	2270	2860	3370	15920	12820	4010	2860	1910
CAL YR 1987	TOTAL	41596	MEAN	114	MAX	752	MIN	20	AC-FT	82510		
WTR YR 1988	TOTAL	28383	MEAN	77.5	MAX	566	MIN	28	AC-FT	56300		

e Estimated

GREEN RIVER BASIN

09290500 MOON LAKE RESERVOIR NEAR MOUNTAIN HOME, UT

LOCATION.--Lat 40°33'43", long 110°29'21", in NW¼NE¼NE¼ sec. 19, T. 2 N., R. 5 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, Ashley National Forest, at dam on Lake Fork River, 1.4 mi downstream from Brown Duck Creek, 10.5 mi upstream from Yellowstone River, and 12.5 mi northwest of Mountain Home.

DRAINAGE AREA.--108 mi².

PERIOD OF RECORD.--December 1937 to current year.

REVISED RECORDS.--WDR UT-77-1: 1975.

GAGE.--Nonrecording gage read once daily on days shown. Datum of gage is NGVD of 1929 (levels by Bureau of Reclamation).

REMARKS.--Reservoir formed by earthfill, rock-faced dam with concrete core. Storage began Dec. 9, 1937. Capacity, 35,760 acre-ft between elevations 8,072.00 ft, crest of original outlet of lake, about 2,000 ft upstream from dam, and 8,137.00 ft, top of spillway gates. Elevation of spillway crest is 8,121.00 ft and elevation of sill of outlet works is 8,064.16 ft. Dead storage between sill of outlet and crest of original outlet of lake, 2,050 acre-ft. Total dead storage, 13,740 acre-ft. Figures given herein represent usable contents. Water is used for irrigation on lands under Moon Lake Water Users Association and Uintah Indian Irrigation projects.

COOPERATION.--Capacity table provided by Bureau of Reclamation. Gage heights furnished by Moon Lake Water Users Association.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 37,560 acre-ft July 10, 11, 1950; elevation, 8,139.30 ft; minimum observed, 226 acre-ft Sept. 30, 1946.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 24,890 acre-ft Apr. 4, elevation, 8,122.1 ft; minimum contents observed, 1,290 acre-ft Sept. 1, elevation, 8,076.4 ft.

MONTHEND ELEVATION, IN FEET, AND INSTANTANEOUS CONTENTS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	--	*15,420	--
Oct. 31	--	*15,360	-60
Nov. 30	--	*17,610	+2250
Dec. 31	8,114.3	19,780	+2170
CAL YR 1987	--	--	-5870
Jan. 31	--	*21,560	+1780
Feb. 29	--	*23,140	+1580
Mar. 31	--	*24,620	+1480
Apr. 30	--	*23,140	-1480
May 31	8,120.0	23,470	+330
June 30	--	*17,550	-5920
July 31	--	* 4,160	-13390
Aug. 31	--	* 1,290	-2870
Sept. 30	--	* 2,230	+940
WTR YR 1988	--	--	-13190

* No gage reading, contents interpolated.
Readings normally made on the first of each month.

GREEN RIVER BASIN

95

09291000 LAKE FORK RIVER BELOW MOON LAKE, NEAR MOUNTAIN HOME, UT

LOCATION.--Lat 40°33'23", long 110°29'02", in SW¼SW¼NW¼ sec. 20, T. 2 N., R. 5 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, Ashley National Forest, on right bank 2,000 ft downstream from Moon Lake Dam, 2 mi downstream from Brown Duck Creek, and 12 mi northwest of Mountain Home.

DRAINAGE AREA.--112 mi².

PERIOD OF RECORD.--September 1921 to September 1934 (fragmentary), April 1942 to current year. Published as West Fork of Lake Fork near Mountain Home 1921-34, and as Lake Fork below Moon Lake, near Mountain Home 1942-65.

REVISED RECORDS.--WSP 1313: 1930 (M). WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,970 ft by barometer. Prior to April 1942, at damsite 2,000 ft upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Moon Lake Reservoir (see station 09290500). No diversion above station.

AVERAGE DISCHARGE.--46 years (1942-88), 130 ft³/s, 94,180 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 2,180 ft³/s June 19, 1949 (gage height, 4.83 ft), from rating curve extended above 860 ft³/s; maximum gage height, 5.46 ft June 26, 1944; no flow at times when reservoir gates are closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 503 ft³/s July 8, gage height, 2.88 ft; minimum discharge, no flow many days during October - April.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	190	377	409	155	44
2	.00	.00	.00	.00	.00	.00	.00	192	375	432	109	37
3	.00	.00	.00	.00	.00	.00	.00	189	373	429	59	38
4	.00	.00	.00	.00	.00	.00	.00	143	317	430	26	38
5	.00	.00	.00	.00	.00	.00	.00	93	127	419	26	27
6	.00	.00	.00	.00	.00	.00	.00	194	144	327	26	23
7	.00	.00	.00	.00	.00	.00	.00	199	216	370	35	23
8	.00	.00	.00	.00	.00	.00	.00	232	334	487	96	22
9	.00	.00	.00	.00	.00	.00	.00	407	335	484	101	15
10	.00	.00	.00	.00	.00	.00	.00	416	335	476	100	11
11	.00	.00	.00	.00	.00	.00	21	451	334	441	110	20
12	65	.00	.00	.00	.00	.00	56	442	332	326	186	75
13	112	.00	.00	.00	.00	.00	57	426	347	287	140	75
14	112	.00	.00	.00	.00	.00	57	385	334	270	104	75
15	112	.00	.00	.00	.00	.00	77	330	312	305	109	75
16	112	.00	.00	.00	.00	.00	103	215	317	303	69	58
17	112	.00	.00	.00	.00	.00	103	184	329	302	49	.00
18	112	.00	.00	.00	.00	.00	103	176	329	299	125	.00
19	112	.00	.00	.00	.00	.00	103	312	331	295	127	.00
20	112	.00	.00	.00	.00	.00	103	335	366	291	126	.00
21	112	.00	.00	.00	.00	.00	103	385	366	287	130	.00
22	112	.00	.00	.00	.00	.00	103	379	364	224	193	.00
23	112	.00	.00	.00	.00	.00	103	254	364	224	192	.00
24	112	.00	.00	.00	.00	.00	128	167	362	238	189	.00
25	111	.00	.00	.00	.00	.00	193	217	368	221	144	.00
26	63	.00	.00	.00	.00	.00	194	353	367	211	94	.00
27	.00	.00	.00	.00	.00	.00	192	344	391	211	113	.00
28	.00	.00	.00	.00	.00	.00	190	204	408	209	113	.00
29	.00	.00	.00	.00	.00	.00	190	257	407	209	72	.00
30	.00	.00	.00	.00	---	.00	190	303	404	208	51	.00
31	.00	---	.00	.00	---	.00	---	352	---	207	51	---
TOTAL	1583.00	0.00	0.00	0.00	0.00	0.00	2369.00	8726	10065	9831	3220	656.00
MEAN	51.1	.00	.00	.00	.00	.00	79.0	281	335	317	104	21.9
MAX	112	.00	.00	.00	.00	.00	194	451	408	487	193	75
MIN	.00	.00	.00	.00	.00	.00	.00	93	127	207	26	.00
AC-FT	3140	.0	.0	.0	.0	.0	4700	17310	19960	19500	6390	1300
CAL YR 1987	TOTAL	55046.20	MEAN	151	MAX	1000	MIN	.00	AC-FT	109200		
WTR YR 1988	TOTAL	36450.00	MEAN	99.6	MAX	487	MIN	.00	AC-FT	72300		

GREEN RIVER BASIN

09292500 YELLOWSTONE RIVER NEAR ALTONAH, UT

LOCATION.--Lat 40°30'43", long 110°20'27", in SW¼SW¼NE¼ sec. 4, T. 1 N., R. 4 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, Uintah and Ouray Indian Reservation, on left bank 1.5 mi downstream from powerplant of Moon Lake Electric Association, Inc., 2 mi downstream from Hell Canyon, 8.2 mi northwest of Altonah.

DRAINAGE AREA.--132 mi².

PERIOD OF RECORD.--October 1944 to current year. Prior to October 1965, published as Yellowstone Creek near Altonah.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,430 ft from river-profile map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--44 years, 141 ft³/s, 102,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,240 ft³/s June 19, 1983, gage height, 4.24 ft, maximum gage height, 4.63 ft June 16, 1986; minimum daily, 25 ft³/s Nov. 28, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 4	2400	*619	*2.58				

Minimum discharge, 33 ft³/s Apr. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	89	e64	e60	e63	e62	48	65	165	133	100	64
2	89	95	65	e56	e62	e60	50	60	162	125	97	63
3	86	96	64	e50	e59	e58	51	63	194	118	128	62
4	86	88	63	e48	e54	e63	50	64	339	130	116	61
5	86	83	64	e55	e49	e58	48	62	428	140	107	61
6	87	96	63	e61	e48	e58	51	63	350	126	102	61
7	87	86	63	e60	e50	e56	54	62	262	116	111	61
8	87	83	e62	e56	e54	e56	52	61	228	110	103	59
9	93	79	e62	e58	e56	e58	45	60	218	116	100	59
10	91	81	64	e62	e60	e60	47	60	210	155	94	59
11	90	76	61	e64	e62	e52	50	70	192	135	89	64
12	88	77	62	e62	e58	e50	54	90	188	121	87	64
13	97	77	e60	e58	e58	e48	57	133	176	116	83	76
14	102	78	e58	e58	e60	e50	62	192	165	113	78	75
15	101	71	e64	e58	e62	e52	76	246	163	111	76	74
16	94	69	e70	e62	e59	e49	70	325	157	134	79	74
17	91	72	e70	e60	e53	e45	68	401	164	150	76	70
18	90	71	e66	e64	e52	e47	69	287	161	147	76	67
19	87	e69	e66	e64	e50	e49	69	237	165	142	73	65
20	85	e70	e61	e52	e52	e54	66	208	164	140	72	65
21	82	71	e61	e53	e54	e58	68	211	181	132	74	64
22	82	69	e64	e54	e60	e54	68	242	165	125	73	66
23	82	69	e72	e56	e54	e51	61	289	157	121	70	67
24	84	73	e64	e59	e54	47	62	309	151	116	67	65
25	84	70	e56	e54	e56	52	63	254	146	111	65	64
26	82	68	e54	e54	e58	55	54	254	151	101	66	62
27	82	e68	e58	e56	e57	56	58	303	159	106	69	62
28	80	e66	e66	e56	e62	48	57	269	201	120	67	60
29	81	e64	e64	e56	e62	49	58	279	173	107	66	60
30	89	e66	e64	e62	---	49	62	210	147	100	65	60
31	86	---	e64	e67	---	49	---	180	---	101	64	---
TOTAL	2722	2290	1959	1795	1638	1653	1748	5609	5882	3818	2593	1934
MEAN	87.8	76.3	63.2	57.9	56.5	53.3	58.3	181	196	123	83.6	64.5
MAX	102	96	72	67	63	63	76	401	428	155	128	76
MIN	80	64	54	48	48	45	45	60	146	100	64	59
AC-FT	5400	4540	3890	3560	3250	3280	3470	11130	11670	7570	5140	3840

CAL YR 1987	TOTAL	60901	MEAN	167	MAX	1110	MIN	50	AC-FT	120800
WTR YR 1988	TOTAL	33641	MEAN	91.9	MAX	428	MIN	45	AC-FT	66730

e Estimated

GREEN RIVER BASIN

97

09295000 DUCHESNE RIVER AT MYTON, UT

LOCATION.--Lat 40°12'01", long 110°03'47", in NE¼NW¼NW¼ sec. 25, T. 3 S., R. 2 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, on left bank at Myton, 3 mi downstream from Lake Fork.

DRAINAGE AREA.--2,643 mi².

PERIOD OF RECORD.--October 1899 to December 1902, April to December 1903, March to December 1904, March to July and September to November 1905, April to July 1906, April to December 1907, March to December 1908, April to December 1909, March to November 1910, July 1911 to current year. Published as "at Price road bridge" 1899-1902.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,061.40 ft NGVD of 1929. Prior to Oct. 14, 1933, nonrecording gages at several sites within 0.5 mi of present site at various datums.

AVERAGE DISCHARGE.--80 years (1899-1902, 1911-88), 515 ft³/s, 373,100 acre-ft/yr.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by several reservoirs. Large diversions above station for irrigation, including transmountain diversions to the Great Basin through Duchesne and Strawberry Tunnels, Hobbie Creek ditch, and Strawberry River and Willow Creek ditch.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 12,800 ft³/s June 10, 1922, gage height, 7.94 ft site and datum then in use, from rating curve extended above 8,000 ft³/s; maximum gage height, 8.35 ft June 22, 24, 1983; minimum, less than 1 ft³/s July 16, 1931, and for several days in August and September 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 517 ft³/s June 5, gage height, 3.17 ft; minimum daily, 37 ft³/s Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	83	310	e275	e240	e290	271	102	102	67	93	58
2	104	78	319	e270	e240	e280	278	104	69	67	81	61
3	101	82	322	e260	e230	e280	284	89	64	69	80	62
4	103	76	317	e280	e220	e280	283	71	71	85	67	65
5	101	66	321	e300	e210	e275	274	58	182	100	58	51
6	95	83	319	e330	e220	e310	269	50	347	110	69	45
7	93	89	322	e310	e235	e300	264	48	159	128	86	49
8	98	80	328	e280	e250	318	252	46	105	118	81	47
9	96	77	307	e290	e250	321	243	49	98	135	60	45
10	99	72	318	e280	e245	330	237	51	111	180	68	48
11	93	70	328	e260	e240	305	235	52	110	234	74	51
12	91	67	291	e245	e250	285	195	65	109	178	80	51
13	111	154	277	e230	e240	282	114	69	105	100	77	65
14	148	114	256	e240	e250	295	101	86	90	72	67	55
15	142	96	228	e245	e245	303	87	112	69	89	58	64
16	176	83	243	e250	e240	306	62	123	71	84	71	88
17	127	92	292	e250	e225	284	52	180	68	93	61	95
18	119	161	369	e250	e240	285	50	265	88	91	52	92
19	119	174	382	e240	e230	308	44	122	85	97	61	100
20	119	198	347	e230	e235	323	56	209	88	95	74	82
21	121	202	303	e240	e240	348	66	129	69	84	75	61
22	120	204	339	e250	e240	363	93	79	77	102	72	76
23	121	203	352	e260	e245	338	92	102	74	103	62	70
24	122	293	299	e250	e250	309	91	178	66	94	57	65
25	191	313	217	e245	e255	297	87	272	59	87	60	53
26	196	319	220	e240	e260	313	78	227	61	81	65	49
27	107	305	275	e245	e270	322	76	124	69	94	66	47
28	100	299	e290	e250	e275	310	105	187	72	98	58	40
29	81	309	e300	e250	e280	277	110	121	82	94	59	37
30	101	307	e300	e250	---	283	105	141	82	85	63	37
31	115	---	e280	e245	---	284	---	115	---	91	57	---
TOTAL	3611	4749	9371	8040	7050	9404	4554	3626	2902	3205	2112	1809
MEAN	116	158	302	259	243	303	152	117	96.7	103	68.1	60.3
MAX	196	319	382	330	280	363	284	272	347	234	93	100
MIN	81	66	217	230	210	275	44	46	59	67	52	37
AC-FT	7160	9420	18590	15950	13980	18650	9030	7190	5760	6360	4190	3590
CAL YR 1987	TOTAL	107767	MEAN	295	MAX	2080	MIN	51	AC-FT	213800		
WTR YR 1988	TOTAL	60433	MEAN	165	MAX	382	MIN	37	AC-FT	119900		

e Estimated

GREEN RIVER BASIN

09299500 WHITEROCKS RIVER NEAR WHITEROCKS, UT

LOCATION.--Lat 40°35'13", long 109°55'37", in SE¼NE¼NW¼ sec. 7, T. 2 N., R. 1 E., Uintah Meridian, Uintah County, Hydrologic Unit 14060003, on right bank, 3.2 mi upstream from U.S. Forest Boundary, and 9.6 mi north-east of Whiterocks.

DRAINAGE AREA.--113 mi².

PERIOD OF RECORD.--September 1899 to December 1903, April to December 1907, March 1908 to November 1910, October 1913 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as Whiterocks River in Canyon, 1899, and as Whiterocks Creek near Whiterocks, 1918-25. November 1917 to June 1921 United States Whiterocks Canal diverted above station (records equivalent if flow of Whiterocks Canal is included).

GAGE.--Water-stage recorder. Altitude of gage is 7,160 ft from topographic map. Prior to Oct. 16, 1930, non-recording gages at several sites within 2 mi of present site at various datums. Oct. 16, 1930 to Nov. 26, 1984, water-stage recorder at various sites and datums about 3 mi downstream.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow slightly regulated by small mountain lakes.

AVERAGE DISCHARGE.--81 years (water years 1900-03, 1909-10, 1913-88), 123 ft³/s, 89,110 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,640 ft³/s, June 22, 1983, gage height, 5.28 ft, from rating curve extended above 2,000 ft³/s, site and datum then in use; minimum recorded, 9.2 ft³/s Apr. 3, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 17	2100	*721	*4.70	No other peaks greater than base discharge.			

Minimum daily discharge, 15 ft³/s, Apr. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	51	e32	e28	20	19	15	80	148	160	68	85
2	49	71	e34	e26	19	18	20	67	141	152	70	82
3	50	66	e36	e22	19	17	20	65	133	146	92	82
4	50	55	e37	e25	21	18	19	63	153	162	71	80
5	50	51	37	e26	20	17	18	64	181	160	64	78
6	49	69	36	e28	19	18	20	62	178	144	66	77
7	51	53	35	e27	20	16	23	57	155	133	76	69
8	50	53	e31	e26	20	20	26	55	140	107	69	54
9	50	48	e33	e25	20	19	20	53	130	103	70	54
10	50	50	e35	e27	19	17	20	54	124	104	64	55
11	48	47	e32	e27	19	17	23	78	116	99	62	64
12	48	47	e30	e26	18	18	30	135	115	92	61	60
13	59	49	e33	e23	18	19	37	220	116	87	61	62
14	65	49	e28	e22	18	22	42	265	116	82	56	63
15	60	39	e25	e23	19	18	53	285	111	78	56	61
16	55	36	e30	e24	17	18	52	325	115	77	54	57
17	52	42	e34	e26	18	17	53	440	109	78	50	53
18	51	38	e33	e27	19	21	57	396	107	74	49	46
19	48	e40	e32	e24	19	20	62	239	125	73	48	45
20	46	e41	e31	e22	19	20	59	191	168	72	48	46
21	47	e42	e31	e20	18	21	58	183	175	71	50	47
22	48	e42	e32	e19	18	20	52	193	167	71	52	55
23	49	37	e33	e22	17	19	43	190	161	70	50	51
24	49	42	e30	e21	17	19	43	210	162	68	64	48
25	50	49	e25	e21	18	22	43	173	170	69	64	46
26	48	39	e23	e21	18	23	37	158	178	72	78	45
27	46	e32	e28	e21	18	23	39	176	170	83	81	44
28	44	e29	e31	e18	20	16	40	161	176	82	78	44
29	43	e32	e32	e17	19	18	43	168	180	76	77	44
30	48	e31	e31	e18	---	20	63	173	175	72	83	44
31	49	---	e29	e20	---	17	---	160	---	70	85	---
TOTAL	1551	1370	979	722	544	587	1130	5139	4395	2987	2017	1741
MEAN	50.0	45.7	31.6	23.3	18.8	18.9	37.7	166	146	96.4	65.1	58.0
MAX	65	71	37	28	21	23	63	440	181	162	92	85
MIN	43	29	23	17	17	16	15	53	107	68	48	44
AC-FT	3080	2720	1940	1430	1080	1160	2240	10190	8720	5920	4000	3450

CAL YR 1987	TOTAL	43227	MEAN	118	MAX	616	MIN	23	AC-FT	85740
WTR YR 1988	TOTAL	23162	MEAN	63.3	MAX	440	MIN	15	AC-FT	45940

e Estimated

GREEN RIVER BASIN

99

09302000 DUCHESNE RIVER NEAR RANDLETT, UT

LOCATION.--Lat 40°12'56", long 109°46'58", in SW¼SW¼SW¼ sec. 16, T. 3 S., R. 2 E., Uintah Meridian, Uintah County, Hydrologic Unit 14060003, Uintah and Ouray Indian Reservation, on left bank 0.25 mi downstream from Uintah River, 1.2 mi southeast of Randlett, and 6.5 mi southeast of Fort Duchesne.

DRAINAGE AREA.--4,247 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1942 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,756.1 ft NGVD of 1929. Prior to Aug. 23, 1944 at site 300 ft downstream at different datum. Aug. 23, 1944 to Sept. 4, 1964 at site 200 ft upstream at datum 1.87 ft higher. Sept. 5, 1964 to June 6, 1968 at site 700 ft upstream at datum 1.68 ft higher. June 7, 1968 to Aug. 31, 1970 at site 200 ft upstream at datum 1.87 ft higher. Sept. 1, 1970 to June 7, 1975 at site 300 ft upstream at datum 2.23 ft higher. June 7, 1975 to May 5, 1977 at site 200 ft upstream at datum 1.87 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by several reservoirs. Large diversions above station for irrigation, including transmountain diversions to the Great Basin through Duchesne and Strawberry Tunnels, Hobbie Creek ditch, Strawberry River, and Willow Creek Ditch.

AVERAGE DISCHARGE.--46 years, 606 ft³/s, 439,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 11,500 ft³/s June 20, 1983; maximum gage height, 10.22 ft June 5, 1986; minimum, 2.2 ft/s Aug. 12, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 701 ft³/s Mar. 22, gage height, 3.88 ft; minimum daily, 50 ft³/s Aug. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	207	261	394	e320	e350	e535	425	189	208	91	120	65
2	213	234	452	e300	e320	e520	424	267	166	80	122	58
3	210	219	435	e280	e330	e560	434	255	152	70	130	61
4	222	201	430	e290	e315	e630	433	186	114	84	120	67
5	228	190	465	e300	e285	e560	427	159	118	115	94	55
6	212	216	476	e310	e300	e580	399	128	414	109	93	51
7	204	271	479	e290	e320	e600	381	109	344	138	152	52
8	215	236	484	e270	e340	e630	347	112	158	120	143	61
9	222	204	446	e280	e365	e650	363	107	120	120	143	62
10	223	190	454	e295	e385	e680	344	101	120	139	118	63
11	217	188	481	e310	e420	630	342	83	140	271	128	67
12	221	185	411	e325	e450	577	312	90	155	269	129	71
13	285	195	329	e340	e400	547	213	107	162	195	136	90
14	456	302	302	e315	e435	537	188	114	154	124	132	111
15	399	298	e270	e305	e450	545	188	137	128	104	129	95
16	346	246	e230	e320	e420	566	189	174	111	93	150	130
17	302	213	e250	e340	e450	547	177	191	103	100	144	137
18	269	228	e275	e325	e425	551	178	455	97	102	132	139
19	264	277	e300	e320	e400	590	180	304	103	91	116	127
20	261	304	e330	e340	e430	629	181	251	109	99	118	122
21	260	323	e310	e325	e450	661	178	259	103	95	148	113
22	256	315	e290	e320	e420	688	217	157	88	92	156	134
23	251	316	e305	e335	e425	649	245	139	94	105	145	133
24	253	347	e315	e355	e435	564	219	181	100	111	109	109
25	299	418	e320	e350	e450	518	201	280	104	107	64	93
26	337	432	e240	e340	e480	525	178	378	93	102	58	79
27	277	396	e210	e330	e500	544	175	228	99	112	67	88
28	210	373	e240	e330	e530	534	171	243	84	135	50	85
29	201	384	e265	e332	e550	467	200	220	97	129	56	80
30	202	384	e295	e335	---	448	188	208	111	115	55	76
31	348	---	e330	e340	---	462	---	216	---	112	60	---
TOTAL	8070	8346	10813	9867	11830	17724	8097	6028	4149	3729	3517	2674
MEAN	260	278	349	318	408	572	270	194	138	120	113	89.1
MAX	456	432	484	355	550	688	434	455	414	271	156	139
MIN	201	185	210	270	285	448	171	83	84	70	50	51
AC-FT	16010	16550	21450	19570	23460	35160	16060	11960	8230	7400	6980	5300

CAL YR 1987 TOTAL 221554 MEAN 607 MAX 4790 MIN 110 AC-FT 439500
WTR YR 1988 TOTAL 94844 MEAN 259 MAX 688 MIN 50 AC-FT 188100

e Estimated

GREEN RIVER BASIN

09302000 DUCHESNE RIVER NEAR RANDLETT, UT--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1950 to September 1951, November 1956 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1950 to September 1951, November 1956 to September 1980, June 1981 to current year.

WATER TEMPERATURES: December 1950 to September 1951, November 1956 to September 1978, October 1979 to September 1980, June 1981 to current year.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 4,490 microsiemens Aug. 24, 1960; minimum observed, 225 microsiemens June 22, 1983.

WATER TEMPERATURES: Maximum, 29.0°C July 22, 1982; minimum, 0.0°C on many days during winter period each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 2,300 microsiemens May 11; minimum daily, 740 microsiemens Dec. 24.

WATER TEMPERATURES: Not published for 1988.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3
OCT , 1987										
07...	1210	200	1430	8.40	21.0	12.5	9.50	640	480	240
NOV										
19...	1315	291	1550	8.40	14.0	2.5	12.6	651	570	270
DEC										
14...	1445	335	1070	8.60	-2.5	0.0	13.6	639	420	160
MAR , 1988										
28...	1515	523	1070	8.50	3.5	6.0	11.4	640	350	150
APR										
25...	1515	203	1600	8.40	14.0	13.5	9.80	635	510	250
MAY										
23...	1440	127	1690	8.60	26.5	21.5	9.80	638	540	270
JUN										
27...	1415	100	1710	8.40	29.0	27.5	8.30	638	510	230
JUL										
25...	1410	102	1430	8.50	39.0	27.5	8.30	643	400	190
AUG										
29...	1600	59	1730	--	35.0	26.5	8.60	637	500	240

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT , 1987										
07...	100	57	150	40	3	3.0	249	470	54	0.6
NOV										
19...	110	71	160	38	3	3.3	297	540	55	0.7
DEC										
14...	88	48	97	33	2	2.3	253	300	39	0.5
MAR , 1988										
28...	74	40	85	34	2	2.4	202	280	39	0.5
APR										
25...	100	62	180	44	4	2.1	254	580	75	0.6
MAY										
23...	110	65	200	44	4	4.4	276	580	91	0.6
JUN										
27...	100	64	210	47	4	4.7	283	580	95	0.6
JUL										
25...	75	52	180	49	4	3.4	214	440	70	0.5
AUG										
29...	85	69	240	51	5	3.4	253	600	80	0.6

GREEN RIVER BASIN

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09302000 DUCHESNE RIVER NEAR RANDLETT, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
OCT , 1987										
07...	9.6	1030	994	1.40	556	<0.10	--	--	--	--
NOV										
19...	15	1160	1130	1.58	911	0.13	0.05	0.06	0.02	0.06
DEC										
14...	13	693	741	0.94	627	0.20	0.02	0.03	<0.01	--
MAR , 1988										
28...	13	710	656	0.97	1000	<0.10	0.09	0.12	0.02	0.06
APR										
25...	11	1180	1160	1.60	647	<0.10	0.06	0.08	0.17	0.52
MAY										
23...	110	1220	1330	1.66	418	0.10	0.04	0.05	0.02	0.06
JUN										
27...	15	1280	1240	1.74	346	<0.10	0.08	0.1	<0.01	--
JUL										
25...	10	1020	960	1.39	281	<0.10	0.04	0.05	0.01	0.03
AUG										
29...	12	1290	1240	1.75	207	<0.10	0.04	0.05	0.01	0.03

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)
OCT , 1987		
07...	1210	750
NOV		
19...	1315	1100
DEC		
14...	1445	440
MAR , 1988		
28...	1515	440
APR		
25...	1515	580
MAY		
23...	1440	720
JUN		
27...	1415	920
JUL		
25...	1410	680
AUG		
29...	1600	1000

GREEN RIVER BASIN

09302000 DUCHESNE RIVER NEAR RANDLETT, UT--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1350	1940	1200	920	880	950	---	1590	1670	1770	1550	1740
2	1330	1860	1120	1020	920	1280	---	1590	1840	1850	1570	1830
3	1340	1820	940	1080	840	1520	---	1480	1820	---	1640	1700
4	1330	1820	1040	1100	900	1460	---	1550	1850	1850	1550	1670
5	1330	1880	960	1060	900	1460	---	1670	2000	1530	1740	1910
6	1430	1860	960	970	950	1400	---	1800	1120	1420	1780	1810
7	1410	1820	920	930	950	1270	---	1990	1460	1410	1520	1750
8	1460	1790	1000	980	900	1160	---	1990	1460	1770	1800	1790
9	1500	1800	980	980	900	1080	---	1990	1650	1750	1820	1710
10	1470	1840	1000	980	900	1100	---	2170	1660	1480	1750	1780
11	1470	1850	930	940	900	1240	---	2300	1660	1030	1840	1660
12	1440	1800	860	960	890	1240	---	2190	1680	1140	1630	1660
13	1710	1690	1040	960	940	1240	---	2100	1640	1140	1650	1670
14	1720	---	1120	960	910	1170	---	2090	1630	1640	1800	1760
15	1740	1810	1100	---	930	1140	1440	1870	1770	1650	1690	1530
16	1560	1890	1100	980	920	1080	1640	1470	1720	1500	1730	1430
17	1560	1870	860	960	920	1080	1570	1550	1790	1500	1720	1560
18	1460	1580	840	920	810	1210	1660	1450	1820	1500	1770	1530
19	1470	1580	880	970	900	1040	1580	1440	1820	1530	1780	1490
20	1450	1470	1080	950	910	1120	1710	1540	1730	1410	1840	1810
21	1420	1400	1100	980	840	1270	1580	1290	1730	1440	1850	1780
22	1410	1280	1180	970	840	940	1850	1590	1810	1380	1770	1770
23	1420	1420	980	910	860	1050	1740	1800	1830	1390	1770	1780
24	1390	1410	740	940	890	1000	1570	1660	1830	1460	1780	1850
25	1330	1310	790	950	900	1000	1540	1190	1790	1510	1820	1840
26	1340	1260	780	970	910	940	1490	1370	1820	1520	1820	1800
27	1370	1180	1170	910	920	960	1480	1430	1850	1480	1660	---
28	1450	1180	1080	920	920	930	1520	1360	1780	1430	1840	1890
29	1590	1240	960	920	900	1010	1480	1360	1830	1530	1880	1940
30	1700	1230	860	930	---	---	1450	1380	1690	1400	1860	1960
31	1760	---	920	940	---	---	---	1540	---	1570	2040	---
MEAN	1470	1620	980	960	900	1150	---	1670	1720	1500	1750	1740

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
NOV , 1987					
19...	1315	291	2.5	161	126
DEC					
14...	1445	335	0.0	204	185
MAR , 1988					
28...	1515	523	6.0	116	164
APR					
25...	1515	203	13.5	112	61
MAY					
23...	1440	127	21.5	119	41
JUN					
27...	1415	100	27.5	173	47
JUL					
25...	1410	102	27.5	93	26
AUG					
29...	1600	59	26.5	68	11

GREEN RIVER BASIN

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09306500 WHITE RIVER NEAR WATSON, UTAH

LOCATION.--Lat 39°58'46", long 109°10'41", in SE¼SW¼NE¼ sec. 2, T. 10 S., R. 24 E., Uintah County, Hydrologic Unit 14050007, on right bank 350 ft downstream from bridge on State Highway 45, 1 mi downstream from Evacuation Creek, and 7 mi north of Watson.

DRAINAGE AREA.--4,020 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1904 to October 1906 (no winter records), May to November 1918, April 1923 to September, 1979, October 1985 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "near Dragon" 1906 and "near Rangely, Colo." 1904-1905, 1918.

GAGE.--Water-stage recorder. Datum of gage is 4,946.78 ft above National Geodetic Vertical Datum of 1929. See WSP 1733 for history of changes prior to Oct. 27, 1959.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 31,900 acres above station.

AVERAGE DISCHARGE.--59 years (1923-79, 1986-88) 706 ft³/s, 511,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 8,160 ft³/s July 15, 1929; maximum gage height, 13.1 ft Feb. 11, 1962, from floodmark in well (backwater from ice); minimum, 11 ft³/s Dec. 6, 1972, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 19	1200	*3,080	*5.49	No other peak greater than base discharge.			

Minimum daily discharge, 217 ft³/s Dec. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	365	552	473	e380	e840	e1100	535	960	2000	899	320	313
2	369	546	450	e330	e880	e1080	507	1190	1660	806	322	307
3	373	550	466	e300	e900	e1050	509	1260	1450	758	337	311
4	374	567	533	e385	e740	e1020	547	1170	1500	753	414	308
5	388	537	567	e480	e640	e1000	622	1090	1840	763	431	294
6	380	552	581	e640	e600	961	639	1050	2210	841	481	296
7	441	523	647	e580	e660	964	619	1170	2580	780	413	283
8	411	536	645	e540	e700	1040	644	1190	2610	718	424	273
9	400	516	582	e500	e800	868	737	1160	2570	686	399	274
10	398	499	532	e550	e980	738	715	1120	2450	614	348	269
11	392	480	555	e620	e900	871	623	1040	2430	599	326	274
12	395	498	579	e520	e950	698	599	1040	2400	603	314	275
13	422	509	506	e450	e800	582	633	1180	2200	605	310	297
14	443	503	302	e500	e880	498	706	1480	2100	608	304	385
15	476	556	311	e560	e860	516	812	1900	1890	605	310	530
16	510	544	304	e600	e920	499	867	2190	1720	561	305	500
17	522	496	256	e670	e860	496	919	2260	1620	400	309	452
18	524	443	308	e740	e800	449	1040	2530	1560	369	313	411
19	517	380	546	e800	e780	441	1090	2930	1460	352	301	412
20	509	387	692	e450	787	483	1070	2930	1370	349	303	420
21	507	427	604	e430	842	711	1090	2460	1350	363	444	439
22	491	465	519	e620	977	1100	1170	1970	1250	404	495	486
23	499	504	416	e560	992	1190	1130	1680	1190	457	348	478
24	507	550	371	e600	953	928	1080	1560	1120	460	348	498
25	591	546	267	e640	914	866	1030	1600	1090	413	342	495
26	594	529	e250	e660	908	690	1010	1770	996	368	366	476
27	602	470	227	e680	e1000	671	1010	1860	976	368	360	467
28	555	497	217	e580	e1100	787	925	1830	860	338	354	467
29	533	449	268	e640	e1150	892	889	1950	844	316	366	472
30	525	420	e450	e760	---	674	931	2150	957	312	373	465
31	534	---	e415	e820	---	563	---	2260	---	316	331	---
TOTAL	14547	15031	13839	17585	25113	24426	24698	51930	50253	16784	11111	11627
MEAN	469	501	446	567	866	788	823	1675	1675	541	358	388
MAX	602	567	692	820	1150	1190	1170	2930	2610	899	495	530
MIN	365	380	217	300	600	441	507	960	844	312	301	269
AC-FT	28850	29810	27450	34880	49810	48450	48990	103000	99680	33290	22040	23060

CAL YR 1987 TOTAL 273735 MEAN 750 MAX 2510 MIN 217 AC-FT 543000
WTR YR 1988 TOTAL 276944 MEAN 757 MAX 2930 MIN 217 AC-FT 549300

e Estimated

GREEN RIVER BASIN
09306500 WHITE RIVER NEAR WATSON, UT--Continued
WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1950 to September 1979, October 1985 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1950 to September 1979, October 1986 to September 1987.

WATER TEMPERATURES: December 1950 to September 1979, October 1986 to September 1987.

SUSPENDED-SEDIMENT DISCHARGE: October 1976 to June 1979, October 1985 to current year.

INSTRUMENTATION.--Water-quality monitor since November 1985.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 4,450 microsiemens Aug. 4, 1955; minimum daily, 266 microsiemens June 1, 1976.

WATER TEMPERATURES: Maximum recorded, 33.0°C July 15, 1977; minimum, 0.0°C many days during winter period.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 31,100 mg/L Aug. 8, 1987; minimum daily mean, 38 mg/L Oct. 1, 1987.

SEDIMENT LOADS: Maximum daily, 121,000 tons Aug. 8, 1987; minimum daily, 37 tons Oct. 1, 1987.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,200 microsiemens Aug. 21; minimum recorded, 371 microsiemens Feb. 4.

WATER TEMPERATURES: Maximum recorded, 29.0°C July 29; minimum observed, 0.0°C many days during winter period.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 18,500 mg/L Aug. 22; minimum daily mean, 38 mg/L Oct. 1.

SEDIMENT LOADS: Maximum daily, 24,700 tons Aug. 22; minimum daily, 37 tons Oct. 1.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	HARD- NESS TOTAL (MG/L AS CAC03)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CAC03
NOV , 1987										
18...	1030	453	850	8.40	1.5	2.0	10.4	645	320	130
DEC										
15...	1430	233	970	8.40	-2.0	0.0	11.4	635	390	170
MAR										
29...	1045	969	830	8.40	6.5	3.5	11.1	634	350	110
APR										
26...	1100	1020	660	8.50	11.5	9.5	9.40	636	340	79
MAY										
24...	1155	1570	440	8.30	24.5	15.0	8.40	634	190	56
JUN										
28...	1115	820	524	8.60	20.5	21.5	7.00	634	220	71
JUL										
26...	1200	355	660	8.50	25.0	21.0	7.10	638	310	110
AUG										
30...	1100	388	820	--	26.0	21.5	8.00	633	280	120

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
NOV , 1987										
18...	70	36	65	30	2	1.8	194	250	19	0.3
DEC										
15...	87	43	82	31	2	2.0	225	300	21	0.3
MAR , 1988										
29...	72	41	86	35	2	3.0	240	300	21	0.3
APR										
26...	73	38	84	35	2	4.3	260	230	14	0.2
MAY										
24...	45	18	27	24	0.9	1.3	131	110	6.3	0.3
JUN										
28...	54	20	32	24	1	1.6	146	120	<0.1	0.2
JUL										
26...	63	37	65	31	2	2.3	201	230	17	0.3
AUG										
30...	64	29	55	30	1	1.8	158	180	14	0.2

GREEN RIVER BASIN

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09306500 WHITE RIVER NEAR WATSON, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
NOV , 1987										
18...	11	595	570	0.81	728	0.16	0.04	0.05	0.01	0.03
DEC										
15...	14	696	686	0.95	438	0.41	0.04	0.05	<0.01	--
MAR , 1988										
29...	12	660	681	0.9	1730	0.45	0.07	0.09	<0.01	--
APR										
26...	12	533	613	0.72	1470	0.40	0.02	0.03	<0.01	--
MAY										
24...	12	306	300	0.42	1300	0.30	<0.01	--	<0.01	--
JUN										
28...	14	347	--	--	--	0.21	0.10	0.13	<0.01	--
JUL										
26...	11	589	546	0.8	565	<0.10	0.03	0.04	0.01	0.03
AUG										
30...	10	403	449	0.55	422	<0.10	0.02	0.03	0.01	0.03

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)
NOV , 1987		
18...	1030	70
DEC		
15...	1430	80
MAR , 1988		
29...	1045	80
APR		
26...	1100	70
MAY		
24...	1155	40
JUN		
28...	1115	40
JUL		
26...	1200	80
AUG		
30...	1100	50

GREEN RIVER BASIN

09306500 WHITE RIVER NEAR WATSON, UT--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	978	905	932	770	730	749	873	642	774	877	827	852
2	975	902	930	810	790	794	884	803	848	886	836	863
3	972	899	932	810	780	796	935	815	886	896	856	879
4	959	906	925	820	770	794	907	846	872	915	904	906
5	946	878	904	840	770	806	898	837	874	914	904	908
6	912	832	871	872	801	817	909	878	893	904	883	897
7	882	822	848	892	823	855	910	870	888	893	852	872
8	872	812	837	854	803	825	891	841	863	862	831	846
9	842	792	817	845	795	817	863	652	781	871	821	837
10	1020	792	851	796	786	790	934	823	861	890	831	856
11	832	772	793	818	777	794	905	864	885	890	849	863
12	822	762	776	829	788	800	896	856	873	879	818	850
13	772	752	763	820	780	799	888	857	869	858	798	821
14	771	751	756	812	791	801	929	868	901	857	807	827
15	801	721	762	853	802	823	980	909	944	856	817	836
16	751	691	716	834	794	812	1050	899	938	896	846	863
17	741	681	701	805	775	788	919	899	911	865	825	844
18	701	661	677	816	756	789	938	907	923	834	804	819
19	711	641	668	838	757	798	907	847	884	833	794	811
20	701	631	665	869	778	821	876	826	849	853	793	814
21	741	671	699	880	790	828	876	846	861	862	812	828
22	741	681	704	882	791	832	885	855	876	861	801	828
23	741	681	708	903	802	845	894	854	876	890	820	845
24	721	701	710	884	803	840	893	833	856	890	829	856
25	971	701	766	855	805	832	932	843	882	859	799	834
26	931	701	760	867	826	847	921	862	887	888	818	850
27	751	691	721	877	817	850	911	891	903	877	828	851
28	741	701	713	869	808	837	940	891	916	906	837	860
29	740	700	716	860	809	833	930	909	921	856	805	833
30	760	720	742	881	652	817	929	898	914	825	745	793
31	800	730	762	---	---	---	898	848	870	764	654	730
MONTH	1020	631	778	903	652	814	1050	642	884	915	654	844

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	634	403	519	851	101	668	889	869	880	753	711	730
2	413	392	401	---	---	---	928	878	888	733	705	716
3	422	382	396	---	---	---	988	898	914	706	677	687
4	441	371	399	---	---	---	968	887	897	690	659	679
5	430	380	399	---	---	---	887	867	879	691	653	674
6	450	380	415	---	---	---	887	857	870	675	644	664
7	459	399	418	---	---	---	916	876	895	667	637	650
8	458	408	425	---	---	---	926	906	916	649	629	637
9	457	388	413	---	---	---	936	875	896	641	602	618
10	447	377	412	---	---	---	885	865	876	616	595	608
11	466	396	431	---	---	---	895	875	885	616	578	597
12	495	425	456	---	---	---	895	874	886	611	589	599
13	494	435	466	---	---	---	884	844	862	622	582	598
14	524	454	484	---	---	---	854	824	839	594	565	580
15	493	423	455	---	---	---	833	803	821	566	499	535
16	492	432	456	---	---	---	843	803	822	499	441	480
17	491	421	454	---	---	---	832	752	781	482	423	448
18	500	441	469	---	---	---	802	752	786	474	396	425
19	510	450	471	---	---	---	762	722	743	427	386	408
20	509	449	468	---	---	---	752	701	720	409	381	395
21	508	458	476	---	---	---	811	661	721	413	381	395
22	537	448	492	---	---	---	731	680	699	414	394	402
23	557	477	513	---	---	---	730	680	700	439	406	417
24	616	506	563	---	---	---	930	670	703	---	---	---
25	685	565	619	---	---	---	700	659	674	---	---	---
26	854	635	702	---	---	---	690	659	674	---	---	---
27	904	704	800	---	---	---	673	652	662	---	---	---
28	923	763	852	---	---	---	685	663	674	---	---	---
29	862	722	805	---	---	---	698	676	685	---	---	---
30	---	---	---	890	840	865	720	669	688	---	---	---
31	---	---	---	899	879	891	---	---	---	---	---	---
MONTH	923	371	504	---	---	---	988	652	798	---	---	---

09306500 WHITE RIVER NEAR WATSON, UT--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	---	---	---	905	685	736	850	800	820
2	---	---	---	---	---	---	756	706	721	830	810	816
3	---	---	---	---	---	---	756	717	730	820	810	814
4	---	---	---	---	---	---	757	678	722	830	800	812
5	---	---	---	---	---	---	1170	728	849	820	800	810
6	---	---	---	---	---	---	739	719	729	860	790	823
7	---	---	---	---	---	---	761	730	743	820	800	809
8	---	---	---	---	---	---	1100	741	785	820	790	805
9	---	---	---	---	---	---	1050	762	827	810	790	797
10	---	---	---	---	---	---	833	762	779	810	790	800
11	---	---	---	---	---	---	794	763	784	810	790	805
12	---	---	---	---	---	---	825	775	794	820	810	816
13	---	---	---	---	---	---	855	765	805	940	810	840
14	---	---	---	---	---	---	896	787	822	820	800	810
15	---	---	---	642	622	633	787	748	767	830	800	811
16	---	---	---	642	621	633	778	738	763	810	790	800
17	---	---	---	661	641	650	849	758	787	800	790	793
18	---	---	---	671	641	661	790	759	770	800	780	787
19	---	---	---	671	651	660	791	750	771	790	780	784
20	---	---	---	681	651	668	851	751	783	790	780	783
21	---	---	---	671	651	657	1200	762	837	790	760	777
22	---	---	---	671	641	655	1180	873	948	810	760	780
23	---	---	---	660	630	645	974	924	950	930	770	835
24	---	---	---	660	630	644	1020	975	999	800	780	785
25	---	---	---	660	630	648	1070	1010	1040	790	770	779
26	---	---	---	670	640	674	1060	777	906	770	760	766
27	---	---	---	671	650	662	877	747	815	770	750	761
28	---	---	---	682	661	674	838	809	822	770	750	757
29	---	---	---	693	662	685	879	789	816	760	740	753
30	---	---	---	703	673	688	880	810	828	760	740	750
31	---	---	---	704	674	---	820	810	815	---	---	---
MONTH	---	---	---	---	---	---	1200	678	814	940	740	796

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	16.9	11.2	14.1	11.4	9.9	10.6	.0	.0	.0	.0	.0	.0
2	16.7	11.2	14.0	10.6	9.5	10.0	.4	.0	.2	.0	.0	.0
3	16.5	11.1	13.8	11.1	8.7	9.7	1.9	.0	.8	.0	.0	.0
4	15.5	10.8	13.3	10.9	7.8	9.2	1.6	.0	.9	.0	.0	.0
5	15.9	10.5	13.3	10.7	7.5	9.2	2.1	.8	1.4	.0	.0	.0
6	16.2	10.9	13.4	10.5	8.9	9.7	2.8	1.5	2.1	.0	.0	.0
7	16.0	11.1	13.6	9.2	7.4	8.4	3.0	1.6	2.2	.0	.0	.0
8	15.2	11.1	13.3	9.3	6.7	7.9	1.6	.2	1.0	.0	.0	.0
9	14.9	10.2	12.7	8.7	5.9	7.2	.7	.0	.2	.0	.0	.0
10	14.6	10.4	12.7	7.2	5.7	6.4	1.8	.0	.8	.0	.0	.0
11	14.4	9.9	12.2	7.1	4.9	6.0	2.0	.5	1.3	.0	.0	.0
12	12.8	9.5	11.5	7.5	5.1	6.3	.3	.0	.1	.0	.0	.0
13	12.6	11.5	12.1	7.5	5.1	6.4	.0	.0	.0	.0	.0	.0
14	12.7	11.2	11.9	7.0	5.8	6.7	.0	.0	.0	.0	.0	.0
15	14.0	10.2	11.9	6.5	3.7	5.4	.0	.0	.0	.0	.0	.0
16	13.5	9.7	11.5	4.9	2.6	3.7	.0	.0	.0	.0	.0	.0
17	12.8	8.5	10.6	3.6	1.9	2.9	.0	.0	.0	.0	.0	.0
18	11.7	8.7	10.3	3.2	.5	1.9	.0	.0	.0	.0	.0	.0
19	12.1	7.9	9.9	3.3	.4	1.9	.0	.0	.0	.0	.0	.0
20	11.5	7.4	9.4	3.3	.5	2.0	.0	.0	.0	.0	.0	.0
21	11.0	6.8	8.9	2.9	.7	1.9	.0	.0	.0	.0	.0	.0
22	11.2	7.0	9.0	3.2	.9	2.0	.0	.0	.0	.0	.0	.0
23	10.8	7.5	9.3	3.3	1.0	2.2	.0	.0	.0	.0	.0	.0
24	10.8	9.0	10.1	3.0	.8	1.9	.0	.0	.0	.0	.0	.0
25	12.5	9.6	10.8	2.1	.9	1.5	.0	.0	.0	.0	.0	.0
26	11.4	8.4	9.8	2.3	.8	1.5	.0	.0	.0	.0	.0	.0
27	11.6	8.1	9.6	1.5	.0	.7	.0	.0	.0	.0	.0	.0
28	10.9	8.0	9.3	.6	.0	.2	.0	.0	.0	.0	.0	.0
29	11.2	8.4	9.8	.6	.0	.2	.0	.0	.0	.0	.0	.0
30	11.5	10.0	10.6	.4	.0	.1	.0	.0	.0	.0	.0	.0
31	11.2	8.4	9.9	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	16.9	6.8	11.4	11.4	.0	4.8	3.0	.0	.4	.0	.0	.0

GREEN RIVER BASIN

09306500 WHITE RIVER NEAR WATSON, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.0	.0	.0	---	---	---	9.2	3.2	5.9	12.4	10.2	11.4
2	.0	.0	.0	---	---	---	10.9	4.1	7.2	13.2	9.5	11.3
3	.0	.0	.0	---	---	---	10.9	5.2	7.9	14.7	10.8	12.7
4	.0	.0	.0	---	---	---	7.6	5.2	7.0	14.9	12.0	13.2
5	.0	.0	.0	---	---	---	9.7	3.8	6.6	14.8	11.8	13.2
6	.0	.0	.0	---	---	---	11.9	5.6	8.4	12.2	9.6	11.2
7	.0	.0	.0	---	---	---	13.4	7.2	10.0	11.9	8.1	10.1
8	.0	.0	.0	---	---	---	11.8	6.9	9.5	14.0	10.2	12.0
9	.0	.0	.0	---	---	---	9.7	4.6	6.9	15.6	11.5	13.6
10	.0	.0	.0	---	---	---	11.4	5.4	8.1	16.4	12.9	14.5
11	.0	.0	.0	---	---	---	13.2	6.4	9.5	17.9	12.9	15.3
12	.0	.0	.0	---	---	---	14.3	7.6	10.6	18.7	13.8	16.1
13	.0	.0	.0	---	---	---	14.2	8.6	11.2	17.6	14.5	16.2
14	.0	.0	.0	---	---	---	14.2	9.7	11.8	17.1	14.9	15.9
15	.0	.0	.0	---	---	---	15.6	11.0	13.0	17.9	14.6	16.4
16	.0	.0	.0	---	---	---	14.5	10.5	12.3	17.6	15.2	16.8
17	.0	.0	.0	---	---	---	12.3	10.0	11.6	17.3	14.8	16.2
18	.0	.0	.0	---	---	---	11.2	9.1	10.3	15.9	13.7	15.1
19	.0	.0	.0	---	---	---	14.3	10.4	12.2	15.3	13.2	14.4
20	.0	.0	.0	---	---	---	12.9	11.3	12.0	15.2	12.8	14.0
21	.0	.0	.0	---	---	---	11.5	9.5	10.6	15.3	12.3	13.9
22	.0	.0	.0	---	---	---	10.5	9.0	9.6	15.6	12.6	14.1
23	.0	.0	.0	---	---	---	11.2	8.6	9.8	16.2	12.9	14.6
24	.0	.0	.0	---	---	---	13.7	9.5	11.3	15.5	13.9	14.7
25	.0	.0	.0	---	---	---	12.0	9.2	10.9	16.4	14.4	15.5
26	.0	.0	.0	---	---	---	12.6	8.0	10.2	17.3	14.9	16.1
27	.0	.0	.0	---	---	---	14.4	10.0	12.1	17.1	15.0	16.3
28	.0	.0	.0	---	---	---	14.7	11.4	13.0	18.1	14.7	16.5
29	.1	.0	.0	---	---	---	17.3	11.8	14.3	17.3	15.0	16.3
30	---	---	---	3.9	2.9	3.5	16.1	12.5	14.1	15.8	13.7	15.0
31	---	---	---	6.7	2.2	4.2	---	---	---	16.5	13.3	15.0
MONTH	.1	.0	.0	---	---	---	17.3	3.2	10.3	18.7	8.1	14.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	16.3	13.4	15.1	26.1	21.1	23.5	25.9	21.3	23.5	24.9	19.0	21.9
2	17.7	14.7	16.2	25.8	21.4	23.5	25.3	20.7	23.0	23.9	18.6	21.2
3	19.3	15.7	17.4	26.0	21.2	23.3	27.8	20.9	23.8	23.5	17.9	20.5
4	19.0	16.8	18.1	23.8	21.7	22.7	26.7	21.1	23.7	23.2	17.1	20.1
5	18.7	16.9	17.9	24.5	20.0	22.3	25.8	19.6	23.0	23.3	16.6	19.9
6	19.1	16.6	18.0	24.7	21.0	22.8	24.7	20.8	22.4	22.6	16.7	19.8
7	19.5	16.0	18.0	26.1	20.4	23.2	24.3	19.3	22.0	22.0	17.3	19.5
8	19.4	15.9	18.0	26.7	21.2	23.6	25.7	19.5	22.5	22.2	16.0	19.1
9	19.4	15.8	17.9	25.7	21.0	23.0	25.9	19.0	22.4	22.6	16.2	19.4
10	18.9	16.2	17.7	25.5	19.5	22.4	25.5	20.0	22.8	21.3	18.1	19.5
11	19.4	16.3	18.0	26.0	20.0	22.9	23.3	20.1	21.9	18.1	15.0	17.1
12	19.3	16.5	18.2	25.7	20.9	23.2	23.6	19.2	21.3	14.9	13.0	13.7
13	18.8	16.7	18.0	27.3	20.3	23.7	24.4	18.6	21.3	15.7	11.5	13.6
14	20.0	16.5	18.3	27.0	22.1	24.7	24.4	18.5	21.4	17.8	12.2	14.8
15	19.5	17.5	18.7	26.1	21.0	23.7	21.5	19.5	20.6	18.8	13.5	16.1
16	20.3	17.6	19.0	26.4	21.0	23.6	25.2	18.9	21.9	19.7	13.8	16.6
17	19.9	18.4	19.2	27.5	20.8	24.1	26.6	20.3	23.4	18.8	14.2	16.5
18	21.6	18.5	19.9	27.0	20.5	23.8	26.7	20.5	23.6	16.0	12.8	14.6
19	21.1	19.6	20.5	26.6	20.1	23.4	26.9	20.6	23.4	16.3	10.0	13.1
20	22.3	19.6	20.8	26.7	19.4	23.0	23.2	18.5	21.8	17.4	11.4	14.4
21	22.7	19.6	21.2	27.2	20.0	23.6	25.1	19.7	21.8	15.1	12.8	14.0
22	23.4	20.7	22.1	27.5	20.8	24.2	26.9	17.9	22.4	17.0	12.1	14.4
23	24.9	21.2	23.0	26.1	21.6	24.0	25.9	20.4	23.3	18.1	12.6	15.4
24	25.6	21.8	23.6	27.4	20.2	23.7	25.3	19.4	22.5	18.7	13.3	16.0
25	25.8	22.5	24.0	27.5	21.1	24.1	26.6	20.5	23.5	18.5	13.4	15.8
26	25.3	22.3	23.5	25.7	21.5	23.1	24.3	20.6	22.5	16.8	13.0	15.1
27	26.0	20.9	23.4	25.0	20.4	22.9	25.0	19.2	22.0	16.7	12.4	14.4
28	23.1	21.0	22.5	28.2	21.6	24.6	25.4	19.4	22.4	15.8	11.3	13.5
29	24.7	20.0	22.2	29.0	22.4	25.3	25.2	19.3	22.3	15.7	10.4	13.1
30	25.0	21.0	22.9	28.5	21.7	24.9	25.0	19.9	22.4	17.0	11.1	14.0
31	---	---	---	26.5	22.8	24.6	24.5	19.6	22.0	---	---	---
MONTH	26.0	13.4	19.8	29.0	19.4	23.6	27.8	17.9	22.5	24.9	10.0	16.6

09306500 WHITE RIVER NEAR WATSON, UT--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY	
1	38	37	e135	201	e100	128	e175	180
2	40	40	e128	189	e100	121	e175	156
3	59	59	e126	187	e110	138	e175	142
4	68	69	e127	194	e110	158	e175	182
5	85	89	e116	168	e120	184	e175	227
6	80	82	e120	179	e130	204	e175	302
7	126	150	e116	164	e130	227	e175	274
8	128	142	e114	165	e140	244	e175	255
9	87	94	e116	162	e150	236	e175	236
10	101	109	e113	152	e160	230	e175	260
11	84	89	e108	140	e160	240	e175	293
12	72	77	e112	151	e160	250	e175	246
13	126	144	e107	147	e160	219	e175	213
14	172	206	e108	147	e160	130	e175	236
15	1130	1450	e108	162	e160	134	e175	265
16	390	537	e92	135	e160	131	e175	283
17	213	300	e83	111	e160	111	e175	317
18	206	291	e90	108	e160	133	e175	350
19	171	239	e90	92	e160	236	e175	378
20	146	201	e90	94	e160	299	e175	213
21	138	189	e90	104	e160	261	e175	203
22	143	190	e90	113	e160	224	e175	293
23	144	194	e90	122	e160	180	e175	265
24	173	237	e90	134	e160	160	e175	283
25	1260	2010	e90	133	e160	115	e175	302
26	1880	3020	e90	129	e160	108	e175	312
27	510	829	e90	114	e160	98	e175	321
28	270	405	e90	121	e160	94	e175	274
29	e144	207	e90	109	e160	116	e175	302
30	e136	193	e90	102	e160	194	e175	359
31	e130	187	---	---	e160	179	e175	387
TOTAL	---	12066	---	4229	---	5482	---	8309

DAY	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
FEBRUARY			MARCH		APRIL		MAY	
1	e175	397	e2280	6770	e575	831	e1050	2720
2	e175	416	e2040	5950	e560	767	e1230	3950
3	e175	425	e1940	5500	e590	811	e1150	3910
4	e175	350	e1880	5180	e750	1110	e1080	3410
5	e175	302	e1830	4940	e890	1490	e1070	3150
6	e175	283	e1700	4410	e840	1450	e1150	3260
7	e175	312	e1700	4420	e835	1400	e1360	4300
8	e175	331	e2000	5620	e990	1720	e1250	4020
9	e175	378	e1790	4200	e1130	2250	e1240	3880
10	e175	463	e1700	3390	e1030	1990	e1100	3330
11	e175	425	e1840	4330	e900	1510	e1030	2890
12	e175	449	e1800	3390	e910	1470	e1060	2980
13	e175	378	e1690	2660	e915	1560	e1250	3980
14	e175	416	e1480	1990	e925	1760	e1750	6990
15	e175	406	e1470	2050	e1000	2190	e1960	10100
16	e175	435	e1410	1900	e1080	2530	e2230	13200
17	e175	406	e1410	1890	e1160	2880	e2430	14800
18	e175	378	e1290	1560	e1420	3990	e2650	18100
19	e175	369	e1330	1580	e1230	3620	e2900	22900
20	e340	722	e1130	1470	e1260	3640	e2580	20400
21	e590	1340	e1230	2360	e1130	3330	e1900	12600
22	e800	2110	e1760	5230	e1200	3790	e1500	7980
23	e840	2250	e2010	6460	e1180	3600	e1240	5620
24	e925	2380	e1590	3980	e1140	3320	455	1920
25	e1000	2470	e1590	3720	e1060	2950	448	1940
26	e1010	2480	e1330	2480	e910	2480	525	2510
27	e1750	4720	e1230	2230	e900	2450	445	2230
28	e2230	6620	e1450	3080	e900	2250	350	1730
29	e2380	7390	e1150	2770	e930	2230	322	1700
30	---	---	e450	819	e1000	2510	553	3210
31	---	---	e540	821	---	---	560	3420
TOTAL	---	39801	---	107150	---	67879	---	197130

e Estimated

GREEN RIVER BASIN

09306500 WHITE RIVER NEAR WATSON, UT--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JUNE		JULY		AUGUST		SEPTEMBER	
1	378	2040	308	748	441	381	206	174
2	252	1130	161	350	203	176	238	197
3	228	893	122	250	214	195	158	133
4	266	1080	1240	2520	832	930	100	83
5	345	1710	2870	5910	1360	1580	87	69
6	615	3670	409	929	312	405	89	71
7	630	4390	130	274	176	196	125	96
8	456	3210	116	225	1590	1820	71	52
9	450	3120	98	182	819	882	70	52
10	345	2280	84	139	168	158	56	41
11	300	1970	75	121	118	104	62	46
12	315	2040	68	111	168	142	58	43
13	240	1430	60	98	522	437	700	561
14	225	1280	63	103	504	414	632	657
15	225	1150	80	131	149	125	340	487
16	156	724	78	118	116	96	232	313
17	132	577	84	91	583	486	e175	214
18	126	531	65	65	110	93	e175	194
19	105	414	69	66	99	80	e160	178
20	102	377	59	56	198	162	e160	181
21	90	328	60	59	10800	12900	e480	569
22	87	294	67	73	18500	24700	e850	1120
23	72	231	88	109	2190	2060	e560	723
24	72	218	73	91	1800	1690	e760	1020
25	66	194	59	66	530	489	e760	1020
26	75	202	70	70	3370	3330	e725	932
27	3090	8140	164	163	2200	2140	e825	1040
28	228	529	109	99	731	699	e700	883
29	120	273	87	74	680	672	e725	924
30	434	1120	91	77	640	645	e640	804
31	---	---	94	80	168	150	---	---
TOTAL	---	45545	---	13448	---	58337	---	12877
YEAR	276944		572253					

e Estimated

GREEN RIVER BASIN

111

09306800 BITTER CREEK NEAR BONANZA, UT

LOCATION.--Lat 39°45'12", long 109°21'15", in SE¼SW¼SW¼ sec. 21, T. 12 S., R. 23 E., Uintah County, Hydrologic Unit 14050007, on left bank 150 ft upstream from road culvert, 3 mi downstream from Sweetwater Canyon Creek, 17 mi upstream from mouth, and 18 mi southwest of Bonanza.

DRAINAGE AREA.--324 mi².

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,570 ft from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Small reservoirs on tributaries above station.

AVERAGE DISCHARGE.--18 years, 6.00 ft³/s, 4,350 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,790 ft³/s Sept. 5, 1982, gage height, 13.82 ft from flood-marks, datum then in use; rating curve extended above 6 ft³/s on basis of slope-area measurement of peak flow; no flow for many days some years. Maximum gage-height 13.83 ft Aug. 26, 1988 from backwater.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 22	0400	57	6.73	Aug. 26	2100	*unknown	*13.83

Minimum daily, 4.0 ft³/s July 25-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	15	14	e8.2	e10	e25	20	18	15	8.3	9.2	6.3
2	12	15	12	e7.5	e11	e22	22	20	14	7.7	12	5.9
3	12	14	12	6.6	e11	e20	23	20	14	7.9	13	5.6
4	12	14	14	e7.8	e10	e18	22	19	13	8.1	13	5.5
5	12	14	15	e8.4	e8.4	e17	20	19	12	7.9	8.7	6.2
6	12	20	16	e9.0	e8.2	18	20	19	11	7.2	8.0	8.2
7	12	18	16	e9.6	e10	20	21	19	11	6.9	9.9	9.5
8	13	15	16	e10	e10	17	19	18	11	6.7	8.4	10
9	13	15	15	e9.0	e11	16	18	18	10	6.9	7.1	11
10	13	15	13	e8.2	e12	19	17	17	9.8	8.0	6.6	11
11	13	15	e12	e9.4	e11	18	17	15	9.8	7.7	6.4	12
12	13	15	e11	e9.0	e11	18	17	15	9.6	6.5	5.7	12
13	15	15	e9.8	e8.0	e10	17	17	15	9.4	6.2	5.3	15
14	17	16	e9.0	e8.4	e11	20	17	15	9.0	5.9	6.5	12
15	17	18	e8.2	e9.4	e11	17	18	15	8.4	5.4	7.9	9.9
16	14	14	8.0	e9.6	e12	18	18	15	8.3	5.5	11	8.9
17	14	13	8.1	e10	e12	18	21	15	7.9	5.6	11	8.2
18	14	15	10	e10	e10	15	19	23	7.7	5.2	9.8	8.4
19	14	14	11	e9.2	e12	14	18	23	7.8	5.0	9.4	8.9
20	14	12	e8.6	e7.2	e12	17	18	19	7.6	4.7	9.5	8.4
21	14	12	e8.0	e8.0	e12	27	19	17	7.7	4.5	13	8.8
22	14	12	e9.4	e9.0	e13	37	21	16	8.1	4.4	12	10
23	14	14	e9.0	e8.0	e15	29	19	16	8.1	4.1	8.0	13
24	15	13	e8.0	e7.6	e15	27	19	16	7.8	4.1	6.8	17
25	17	13	e7.0	e9.0	e16	23	19	16	7.5	4.0	7.2	19
26	16	13	e7.4	e9.0	e18	24	18	16	7.2	5.1	e36	20
27	15	14	e8.4	e9.0	e19	26	17	16	9.0	5.1	e8.0	19
28	14	16	e9.4	e8.2	e20	24	18	15	10	5.0	e7.5	19
29	14	14	e8.8	e7.6	e22	21	17	15	10	4.6	e7.0	17
30	15	14	e9.2	e9.4	---	20	17	14	9.0	4.0	e6.5	16
31	16	---	e9.0	e10	---	19	---	15	---	5.7	6.4	---
TOTAL	432	437	332.3	269.3	363.6	641	566	529	290.7	183.9	296.8	341.7
MEAN	13.9	14.6	10.7	8.69	12.5	20.7	18.9	17.1	9.69	5.93	9.57	11.4
MAX	17	20	16	10	22	37	23	23	15	8.3	36	20
MIN	12	12	7.0	6.6	8.2	14	17	14	7.2	4.0	5.3	5.5
AC-FT	857	867	659	534	721	1270	1120	1050	577	365	589	678

CAL YR 1987 TOTAL 6708.9 MEAN 18.4 MAX 68 MIN 6.7 AC-FT 13310
WTR YR 1988 TOTAL 4683.3 MEAN 12.8 MAX 37 MIN 4.0 AC-FT 9290

e Estimated

GREEN RIVER BASIN

09308500 MINNIE MAUD CREEK NEAR MYTON, UT

LOCATION.--Lat 39°47'55", long 110°33'55", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T. 12 S., R. 12 E., Carbon County,
Hydrologic Unit 14060005, on left bank 38.4 mi southwest of Myton.

DRAINAGE AREA.--32.0 mi².

PERIOD OF RECORD.--August 1950 to September 1955, September 1957 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,190 ft by barometer.

REMARKS.--Records poor. No diversion above station.

AVERAGE DISCHARGE.--36 years, 5.97 ft³/s, 4,330 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge unknown, occurred Oct. 13, 1975, gage height, 11.67 ft; maximum known discharge, 1,370 ft³/s Aug. 25, 1961, gage height, 9.40 ft, from rating curve extended above 110 ft³/s on basis of slope-area measurement of peak flow; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 26	--	*34	daily				

Minimum daily discharge, .22 ft³/s, Dec. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.5	e.72	e.25	e.28	e4.5	e12	e29	9.1	3.1	1.7	.89
2	1.4	e1.5	e.78	e.23	e.26	e4.5	e11	e28	8.5	3.1	1.6	.82
3	1.3	1.6	e.80	e.26	e.29	e4.5	e10	28	7.7	3.1	1.7	.77
4	1.1	1.5	e.80	e.28	e.28	e4.3	e10	27	6.9	3.0	1.4	.72
5	1.1	1.6	e.80	e.28	e.33	e6.0	e12	27	6.7	2.9	1.3	.79
6	1.0	e1.6	e.76	e.30	e.32	e6.4	e13	28	6.2	2.8	2.2	.74
7	1.1	e1.6	e.82	e.27	e.38	e6.4	e14	27	6.1	2.7	2.3	.76
8	1.1	1.6	e.60	e.27	e.45	e6.2	e16	26	5.7	2.6	1.6	.69
9	1.1	1.7	e.66	e.27	e.58	e8.0	e12	25	5.6	2.6	1.3	.64
10	1.1	1.6	e.68	e.29	e.70	e8.6	e13	24	5.3	2.7	1.4	.94
11	1.1	1.6	e.74	e.31	e.80	e8.2	e14	24	5.2	2.5	1.3	1.6
12	1.1	1.7	e.65	e.29	e.90	e8.2	e15	23	5.0	2.3	1.3	1.3
13	1.6	1.5	e.56	e.25	e1.0	e8.2	e16	22	4.9	2.2	1.2	1.8
14	1.6	1.5	e.50	e.28	e1.1	e8.2	e18	21	4.5	2.1	1.2	1.5
15	1.3	e1.4	e.47	e.29	e1.0	e10	e21	21	4.2	2.1	1.1	1.2
16	1.2	e1.3	e.50	e.29	e1.1	e10	e19	22	4.0	2.0	2.0	1.1
17	1.2	e1.3	e.54	e.28	e.90	e9.0	e18	22	4.1	1.9	1.3	1.0
18	1.2	e1.1	e.58	e.29	e1.6	e9.6	e19	22	3.9	1.9	1.1	.96
19	1.3	e1.2	e.52	e.26	e1.6	e10	e24	20	3.8	1.8	1.0	1.1
20	1.3	e1.3	e.40	e.24	e2.0	e11	e20	18	3.8	1.8	1.3	1.0
21	1.3	e1.3	e.46	e.26	e2.5	e13	e20	17	3.6	1.8	1.4	1.1
22	e1.3	e1.3	e.48	e.28	e3.0	e24	e19	16	3.6	1.6	1.2	1.5
23	1.3	e1.0	e.48	e.29	e3.0	e12	e18	15	3.6	1.6	1.1	1.2
24	1.5	e1.1	e.35	e.30	e2.8	e9.0	e17	15	3.6	1.6	1.0	1.1
25	1.5	e1.2	e.30	e.26	e3.5	e11	e22	14	3.4	1.6	1.0	.99
26	1.4	e1.0	e.22	e.27	e3.4	e34	e18	13	3.5	1.6	1.1	1.0
27	1.3	e.89	e.26	e.27	e3.7	e11	e22	12	3.6	1.8	1.1	1.1
28	1.3	.94	e.27	e.26	e3.8	e9.0	e25	11	3.7	2.4	.97	1.1
29	1.3	.91	e.28	e.28	e3.9	e8.4	e28	10	3.7	1.8	.93	1.0
30	1.4	.89	e.28	e.29	---	e11	e32	11	3.3	1.5	.89	1.0
31	1.4	---	e.26	e.26	---	e10	---	9.6	---	1.7	.88	---
TOTAL	39.8	40.23	16.52	8.50	45.47	304.2	528	627.6	146.8	68.2	40.87	31.41
MEAN	1.28	1.34	.53	.27	1.57	9.81	17.6	20.2	4.89	2.20	1.32	1.05
MAX	1.6	1.7	.82	.31	3.9	34	32	29	9.1	3.1	2.3	1.8
MIN	1.0	.89	.22	.23	.26	4.3	10	9.6	3.3	1.5	.88	.64
AC-FT	79	80	33	17	90	603	1050	1240	291	135	81	62

CAL YR 1987 TOTAL 1748.55 MEAN 4.79 MAX 41 MIN .22 AC-FT 3470
WTR YR 1988 TOTAL 1897.60 MEAN 5.18 MAX 34 MIN .22 AC-FT 3760

e Estimated

GREEN RIVER BASIN

113

09309600 FAIRVIEW TUNNEL NEAR FAIRVIEW, UT
(Transmountain diversion)

LOCATION.--Lat 39°40'03", long 111°18'41", in NW¼NW¼NE¼ sec. 25, T. 13 S., R. 5 E., Sanpete County.
Hydrologic Unit 14060007, on right bank 1,000 ft upstream from tunnel portal, 7.3 mi east-northeast of Fairview.

PERIOD OF RECORD.--July 1967 to current year. Seasonal records only. (July to September 1967, gage height only.)

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 8,660 ft from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Fairview Tunnel diverts from San Rafael River and Price River drainages in the Colorado River Basin to San Pitch River in the Great Basin. Due to the location of the gage, reported flow may not be actual flow through tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 52 ft³/s June 6, 1984, gage height, 1.55 ft; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 18 ft³/s July 9, 10; minimum daily, 0.22 ft³/s Sept. 25-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	e5.8	12	15	5.6
2	---	---	---	---	---	---	---	---	e5.8	15	13	6.1
3	---	---	---	---	---	---	---	---	6.1	15	13	5.8
4	---	---	---	---	---	---	---	---	6.3	16	13	5.8
5	---	---	---	---	---	---	---	---	6.5	16	12	5.8
6	---	---	---	---	---	---	---	---	6.5	16	9.1	5.8
7	---	---	---	---	---	---	---	---	6.5	16	7.5	5.6
8	---	---	---	---	---	---	---	---	6.5	17	7.5	5.6
9	---	---	---	---	---	---	---	---	6.5	18	7.5	5.6
10	---	---	---	---	---	---	---	---	6.3	18	7.5	5.6
11	---	---	---	---	---	---	---	---	6.3	17	7.5	5.6
12	---	---	---	---	---	---	---	---	6.3	17	7.5	5.8
13	---	---	---	---	---	---	---	---	6.5	16	7.5	5.4
14	---	---	---	---	---	---	---	---	6.5	16	7.5	e.30
15	---	---	---	---	---	---	---	---	6.9	16	7.5	e.25
16	---	---	---	---	---	---	---	---	13	16	7.5	e.25
17	---	---	---	---	---	---	---	---	14	16	7.5	e.25
18	---	---	---	---	---	---	---	---	14	16	7.5	e.25
19	---	---	---	---	---	---	---	---	14	16	7.5	e.25
20	---	---	---	---	---	---	---	---	15	16	7.5	e.25
21	---	---	---	---	---	---	---	---	14	16	7.5	e.25
22	---	---	---	---	---	---	---	---	14	16	7.5	e.25
23	---	---	---	---	---	---	---	---	13	16	7.5	e.25
24	---	---	---	---	---	---	---	---	13	16	7.5	e.25
25	---	---	---	---	---	---	---	---	12	16	7.5	e.22
26	---	---	---	---	---	---	---	---	13	16	8.2	e.22
27	---	---	---	---	---	---	---	---	12	16	7.5	e.22
28	---	---	---	---	---	---	---	---	12	16	6.7	e.22
29	---	---	---	---	---	---	---	---	11	16	6.5	e.22
30	---	---	---	---	---	---	---	---	11	16	6.1	e.22
31	---	---	---	---	---	---	---	---	---	16	6.1	---
TOTAL	---	---	---	---	---	---	---	---	290.3	497	258.7	78.22
MEAN	---	---	---	---	---	---	---	---	9.68	16.0	8.35	2.61
MAX	---	---	---	---	---	---	---	---	15	18	15	6.1
MIN	---	---	---	---	---	---	---	---	5.8	12	6.1	.22
AC-FT	---	---	---	---	---	---	---	---	576	986	513	155

e Estimated

GREEN RIVER BASIN

09310000 GOOSEBERRY CREEK NEAR SCOFIELD, UT

LOCATION.--Lat 39°42'57", long 111°17'58", in NW¼SE¼SW¼ sec. 6, T. 13 S., R. 6 E., Sanpete County, Hydrologic Unit 14060007, on left bank 300 ft downstream from old Mammoth Dam, 5.5 mi upstream from mouth, and 7 mi west of Scofield.

DRAINAGE AREA.--16.8 mi².

PERIOD OF RECORD.--October 1930 to September 1931, May 1940 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 8,400 ft from topographic map. October 1930 to September 1931, at different datum, May 1940 to September 1954, at datum 0.50 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Transmountain diversion above station for irrigation in Sevier River basin, part of which is water diverted into Gooseberry Creek from Boulder Creek. A small reservoir on Gooseberry Creek 5 mi above station, capacity about 1,900 acre-ft is used to regulate these diversions. Flow also affected by small reservoir 1 mi above station.

AVERAGE DISCHARGE.--49 years, 19.4 ft³/s, 14,060 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 419 ft³/s May 22, 1984; maximum gage height, 2.98 ft June 6, 1957, datum then in use; no flow Nov. 11, 1964, Sept. 23-26, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 199 ft³/s May 17, gage height, 2.51 ft; minimum discharge, 1.5 ft³/s Mar. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	4.2	2.5	e2.9	e2.8	3.2	e4.3	42	45	9.7	5.0	2.9
2	3.0	4.2	2.6	e2.8	2.9	3.6	e4.3	30	39	9.3	4.8	2.7
3	2.9	4.2	2.6	e3.0	2.9	3.4	e4.3	27	35	9.2	5.2	2.5
4	3.0	3.8	2.7	e3.1	e3.0	3.1	4.3	34	32	e10	5.2	2.3
5	3.0	3.8	2.8	e3.2	e3.2	3.9	e4.7	46	29	e9.3	4.8	2.5
6	3.1	5.1	2.8	3.3	3.1	e3.9	e5.0	51	27	e8.7	4.7	2.3
7	3.1	5.0	2.9	3.0	3.1	e3.8	5.3	38	25	e8.5	5.1	2.7
8	3.2	3.9	3.0	3.3	2.8	e3.5	e5.0	31	23	e8.0	4.6	2.5
9	3.2	3.3	2.7	3.1	2.8	3.6	e5.6	30	23	e8.0	4.3	2.7
10	3.1	3.1	2.7	2.9	e2.7	e3.7	e6.4	40	21	e8.0	4.1	2.9
11	3.2	2.9	2.7	e3.1	e3.1	3.5	7.5	65	21	e7.8	4.0	2.7
12	3.2	2.9	2.8	e3.4	3.1	3.8	9.5	95	20	e7.2	4.3	2.9
13	3.7	2.9	e2.9	e3.3	3.2	3.2	12	127	19	e7.2	4.2	4.0
14	4.1	3.5	e2.6	3.3	2.9	3.6	15	144	18	e6.6	4.0	4.2
15	4.0	e3.4	e2.6	e3.4	3.4	3.1	19	149	18	e6.6	3.7	4.0
16	3.7	e3.3	2.6	e3.1	3.4	e3.4	24	155	17	e6.2	3.8	4.0
17	3.5	e3.2	2.5	e3.2	3.2	3.3	27	173	17	e6.2	3.6	3.5
18	3.4	e3.0	2.6	3.3	2.7	3.5	24	165	16	e6.2	3.6	3.3
19	3.4	2.6	2.7	e3.2	3.0	3.3	24	139	16	e5.6	3.6	3.3
20	3.3	2.5	2.7	e3.1	2.7	3.6	29	123	17	e5.6	3.7	3.3
21	3.4	2.6	2.7	3.0	3.1	3.9	29	112	15	e5.2	4.2	3.8
22	3.4	2.7	e2.7	3.4	3.3	3.3	23	107	14	e5.6	4.2	4.5
23	3.5	2.6	e2.7	3.0	3.2	e3.1	18	104	14	e5.0	3.8	4.2
24	4.1	2.5	e2.8	3.2	3.3	3.2	17	99	13	e5.2	3.8	4.0
25	4.4	2.6	e2.7	3.0	3.1	3.4	15	90	13	e5.2	3.7	3.8
26	4.0	2.7	e2.6	2.8	3.3	e3.7	14	84	13	e5.2	3.9	3.8
27	3.8	2.7	e2.9	2.7	3.5	e4.1	15	77	13	5.1	4.6	3.8
28	3.6	2.5	e3.0	2.6	3.0	e4.1	20	64	12	5.0	4.3	3.3
29	3.6	2.6	2.8	2.6	3.1	e4.1	27	58	11	5.0	4.0	3.5
30	4.1	2.8	e2.8	2.9	---	4.5	39	57	10	5.0	3.8	3.5
31	4.1	---	3.0	2.8	---	4.4	---	53	---	5.3	3.1	---
TOTAL	108.1	97.1	84.7	95.0	88.9	111.8	457.2	2609	606	210.7	129.7	99.4
MEAN	3.49	3.24	2.73	3.06	3.07	3.61	15.2	84.2	20.2	6.80	4.18	3.31
MAX	4.4	5.1	3.0	3.4	3.5	4.5	39	173	45	10	5.2	4.5
MIN	2.9	2.5	2.5	2.6	2.7	3.1	4.3	27	10	5.0	3.1	2.3
AC-FT	214	193	168	188	176	222	907	5170	1200	418	257	197

CAL YR 1987 TOTAL 3913.0 MEAN 10.7 MAX 89 MIN 2.0 AC-FT 7760
WTR YR 1988 TOTAL 4697.6 MEAN 12.8 MAX 173 MIN 2.3 AC-FT 9320

e Estimated

09310500 FISH CREEK ABOVE RESERVOIR, NEAR SCOFIELD, UT

LOCATION.--Lat 39°46'28", long 111°11'25", in NW¼NE¼SW¼ sec. 18, T. 12 S., R. 7 E., Carbon County, Hydrologic Unit 14060007, on right bank 0.8 mi upstream from bridge, 1.2 mi downstream from French Creek, and 4.5 mi north of Scofield.

DRAINAGE AREA.--60.1 mi².

PERIOD OF RECORD.--June to October 1931, April to September 1932, October 1938 to current year. Published as Price River above Scofield Reservoir, near Scofield, October 1938 to September 1967.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,670 ft from topographic map. June 1931 to September 1932, and October 1938 to July 27, 1967, at various sites about 0.5 mi downstream at different datums.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Small transmountain diversions in headwaters for irrigation in Sevier Lake basin.

AVERAGE DISCHARGE.--50 years (1938-88), 50.3 ft³/s, 36,440 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,450 ft³/s May 21, 1984, gage height, 6.20 ft; minimum recorded, 0.6 ft³/s Oct. 31, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 270 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 20	1900	372	2.92	Apr. 30	1900	*592	*3.67

Minimum discharge, 5.4 ft³/s, Nov. 12.

REVISIONS.--Revised figures of discharge for the water year 1987, superseding those published in the report for 1987 are given below.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	17	e13	e9.6	e9.0	e7.6	e14	167	47	21	12	7.5
2	24	17	e13	e9.7	e8.6	e7.8	e16	176	45	19	11	7.5
3	24	17	e14	e9.8	e8.6	e8.4	e19	150	43	17	10	8.0
4	22	16	e14	e10	e8.0	e8.4	e23	140	41	16	9.9	9.8
5	20	16	e14	e10	e8.4	e8.4	25	141	39	15	9.3	9.5
6	20	16	e14	e11	e8.0	e9.0	26	149	40	14	10	8.8
7	20	e16	e14	e11	e8.0	e9.0	29	155	40	14	12	8.5
8	20	e17	e14	e11	e8.8	e9.0	39	149	47	14	11	8.4
9	20	e17	e14	e11	e9.0	e9.8	40	137	44	14	9.5	7.9
10	20	e16	e14	e11	e8.6	e9.6	39	129	39	13	9.4	7.7
11	20	e16	e14	e11	e8.6	e9.6	41	123	36	16	9.5	7.4
12	19	e15	e14	e10	e8.5	e9.6	39	117	33	24	9.3	7.4
13	18	e16	e13	e9.8	e9.0	e10	34	133	32	17	8.6	7.7
14	18	e18	e13	e9.2	e8.6	e10	38	119	31	14	8.8	7.7
15	17	e18	e13	e9.8	e8.6	e10	53	116	30	13	9.1	7.8
16	17	e18	e13	e10	e9.0	e11	69	109	29	13	8.9	7.8
17	18	e18	e13	e10	e8.6	e11	81	105	27	13	8.3	7.7
18	20	e20	e12	e10	e8.4	e11	89	115	26	12	7.8	7.6
19	19	e20	e12	e9.4	e8.0	e11	82	115	24	11	7.4	7.3
20	20	e19	e12	e9.4	e8.0	e11	61	105	24	11	7.4	7.2
21	19	e19	e12	e9.0	e8.2	e11	59	99	23	17	7.9	7.1
22	18	e16	e12	e9.0	e8.2	e10	74	90	22	20	8.2	7.2
23	18	e14	e12	e9.0	e8.0	e10	96	85	21	14	9.2	7.2
24	18	e14	e11	e9.0	e8.0	e11	114	80	20	12	12	7.5
25	17	e15	e11	e9.0	e8.2	e12	126	75	19	12	12	7.2
26	17	e14	e11	e8.6	e8.2	e12	136	73	18	13	11	7.7
27	17	e13	e11	e8.4	e8.0	e12	141	71	18	16	9.4	7.7
28	16	e13	e11	e8.4	e7.8	e12	150	69	18	19	8.8	7.3
29	16	e13	e11	e8.4	---	e13	165	64	19	21	8.5	7.2
30	16	e14	e10	e9.0	---	e13	167	57	26	16	7.5	7.4
31	17	---	e9.6	e9.0	---	e14	---	52	---	14	7.3	---
TOTAL	585	488	388.6	299.5	234.9	321.2	2085	3465	921	475	291.0	232.7
MEAN	18.9	16.3	12.5	9.66	8.39	10.4	69.5	112	30.7	15.3	9.39	7.76
MAX	24	20	14	11	9.0	14	167	176	47	24	12	9.8
MIN	16	13	9.6	8.4	7.8	7.6	14	52	18	11	7.3	7.1
AC-FT	1160	968	771	594	466	637	4140	6870	1830	942	577	462

CAL YR 1986	TOTAL	32144.6	MEAN	88.1	MAX	735	MIN	9.6	AC-FT	63760
WTR YR 1987	TOTAL	9786.9	MEAN	26.8	MAX	176	MIN	7.1	AC-FT	19410

e Estimated

GREEN RIVER BASIN

09310500 FISH CREEK ABOVE RESERVOIR, NEAR SCOFIELD, UT--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	11	e7.6	e8.0	e8.8	e9.5	e16	267	94	25	13	8.8
2	7.6	11	e7.6	e7.7	e9.0	e10	e16	128	89	24	13	8.6
3	7.0	11	e7.8	e7.7	e9.0	e9.2	e17	97	83	24	14	8.7
4	7.2	11	e8.5	e7.9	e8.7	e9.2	e28	94	77	26	13	8.9
5	7.2	9.9	e8.0	e7.9	e8.9	e10	e40	113	73	24	12	8.8
6	7.3	13	e7.6	e8.4	e8.5	e9.4	e50	108	68	22	12	10
7	7.9	14	e7.9	e7.6	e8.5	e9.2	e60	82	64	20	13	12
8	8.2	13	e8.2	e8.2	e8.0	e9.0	63	82	59	19	12	12
9	7.9	11	e7.6	e7.8	e8.0	e9.2	e70	87	57	19	10	12
10	7.7	11	e8.1	e7.4	e7.8	e9.5	e90	102	55	19	10	12
11	7.7	9.9	e8.1	e7.9	e8.4	e9.0	103	e145	52	19	9.9	12
12	7.8	10	e8.3	e8.0	e8.4	e9.4	166	e185	51	18	10	13
13	9.8	9.7	e8.2	e7.6	e8.6	e8.8	203	e236	50	17	10	18
14	11	e10	e7.9	e8.1	e8.0	e9.4	205	e235	47	16	9.6	17
15	11	e9.0	e7.9	e8.0	e8.7	e9.0	199	e250	45	15	9.1	13
16	9.9	e8.8	e7.9	e8.2	e8.7	e10	224	e295	44	15	9.6	12
17	9.0	e8.6	e7.7	e8.6	e8.3	e9.8	249	e280	42	14	9.1	11
18	8.8	e8.1	e8.0	e8.3	e8.5	e10	202	e255	41	14	9.1	10
19	8.6	e7.6	e8.4	e8.2	e8.6	e11	219	e230	41	14	9.0	9.3
20	8.5	e7.0	e8.4	e8.0	e8.0	e12	275	e220	43	13	9.8	11
21	8.7	e7.6	e8.4	e7.9	e8.6	e13	275	e195	39	13	11	13
22	8.9	e7.8	e8.4	e8.6	e8.8	e12	233	e190	36	12	11	15
23	8.8	e8.0	e8.4	e8.0	e8.9	e11	176	e185	35	13	9.9	13
24	11	e7.6	e8.3	e8.4	e9.1	e12	175	e170	33	12	8.8	11
25	12	e7.9	e8.0	e8.2	e8.8	e12	178	e160	32	13	8.9	10
26	11	e8.2	e7.6	e8.0	e9.1	e13	159	147	35	13	9.7	9.1
27	10	e8.2	e8.0	e7.8	e9.6	e15	266	142	33	14	13	8.4
28	9.8	e7.8	e9.0	e7.5	e8.7	e15	324	125	34	13	11	7.6
29	9.8	e8.2	e8.8	e7.4	e9.0	e15	331	120	31	13	9.7	6.5
30	11	e8.4	e8.7	e9.0	---	e16	403	100	27	13	9.3	6.5
31	12	---	e9.0	e9.0	---	e16	---	96	---	13	9.1	---
TOTAL	280.4	284.3	252.3	249.3	250.0	342.6	5015	5115	1510	519	328.6	328.2
MEAN	9.05	9.48	8.14	8.04	8.62	11.1	167	165	50.3	16.7	10.6	10.9
MAX	12	14	9.0	9.0	9.6	16	403	295	94	26	14	18
MIN	7.0	7.0	7.6	7.4	7.8	8.8	16	82	27	12	8.8	6.5
AC-FT	556	564	500	494	496	680	9950	10150	3000	1030	652	651
CAL YR 1987	TOTAL	9142.3	MEAN	25.0	MAX	176	MIN	7.0	AC-FT	18130		
WTR YR 1988	TOTAL	14474.7	MEAN	39.5	MAX	403	MIN	6.5	AC-FT	28710		

e Estimated

GREEN RIVER BASIN

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09311000 SCOFIELD RESERVOIR NEAR SCOFIELD, UT

LOCATION.--Lat 39°47'15", long 111°07'30", in NW¼SE¼ sec. 10, T. 12 S., R. 7 E., Carbon County, Hydrologic Unit 14060007, on right bank 200 ft upstream from face of dam on Price River and 4.7 mi northeast of Scofield.

DRAINAGE AREA.--154 mi².

PERIOD OF RECORD.--October 1941, April 1942 to current year. Fragmentary records 1926-41 in files of Office of State Engineer.

REVISED RECORDS.--WSP 1089; 1946. WDR UT-77-1: Drainage area.

GAGE.--Staff gage read twice daily. Datum of gage is NGVD of 1929 (levels by Bureau of Reclamation). Prior to Nov. 8, 1945, at site 800 ft upstream 200 ft from old dam at datum 4.51 ft higher.

REMARKS.--Reservoir is formed by earth and rockfill; rock-faced dam 800 ft downstream from old dam in use prior to Nov. 8, 1945. Storage began in May 1926. Usable capacity of reservoir formed by new dam is 65,780 acre-ft between elevations 7,586.0 ft (bottom of outlet works) and 7,617.5 ft (crest of spillway). Dead storage, 8,000 acre-ft below elevation 7,586.0 ft. Figures given herein represent usable contents. Water used for irrigation in vicinity of Price.

COOPERATION.--Capacity table provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 77,280 acre-ft June 12, 13, 1983; elevation, 7,621.85 ft; minimum observed, 280 acre-ft Oct. 3, 1945; elevation, 7,586.25 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 56,970 acre-ft May 27-June 1, elevation, 7,614.3 ft; minimum observed, 27,160 acre-ft Sept. 28-30, elevation, 7,602.1 ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

7,602	26,940	7,610	45,720
7,605	33,600	7,615	58,870

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35700	34760	35930	37590	39520	40740	42710	48020	56970	50350	39280	31100
2	35700	34760	35930	37590	39760	40740	42710	48280	56700	50090	39030	30880
3	35460	34760	35930	37590	39760	40980	42960	48790	56700	49830	38550	30660
4	35460	34760	36170	37830	39760	40980	42960	49050	56700	49310	38310	30430
5	35230	34990	36170	37830	39760	40980	42960	49310	56430	49050	38070	30210
6	35230	34990	36170	37830	39760	40980	42960	49570	56160	48790	37830	29990
7	34990	35230	36170	37830	40000	40980	43210	49830	56160	48540	37350	29770
8	34990	35230	36170	38070	40000	40980	43210	50090	55900	48280	37120	29550
9	34760	35230	36400	38070	40000	41230	43460	50350	55630	47760	36890	29330
10	34760	35230	36400	38070	40000	41230	43710	50610	55360	47510	36400	29110
11	34530	35230	36400	38070	40000	41230	43710	50610	55090	47250	36170	28890
12	34530	35230	36640	38310	40000	41480	43960	51130	55090	46740	35930	28670
13	34530	35230	36640	38310	40250	41480	43960	51390	54830	46480	35460	28670
14	34530	35230	36640	38310	40250	41480	44210	51920	54560	45980	35230	28450
15	34530	35460	36640	38310	40250	41720	44460	52440	54030	45720	34990	28240
16	34530	35460	36640	38550	40250	41720	44710	53230	54030	45220	34760	28240
17	34530	35460	36890	38550	40250	41720	44960	53760	54030	44960	34530	28020
18	34530	35460	36890	38550	40250	41970	45220	54560	53760	44460	34300	27800
19	34530	35460	36890	38550	40490	41970	45470	55090	53500	43960	33830	27800
20	34300	35460	36890	38790	40490	41970	45720	55630	53500	43710	33600	27590
21	34300	35700	36890	38790	40490	41970	45980	55900	53230	43210	33370	27590
22	34300	35700	36890	38790	40490	42220	46230	56160	52970	42960	33140	27590
23	34300	35700	37120	39030	40490	42220	46480	56430	52710	42460	32910	27590
24	34530	35700	37120	39030	40490	42220	46740	56700	52710	42220	32690	27370
25	34530	35700	37120	39030	40490	42460	47000	56700	52440	41720	32460	27370
26	34530	35700	37120	39280	40740	42460	47000	56700	51920	41480	32230	27370
27	34530	35930	37350	39280	40740	42460	47250	56970	51650	40980	32230	27370
28	34530	35930	37350	39280	40740	42460	47250	56970	51390	40740	32010	27160
29	34530	35930	37350	39520	40740	42710	47510	56970	51130	40490	31780	27160
30	34760	35930	37350	39520	---	42710	47760	56970	50870	40000	31550	27160
31	34760	---	37590	39520	---	42710	---	56970	---	39760	31330	---
MAX	35700	35930	37590	39520	40740	42710	47760	56970	56970	50350	39280	31100
MIN	34300	34760	35930	37590	39520	40740	42710	48020	50870	39760	31330	27060
(#)	7605.5	7606.0	7606.7	7607.5	7608.0	7608.8	7610.8	7614.3	7612.0	7607.6	7604.0	7602.1
(*)	-1170	+1170	+1660	+1930	+1220	+1970	+5050	+9210	-6100	-11110	-8430	-4170

CAL YR 1987 (*) -11200

WTR YR 1988 (*) - 8770

(#) Elevation, in feet, at end of month.

(*) Change in contents, in acre-feet.

(e) No gage reading, contents interpolated.

GREEN RIVER BASIN

09312600 WHITE RIVER BELOW TABBYUNE CREEK, NEAR SOLDIER SUMMIT, UT

LOCATION.--Lat 39°52'33", long 111°02'12", in NE¼SE¼SW¼ sec. 9, T. 11 S., R. 8 E., Utah County, Hydrologic Unit 14060007, 50 ft downstream from bridge on U.S. Highways 6-50, 1.5 mi downstream from Tabbyune Creek, 2.5 mi northwest of the Colton railroad siding, and 4.5 mi southeast of Soldier Summit.

DRAINAGE AREA.--75.6 mi².

PERIOD OF RECORD.--May 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,230 ft from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--21 years, 32.0 ft³/s, 23,180 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 962 ft³/s May 27, 1983, gage height, 5.82 ft; no flow many days August and September 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 14	1229	*96	*1.68				

Minimum discharge, 1.3 ft³/s Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	4.3	3.0	e4.0	e4.7	e6.0	28	85	34	12	4.0	2.0
2	3.5	4.3	3.1	e3.9	e4.6	e6.2	27	86	31	12	3.8	1.9
3	3.4	4.3	3.7	e4.4	e4.7	e6.2	26	76	29	12	4.5	2.6
4	3.5	4.2	e3.6	e4.6	e4.6	e6.1	26	73	28	12	4.1	1.9
5	3.5	4.3	3.6	e4.6	e4.8	e6.8	30	74	26	11	3.5	1.8
6	3.5	6.4	3.6	e4.8	e4.2	e7.4	35	79	25	10	3.5	1.8
7	3.6	5.8	3.9	e4.6	e4.7	e7.4	43	81	24	9.8	3.8	1.8
8	3.4	5.7	e3.9	e4.7	e4.9	e6.6	46	78	23	9.5	3.2	1.7
9	3.4	4.7	e3.6	e4.5	e4.9	e6.8	36	75	22	9.3	3.1	1.7
10	3.5	4.6	3.7	e4.8	e4.7	e7.6	38	72	21	9.0	3.0	1.9
11	3.6	4.5	4.1	e4.9	e4.5	e7.4	45	74	21	8.8	2.9	2.0
12	3.7	4.1	e4.1	e4.7	e4.6	e7.0	52	80	20	8.4	3.4	2.6
13	4.7	4.1	4.1	e4.6	e4.8	e7.0	54	88	19	e8.0	3.0	4.1
14	4.8	e4.0	e4.0	e4.8	e5.0	e7.0	59	94	18	e8.2	2.6	3.6
15	4.5	e3.7	e3.7	e4.9	e4.6	e7.5	62	93	18	e8.0	2.4	3.4
16	4.0	e3.6	e4.2	e4.8	e4.7	e6.6	60	82	18	e8.4	2.6	2.9
17	4.0	e3.5	e4.5	e4.7	e4.3	e7.5	58	78	17	e8.4	2.4	2.7
18	4.0	e3.4	e4.6	e4.9	e4.6	e7.8	60	73	17	e7.6	2.3	2.6
19	4.0	e3.5	e4.5	e4.4	e4.7	e8.3	67	66	16	e7.0	2.6	2.8
20	4.0	e3.6	e4.2	e4.1	e4.9	e8.8	66	60	16	e6.8	2.7	2.9
21	3.9	e3.5	e4.6	e4.6	e5.0	e9.7	66	55	16	e7.0	3.8	3.2
22	3.8	e3.4	e4.8	e4.7	e5.3	e9.4	64	52	15	e6.2	3.5	3.6
23	4.0	e3.3	e4.8	e4.8	e5.3	e9.0	59	49	14	e5.8	2.6	3.3
24	4.9	e3.4	e4.7	e4.7	e5.5	e8.5	57	46	13	e5.9	2.2	3.1
25	4.9	e3.5	e4.2	e4.6	e5.9	e10	62	44	13	e6.0	2.1	3.1
26	4.4	e3.4	e3.8	e4.7	e5.8	e13	57	41	13	e5.3	2.1	3.1
27	4.1	e3.1	e4.1	e4.6	e5.9	e15	60	39	13	5.0	2.5	3.2
28	4.0	e3.3	e4.2	e4.7	e5.9	e23	63	37	17	4.9	2.2	e3.1
29	4.1	e3.2	e4.3	e4.8	e5.9	e24	67	36	17	5.5	2.1	e3.0
30	4.6	e3.1	e4.2	e4.9	---	22	76	39	14	4.4	2.1	e3.2
31	4.6	---	e4.2	e4.7	---	24	---	36	---	4.4	2.5	---
TOTAL	123.5	119.8	125.6	143.5	144.0	309.6	1549	2041	588	246.6	91.1	80.6
MEAN	3.98	3.99	4.05	4.63	4.97	9.99	51.6	65.8	19.6	7.95	2.94	2.69
MAX	4.9	6.4	4.8	4.9	5.9	24	76	94	34	12	4.5	4.1
MIN	3.4	3.1	3.0	3.9	4.2	6.0	26	36	13	4.4	2.1	1.7
AC-FT	245	238	249	285	286	614	3070	4050	1170	489	181	160

CAL YR 1987 TOTAL 4799.2 MEAN 13.1 MAX 63 MIN 3.0 AC-FT 9520
WTR YR 1988 TOTAL 5562.3 MEAN 15.2 MAX 94 MIN 1.7 AC-FT 11030

e Estimated

GREEN RIVER BASIN

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09312700 BEAVER CREEK NEAR SOLDIER SUMMIT, UT

LOCATION.--Lat 39°49'50", long 110°58'07", in NW¼SW¼SW¼ sec. 30, T. 11 S., R. 9 E., Utah County, Hydrologic Unit 14060007, on left bank 0.5 mi upstream from mouth, 2.5 mi southeast of Colton, and 9.1 mi southeast of Soldier Summit.

DRAINAGE AREA.--26.1 mi².

PERIOD OF RECORD.--October 1960 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,200 ft from topographic map. Prior to July 15, 1983 at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--28 years, 4.68 ft³/s, 3,390 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 204 ft³/s May 27, 1983, maximum gage height, 2.81 ft May 16, 1984, datum then in use; no flow for many days some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 23 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 18	0332	*28	*1.55	No other peak greater than base discharge.			

Minimum discharge, 0.33 ft³/s Mar. 24, Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.74	2.4	e.95	e1.0	e.95	e1.7	3.6	12	11	3.2	.88	.73
2	.78	2.8	e1.2	e.97	e.85	e1.9	3.3	13	10	2.8	.79	e.70
3	.78	3.3	e1.3	e1.2	e.87	e1.9	4.0	13	9.4	2.6	.80	e.75
4	.78	3.0	e1.2	e1.3	e.70	e1.8	4.1	13	7.9	2.9	.82	e.72
5	.78	2.5	e1.2	e1.3	e.75	2.1	4.2	13	7.4	4.2	.72	e.69
6	.78	7.4	e1.2	e1.4	e.62	2.7	5.3	14	6.6	4.8	.76	e.69
7	.78	5.0	e1.3	e1.3	e.64	2.7	7.6	15	6.2	3.7	.82	e.69
8	.83	3.7	e1.3	e1.4	e.66	e2.6	7.8	14	5.9	3.1	.68	e.64
9	.87	2.9	e1.2	e1.2	e.66	e2.7	6.6	14	5.6	2.7	e.70	e.64
10	.87	2.6	e1.3	e1.3	e.64	2.8	8.0	14	5.3	2.8	e.68	e.65
11	.87	3.0	e1.4	e1.4	e.63	2.5	9.3	14	5.1	2.5	e.78	e.66
12	.87	2.7	e1.4	e1.1	e.64	e2.0	11	15	5.2	2.7	e.76	e.68
13	1.4	3.0	e1.4	e1.0	e.70	e2.0	12	20	5.0	2.6	.75	.69
14	2.3	2.4	e1.3	e1.1	e.80	e2.0	12	24	4.6	2.1	e.74	.52
15	2.0	1.8	e1.0	e1.2	e.72	2.1	13	24	4.3	1.7	e.72	.57
16	1.5	1.5	e1.2	e1.0	e.74	1.5	14	24	3.9	1.6	e.75	.49
17	1.4	e1.2	e1.3	e.97	e.70	2.1	13	25	3.5	1.7	e.70	.48
18	1.3	e1.0	e1.4	e.99	e.82	e2.4	12	26	4.0	1.4	e.66	.40
19	1.3	e1.1	e1.3	e.80	e.94	e2.9	12	21	3.1	1.2	e.74	.38
20	1.3	e1.2	e1.0	e.70	e1.0	3.5	12	18	3.1	1.1	e.76	.38
21	1.2	e1.1	e1.3	e.85	e1.1	3.8	12	17	3.1	1.1	e.86	.42
22	1.3	e1.0	e1.4	e.95	e1.4	3.0	11	15	3.6	1.0	e.76	.55
23	1.3	e.97	e1.4	e.98	e1.4	2.7	10	15	4.3	.86	e.74	.48
24	1.6	e1.0	e1.3	e1.0	e1.6	1.8	9.3	15	3.6	.82	e.72	.52
25	2.0	e1.1	e1.2	e.97	e1.7	3.1	9.7	14	3.1	.78	e.70	.51
26	1.9	e1.0	e.98	e1.0	e1.5	3.9	8.4	14	3.6	.62	e.70	.49
27	1.6	e.96	e1.1	e.95	e1.6	4.0	9.1	12	5.4	.75	e.77	.52
28	1.4	e1.1	e1.2	e.97	e1.6	5.4	10	12	5.5	.87	e.75	.44
29	1.4	e1.0	e1.3	e.99	e1.6	5.6	10	11	4.8	.99	.90	.38
30	2.7	e.97	e1.2	e1.0	---	3.0	12	12	3.7	.84	.92	.41
31	3.0	---	e1.2	e.95	---	4.0	---	12	---	.91	.85	---
TOTAL	41.63	64.70	38.43	33.24	28.53	86.2	276.3	495	157.8	60.94	23.68	16.87
MEAN	1.34	2.16	1.24	1.07	.98	2.78	9.21	16.0	5.26	1.97	.76	.56
MAX	3.0	7.4	1.4	1.4	1.7	5.6	14	26	11	4.8	.92	.75
MIN	.74	.96	.95	.70	.62	1.5	3.3	11	3.1	.62	.66	.38
AC-FT	83	128	76	66	57	171	548	982	313	121	47	33

CAL YR 1987 TOTAL 1378.73 MEAN 3.78 MAX 19 MIN .63 AC-FT 2730
WTR YR 1988 TOTAL 1323.32 MEAN 3.62 MAX 26 MIN .38 AC-FT 2620

e Estimated

GREEN RIVER BASIN

09312800 WILLOW CREEK NEAR CASTLE GATE, UT

LOCATION.--Lat 39°46'37", Long 110°47'30", in SW¼SE¼SW¼ sec. 15, T. 12 S., R. 10 E., Carbon County, Hydrologic Unit 14060007, on right bank 130 ft upstream from Deep Canyon, 170 ft east of State Highway 33, 1.5 mi downstream from junction with two major tributaries, 5.1 mi northeast of Castle Gate, 5.4 mi upstream from mouth, and 12.3 mi north of Price.

DRAINAGE AREA.--62.8 mi².

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,000 ft from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No regulation or diversion above station.

AVERAGE DISCHARGE.--26 years, 9.86 ft³/s, 7,140 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 836 ft³/s Aug. 6, 1973, gage height, 6.47 ft from floodmarks; no flow on many days.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 26	1904	*190	*3.11	No other peak greater than base discharge.			
Minimum daily, 0.28 ft ³ /s Dec. 26.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.93	1.6	e1.1	e.41	e.49	e8.0	e28	e40	15	5.3	1.6	1.3
2	.93	e1.6	e1.2	e.39	e.47	e9.0	e25	e37	14	4.9	1.2	1.1
3	.88	e1.7	e1.3	e.41	e.54	e9.0	e23	34	12	4.7	1.3	.99
4	.84	2.0	e1.3	e.45	e.52	e8.8	e23	33	11	5.1	1.2	1.0
5	.92	e1.8	e1.3	e.45	e.58	e13	e24	31	11	5.1	.98	1.0
6	.88	e1.7	e1.1	e.49	e.56	e14	e25	30	10	4.8	2.1	.90
7	.93	e1.9	e1.1	e.47	e.70	e14	e30	31	9.7	4.4	2.4	.91
8	.93	e1.8	e.82	e.47	e.90	e13	e35	30	9.4	4.2	1.5	.84
9	.93	e1.9	e.88	e.47	e1.0	e20	e20	28	9.2	4.4	1.2	.83
10	.93	2.2	e.94	e.49	e1.0	e20	e22	27	8.8	4.7	1.1	.88
11	.93	1.8	e1.0	e.52	e1.1	e19	e24	25	8.5	4.2	1.1	1.1
12	.95	e1.9	e.80	e.48	e1.5	e19	e26	27	8.3	3.6	1.2	1.2
13	1.9	e2.0	e.70	e.42	e1.9	e19	e30	30	8.2	3.5	1.1	2.2
14	2.1	e2.0	e.60	e.48	e2.3	e19	e35	31	7.9	3.3	.86	2.0
15	1.5	e1.9	e.50	e.49	e2.1	e29	e40	32	7.5	3.0	.93	1.5
16	1.2	e1.8	e.54	e.49	e2.3	e29	e35	32	7.2	3.0	5.0	1.3
17	1.1	e1.8	e.66	e.47	e2.0	e28	e30	37	6.8	2.9	1.8	1.2
18	1.1	e1.4	e.74	e.49	e2.8	e27	e35	32	6.7	2.9	1.6	1.1
19	1.1	e1.5	e.64	e.45	e2.8	e44	e50	27	6.5	3.0	1.5	1.1
20	.93	e1.6	e.47	e.39	e4.0	e59	e42	25	6.4	2.8	1.5	1.2
21	1.0	e1.6	e.48	e.42	e5.0	e70	e40	23	6.4	2.7	2.0	1.2
22	1.1	e1.6	e.50	e.46	e5.6	e80	e40	21	6.9	2.7	1.6	2.0
23	1.1	e1.4	e.50	e.49	e5.6	46	e37	20	6.5	2.7	1.3	1.6
24	1.5	e1.5	e.37	e.52	e5.4	28	e35	19	6.3	2.6	1.2	1.3
25	1.9	e1.6	e.30	e.45	e7.0	54	e40	19	5.7	2.1	1.2	1.2
26	1.4	e1.4	e.28	e.47	e6.4	84	e30	17	6.9	1.6	1.3	1.3
27	1.2	e1.1	e.40	e.47	e6.8	62	e35	16	6.3	1.6	1.5	1.3
28	1.3	e1.3	e.45	e.46	e7.0	19	e40	15	7.2	1.6	1.2	1.1
29	1.3	e1.2	e.47	e.48	e8.0	e18	e45	14	6.6	1.5	1.1	1.2
30	1.7	e1.2	e.47	e.50	---	e22	e50	18	5.6	1.3	1.2	1.3
31	1.5	---	e.45	e.46	---	e20	---	16	---	1.5	1.1	---
TOTAL	36.91	49.8	22.36	14.36	86.36	923.8	994	817	248.5	101.7	45.87	37.15
MEAN	1.19	1.66	.72	.46	2.98	29.8	33.1	26.4	8.28	3.28	1.48	1.24
MAX	2.1	2.2	1.3	.52	8.0	84	50	40	15	5.3	5.0	2.2
MIN	.84	1.1	.28	.39	.47	8.0	20	14	5.6	1.3	.86	.83
AC-FT	73	99	44	28	171	1830	1970	1620	493	202	91	74

CAL YR 1987	TOTAL	3031.21	MEAN	8.30	MAX	190	MIN	.28	AC-FT	6010
WTR YR 1988	TOTAL	3377.81	MEAN	9.23	MAX	84	MIN	.28	AC-FT	6700

e Estimated

GREEN RIVER BASIN

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09314500 PRICE RIVER AT WOODSIDE, UT

LOCATION.--Lat 39°15'50", long 110°20'45", in SW¼SE¼SE¼ sec. 9, T. 18 S., R. 14 E., Emery County, Hydrologic Unit 14060007, on left downstream wingwall of old highway bridge, 200 ft downstream from railroad bridge at Woodside, and 16.3 mi upstream from mouth.

DRAINAGE AREA.--1,540 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1909 to December 1910, January to August 1911 (gage heights only), November 1945 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,600 ft by barometer. September 1909 to August 1911, reference point at site about 100 ft upstream at different datum. Nov. 27, 1945 to Oct. 16, 1954, water-stage recorder at site 15 ft downstream at datum 1.85 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions above station for irrigation of about 18,000 acres. Flow affected by storage in Scofield Reservoir, usable capacity, 65,780 acre-ft, since 1926 (see station 09311000).

AVERAGE DISCHARGE.--42 years, 128 ft³/s, 92,740 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,720 ft³/s Sept. 11, 1980, gage height, 11.16 ft, from rating curve extended above 1,200 ft³/s; no flow for several days in 1960, 1961, and part of July 8, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 5	2248	*1,110	*6.12				

Minimum daily discharge, 21 ft³/s Sept. 2, 5, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	150	e54	e35	e41	e275	86	160	125	50	32	23
2	47	150	e55	e30	e55	e260	82	175	111	47	32	21
3	48	217	e57	e32	e60	248	81	187	101	41	31	23
4	48	142	e56	e38	e58	194	108	179	89	43	34	23
5	47	194	e59	e40	e56	162	128	158	77	48	32	21
6	67	532	e61	e42	e58	135	102	143	75	45	36	21
7	60	579	e57	e39	e58	130	97	131	78	40	34	22
8	50	207	e52	e38	e59	120	112	134	77	35	56	24
9	49	132	e50	e40	e61	90	117	128	77	34	54	22
10	47	112	e52	e40	e64	90	104	114	74	60	40	22
11	45	102	e53	e42	e63	88	94	92	69	46	33	24
12	44	96	e47	e35	e63	75	96	80	69	44	28	29
13	62	94	e45	e29	e69	69	90	78	69	40	28	38
14	293	111	e43	e30	e70	63	93	75	65	38	29	53
15	199	100	e38	e31	e69	65	98	85	63	34	28	48
16	108	92	e40	e34	e74	75	101	88	60	34	25	45
17	87	81	e44	e36	e73	78	153	87	56	35	24	43
18	77	73	e47	e39	e79	74	232	141	57	33	26	38
19	78	69	e44	e34	e83	72	307	209	59	30	23	37
20	75	65	e43	e25	e89	68	213	149	55	30	23	34
21	74	e64	e46	e30	e89	81	229	114	51	29	26	41
22	75	e65	e47	e28	e97	153	497	97	51	31	31	67
23	74	e66	e46	e29	e98	177	308	94	46	28	74	49
24	104	e66	e43	e27	e106	139	331	95	38	26	42	49
25	140	e60	e44	e28	e150	111	257	93	35	27	34	49
26	105	e63	e42	e31	e195	86	218	93	41	29	29	46
27	88	e58	e46	e32	e180	170	198	99	46	30	27	40
28	83	e55	e44	e33	e240	183	169	145	68	38	26	37
29	80	e56	e46	e44	e290	150	169	106	55	34	26	33
30	96	e54	e44	e42	---	103	168	96	73	34	27	31
31	142	---	e40	e42	---	97	---	115	---	32	25	---
TOTAL	2640	3905	1485	1075	2747	3881	5038	3740	2010	1145	1015	1053
MEAN	85.2	130	47.9	34.7	94.7	125	168	121	67.0	36.9	32.7	35.1
MAX	293	579	61	44	290	275	497	209	125	60	74	67
MIN	44	54	38	25	41	63	81	75	35	26	23	21
AC-FT	5240	7750	2950	2130	5450	7700	9990	7420	3990	2270	2010	2090
CAL YR 1987	TOTAL	37168	MEAN	102	MAX	1270	MIN	22	AC-FT	73720		
WTR YR 1988	TOTAL	29734	MEAN	81.2	MAX	579	MIN	21	AC-FT	58980		

e Estimated

GREEN RIVER BASIN

09314500 PRICE RIVER AT WOODSIDE, UT--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1946 to September 1949, February 1951 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: February 1951 to September 30, 1978.

WATER TEMPERATURES: February 1951 to September 1959, November 1961 to September 1963, October 1964 to Sept. 30, 1978.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 8,540 microsiemens Dec. 11, 1951; minimum daily, 814 microsiemens June 1, 1952.

WATER TEMPERATURES: Maximum, 32.0°C July 10, 11, 1954 and Apr. 7, 1977; minimum, 0.0°C on many days during winter period each year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT , 1987										
27...	1030	82	3460	8.40	13.5	9.0	9.90	650	1100	180
MAR , 1988										
28...	1100	183	1630	8.20	10.0	6.0	10.7	645	550	100
APR										
29...	1020	175	2040	8.40	23.0	13.5	8.50	645	650	110
MAY										
23...	1350	98	2610	8.30	28.0	21.0	7.40	645	780	130
JUN										
20...	1100	53	2720	8.30	27.5	22.5	7.20	649	1000	160
JUL										
21...	1320	30	2650	8.30	36.5	25.5	6.70	652	1000	170
AUG										
29...	1045	28	3090	8.30	25.5	22.0	7.00	647	1100	180
SEP										
06...	1015	21	3060	8.30	25.0	18.5	7.70	646	1100	170

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT , 1987										
27...	150	480	49	7	6.4	6	330	277	1800	62
MAR , 1988										
28...	72	190	43	4	4.6	0	534	438	720	33
APR										
29...	92	240	44	4	6.0	4	750	621	920	37
MAY										
23...	110	360	50	6	7.2	0	724	593	1400	48
JUN										
20...	150	340	42	5	5.9	0	698	572	1300	49
JUL										
21...	150	270	36	4	8.0	0	448	370	1400	52
AUG										
29...	160	410	44	5	9.5	0	424	348	1800	60
SEP										
06...	170	440	46	6	9.5	12	414	359	1900	67

GREEN RIVER BASIN

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09314500 PRICE RIVER AT WOODSIDE, UT--Continued
 WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	FLUORIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
OCT , 1987									
27...	0.4	7.3	3000	2690	4.08	664	1.00	0.98	0.05
MAR , 1988									
28...	0.3	6.4	1300	1240	1.77	642	0.40	0.38	0.11
APR									
29...	0.3	9.6	1640	1580	2.23	775	0.40	0.38	0.04
MAY									
23...	0.4	9.1	2310	2220	3.14	610	0.40	0.39	0.03
JUN									
20...	0.4	1.3	2270	2120	3.09	325	<0.10	<0.10	0.04
JUL									
21...	0.3	0.7	2230	2150	3.03	180	<0.10	<0.10	0.03
AUG									
29...	0.3	0.7	2760	2710	3.75	209	<0.10	<0.10	0.02
SEP									
06...	0.3	0.69	3060	2850	4.16	174	<0.10	<0.10	0.03

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
OCT , 1987									
27...	0.06	0.08	0.35	0.4	1.4	6.2	0.07	0.04	0.12
MAR , 1988									
28...	0.11	0.14	0.69	0.8	1.2	5.3	0.38	0.03	0.09
APR									
29...	0.04	0.05	0.26	0.3	0.7	3.1	0.02	0.02	0.06
MAY									
23...	0.02	0.03	0.87	0.9	1.3	5.8	0.03	<0.01	--
JUN									
20...	0.04	0.05	0.66	0.7	--	--	0.12	0.02	0.06
JUL									
21...	0.03	0.04	1.1	1.1	--	--	0.21	<0.01	--
AUG									
29...	0.04	0.05	0.78	0.8	--	--	0.12	0.01	0.03
SEP									
06...	0.04	0.05	0.57	0.6	--	--	0.08	<0.01	--

DATE	TIME	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDEED TOTAL (MG/L AS C)
APR , 1988			
29...	1020	4.8	4.9
MAY			
23...	1350	7.3	2.3
JUL			
21...	1320	6.3	3.2
AUG			
29...	1045	6.6	4.8

GREEN RIVER BASIN

09314500 PRICE RIVER AT WOODSIDE, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
AUG , 1988 29...	1045	5800	2	<10	1	10	8	4500

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
AUG , 1988 29...	30	220	120	5	12	4	40

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)
OCT , 1988 27...	1030	320
MAR 28...	1100	160
APR 29...	1020	170
MAY 23...	1350	250
JUN 20...	1100	280
JUL 21...	1320	300
AUG 29...	1045	350
SEP 06...	1015	390

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
MAY , 1988 23...	1350	98	21.0	795	210
JUN 20...	1100	53	22.5	117	17
JUL 21...	1320	30	25.5	180	15
AUG 29...	1045	28	22.0	320	24
SEP 06...	1015	21	18.5	21	1.2

09315000 GREEN RIVER AT GREEN RIVER, UT

LOCATION.--Lat 38°59'10", long 110°09'02", in NW¼NW¼SW¼ sec. 15, T. 21 S., R. 16 E., Emery County, Hydrologic Unit 14060008, on right bank 100 ft upstream from site of old highway bridge, 500 ft upstream from railroad bridge, 1.1 mi southeast of town of Green River, 22.5 mi upstream from San Rafael River, at mile 117.4 upstream from mouth.

DRAINAGE AREA.--44,850 mi² approximately, of which about 4,260 mi² (including 3,959 mi² in Great Divide Basin in southern Wyoming) is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1894 to October 1899, October 1904 to current year. Published as "at Blake" 1894-99, as "near Elgin" 1911, and as "at Little Valley, near Green River" 1910-23.

REVISED RECORDS.--WSP 918: 1895-1900. WDR UT-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,040.18 ft NGVD of 1929. Prior to Nov. 6, 1914, staff, wire-weight, or chain gages at several sites within 7 mi of present site at various datums. Nov. 6, 1914 to June 20, 1924, water-stage recorder at site 7 mi downstream at different datum. June 21 to Sept. 18, 1924, chain gage, and Sept. 19, 1924 to May 7, 1947, water-stage recorder, at site 100 ft downstream at present datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation above station. Flow regulated by Flaming Gorge Reservoir (see station 09234400) since Nov. 1, 1962.

AVERAGE DISCHARGE.--89 years, 6,394 ft³/s, 4,632,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,100 ft³/s June 27, 1917, gage height, 14.53 ft, site and datum then in use; minimum, 255 ft³/s Nov. 26, 1931; minimum gage height, 4.08 ft Aug. 1, Dec. 5, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 17,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 22	2030	*17,400	*10.33	No other peak greater than base discharge.			

Minimum discharge, 1,350 ft³/s Sept. 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2790	3420	3760	e2050	e3500	4520	4620	6440	12200	5010	2060	1770
2	2630	3670	3760	e2000	e3560	4750	4870	6460	12800	4890	2160	1630
3	2680	3890	3730	e2500	e3570	4980	4510	6850	12600	5350	2670	1530
4	2640	3660	3780	e2910	e3280	5850	4090	7030	11300	5000	2400	1560
5	2780	3610	3860	e3730	e3140	6730	4100	7990	9780	4570	2530	1580
6	2910	4230	3740	e4100	e3080	6760	3890	8790	8890	4280	2530	1470
7	3060	4350	3890	e4050	e3070	7130	3730	7880	9610	3960	2600	1450
8	3050	4110	4080	e3920	e3110	6430	3790	7540	10600	3750	2480	1460
9	2940	4020	4290	e3640	e3110	5910	4240	6840	11800	3630	2190	1410
10	2810	3960	4210	e3510	e3260	5520	4580	7330	12800	3810	2050	1370
11	2790	3670	4120	e3690	e3250	5260	4760	8270	13300	3750	1970	1370
12	2710	3450	4010	e3630	e3280	5940	4610	7300	12500	3640	1860	1390
13	2970	3640	3990	e3510	e3340	6410	4990	6810	11600	3620	1760	1450
14	3050	4020	4040	e3470	e3360	5410	5030	7010	11400	3080	1700	1470
15	3330	4190	3320	e3400	e3300	4460	4530	6740	10600	2870	1800	1490
16	3450	4370	2160	e3590	e3330	4080	4380	7450	9960	3210	2020	1530
17	3350	4420	1710	e3660	e3320	3870	4910	9730	10100	2790	1800	1550
18	3120	4310	2230	e3800	e3350	3670	5560	12300	8980	2800	1830	1770
19	3120	4210	2870	e3770	e3390	3500	6750	13100	8560	2850	2000	1850
20	3090	4170	3430	e3700	e3430	3460	7530	13900	8430	3010	1860	1930
21	3080	4130	3820	e3860	e3430	3400	8320	14700	8190	2630	2130	2050
22	3170	4080	3810	e4000	e3540	3860	9060	16900	7510	2470	1920	2230
23	3240	4040	3560	e3820	e3660	4190	8810	16500	7150	2520	2170	2020
24	3020	4040	3670	e3600	e3840	4630	9280	13600	7660	2520	2270	2080
25	3120	4110	3210	e3490	4060	4680	9280	11600	7550	2500	2200	2200
26	3130	4150	3370	e3510	3900	4980	9010	10400	7310	2370	1920	2030
27	3590	4090	2830	e3540	4190	5570	7950	9960	6850	2430	1820	1960
28	3490	3920	2580	e3550	3970	5480	7160	10100	6660	2310	1980	1960
29	3380	3960	2350	e3620	4670	5030	6660	10900	6050	2210	2020	1970
30	3500	3830	2130	e3580	---	4840	6430	11100	5380	2490	2150	2030
31	3260	---	e2070	e3580	---	4720	---	11500	---	2460	1840	---
TOTAL	95250	119720	104380	108780	101290	156020	177430	303020	288120	102780	64690	51560
MEAN	3073	3991	3367	3509	3493	5033	5914	9775	9604	3315	2087	1719
MAX	3590	4420	4290	4100	4670	7130	9280	16900	13300	5350	2670	2230
MIN	2630	3420	1710	2000	3070	3400	3730	6440	5380	2210	1700	1370
AC-FT	188900	237500	207000	215800	200900	309500	351900	601000	571500	203900	128300	102300
CAL YR 1987	TOTAL	1774990	MEAN	4863	MAX	13600	MIN	1710	AC-FT	3521000		
WTR YR 1988	TOTAL	1673040	MEAN	4571	MAX	16900	MIN	1370	AC-FT	3318000		

e Estimated

GREEN RIVER BASIN

09315000 GREEN RIVER AT GREEN RIVER, UT--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

LOCATION.--Daily samples collected at bridge on U.S. Highways 50 and 6, in town of Green River, 0.7 mi from gaging station.

PERIOD OF RECORD.--August 1928 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1941 to September 1981, March 1982 to current year.

WATER TEMPERATURES: May 1949 to September 1959, October 1964 to September 1981, March 1982 to current year.

SUSPENDED-SEDIMENT DISCHARGE: May 1930 to September 1984.

INSTRUMENTATION.--Water-quality monitor installed April 1985.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 3,250 microsiemens Dec. 1, 1967; minimum daily, 255 microsiemens June 30, 1978.

WATER TEMPERATURES: Maximum, 30.0°C Aug. 13, 1958; minimum, 0.0°C on many days during winter period each year.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 66,000 mg/L July 11, 1936; minimum daily, 19 mg/L Sept. 30, 1974.

SEDIMENT LOADS: Maximum daily, 2,230,000 tons July 11, 1936; minimum daily, 54 tons Sept. 27, 1956.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,220 microsiemens Mar. 24; minimum, 340 microsiemens several days during June.

WATER TEMPERATURES: Maximum, 28.0°C July 31; minimum, 0.0°C many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT , 1987										
26...	1150	3060	940	8.30	17.5	12.0	--	9.10	662	--
NOV										
24...	1015	3980	920	8.30	6.5	2.0	34	12.7	660	--
MAR , 1988										
23...	1045	4150	1180	8.30	14.5	8.0	120	10.3	660	--
APR										
26...	1000	9120	720	8.20	12.5	11.5	230	8.40	660	--
MAY										
24...	1100	13600	365	8.20	28.0	17.0	480	7.90	659	--
JUN										
21...	1030	8370	470	8.20	32.0	24.0	24	6.80	660	240
JUL										
20...	1000	3080	760	8.40	31.5	23.0	37	7.00	660	122
AUG										
24...	1230	2240	940	8.30	35.5	25.0	--	6.90	662	--
SEP										
06...	1400	1430	890	8.20	31.5	22.5	--	7.20	658	--

DATE	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3
OCT , 1987										
26...	--	330	73	36	83	35	2	3.0	--	--
NOV										
24...	--	340	75	37	80	34	2	2.6	0	234
MAR , 1988										
23...	--	380	79	44	120	41	3	3.1	30	532
APR										
26...	--	230	50	25	52	33	2	2.3	0	362
MAY										
24...	--	140	31	14	25	28	1	1.4	0	225
JUN										
21...	320	150	35	14	29	30	1	1.4	0	276
JUL										
20...	300	260	60	27	63	34	2	2.7	18	420
AUG										
24...	--	320	66	37	90	38	2	3.0	--	--
SEP										
06...	--	310	64	37	86	37	2	2.8	--	--

GREEN RIVER BASIN

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09315000 GREEN RIVER AT GREEN RIVER, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	ALKA- LIMITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
OCT , 1987										
26...	--	290	25	0.3	6.1	657	625	0.89	5420	--
NOV										
24...	192	280	27	0.3	6.6	640	620	0.87	6880	<0.01
MAR										
23...	485	380	33	0.4	9.3	819	799	1.11	9180	<0.01
APR										
26...	297	190	13	0.3	10	427	423	0.58	10500	<0.01
MAY										
24...	225	89	7.1	0.3	10	247	240	0.34	9070	<0.01
JUN										
21...	226	93	9.2	0.3	8.2	279	248	0.38	6310	<0.01
JUL										
20...	374	200	20	0.3	7.3	491	478	0.67	4080	<0.01
AUG										
24...	--	300	26	0.3	5.5	634	627	0.86	3830	--
SEP										
06...	--	280	27	0.3	5.6	602	606	0.82	2320	--

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
OCT , 1987										
26...	<0.10	--	0.03	0.04	--	--	--	--	0.04	0.12
NOV										
24...	0.17	<0.01	0.01	0.01	--	0.3	0.01	0.02	0.02	0.06
MAR , 1988										
23...	0.46	0.04	0.01	0.01	0.46	0.5	0.17	0.04	0.02	0.06
APR										
26...	0.37	0.03	0.03	0.04	0.27	0.3	0.07	0.02	0.01	0.03
MAY										
24...	0.23	0.45	<0.01	--	1.5	2.0	2.00	0.02	<0.01	--
JUN										
21...	<0.10	0.02	0.02	0.03	0.38	0.4	0.09	0.04	0.02	0.06
JUL										
20...	<0.10	<0.01	<0.01	--	--	0.7	0.08	0.02	<0.01	--
AUG										
24...	<0.10	--	<0.01	--	--	--	--	--	0.01	0.03
SEP										
06...	<0.10	--	<0.01	--	--	--	--	--	0.01	0.03

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
NOV , 1987											
24...	1015	<10	2	88	<0.5	<1	<1	<3	3	<3	<5
MAR , 1988											
23...	1045	<10	2	150	<0.5	<1	<1	<3	2	4	<5
APR											
26...	1000	30	2	200	<0.5	<1	1	<3	5	37	<5
JUN											
21...	1030	20	2	120	<0.5	<1	<1	<3	2	22	<5
JUL											
20...	1000	<10	2	120	<0.5	<1	1	<3	2	10	<5

GREEN RIVER BASIN

09315000 GREEN RIVER AT GREEN RIVER, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV , 1987										
24...	37	4	<0.1	<10	1	2	1.0	850	<6	8
MAR , 1988										
23...	45	14	<0.1	<10	2	2	1.0	980	<6	12
APR										
26...	29	3	<0.1	<10	<1	2	<1.0	550	<6	14
JUN										
21...	17	1	<0.1	<10	4	<1	<1.0	320	<6	12
JUL										
20...	25	2	<0.1	<10	3	3	1.0	630	<6	7

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)
OCT , 1987		
26...	1150	190
AUG , 1988		
24...	1230	180
SEP		
06...	1400	180

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS- SOLVED (UG/L AS U)
MAY , 1988									
24...	1100	2.1	3.6	3.0	4.7	2.3	4.1	0.08	1.6

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	880	870	875	940	930	939	950	930	943	1020	1010	1020
2	880	870	877	950	940	945	950	940	943	1030	1020	1020
3	880	870	874	950	940	948	950	930	942	1040	1030	1030
4	880	870	873	960	950	953	950	940	945	1050	1030	1040
5	880	870	874	960	950	958	950	940	946	1040	1010	1020
6	880	870	875	970	960	961	950	940	948	1010	980	992
7	880	870	874	970	960	964	960	940	954	990	970	980
8	880	870	876	980	960	969	970	950	957	980	970	974
9	880	870	872	970	939	950	970	950	962	980	970	972
10	870	860	869	940	930	934	970	940	957	990	970	979
11	870	860	865	940	930	938	960	940	952	990	980	986
12	870	860	864	950	940	943	960	950	954	980	970	976
13	880	860	869	950	940	948	960	950	953	980	960	969
14	890	870	880	950	940	947	950	940	943	970	960	963
15	920	880	897	950	940	949	940	930	938	970	960	965
16	920	900	910	950	930	942	940	930	935	970	960	966
17	920	900	907	940	930	934	950	940	942	970	960	964
18	910	890	903	940	920	935	940	930	939	970	950	960
19	930	910	915	940	920	930	964	930	945	970	950	961
20	940	920	926	940	920	928	990	970	976	970	960	965
21	940	920	932	930	910	926	1000	980	991	970	950	961
22	940	920	933	930	910	920	1010	990	1000	960	940	951
23	940	920	932	930	910	923	990	980	989	950	940	943
24	940	930	933	930	910	922	990	970	981	960	940	946
25	940	920	934	930	920	921	980	970	974	950	940	948
26	950	930	939	930	920	923	980	970	976	960	950	952
27	950	940	946	940	920	930	990	970	978	970	950	959
28	950	940	946	940	920	933	990	980	986	980	960	971
29	950	930	941	940	920	936	1000	970	983	990	970	976
30	940	930	937	943	930	939	1010	990	1000	990	980	988
31	950	940	942	---	---	---	1020	1000	1010	990	980	984
MONTH	950	860	903	980	910	940	1020	930	963	1050	940	977

GREEN RIVER BASIN

09315000 GREEN RIVER AT GREEN RIVER, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	17.7	14.8	16.3	12.3	11.9	12.1	2.0	.7	1.3	.0	.0	.0
2	20.7	13.2	16.2	12.5	11.7	12.1	1.8	.8	1.3	.0	.0	.0
3	17.7	12.8	15.6	13.4	11.9	12.5	2.2	.8	1.4	.0	.0	.0
4	18.5	11.9	15.8	13.0	11.4	12.2	2.0	.9	1.5	.0	.0	.0
5	17.8	14.5	16.2	12.7	11.5	12.1	2.4	1.5	1.9	.1	.0	.0
6	18.1	15.3	16.7	12.2	11.2	11.7	2.9	2.3	2.6	.0	.0	.0
7	17.8	15.3	16.6	11.7	10.8	11.2	3.3	2.7	2.9	.0	.0	.0
8	17.5	15.3	16.4	11.6	10.3	10.8	3.6	2.4	3.0	.0	.0	.0
9	17.3	14.8	16.1	10.9	9.4	10.1	3.4	2.1	2.6	.1	.0	.0
10	17.2	14.2	16.0	10.3	8.8	9.5	3.4	1.8	2.5	.1	.0	.0
11	16.9	14.1	15.5	9.7	8.2	9.0	3.5	2.1	2.7	.1	.0	.0
12	16.2	12.8	14.9	9.0	7.7	8.4	2.7	1.2	2.1	.0	.0	.0
13	15.2	14.5	14.8	8.6	7.3	7.9	1.0	.0	.5	.0	.0	.0
14	15.2	14.1	14.6	8.0	7.5	7.8	.1	.0	.1	.0	.0	.0
15	15.1	13.6	14.3	7.4	6.3	7.0	.1	.0	.0	.0	.0	.0
16	14.8	13.1	13.9	6.9	5.6	6.1	.0	.0	.0	.1	.0	.0
17	14.1	12.3	13.2	5.8	4.6	5.3	.0	.0	.0	.1	.0	.1
18	13.7	11.7	12.7	4.7	3.7	4.3	.2	.0	.1	.1	.0	.1
19	13.5	11.5	12.5	4.2	3.0	3.5	.6	.1	.3	.2	.0	.0
20	13.3	11.1	12.2	3.8	2.4	3.0	.5	.0	.1	.1	.0	.0
21	12.9	10.6	11.7	3.3	2.4	2.8	.5	.0	.2	.0	.0	.0
22	12.6	10.4	11.5	3.0	1.9	2.4	.5	.0	.2	.0	.0	.0
23	12.2	10.7	11.4	3.4	2.1	2.6	.4	.0	.2	.0	.0	.0
24	11.8	11.0	11.4	3.3	1.9	2.5	.1	.0	.0	.0	.0	.0
25	12.5	11.0	11.7	2.6	1.9	2.2	.0	.0	.0	.0	.0	.0
26	13.1	11.2	12.1	2.5	1.8	2.1	.1	.0	.0	.0	.0	.0
27	13.0	11.0	12.0	3.0	1.7	2.3	.0	.0	.0	.0	.0	.0
28	13.0	11.4	12.1	2.7	1.5	2.0	.0	.0	.0	.0	.0	.0
29	11.9	11.3	11.6	2.4	1.2	1.7	.1	.0	.0	.0	.0	.0
30	12.7	11.3	11.9	2.3	1.0	1.6	.0	.0	.0	.0	.0	.0
31	12.7	11.4	12.0	---	---	---	.1	.0	.0	.0	.0	.0
MONTH	20.7	10.4	13.9	13.4	1.0	6.6	3.6	.0	.9	.2	.0	.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.0	.0	.0	3.4	1.9	2.7	6.9	4.1	5.5	14.2	12.6	13.8
2	.0	.0	.0	3.7	1.8	2.8	8.2	5.4	6.8	14.7	12.2	13.3
3	.0	.0	.0	3.9	1.8	2.9	9.0	6.4	7.7	14.3	12.4	13.3
4	.0	.0	.0	3.7	2.0	2.8	9.2	7.8	8.4	14.3	12.4	13.3
5	.0	.0	.0	2.8	1.3	2.0	10.9	8.0	9.3	15.1	13.2	14.0
6	.0	.0	.0	2.6	1.0	1.7	12.7	9.5	11.0	14.0	12.4	13.2
7	.1	.0	.0	2.9	1.1	1.8	13.6	10.5	12.0	13.3	11.5	12.4
8	.0	.0	.0	2.5	.8	1.5	13.2	11.3	12.2	13.8	11.8	12.8
9	.0	.0	.0	2.9	.8	1.8	12.7	10.4	11.5	14.2	12.1	13.2
10	.0	.0	.0	---	---	---	13.1	10.4	11.7	15.3	13.0	14.0
11	.0	.0	.0	---	---	---	13.0	10.2	11.6	16.8	14.5	15.6
12	.0	.0	.0	---	---	---	14.1	11.1	12.5	18.1	15.5	16.7
13	.0	.0	.0	---	---	---	14.7	12.1	13.4	19.1	16.4	17.6
14	.1	.0	.0	---	---	---	15.1	13.2	14.1	20.0	17.4	18.5
15	.0	.0	.0	---	---	---	15.8	13.7	14.7	20.7	18.0	19.3
16	.0	.0	.0	---	---	---	15.4	14.5	14.9	20.4	18.5	19.4
17	.0	.0	.0	---	---	---	15.4	14.2	14.8	19.5	18.6	19.0
18	.1	.0	.0	---	---	---	14.8	13.7	14.2	19.1	17.8	18.4
19	.1	.0	.0	---	---	---	15.5	13.2	14.2	18.1	17.3	17.6
20	.0	.0	.0	---	---	---	15.1	13.9	14.4	17.5	16.8	17.3
21	.0	.0	.0	---	---	---	14.1	13.4	13.8	17.8	16.7	17.3
22	.1	.0	.0	---	---	---	14.2	12.9	13.5	17.4	16.2	16.9
23	.3	.0	.1	---	---	---	13.3	12.2	12.8	17.1	15.8	16.6
24	2.1	.0	.8	9.6	7.5	8.5	13.0	11.5	12.3	17.4	15.9	16.7
25	2.7	.4	1.5	10.1	7.7	8.8	12.9	12.0	12.3	17.9	16.6	17.3
26	3.0	.8	1.9	10.4	8.2	9.2	13.0	11.8	12.3	18.9	17.5	18.1
27	2.5	1.0	1.8	10.1	8.2	9.1	13.6	12.0	12.7	19.5	18.1	18.8
28	2.8	1.4	2.1	8.5	7.2	8.0	14.3	12.5	13.3	19.9	18.3	19.0
29	3.4	1.4	2.4	8.4	6.2	7.3	15.8	13.0	14.3	19.3	18.1	18.8
30	---	---	---	7.3	5.8	6.4	15.7	14.2	14.8	18.0	16.6	17.4
31	---	---	---	6.4	5.0	5.7	---	---	---	17.2	16.0	16.6
MONTH	3.4	.0	.4	---	---	---	15.8	4.1	12.2	20.7	11.5	16.3

GREEN RIVER BASIN

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09315000 GREEN RIVER AT GREEN RIVER, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	16.9	15.8	16.4	25.1	22.7	23.9	27.3	24.3	25.8	25.3	22.2	23.8
2	17.9	16.1	16.9	25.9	23.0	24.3	26.5	23.9	25.3	24.2	19.5	22.2
3	18.9	17.3	18.1	26.3	24.2	25.0	26.5	23.6	24.9	---	---	---
4	20.0	18.7	19.3	25.4	24.0	24.5	26.0	23.1	24.6	---	---	---
5	20.8	19.3	20.0	25.0	23.0	24.0	26.2	22.9	24.5	---	---	---
6	20.5	19.3	19.9	25.1	22.7	23.9	25.8	23.5	24.6	---	---	---
7	20.4	19.1	19.7	26.0	22.9	24.4	26.2	23.0	24.4	23.9	18.4	21.4
8	20.5	19.3	19.9	26.8	23.5	24.9	25.8	22.7	24.3	24.7	18.9	21.4
9	21.0	19.5	20.3	26.3	23.8	24.8	25.4	22.3	23.8	23.3	16.8	20.6
10	20.7	20.1	20.5	25.6	23.0	24.1	25.2	22.2	23.7	24.2	18.3	20.9
11	20.9	19.6	20.3	25.5	22.8	24.0	25.1	22.1	23.5	19.6	16.5	18.1
12	20.6	19.6	20.1	25.4	22.8	24.1	24.6	21.6	23.1	16.7	14.1	15.6
13	20.7	19.7	20.2	26.0	23.0	24.4	24.7	21.7	23.3	17.5	13.0	15.6
14	21.5	20.1	20.7	26.7	23.3	24.9	24.5	20.8	22.9	18.5	13.4	15.9
15	21.5	20.5	21.0	26.5	23.4	24.9	23.4	21.4	22.5	19.0	14.0	16.6
16	22.6	21.0	21.8	27.8	23.7	25.6	24.8	21.2	22.9	18.5	14.8	17.0
17	23.0	21.8	22.4	27.7	24.5	26.0	25.8	21.9	23.9	18.8	15.2	17.3
18	23.6	22.0	22.7	27.1	23.8	25.5	26.1	22.5	24.4	17.8	15.7	16.7
19	24.0	22.4	23.2	26.5	23.3	24.9	26.2	22.7	24.5	17.1	14.1	15.6
20	24.5	22.8	23.6	26.3	21.8	24.7	25.3	22.7	24.2	17.5	14.8	16.2
21	25.1	23.2	24.1	27.0	22.9	24.9	25.6	22.8	23.9	16.4	15.1	15.7
22	25.8	23.7	24.7	27.7	23.9	25.7	26.4	23.0	24.6	17.2	14.5	15.8
23	26.6	23.8	25.1	26.3	24.1	25.4	26.6	23.5	25.1	17.6	14.6	16.1
24	27.2	24.9	25.9	27.5	23.9	25.6	26.6	23.5	25.1	18.0	15.3	16.7
25	27.5	25.7	26.5	27.2	23.9	25.4	26.9	24.1	25.5	18.3	15.5	16.9
26	27.5	25.6	26.4	27.2	24.0	25.5	25.5	24.1	24.8	18.0	15.8	16.9
27	27.5	25.4	26.2	26.4	23.7	25.1	26.2	22.8	24.6	17.8	15.4	16.6
28	25.8	23.9	24.8	27.3	23.6	25.4	25.9	23.2	24.5	17.1	14.4	15.9
29	25.3	23.1	24.2	27.7	24.2	25.8	25.9	22.7	24.3	16.8	14.3	15.6
30	25.5	23.3	24.3	27.2	23.6	25.3	26.0	22.9	24.4	17.1	14.3	15.7
31	---	---	---	28.0	24.5	26.1	25.4	22.8	24.1	---	---	---
MONTH	27.5	15.8	22.0	28.0	21.8	24.9	27.3	20.8	24.3	---	---	---

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SED. SUSP. SIEVE DIAM. PERCENT FINER THAN .062 MM	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
NOV , 1987						
24...	1015	3980	2.0	99	131	1410
MAR , 1988						
23...	1045	4150	8.0	99	607	6800
JUN						
21...	1030	8370	24.0	100	254	5740
JUL						
20...	1000	3080	23.0	98	74	615

GREEN RIVER BASIN

09317800 ELECTRIC LAKE NEAR SCOFIELD, UT

LOCATION.--Lat 39°36'03", long 111°12'41", in NE¼NE¼SE¼ sec. 14, T. 14 S., R. 6 E., Emery County, Hydrologic Unit 14060009, 25 mi northwest of Huntington, 21 mi east of Fairview.

PERIOD OF RECORD.--November 1973 to current year. Not published prior to 1986. Records available from Utah Power & Light Co.

COOPERATION.--Records provided by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 26,630 acre-ft June 20-23, elevation, 8,564.49 ft; minimum, 21,620 acre-ft Apr. 7-11, elevation, 8,551.19 ft.

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23860	23410	22990	22630	e22480	22090	21710	22410	26190	26550	25810	25060
2	23860	23410	22980	22630	e22480	22080	21690	22450	26240	26530	25800	25020
3	23830	23400	22960	22620	22460	22070	21670	22480	26290	26510	25790	24970
4	23820	23390	22950	22610	22450	22050	21650	22510	26350	26500	25770	24920
5	23800	23380	22950	22600	22440	22030	21640	22570	26400	26480	25740	24880
6	23780	23390	22930	22610	22420	22030	21630	22650	26440	26460	25720	24840
7	23760	23380	22930	22580	22410	22030	21620	22690	26480	26430	25700	24810
8	23740	23370	22910	22580	22390	22020	21620	22730	26500	26410	25680	24780
9	23730	23350	22900	22570	22370	22010	21620	22760	26520	26390	25650	24750
10	23700	23330	22890	22550	22360	22010	21620	22830	26540	26370	25620	24690
11	23690	23310	22880	22550	22340	22000	21620	22930	26560	26340	25600	24650
12	23670	23300	22870	22550	22330	22000	21650	23070	26580	26320	25580	24610
13	23670	23270	22850	e22550	22320	21990	21680	23250	26590	26290	25550	24550
14	23660	23270	22840	e22540	22300	21960	21720	23450	26600	26270	25520	24440
15	23650	23260	22800	e22540	22290	21950	21750	23660	26600	26240	25490	24350
16	23630	23240	22750	e22540	22280	21940	21800	23880	26610	26210	25460	24280
17	23610	23230	22730	e22530	22270	21940	21860	24150	26610	26190	25430	24200
18	23590	23210	22720	e22530	22260	21930	21900	24370	26610	26150	25420	24120
19	23570	23190	22710	e22530	22240	21910	21940	24550	26620	26120	25390	24040
20	23550	23170	22700	e22520	22220	21890	21990	24700	26630	26090	25380	23960
21	23530	23160	22680	e22520	22210	21870	22060	24850	26630	26060	25360	23880
22	23520	23150	22720	e22520	22180	21860	22100	25000	26630	26030	25350	23800
23	23520	23130	22710	e22510	22170	21840	22130	25150	26630	26010	25320	23710
24	23520	23110	22700	e22510	22150	21830	22140	25300	26620	25980	25300	23630
25	23510	23090	22690	e22500	22140	21810	22180	25440	26610	25970	25280	23500
26	23490	23080	22680	e22500	22120	21800	22190	25580	26610	25940	25270	23410
27	23480	23060	22670	e22500	22110	21790	22210	25740	26610	25920	25260	23330
28	23460	23040	22670	e22490	22090	21770	22230	25850	26600	25890	25230	23230
29	23450	23020	22660	e22490	22090	21760	22280	25970	26590	25870	25210	23150
30	23440	23080	22650	e22490	---	21740	22340	26070	26570	25850	25170	23070
31	23430	---	22640	e22480	---	21730	---	26140	---	25830	25120	---
MAX	23860	23410	22990	22630	22480	22090	22340	26140	26630	26550	25810	25060
MIN	23430	23020	22640	22480	22090	21730	21620	22410	26190	25830	25120	23070
(#)	8556.23	8555.09	8554.08	8553.64	8552.53	8551.52	8553.25	8563.27	8564.34	8562.51	8560.70	8555.25
(*)	-460	-350	-440	-160	-390	-360	+610	+3800	+430	-740	-710	-2050

WTR YR 1988 (*) -820

(#) Elevation, in feet, at end of month.
(*) Change in contents, in acre-feet.

e Estimated.

GREEN RIVER BASIN

133

09317997 HUNTINGTON CREEK NEAR HUNTINGTON, UT

LOCATION.--Lat 39°23'07", long 111°05'15", in SE¼NE¼SW¼, sec. 36, T. 16 S., R. 7 E., Emery County, Hydrologic Unit 14060009, on right bank about 500 ft upstream from bridge to Deer Creek Mine, 8 mi northwest of Huntington.

DRAINAGE AREA.--181 mi², approximately.

PERIOD OF RECORD.--October 1979 to current year. Water years 1981-85 not published, records available in office of Utah Power & Light Co., located in Salt Lake City, Ut.

GAGE.--Water-stage recorder. Altitude of gage is 6,450 ft from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Small transmountain diversions to tributaries of San Pitch River (Sevier Lake Basin). Flow regulated by reservoirs above station.

COOPERATION.--Records collected by Utah Power & Light Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,680 ft³/s May 24, 1984, gage height, 4.96 ft; minimum, 3.0 ft³/s Feb. 2-5, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 377 ft³/s May 15, gage height, 4.36 ft; minimum daily discharge, 21 ft³/s Mar. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	48	47	31	29	28	27	72	138	98	e93	e66
2	108	49	48	31	29	28	27	60	134	96	e84	e59
3	108	51	48	31	29	28	27	59	150	98	e69	e59
4	104	42	48	31	29	28	27	62	171	99	e67	e59
5	99	43	48	30	29	28	36	70	186	95	e69	e55
6	98	57	46	31	29	28	38	80	182	94	e68	e55
7	82	48	45	30	29	28	44	71	186	90	e70	e57
8	78	45	44	30	29	25	44	71	199	91	e65	e66
9	75	44	46	30	29	27	37	72	185	87	e65	e59
10	79	45	42	29	29	28	37	87	172	87	e63	e64
11	80	43	38	29	29	26	41	121	161	92	e68	e62
12	79	43	38	29	28	25	46	151	184	100	e71	e60
13	84	44	38	30	29	24	51	198	180	109	e70	e64
14	74	45	37	30	28	21	53	224	168	109	e68	e83
15	68	41	38	30	28	21	55	246	141	114	e67	e73
16	67	48	42	30	29	22	57	265	138	113	e75	e67
17	65	44	51	30	29	23	59	297	144	e116	e78	e60
18	60	56	44	30	28	25	57	248	142	e115	e77	e57
19	58	46	42	30	28	27	52	190	142	e114	e85	e54
20	55	45	37	30	27	28	53	169	143	e95	e85	e53
21	53	46	36	29	28	27	55	172	137	e93	e87	e59
22	46	47	41	30	28	28	50	174	133	e98	e80	e68
23	45	45	38	30	27	28	49	183	130	e95	e73	e72
24	47	44	35	30	27	28	54	187	127	e95	e67	e72
25	49	46	34	30	27	26	55	200	126	e93	e83	e66
26	45	46	33	30	27	25	52	208	137	e93	e67	e66
27	42	43	34	30	28	23	54	208	126	e93	e74	e63
28	42	46	35	29	28	24	57	193	119	e91	e67	e59
29	45	46	34	29	29	27	60	194	86	e93	e82	e58
30	52	45	34	29	---	27	70	182	99	e89	e65	e58
31	46	---	32	29	---	27	---	158	---	e98	e64	---
TOTAL	2151	1381	1253	927	822	808	1424	4872	4466	3043	2266	1873
MEAN	69.4	46.0	40.4	29.9	28.3	26.1	47.5	157	149	98.2	73.1	62.4
MAX	118	57	51	31	29	28	70	297	199	116	93	83
MIN	42	41	32	29	27	21	27	59	86	87	63	53
AC-FT	4270	2740	2490	1840	1630	1600	2820	9660	8860	6040	4490	3720
CAL YR 1987	TOTAL	28279	MEAN	77.5	MAX	215	MIN	32	AC-FT	56090		
WTR YR 1988	TOTAL	25286	MEAN	69.1	MAX	297	MIN	21	AC-FT	50150		

e Estimated

GREEN RIVER BASIN

09319000 EPHRAIM TUNNEL NEAR EPHRAIM, UT
(Transmountain diversion)

LOCATION.--Lat 39°19'47", long 111°25'51", in SE¼SE¼SE¼ sec. 14, T. 17 S., R. 4 E., Sanpete County, Hydrologic Unit 14060009, at east tunnel portal, 9.0 mi east of Ephraim.

PERIOD OF RECORD.--September 1949 to current year. Monthly discharge only for September 1949 to September 1960; figures of daily discharge available in Salt Lake City District Office, Geological Survey. Seasonal records only since October 1971.

GAGE.--Water-stage recorder and masonry control. Datum of gage is 9,694.9 ft NGVD of 1929. (Levels by U.S. Geological Survey, Topographic Division.)

REMARKS.--Records poor. Tunnel diverts from Cottonwood Creek drainage in Colorado River Basin to San Pitch River in the Great Basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 142 ft³/s June 6, 1964, gage height, 5.43 ft; no flow at times in some years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	e21	5.9	.26	.0
2	---	---	---	---	---	---	---	---	e22	5.8	.44	.0
3	---	---	---	---	---	---	---	---	e24	5.5	.74	.0
4	---	---	---	---	---	---	---	---	e29	5.7	.45	.01
5	---	---	---	---	---	---	---	---	e31	5.1	.24	.01
6	---	---	---	---	---	---	---	---	e28	4.7	.68	.0
7	---	---	---	---	---	---	---	---	e25	4.0	.38	.01
8	---	---	---	---	---	---	---	---	e23	3.2	.20	.01
9	---	---	---	---	---	---	---	---	e21	4.0	.18	.03
10	---	---	---	---	---	---	---	---	e19	4.1	.13	.03
11	---	---	---	---	---	---	---	---	e17	3.6	.14	.02
12	---	---	---	---	---	---	---	---	e16	3.4	.14	.02
13	---	---	---	---	---	---	---	---	e15	3.2	.09	.02
14	---	---	---	---	---	---	---	---	13	2.8	.05	.01
15	---	---	---	---	---	---	---	---	12	2.6	.03	.01
16	---	---	---	---	---	---	---	---	12	2.6	.02	.01
17	---	---	---	---	---	---	---	---	11	3.3	.01	.02
18	---	---	---	---	---	---	---	---	12	2.6	.0	.01
19	---	---	---	---	---	---	---	---	11	2.1	.00	.02
20	---	---	---	---	---	---	---	---	12	1.6	.01	.02
21	---	---	---	---	---	---	---	---	11	1.2	.01	.02
22	---	---	---	---	---	---	---	---	10	1.1	.0	.02
23	---	---	---	---	---	---	---	---	9.8	1.0	.0	.02
24	---	---	---	---	---	---	---	---	9.3	.89	.00	.02
25	---	---	---	---	---	---	---	---	9.7	.84	.01	.02
26	---	---	---	---	---	---	---	---	8.3	.67	.01	.02
27	---	---	---	---	---	---	---	---	7.7	.57	.01	.02
28	---	---	---	---	---	---	---	---	6.9	.39	.01	.03
29	---	---	---	---	---	---	---	---	7.2	.38	.01	.03
30	---	---	---	---	---	---	---	---	6.6	.44	.01	.02
31	---	---	---	---	---	---	---	---	---	.35	.02	---
TOTAL	---	---	---	---	---	---	---	---	460.5	83.63	4.28	0.48
MEAN	---	---	---	---	---	---	---	---	15.3	2.70	.14	.016
MAX	---	---	---	---	---	---	---	---	31	5.9	.74	.03
MIN	---	---	---	---	---	---	---	---	6.6	.35	.00	.00
AC-FT	---	---	---	---	---	---	---	---	913	166	8.5	1.0

e Estimated

GREEN RIVER BASIN

135

09323000 SPRING CITY TUNNEL NEAR SPRING CITY, UT
(Transmountain diversion)

LOCATION.--Lat 39°25'34", long 111°21'51", in NW¼SW¼SE¼ sec. 16, T. 16 S., R. 5 E., Sanpete County, Hydrologic Unit 14060009, at west portal of tunnel, 11 mi east of Spring City.

PERIOD OF RECORD.--October 1949 to current year. Monthly discharges only for October 1949 to September 1960. Figures of daily discharge available from Salt Lake City District Office, Geological Survey. Seasonal records only since October 1971.

GAGE.--Water-stage recorder. Datum of gage is 9,838 ft NGVD of 1929. Prior to Aug. 24, 1960, at datum about 0.3 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Tunnel diverts from Cottonwood Creek drainage in Colorado River Basin to San Pitch River in the Great Basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 111 ft³/s July 23, 1965; possibly no flow at times in some years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	e15	6.1	2.3	e1.2
2	---	---	---	---	---	---	---	---	17	5.8	2.9	e1.2
3	---	---	---	---	---	---	---	---	24	5.8	2.9	e1.2
4	---	---	---	---	---	---	---	---	32	5.9	2.3	e1.1
5	---	---	---	---	---	---	---	---	34	5.3	2.2	e1.1
6	---	---	---	---	---	---	---	---	31	4.9	2.7	e.90
7	---	---	---	---	---	---	---	---	28	4.7	2.0	e.92
8	---	---	---	---	---	---	---	---	25	4.5	1.8	e.91
9	---	---	---	---	---	---	---	---	24	4.4	1.8	e.94
10	---	---	---	---	---	---	---	---	21	4.2	1.8	e.94
11	---	---	---	---	---	---	---	---	19	4.0	1.8	e.84
12	---	---	---	---	---	---	---	---	18	3.8	1.7	e.84
13	---	---	---	---	---	---	---	---	17	3.7	1.7	e.84
14	---	---	---	---	---	---	---	---	16	3.6	1.6	e.82
15	---	---	---	---	---	---	---	---	15	3.4	1.6	e.82
16	---	---	---	---	---	---	---	---	14	3.3	1.6	e.82
17	---	---	---	---	---	---	---	---	14	3.2	1.6	e.88
18	---	---	---	---	---	---	---	---	14	3.1	1.5	e.84
19	---	---	---	---	---	---	---	---	13	3.0	1.5	e.86
20	---	---	---	---	---	---	---	---	13	2.8	1.6	e.86
21	---	---	---	---	---	---	---	---	11	2.7	1.6	e.86
22	---	---	---	---	---	---	---	---	8.5	2.6	1.5	e.86
23	---	---	---	---	---	---	---	---	9.1	2.6	1.4	e.86
24	---	---	---	---	---	---	---	---	8.2	2.6	1.4	e.86
25	---	---	---	---	---	---	---	---	8.4	2.5	1.4	e.84
26	---	---	---	---	---	---	---	---	9.3	2.4	1.5	e.84
27	---	---	---	---	---	---	---	---	8.2	2.4	1.4	e.84
28	---	---	---	---	---	---	---	---	7.6	2.4	1.3	e.86
29	---	---	---	---	---	---	---	---	7.1	2.4	1.3	e.88
30	---	---	---	---	---	---	---	---	6.5	2.5	1.3	e.88
31	---	---	---	---	---	---	---	---	---	2.4	1.3	---
TOTAL	---	---	---	---	---	---	---	---	487.9	113.0	54.3	27.41
MEAN	---	---	---	---	---	---	---	---	16.3	3.65	1.75	.91
MAX	---	---	---	---	---	---	---	---	34	6.1	2.9	1.2
MIN	---	---	---	---	---	---	---	---	6.5	2.4	1.3	.82
AC-FT	---	---	---	---	---	---	---	---	968	224	108	54

e Estimated

GREEN RIVER BASIN

09323900 JOES VALLEY RESERVOIR NEAR ORANGEVILLE, UT

LOCATION.--Lat $39^{\circ}17'20''$, long $111^{\circ}16'10''$, in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 5, T. 18 S., R. 6 E., Emery County, Hydrologic Unit 14060009, on Seeley Creek 5.2 mi upstream from Cottonwood Creek, and 12.6 mi west of Orangeville.

DRAINAGE AREA.--146 mi².

PERIOD OF RECORD.--November 1965 to current year.

GAGE.--Mercury gage in control house at downstream end of outlet tunnel. Datum of gage is NGVD of 1929 (levels by Bureau of Reclamation).

REMARKS.--Reservoir is formed by earthfill rock-faced dam. Storage began Nov. 3, 1965. Usable capacity, 54,610 acre-ft between elevations 6,910.0 and 6,989.7 ft above mean sea level. Dead storage, 870 acre-ft between elevations 6,817.0 and 6,866.5 ft. Inactive storage, 6,980 acre-ft between elevations 6,866.5 and 6,910.0 ft. Figures given herein represent total contents. Water is used for irrigation. Huntington North Reservoir, a small off-channel reservoir near Huntington, is operated in conjunction with Joes Valley Reservoir; records not included.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 66,030 acre-ft June 20, 21, 1983; minimum observed since reservoir was first filled, 7,710 acre-ft Oct. 1, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 62,110 acre-ft several days in June, elevation, 6,989.4 ft; minimum observed, 43,460 acre-ft, Mar. 14, 18, elevation, 6,971.6 ft.

MONTHEND ELEVATION, IN FEET, AND CONTENTS AT 2400, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	6,974.6	46,280	--
Oct. 31	6,973.1	44,850	-1430
Nov. 30	6,973.9	45,610	+760
Dec. 31	6,973.2	44,940	-670
CAL YR 1987	--	--	-1920
Jan. 31	6,972.5	44,290	-650
Feb. 29	6,971.7	43,550	-740
Mar. 31	6,971.9	43,730	+180
Apr. 30	6,973.9	45,610	+1880
May 31	6,984.8	56,870	+11260
June 30	6,988.8	61,420	+4550
July 31	6,982.1	53,920	-7500
Aug. 31	6,976.7	48,330	-5590
Sept. 30	6,971.8	43,640	-4690
WTR YR 1988	--	--	-2640

* No gage reading, contents interpolated.

09326500 FERRON CREEK (UPPER STATION) NEAR FERRON, UT

LOCATION.--Lat 39°06'15", long 111°12'57", in NE¼SE¼SW¼ sec. 2, T. 20 S., R. 6 E., Emery County, Hydrologic Unit 14060009, on right bank 1.8 mi upstream from Dry Wash and 4.5 mi west of Ferron.

DRAINAGE AREA.--138 mi².

PERIOD OF RECORD.--May 1911 to September 1923, October 1947 to current year. Monthly discharge only for some periods, published in WSP 1313. Records for station at site 2 mi downstream published as Ferron Creek near Ferron, Apr. 1909 to Oct. 1911, not equivalent because of diversions 1.5 mi downstream from present site.

REVISED RECORDS.--WSP 1243: 1951(P). WSP 1313: 1920(M).

GAGE.--Water-stage recorder. Altitude of gage is 6,210 ft from topographic map. May 6, 1911 to Sept. 30, 1923, nonrecording gages in vicinity of present site at different datums. Dec. 19, 1947 to Sept. 30, 1966, at site 1.5 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Slight regulation by small reservoir above station (capacity not known). Small diversions above station for irrigation, including a transmountain diversion to tributary of San Pitch River (Sevier Lake basin). Greater part of flow diverted during irrigation season by Upper North and Upper South Canals, 1.5 mi below station.

AVERAGE DISCHARGE.--53 years, 68.9 ft³/s, 49,920 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 4,180 ft³/s Aug. 27, 1952, gage height, 9.71 ft, site and datum then in use, from rating table extended above 400 ft³/s on basis of slope-area measurements at gage heights 8.70 ft and 9.71 ft; site and datum then in use; no flow Oct. 19-21, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 26	2030	*379	*5.25				

Minimum observed discharge, 4.9 ft³/s Feb. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	17	e14	e12	e9.0	e11	13	66	184	69	26	14
2	12	18	e13	e11	e8.0	e10	15	51	195	67	25	13
3	12	19	e13	e12	e7.6	e10	25	52	227	64	28	13
4	11	15	e14	e13	e7.2	e11	26	56	257	63	25	13
5	11	20	e14	e13	e7.0	12	24	60	256	60	23	12
6	11	40	e14	e13	e7.2	13	34	67	235	56	26	12
7	11	20	e13	e14	e7.4	11	48	56	215	52	26	12
8	11	14	e14	e13	e7.6	e10	37	53	198	49	27	12
9	11	11	e14	e14	e7.8	12	23	53	189	47	21	12
10	11	13	e14	e12	e7.8	e10	27	69	178	46	18	11
11	11	11	e15	e12	e8.2	e12	39	98	168	44	19	12
12	12	11	e14	e12	e8.4	e11	50	130	157	42	22	14
13	18	12	e13	e13	e8.4	e10	59	159	149	40	19	17
14	18	13	e12	e10	e8.8	e10	58	183	144	39	16	16
15	13	12	e12	e9.2	e8.0	e11	47	206	136	36	16	14
16	12	e13	e12	e8.0	e7.2	10	55	231	131	36	16	13
17	12	e14	e13	e8.2	e6.8	e9.0	83	267	128	35	16	12
18	12	e13	e13	e8.2	e6.0	e10	64	246	123	34	16	12
19	12	e13	e14	e8.0	e6.0	12	53	218	119	32	16	11
20	11	e13	e13	e6.6	e6.0	17	52	212	116	31	20	12
21	11	e13	e14	e6.8	e6.5	29	57	224	116	30	22	13
22	12	e14	e14	e7.0	e6.5	27	48	248	110	29	19	17
23	12	e14	e13	e8.0	e7.0	20	41	276	104	28	16	13
24	14	e14	e13	e10	e6.5	16	44	280	98	28	15	12
25	14	e13	e11	e9.8	e6.5	17	43	280	94	30	15	12
26	12	e13	e12	e9.6	e7.0	35	36	305	95	30	15	11
27	12	e14	e12	e9.0	e8.0	41	40	295	91	28	18	11
28	12	e14	e13	e9.0	e8.5	20	48	280	84	27	15	11
29	12	e13	e13	e9.0	e8.5	16	60	264	83	26	14	11
30	23	e13	e13	e9.5	---	15	78	234	74	26	14	11
31	14	---	e13	e10	---	15	---	202	---	27	14	---
TOTAL	392	447	409	319.9	215.4	473.0	1327	5421	4454	1251	598	379
MEAN	12.6	14.9	13.2	10.3	7.43	15.3	44.2	175	148	40.4	19.3	12.6
MAX	23	40	15	14	9.0	41	83	305	257	69	28	17
MIN	11	11	11	6.6	6.0	9.0	13	51	74	26	14	11
AC-FT	778	887	811	635	427	938	2630	10750	8830	2480	1190	752

CAL YR 1987	TOTAL	16901.4	MEAN	46.3	MAX	370	MIN	6.0	AC-FT	33520
WTR YR 1988	TOTAL	15686.3	MEAN	42.9	MAX	305	MIN	6.0	AC-FT	31110

e Estimated

GREEN RIVER BASIN

09328500 SAN RAFAEL RIVER NEAR GREEN RIVER, UT

LOCATION.--Lat 38°51'30", long 110°22'10", in SE¼SE¼NW¼ sec. 34, T. 22 S., R. 14 E., Emery County, Hydrologic Unit 14060009, on left bank 300 ft upstream from bridge on State Highway 24, 14.0 mi southwest of Green River, and 34.3 mi upstream from mouth.

DRAINAGE AREA.--1,628 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1909 to September 1918, September 1919 to July 1920 (gage heights only), October 1945 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,190 ft from topographic map. May 5, 1909 to Sept. 10, 1918, staff gage, and Sept. 10, 1919 to July 10, 1920, tape-weight gage. Nov. 29, 1945 to July 7, 1976, water-stage recorder at various sites and datums about 1 mi upstream.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions above station for irrigation of about 42,000 acres. Several small transmountain diversions from tributaries for irrigation in Sevier Lake basin, and some storage since Nov. 3, 1965, in Joes Valley Reservoir (see station 09323900).

AVERAGE DISCHARGE.--52 years (1909-18, 1945-88), 157 ft³/s, 113,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft³/s, Sept. 2, 1909, gage height, 12.7 ft, site and datum then in use, from rating curve extended above 3,100 ft³/s; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 7	1818	*885	*7.49				

Minimum daily discharge, 1.0 ft³/s Sep. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	111	e37	e33	e37	e265	55	38	51	67	5.6	6.1
2	31	85	e37	e25	e48	e200	50	44	71	42	4.7	4.8
3	29	118	e39	e28	e50	e130	50	44	61	33	4.9	5.3
4	28	95	e38	e36	e44	105	53	47	62	32	7.7	2.8
5	29	76	e41	e42	e43	89	52	41	63	40	17	2.3
6	29	218	e44	e46	e45	81	51	36	48	34	7.3	2.1
7	28	572	e38	e43	e45	73	52	35	39	25	7.1	1.6
8	27	301	e35	e41	e48	69	53	28	40	24	5.4	1.3
9	31	111	e32	e40	e48	66	51	32	39	22	4.6	1.0
10	31	74	e34	e40	e60	61	55	31	32	19	6.1	2.7
11	33	59	e32	e45	e58	62	46	28	30	21	4.5	3.0
12	34	54	e28	e34	e58	56	45	28	29	19	3.1	3.1
13	47	49	e29	e26	e66	51	43	27	30	23	2.7	4.1
14	89	49	e30	e27	e65	51	40	31	27	20	2.6	5.6
15	188	47	e27	e30	e64	51	38	25	28	15	4.0	16
16	97	47	e31	e34	e70	58	38	28	27	13	4.5	21
17	73	44	e39	e35	e68	65	42	30	21	12	3.3	19
18	61	40	e46	e41	e80	72	135	36	21	9.1	4.1	16
19	55	41	e44	e34	e92	79	148	61	21	6.4	3.7	14
20	53	42	e42	e23	e100	72	109	50	26	5.5	3.0	15
21	54	e42	e44	e29	e110	64	69	34	26	5.3	6.1	22
22	51	e40	e43	e27	e140	59	128	31	29	5.3	5.3	27
23	51	e41	e45	e28	e200	65	115	32	35	5.6	14	37
24	50	e41	e40	e24	e250	62	82	33	30	6.9	6.6	28
25	71	e40	e40	e25	e270	57	66	34	28	6.9	9.4	30
26	108	e42	e43	e27	e290	54	59	30	27	6.7	7.6	26
27	78	e39	e45	e29	e275	52	54	27	33	6.8	5.8	24
28	68	e37	e43	e29	e300	60	49	26	39	8.4	4.5	22
29	63	e38	e44	e40	e320	66	43	31	144	7.2	4.3	22
30	65	e36	e43	e38	---	61	40	30	135	7.6	4.4	23
31	108	---	e37	e38	---	55	---	34	---	7.9	4.3	---
TOTAL	1792	2629	1190	1037	3344	2411	1911	1062	1292	556.6	178.2	407.8
MEAN	57.8	87.6	38.4	33.5	115	77.8	63.7	34.3	43.1	18.0	5.75	13.6
MAX	188	572	46	46	320	265	148	61	144	67	17	37
MIN	27	36	27	23	37	51	38	25	21	5.3	2.6	1.0
AC-FT	3550	5210	2360	2060	6630	4780	3790	2110	2560	1100	353	809

CAL YR 1987 TOTAL 29273 MEAN 80.2 MAX 1230 MIN 19 AC-FT 58060
WTR YR 1988 TOTAL 17810.6 MEAN 48.7 MAX 572 MIN 1.0 AC-FT 35330

e Estimated

GREEN RIVER BASIN

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09328500 SAN RAFAEL RIVER NEAR GREEN RIVER, UT--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1946 to September 1949, October 1950 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July to September 1949, November 1950 to September 1962, October 1964 to September 1979, daily, October 1979 to September 1980, March 1982 to current year.

WATER TEMPERATURES: July to September 1949, October 1950 to September 1962, October 1964 to September 1978.

SUSPENDED-SEDIMENT DISCHARGE: March 1948 to September 1949, October 1950 to September 1959.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily (water years 1949, 1951-70, 1974-76), 7,230 microsiemens July 15, 1954, and June 29, 1977; minimum daily (water years 1949, 1951-76), 689 microsiemens June 29, 1957.

WATER TEMPERATURES: Maximum (water years 1949, 1951-61, 1966-76), 35.0°C July 11, 1954; minimum, 0.0°C on many days during winter period each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 5,050 microsiemens Sept. 9; minimum, 1,900 microsiemens June 28.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3
OCT , 1987										
27...	1310	80	2990	8.20	20.0	12.0	9.00	661	930	760
NOV										
30...	1300	37	3040	8.20	10.0	1.5	12.5	659	1100	920
MAR , 1988										
28...	1300	60	2860	8.20	13.0	7.0	10.7	655	1000	810
APR										
29...	1330	43	3490	8.30	26.0	18.5	7.70	656	1300	1000
MAY										
23...	1045	33	3050	8.30	26.0	20.0	7.80	657	1000	770
JUN										
20...	1330	28	3160	8.30	31.5	25.5	6.90	658	1200	960
JUL										
21...	1030	5.6	3170	8.10	33.5	23.0	6.80	662	1300	1100
AUG										
29...	1320	4.1	3550	8.10	33.5	28.5	6.60	656	1400	1200
SEP										
06...	1200	2.2	4170	8.20	27.5	23.5	7.00	656	1500	1300

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT , 1987									
27...	190	110	380	47	6	6.5	166	1500	45
NOV									
30...	210	130	320	39	4	6.3	144	1700	52
MAR , 1988									
28...	200	130	350	42	5	6.7	228	1500	55
APR									
29...	220	180	590	50	7	1.9	258	2300	66
MAY									
23...	190	130	410	47	6	9.6	243	1600	51
JUN									
20...	210	160	390	42	5	9.0	225	1700	55
JUL									
21...	240	170	370	38	5	11	189	1600	73
AUG									
29...	290	170	410	38	5	10	190	1900	100
SEP									
06...	290	200	500	41	6	10	226	2400	110

GREEN RIVER BASIN

09328500 SAN RAFAEL RIVER NEAR GREEN RIVER, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	FLUORIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
OCT , 1987									
27...	0.3	6.8	2690	2340	3.66	581	0.30	0.32	0.04
NOV									
30...	0.3	8.8	2810	2520	3.82	278	0.40	0.37	0.03
MAR , 1988									
28...	0.3	3.8	2540	2380	3.45	411	<0.10	<0.10	0.04
APR									
29...	0.3	5.6	3690	3520	5.02	432	<0.10	--	0.05
MAY									
23...	0.4	6.6	2690	2540	3.66	238	<0.10	<0.10	0.04
JUN									
20...	0.4	7.2	2740	2670	3.73	210	<0.10	<0.10	0.06
JUL									
21...	0.3	7.1	2780	2590	3.78	42.3	<0.10	<0.10	0.10
AUG									
29...	0.3	4.5	3160	3000	4.30	35.0	<0.10	<0.10	0.08
SEP									
06...	0.3	4.7	3950	3650	5.37	23.5	<0.10	<0.10	0.10

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
OCT , 1987									
27...	0.06	0.08	0.46	0.5	0.8	3.5	0.01	<0.01	--
NOV									
30...	0.06	0.08	0.57	0.6	1.0	4.4	0.01	0.04	0.12
MAR , 1988									
28...	0.03	0.04	0.36	0.4	--	--	0.22	<0.01	--
APR									
29...	--	--	0.35	0.4	--	--	<0.01	--	--
MAY									
23...	0.03	0.04	0.76	0.8	--	--	0.04	<0.01	--
JUN									
20...	0.05	0.06	0.54	0.6	--	--	0.05	0.01	0.03
JUL									
21...	0.09	0.12	0.7	0.8	--	--	0.02	<0.01	--
AUG									
29...	0.08	0.1	1.0	1.1	--	--	0.02	<0.01	--
SEP									
06...	0.13	0.17	0.6	0.7	--	--	0.02	<0.01	--

DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
AUG , 1988								
29...	1320	190	1	<10	1	4	7	140

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
AUG , 1988							
29...	<5	250	70	5	<9	1	10

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

APR , 1988			
29...	1330	7.8	0.9
MAY			
23...	1045	8.6	0.9
JUL			
21...	1030	5.8	0.3
AUG			
29...	1320	4.9	0.3

OCT , 1987		
27...	1310	250
NOV		
30...	1300	250
MAR , 1988		
28...	1300	230
APR		
29...	1330	300
MAY		
23...	1045	260
JUN		
20...	1330	310
JUL		
21...	1030	340
AUG		
29...	1320	400
SEP		
06...	1200	430

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
ONCE-DAILY

[illegible]

GREEN RIVER BASIN

09328500 SAN RAFAEL RIVER NAR GREEN RIVER, UT--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
MAY . 1988					
23...	1045	33	20.0	293	26
JUN					
20...	1330	28	25.5	113	8.5
JUL					
21...	1030	5.6	23.0	58	0.88
AUG					
29...	1320	4.1	28.5	32	0.35
SEP					
06...	1200	2.2	23.5	11	0.06

DIRTY DEVIL RIVER BASIN

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09329050 SEVEN MILE CREEK NEAR FISH LAKE, UT

LOCATION.--Lat 38°37'40", long 111°38'50", in SE¼SW¼SW¼ sec. 13, T. 25 S., R. 2 E., Sevier County, Hydrologic Unit 14070003, on left bank 0.4 mi upstream from bridge on State Highway 25, about 0.7 mi upstream from Johnson Valley Reservoir, and 3.5 mi northeast of north end of Fish Lake.

DRAINAGE AREA.--24.0 mi².

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 9,200 ft from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--24 years, 16.0 ft³/s, 11,590 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 369 ft³/s June 1, 1984, gage height, 4.03 ft; minimum, 1.9 ft³/s Nov. 16, 17, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 80 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 14	1930	*235	*3.16	No other peak greater than base discharge.			
Minimum daily, 3.0 ft ³ /s Jan. 20.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	11	e7.5	e4.0	e5.0	e6.0	e9.0	e40	33	12	12	8.1
2	7.5	9.4	e8.0	e3.5	e5.0	e6.0	e10	e49	34	12	11	7.4
3	7.5	10	e7.5	e4.0	e4.5	e6.5	e10	e45	35	12	15	7.2
4	7.5	8.8	e7.0	e4.5	e5.0	e7.0	e10	e44	36	12	11	7.3
5	7.7	9.3	e7.5	e4.5	e5.0	e7.0	e11	e45	32	11	9.4	7.3
6	7.4	10	e7.0	e4.5	e5.0	e7.0	e14	e45	29	11	9.6	7.2
7	7.3	8.9	e7.5	e4.0	e5.0	e6.5	e16	e42	26	10	9.4	7.2
8	7.2	8.9	e6.5	e4.0	e5.5	e7.0	e15	e44	24	10	8.9	7.1
9	7.2	11	e6.5	e4.0	e5.5	e7.0	e15	e45	22	11	8.4	7.2
10	7.3	10	e7.0	e4.5	e6.0	e7.0	e15	e50	21	13	8.5	7.3
11	7.3	e10	e7.5	e4.5	e5.5	e6.0	e17	e56	20	12	8.9	7.2
12	7.3	e9.0	e6.5	e4.0	e5.5	e5.5	e20	83	19	12	9.0	8.0
13	10	e8.5	e6.5	e3.5	e5.5	e6.0	e25	108	18	12	8.5	8.8
14	9.6	e7.5	e6.0	e4.0	e5.5	e6.5	e27	140	17	11	8.3	8.2
15	8.4	e7.5	e5.5	e4.0	e5.5	e6.5	e24	129	17	11	8.3	7.8
16	7.8	e9.0	e6.0	e4.5	e6.0	e6.0	e21	125	16	11	8.2	7.5
17	7.7	e11	e6.0	e4.5	e5.0	e6.5	e23	132	17	11	8.2	7.4
18	7.6	e8.0	e6.0	e4.5	e5.0	e7.5	e25	102	16	11	8.4	7.3
19	7.5	e8.5	e6.0	e4.0	e5.0	e7.5	e26	79	16	10	8.5	7.4
20	7.9	e8.5	e5.5	e3.0	e5.0	e8.0	e27	71	17	10	8.8	7.4
21	7.8	e9.0	e6.0	e4.0	e5.0	e7.0	e26	80	16	10	8.8	7.8
22	7.6	e8.5	e6.0	e3.5	e5.5	e7.5	e25	85	15	9.9	8.8	8.3
23	7.9	e8.0	e6.0	e4.0	e5.5	e7.0	e25	82	16	10	8.5	7.8
24	8.9	e8.0	e5.0	e4.0	e5.5	e7.5	e25	64	16	11	8.5	7.5
25	9.1	e8.5	e5.0	e4.0	e5.5	e8.0	e27	62	14	11	8.7	7.4
26	8.0	e7.9	e4.5	e4.5	e5.5	e9.0	e27	71	15	11	9.0	7.4
27	7.7	e7.8	e4.5	e4.5	e6.0	e8.5	e30	57	15	11	9.0	7.4
28	7.5	e8.0	e4.5	e4.5	e6.0	e8.0	e32	51	15	11	8.4	7.2
29	8.2	e8.0	e5.0	e5.5	e6.0	e7.5	e35	45	16	11	8.2	7.3
30	10	e7.5	e5.0	e5.5	---	e7.0	e37	41	13	11	8.3	7.4
31	9.1	---	e5.0	e5.0	---	e8.0	---	36	---	12	9.2	---
TOTAL	246.9	266.0	190.0	131.0	155.5	218.0	649.0	2148	616	343.9	283.7	225.8
MEAN	7.96	8.87	6.13	4.23	5.36	7.03	21.6	69.3	20.5	11.1	9.15	7.53
MAX	10	11	8.0	5.5	6.0	9.0	37	140	36	13	15	8.8
MIN	7.2	7.5	4.5	3.0	4.5	5.5	9.0	36	13	9.9	8.2	7.1
AC-FT	490	528	377	260	308	432	1290	4260	1220	682	563	448

CAL YR 1987	TOTAL	4664.1	MEAN	12.8	MAX	105	MIN	2.5	AC-FT	9250
WTR YR 1988	TOTAL	5473.8	MEAN	15.0	MAX	140	MIN	3.0	AC-FT	10860

e Estimated

DIRTY DEVIL RIVER BASIN

09330000 FREMONT RIVER NEAR BICKNELL, UT

LOCATION.--Lat 38°18'25", long 111°31'03", in SW¼NE¼NW¼ sec. 7, T. 29 S., R. 4 E., Wayne County, Hydrologic Unit 14070003, on left bank at upstream side of county road bridge, 2.9 mi southeast of Bicknell along Highway U-24.

DRAINAGE AREA.--751 mi².

PERIOD OF RECORD.--May 1909 to December 1912, published as "near Thurber", October 1937 to September 1958 (1944-46, fragmentary), October 1976 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,920 ft from topographic map. May 1909 to December 1912, staff gage near present site at different datum. October 1937 to June 28, 1949, staff gages on two canals and river station about 0.25 mi downstream at different datums. June 28, 1949 to Apr. 29, 1958, water-stage recorders replaced staff gages on river and canal site using same datum. Apr. 29 to Sept. 30, 1958, staff gage on river at site 600 ft farther downstream from water-stage recorder at datum 1.67 ft lower.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 10,600 acres above station. Flow regulated by Fish Lake and Johnson, Forsythe, and Mill Meadow Reservoirs.

AVERAGE DISCHARGE.--33 years (1909-12, 1937-43, 1946-58, 1976-88), 91.1 ft³/s, 66,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,200 ft³/s Apr. 5, 1942, gage height, 5.8 ft, site and datum in use (from floodmarks), from rating curve extended above 700 ft³/s; minimum observed, 18 ft³/s June 2, 4, 13-15, 17, 18, 1912.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 451 ft³/s Apr. 8, gage height, 2.04 ft; minimum discharge, 47 ft³/s July 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	114	86	e70	99	223	133	e150	112	76	81	106
2	76	106	89	e75	101	155	137	e135	110	80	76	96
3	76	105	93	e80	98	117	137	e125	105	78	84	88
4	76	103	92	e90	e100	110	198	e110	103	77	85	87
5	76	114	98	e100	103	109	230	e105	91	72	88	86
6	76	130	97	102	98	111	250	e120	84	70	103	81
7	77	111	94	e95	97	104	338	e115	85	70	105	79
8	78	101	e88	100	102	103	376	e105	86	65	104	78
9	79	97	82	e96	101	111	249	e97	88	66	99	75
10	82	96	92	101	103	109	186	e94	87	66	105	76
11	88	95	e87	e105	102	108	174	e99	89	66	105	73
12	90	96	e65	e112	107	113	205	123	87	64	121	97
13	117	97	e60	e99	107	107	231	135	87	59	101	109
14	117	110	e62	98	e105	105	200	141	86	61	87	95
15	98	98	e63	99	e103	111	180	139	87	63	86	86
16	92	92	e62	99	e104	113	209	125	90	66	82	83
17	97	94	e68	99	e105	122	217	116	92	60	80	88
18	97	84	74	102	e107	110	196	126	97	60	81	83
19	95	86	73	e90	112	112	180	149	95	57	85	83
20	100	89	e73	e80	111	113	175	149	90	55	95	92
21	106	91	70	e84	113	115	204	130	93	56	113	93
22	103	91	74	e87	114	181	186	117	95	57	104	99
23	101	92	e68	e92	115	225	178	118	95	59	98	94
24	110	87	e66	e90	117	257	166	114	91	59	100	92
25	111	91	e68	e94	122	172	158	115	88	60	103	88
26	107	92	e65	96	133	197	150	112	86	61	113	88
27	111	84	e65	97	151	301	144	106	91	65	136	88
28	113	84	e65	97	165	e230	150	102	86	93	132	87
29	120	88	e68	105	185	e190	160	105	90	71	120	91
30	147	86	e68	107	---	e160	165	111	82	73	110	95
31	127	---	e70	101	---	112	---	117	---	81	105	---
TOTAL	3019	2904	2345	2942	3280	4506	5862	3705	2748	2066	3087	2656
MEAN	97.4	96.8	75.6	94.9	113	145	195	120	91.6	66.6	99.6	88.5
MAX	147	130	98	112	185	301	376	150	112	93	136	109
MIN	76	84	60	70	97	103	133	94	82	55	76	73
AC-FT	5990	5760	4650	5840	6510	8940	11630	7350	5450	4100	6120	5270

CAL YR 1987 TOTAL 43693 MEAN 120 MAX 813 MIN 47 AC-FT 86670
WTR YR 1988 TOTAL 39120 MEAN 107 MAX 376 MIN 55 AC-FT 77590

e Estimated

DIRTY DEVIL RIVER BASIN

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09330230 FREMONT RIVER NEAR CAINEVILLE, UT

LOCATION.--Lat 38°16'40", long 111°04'00". in NE¼NE¼NE¼ sec. 20, T. 29 S., R. 8 E., Wayne County, Hydrologic Unit 14070003, on right bank 2.0 mi downstream from Pleasant Creek, 4.5 mi southwest of Caineville, and 9.8 mi east of Fruita, Utah.

DRAINAGE AREA.--1,208 mi².

PERIOD OF RECORD.--March 1967 to current year.

GAGE.--Water-stage recorder and bubble gage. Altitude of gage is 4,750 ft from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--21 years, 78.3 ft³/s, 56,730 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,800 ft³/s July 24, 1984, gage height, 10.20₃ ft, from rating curve extended above 4,000 ft³/s on basis of slope-conveyance study; minimum discharge, 10 ft³/s June 9, 1981, July 31, Aug. 1, 1986.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 29	0200	795	3.31	Aug. 21	2137	*1,070	*3.73

Minimum discharge, 8.4 ft³/s June 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	e110	96	e83	93	165	130	114	63	49	46	53
2	58	e99	97	e85	94	150	140	115	58	42	53	49
3	59	e94	100	e90	94	121	140	101	57	47	40	47
4	60	e95	101	e92	e84	112	149	93	49	55	47	46
5	62	e94	104	e93	e84	107	187	84	44	51	39	46
6	e61	e120	106	e93	90	109	187	80	39	38	42	41
7	e63	e135	105	e86	91	106	212	85	42	32	50	40
8	e64	e115	95	e89	94	97	259	84	25	31	41	35
9	e66	e105	97	e86	96	106	233	76	22	37	32	34
10	e68	e98	104	e88	99	106	170	65	21	37	33	52
11	e72	e90	109	e95	98	102	148	61	30	41	37	64
12	e76	e90	e80	e88	100	98	147	63	31	32	45	66
13	e90	e90	e70	e87	103	98	155	75	29	31	50	89
14	e105	e96	e68	e88	96	99	149	91	23	29	44	70
15	e110	e115	e69	e88	102	104	122	95	20	31	41	61
16	e95	e93	e68	e90	103	108	139	88	18	44	37	54
17	e84	102	e75	e90	90	102	169	91	20	44	29	54
18	e86	94	e80	e92	99	106	148	90	34	38	28	48
19	e90	94	e78	e82	97	107	128	95	42	31	31	45
20	e86	97	e78	e78	98	108	119	96	42	29	36	45
21	e92	98	e76	e77	103	108	134	96	41	30	112	51
22	e100	100	e80	e78	104	126	142	80	41	28	81	54
23	e95	101	e76	e82	104	162	131	70	44	32	33	66
24	e96	98	e74	e80	105	178	129	64	42	34	45	62
25	e100	99	e76	e84	106	172	121	57	36	35	54	58
26	e94	102	e72	e85	109	141	113	61	35	32	50	57
27	e100	96	e72	e87	118	183	104	57	44	34	101	56
28	e105	94	e72	e90	127	234	106	55	52	27	64	55
29	e110	99	e74	92	139	212	103	53	191	36	60	57
30	e170	97	e76	99	---	142	109	64	57	27	52	61
31	e130	---	e71	96	---	121	---	74	---	29	47	---
TOTAL	2702	3010	2599	2713	2920	3990	4423	2473	1292	1113	1500	1616
MEAN	87.2	100	83.8	87.5	101	129	147	79.8	43.1	35.9	48.4	53.9
MAX	170	135	109	99	139	234	259	115	191	55	112	89
MIN	55	90	68	77	84	97	103	53	18	27	28	34
AC-FT	5360	5970	5160	5380	5790	7910	8770	4910	2560	2210	2980	3210
CAL YR 1987	TOTAL	40976	MEAN	112	MAX	671	MIN	26	AC-FT	81280		
WTR YR 1988	TOTAL	30351	MEAN	82.9	MAX	259	MIN	18	AC-FT	60200		

e Estimated

DIRTY DEVIL RIVER BASIN

09330410 BULL CREEK NEAR HANKSVILLE, UT

LOCATION.--Lat 38°07'19", long 110°45'32", in SE¼NE¼SW¼ sec. 12, T. 31 S., R. 10 E., Garfield County, Hydrologic Unit 14070003, on left bank 1 mi downstream from BLM recreation area "Lonesome Beaver Campground" and 21 mi south of Hanksville.

DRAINAGE AREA.--7.53 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1983 to current year.

REVISED RECORDS.--WDR UT-85-1: 1984(M).

GAGE.--Water-stage recorder. Altitude of gage is 7,600 ft from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 200 ft³/s, Aug. 5, 1983, gage height, 3.70 ft; minimum daily, 0.03 ft³/s March 28, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 106 ft³/s Aug. 26, gage height, 2.03 ft; minimum daily discharge, 0.15 ft³/s Jan. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.57	.68	e.25	e.19	e.28	e.40	e.43	e.99	3.8	2.4	.90	e.40
2	.54	.54	e.26	e.17	e.30	e.39	e.45	e1.0	3.6	2.3	.84	e.40
3	.54	.53	e.28	e.20	e.30	e.40	e.46	e1.3	3.4	2.3	.84	.48
4	.54	.47	e.30	e.23	e.28	e.41	e.49	e1.5	3.4	1.8	.84	.58
5	.55	.67	e.31	e.23	e.26	e.40	e.47	e1.7	3.7	1.7	.82	.67
6	.53	.68	e.32	e.24	e.26	e.41	e.49	e1.6	4.2	1.7	.84	.66
7	.55	.58	e.32	e.21	e.28	e.41	e.53	e1.8	4.2	1.7	.81	.48
8	.53	.54	e.30	e.23	e.30	e.38	e.51	e1.9	4.1	1.7	.78	.52
9	.53	.48	e.29	e.22	e.35	e.39	e.49	e2.0	3.7	1.7	.75	.63
10	.53	.45	e.30	e.23	e.40	e.38	e.51	e2.1	3.5	1.5	.70	.78
11	.52	.42	e.30	e.25	e.39	e.39	e.54	2.2	3.4	1.5	.74	.83
12	.48	.37	e.27	e.21	e.38	e.38	e.59	2.4	3.4	1.5	.72	.91
13	.71	.41	e.25	e.19	e.39	e.37	e.63	2.8	3.3	1.4	.66	.77
14	.59	.42	e.25	e.17	e.38	e.36	e.64	3.4	3.2	1.4	.67	.68
15	.55	.18	e.23	e.17	e.37	e.37	e.65	3.8	3.2	1.3	.67	.64
16	.52	e.27	e.24	e.19	e.35	e.37	e.69	4.3	3.2	1.3	.62	.60
17	.49	e.27	e.26	e.19	e.33	e.38	e.67	5.1	3.1	1.3	.64	.52
18	.48	e.25	e.28	e.23	e.33	e.39	e.65	5.8	2.9	1.2	.63	.45
19	.48	e.26	e.26	e.19	e.35	e.41	e.63	5.7	2.8	1.2	.58	.44
20	.48	e.26	e.25	e.15	e.37	e.43	e.68	5.2	2.8	1.1	.58	.41
21	.47	e.27	e.26	e.17	e.38	e.45	e.65	5.1	2.8	1.1	.57	1.1
22	.43	e.29	e.26	e.17	e.39	e.46	e.64	4.8	2.7	1.1	.55	.85
23	.46	e.28	e.26	e.20	e.38	e.47	e.63	4.6	2.7	1.0	.55	.73
24	.50	e.27	e.24	e.21	e.38	e.47	e.66	4.4	2.7	1.0	.54	.60
25	.48	e.26	e.24	e.20	e.37	e.48	e.70	4.4	2.6	.99	.53	.50
26	.47	e.27	e.24	e.23	e.38	e.49	e.68	4.5	2.5	1.1	e1.0	.43
27	.42	e.26	e.25	e.22	e.39	e.50	e.75	4.9	2.7	1.0	e5.0	.37
28	.39	e.25	e.24	e.23	e.40	e.45	e.86	4.9	2.6	.98	e2.0	.39
29	.46	e.26	e.24	e.26	e.41	e.40	e.85	4.9	2.6	.92	e1.0	.39
30	.45	e.25	e.25	e.25	---	e.41	e.96	4.4	2.4	.93	e.60	.39
31	.46	---	e.23	e.26	---	e.43	---	4.0	---	.91	e.50	---
TOTAL	15.70	11.39	8.23	6.49	10.13	12.83	18.58	107.49	95.2	43.03	36.47	17.60
MEAN	.51	.38	.27	.21	.35	.41	.62	3.47	3.17	1.39	1.18	.59
MAX	.71	.68	.32	.26	.41	.50	.96	5.8	4.2	2.4	1.0	1.1
MIN	.39	.18	.23	.15	.26	.36	.43	.99	2.4	.91	.50	.37
AC-FT	31	23	16	13	20	25	37	213	189	85	72	35
CAL YR 1987	TOTAL	835.74	MEAN	2.29	MAX	17	MIN	.18	AC-FT	1660		
WTR YR 1988	TOTAL	383.14	MEAN	1.05	MAX	10	MIN	.15	AC-FT	760		

e Estimated

DIRTY DEVIL RIVER BASIN

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09330410 BULL CREEK NEAR HANKSVILLE, UT--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1983 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT
OCT , 1987												
06...	1640	0.61	420	8.20	18.5	10.0	230	120	72	12	8.2	7
MAR , 1988												
29...	1145	0.40	620	8.20	3.0	9.0	310	120	94	18	24	14
MAY												
10...	1145	2.1	365	8.10	19.0	7.0	210	62	64	11	7.1	7
JUN												
28...	1120	3.1	335	8.20	17.5	10.0	190	51	58	10	6.4	7
AUG												
01...	1120	0.93	375	8.20	21.5	11.0	200	68	61	11	7.1	7
SEP												
02...	1500	0.38	420	8.10	23.0	16.0	220	73	68	13	8.2	7

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)
OCT , 1987												
06...	0.2	0.7	113	73	2.3	0.2	13	249	0.34	0.41	<0.10	0.012
MAR , 1988												
29...	0.6	0.7	189	160	5.3	0.3	14	430	0.58	0.46	<0.10	0.01
MAY												
10...	0.2	0.5	143	68	2.2	0.3	11	250	0.34	1.44	<0.10	0.006
JUN												
28...	0.2	1.0	135	59	1.7	0.5	11	229	0.31	1.91	<0.10	0.016
AUG												
01...	0.2	0.4	130	57	2.0	0.2	12	229	0.31	0.57	<0.10	0.004
SEP												
02...	0.2	0.8	151	64	2.5	0.2	13	260	0.35	0.27	<0.10	0.01

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)
OCT , 1987		
06...	1640	30
MAR , 1988		
29...	1145	40
MAY		
10...	1145	20
JUN		
28...	1120	20
AUG		
01...	1120	30
SEP		
02...	1500	30

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. PERCENT FINER THAN .062 MM	SED. SUSP. FALL DIAM. PERCENT FINER THAN .002 MM	SED. SUSP. FALL DIAM. PERCENT FINER THAN .004 MM	SED. SUSP. FALL DIAM. PERCENT FINER THAN .016 MM	SED. SUSP. FALL DIAM. PERCENT FINER THAN .062 MM	SED. SUSP. FALL DIAM. PERCENT FINER THAN .125 MM
MAY , 1988											
10...	1145	2.1	7.0	92	0.53	--	--	--	--	--	--
JUN											
28...	1120	3.1	10.0	544	4.5	--	27	41	79	99	100
AUG											
01...	1120	0.93	11.0	56	0.14	98	--	--	--	--	--
SEP											
02...	1500	0.38	16.0	154	0.16	96	--	--	--	--	--

DIRTY DEVIL RIVER BASIN

09330500 MUDDY CREEK NEAR EMERY, UT

LOCATION.--Lat 38°58'55", long 111°14'55". in NE¼NW¼NE¼ sec. 21, T. 21 S., R. 6 E., Emery County, Hydrologic Unit 14070002, on left bank 100 ft upstream from Emery Canal and 4.1 mi north of Emery.

DRAINAGE AREA.--105 mi².

PERIOD OF RECORD.--April to July 1909, July 1910 to July 1914, June 1949 to current year.

REVISED RECORDS.--WSP 1633: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,400 ft from topographic map. Apr. 29 to July 31, 1909, reference point. July 23, 1910 to July 16, 1914, staff gages, at sites about 1 mi upstream at different datums. June 29, 1949 to May 1, 1957, water-stage recorder at site 100 ft upstream at datum 2.89 ft higher prior to Mar. 20, 1953, and at datum 1.89 ft higher thereafter.

REMARKS.--Records good except for estimated daily discharges, which are poor. One small diversion for irrigation and two storage reservoirs (total capacity 700 acre-ft) above station.

AVERAGE DISCHARGE.--42 years (1910-13, 1949-88), 40.2 ft³/s, 29,120 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,340 ft³/s May 10, 1952, gage height, 11.14 ft, present datum from rating curve extended above 400 ft³/s on basis of slope-area measurement of peak flow; no flow Apr. 13-16, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 20	1500	*257	*3.05				

Minimum daily discharge, 3.2 ft³/s Jan. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	18	e4.4	e3.8	e3.9	e14	11	31	83	43	40	19
2	11	19	e4.3	e3.5	e3.7	e13	15	24	80	42	43	18
3	11	19	e4.3	e3.7	e3.5	e12	20	29	88	42	43	18
4	11	16	e4.5	e4.0	e3.4	e13	20	30	95	42	35	18
5	12	18	e4.5	e4.2	e3.5	13	18	32	98	40	36	18
6	12	32	e4.5	e4.7	e3.6	15	24	34	98	38	38	20
7	12	19	e4.4	e4.8	e3.8	12	31	29	96	37	36	18
8	12	16	e4.6	e4.9	e3.9	e11	25	28	93	36	35	18
9	11	13	e4.5	e5.0	e4.0	12	16	28	90	36	34	18
10	11	16	e4.5	e4.7	e4.0	9.3	18	34	88	35	34	18
11	11	14	e4.9	e4.8	e4.1	13	25	45	85	37	34	19
12	12	14	e4.5	e4.9	e4.2	e12	30	56	83	37	34	18
13	19	15	e4.2	e4.9	e4.3	e11	33	74	80	36	33	17
14	15	16	e3.9	e4.8	e4.5	e11	32	81	77	36	32	17
15	13	e8.0	e3.8	e4.5	e4.2	11	27	86	74	35	32	16
16	12	e8.0	e3.8	e4.0	e4.0	9.0	32	93	73	35	31	16
17	12	e6.5	e4.1	e4.3	e3.7	e9.2	48	105	72	36	31	15
18	12	e5.5	e4.2	e4.2	e3.7	e10	36	100	69	35	30	15
19	11	e3.9	e4.5	e4.2	e3.7	e13	29	90	68	35	30	14
20	11	e4.3	e4.2	e3.2	e4.5	18	27	85	67	34	46	15
21	11	e4.4	e4.3	e3.6	e5.8	36	29	86	66	33	34	19
22	12	e4.6	e4.3	e3.7	e5.8	29	25	92	64	34	29	18
23	15	e4.6	e4.2	e3.8	e6.8	21	23	98	64	38	28	16
24	15	e4.5	e4.1	e4.2	e6.4	16	24	98	60	37	27	15
25	14	e4.5	e3.6	e3.9	e6.8	21	24	95	58	37	26	15
26	13	e4.4	e3.7	e3.7	e7.5	40	21	97	58	38	29	15
27	13	e4.5	e3.8	e3.5	e9.0	38	22	100	59	43	28	15
28	13	e4.4	e4.0	e3.5	e9.2	19	26	101	67	42	25	14
29	13	e4.4	e4.0	e3.9	e9.0	e13	29	105	57	40	22	15
30	20	e4.3	e4.0	e4.0	---	12	35	100	45	40	19	15
31	15	---	e4.0	e4.2	---	10	---	91	---	40	19	---
TOTAL	398	325.8	130.6	129.1	144.5	496.5	775	2177	2255	1169	993	502
MEAN	12.8	10.9	4.21	4.16	4.98	16.0	25.8	70.2	75.2	37.7	32.0	16.7
MAX	20	32	4.9	5.0	9.2	40	48	105	98	43	46	20
MIN	11	3.9	3.6	3.2	3.4	9.0	11	24	45	33	19	14
AC-FT	789	646	259	256	287	985	1540	4320	4470	2320	1970	996

CAL YR 1987 TOTAL 9499.1 MEAN 26.0 MAX 83 MIN 3.6 AC-FT 18840
WTR YR 1988 TOTAL 9495.5 MEAN 25.9 MAX 105 MIN 3.2 AC-FT 18830

e Estimated

DIRTY DEVIL RIVER BASIN

149

09333500 DIRTY DEVIL RIVER ABOVE POISON SPRING WASH, NEAR HANKSVILLE, UT

LOCATION.--Lat 38°05'39", long 110°24'24", in SE¼SW¼SE¼ sec. 20, T. 31 S., R. 14 E., Garfield County, Hydrologic Unit 14070004, on right bank 0.25 mi upstream from Poison Spring Wash and 25.5 mi south-east of Hanksville.

DRAINAGE AREA.--4,159 mi².

PERIOD OF RECORD.--June 1948 to current year. Prior to October 1968 published as "near Hite."

REVISED RECORDS.--WDR UT-77-1: Drainage area. WDR UT-80-1: 1979, 1977-79(P).

GAGE.--Water-stage recorder. Altitude of gage is 3,850 ft from topographic map. Prior to July 15, 1964, at site 28 mi downstream at different datum. July 15, 1964 to Dec. 14, 1976, approximately 1,200 ft upstream at datum 4.83 ft higher. Dec. 15, 1976 to Sept. 30, 1980 at site 400 ft upstream at datum 4.28 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Many diversions for irrigation above station.

AVERAGE DISCHARGE.--40 years, 103 ft³/s, 74,620 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 35,000 ft³/s Nov. 4, 1957, gage height, 28.1 ft from floodmarks, site and datum then in use, from rating curve extended above 9,000 ft³/s on basis of slope-area measurement at gage height 20.65 ft; no flow at times many years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,700 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 18	1045	*620	*6.81				

Minimum discharge, 0.48 ft³/s July 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e44	e96	e140	e45	e58	193	167	83	42	67	2.6	e48
2	e45	e100	e140	e37	e68	206	153	83	47	30	20	e45
3	e48	e110	e140	e41	e64	202	162	87	42	19	18	42
4	e46	e110	142	e43	e54	160	166	85	39	104	11	36
5	e45	e160	144	e45	e54	143	172	74	31	90	12	28
6	e48	e150	150	e46	e54	144	197	65	25	36	13	26
7	e49	e140	154	e42	e70	144	206	64	17	19	16	34
8	e50	e130	152	e44	e100	141	208	62	13	12	82	35
9	e48	e120	145	e47	e150	141	235	70	14	6.6	31	32
10	e52	e120	144	e54	191	147	245	69	17	4.3	22	31
11	e54	e115	148	e52	194	146	192	70	12	6.6	16	28
12	e60	e115	150	e50	176	140	164	56	10	8.7	14	61
13	e170	e120	e130	e45	185	144	163	48	8.6	6.9	62	97
14	e85	e140	e130	e43	200	145	161	44	8.9	6.7	58	115
15	e75	e120	e100	e43	214	151	168	49	13	3.4	25	86
16	e66	e120	e105	e49	217	163	160	76	11	1.6	15	63
17	e66	e125	e110	e58	198	173	218	82	7.8	1.3	15	53
18	e70	e130	e115	e64	173	164	426	152	6.0	.98	13	51
19	e68	e130	e105	e45	174	167	310	75	6.2	3.5	7.4	46
20	e66	e125	e92	e30	187	162	192	54	4.4	8.0	5.9	50
21	e68	e130	e94	e25	200	165	114	45	2.3	7.9	4.0	84
22	e70	e135	e99	e30	207	165	101	46	3.6	6.5	106	129
23	e70	e130	e100	e32	209	163	184	46	9.8	5.5	112	99
24	e84	e130	e90	e32	211	203	127	42	9.9	4.6	51	60
25	e80	e135	e86	e39	195	212	127	40	8.9	4.1	48	53
26	e76	e135	e86	e45	180	220	121	36	8.8	7.1	e350	50
27	e80	e130	e80	e50	171	178	97	28	5.0	6.8	e300	48
28	e80	e130	e74	e50	178	184	92	30	3.7	12	e175	48
29	e100	e135	e76	e60	180	251	86	29	63	18	e140	47
30	e90	e140	e66	e56	---	267	82	29	230	12	e75	53
31	e84	---	e58	e60	---	219	---	27	---	6.3	e60	---
TOTAL	2137	3806	3545	1402	4512	5403	5196	1846	719.9	526.38	1879.9	1678
MEAN	68.9	127	114	45.2	156	174	173	59.5	24.0	17.0	60.6	55.9
MAX	170	160	154	64	217	267	426	152	230	104	350	129
MIN	44	96	58	25	54	140	82	27	2.3	.98	2.6	26
AC-FT	4240	7550	7030	2780	8950	10720	10310	3660	1430	1040	3730	3330

CAL YR 1987 TOTAL 36248.00 MEAN 99.3 MAX 640 MIN .00 AC-FT 71900
WTR YR 1988 TOTAL 32651.18 MEAN 89.2 MAX 426 MIN .98 AC-FT 64760

e Estimated

ESCALANTE RIVER BASIN

09337000 PINE CREEK NEAR ESCALANTE, UT

LOCATION.--Lat 37°51'45", long 111°38'07", in SW¼NE¼SW¼ sec. 12, T. 34 S., R. 2 E., Garfield County, Hydrologic Unit 14070005, on right bank 0.2 mi upstream from unnamed right bank tributary and 7 mi north of Escalante.

DRAINAGE AREA.--68.1 mi².

PERIOD OF RECORD.--July 1950 to September 1955, July 1957 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,400 ft from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Several small storage reservoirs above station.

AVERAGE DISCHARGE.--36 years, 5.16 ft³/s, 3,740 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,010 ft³/s Aug. 2, 1967, gage height, 7.72 ft, from rating curve extended above 35 ft³/s on basis of slope-area measurement at gage height 7.70 ft; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 13	2300	117	3.31	Aug. 21	1620	118	3.33
June 28	1830	*122	*3.36				

Minimum daily discharge, 2.1 ft³/s Dec. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3.2	11	e2.1	e2.7	e3.0	e2.7	e3.5	20	8.8	10	9.5	8.2
2	e3.0	8.4	e2.2	e2.6	e3.0	e2.6	3.8	14	7.4	11	9.9	6.8
3	e2.9	8.9	e2.4	e2.7	e3.2	e2.5	4.1	14	6.6	18	11	6.3
4	e2.8	5.1	e2.6	e2.8	e3.1	e2.4	4.9	12	6.0	18	9.5	6.2
5	e2.7	13	e2.8	e2.9	e3.0	e2.4	4.6	13	5.5	15	8.8	6.1
6	e2.7	8.6	e2.8	e2.9	e2.7	e2.4	4.7	13	5.3	14	10	5.9
7	e2.7	5.2	e2.7	e2.8	e2.6	e2.3	5.8	10	5.2	14	7.1	5.7
8	2.7	4.4	e2.5	e2.7	e2.6	e2.3	6.0	10	5.2	15	5.3	5.8
9	2.7	4.3	e2.7	e2.8	e2.5	e2.3	5.6	12	6.1	17	4.9	5.5
10	2.7	4.3	e3.0	e3.0	e2.4	e2.3	6.0	18	5.9	16	4.8	5.4
11	2.7	4.1	e3.0	e3.1	e2.5	e2.3	6.6	31	9.0	13	5.0	5.6
12	2.8	3.9	e3.0	e3.1	e2.5	e2.4	7.4	50	9.0	14	5.9	7.5
13	3.9	3.9	e2.8	e3.0	e2.6	e2.5	8.5	72	8.7	11	5.1	6.8
14	3.4	3.9	e2.6	e2.9	e2.6	e2.6	11	60	8.1	9.5	4.8	6.1
15	3.0	3.1	e2.5	e2.7	e2.5	e2.7	11	53	7.4	9.3	4.8	6.0
16	2.8	3.4	e2.5	e2.8	e4.0	e2.8	17	44	6.6	9.6	4.8	5.4
17	2.8	4.3	e2.4	e3.0	e2.3	e2.9	13	56	6.4	10	4.7	5.0
18	2.8	3.0	e2.5	e3.2	e2.2	e3.0	11	46	7.0	9.1	6.5	4.7
19	2.8	e2.9	e2.6	e3.1	e2.2	e3.1	11	35	5.7	8.8	7.2	4.8
20	2.8	e2.9	e2.7	e2.7	e2.3	e3.2	10	27	5.0	8.6	7.2	4.6
21	2.8	e2.8	e2.8	e2.6	e2.3	e3.3	12	24	4.9	8.4	11	5.8
22	2.8	e2.8	e2.8	e2.6	e2.4	e3.4	8.7	21	8.2	8.4	7.4	6.1
23	2.9	e2.8	e2.7	e2.7	e2.4	e3.4	8.1	19	12	8.7	8.1	5.5
24	3.5	e2.8	e2.7	e2.8	e2.5	e3.4	7.7	14	11	8.7	7.0	3.8
25	3.3	e2.8	e2.6	e2.8	e2.6	e3.3	7.6	11	11	9.4	7.0	3.5
26	3.0	e2.7	e2.6	e2.9	e2.7	e3.1	7.9	9.4	12	9.1	7.5	4.4
27	2.9	e2.6	e2.7	e3.0	e2.8	e3.0	8.3	9.1	13	9.4	9.3	3.9
28	2.9	e2.5	e2.9	e3.1	e2.8	e3.2	9.5	7.8	17	9.4	8.3	3.0
29	11	e2.4	e2.9	e3.2	e2.8	e3.3	10	7.7	17	9.3	7.4	3.0
30	5.9	e2.3	e2.9	e3.2	---	e3.4	14	9.0	11	9.2	7.6	3.8
31	3.7	---	e2.8	e3.0	---	e3.4	---	9.1	---	9.4	7.8	---
TOTAL	102.6	135.1	82.8	89.4	77.1	87.9	249.3	751.1	252.0	350.3	225.2	161.2
MEAN	3.31	4.50	2.67	2.88	2.66	2.84	8.31	24.2	8.40	11.3	7.26	5.37
MAX	11	13	3.0	3.2	4.0	3.4	17	72	17	18	11	8.2
MIN	2.7	2.3	2.1	2.6	2.2	2.3	3.5	7.7	4.9	8.4	4.7	3.0
AC-FT	204	268	164	177	153	174	494	1490	500	695	447	320
CAL YR 1987	TOTAL	2870.7	MEAN	7.86	MAX	83	MIN	2.1	AC-FT	5690		
WTR YR 1988	TOTAL	2564.0	MEAN	7.01	MAX	72	MIN	2.1	AC-FT	5090		

e Estimated

ESCALANTE RIVER BASIN

151

09337500 ESCALANTE RIVER NEAR ESCALANTE, UT

LOCATION.--Lat 37°46'41", long 111°34'26", in NE¼NW¼SE¼ sec. 9, T. 35 S., R. 3 E., Garfield County, Hydrologic Unit 14070005, on left bank 150 ft downstream from Pine Creek and 2 mi northeast of Escalante.

DRAINAGE AREA.--320 mi².

PERIOD OF RECORD.--August 1909 to April 1913, October 1942 to September 1955, December 1971 to current year. Published as Escalante Creek near Escalante 1909-13.

REVISED RECORDS.--WSP 1149: 1943(M), 1944, 1945(M). WRD UT-73-1: 1972.

GAGE.--Water-stage recorder. Altitude of gage, 5,670 ft from topographic map. Prior to Apr. 30, 1913, staff gage at approximately same site at different datum.

REMARKS.--Records poor. Diversions above station for irrigation of about 2,300 acres of crop and pastureland.

AVERAGE DISCHARGE.--32 years (1909-12, 1942-55, 1972-88), 14.9 ft³/s, 10,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,450 ft³/s August 1953, day unknown, gage height, 9.9 ft from outside high-water mark, from rating curve extended above 540 ft³/s on basis of slope-area measurements at gage heights, 5.50 ft and 7.34 ft from inside gage and 7.59 ft from outside high-water mark; minimum, 0.07 ft³/s Dec. 24, 1978, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 421 ft³/s Nov. 5, gage height 3.80 ft; minimum daily discharge, 1.1 ft³/s Oct. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	59	e7.6	e5.2	e5.8	e5.8	e4.0	15	32	e9.8	e12	e8.8
2	1.1	40	e7.2	e5.6	e5.9	e5.4	4.7	13	29	e10	e80	e8.2
3	1.2	55	e7.0	e5.6	e6.1	e5.0	5.0	14	27	e11	e34	e7.6
4	1.2	26	e6.6	e6.0	e6.2	e5.0	5.3	9.2	22	e11	e33	e7.2
5	1.4	72	e6.4	e6.2	e6.2	e5.0	5.6	4.8	20	e12	e34	e7.0
6	1.5	63	e5.8	e5.8	e6.2	e5.0	6.1	5.3	19	e11	e34	e6.8
7	1.9	e48	e5.7	e5.6	e6.0	e5.0	e6.0	5.4	17	e9.6	e29	e6.6
8	1.9	e28	e5.8	e5.5	e5.6	e5.0	e6.4	5.0	13	e8.0	e20	e6.0
9	1.5	e27	e6.0	e5.8	e5.6	e5.0	e7.5	4.7	11	e6.0	e17	e6.0
10	1.7	e26	e6.2	e6.0	e5.5	e4.8	e8.0	7.9	10	e4.3	e17	e5.6
11	1.5	e24	e6.0	e6.2	e5.6	e4.6	e9.5	16	11	e4.0	e17	e7.0
12	1.8	e20	e5.6	e5.6	e5.8	e4.5	e11	29	11	e3.2	e20	e9.0
13	7.0	e15	e5.5	e5.0	e5.9	e4.4	e13	50	12	e2.8	e17	e10
14	4.5	e22	e6.0	e5.2	e6.0	e4.4	e16	45	12	e2.8	e16	e9.0
15	3.4	e19	e6.6	e5.6	e5.8	e4.4	e20	39	11	e2.9	e15	e8.0
16	2.9	e18	e6.8	e6.0	e5.8	e4.4	18	71	e11	e3.4	e14	e6.6
17	3.0	e16	e6.8	e6.0	e5.8	e4.4	20	90	e10	e5.0	e14	e6.0
18	3.0	e15	e6.0	e5.0	e6.0	e4.4	16	84	e10	e5.0	e13	e5.0
19	4.7	e14	e5.6	e4.0	e6.2	e4.5	18	63	e11	e4.9	e13	e4.4
20	4.9	e13	e5.4	e3.8	3.9	e4.6	16	42	e11	e4.8	e13	e4.2
21	4.5	e12	e5.6	e4.8	e5.8	e4.8	32	22	e12	e4.9	e16	e4.5
22	5.3	e11	e6.0	e4.4	e5.6	e5.0	34	22	e13	e5.2	e17	e4.1
23	5.0	e11	e6.4	e5.2	e5.8	e5.4	34	57	e17	e5.4	e15	e3.8
24	6.8	e10	e6.2	e5.8	e6.0	e5.4	32	50	e16	e11	e14	e3.3
25	7.9	e9.6	e6.0	e5.4	e6.0	e5.4	30	38	e15	e10	e17	2.8
26	7.2	e9.0	e5.6	e5.8	e6.0	e5.2	14	28	e13	e8.8	e12	2.7
27	12	e8.6	e5.2	e6.2	6.0	e5.1	13	31	e11	e9.0	e11	2.6
28	21	e8.4	e5.6	e6.2	6.0	e3.7	11	26	e10	e9.0	e11	2.4
29	53	e8.0	e6.0	e6.4	e6.0	e2.8	7.9	24	e9.6	e12	e10	2.5
30	47	e7.8	e6.2	e6.2	---	e2.7	8.0	29	e9.5	e11	e9.0	2.8
31	23	---	e5.0	e6.9	---	e3.7	---	29	---	e11	e8.8	---
TOTAL	243.9	715.4	188.4	173.0	169.1	144.8	432.0	969.3	436.1	228.8	602.8	170.5
MEAN	7.87	23.8	6.08	5.58	5.83	4.67	14.4	31.3	14.5	7.38	19.4	5.68
MAX	53	72	7.6	6.9	6.2	5.8	34	90	32	12	80	10
MIN	1.1	7.8	5.0	3.8	3.9	2.7	4.0	4.7	9.5	2.8	8.8	2.4
AC-FT	484	1420	374	343	335	287	857	1920	865	454	1200	338

CAL YR 1987 TOTAL 4339.94 MEAN 11.9 MAX 96 MIN .46 AC-FT 8610
WTR YR 1988 TOTAL 4474.1 MEAN 12.2 MAX 90 MIN 1.1 AC-FT 8870

e Estimated

SAN JUAN RIVER BASIN

09378170 SOUTH CREEK ABOVE RESERVOIR NEAR MONTICELLO, UT

LOCATION.--Lat 37°50'48", long 109°22'08", in NE¼SW¼SW¼ sec. 2, T. 34 S., R. 23 E., San Juan County,
Hydrologic Unit 14080203, 200 ft upstream from west side of reservoir and 2 mi southwest of Monticello, Ut.

DRAINAGE AREA.--8.64 mi².

PERIOD OF RECORD.--October 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,170 ft from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 163 ft³/s Nov. 5, 1987, gage height, 4.17 ft; minimum daily,
0.10 ft³/s Oct. 1-6, 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 34 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 5	2330	*163	*4.17	No other peak greater than base discharge.			

Minimum daily discharge, .16 ft³/s Oct. 7.DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.22	11	e.84	e.36	.38	3.6	3.4	12	5.3	1.3	.27	.29
2	.22	12	.86	e.31	.38	3.0	3.5	13	4.9	1.3	.27	.23
3	.20	3.9	.77	e.38	.37	2.6	4.1	13	4.4	1.1	.27	.22
4	.18	2.8	.76	e.44	.34	2.6	4.3	12	4.7	1.1	.27	.22
5	.18	18	.97	e.51	.55	2.6	3.8	11	5.3	1.1	.27	.22
6	.18	46	.79	.58	e.47	2.9	4.5	10	5.3	.98	.42	.22
7	.16	11	.77	.53	e.49	2.9	5.6	9.1	5.3	.94	.44	.22
8	.26	7.9	.67	.50	e.51	2.3	7.2	7.8	5.1	1.3	.41	.22
9	.32	6.4	.66	.61	.51	2.5	7.2	7.0	4.6	1.1	.38	.22
10	.32	5.3	.66	.70	.56	2.6	6.8	6.2	4.1	.90	.38	.24
11	.32	3.9	.70	.65	.57	2.2	6.8	6.4	3.9	.84	.38	.27
12	.32	3.5	.53	.60	.59	2.1	7.5	6.7	3.6	.84	.38	.51
13	.37	3.3	e.50	e.49	.66	1.9	8.5	7.7	3.5	.78	.38	.57
14	.53	3.2	e.47	e.47	.63	2.2	9.3	8.9	3.3	.77	.38	.46
15	.30	2.8	e.46	e.51	.60	2.1	9.8	9.6	3.0	.79	.36	.44
16	.27	2.2	e.51	.48	.64	2.0	12	10	2.9	.84	.34	.44
17	.27	2.0	.55	.47	.58	1.7	15	13	2.7	.78	.35	.44
18	.27	1.8	.59	e.43	.87	1.8	13	14	2.6	.57	.32	.44
19	.27	1.9	.50	e.38	.74	2.0	13	14	2.5	.50	.32	.44
20	.27	2.1	.48	e.34	.70	2.6	11	11	2.3	.50	.32	.44
21	.27	1.9	.65	e.36	.74	3.5	10	8.7	2.2	.46	1.6	.68
22	.27	1.6	.55	e.37	.89	4.6	10	7.7	2.0	.38	.52	.47
23	.27	1.4	.65	.38	.95	5.5	9.7	6.9	1.9	.38	.40	.44
24	.27	1.1	.65	.32	1.1	5.0	10	6.7	1.7	.38	.30	.44
25	.36	.94	.63	e.40	1.3	5.5	9.7	6.6	1.9	.37	.24	.44
26	.32	e.86	.60	.43	1.4	8.4	8.6	6.3	1.9	.30	.28	.44
27	.32	e.76	.52	.34	1.8	12	8.0	6.7	1.8	.27	.28	.44
28	.32	e.78	.72	.35	2.6	6.7	8.1	7.3	2.2	.30	.27	.44
29	.32	e.82	.63	.42	3.4	5.2	8.5	7.5	1.9	.31	.26	.44
30	1.1	e.88	.58	.47	---	5.0	9.7	7.4	1.6	.27	.22	.44
31	.73	---	e.47	.44	---	4.1	---	6.3	---	.27	.25	---
TOTAL	9.98	162.04	19.69	14.02	25.32	113.7	248.6	280.5	98.4	22.02	11.53	11.42
MEAN	.32	5.40	.64	.45	.87	3.67	8.29	9.05	3.28	.71	.37	.38
MAX	1.1	46	.97	.70	3.4	12	15	14	5.3	1.3	1.6	.68
MIN	.16	.76	.46	.31	.34	1.7	3.4	6.2	1.6	.27	.22	.22
AC-FT	20	321	39	28	50	226	493	556	195	44	23	23

CAL YR 1987 TOTAL 1261.52 MEAN 3.46 MAX 46 MIN .12 AC-FT 2500
WTR YR 1988 TOTAL 1017.22 MEAN 2.78 MAX 46 MIN .16 AC-FT 2020

e Estimated

09378200 MONTEZUMA CREEK AT GOLF COURSE, AT MONTICELLO, UT

LOCATION.--Lat 37°51'38", long 109°20'30", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 36, T. 33 S., R. 23 E., San Juan County, Hydrologic Unit 14080203, on left bank 1,000 ft west of State Highway 191 and 0.8 mi south of Monticello.

DRAINAGE AREA.--17.6 mi².

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,900 ft from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--9 years, 4.98 ft³/s, 3,610 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 537 ft³/s Apr. 24, 1983, gage height, 5.77 ft; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 21	1522	*69	*5.45				

No flow Apr. 12-17, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	.89	e.66	e.48	e.86	e1.8	2.4	1.2	13	e.55	.93	.72
2	.15	.70	.74	e.55	e.78	e1.9	2.0	1.7	8.9	e.50	.79	.72
3	.15	.45	.70	e.63	e.76	2.2	2.1	2.1	5.8	e.50	.80	.70
4	.15	.22	.77	e.62	e.76	1.8	2.3	1.4	4.9	e.90	.77	.69
5	.14	4.0	.76	e.72	e.83	1.6	2.2	1.3	11	e.60	.71	.72
6	.14	7.0	.74	e.78	e.82	1.5	1.9	1.3	21	e.50	.82	.75
7	.19	.36	.75	e.76	e.84	1.6	2.0	1.2	9.8	e.40	.76	.70
8	.18	.29	.75	e.78	e.84	1.4	2.3	1.1	5.3	e.60	.72	.66
9	.18	.25	.76	e.72	e.85	1.2	2.3	1.2	1.9	.90	.71	.67
10	.18	.22	.87	e.83	e.85	1.2	1.9	1.2	.77	.33	.71	.73
11	.18	.27	.58	e.86	e.78	1.3	.57	1.5	.48	.25	.63	.70
12	.19	.19	e.54	e.76	e.84	2.0	e.02	1.7	.41	.16	.59	.82
13	.24	.18	e.52	e.79	e.82	3.3	e.01	.83	.39	.16	.57	.73
14	.26	.24	e.51	e.86	e.73	4.3	e.01	.25	.52	.15	.58	.72
15	.24	.59	e.49	e.78	e.74	1.2	e.01	.50	.29	.15	.57	.70
16	.20	.29	e.54	e.84	e.73	1.1	e.01	1.3	.30	.15	.65	.68
17	.19	.24	e.58	e.84	e.65	2.4	.03	3.4	.32	.17	.64	.66
18	.18	.30	e.70	e.77	e.66	1.7	.23	21	.30	.23	.63	.65
19	.18	.26	e.70	e.73	e.72	1.1	.15	42	.31	.30	.61	.65
20	.18	.35	e.66	e.66	e.80	1.1	.08	17	e.50	.36	.61	.66
21	.18	.35	e.70	e.69	e.90	1.2	.07	8.1	e.40	.46	4.7	.75
22	.18	.49	e.74	e.72	e1.1	1.5	.16	4.1	e.35	.58	.90	.70
23	.18	.63	e.70	e.90	e1.2	1.7	.29	4.2	e.35	.68	.78	.68
24	.23	.75	e.64	e.74	e1.4	1.7	1.4	5.3	e.60	.26	.81	.73
25	.25	.66	e.60	e.88	e1.6	1.6	2.1	5.8	e.80	.24	.83	.72
26	.23	.65	e.60	e.96	e1.7	2.0	1.9	3.0	e.60	.24	.79	.69
27	.21	e.58	e.68	e.96	e1.7	3.4	1.4	5.8	e1.0	.26	.75	.64
28	.21	e.60	e.70	e1.0	e1.6	3.9	1.3	9.6	e1.5	.57	.74	.70
29	.21	e.62	e.70	e1.0	e1.7	3.6	1.2	14	e1.0	.79	.72	.73
30	.49	e.60	e.62	e1.0	---	2.4	1.1	13	e.70	.76	.76	.78
31	.40	---	e.55	e.86	---	2.4	---	13	---	.79	.74	---
TOTAL	6.42	23.22	20.55	24.47	28.56	61.1	33.44	189.08	93.49	13.49	26.32	21.15
MEAN	.21	.77	.66	.79	.98	1.97	1.11	6.10	3.12	.44	.85	.70
MAX	.49	7.0	.87	1.0	1.7	4.3	2.4	42	21	.90	4.7	.82
MIN	.14	.18	.49	.48	.65	1.1	.01	.25	.29	.15	.57	.64
AC-FT	13	46	41	49	57	121	66	375	185	27	52	42
CAL YR 1987	TOTAL	616.06	MEAN	1.69	MAX	27	MIN	.07	AC-FT	1220		
WTR YR 1988	TOTAL	541.29	MEAN	1.48	MAX	42	MIN	.01	AC-FT	1070		

e Estimated

SAN JUAN RIVER BASIN

09378600 MONTEZUMA CREEK NEAR BLUFF, UT

LOCATION.--Lat 37°18'30", long 109°17'35", in NW¼SW¼ sec. 16, T. 40 S., R. 24 E., San Juan County, Hydrologic Unit 14080201, on right bank approximately 200 ft upstream from bridge on Highway 262, 3.4 mi above mouth, and 14 mi southeast of Bluff.

DRAINAGE AREA.--1,200 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1985 to current year. Annual maximum only December 1958 to September 1971 at crest-stage site.

GAGE.--Water-stage recorder. Altitude of gage is 4,490 ft from topographic map. December 1958 to September 1971, crest-stage gage only at various sites upstream from bridge at different datums. June 6, 1985 to September 30, 1985 instantaneous measurements only at same site.

REMARKS.--Records poor. Flow affected by storage in Lloyd's Lake at headwaters with a capacity of approximately 3,000 acre-ft and several diversions for agricultural use.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,890 ft³/s Aug. 7, 1988, gage height, 16.08 ft; no flow on many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,890 ft³/s Aug. 7, gage height, 16.08 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	92	e10	e3.5	e3.9	240	27	20	19	11	e7.0	e8.0
2	.00	103	e9.0	e1.2	e3.7	272	21	20	19	e2.0	e2.0	e5.0
3	.00	e29	e8.0	e.20	e3.3	261	19	19	19	e3.0	e1.0	e3.0
4	.00	15	e5.4	e2.1	e3.0	236	19	21	19	e13	e.00	e2.0
5	.00	29	e7.2	e2.7	e3.3	224	20	25	13	16	e.00	e1.0
6	.00	892	e6.2	e3.2	e3.0	217	15	23	13	e8.0	e.00	e.00
7	.00	124	e6.0	e3.0	e3.5	208	16	23	11	e3.0	249	.00
8	.00	e50	e4.6	e2.9	e4.5	196	17	22	10	e2.0	e3.0	.00
9	.00	e35	e4.2	e2.8	e5.0	166	19	20	11	e1.0	e2.0	.00
10	.00	e23	e5.0	e2.8	e6.2	154	19	21	e4.0	e1.0	e1.0	.00
11	.00	16	e3.2	e3.0	e5.2	157	19	20	e202	e23	e.00	e.00
12	.00	13	e4.0	e2.0	e4.7	149	19	17	e50	e2.0	e.00	e210
13	.00	13	e4.5	e2.2	e10	135	17	18	e20	e.00	e.00	85
14	121	16	e4.1	e2.4	e9.0	61	16	15	e4.0	.00	e1.0	e33
15	60	92	e3.0	e2.7	e8.0	33	17	15	e2.0	.00	e3.0	e6.0
16	9.2	19	e3.5	e3.0	e13	31	29	15	e.00	.00	e3.0	e4.0
17	e2.0	13	e4.3	e2.9	e21	30	33	18	.00	.00	e2.0	e3.0
18	e.00	12	e4.8	e2.8	26	29	37	52	.00	.00	e1.0	e2.0
19	e.00	14	e5.2	e3.0	28	32	39	40	.00	.00	e.00	e1.0
20	e.00	11	e4.0	e2.3	33	27	32	39	.00	.00	.00	e.00
21	e.00	11	e5.2	e2.4	43	24	25	39	.00	.00	.00	.00
22	e.00	12	e5.8	e2.6	56	28	25	32	.00	.00	.00	.00
23	e.00	12	e6.2	e2.7	65	31	30	27	.00	.00	.00	.00
24	e3.0	11	e4.5	e2.0	73	35	32	24	e.00	.00	e1.0	.00
25	34	15	e3.7	e.60	82	34	29	20	e31	.00	e19	.00
26	e1.0	14	e4.0	e1.0	94	28	34	18	147	.00	e2.0	.00
27	e.00	12	e4.3	e1.2	117	29	30	16	114	.00	e.00	.00
28	e.00	11	e4.0	e1.2	159	34	28	19	65	.00	e.00	.00
29	e1.0	e11	e3.4	e1.6	200	34	23	16	58	.00	e.00	.00
30	49	e10	e3.9	e3.6	---	30	21	17	22	.00	e3.0	.00
31	13	---	e4.2	e3.3	---	28	---	17	---	.00	e2.1	---
TOTAL	293.20	1730	155.4	72.90	1086.3	3193	727	708	853.00	85.00	302.10	363.00
MEAN	9.46	57.7	5.01	2.35	37.5	103	24.2	22.8	28.4	2.74	9.75	12.1
MAX	121	892	10	3.6	200	272	39	52	202	23	249	210
MIN	.00	10	3.0	.20	3.0	24	15	15	.00	.00	.00	.00
AC-FT	582	3430	308	145	2150	6330	1440	1400	1690	169	599	720
CAL YR 1987	TOTAL	13792.80	MEAN	37.8	MAX	892	MIN	.00	AC-FT	27360		
WTR YR 1988	TOTAL	9568.90	MEAN	26.1	MAX	892	MIN	.00	AC-FT	18980		

e Estimated

SAN JUAN RIVER BASIN

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09378600 MONTEZUMA CREEK NEAR BLUFF, UT--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1985 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	HARD- NESS TOTAL (MG/L AS CAC03)
NOV , 1987									
10...	1200	24	1280	8.30	17.0	10.0	--	--	400
MAR , 1988									
01...	1400	244	2100	8.20	15.0	13.5	8.70	650	860
APR									
11...	1200	20	2000	8.20	15.0	11.0	--	--	820
MAY									
18...	1000	45	1150	8.20	20.0	15.5	--	--	270
JUN									
28...	1430	77	620	8.10	27.5	22.0	--	--	72

DATE	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CAC03	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV , 1987									
10...	230	95	40	120	39	3	4.6	176	400
MAR , 1988									
01...	670	180	100	180	31	3	5.4	188	830
APR									
11...	610	170	97	210	36	3	4.9	210	790
MAY									
18...	96	58	30	150	54	4	4.5	173	390
JUN									
28...	0	20	5.4	98	73	5	4.7	94	150

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)
NOV , 1987								
10...	69	0.4	7.9	843	1.15	54.6	--	0.071
MAR , 1988								
01...	46	0.4	8.4	1470	1.99	965	0.57	0.109
APR								
11...	140	0.3	8.6	1550	2.10	82.3	<0.10	0.023
MAY								
18...	65	0.4	8.0	812	1.10	99.8	0.58	0.053
JUN								
28...	22	0.4	8.7	368	0.5	76.6	0.64	0.12

SAN JUAN RIVER BASIN

09378600 MONTEZUMA CREEK NEAR BLUFF, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)
NOV , 1987		
10...	1200	80
MAR , 1988		
01...	1400	80
APR		
11...	1200	130
MAY		
18...	1000	90
JUN		
28...	1430	60

PARTICLE SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. PERCENT FINER THAN .002 MM	SED. SUSP. FALL DIAM. PERCENT FINER THAN .004 MM	SED. SUSP. FALL DIAM. PERCENT FINER THAN .016 MM	SED. SUSP. FALL DIAM. PERCENT FINER THAN .062 MM	SED. SUSP. FALL DIAM. PERCENT FINER THAN .125 MM	SED. SUSP. FALL DIAM. PERCENT FINER THAN .250 MM	SED. SUSP. FALL DIAM. PERCENT FINER THAN .500 MM
NOV , 1987												
10...	1200	24	10.0	1700	110	43	52	62	78	91	98	100
MAR , 1988												
01...	1400	244	13.5	12000	7910	24	30	43	74	93	99	100
APR												
11...	1200	20	11.0	1080	57	41	50	63	78	88	99	100
MAY												
18...	1000	45	15.5	9270	1130	--	--	--	--	--	--	--
JUN												
28...	1430	77	22.0	66100	13700	--	--	--	--	--	--	--

SAN JUAN RIVER BASIN

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09378630 RECAPTURE CREEK NEAR BLANDING, UT

LOCATION.--Lat 37°45'20", long 109°28'33", in NW¼NE¼NW¼ sec. 11, T. 35 S., R. 22 E., San Juan County, Hydrologic Unit 14080201, on right bank 100 ft below road fork, 1.9 mi north of Manti-LaSal National Forest boundary, and 9.4 mi north of Blanding.

DRAINAGE AREA.--3.77 mi².

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,200 ft from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--23 years, 1.50 ft³/s, 1,090 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 142 ft³/s Oct. 20, 1972, gage height, 2.14 ft; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8.0 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 1	1451	18	1.34	May 1	1101	11	1.30
Nov. 5	2320	*97	*1.91	May 18	2346	14	1.27

Minimum daily discharge, .01 ft³/s on many days during the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	6.8	e.07	e.01	e.01	e1.8	1.8	10	2.6	.34	.20	.16
2	.01	6.0	e.06	e.01	e.01	e1.6	1.6	8.4	2.1	.30	.09	.13
3	.01	1.8	e.04	e.01	e.01	e1.4	1.6	7.1	1.9	.25	.07	.12
4	.01	1.1	e.04	e.01	e.01	e1.4	1.7	6.3	2.0	.26	.07	.12
5	.01	8.3	e.03	e.01	e.01	e1.4	1.8	6.1	2.5	.28	.06	.11
6	.01	19	e.03	e.01	e.01	e1.5	2.2	6.0	2.8	.23	.11	.10
7	.01	6.9	e.03	e.01	e.01	e1.5	3.2	5.1	2.4	.24	.15	.09
8	.01	4.4	e.01	e.01	e.01	e1.3	4.6	4.1	2.0	.26	.07	.09
9	.01	3.0	e.01	e.01	e.01	e1.3	5.2	3.5	1.7	.32	.06	.09
10	.01	2.1	e.02	e.01	e.01	1.6	4.4	3.2	1.2	.21	.08	.15
11	.01	1.7	e.02	e.01	e.01	1.4	4.1	4.3	1.2	.17	.08	.12
12	.01	1.4	e.01	e.01	e.01	.78	4.5	5.8	1.1	.15	.08	.36
13	.02	1.3	e.01	e.01	e.01	.72	5.7	7.1	.99	.15	.08	.15
14	.02	1.2	e.01	e.01	e.01	1.5	5.6	7.7	.88	.15	.08	.06
15	.02	.99	e.01	e.01	e.01	1.5	5.1	7.2	.77	.17	.08	.05
16	.02	.66	e.01	e.01	e.02	.97	5.5	6.9	.70	.17	.08	.05
17	.02	.60	e.01	e.01	e.02	.90	5.7	7.3	.65	.29	.10	.05
18	.02	.46	e.01	e.01	e.02	.71	5.0	7.3	.58	.21	.17	.04
19	.02	e.36	e.01	e.01	e.02	.73	4.6	9.1	.53	.17	.13	.04
20	.02	e.36	e.01	e.01	e.02	.84	4.0	7.0	.49	.13	.14	.05
21	.02	e.28	e.01	e.01	e.02	1.1	4.1	5.9	.44	.10	.27	.05
22	.02	e.20	e.01	e.01	e.02	1.5	4.2	5.4	.44	.07	.23	.05
23	.02	e.13	e.01	e.01	e.05	1.9	3.9	4.9	.48	.07	.17	.04
24	.02	e.10	e.01	e.01	e.15	2.2	4.2	4.8	.43	.08	.16	.04
25	.02	e.10	e.01	e.01	e.25	2.4	4.4	4.4	.43	.07	.14	.04
26	.02	e.09	e.01	e.01	e.45	3.3	4.3	4.0	.49	.06	.14	.04
27	.02	e.06	e.01	e.01	e.70	5.1	4.3	4.1	.85	.07	.16	.04
28	.02	e.07	e.01	e.01	e1.0	5.2	4.9	4.2	.91	.06	.13	.04
29	.03	e.08	e.01	e.01	e1.4	4.8	5.7	4.0	.58	.06	.12	.04
30	.35	e.06	e.01	e.01	---	2.8	7.6	4.0	.42	.06	.14	.04
31	.14	---	e.01	e.01	---	2.0	---	3.2	---	.06	.15	---
TOTAL	0.96	69.60	0.56	0.31	4.29	57.15	125.5	178.4	34.56	5.21	3.79	2.55
MEAN	.031	2.32	.018	.010	.15	1.84	4.18	5.75	1.15	.17	.12	.085
MAX	.35	19	.07	.01	1.4	5.2	7.6	10	2.8	.34	.27	.36
MIN	.01	.06	.01	.01	.01	.71	1.6	3.2	.42	.06	.06	.04
AC-FT	1.9	138	1.1	.6	8.5	113	249	354	69	10	7.5	5.1

CAL YR 1987 TOTAL 597.56 MEAN 1.64 MAX 21 MIN .01 AC-FT 1190
WTR YR 1988 TOTAL 482.88 MEAN 1.32 MAX 19 MIN .01 AC-FT 958

e Estimated

SAN JUAN RIVER BASIN

09378650 RECAPTURE CREEK BELOW JOHNSON CREEK, NEAR BLANDING, UT

LOCATION.--Lat 37°40'51", long 109°27'43", in SW¼SW¼SE¼ sec. 2, T. 36 S., R. 22 E., San Juan County, Hydrologic Unit 14080201, on left bank 0.2 mi downstream from Johnson Creek, 1.5 mi upstream from U.S. Highway 191 and 4.3 mi northwest of Blanding.

DRAINAGE AREA.--50.2 mi².

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,120 ft from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--13 years, 9.59 ft³/s, 6,950 acre-ft/yr.EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 695 ft³/s Mar. 14, 1981, gage height, 5.67 ft; no flow many days each year.EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 230 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 6	0316	*228	*3.98				

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	71	e.05	e.00	e.00	e3.0	15	27	5.2	.74	e.60	e.20
2	.00	54	e.04	e.00	e.00	e2.9	14	24	5.0	.51	.59	e.04
3	.00	37	e.02	e.00	e.00	e2.8	14	20	7.4	.41	e.02	e.00
4	.00	31	e.02	e.00	e.00	e2.8	14	18	8.9	.43	e.00	.00
5	.00	e38	e.01	e.00	e.00	e2.8	15	17	12	.49	.00	.00
6	.00	e80	e.01	e.00	e.00	e3.0	15	16	14	.51	e.01	.00
7	.00	26	e.01	e.00	e.00	e3.0	17	15	14	.51	e.03	.00
8	.00	17	e.00	e.00	e.00	e2.9	22	14	12	1.1	.09	.00
9	.00	12	e.00	e.00	e.00	e2.9	22	12	9.1	7.4	.02	e.00
10	.00	11	e.00	e.00	e.00	e6.0	21	11	2.9	7.3	e.01	e.04
11	.00	9.9	e.00	e.00	e.00	e5.0	19	11	2.2	5.2	e.01	e.06
12	.00	8.6	e.00	e.00	e.00	e4.0	20	13	7.1	.50	e.01	e.12
13	e.00	7.8	e.00	e.00	e.00	e4.0	22	15	9.0	.18	e.00	1.4
14	e2.5	7.5	e.00	e.00	e.00	e6.5	23	17	10	.27	e.00	.28
15	13	6.8	e.00	e.00	e.00	e7.0	22	19	5.5	.32	e.01	e.02
16	8.6	7.2	e.00	e.00	e.00	e5.5	23	19	4.5	.25	e.01	e.00
17	5.6	1.7	e.00	e.00	e.00	e5.0	29	22	3.9	.21	e.00	.00
18	3.6	e1.0	e.00	e.00	e.00	e4.0	25	26	3.2	e.18	.00	.00
19	2.3	e.80	e.00	e.00	e.00	e5.0	23	24	4.8	.10	e.00	.00
20	1.2	e.80	e.00	e.00	e.00	e7.0	19	16	8.7	e.06	e.02	.00
21	.47	e.50	e.00	e.00	e.00	e11	16	11	6.5	e.02	e.02	.00
22	e.04	e.30	e.00	e.00	e.01	e15	17	8.6	2.0	e.02	e.00	.00
23	e.00	e.13	e.00	e.00	e.10	e17	17	7.2	1.8	.02	.00	.00
24	.00	e.10	e.00	e.00	e.30	e20	18	7.8	1.7	.02	.00	.00
25	.00	e.07	e.00	e.00	e.60	e19	18	9.4	1.7	e.02	e.00	.00
26	.00	e.06	e.00	e.00	e.94	22	17	9.4	1.7	e.01	e.02	.00
27	.00	e.05	e.00	e.00	e.80	30	17	9.4	3.1	e.01	e.04	.00
28	e.00	e.05	e.00	e.00	e2.1	29	17	9.6	9.0	e.10	e.00	.00
29	e.04	e.06	e.00	e.00	e3.6	27	19	9.8	7.0	e.20	e.00	.00
30	24	e.04	e.00	e.00	---	20	24	12	1.9	e.01	e.04	.00
31	14	---	e.00	e.00	---	17	---	6.7	---	e.01	e.18	---
TOTAL	75.35	430.46	0.16	0.00	8.45	312.1	574	456.9	185.8	27.11	1.73	2.16
MEAN	2.43	14.3	.005	.00	.29	10.1	19.1	14.7	6.19	.87	.056	.072
MAX	24	80	.05	.00	3.6	30	29	27	14	7.4	.60	1.4
MIN	.00	.04	.00	.00	.00	2.8	14	6.7	1.7	.01	.00	.00
AC-FT	149	854	.3	.0	17	619	1140	906	369	54	3.4	4.3

CAL YR 1987 TOTAL 3439.59 MEAN 9.42 MAX 111 MIN .00 AC-FT 6820
WTR YR 1988 TOTAL 2074.22 MEAN 5.67 MAX 80 MIN .00 AC-FT 4110

e Estimated

09379500 SAN JUAN RIVER NEAR BLUFF, UT

LOCATION.--Lat 37°08'49", long 109°51'51", in SE¼NE¼NW¼ sec. 7, T. 42 S., R. 19 E., San Juan County.
Hydrologic Unit 14080205, on left bank 1,600 ft downstream from Gypsum Creek, 1,800 ft upstream from highway bridge, 20 mi southwest of Bluff, at mile 113.5.

DRAINAGE AREA.--23,000 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1914 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1213: 1940. WSP 1313: 1917, 1929. WSP 1343: 1945.

GAGE.--Water-stage recorder. Datum of gage is 4,048 ft from levels of Topographic Division, U.S. Geological Survey. Prior to Mar. 16, 1927, chain gages at sites about 1,700 ft downstream at different datums.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of approximately 200,000 acres above station. No diversion between station and mouth of river. Flow regulated by Navajo Reservoir since June 28, 1962 (see station 09355100 in New Mexico report).

AVERAGE DISCHARGE.--74 years, 2,590 ft³/s, 1,876,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--1914-17, 1927-86; maximum discharge, 70,000 ft³/s Sept. 10, 1927, gage height, 32.0 ft from rating curve extended above 31,000 ft³/s and slope-area measurement at gage height 26.62 ft; no flow July 3-13, 1934, Aug. 24-27, 29, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 6, 1911, which is greatest known at Shiprock, NM, probably exceeded that of Sept. 10, 1927 at this station but stage was not accurately determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 6	1058	*13,600	*11.74	No other peak greater than base discharge.			
Minimum, 345 ft ³ /s July 22.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	948	3450	1230	1120	e1150	2340	1360	1500	2480	3400	e780	e2600
2	985	3940	1240	1110	e1200	2440	1380	1510	1980	2600	1610	3110
3	950	3270	1230	1090	e1900	2280	1320	1710	1720	2200	1720	3230
4	982	2070	1220	1070	e2100	2140	1260	1780	1550	1960	1490	2810
5	988	1800	1230	1120	e1900	1890	1250	1550	1530	1900	1370	1700
6	1030	10000	1240	1180	e1500	1740	1280	1370	2470	1850	1170	1340
7	857	5870	1250	e1250	e1400	1690	1290	1280	2820	1610	1560	1170
8	803	3260	1250	1290	e1440	1630	1330	1310	2920	1370	3670	1070
9	770	2350	1220	1210	e1440	1590	1310	1350	3100	1200	2390	920
10	766	1950	1220	1200	e1500	1460	1390	1270	3030	1140	1880	894
11	790	1700	1220	1190	e1470	1400	1500	1230	2940	1080	1450	859
12	809	1530	1210	1210	e1490	1410	1490	1130	3470	1150	1200	958
13	924	e1520	1200	1210	1570	1350	1430	1070	3380	1110	1090	e2000
14	1420	e1600	1230	1170	1490	1270	1370	1250	2800	e900	1160	1520
15	1450	e1780	e1210	1140	e1400	1260	1390	1760	2600	e600	1080	1460
16	1190	1610	1160	1150	e1350	1250	1800	1970	2130	e500	e1020	1470
17	1200	1520	1190	1210	e1350	1240	2920	2470	1810	e500	e1200	1470
18	1170	1400	e1240	e1200	e1400	1240	4510	3040	1700	e550	e2000	1250
19	1100	1350	e1240	e1200	e1360	1220	3000	3350	1800	539	2060	1140
20	1070	1320	e1200	e1100	e1380	1220	2170	3120	1840	530	1920	1060
21	1010	1310	e1230	e1110	e1420	1210	1860	2740	1840	453	1660	1070
22	1030	1300	1250	1140	e1430	1190	1800	2300	1860	379	1570	1150
23	1070	1310	1200	1150	e1490	1180	1930	1970	1850	476	1220	1470
24	1080	1300	1250	1140	e1550	1200	2060	1750	1730	459	1030	1700
25	e1270	e1290	1220	1120	e1590	1240	1990	1560	1870	543	2630	1560
26	e1200	e1280	1200	e1110	1630	1270	2010	1540	2600	510	4080	1450
27	1210	e1260	1220	e1110	1650	1270	1820	1710	3500	462	2740	1390
28	1210	e1270	1190	e1140	1740	1260	1700	1700	3000	455	e2800	1330
29	1240	1240	1160	e1150	2250	1290	1610	1710	4950	518	e2820	1240
30	1990	1230	1140	e1150	---	1360	1550	2020	5280	539	e2000	1220
31	2780	---	1170	e1200	---	1400	---	2440	---	515	1920	---
TOTAL	35292	66080	37660	35940	44540	45930	53080	56460	76550	32038	56290	45611
MEAN	1138	2203	1215	1159	1536	1482	1769	1821	2552	1033	1816	1520
MAX	2780	10000	1250	1290	2250	2440	4510	3350	5280	3400	4080	3230
MIN	766	1230	1140	1070	1150	1180	1250	1070	1530	379	780	859
AC-FT	70000	131100	74700	71290	88350	91100	105300	112000	151800	63550	111700	90470

CAL YR 1987	TOTAL	1433140	MEAN	3926	MAX	11300	MIN	766	AC-FT	2843000
WTR YR 1988	TOTAL	585471	MEAN	1600	MAX	10000	MIN	379	AC-FT	1161000

e Estimated

SAN JUAN RIVER BASIN

09379500 SAN JUAN RIVER NEAR BLUFF, UT--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1929 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1941 to September 1977, October 1980 to current year.

WATER TEMPERATURES: May 1944 to September 1961, October 1964 to current year.

SUSPENDED-SEDIMENT DISCHARGE: July 1929 to September 1980.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 2,790 microsiemens Sept. 19, 1959; minimum daily, 208 microsiemens June 17, 1952.

WATER TEMPERATURES: Maximum, 33.0°C July 31, 1959; minimum, 0.0°C on many days during winter period of most years.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 383,000 mg/L Sept. 21, 1929; minimum daily mean, no flow on several days in 1934 and 1939.

SEDIMENT LOADS: Maximum daily, 15,700,000 tons Oct. 20, 1972; minimum daily, 0 tons on several days in 1934 and 1939.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Not published in 1988.

WATER TEMPERATURES: Maximum observed, 30.0°C July 18; minimum recorded, 0.0°C Dec. 13-15, Jan. 28, 29.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT , 1987										
26...	1045	1240	800	8.20	20.0	13.0	--	8.80	660	--
NOV										
23...	1000	1370	850	8.30	4.5	3.0	--	11.9	660	--
DEC										
22...	1100	1230	960	8.20	2.5	1.5	38	12.5	659	--
FEB , 1988										
18...	1200	1400	970	8.30	11.0	2.5	--	12.0	650	--
MAR										
24...	1130	1150	900	8.00	18.0	12.0	33	9.20	660	--
APR										
26...	1200	2040	830	8.30	22.0	13.0	--	9.20	655	--
MAY										
25...	1130	1500	590	8.20	23.0	20.0	94	7.30	660	--
JUN										
28...	1230	2770	610	8.10	27.5	23.5	--	6.90	650	--
JUL										
18...	1100	596	860	8.50	25.0	30.0	640	6.80	640	82
AUG										
23...	1000	1320	700	8.10	34.0	23.5	--	7.20	660	--
SEP										
07...	1100	1160	810	8.20	28.5	20.0	--	7.00	650	--

SAN JUAN RIVER BASIN

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09379500 SAN JUAN RIVER NEAR BLUFF, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3
OCT , 1987										
26...	--	330	86	27	68	31	2	3.4	--	--
NOV										
23...	--	360	95	30	60	26	1	2.7	--	--
DEC										
22...	--	350	91	30	74	31	2	0.7	0	184
FEB , 1988										
18...	--	310	82	25	100	41	3	4.1	--	--
MAR										
24...	--	350	86	32	71	31	2	2.7	0	144
APR										
26...	--	270	70	23	72	36	2	2.9	--	--
MAY										
25...	--	240	67	18	39	26	1	2.4	0	340
JUN										
28...	--	180	51	12	75	47	3	3.6	--	--
JUL										
18...	210	320	87	25	70	32	2	3.4	6	392
AUG										
23...	--	220	69	12	77	43	2	3.7	--	--
SEP										
07...	--	240	74	14	74	39	2	3.4	--	--

DATE	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
OCT , 1987										
26...	--	290	18	0.3	7.1	609	583	0.83	2040	--
NOV										
23...	--	300	23	0.3	9.6	624	615	0.85	2310	--
DEC										
22...	150	350	22	0.3	7.7	655	626	0.89	2180	<0.01
FEB , 1988										
18...	--	350	2.0	0.4	9.0	721	670	0.98	2730	--
MAR										
24...	118	320	23	0.3	6.0	652	624	0.89	2020	<0.01
APR										
26...	--	270	17	0.3	8.9	547	550	0.74	3010	--
MAY										
25...	279	180	12	0.3	8.2	407	401	0.55	1650	<0.01
JUN										
28...	--	200	24	1.7	11	437	489	0.59	3270	--
JUL										
18...	331	290	17	0.4	8.7	607	593	0.83	977	<0.01
AUG										
23...	--	230	19	0.6	11	526	506	0.72	1870	--
SEP										
07...	--	240	13	0.5	9.9	542	514	0.74	1700	--

SAN JUAN RIVER BASIN

09379500 SAN JUAN RIVER NEAR BLUFF, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
OCT , 1987										
26...	0.17	--	0.03	0.04	--	--	--	--	<0.01	--
NOV										
23...	0.45	--	0.06	0.08	--	--	--	--	0.02	0.06
DEC										
22...	0.41	0.01	0.02	0.03	0.39	0.4	0.01	0.01	<0.01	--
FEB , 1988										
18...	0.95	--	0.14	0.18	--	--	--	--	0.03	0.09
MAR										
24...	<0.10	0.03	0.03	0.04	0.47	0.5	0.05	0.05	0.03	0.09
APR										
26...	0.96	--	--	--	--	--	--	--	--	--
MAY										
25...	0.30	0.02	<0.01	--	0.68	0.7	0.03	0.03	<0.01	--
JUN										
28...	--	--	--	--	--	--	--	--	--	--
JUL										
18...	0.42	0.04	0.34	0.44	1.7	1.7	0.42	0.38	0.40	1.2
AUG										
23...	--	--	--	--	--	--	--	--	--	--
SEP										
07...	0.47	--	0.07	0.09	--	--	--	--	0.02	0.06

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
DEC , 1987											
22...	1100	<10	<1	72	<0.5	<1	<1	<3	<1	7	<5
MAR , 1988											
24...	1130	<10	1	76	<0.5	2	<1	<3	3	4	<5
MAY											
25...	1130	20	1	84	<0.5	3	1	<3	5	83	<5
JUL											
18...	1100	50	2	310	<0.5	<1	6	<3	3	36	<5

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC , 1987										
22...	47	1	<0.1	<10	<1	<1	<1.0	1200	<6	4
MAR , 1988										
24...	61	4	<0.1	<10	2	2	1.0	1100	<6	7
MAY										
25...	28	1	<0.1	10	3	1	1.0	840	<6	5
JUL										
18...	39	190	<0.1	<10	<1	2	<1.0	1200	<6	41

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)
OCT , 1987		
26...	1045	70
NOV		
23...	1000	60
FEB , 1988		
18...	1200	100
APR		
26...	1200	80
JUN		
28...	1230	100
AUG		
23...	1000	100
SEP		
07...	1100	60

09379500 SAN JUAN RIVER NEAR BLUFF, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER				NOVEMBER			DECEMBER			JANUARY		
1	17.4	16.7	17.2	11.6	11.0	11.3	3.0	1.5	2.3	---	---	---
2	17.4	16.6	17.1	11.1	10.4	10.9	3.0	2.0	2.6	---	---	---
3	17.3	16.6	17.1	12.7	10.9	11.5	3.0	1.9	2.5	---	---	---
4	17.3	16.4	16.9	12.7	11.5	11.9	3.6	2.2	2.9	---	---	---
5	17.0	16.2	16.7	11.9	10.9	11.4	4.7	3.4	4.1	---	---	---
6	16.8	16.1	16.5	11.8	10.4	10.7	4.7	3.7	4.3	---	---	---
7	17.5	16.0	16.7	14.5	10.1	10.9	5.2	3.9	4.6	---	---	---
8	17.4	15.2	16.3	10.6	10.2	10.4	4.8	3.7	4.2	---	---	---
9	17.3	14.8	16.1	10.6	10.2	10.4	3.9	2.8	3.4	---	---	---
10	17.3	15.0	16.2	10.2	9.6	9.8	3.9	2.7	3.4	---	---	---
11	17.3	15.2	16.3	9.6	9.1	9.4	3.9	2.7	3.4	---	---	---
12	16.9	15.9	16.5	9.4	8.7	9.0	3.7	2.3	2.8	---	---	---
13	16.6	11.9	15.6	9.0	8.4	8.7	2.4	.0	1.1	---	---	---
14	13.5	11.4	12.1	8.8	8.5	8.7	.3	.0	.0	---	---	---
15	13.6	12.4	13.1	8.5	7.9	8.2	.1	.0	.1	---	---	---
16	14.1	12.5	13.4	7.8	6.8	7.2	---	---	---	---	---	---
17	14.4	13.1	13.9	6.8	6.2	6.4	---	---	---	---	---	---
18	14.3	13.1	13.9	6.2	5.1	5.4	---	---	---	---	---	---
19	14.1	12.4	13.4	5.1	4.2	4.6	---	---	---	---	---	---
20	13.6	11.6	12.7	4.6	4.0	4.4	---	---	---	---	---	---
21	12.7	11.5	12.2	4.7	4.0	4.4	---	---	---	---	---	---
22	12.5	11.1	12.0	4.8	4.1	4.5	---	---	---	---	---	---
23	12.9	11.8	12.4	4.8	4.1	4.4	---	---	---	---	---	---
24	12.9	12.2	12.6	4.4	3.5	4.0	---	---	---	---	---	---
25	13.4	12.7	13.0	4.2	3.3	3.8	---	---	---	---	---	---
26	13.6	12.6	13.1	4.4	3.6	4.0	---	---	---	---	---	---
27	13.7	12.1	13.0	3.9	2.9	3.5	---	---	---	.2	.1	.1
28	13.5	12.6	13.2	3.8	2.9	3.3	---	---	---	.3	.0	.2
29	13.4	11.8	12.4	3.4	2.5	3.0	---	---	---	1.2	.0	.5
30	12.0	11.1	11.7	3.0	1.8	2.5	---	---	---	2.2	.3	1.3
31	11.6	10.8	11.3	---	---	---	---	---	---	2.7	1.5	2.1
MONTH	17.5	10.8	14.3	14.5	1.8	7.3	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	2.6	1.7	2.2	8.9	8.5	8.8	9.6	6.9	8.4	16.1	13.0	14.0
2	3.0	2.2	2.6	8.8	8.5	8.7	11.1	8.1	9.8	13.4	11.2	12.4
3	3.2	2.6	3.0	8.7	8.2	8.5	12.3	9.3	11.1	13.9	12.2	13.1
4	2.6	1.6	1.9	8.8	8.1	8.5	12.2	10.2	11.5	15.1	13.6	14.2
5	2.1	.8	1.5	8.8	7.8	8.3	13.7	10.4	12.2	15.7	14.1	14.9
6	2.2	2.0	2.2	8.8	7.6	8.3	14.9	11.7	13.5	14.2	11.4	12.9
7	2.2	1.7	2.1	8.8	8.2	8.5	16.0	12.7	14.6	14.0	11.3	13.0
8	2.6	1.0	1.7	8.2	6.7	7.3	16.3	14.1	15.3	14.9	12.0	13.6
9	3.1	1.6	2.4	7.4	6.0	6.8	14.9	12.3	13.6	16.0	13.4	14.8
10	3.8	2.5	3.2	7.4	6.4	6.8	13.4	10.9	12.5	17.8	14.6	16.2
11	3.8	2.8	3.4	6.6	5.3	6.0	13.6	10.8	12.4	18.8	15.8	17.5
12	4.0	3.3	3.6	6.7	5.7	6.2	14.8	11.4	13.2	19.9	17.0	18.7
13	4.2	3.6	3.9	6.0	4.3	5.4	15.5	13.3	14.6	20.2	18.1	19.3
14	4.2	3.2	3.7	6.6	4.2	5.6	15.6	14.4	15.0	22.3	18.6	20.5
15	4.0	2.8	3.5	7.5	4.9	6.4	16.0	13.5	14.9	21.0	18.9	19.8
16	4.2	2.8	3.7	7.5	6.1	6.7	15.8	13.7	14.6	20.7	19.4	20.1
17	4.0	2.7	3.4	7.5	5.2	6.5	13.7	12.3	12.8	20.4	19.0	19.5
18	3.3	2.0	2.8	7.5	5.4	6.8	12.2	11.1	11.5	19.0	18.1	18.5
19	3.6	2.0	2.9	8.2	5.9	7.2	12.1	11.4	11.6	18.7	16.8	17.3
20	3.9	2.2	3.3	9.5	7.0	8.4	12.9	12.1	12.5	16.9	15.3	16.1
21	4.8	2.9	4.0	10.4	8.2	9.5	13.0	12.8	12.9	16.4	15.7	16.1
22	5.4	3.5	4.7	10.9	9.0	10.2	12.7	11.9	12.3	17.5	16.0	16.6
23	6.0	4.3	5.4	11.6	9.6	10.8	11.8	11.4	11.6	18.5	16.7	17.6
24	6.5	4.8	5.9	11.8	10.2	11.1	12.0	11.5	11.7	19.6	17.5	18.5
25	6.7	5.3	6.2	11.7	9.4	10.8	12.6	11.9	12.1	21.6	18.5	20.2
26	6.7	5.8	6.4	12.8	10.2	11.7	14.8	12.6	13.6	23.1	19.5	21.4
27	7.2	6.4	6.7	13.4	11.3	12.5	16.1	12.9	14.6	22.3	20.1	20.9
28	8.8	7.2	7.8	12.8	9.9	11.2	16.1	14.7	15.5	21.0	19.3	20.3
29	8.9	8.2	8.6	9.9	7.7	8.9	17.3	14.1	15.8	20.8	18.6	19.5
30	---	---	---	9.2	8.1	8.7	17.3	15.2	16.4	18.6	16.7	17.2
31	---	---	---	8.6	7.2	8.0	---	---	---	16.9	15.9	16.4
MONTH	8.9	.8	3.9	13.4	4.2	8.4	17.3	6.9	13.1	23.1	11.2	17.1

SAN JUAN RIVER BASIN

09379500 SAN JUAN RIVER NEAR BLUFF, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	17.5	16.3	16.8	21.9	20.6	21.3	26.2	23.6	24.8	22.5	20.8	21.8
2	19.0	17.0	17.8	22.5	21.5	21.9	25.9	24.3	25.2	22.1	20.4	21.4
3	21.6	18.5	19.9	22.9	22.3	22.6	25.3	23.8	24.6	22.4	20.1	21.2
4	23.8	20.4	22.2	23.2	22.2	22.7	24.6	23.4	24.2	21.7	20.2	21.0
5	23.4	21.1	22.3	23.2	22.6	22.9	24.1	22.7	23.5	21.9	20.2	21.1
6	21.7	19.8	20.3	23.5	22.2	22.8	24.6	22.7	23.7	21.6	19.5	20.7
7	20.4	19.3	19.7	23.6	22.8	23.2	24.5	23.1	23.9	21.8	19.7	20.8
8	21.0	18.8	19.5	23.7	23.0	23.4	23.9	22.1	22.8	---	---	---
9	21.6	19.2	20.3	23.8	23.4	23.7	22.7	21.7	22.3	---	---	---
10	21.5	19.7	20.2	23.5	22.4	23.0	23.0	21.7	22.4	---	---	---
11	20.0	18.9	19.5	23.9	22.8	23.3	23.1	21.7	22.5	---	---	---
12	20.7	18.5	19.3	23.9	23.0	23.5	23.2	21.2	22.3	---	---	---
13	20.1	18.0	19.1	24.6	23.2	23.8	23.6	22.2	23.0	---	---	---
14	20.1	18.4	19.1	24.5	23.7	24.2	23.8	22.0	23.1	---	---	---
15	21.0	19.6	20.2	25.3	23.3	24.3	23.8	22.9	23.4	---	---	---
16	22.3	20.2	21.1	25.2	23.5	24.5	23.5	22.5	23.1	---	---	---
17	23.3	21.6	22.6	25.8	23.5	24.5	23.9	22.5	23.2	---	---	---
18	23.4	21.9	22.7	26.0	23.4	24.7	23.9	22.9	23.5	---	---	---
19	24.6	22.3	23.4	26.5	23.7	25.0	23.7	22.7	23.3	---	---	---
20	24.9	23.3	24.2	26.9	23.4	25.1	23.5	22.6	23.0	---	---	---
21	25.4	23.9	24.7	27.1	24.3	25.6	22.9	22.4	22.7	---	---	---
22	25.7	24.4	25.1	27.2	23.3	25.4	23.7	21.8	22.7	---	---	---
23	26.0	24.4	25.2	26.5	24.4	25.4	25.0	22.9	24.0	---	---	---
24	26.3	24.8	25.6	26.5	23.7	24.8	25.1	23.4	24.3	---	---	---
25	26.1	24.5	25.4	26.8	24.3	25.3	25.2	23.8	24.6	---	---	---
26	24.4	22.0	23.2	26.1	23.9	25.0	24.6	22.7	23.3	---	---	---
27	24.7	22.9	23.7	26.3	23.6	24.8	22.8	22.2	22.6	---	---	---
28	23.9	22.4	22.9	26.3	23.7	24.9	22.6	21.1	21.9	---	---	---
29	22.4	21.0	21.4	26.3	24.2	25.1	22.4	21.5	22.0	---	---	---
30	21.9	20.3	20.9	26.2	23.9	24.8	22.2	21.3	21.8	---	---	---
31	---	---	---	25.9	24.0	24.9	22.0	21.1	21.7	---	---	---
MONTH	26.3	16.3	21.6	27.2	20.6	24.1	26.2	21.1	23.2	---	---	---

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SED. SUSP. SIEVE DIAM. PERCENT FINER THAN .062 MM	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
MAR , 1988						
24...	1130	1150	12.0	89	109	338
MAY						
25...	1130	1500	20.0	--	2240	9070
JUL						
18...	1100	596	30.0	99	1400	2250

09379900 LAKE POWELL AT GLEN CANYON DAM, AZ

LOCATION.--Lat 36°56'12", long 111°29'00", in sec. 24, T. 41 N., R. 8 E., Coconino County, Hydrologic Unit 14070006, at Glen Canyon Dam on Colorado River, 900 ft upstream from bridge on U.S. Highway 89, 1.4 mi downstream from Wahweap Creek, 2 mi northwest of Page, and 12 mi downstream from Utah-Arizona State line.

DRAINAGE AREA.--111,700 mi², approximately, including 3,959 mi² in Great Divide Basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--March 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to Sept. 1, 1964, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by concrete-arch gravity dam; storage began Mar. 13, 1963; dam completed September 1963. Total capacity, 27,000,000 acre-ft, consisting of the following: Dead storage, 1,998,000 acre-ft below elevation 3,370 ft--sill of outlet gates usable contents, 25,002,000 acre-ft between elevations 3,370 ft and 3,700 ft--top of conservation pool. Reservoir is used for power development, to provide storage replacement for upstream irrigation development, and to meet downstream requirements under the Colorado River Compact of 1922. Figures given herein represent usable contents; prior to Oct. 1, 1968, figures of total contents were published (prior to sealing of diversion tunnel July 7, 1965, all storage was usable).

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES (at 2400) FOR PERIOD OF RECORD.--Maximum contents, 26,373,000 acre-ft July 14, 1983, elevation, 3,708.34 ft; minimum since power pool level was reached (Aug. 16, 1964), 4,166,000 acre-ft Mar. 18, 1965, elevation, 3,490.76 ft.

EXTREMES (at 2400) FOR CURRENT YEAR.--Maximum contents, 23,937,000 acre-ft July 5, elevation, 3,693.31 ft; minimum, 22,159,000 acre-ft Feb. 26, elevation, 3,681.65 ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

3,680	21,916,000	3,690	23,424,000
3,685	22,662,000	3,695	24,204,000

RESERVOIR STORAGE, IN THOUSANDS OF ACRE-Feet, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23099	23121	23014	22694	22357	22167	22167	22467	23151	23895	23565	23119
2	23092	23128	22999	22674	22353	22179	22174	22474	23188	23908	23538	23105
3	23083	23131	22982	22661	22344	22180	22171	22488	23223	23927	23524	23099
4	23083	23136	22964	22640	22341	22185	22185	22498	23254	23933	23502	23096
5	23072	23130	22953	22614	22338	22186	22170	22519	23286	23937	23476	23090
6	23066	23167	22948	22600	22338	22192	22171	22525	23306	23930	23480	23075
7	23052	23183	22936	22605	22335	22198	22174	22539	23335	23920	23462	23055
8	23055	23194	22927	22602	22325	22199	22171	22557	23365	23905	23448	23043
9	23049	23193	22917	22606	22310	22189	22176	22572	23400	23923	23439	23026
10	23047	23185	22898	22606	22305	22207	22180	22588	23431	23911	23419	23020
11	23049	23180	22900	22588	22299	22204	22185	22593	23469	23900	23412	23011
12	23032	23173	22903	22591	22296	22199	22188	22602	23520	23894	23385	22994
13	23034	23164	22888	22585	22284	22196	22185	22605	23553	23880	23366	22976
14	23034	23153	22863	22578	22290	22195	22199	22615	23593	23869	23362	22961
15	23026	23153	22853	22560	22275	22182	22190	22622	23621	23858	23335	22950
16	23025	23147	22832	22551	22271	22190	22223	22641	23643	23850	23322	22944
17	23028	23136	22815	22561	22250	22180	22228	22646	23674	23847	23295	22935
18	23035	23130	22792	22531	22235	22179	22241	22685	23688	23836	23274	22938
19	23029	23127	22786	22515	22222	22180	22256	22709	23722	23819	23409	22920
20	23023	23113	22717	22498	22214	22192	22263	22756	23727	23803	23251	22907
21	23018	23104	22775	22491	22210	22180	22275	22807	23747	23786	23243	22883
22	23017	23096	22765	22470	22199	22182	22301	22854	23764	23766	23226	22874
23	23015	23078	22765	22464	22196	22168	22328	22898	23767	23763	23203	22856
24	23025	23058	22765	22441	22183	22165	22350	22933	23783	23744	23196	22848
25	23034	23041	22763	22420	22170	22170	22377	22967	23805	23725	23173	22841
26	23035	23049	22742	22411	22159	22168	22398	22986	23809	23702	23170	22818
27	23041	23040	22741	22392	22168	22190	22419	23003	23834	23676	23174	22798
28	23044	23037	22742	22380	22174	22167	22432	23031	23852	23651	23170	22779
29	23067	23034	22733	22366	22174	22165	22447	23055	23847	23617	23154	22765
30	23072	23029	22717	22366	---	22171	22452	23086	23873	23595	23154	22753
31	23084	---	22706	22366	---	22165	---	23118	---	23575	23128	---
MAX	23099	23194	23014	22694	22357	22207	22452	23118	23873	23937	23565	23119
MIN	23015	23029	22706	22366	22159	22165	22167	22467	23151	23575	23128	22753
(#)	3687.79	3687.43	3685.30	3683.04	3681.75	3681.69	3683.61	3688.01	3692.90	3690.98	3688.08	3685.61
(*)	-25	-55	-323	-340	-192	-9	+287	+666	+755	-298	-447	-375

CAL YR 1987 (*) +142
WTR YR 1988 (*) -356

(#) Elevation, in feet, at end of month.
(*) Change in contents, in thousands of acre-feet.

KANAB CREEK BASIN

09403600 KANAB CREEK NEAR KANAB, UT

LOCATION.--Lat 37°06'02", long 112°32'50", in NE¼NE¼SW¼ sec. 5, T. 43 S., R. 6 W., Kane County, Hydrologic Unit 15010003, at upstream edge of left bridge pier on U.S. Highway 89, 300 ft upstream from Tiny Canyon and 3.5 mi north of Kanab.

DRAINAGE AREA.--198 mi².

PERIOD OF RECORD.--July 1959 to September 1968 (peaks only). January 1979 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,060 ft from topographic map. A crest-stage gage was in operation at this site from July 22, 1959 to Sept. 30, 1968 at different datum.

REMARKS.--Records poor. No diversion above station for irrigation.

AVERAGE DISCHARGE.--9 years, 15.7 ft³/s, 11,370 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,130 ft³/s Aug. 20, 1984, maximum gage height, 8.50 ft Aug. 20, 1984; minimum recorded, 0.90 ft³/s June 23, 26, 29, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge recorded by crest-stage gage, 3,030 ft³/s Sept. 8, 1961, gage height, 19.80 ft at different datum.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 1	0230	*511	*8.34	No other peak greater than base discharge.			

Minimum daily discharge, 4.3 ft³/s Mar. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e8.4	13	e20	e16	e15	e11	e5.0	e14	e11	e5.1	e18	e7.2
2	e8.2	12	e19	e16	e15	e10	5.9	e14	e11	e5.4	e15	e7.0
3	7.9	15	e18	16	e16	e9.6	e6.7	e14	e10	e5.6	e18	e7.0
4	e8.2	9.2	e17	17	e16	e10	7.2	e14	e10	e6.0	e11	e7.0
5	8.4	e11	e17	e17	e16	e11	e7.0	14	e9.6	e6.3	e9.0	e7.0
6	9.1	18	e16	17	e16	e12	e6.8	e14	e9.4	e6.4	e12	e7.0
7	e9.2	15	16	e16	16	e11	6.7	e15	e9.2	6.5	e8.0	e7.0
8	e10	e15	e15	e16	15	e10	e8.8	e15	e9.0	7.0	6.7	e7.0
9	e12	e15	e15	e16	17	e9.7	10	e15	e8.8	6.2	e6.2	e7.0
10	14	e15	e14	16	13	e9.0	11	16	8.8	6.7	e6.6	e7.0
11	e15	15	e13	e16	14	e8.4	10	14	9.5	7.3	6.8	7.0
12	e14	e14	e12	e16	14	e8.6	e10	e12	8.1	7.3	e8.0	8.1
13	e12	e14	e11	e16	14	e9.0	e10	e12	e7.4	6.5	e9.2	7.2
14	e11	e14	e10	e17	13	e9.7	e10	13	6.5	6.7	8.6	7.5
15	9.5	13	e10	e17	12	e10	e11	e13	e6.4	6.6	e8.7	e7.5
16	e9.7	e13	e10	18	14	e11	e11	e13	e6.3	7.2	e9.0	e7.3
17	e9.8	e14	e10	e18	12	e12	e12	e12	e6.2	6.6	e9.0	7.1
18	e10	e14	11	e18	14	e12	e13	e12	e6.1	7.2	e9.0	7.7
19	e10	e14	11	e18	14	e13	e14	e11	e5.9	7.0	8.8	7.1
20	e11	e15	11	e17	15	e13	e16	e11	e5.8	6.7	8.4	6.6
21	11	e15	12	e17	14	e14	19	e11	e5.7	7.2	e8.6	6.8
22	e11	e15	12	e17	12	e14	19	12	e5.6	6.7	e9.0	7.4
23	e11	16	14	17	12	e12	21	12	e5.4	6.5	e9.4	7.3
24	e11	16	15	16	11	e10	21	15	e5.6	5.9	9.8	8.5
25	e11	16	e15	e16	12	e8.0	e18	e13	e5.3	6.1	12	7.8
26	11	e16	e15	e15	13	e5.8	13	e12	4.9	7.2	e13	7.7
27	11	e19	e16	15	12	5.2	e15	e11	e4.8	7.3	e13	e7.8
28	e11	e22	e16	14	e12	5.4	15	e13	4.8	8.6	e13	e7.9
29	e11	e22	e16	e14	e11	e4.8	e14	e13	4.4	8.0	e13	e8.0
30	12	e21	e16	15	---	4.3	e14	e12	e4.8	4.7	e8.0	e8.0
31	12	---	e16	e15	---	6.6	---	e12	---	5.7	e7.4	---
TOTAL	330.4	456.2	439	505	400	300.1	361.1	404	216.3	204.2	312.2	220.5
MEAN	10.7	15.2	14.2	16.3	13.8	9.68	12.0	13.0	7.21	6.59	10.1	7.35
MAX	15	22	20	18	17	14	21	16	11	8.6	18	8.5
MIN	7.9	9.2	10	14	11	4.3	5.0	11	4.4	4.7	6.2	6.6
AC-FT	655	905	871	1000	793	595	716	801	429	405	619	437

CAL YR 1987 TOTAL 4150.3 MEAN 11.4 MAX 22 MIN 5.2 AC-FT 8230
WTR YR 1988 TOTAL 4149.0 MEAN 11.3 MAX 22 MIN 4.3 AC-FT 8230

e Estimated

VIRGIN RIVER BASIN

167

09404450 EAST FORK VIRGIN RIVER NEAR GLENDALE, UT

LOCATION.--Lat 37°20'19", long 112°36'13", in SE¼NE¼NW¼ sec. 14, T. 40 S., R. 7 W., Kane County, Hydrologic Unit 15010008, on right bank 50 ft downstream from Lydia's Creek, and 1.0 mi north of the town of Glendale on U.S. Highway 89.

DRAINAGE AREA.--69.2 mi².

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder and artificial concrete control. Altitude of gage is 5,900 ft from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. A few small diversions above station.

AVERAGE DISCHARGE.--22 years, 20.7 ft³/s, 15,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 640 ft³/s July 27, 1976, gage height, 4.14 ft; minimum, 3.2 ft³/s Aug. 12, 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 27	2300	*49	*1.66				

Minimum discharge, 3.5 ft³/s Aug. 15, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	25	18	14	14	30	15	27	13	9.6	9.1	7.7
2	4.8	19	18	14	15	25	15	23	12	8.2	8.8	7.1
3	5.1	24	16	14	14	22	14	22	11	7.5	12	6.4
4	5.2	14	14	14	14	24	13	22	10	7.1	9.4	5.9
5	5.2	21	20	15	14	23	13	21	9.6	6.6	8.5	5.6
6	5.7	28	16	15	14	18	13	21	9.2	6.1	9.1	5.5
7	5.7	23	16	15	14	19	13	22	8.8	6.3	7.7	5.3
8	6.0	18	15	15	15	18	14	20	8.4	6.6	7.2	5.2
9	5.9	17	14	14	16	18	13	20	7.9	7.3	7.1	5.2
10	6.2	15	15	14	16	19	11	21	7.2	7.3	7.0	5.7
11	6.4	16	14	15	16	19	10	18	7.0	6.8	8.7	5.7
12	7.5	15	13	14	18	18	11	15	7.0	7.0	9.1	6.0
13	12	15	11	14	22	17	14	15	6.6	6.6	7.0	6.6
14	11	21	12	14	21	17	15	15	6.7	6.4	6.0	7.7
15	11	19	e12	14	21	17	14	13	5.8	6.4	5.6	7.6
16	11	18	13	14	18	17	22	12	5.6	6.5	5.3	6.3
17	10	15	13	16	15	17	21	13	7.0	6.9	7.5	5.8
18	11	17	14	18	16	16	18	15	6.6	6.6	6.2	5.2
19	11	18	14	16	15	16	17	14	6.2	6.1	6.2	5.2
20	11	17	14	e13	17	16	16	13	6.4	6.0	6.8	5.1
21	9.9	14	14	e13	18	17	22	12	6.9	6.1	7.5	5.4
22	10	14	14	e13	18	17	27	12	7.5	6.3	7.3	6.9
23	15	14	14	e13	18	17	30	11	7.6	7.1	7.1	6.7
24	17	14	12	e13	19	16	28	11	7.8	7.0	7.8	7.8
25	12	14	10	e13	20	16	28	11	9.6	7.3	9.6	8.7
26	11	14	11	14	21	16	27	11	9.3	6.9	11	8.3
27	11	15	13	15	27	16	25	11	9.5	9.2	12	7.7
28	11	17	14	15	34	16	25	10	9.7	9.9	11	7.3
29	17	18	14	16	31	16	25	11	10	8.7	11	6.8
30	15	17	14	16	---	16	28	13	11	8.8	9.2	6.5
31	15	---	14	15	---	15	---	13	---	8.5	7.6	---
TOTAL	300.4	526	436	448	531	564	557	488	250.9	223.7	255.4	192.9
MEAN	9.69	17.5	14.1	14.5	18.3	18.2	18.6	15.7	8.36	7.22	8.24	6.43
MAX	17	28	20	18	34	30	30	27	13	9.9	12	8.7
MIN	4.8	14	10	13	14	15	10	10	5.6	6.0	5.3	5.1
AC-FT	596	1040	865	889	1050	1120	1100	968	498	444	507	383

CAL YR 1987 TOTAL 4866.9 MEAN 13.3 MAX 28 MIN 4.7 AC-FT 9650
WTR YR 1988 TOTAL 4773.3 MEAN 13.0 MAX 34 MIN 4.8 AC-FT 9470

e Estimated

VIRGIN RIVER BASIN

09405200 DEEP CREEK NEAR CEDAR CITY, UT

LOCATION.--Lat 37°31'18", long 112°53'01", in NE¼NE¼SE¼, sec. 7, T. 38 S, R. 9 W, Kane County, Hydrologic Unit 15010008, on left bank 100 ft downstream from road, 14.5 mi southeast of Cedar City.

DRAINAGE AREA.--6.72 mi².

PERIOD OF RECORD.--June 1987 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,680 ft from topographic map.

REMARKS.--Records good. Some diversion for irrigation above gage.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23 ft³/s Aug. 27, gage height 8.73 ft; minimum daily, 0.84 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.99	3.7	2.0	1.2	1.7	3.1	4.6	10	5.8	2.5	2.6	2.1
2	1.0	4.2	1.9	1.3	e1.6	3.1	3.6	10	4.8	2.2	2.2	1.9
3	.97	4.3	2.0	1.2	e1.5	2.7	3.8	8.4	4.4	2.1	5.2	1.9
4	1.0	3.0	2.0	1.3	e1.4	2.7	4.0	7.9	3.7	1.7	2.6	1.7
5	1.0	3.9	2.4	1.4	e1.4	2.9	4.4	7.7	3.5	1.6	2.3	1.7
6	1.0	4.0	2.2	1.4	e1.4	3.0	5.2	7.5	3.4	1.7	2.5	1.7
7	1.0	3.4	2.2	1.4	e1.5	2.7	5.9	7.5	3.4	1.7	2.4	1.5
8	1.0	3.3	e2.3	1.4	e1.5	2.7	5.5	7.3	3.3	1.7	1.9	1.2
9	1.0	3.2	e2.4	1.4	e1.5	3.1	4.6	7.2	3.2	1.6	1.8	1.1
10	1.1	2.9	2.3	1.4	e1.5	2.7	4.5	7.6	3.0	1.5	1.8	1.2
11	1.1	2.8	2.2	1.5	e1.6	e2.5	4.9	8.3	2.9	1.6	2.2	1.0
12	1.8	2.6	e2.0	e1.5	e1.6	2.4	5.0	8.5	2.9	1.6	2.3	1.3
13	3.5	2.5	e1.7	e1.5	e1.7	2.0	5.0	9.1	2.9	1.5	1.8	1.3
14	2.2	e2.4	e1.5	e1.4	e1.7	e2.0	6.7	8.8	3.0	1.5	1.4	1.2
15	1.6	e2.3	1.4	e1.4	e1.7	e2.1	6.7	8.4	2.9	1.3	1.4	1.2
16	1.5	e2.3	1.6	e1.5	e1.7	2.1	12	8.0	2.9	1.4	1.6	1.0
17	1.3	2.3	1.6	e1.5	e1.6	e2.3	11	8.2	3.5	1.2	1.6	1.0
18	1.3	2.5	1.6	e1.6	e1.6	2.4	10	7.3	3.5	1.2	1.4	1.0
19	1.3	3.3	1.6	e1.5	1.1	3.0	8.5	6.1	3.2	1.2	1.6	1.1
20	1.3	3.0	1.6	e1.4	1.3	3.3	8.3	5.5	3.1	1.2	1.8	.99
21	1.2	2.3	1.5	e1.3	1.3	3.4	8.2	5.1	3.5	1.3	2.0	.84
22	1.3	2.2	1.6	e1.4	1.8	3.6	6.9	5.0	3.2	1.3	1.9	.85
23	2.7	2.2	1.6	e1.4	1.9	4.3	6.7	5.1	2.8	1.3	1.9	1.0
24	3.3	e2.2	1.5	e1.4	2.2	4.1	7.7	4.9	2.8	1.3	1.8	1.0
25	2.4	e2.2	1.4	e1.4	2.5	4.5	9.4	4.8	2.8	1.3	1.8	.97
26	1.9	e2.2	1.3	e1.5	2.7	5.5	11	4.5	3.3	1.7	2.6	.98
27	1.7	e2.2	1.3	e1.5	2.8	6.0	13	4.3	3.1	3.3	5.1	.92
28	1.8	2.1	1.3	1.6	e3.0	5.3	13	4.0	2.8	2.0	3.0	.93
29	3.3	2.0	1.3	1.7	e3.0	3.7	13	4.9	2.6	2.0	2.6	.98
30	2.6	2.0	1.3	1.7	---	3.3	12	5.4	2.5	2.4	2.4	.97
31	2.3	---	1.3	1.7	---	4.2	---	7.0	---	2.7	2.3	---
TOTAL	51.46	83.5	53.9	44.8	51.8	100.7	225.1	214.3	98.7	52.6	69.8	36.53
MEAN	1.66	2.78	1.74	1.45	1.79	3.25	7.50	6.91	3.29	1.70	2.25	1.22
MAX	3.5	4.3	2.4	1.7	3.0	6.0	13	10	5.8	3.3	5.2	2.1
MIN	.97	2.0	1.3	1.2	1.1	2.0	3.6	4.0	2.5	1.2	1.4	.84
AC-FT	102	166	107	89	103	200	446	425	196	104	138	72

WTR YR 1988 TOTAL 1083.19 MEAN 2.96 MAX 13 MIN .84 AC-FT 2150

e Estimated

VIRGIN RIVER BASIN

169

09405250 EAST FORK DEEP CREEK NEAR CEDAR CITY, UT

LOCATION.--Lat 37°30'35", long 112°52'58", in NE¼SE¼NE¼ sec. 18, T. 38 S., R. 9 W., Kane County, Hydrologic Unit 15010008, on right bank 400 ft downstream from road, 40 ft downstream from confluence of two streams, 15 mi southeast of Cedar City.

DRAINAGE AREA.--7.82 mi².

PERIOD OF RECORD.--June 1987 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,640 ft from topographic map.

REMARKS.--Records good. Some diversion for irrigation above gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32 ft³/s Apr. 26, 1988, gage height 8.21 ft; minimum, 0.62 ft³/s July 3, 6, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 32 ft³/s Apr. 26, gage height 8.21 ft; minimum daily, 1.1 ft³/s Oct. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	11	e5.2	e3.1	e3.4	e5.1	e6.4	15	10	3.0	2.4	2.9
2	1.4	11	e5.8	e3.3	e3.4	e4.8	e6.6	14	8.0	3.4	2.2	2.5
3	1.1	11	e5.7	e3.4	e3.7	e4.6	e6.8	13	6.6	3.2	4.7	2.1
4	1.1	6.4	e5.6	e3.4	e3.9	e4.1	7.8	13	6.4	3.0	2.0	1.8
5	1.2	9.9	e5.4	e3.4	e3.8	e4.3	7.9	12	6.1	2.6	1.7	1.8
6	1.3	9.7	e4.8	e3.4	e3.9	e4.4	8.3	12	5.7	2.6	1.6	1.6
7	1.4	8.8	e5.1	e3.4	e4.1	e4.2	8.5	13	5.6	2.6	2.2	1.9
8	1.4	8.8	e5.2	e3.4	e4.2	e4.0	8.4	13	6.5	2.5	1.9	2.1
9	1.4	8.1	e4.6	e3.4	e4.3	e4.0	7.9	12	6.2	2.8	1.6	2.1
10	1.4	7.6	e3.9	e3.4	e4.2	e4.0	7.7	11	6.4	2.6	2.3	1.9
11	1.4	6.9	e3.4	e3.3	e4.2	e4.0	7.8	11	6.0	2.6	e2.4	2.0
12	2.9	6.3	e3.2	e3.1	e4.1	e4.0	8.0	11	5.9	2.7	e2.5	2.2
13	4.8	6.0	e3.1	e3.2	e3.9	e3.9	8.3	12	5.8	2.4	e2.1	2.3
14	2.9	6.1	e3.1	e3.4	e3.9	e3.8	11	13	5.4	2.2	e1.8	2.3
15	2.5	e5.1	e3.2	e3.4	e3.6	e4.1	12	12	5.0	2.2	e2.0	2.2
16	2.5	e4.9	e3.4	e3.4	e3.4	e4.1	28	10	4.5	2.2	2.1	2.1
17	2.4	e5.0	e3.5	e3.4	e2.9	e4.4	20	13	4.6	1.8	1.8	2.0
18	2.3	e5.2	e3.6	e3.4	e3.2	e4.5	17	14	5.3	2.0	1.7	1.8
19	2.4	e5.6	e3.6	e3.0	e3.1	e4.9	14	13	5.2	1.6	1.9	2.0
20	2.4	e5.7	e3.2	e3.0	e3.1	e5.0	13	12	5.0	1.6	2.5	2.1
21	2.4	e5.4	e3.0	e3.0	e3.4	e5.4	15	12	5.5	1.3	2.6	1.9
22	2.3	e5.2	e3.2	e3.5	e3.9	e5.4	13	12	4.8	1.4	2.1	2.2
23	5.6	e4.9	e3.4	e3.6	e4.1	e5.6	13	12	4.0	2.1	2.2	2.2
24	6.3	e4.7	e3.2	e3.6	e4.5	e6.0	16	11	2.5	2.1	2.3	2.0
25	4.0	e4.7	e3.1	e3.8	e4.9	e6.2	23	11	3.2	1.2	2.3	1.9
26	3.3	e4.6	e3.0	e4.1	e5.0	e6.6	29	11	4.2	1.3	4.6	1.9
27	3.1	e4.6	e3.2	e4.2	e4.9	e6.4	29	11	3.4	2.4	7.7	2.1
28	3.0	e4.7	e3.4	e4.0	e4.8	e6.3	23	11	3.1	2.2	3.2	1.7
29	7.9	e4.8	e3.4	e3.8	e4.8	e6.2	16	10	2.9	2.3	2.8	1.7
30	5.1	e5.0	e3.1	e3.6	---	e6.0	15	10	2.9	2.3	2.7	1.7
31	6.4	---	e3.0	e3.4	---	e6.2	---	11	---	2.3	3.2	---
TOTAL	88.9	197.7	119.6	106.8	114.6	152.5	407.4	371	156.7	70.5	79.1	61.0
MEAN	2.87	6.59	3.86	3.45	3.95	4.92	13.6	12.0	5.22	2.27	2.55	2.03
MAX	7.9	11	5.8	4.2	5.0	6.6	29	15	10	3.4	7.7	2.9
MIN	1.1	4.6	3.0	3.0	2.9	3.8	6.4	10	2.5	1.2	1.6	1.6
AC-FT	176	392	237	212	227	302	808	736	311	140	157	121

WTR YR 1988 TOTAL 1925.8 MEAN 5.26 MAX 29 MIN 1.1 AC-FT 3820

e Estimated

VIRGIN RIVER BASIN

09405500 NORTH FORK VIRGIN RIVER NEAR SPRINGDALE, UT

LOCATION.--Lat $37^{\circ}12'35''$, long $112^{\circ}58'40''$, in NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 41 S., R. 10 W., Washington County, Hydrologic Unit 15010008, on right bank in Zion National Park, 0.2 mi downstream from point of diversion of Springdale Canal, 0.5 mi downstream from Pine Creek, and 1.9 mi northeast of Springdale.

DRAINAGE AREA.--344 mi².

PERIOD OF RECORD.--May 1913 to June 1914, June to November 1923, April to June, August and September 1925 (fragmentary), October 1925 to current year. Published as Zion Creek near Springdale 1913-14 (flow of Springdale Canal not included) and as Mukuntuweap River near Springdale 1923, 1925-32.

GAGE.--Water-stage recorder. Elevation of gage is 3,970 ft from topographic map. May 13, 1913 to June 30, 1914, nonrecording gage at site 3.2 mi downstream at different datum. June 6, 1923 to Dec. 14, 1949, nonrecording gages at several sites within 0.8 mi of present site at various datums.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Figures given herein include Springdale Canal, which diverts water in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 41 S., R. 10 W., for irrigation in vicinity of Springdale. Diversion for irrigation of about 1,400 acres above station.

AVERAGE DISCHARGE.--63 years, 105 ft³/s, 76,070 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,150 ft³/s Dec. 6, 1966, gage height, 12.98 ft, from rating curve extended above 2,000 ft³/s on basis of drift measurement at gage height 6.7 ft, and a slope-area measurement at gage height 10.25 ft; minimum observed, 20 ft³/s July 31, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,580 ft³/s Nov. 5, gage height, 5.17 ft; minimum daily discharge, 31 ft³/s Dec. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	157	58	43	60	110	100	354	228	71	81	73
2	46	150	60	40	56	94	106	310	198	69	57	59
3	45	227	57	45	56	78	110	300	174	77	264	59
4	45	103	59	51	51	75	119	305	164	79	85	52
5	42	267	68	57	46	77	122	306	151	76	65	48
6	42	272	61	61	51	83	142	287	137	73	82	57
7	41	193	59	58	54	84	176	272	124	71	66	61
8	40	101	57	56	55	69	192	263	119	68	62	59
9	43	86	53	52	56	88	159	252	116	66	63	58
10	40	73	60	51	55	101	149	280	109	66	62	61
11	40	65	55	51	55	71	175	352	106	64	62	59
12	42	64	51	52	56	72	198	397	104	64	60	44
13	72	61	37	45	58	74	214	444	101	62	54	43
14	64	94	31	44	56	71	294	450	99	62	62	52
15	55	66	35	49	58	76	268	429	93	59	66	59
16	51	55	45	51	59	75	422	420	88	59	67	59
17	50	62	56	52	50	63	426	431	93	56	65	58
18	49	57	56	51	60	71	347	358	96	56	65	57
19	50	57	56	51	57	75	316	316	105	59	65	58
20	50	62	52	51	58	76	332	282	97	59	67	60
21	49	64	47	50	58	87	561	263	127	57	70	58
22	49	58	50	52	56	96	355	254	100	57	66	60
23	150	56	55	53	58	105	330	243	91	57	63	63
24	101	55	50	52	61	128	300	231	87	59	57	62
25	82	58	33	56	64	116	361	225	96	57	89	61
26	58	56	40	54	69	147	411	214	90	60	75	60
27	55	52	40	55	95	174	440	202	85	73	104	60
28	52	60	38	58	114	166	422	182	81	60	100	60
29	111	60	51	62	108	121	373	231	77	79	68	60
30	98	54	55	62	---	128	375	205	73	57	66	54
31	74	---	53	62	---	97	---	188	---	71	78	---
TOTAL	1840	2845	1578	1627	1790	2948	8295	9246	3409	2003	2356	1734
MEAN	59.4	94.8	50.9	52.5	61.7	95.1	276	298	114	64.6	76.0	57.8
MAX	150	272	68	62	114	174	561	450	228	79	264	73
MIN	40	52	31	40	46	63	100	182	73	56	54	43
AC-FT	3650	5640	3130	3230	3550	5850	16450	18340	6760	3970	4670	3440
CAL YR 1987	TOTAL	30260	MEAN	82.9	MAX	370	MIN	31	AC-FT	60020		
WTR YR 1988	TOTAL	39671	MEAN	108	MAX	561	MIN	31	AC-FT	78690		

VIRGIN RIVER BASIN

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09405900 NORTH CREEK NEAR VIRGIN, UT

LOCATION.--Lat 37°14'14", Long 113°09'01", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$, sec. 12, T. 41 S., R. 13 W., Washington County, Hydrologic Unit 15010008, on left bank 30 ft upstream from Bonnie Reeder Memorial Bridge, 3.2 mi north of town of Virgin and State Highway 9.

DRAINAGE AREA.--110 mi².

PERIOD OF RECORD.--December 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,680 ft from topographic map.

REMARKS.--Records poor. Two diversions for irrigation above station, the nearest approximately 200 ft upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,630 ft³/s, July 20, 1987, gage height, 9.34 ft from slope area measurement; no flow Sept. 6, 1986, minimum daily, Aug. 18, 19, 1987

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 950 ft³/s, Aug. 3, gage height, 8.17 ft; minimum daily, no flow July 12-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.39	49	3.6	e5.1	7.8	29	4.6	21	e1.5	1.4	e3.0	e1.0
2	2.3	33	4.2	e5.1	8.5	20	3.3	14	e1.1	1.1	e3.5	e.30
3	2.7	82	4.4	5.0	9.2	14	2.6	11	e1.0	1.7	178	e.25
4	2.3	21	3.8	5.2	7.0	7.7	3.7	9.3	e1.1	1.6	e7.0	e.25
5	1.0	137	8.6	9.6	6.1	7.0	4.2	7.9	e1.3	1.3	e2.0	e.25
6	1.6	90	5.3	13	5.9	7.0	4.3	6.1	e1.4	e1.3	e6.0	e.25
7	1.4	85	4.9	7.6	5.8	6.5	5.0	7.0	e1.5	e1.3	e5.0	e.25
8	2.1	12	7.0	6.7	5.5	4.9	5.5	6.1	e1.3	1.5	e2.0	e.50
9	2.7	6.3	4.2	6.1	6.3	5.1	5.1	5.9	e1.3	.24	e1.0	e.25
10	5.4	4.9	4.1	5.9	6.8	17	4.1	4.8	e1.2	.21	e1.0	e.10
11	2.7	4.1	4.1	6.1	7.2	7.2	3.1	3.0	e1.4	.13	e1.5	e.10
12	5.1	3.9	3.9	6.1	7.0	5.4	1.8	2.6	e1.6	.00	e1.3	e.10
13	22	3.6	e3.8	5.8	7.7	4.9	1.4	3.4	e1.8	.00	e1.1	e.10
14	10	54	e3.9	5.7	7.4	4.6	17	3.3	e1.6	.00	e.86	e.10
15	6.8	13	e4.0	6.1	6.0	4.6	12	3.0	e1.5	.00	e.68	e.10
16	6.9	5.7	e4.2	5.3	5.9	4.7	64	3.1	e1.5	.00	.54	e.10
17	7.3	5.1	4.7	e5.2	5.4	3.9	85	2.8	1.5	.00	.45	e.10
18	5.8	4.8	4.9	e5.1	5.5	3.8	60	3.2	1.5	.00	.47	e.10
19	6.9	4.5	4.6	e5.1	5.1	4.2	38	3.2	2.3	.00	.44	e.10
20	7.2	4.3	4.7	e5.0	5.1	3.7	46	3.1	e9.3	.13	.38	e.10
21	8.7	4.1	4.6	e5.0	5.3	2.6	203	2.4	e1.3	.21	e.36	e.80
22	9.1	3.9	4.7	e5.0	4.2	2.8	103	2.4	e1.2	.23	e.35	e.15
23	49	3.8	4.9	5.0	4.4	2.7	109	2.0	e1.2	.16	e.35	e.15
24	27	3.3	e4.9	e5.0	5.4	4.2	70	1.4	e1.2	.07	e.50	e.15
25	9.3	3.4	e4.9	e5.0	5.3	2.8	53	e1.1	e1.2	.76	e.50	e.15
26	8.2	3.6	e4.9	5.0	5.9	4.2	50	e1.0	e1.1	e1.1	e1.0	e.15
27	9.3	3.7	e5.0	7.0	19	4.5	59	e1.0	e1.1	e7.0	e3.0	e.15
28	7.8	3.8	e5.1	7.9	39	31	57	e1.0	e1.1	e3.0	e1.0	e.15
29	28	3.8	e5.3	10	23	13	48	e8.9	e.98	e1.5	e.50	e.15
30	7.9	3.7	5.2	12	---	8.3	33	e4.2	e.86	e1.0	e.50	e.15
31	7.5	---	e5.2	10	---	6.0	---	e3.0	---	e2.0	e.50	---
TOTAL	274.39	660.3	147.6	201.7	242.7	247.3	1155.7	152.2	47.94	28.94	224.78	6.55
MEAN	8.85	22.0	4.76	6.51	8.37	7.98	38.5	4.91	1.60	.93	7.25	.22
MAX	49	137	8.6	13	39	31	203	21	9.3	7.0	178	1.0
MIN	.39	3.3	3.6	5.0	4.2	2.6	1.4	1.0	.86	.00	.35	.10
AC-FT	544	1310	293	400	481	491	2290	302	95	57	446	13
CAL YR 1987	TOTAL	2957.03	MEAN	8.10	MAX	137	MIN	.00	AC-FT	5870		
WTR YR 1988	TOTAL	3390.10	MEAN	9.26	MAX	203	MIN	.00	AC-FT	6720		

e Estimated

VIRGIN RIVER BASIN

09406000 VIRGIN RIVER AT VIRGIN, UT

LOCATION.--Lat 37°10'22", long 113°10'48", in SW¼NW¼SW¼ sec. 23, T. 41 S., R. 12 W., Washington County, Hydrologic Unit 15010008, on right bank 1.0 mi east of Virgin and .25 mi downstream from North Creek.

DRAINAGE AREA.--934 mi².

PERIOD OF RECORD.--April 1909 to September 1971, October 1978 to current year. Fragmentary prior to 1926, monthly discharge published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1942-43(M), 1947-48(M). WSP 1633: 1921(M), 1950-51.

GAGE.--Water-stage recorder. Altitude of gage is 3,500 ft from topographic map. At present location since July 18, 1985; from Oct. 1, 1978 to July 5, 1985, located 2 mi downstream on left bank, and from Dec. 19, 1949 to September 1971, located directly across from previous site, on right bank at different datum. Prior to Dec. 19, 1949, nonrecording gages at several sites within 3 mi of present site at various datums.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 2,800 acres above station.

AVERAGE DISCHARGE.--72 years, 206 ft³/s, 149,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,800 ft³/s Dec. 6, 1966, gage height, 18.00 ft from rating curve extended above 5,000 ft³/s on basis of one slope-area measurement and one float measurement; minimum observed, 22 ft³/s July 10, 1920 and June 11, 1921.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 5	2030	*2,690	*13.18	Aug. 1	0100	1,820	11.00
Apr. 21	0830	1,810	11.02	Aug. 6	1630	2,260	11.38

Minimum discharge, 67 ft³/s Oct. 5, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	332	128	123	137	217	146	442	265	e99	e230	105
2	80	289	131	121	138	197	153	373	241	e102	e135	111
3	79	559	134	126	140	172	160	371	211	e105	e310	96
4	78	223	136	135	128	159	166	363	200	e107	e135	e90
5	75	659	149	143	123	161	169	364	187	e104	112	e84
6	71	555	146	148	126	165	184	347	170	e100	332	e90
7	73	503	139	137	126	166	222	341	154	e98	e150	e93
8	73	176	144	133	129	148	239	330	147	e96	e130	e94
9	77	160	131	130	135	152	199	317	142	e94	e120	e95
10	76	149	140	129	138	177	184	327	138	e93	e111	e95
11	77	139	140	130	137	150	206	391	134	e92	e109	e89
12	85	136	135	131	137	142	237	443	129	e90	e107	e80
13	130	135	119	124	140	139	256	483	128	e89	e106	e78
14	116	201	111	120	141	138	349	528	126	e88	e100	e90
15	99	143	120	129	136	141	319	485	119	e80	e89	e96
16	106	132	123	131	137	139	602	473	114	e87	e86	e105
17	114	144	142	138	131	130	689	477	110	e83	100	e110
18	116	141	145	152	132	134	495	416	124	e80	101	e107
19	114	134	143	129	133	136	433	366	142	e81	101	101
20	117	137	141	123	133	139	388	327	177	e82	101	99
21	114	139	129	121	138	148	1360	305	179	e80	111	96
22	119	137	138	122	138	154	721	296	144	e74	126	95
23	364	136	142	124	139	161	609	286	124	e75	135	97
24	243	134	130	129	142	183	497	265	121	e74	98	96
25	188	134	111	130	146	175	512	261	122	e80	171	95
26	148	134	117	128	151	199	552	246	116	e90	167	91
27	147	130	114	132	175	229	592	238	116	e100	181	90
28	145	130	119	139	268	248	588	223	e112	e96	151	88
29	209	133	133	141	215	182	494	329	e106	e100	113	86
30	220	129	138	148	---	181	474	271	e102	e90	127	83
31	158	---	130	147	---	154	---	234	---	e100	108	---
TOTAL	3897	6383	4098	4093	4189	5116	12195	10918	4400	2809	4253	2825
MEAN	126	213	132	132	144	165	406	352	147	90.6	137	94.2
MAX	364	659	149	152	268	248	1360	528	265	107	332	111
MIN	71	129	111	120	123	130	146	223	102	74	86	78
AC-FT	7730	12660	8130	8120	8310	10150	24190	21660	8730	5570	8440	5600

CAL YR 1987	TOTAL	52807	MEAN	145	MAX	659	MIN	45	AC-FT	104700
WTR YR 1988	TOTAL	65176	MEAN	178	MAX	1360	MIN	71	AC-FT	129300

e Estimated

VIRGIN RIVER BASIN

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09406150 LAVERKIN CREEK NEAR LAVERKIN, UT

LOCATION.--Lat 37°12'17", long 113°17'03", in NE¼NE¼SW¼ sec. 23, T. 41 S, R. 13 W., Washington County, Hydrologic Unit 15010008, on left bank 1 mi west of LaVerkin, 0.25 mi upstream from confluence of LaVerkin Creek and Virgin River.

DRAINAGE AREA.--90 mi².

PERIOD OF RECORD.--December 1984 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,040 ft from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,820 ft³/s, Aug. 2, 1988, gage height 11.10 ft from slope area measurement; minimum discharge, 0.41 ft³/s July 3, 4, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,820 ft³/s Aug. 2, gage height 11.10 ft from slope area measurement; minimum discharge, 0.52 ft³/s Oct. 6-8, Dec. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	28	2.3	e5.7	6.7	23	8.8	34	30	3.0	e73	e1.7
2	2.6	39	2.4	e5.9	8.1	18	10	31	23	2.3	e50	e1.2
3	1.1	59	2.4	e6.2	9.2	13	8.9	28	19	2.3	e120	e.97
4	.64	13	2.6	e6.6	7.1	12	9.5	22	14	2.8	e10	e1.0
5	.61	35	12	e7.3	7.6	12	9.2	21	12	2.9	10	e1.1
6	.65	e70	4.9	e8.6	7.7	13	8.5	22	10	2.1	e20	e1.2
7	.52	e20	2.4	9.4	7.6	12	11	28	9.6	2.2	e15	e1.3
8	1.0	e7.0	3.0	8.1	8.0	10	11	26	9.5	2.0	8.4	e1.4
9	2.1	e4.4	1.6	7.5	9.1	12	9.1	24	9.7	2.3	7.9	1.7
10	2.6	e4.2	1.8	7.0	9.8	20	7.1	21	9.6	2.4	7.9	2.1
11	2.7	e3.9	2.3	7.1	9.7	17	7.4	19	13	e2.4	7.4	e2.6
12	21	e3.6	2.0	7.4	9.8	11	7.8	19	8.2	e2.3	6.4	e2.8
13	59	e7.5	e1.8	6.9	11	10	8.5	19	7.4	e2.2	4.7	e3.5
14	21	38	e1.7	7.1	11	11	30	19	8.1	e2.1	3.8	e3.9
15	6.1	17	e1.5	6.8	9.1	12	31	19	7.6	e2.0	2.2	1.9
16	4.1	4.3	e1.6	6.9	9.6	11	124	19	7.3	e2.0	1.8	e1.6
17	3.7	3.5	2.4	8.1	7.5	9.9	155	34	8.3	e2.0	3.1	e1.4
18	3.4	3.3	3.0	8.8	8.3	10	100	e25	17	e1.9	1.8	e1.4
19	3.3	2.8	2.3	3.8	8.0	11	52	e20	19	e1.9	.83	e1.3
20	3.1	3.4	2.1	7.5	7.6	13	55	e19	e32	2.0	1.6	e1.4
21	3.1	3.4	1.9	7.6	8.7	14	e180	19	125	1.4	2.3	e1.6
22	3.0	2.9	1.8	7.6	9.9	13	110	e17	26	1.2	2.9	e1.5
23	34	2.7	2.1	8.3	10	12	79	e16	6.7	1.2	3.7	e1.4
24	47	2.6	e1.9	8.4	11	13	80	e16	36	1.4	6.3	e1.3
25	18	2.6	e2.0	7.8	12	11	62	e16	22	1.5	4.3	e1.5
26	5.6	2.9	2.0	8.5	11	12	51	e16	8.9	1.7	29	e1.6
27	4.5	2.5	e2.9	9.0	15	12	59	e17	8.9	e40	e80	e1.8
28	4.3	2.7	e4.7	8.8	23	11	54	17	4.8	e19	e100	e2.0
29	38	2.6	e6.7	11	17	7.4	52	64	3.0	4.0	e8.0	e2.4
30	10	2.4	e6.6	11	---	9.6	51	44	2.9	4.0	e2.3	e2.7
31	4.9	---	e6.0	8.5	---	8.9	---	32	---	4.6	e1.8	---
TOTAL	315.02	394.2	94.7	239.2	290.1	384.8	1441.8	743	518.5	125.1	596.43	53.27
MEAN	10.2	13.1	3.05	7.72	10.0	12.4	48.1	24.0	17.3	4.04	19.2	1.78
MAX	59	70	12	11	23	23	180	64	125	40	120	3.9
MIN	.52	2.4	1.5	3.8	6.7	7.4	7.1	16	2.9	1.2	.83	.97
AC-FT	625	782	188	474	575	763	2860	1470	1030	248	1180	106
CAL YR 1987	TOTAL	2849.70	MEAN	7.81	MAX	70	MIN	.52	AC-FT	5650		
WTR YR 1988	TOTAL	5196.12	MEAN	14.2	MAX	180	MIN	.52	AC-FT	10310		

e Estimated

VIRGIN RIVER BASIN

09407000 ASH CREEK ABOVE TOQUERVILLE, UT

LOCATION.--Lat 37°16'00", long 113°16'43", in SE¼SW¼NE¼ sec. 35, T. 40 S., R. 13 W., Washington County, Hydrologic Unit 15010008, on left bank approximately 1 mi upstream from Toquerville.

DRAINAGE AREA.--190 mi².

PERIOD OF RECORD.--October 1941 to September 1942, December 1984 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,450 ft from topographic map. October 1941 to September 1942 at approximately the same site at different datum.

REMARKS.--Records fair.

COOPERATION.--Gage-height readings and discharge measurements for 1942 water year provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 842 ft³/s, Aug. 3, 1988, gage height, 9.24 ft from rating curve extended above 30 ft³/s on basis of step-backwater analysis; no flow for extended periods each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 842 ft³/s, Aug. 3, gage height, 9.24 ft from rating curve extended above 30 ft³/s on basis of step-backwater analysis; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	e.00	e3.1	e2.3	e.00	7.3	1.1	25	5.7	1.6	.14	.36
2	e.00	e.00	e2.9	e1.4	e.00	7.2	.78	24	5.2	1.5	12	.26
3	e.00	e.00	e2.8	e1.5	e.00	6.0	.37	22	4.8	1.4	110	.00
4	e.00	e.00	e3.3	e1.8	e.00	5.6	.32	19	4.5	1.3	4.2	.00
5	e.00	e.00	e3.7	e1.8	e.00	4.6	.28	17	4.5	1.3	3.2	.00
6	e.00	e10	e3.4	e1.8	e.00	4.9	.24	15	4.2	1.2	3.0	.00
7	e.00	e7.4	e3.0	e1.8	e.00	5.4	.18	14	3.9	1.1	2.5	.00
8	e.00	e7.2	e2.8	e1.7	e1.0	3.8	.26	13	3.9	.93	1.2	.00
9	e.00	e7.0	e2.6	e1.6	4.0	1.5	.57	11	3.7	.76	1.2	.00
10	e.00	e6.9	e2.5	e1.4	3.9	1.7	.57	9.7	3.6	.64	1.3	.00
11	e.00	e6.8	e2.5	e1.0	4.2	.89	.37	8.8	3.5	.49	1.6	.00
12	e.00	e6.6	e2.4	e1.1	8.0	1.0	.24	8.6	3.3	.44	1.6	.00
13	e.34	e6.2	e2.3	e1.2	8.5	.72	.24	8.5	3.2	.27	1.0	.00
14	e.00	e5.7	e2.0	e1.2	8.1	.74	.33	8.6	2.9	.22	.29	.00
15	e.00	e4.7	e2.1	e1.3	5.2	.45	1.0	8.4	2.7	.16	.07	.00
16	e.00	e4.2	e2.9	e1.1	4.0	.38	2.5	8.4	2.5	.00	.01	.00
17	e.00	e4.5	e2.9	e1.0	3.2	.31	7.3	11	2.5	.00	.03	.00
18	e.00	e4.9	e3.0	e.95	7.2	.24	13	11	2.6	.00	.00	.00
19	e.00	e5.2	e3.0	e.86	3.8	.14	13	9.8	2.2	.00	.00	.00
20	e.00	e5.5	e3.0	e.79	2.7	.36	21	9.4	2.1	.00	.00	.00
21	e.00	e5.9	e3.1	e.86	2.3	.34	79	9.1	2.6	.00	.00	.00
22	e.00	e6.0	e3.0	e.91	.44	.33	38	8.6	4.5	.00	.00	.00
23	e1.0	e5.6	e2.9	e.94	.34	.32	48	7.9	3.1	.00	1.8	.00
24	e.00	e5.4	e2.3	e.70	.34	.34	39	6.6	3.0	.00	2.7	.00
25	e.00	e5.2	e2.1	e.50	.58	e.47	28	6.1	2.5	.00	1.1	.00
26	e.00	e4.5	e2.2	e.15	2.4	e.50	24	5.8	2.3	.00	3.2	.00
27	e.00	e4.1	e2.4	e.05	4.0	e.52	24	5.8	2.1	.30	5.9	.00
28	e.00	e3.9	e2.9	e.00	10	e.55	25	5.8	2.0	.13	1.7	.00
29	e.00	e3.7	e3.3	e.00	7.4	.83	26	6.6	1.9	.79	.88	.00
30	e.00	e3.3	e3.2	e.00	---	.93	26	6.8	1.7	.43	.70	.00
31	e.00	---	e2.7	e.00	---	.95	---	6.4	---	.11	.53	---
TOTAL	1.34	140.40	86.3	31.71	91.60	59.31	420.65	337.7	97.2	15.07	161.85	0.62
MEAN	.043	4.68	2.78	1.02	3.16	1.91	14.0	10.9	3.24	.49	5.22	.021
MAX	1.0	10	3.7	2.3	10	7.3	79	25	5.7	1.6	110	.36
MIN	.00	.00	2.0	.00	.00	.14	.18	5.8	1.7	.00	.00	.00
AC-FT	2.7	278	171	63	182	118	834	670	193	30	321	1.2

CAL YR 1987 TOTAL 1594.79 MEAN 4.37 MAX 38 MIN .00 AC-FT 3160
WTR YR 1988 TOTAL 1443.75 MEAN 3.94 MAX 110 MIN .00 AC-FT 2860

e Estimated

VIRGIN RIVER BASIN

175

09408000 LEEDS CREEK NEAR LEEDS, UT

LOCATION.--Lat 37°16'03", long 113°22'12", in SW¼SE¼NE¼ sec. 36, T. 40 S., R. 14 W., Washington County, Hydrologic Unit 15010008, on left bank 1,150 ft upstream from Leeds Ditch diversion, 2.1 mi north of Leeds, and 4.4 mi upstream from mouth.

DRAINAGE AREA.--15.5 mi².

PERIOD OF RECORD.--October 1915 to June 1920 (fragmentary) in reports of Geological Survey; October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,000 ft from topographic map. Prior to June 1920, at various sites and datums about 600 ft downstream; Oct. 28, 1964 to Aug. 20, 1967, water-stage recorder at site 1,000 ft downstream at different datum.

REMARKS.--Records fair. One diversion above station for domestic use.

AVERAGE DISCHARGE.--24 years, 7.65 ft³/s, 5,540 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,420 ft³/s Aug. 3, 1988, gage height, 9.41 ft; minimum recorded, 0.23 ft³/s Jan. 3, 1971.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 12, 1964, reached a stage of 6.00 ft former site and datum, discharge 2,980 ft³/s from slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 3	0200	*4,420	*9.41	Aug. 27	unknown	3,960	9.00
Aug. 25	1700	113	3.82				

Minimum daily discharge, 2.4 ft³/s Oct. 7, 8, 10, 11, 20-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	13	5.7	4.5	6.4	8.5	6.6	14	22	14	9.5	e13
2	3.4	15	5.7	4.0	6.6	8.1	6.6	14	22	14	6.6	e12
3	2.8	26	5.7	4.1	6.1	8.0	6.5	14	22	13	e190	e11
4	2.8	11	5.6	4.4	5.9	7.8	6.4	14	22	13	e19	e9.4
5	2.5	13	5.5	4.8	5.9	7.6	6.3	14	22	13	11	e8.0
6	2.5	25	5.3	4.6	5.9	7.8	6.2	14	22	12	9.9	e6.8
7	2.4	23	5.3	4.3	5.9	7.9	6.1	14	23	12	9.4	e6.0
8	2.4	11	5.2	4.4	5.9	7.8	6.1	14	22	12	8.9	e5.4
9	2.7	9.3	5.2	4.4	6.4	7.9	6.1	13	23	11	8.5	e5.9
10	2.4	8.2	5.1	4.4	6.8	8.0	6.2	15	23	11	8.0	e5.5
11	2.4	8.9	5.0	4.5	6.7	7.9	6.1	16	23	11	7.6	e5.5
12	4.5	12	e4.9	4.3	6.9	7.8	6.1	16	22	10	8.2	e5.4
13	11	13	e4.8	4.3	7.0	7.6	6.2	16	21	9.5	8.2	e5.5
14	3.3	15	e4.8	4.3	6.7	7.7	6.2	16	21	8.9	7.9	5.2
15	2.9	11	e4.7	4.3	6.6	7.5	6.6	16	20	8.4	7.6	5.2
16	2.7	9.1	e4.7	4.3	6.5	7.6	7.6	16	20	7.9	7.6	5.0
17	2.7	10	e4.8	4.8	6.4	7.5	9.4	19	20	7.5	7.6	4.9
18	2.7	9.1	e5.0	4.8	6.4	7.4	11	18	20	7.0	7.4	4.9
19	2.5	8.1	5.0	4.6	6.4	7.3	9.4	18	19	6.7	7.4	4.9
20	2.4	7.6	4.9	e4.5	6.6	7.1	13	18	19	6.3	7.6	4.9
21	2.4	7.0	e4.7	e4.2	6.8	7.1	29	18	19	6.0	7.6	4.8
22	2.4	6.7	e4.6	e4.2	7.0	7.1	19	19	18	5.7	7.1	4.9
23	7.9	6.4	e4.5	e4.3	7.0	7.0	26	19	17	5.3	7.1	4.7
24	9.5	6.4	e4.4	e4.4	6.8	6.9	19	18	17	5.1	7.1	4.6
25	3.9	6.4	e4.3	5.0	6.9	6.9	15	18	17	4.9	e50	4.6
26	3.2	6.4	e4.3	5.6	7.1	6.9	14	18	17	4.6	e14	4.6
27	2.9	6.4	e4.3	6.1	8.6	6.8	14	19	16	4.4	e160	4.6
28	2.8	6.4	e4.4	6.6	9.3	6.7	14	20	16	7.8	e17	4.4
29	6.3	6.2	e4.4	7.5	8.2	6.8	14	21	15	9.6	e14	4.4
30	3.5	5.9	4.1	8.5	---	6.8	13	21	15	8.8	e14	4.3
31	3.6	---	3.8	7.5	---	6.6	---	22	---	8.4	e15	---
TOTAL	113.3	322.5	150.7	152.5	195.7	230.4	321.7	522	595	278.8	670.8	180.3
MEAN	3.65	10.7	4.86	4.92	6.75	7.43	10.7	16.8	19.8	8.99	21.6	6.01
MAX	11	26	5.7	8.5	9.3	8.5	29	22	23	14	190	13
MIN	2.4	5.9	3.8	4.0	5.9	6.6	6.1	13	15	4.4	6.6	4.3
AC-FT	225	640	299	302	388	457	638	1040	1180	553	1330	358

CAL YR 1987	TOTAL	2201.8	MEAN	6.03	MAX	56	MIN	2.4	AC-FT	4370
WTR YR 1988	TOTAL	3733.7	MEAN	10.2	MAX	190	MIN	2.4	AC-FT	7410

e Estimated

VIRGIN RIVER BASIN

09408150 VIRGIN RIVER NEAR HURRICANE, UT

LOCATION.--Lat 37°09'45", long 113°23'42", in NE¼NE¼SW¼ sec. 2, T. 42 S., R. 14 W., Washington County, Hydrologic Unit 15010008, on left bank at downstream side of bridge on State Highway 17, 1.8 mi downstream from Quail Creek and 6.2 mi west of Hurricane.

DRAINAGE AREA.--1,499 mi².

PERIOD OF RECORD.--March 1967 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 2,760 ft from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are pgor. Beginning in June 1985 flow is diverted from the river into a pipeline (capacity approximately 250 ft³/s), at a point approximately 20 miles upstream, into Quail Creek Reservoir, an offstream site, located about 1.0 mile above the gage, capacity 40,000 acre-feet.

AVERAGE DISCHARGE.--18 years (water years 1968-85), 246 ft³/s, 178,200 acre-ft/yr (prior to diversion to Quail Creek Reservoir).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,700 ft³/s Mar. 5, 1978, gage height, 16.28 ft; minimum, 23 ft³/s Aug. 22, 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1909, 17.34 ft Dec. 6, 1966, from flood-marks; discharge, 20,100 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	0845	2,310	4.99	Apr. 21	0600	2,430	5.21
Nov. 6	0030	*7,310	*9.43	Aug. 3	0630	4,980	7.60

Minimum daily discharge, 36.0 ft³/s Dec. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	305	72	174	164	252	137	503	271	e90	356	274
2	63	342	62	174	180	264	127	432	238	e71	134	267
3	60	850	68	176	219	208	118	450	200	e66	e2000	267
4	62	285	131	178	207	177	126	439	182	e67	e130	265
5	63	463	206	197	212	183	127	412	164	e70	82	268
6	64	1470	196	201	205	187	133	385	149	e76	168	276
7	66	887	143	196	210	190	175	386	140	e70	157	259
8	63	231	59	185	206	176	204	364	127	e76	e70	256
9	62	190	46	182	198	164	161	338	97	e74	85	260
10	64	194	49	180	177	207	134	328	88	e74	139	257
11	67	216	41	182	160	197	145	421	87	e74	139	80
12	73	146	42	186	166	187	193	504	87	e77	148	e72
13	170	128	36	180	164	182	169	558	e83	e73	147	e73
14	119	266	96	180	165	176	290	654	e83	e78	133	e72
15	63	171	159	172	162	168	354	632	e86	e83	125	91
16	56	79	56	148	160	163	702	548	e86	e83	133	138
17	55	146	51	154	156	159	886	584	e71	e83	136	136
18	55	192	65	194	156	244	678	559	e76	e84	137	135
19	51	198	44	187	156	296	575	466	83	85	131	136
20	49	187	40	159	158	150	491	400	162	88	122	140
21	72	185	38	129	156	157	1680	334	293	82	114	137
22	48	193	46	122	158	99	1020	314	223	94	e90	141
23	313	182	40	124	160	136	869	294	169	96	e81	145
24	246	156	114	167	158	150	741	251	e165	96	e84	144
25	207	138	195	148	164	153	669	239	e155	99	e85	141
26	60	131	161	133	164	171	694	220	e150	96	95	e100
27	45	117	112	141	168	209	739	205	e145	127	272	e92
28	47	119	116	161	356	248	742	181	e135	160	196	e101
29	138	121	141	169	267	210	614	262	e122	118	186	e103
30	210	99	146	179	---	202	551	348	e108	140	271	e102
31	89	---	153	176	---	172	---	264	---	114	221	---
TOTAL	2863	8387	2924	5234	5332	5837	14244	12275	4225	2764	6367	4928
MEAN	92.4	280	94.3	169	184	188	475	396	141	89.2	205	164
MAX	313	1470	206	201	356	296	1680	654	293	160	2000	276
MIN	45	79	36	122	156	99	118	181	71	66	70	72
AC-FT	5680	16640	5800	10380	10580	11580	28250	24350	8380	5480	12630	9770

CAL YR 1987 TOTAL 47230 MEAN 129 MAX 1470 MIN 34 AC-FT 93680
WTR YR 1988 TOTAL 75380 MEAN 206 MAX 2000 MIN 36 AC-FT 149500

e Estimated

VIRGIN RIVER BASIN

177

09408175 ST. GEORGE-WASHINGTON CANAL NEAR WASHINGTON, UT

LOCATION.--Lat 37°06'54", long 113°26'18", in NW¼SW¼SW¼ sec. 21, T. 42 S., R. 14 W., Washington County, Hydrologic Unit 15010008, on right bank 1.25 mi east southeast of Washington, Utah.

PERIOD OF RECORD.--October 1, 1987 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,720 ft from topographic map.

REMARKS.--Completely regulated canal. Records good.

COOPERATION.--Washington County Water Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 107 ft³/s Sept. 19, 1988. Minimum daily discharge, zero flow Feb. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	50	41	45	46	73	76	45	68	76	44	100
2	55	49	42	46	48	74	76	45	75	59	64	98
3	42	37	42	43	48	71	75	51	82	63	88	e105
4	e46	52	38	43	49	73	75	58	82	67	51	e100
5	e43	50	51	44	49	65	74	59	78	72	46	e100
6	e45	61	50	43	50	77	75	60	74	57	68	103
7	e44	41	45	48	20	73	79	63	74	40	73	92
8	e47	54	42	47	6.9	58	76	73	66	54	64	104
9	e43	50	42	46	.00	58	57	70	68	74	75	94
10	e46	49	28	45	12	67	77	78	5.0	70	83	91
11	e41	49	38	45	40	70	75	85	70	74	76	67
12	e47	28	33	40	48	67	75	82	84	77	85	72
13	e42	46	38	40	49	68	72	83	83	68	79	73
14	e45	62	39	40	36	65	62	61	83	63	65	72
15	e46	66	36	30	13	64	54	43	86	66	85	73
16	48	59	32	7.4	53	65	48	76	83	67	83	94
17	50	60	32	36	54	54	57	82	70	78	85	85
18	45	51	35	37	55	65	55	81	75	69	88	98
19	50	46	40	37	46	61	54	75	76	68	e85	107
20	50	32	39	37	42	67	52	77	76	88	e84	103
21	51	35	39	38	42	69	43	75	71	82	e83	99
22	50	35	39	33	47	71	43	71	60	68	73	98
23	58	52	39	21	64	79	43	75	59	72	80	90
24	53	55	39	21	66	73	43	80	72	64	83	99
25	52	50	43	21	70	83	39	84	83	64	84	100
26	46	45	42	21	73	78	37	90	79	64	71	97
27	46	51	46	21	70	75	38	80	76	68	84	e85
28	46	54	46	22	57	81	46	92	68	84	76	e100
29	48	54	45	36	60	83	45	91	68	76	70	102
30	50	41	43	50	---	81	45	73	69	65	73	101
31	47	---	45	45	---	58	---	62	---	66	83	---
TOTAL	1478	1464	1249	1128.4	1313.9	2166	1766	2220	2163.0	2123	2331	2802
MEAN	47.7	48.8	40.3	36.4	45.3	69.9	58.9	71.6	72.1	68.5	75.2	93.4
MAX	58	66	51	50	73	83	79	92	86	88	88	107
MIN	41	28	28	7.4	.00	54	37	43	5.0	40	44	67
AC-FT	2930	2900	2480	2240	2610	4300	3500	4400	4290	4210	4620	5560

WTR YR 1988 TOTAL 22204.3 MEAN 60.7 MAX 107 MIN .00 AC-FT 44040

e Estimated

VIRGIN RIVER BASIN

09408195 FORT PIERCE WASH NEAR ST. GEORGE, UT

LOCATION.--Lat 37°00'03", long 113°28'05", in SE¼NE¼SW¼ sec. 31, T. 43 S., R. 14 W., Washington County, Hydrologic Unit 15010009, on left bank upstream of road crossing, and approximately 10 mi southeast of St. George, Ut.

DRAINAGE AREA (REVISED).--1,349 mi².

PERIOD OF RECORD.--September 1984 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,800 ft from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 966 ft³/s June 20, 1988, gage height 7.57 ft; no flow for extended periods most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 966 ft³/s June 20, gage height 7.57 ft; no flow for extended periods during year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	e.00	.00	.00	.00	.00	.0	e.00	.00	e.00	e.00	.00
2	.00	e.00	.00	.00	.00	.00	.00	e.00	.00	e.00	e.00	.00
3	.00	e.00	.00	.00	.00	.00	.00	e.00	.00	e.00	e14	.00
4	.00	e.00	.00	.00	.00	.00	.00	e.00	.00	e.00	e.10	.00
5	.00	e.00	.00	.00	.00	.00	.00	e.00	.00	e.00	e.00	.00
6	.00	e13.5	.00	.00	.00	.00	.00	e.00	.00	e.00	19	.00
7	.00	e1.10	.00	.00	.00	.0	.00	e.00	.00	e.00	2.2	.00
8	.00	e.00	.00	.00	.00	.00	.00	e.00	.00	e.00	.00	.00
9	.00	e.00	.00	.00	.00	.00	.00	e.00	.00	e.00	.00	.00
10	.00	e.00	.00	.00	.00	.00	.00	e.00	.00	e.00	.00	.00
11	.00	e.00	.00	.00	.00	.00	.00	e.00	.00	e.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	e.00	.00	e.00	.00	.00
13	e8.0	.00	.00	.00	.00	.0	.00	e.00	.00	e.00	.00	.00
14	e.50	.00	.00	.00	.00	.00	.00	e.00	.00	e.00	.00	.00
15	e.00	.00	.00	.00	.00	.0	.00	e.00	.00	e.00	.00	.00
16	e.00	.00	.00	.00	.00	.00	.00	e.00	.00	e.00	.00	.00
17	e.00	.00	.00	.00	.00	.00	.00	e.00	.00	e.00	.00	.00
18	e.00	.00	.00	.00	.00	.00	.00	e.00	.00	e.00	.00	.00
19	e.00	.00	.00	.00	.00	.00	.00	e.00	.00	e.00	.00	.00
20	e.00	.00	.00	.00	.00	.00	.00	.00	e49	e.00	.00	.00
21	e.00	.00	.00	.00	.00	.00	.00	.00	e4.0	e.00	.00	.00
22	e.00	.00	.00	.00	.00	.00	e10	.00	e.00	e.00	.00	.00
23	e.00	.00	.00	.00	.00	.00	e.80	.00	e.00	e.00	.00	.00
24	e.00	.00	.00	.00	.00	.00	e.00	.00	e.00	e.00	.00	.00
25	e.00	.00	.00	.00	.00	.00	e.00	.00	e.00	e.00	e.50	.00
26	e.00	.00	.00	.00	.00	.00	e.00	.00	e.00	e.00	e.50	.00
27	e.00	.00	.00	.00	.00	.00	e.00	.00	e.00	e.00	.00	.00
28	e.00	.00	.00	.00	.00	.00	e.00	.00	e.00	e.00	.00	.00
29	e.00	.00	.00	.00	.00	.00	e.00	.00	e.00	e.00	.00	.00
30	e.00	.00	.00	.00	---	.00	e.00	.00	e.00	e17	.00	.00
31	e.00	---	.00	.00	---	.00	---	.00	---	e.00	.00	---
TOTAL	8.50	14.60	0.00	0.00	0.00	0.00	10.80	0.00	53.00	18.00	36.30	0.00
MEAN	.27	.49	.00	.00	.00	.00	.36	.00	1.77	.58	1.17	.00
MAX	8.0	13	.00	.00	.00	.00	10	.00	49	17	19	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	17	29	.0	.0	.0	.0	21	.0	105	36	72	.0

CAL YR 1987 TOTAL 141.20 MEAN .39 MAX 30 MIN .00 AC-FT 280
WTR YR 1988 TOTAL 141.20 MEAN .39 MAX 49 MIN .00 AC-FT 280

e Estimated

VIRGIN RIVER BASIN

179

09408400 SANTA CLARA RIVER NEAR PINE VALLEY, UT

LOCATION.--Lat 37°23'00" long 113°28'57", in NW¼SE¼NE¼ sec. 24, T. 39 S., R. 15 W., Washington County, Hydrologic Unit 15010008, in Dixie National Forest, on right bank 150 ft upstream from highway bridge, 0.6 mi downstream from Pine Valley Reservoir, 1.6 mi southeast of town of Pine Valley, and 2.5 mi upstream from Grass Valley Creek.

DRAINAGE AREA.--18.7 mi².

PERIOD OF RECORD.--July 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,640 ft from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow slightly regulated by Pine Valley Reservoir. No diversion above station.

AVERAGE DISCHARGE.--29 years, 10.4 ft³/s, 7,530 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 776 ft³/s Dec. 6, 1966, gage height, 6.85 ft; minimum, 0.37 ft³/s Mar. 30, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 60 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	0200	135	3.00	May 17	1200	*307	*3.74
Apr. 20	2100	68	2.52				

Minimum daily discharge, 1.7 ft³/s Oct. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	68	6.9	4.2	4.5	8.9	9.5	32	35	17	10	6.1
2	1.7	50	6.8	4.1	4.4	8.1	9.3	32	32	17	9.7	5.7
3	1.7	78	6.6	4.1	4.1	7.5	9.4	25	32	16	13	5.6
4	1.8	35	6.5	4.0	e4.1	7.3	9.5	27	34	16	11	5.4
5	1.8	38	7.2	4.1	e4.0	7.3	10	25	36	16	10	5.3
6	1.8	51	6.7	4.0	e3.8	7.5	11	23	34	15	9.9	5.2
7	1.8	37	6.8	3.8	e3.7	7.3	13	22	32	15	9.3	5.1
8	1.8	28	6.5	3.8	e3.7	6.8	15	20	29	15	9.0	5.1
9	1.9	24	6.4	3.8	3.8	6.9	14	19	29	15	8.7	5.0
10	1.9	20	6.4	3.8	3.8	7.1	13	21	28	14	8.4	5.0
11	1.9	18	6.3	3.9	3.8	6.7	14	29	27	14	8.2	5.1
12	2.3	16	6.2	3.8	4.0	6.3	16	41	26	14	8.1	5.3
13	2.8	15	5.8	e3.7	4.2	6.0	17	55	25	13	7.8	5.3
14	2.4	14	e5.4	3.7	4.3	6.0	24	62	24	13	7.5	5.2
15	2.2	12	e5.2	3.8	4.2	5.9	27	68	24	13	7.3	5.0
16	2.1	12	5.1	3.7	4.2	5.7	39	72	23	13	7.1	4.8
17	2.1	12	5.2	3.8	4.1	5.4	48	167	24	12	6.9	4.7
18	2.1	11	5.0	e3.8	4.0	5.3	49	132	24	12	6.8	4.7
19	2.1	10	5.0	e3.7	4.0	5.4	41	86	22	11	6.7	4.6
20	2.1	9.9	e4.8	3.7	3.9	5.6	46	67	22	11	6.9	4.5
21	2.1	9.7	e4.8	3.5	3.8	6.0	48	58	23	11	6.8	4.6
22	2.1	9.1	4.8	3.5	3.8	6.5	37	55	22	11	6.5	4.6
23	3.6	8.8	e4.7	3.6	3.8	7.9	32	54	21	11	6.4	4.5
24	3.7	8.4	e4.6	3.7	3.8	9.2	30	54	20	11	6.9	4.4
25	3.4	8.3	e4.6	3.7	4.0	9.4	32	55	20	10	9.1	4.2
26	2.8	8.0	e4.4	4.0	4.4	11	33	54	19	11	7.4	4.2
27	2.6	e7.8	e4.4	4.4	5.9	13	34	51	19	11	6.9	4.2
28	2.7	7.5	4.5	4.8	8.2	13	36	46	19	11	6.4	4.2
29	5.7	7.3	4.4	5.0	9.0	12	37	45	18	11	6.6	4.1
30	4.6	7.0	4.5	4.9	---	11	40	41	18	10	6.3	4.0
31	5.4	---	4.3	4.7	---	10	---	38	---	11	6.4	---
TOTAL	78.7	640.8	170.8	123.1	127.3	242.0	793.7	1576	761	401	248.0	145.7
MEAN	2.54	21.4	5.51	3.97	4.39	7.81	26.5	50.8	25.4	12.9	8.00	4.86
MAX	5.7	78	7.2	5.0	9.0	13	49	167	36	17	13	6.1
MIN	1.7	7.0	4.3	3.5	3.7	5.3	9.3	19	18	10	6.3	4.0
AC-FT	156	1270	339	244	252	480	1570	3130	1510	795	492	289

CAL YR 1987 TOTAL 2882.4 MEAN 7.90 MAX 78 MIN 1.4 AC-FT 5720
WTR YR 1988 TOTAL 5308.1 MEAN 14.5 MAX 167 MIN 1.7 AC-FT 10530

e Estimated

VIRGIN RIVER BASIN

09408500 SANTA CLARA-PINTO DIVERSION NEAR PINTO, UT
(Transmountain diversion)

LOCATION.--Lat 37°28'04", long 113°28'21", in SW¼SE¼NW¼ sec. 19, T. 38 S., R. 14 W., Washington County, Hydrologic Unit 15010008, on right bank 0.2 mi downstream from outlet of diversion tunnel and 6 mi southeast of Pinto.

PERIOD OF RECORD.--October 1953 to September 1962 (monthly discharge only, October 1953 to September 1960), October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,820 ft from topographic map. Prior to September 1962, at site 600 ft upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow at this station is seasonal occurring during the snowmelt period and heavy storm periods. This is a transmountain diversion from a tributary of Santa Clara River in Colorado River Basin to Pinto Creek in Escalante Valley in the Great Basin.

AVERAGE DISCHARGE.--28 years (1953-62, 1969-88), 3.85 ft³/s, 2,790 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 229 ft³/s May 24, 1983, gage height, 2.58 ft; no flow for part of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 120 ft³/s May 17, gage height, 2.30 ft; no flow for extended periods during year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	5.3	e.00	e.00	7.7	11	38	12	.00	.00	.00
2	.00	5.3	5.3	e.00	e.00	7.2	12	29	12	.00	.00	.00
3	.00	9.5	5.2	e.00	e.00	6.9	12	20	11	.00	.00	.00
4	.00	12	3.1	e.00	e.00	6.7	11	17	11	.00	.00	.00
5	.00	18	3.8	e.00	e.00	6.7	12	17	11	.00	.00	.00
6	.00	31	3.3	e.00	e.00	7.7	13	32	11	.00	.00	.00
7	.00	23	3.1	e.00	e.00	8.1	14	30	11	.00	.00	.00
8	.00	16	2.8	e.00	e.00	7.7	16	24	9.7	.00	.00	.00
9	.00	14	3.2	e.00	e.00	7.9	15	19	9.2	.00	.00	.00
10	.00	13	3.1	e.00	e.00	6.9	14	18	8.7	.00	.00	.00
11	.00	13	2.7	e.00	e.00	e6.8	14	25	7.9	.00	.00	.00
12	.00	13	2.2	e.00	e.00	e6.8	15	37	6.1	.00	.00	.00
13	.00	12	e1.2	e.00	e.00	e7.0	16	49	5.9	.00	.00	.00
14	.00	12	e.07	e.00	e.00	e7.0	24	60	4.3	.00	.00	.00
15	.00	9.6	e.00	e.00	e.00	e7.1	27	59	3.8	.00	.00	.00
16	.00	8.9	e.00	e.00	e.00	e7.2	41	59	3.4	.00	.00	.00
17	.00	8.8	e.00	e.00	e.00	e7.4	42	88	3.3	.00	.00	.00
18	.00	7.6	e.00	e.00	e.00	e8.0	53	89	3.6	.00	.00	.00
19	.00	7.5	e.00	e.00	e.00	e8.4	94	33	3.3	.00	.00	.00
20	.00	7.0	e.00	e.00	e.00	8.6	64	18	2.7	.00	.00	.00
21	.00	6.3	e.00	e.00	e.00	8.9	50	18	2.7	.00	.00	.00
22	.00	5.6	e.00	e.00	e.00	11	31	35	2.9	.00	.00	.00
23	.00	5.2	e.00	e.00	e.00	13	22	33	1.8	.00	.00	.00
24	.00	4.4	e.00	e.00	e.14	12	31	32	1.4	.00	.00	.00
25	.00	4.2	e.00	e.00	e1.5	11	44	32	1.3	.00	.00	.00
26	.00	3.9	e.00	e.00	e7.0	12	49	30	1.2	.00	.00	.00
27	.00	1.2	e.00	e.00	e6.6	15	70	25	.99	.00	.00	.00
28	.00	5.7	e.00	e.00	e6.2	16	69	21	.53	.00	.00	.00
29	.00	5.3	e.00	e.00	5.8	13	67	21	.27	.00	.00	.00
30	.00	5.3	e.00	e.00	---	12	42	20	e.13	.00	.00	.00
31	.00	---	e.00	e.00	---	12	---	14	---	.00	.00	---
TOTAL	0.00	288.30	44.37	0.00	27.24	283.7	995	1042	164.12	0.00	0.00	0.00
MEAN	.00	9.61	1.43	.00	.94	9.15	33.2	33.6	5.47	.00	.00	.00
MAX	.00	31	5.3	.00	7.0	16	94	89	12	.00	.00	.00
MIN	.00	.00	.00	.00	.00	6.7	11	14	.13	.00	.00	.00
AC-FT	.0	572	88	.0	54	563	1970	2070	326	.0	.0	.0
CAL YR 1987	TOTAL	1648.56	MEAN	4.52	MAX	50	MIN	.00	AC-FT	3270		
WTR YR 1988	TOTAL	2844.73	MEAN	7.77	MAX	94	MIN	.00	AC-FT	5640		

e Estimated

VIRGIN RIVER BASIN

181

09409880 SANTA CLARA RIVER AT GUNLOCK, UT

LOCATION.--Lat 37°16'55", long 113°46'00", in SW¼SW¼NW¼ sec. 28, T. 40 S., R. 17 W., Washington County, Hydrologic Unit 15010008, on right bank at downstream side of bridge on county road at Gunlock, 0.5 mi below tailrace of powerhouse.

DRAINAGE AREA.--271 mi².

PERIOD OF RECORD.--August 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,628 ft from topographic map.

REMARKS.--Records fair. Many diversions for irrigation above station. Flow regulated by several reservoirs and powerplant above station.

AVERAGE DISCHARGE.--19 years, 25.5 ft³/s, 18,470 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,810 ft³/s Feb. 14, 1980, gage height, 5.74 ft from rating curve extended above 1,580 ft³/s; no flow several days during 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 154 ft³/s Apr. 26, gage height, 3.61 ft; minimum discharge, 2.1 ft³/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	18	20	20	21	14	23	73	33	21	16	9.7
2	4.0	26	20	19	23	15	25	70	31	18	16	14
3	5.0	27	21	19	22	14	27	61	28	20	21	14
4	5.1	27	21	13	22	14	30	52	28	24	24	14
5	4.4	27	21	18	19	14	32	48	31	e15	25	13
6	4.3	28	20	18	19	14	31	44	45	e14	23	12
7	5.4	28	18	17	19	13	35	42	32	e14	20	11
8	6.0	28	18	17	19	14	38	38	38	e13	19	9.2
9	5.8	27	15	17	18	16	41	36	27	e12	18	8.7
10	5.8	24	18	18	17	18	44	35	15	e11	19	11
11	5.6	23	19	15	17	17	47	37	16	e11	21	12
12	6.4	21	19	11	18	16	50	42	17	e11	21	13
13	7.1	22	20	16	20	16	54	44	16	e11	18	12
14	7.6	23	20	13	18	14	57	46	15	e12	15	10
15	7.5	23	12	19	19	15	62	49	15	e13	14	9.3
16	7.4	22	19	18	19	15	65	49	17	15	10	8.8
17	7.5	21	23	20	19	13	70	47	17	12	8.0	8.4
18	7.4	19	23	20	19	12	74	53	17	17	11	6.6
19	7.5	18	24	18	15	12	79	52	18	14	10	7.9
20	7.8	18	21	19	16	13	84	53	18	12	11	12
21	7.8	19	19	18	14	12	89	51	19	16	13	10
22	7.9	19	19	17	16	12	95	52	20	15	13	8.4
23	8.8	21	18	18	17	12	100	52	18	13	13	8.9
24	11	21	19	18	16	12	107	51	16	13	10	11
25	11	22	22	20	16	13	106	52	14	17	11	9.6
26	11	22	e19	19	15	14	108	52	16	18	12	9.1
27	10	22	20	19	14	15	101	50	14	18	12	6.9
28	10	20	18	18	15	17	89	47	14	19	9.8	5.4
29	14	19	17	18	14	18	85	42	21	17	7.5	4.4
30	18	20	16	19	---	20	78	45	25	13	7.4	4.2
31	16	---	18	21	---	21	---	36	---	16	9.6	---
TOTAL	247.8	675	597	550	516	455	1926	1501	651	465	458.3	294.5
MEAN	7.99	22.5	19.3	17.7	17.8	14.7	64.2	48.4	21.7	15.0	14.8	9.82
MAX	18	28	24	21	23	21	108	73	45	24	25	14
MIN	4.0	18	12	11	14	12	23	35	14	11	7.4	4.2
AC-FT	492	1340	1180	1090	1020	902	3820	2980	1290	922	909	584
CAL YR 1987	TOTAL	4114.3	MEAN	11.3	MAX	28	MIN	3.0	AC-FT	8160		
WTR YR 1988	TOTAL	8336.6	MEAN	22.8	MAX	108	MIN	4.0	AC-FT	16540		

e Estimated

VIRGIN RIVER BASIN

09410100 SANTA CLARA RIVER BELOW WINSOR DAM, NEAR SANTA CLARA, UT

LOCATION (REVISED).--Lat 37°11'22", long 113°46'02", in NW¼NW¼SW¼ sec. 28, T. 41 S., R. 17 W., Washington County, Hydrologic Unit 15010008, on right bank 1,100 ft downstream from Winsor Dam, 0.6 mi northwest of Shivwits Indian Village, and 78.5 mi northwest of Santa Clara.

DRAINAGE AREA.--378 mi².

PERIOD OF RECORD.--December 1971 to current year.

REVISED RECORDS.--WRD UT-73-1: 1972(M).

GAGE.--Water-stage recorder. Altitude of gage is 3,210 ft from topographic map, prior to March 29, 1988 at several sites upstream and downstream at different datums.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by Gunlock Reservoir and several diversions upstream for irrigation.

AVERAGE DISCHARGE.--16 years, 26.1 ft³/s, 18,910 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,770 ft³/s Mar. 3, 1983, gage height, 6.07 ft from rating curve extended above 980 ft³/s on basis of slope-area measurement; no flow several days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 158 ft³/s Aug. 29, gage height, 12.04 ft; minimum, no flow many days in November, December and March.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.10	.15	e.00	1.0	e.10	5.6	15	57	e24	16	15	11
2	e.10	.00	e.00	.92	e.10	6.5	12	55	e22	18	15	11
3	e.10	20	e.00	.64	e.10	9.4	12	52	e20	17	12	11
4	e.10	20	e.00	.53	e.10	8.0	13	50	e19	15	8.1	11
5	e.10	20	e.00	1.0	e.10	4.8	14	48	e19	15	8.8	11
6	e.10	4.8	e.00	.71	e.10	3.6	13	46	e18	18	7.5	11
7	e.10	6.5	e.00	.52	e.10	1.7	13	42	e18	19	14	11
8	e.10	4.1	e.00	.59	e.10	.67	19	43	e18	16	7.5	11
9	e.10	3.9	e.00	.57	e.10	.35	24	40	e16	17	5.9	11
10	e.10	e3.5	e.00	.81	e.10	3.0	26	37	e15	19	6.6	5.4
11	e.10	e1.0	e.00	.75	e.10	2.6	26	35	e15	19	11	5.5
12	e.10	e.00	e.00	.85	e.10	2.6	26	32	e14	19	13	5.0
13	e.10	e.00	e.00	.91	e.10	2.0	27	37	e13	16	13	4.9
14	e.10	e.00	e.00	1.4	e.10	.00	29	40	e13	16	14	5.1
15	e.10	e.00	e.00	1.7	e.10	.00	28	40	12	16	14	5.4
16	e.10	e.00	e.00	1.1	e.10	.00	28	50	11	16	14	5.7
17	e.10	e.00	e.00	2.3	e.10	.00	18	55	16	17	15	7.9
18	e.10	e.00	e.00	4.2	e10	.53	17	e66	14	17	16	9.5
19	e.10	e.00	e.00	5.5	2.0	2.5	19	e80	15	17	15	9.5
20	e.10	e.00	e.00	2.9	1.6	3.2	23	e86	14	16	9.9	9.7
21	e.10	e.00	e.00	1.4	.85	3.5	29	e68	14	15	10	9.8
22	e.10	e.00	e.00	e.10	.76	6.1	51	e60	12	16	9.7	9.8
23	e.10	e.00	e.00	e.10	3.5	6.0	64	e56	11	16	11	9.8
24	e.10	e.00	e.00	e.10	3.3	e6.8	72	e52	15	16	15	9.8
25	e.10	e.00	e.00	e.10	3.0	e8.0	e80	e48	16	15	15	9.9
26	e.10	e.00	e.00	e.10	2.8	e8.8	e76	e43	15	15	16	10
27	e.10	e.00	e.00	e.10	3.0	e10	e72	e40	13	14	13	10
28	e.10	e.00	e.00	e.10	3.0	e14	e67	e37	12	14	12	10
29	e.10	e.00	e.00	e.10	3.3	e15	63	e34	11	15	14	10
30	e.10	e.00	e.00	e.10	---	16	57	e30	13	15	11	11
31	e.10	---	e.30	e.10	---	17	---	e26	---	15	11	---
TOTAL	3.10	83.95	0.30	31.30	38.81	168.25	1033	1485	458	505	373.0	272.7
MEAN	.10	2.80	.010	1.01	1.34	5.43	34.4	47.9	15.3	16.3	12.0	9.09
MAX	.10	20	.30	5.5	10	17	80	86	24	19	16	11
MIN	.10	.00	.00	.10	.10	.00	12	26	11	14	5.9	4.9
AC-FT	6.1	167	.6	62	77	334	2050	2950	908	1000	740	541

CAL YR 1987 TOTAL 2284.01 MEAN 6.26 MAX 23 MIN .00 AC-FT 4530
WTR YR 1988 TOTAL 4452.41 MEAN 12.2 MAX 86 MIN .00 AC-FT 8830

e Estimated

VIRGIN RIVER BASIN

183

09413000 SANTA CLARA RIVER AT ST. GEORGE, UT

LOCATION.--Lat 37°04'26", long 113°34'56", in NE¼NW¼SW¼ sec. 6, T. 43 S., R. 15 W., Washington County, Hydrologic Unit 15010008 on right bank 0.25 mi upstream from mouth and 2 mi south of St. George.

DRAINAGE AREA.--540 mi², approximately.

PERIOD OF RECORD.--October 1950 to September 1956. November 1984 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,560 ft from topographic map. October 1950 to September 1956, gage located 0.25 mi upstream from present site at different datum.

REMARKS.--Records poor. Flow regulated by reservoirs and many diversions for irrigation above station.

AVERAGE DISCHARGE.--9 years (1950-56, 1986-88), 7.98 ft³/s, 5,780 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,200 ft³/s Aug. 24, 1955, gage height, 10.02 ft from rating curve extended above 400 ft/s on basis of indirect measurements at gage heights 7.31 and 9.48 ft, site and datum then in use; no flow at times in 1951, 1953, 1955-56.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,250 ft³/s Aug. 27, gage height, 6.43 ft; minimum daily discharge, 0.48 ft³/s June 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	15	3.1	3.0	3.0	4.4	5.4	42	20	2.4	e7.9	e4.7
2	1.9	18	3.2	2.6	3.0	3.6	3.8	44	12	2.9	e8.8	e4.5
3	2.0	33	3.1	2.6	3.0	3.6	5.1	43	7.9	2.7	92	e4.0
4	2.6	9.2	3.2	2.7	3.3	3.6	4.8	57	5.6	4.0	8.5	e4.1
5	2.0	12	3.2	6.1	3.3	5.9	5.0	63	6.3	4.5	6.8	e4.4
6	1.7	32	3.1	3.2	3.4	5.4	4.9	46	5.3	3.2	6.5	e4.5
7	1.7	18	3.1	2.8	3.2	6.5	5.0	40	7.4	4.5	8.9	e4.2
8	1.7	10	3.3	2.6	3.2	4.8	4.1	50	9.1	2.5	5.3	e4.1
9	1.7	8.6	2.6	2.6	3.2	6.7	3.3	35	8.5	2.6	4.1	4.1
10	1.7	6.5	2.7	2.7	3.0	6.8	4.0	24	8.3	2.7	6.4	4.2
11	1.7	8.2	3.0	2.7	3.0	5.9	4.9	9.9	11	1.8	4.1	4.9
12	2.6	5.7	e2.8	3.2	3.2	8.9	5.8	13	12	3.7	4.4	4.7
13	5.3	3.2	e2.7	3.2	3.2	9.3	5.8	16	10	2.3	4.5	4.0
14	3.7	7.1	e2.8	3.9	3.0	5.4	6.5	23	7.3	2.2	4.1	4.3
15	3.6	3.3	e2.7	3.9	3.1	4.4	17	19	3.4	2.2	4.1	4.3
16	3.3	2.8	e2.5	3.6	3.0	4.1	20	29	.48	1.9	2.7	3.9
17	3.4	2.8	e2.6	9.8	3.0	3.2	17	48	6.1	2.4	3.2	3.9
18	3.3	2.8	e2.7	11	2.9	4.4	17	97	7.7	2.5	2.2	4.1
19	4.1	2.9	e2.7	4.0	2.9	4.6	8.7	52	8.7	2.0	3.8	4.5
20	3.2	3.0	e2.6	3.6	3.0	4.7	13	58	5.0	3.2	4.0	4.4
21	2.1	3.0	2.7	3.3	3.9	4.7	23	49	12	2.2	4.5	5.4
22	2.2	3.0	2.6	3.2	3.7	3.7	37	44	13	1.7	5.2	4.6
23	7.6	3.0	3.4	3.4	2.8	4.0	54	37	7.9	1.6	6.3	4.2
24	9.8	3.2	2.6	3.3	3.4	3.0	45	29	5.0	3.0	5.9	4.4
25	5.6	3.1	2.6	3.2	3.8	3.1	36	30	5.7	2.2	8.8	4.1
26	4.6	3.0	2.6	3.1	3.9	3.5	54	30	6.8	1.7	9.4	4.5
27	4.3	3.1	2.6	3.0	3.5	5.4	74	29	6.3	3.7	e100	4.4
28	4.1	3.2	2.6	3.1	2.8	5.4	65	27	3.6	e56	e8.0	4.0
29	13	3.2	2.7	3.0	3.6	5.6	54	22	3.2	e10	e7.0	4.2
30	10	3.2	2.7	3.0	---	4.2	39	33	2.7	e8.1	e70	5.0
31	6.5	---	2.6	3.1	---	4.3	---	33	---	e8.8	e6.0	---
TOTAL	122.8	235.1	87.4	114.5	93.3	153.1	642.1	1171.9	228.28	155.2	423.4	130.6
MEAN	3.96	7.84	2.82	3.69	3.22	4.94	21.4	37.8	7.61	5.01	13.7	4.35
MAX	13	33	3.4	11	3.9	9.3	74	97	20	56	100	5.4
MIN	1.7	2.8	2.5	2.6	2.8	3.0	3.3	9.9	.48	1.6	2.2	3.9
AC-FT	244	466	173	227	185	304	1270	2320	453	308	840	259

CAL YR 1987 TOTAL 1254.20 MEAN 3.44 MAX 33 MIN .31 AC-FT 2490
WTR YR 1988 TOTAL 3557.68 MEAN 9.72 MAX 100 MIN .48 AC-FT 7060

e Estimated

VIRGIN RIVER BASIN

09413200 VIRGIN RIVER NEAR BLOOMINGTON, UT

LOCATION.--Lat 37°04'14", long 113°34'55", in SE¼NW¼SW¼ sec. 6, T. 43 S., R. 15 W., Washington County, Hydrologic Unit 15010010, on left bank 2.5 mi south of St. George.

DRAINAGE AREA.--3,831 mi².

PERIOD OF RECORD.--September 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,530 ft from topographic map, prior to Sept. 19, 1978 at site 1.5 mi downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 19,600 acres above station.

AVERAGE DISCHARGE.--11 years, 283 ft³/s, 205,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 10,000 ft³/s Feb. 15, 1980; minimum, 5.8 ft³/s Sept. 21, 1977.

EXTREMES₃ FOR CURRENT YEAR.--Maximum discharge, 6,760 ft³/s Aug. 3, gage height, 8.95 ft; minimum daily discharge, 19 ft³/s Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e48	141	110	156	184	e260	e140	579	248	77	339	e94
2	e27	186	108	159	198	e240	e122	501	219	43	192	e112
3	e22	523	109	164	233	e200	e121	447	196	43	2080	e118
4	e21	407	125	163	225	e185	e105	442	167	42	286	e119
5	e21	150	161	178	219	e184	e98	412	161	44	111	e120
6	e20	775	165	184	224	e183	e96	389	157	50	149	e125
7	19	814	154	178	227	e180	e101	374	143	38	272	e135
8	22	245	104	174	231	e170	e110	358	143	38	62	e150
9	21	161	104	171	221	e170	102	335	121	37	50	165
10	20	e160	107	171	204	e190	84	315	167	37	104	162
11	21	e145	101	173	184	e198	88	360	122	35	102	120
12	31	134	106	173	e181	e190	96	439	111	36	107	54
13	e70	116	100	172	e180	e184	101	488	107	30	112	61
14	74	162	118	175	e178	e175	162	621	106	32	97	50
15	42	184	150	179	e175	e171	237	632	98	32	88	70
16	36	126	115	162	e172	e170	469	527	94	30	95	92
17	34	135	106	178	e171	e165	e820	547	79	27	89	102
18	35	163	117	203	e170	e160	e700	641	71	26	84	109
19	32	168	110	182	e169	244	e620	531	94	26	104	103
20	29	165	104	179	e170	183	e550	425	130	26	82	98
21	32	165	102	163	e170	142	e1320	340	287	26	99	110
22	32	166	104	156	e170	123	e1710	308	243	30	89	110
23	168	162	100	160	e171	135	e990	295	307	26	50	115
24	167	156	118	177	e172	136	e790	246	148	23	45	103
25	145	148	158	174	e175	140	e620	234	141	26	54	106
26	55	141	155	159	e178	139	e640	219	140	30	105	96
27	42	130	137	159	e210	155	e780	209	129	44	246	68
28	35	130	134	169	e250	188	831	190	125	105	211	73
29	61	129	147	174	e320	e200	703	177	92	52	73	70
30	126	127	147	184	---	e180	608	401	86	43	135	71
31	61	---	144	186	---	e160	---	282	---	133	74	---
TOTAL	1569	6514	3820	5335	5732	5500	13914	12264	4432	1287	5786	3081
MEAN	50.6	217	123	172	198	177	464	396	148	41.5	187	103
MAX	168	814	165	203	320	260	1710	641	307	133	2080	165
MIN	19	116	100	156	169	123	84	177	71	23	45	50
AC-FT	3110	12920	7580	10580	11370	10910	27600	24330	8790	2550	11480	6110
CAL YR 1987	TOTAL	45112	MEAN	124	MAX	3060	MIN	19	AC-FT	89480		
WTR YR 1988	TOTAL	69234	MEAN	189	MAX	2080	MIN	19	AC-FT	137300		

e Estimated

GREAT SALT LAKE BASIN

10010000 GREAT SALT LAKE AT STATE PARK SALT AIR BEACH BOAT HARBOR, UT

LOCATION.--Lat 40°44'05", long 112°12'45", in NE¼SW¼NW¼ sec. 17, T. 1 S., R. 3 W., Salt Lake County, Hydrologic Unit 16020310, at State Park Saltair Beach Boat Harbor on southeast shore of lake, 17.1 mi west of Salt Lake City. (Gage temporarily located 0.4 mi to the southeast, from Apr. 13, 1984 to May 30, 1985, because of problems associated with highway, then relocated 0.1 mi to the northeast from May 30, 1985 to present because of highway construction.)

PERIOD OF RECORD.--September 1875 to December 1899, October 1902 to current year. Records for October 1902 to September 1912 and diagram showing fluctuations of lake from 1851-1950, published in WSP 1314.

REVISED RECORDS.--WSP 1314: 1877. WRD-UT-74-1: 1967-73. WDR-UT-83-1: 1981-82.

GAGE.--Water-stage recorder at Boat Harbor since October 1938. Datum at gage since September 15, 1970 is 4,186.80 ft NGVD of 1929. October 1938 to April 15, 1967, at datum 4,186.9 ft and April 15, 1967 to September 15, 1970, at datum 4,186.85 ft. Prior to October 1938, staff gages at sites and datums as follows: September 1875 to October 1877 at Black Rock at 4,208.4 ft NGVD of 1929, November 1877 to November 1879 at Farmington Bay at 4,206.9 ft NGVD of 1929, November 1879 to April 1881 near Black Rock at 4,203.1 ft NGVD of 1929, April 1881 to December 1899 at Garfield Landing at 4,198.5 ft NGVD of 1929, October 1902 to July 1903, at Midlake on Lucin cutoff of Southern Pacific Railroad, 30 mi west of Ogden, at 4,197.9 ft NGVD of 1929, and July 1903 to October 1938 at Saltair at 4,196.9 ft NGVD of 1929.

REMARKS.--To compensate for wind effect and seiches, elevations given for the gage are taken from a mean-slope line defined by several days' gage-height graph, preceding and following 0001 hours, for the 1st and 15th of each month. Wind effects may cause substantial changes in elevations, which are not shown in the published elevations. Specific gravity and temperature were collected from water surface near the gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 4,211.85 ft June 3, 1986, Mar. 30-Apr. 6, 1987; minimum, 4,191.35 ft Oct. 15, Nov. 1, 1963. Maximum elevation since 1847, 4,211.6 ft in 1873, computed from traditional data by G. K. Gilbert and E. C. LaRue.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 4209.60 ft Oct. 1-5; minimum, 4206.85 ft Sept. 30.

GAGE HEIGHT AND ELEVATION, IN FEET, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Day	Gage height	Elevation	Temperature, water (Deg. C)	Specific Gravity (20.0 C)	Percent Salinity
Oct. 1	22.80	4,209.60	18.5	1.052	7.8
15	22.70	4,209.50	16.5	1.049	7.4
Nov. 1	22.65	4,209.45	14.0	1.046	7.0
15	22.65	4,209.45	7.0	1.045	6.8
Dec. 1	22.65	4,209.45	5.0	1.045	6.8
15	22.60	4,209.40	2.0	1.048	7.3
Jan. 1	22.60	4,209.40	0.0	1.048	7.3
15	22.70	4,209.50	-0.5	1.047	7.1
Feb. 1	22.70	4,209.50	-1.0	1.047	7.1
15	22.75	4,209.55	2.0	1.048	7.3
Mar. 1	22.75	4,209.55	7.5	1.047	7.1
15	22.75	4,209.55	--	--	--
Apr. 1	22.70	4,209.50	6.5	--	--
15	22.60	4,209.40	14.5	1.046	7.0
May 1	22.65	4,209.45	9.0	1.047	7.1
15	22.50	4,209.30	16.0	1.050	7.6
June 1	22.30	4,209.10	20.0	1.052	7.8
15	22.15	4,208.95	23.0	1.053	8.0
July 1	21.90	4,208.70	25.5	1.053	8.0
15	21.50	4,208.30	27.5	1.056	8.4
Aug. 1	21.25	4,208.05	27.0	1.056	8.4
15	20.80	4,207.60	23.5	1.060	9.0
Sept. 1	20.60	4,207.40	24.0	1.061	9.1
15	20.25	4,207.05	19.5	1.064	9.5

GREAT SALT LAKE BASIN

10010100 GREAT SALT LAKE NEAR SALINE, UT

LOCATION.--Lat $41^{\circ}15'09''$, long $112^{\circ}29'40''$, in SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14, T. 6 N., R. 6 W., Box Elder County, Hydrologic Unit 16020310, 3.4 mi northwest of Saline at the Little Valley boat harbor, 30 mi west of Ogden and 27 mi south of Promontory.

PERIOD OF RECORD.--April 1966 to current year.

REVISED RECORDS.--WDR UT-75-1: 1966-75. WDR UT-83-1: 1966-82, gage datum.

GAGE.--Water-stage recorder on pier of boat harbor. Datum of gage, 4,189.80 ft NGVD of 1929.

REMARKS.--To compensate for wind effect and seiches, elevations given for the gage are taken from a mean-slope line defined by several days' gage-height graph, preceding and following 0001 hours, for the 1st and 15th of each month. Wind effects may cause substantial changes in elevations, which are not shown in the published elevations. Samples for specific gravity and temperature were collected from water surface near the gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 4,210.95 ft Apr. 7-29, 1987; minimum, 4,192.65 ft Oct. 15, Nov. 1, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 4,208.85 ft Feb. 1-8; minimum, 4,206.00 ft Sept. 30.

GAGE HEIGHT AND ELEVATION, IN FEET, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Day	Gage height	Elevation	Temperature, water (Deg. C)	Specific Gravity (20.0°C)	Percent Salinity
Oct. 1	19.00	4,208.80	--	--	--
15	18.90	4,208.70	18.5	--	--
Nov. 1	18.85	4,208.65	--	--	--
15	18.85	4,208.65	8.5	1.112	16.0
Dec. 1	18.85	4,208.65	--	--	--
15	18.70	4,208.50	3.5	1.112	16.0
Jan. 1	18.85	4,208.65	--	--	--
15	19.00	4,208.80	-0.5	1.092	13.4
Feb. 1	19.05	4,208.85	--	--	--
15	18.95	4,208.75	2.0	1.115	16.4
Mar. 1	18.95	4,208.75	--	--	--
15	18.85	4,208.65	5.0	1.116	16.5
Apr. 1	18.85	4,208.65	--	--	--
15	18.75	4,208.55	23.5	1.105	15.1
May 1	18.65	4,208.45	--	--	--
15	18.65	4,208.45	18.5	1.116	16.5
June 1	18.50	4,208.30	--	--	--
15	18.35	4,208.15	22.0	1.108	15.5
July 1	18.15	4,207.95	--	--	--
15	17.80	4,207.60	26.0	1.121	17.1
Aug. 1	17.45	4,207.25	--	--	--
15	17.10	4,206.90	25.5	1.117	16.6
Sept. 1	16.75	4,206.55	--	--	--
15	16.40	4,206.20	20.5	1.126	17.8

10011500 BEAR RIVER NEAR UTAH-WYOMING STATE LINE

LOCATION.--Lat 40°57'55", long 110°51'10", in SE¼NW¼SE¼ sec. 30, T. 3 N., R. 10 E., Summit County, Utah
Hydrologic Unit 16010101, on left bank 400 ft downstream from West Fork and 2.8 mi upstream from Utah-Wyoming
State line.

DRAINAGE AREA.--172 mi².

PERIOD OF RECORD.--July 1942 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,965 ft from river-profile map. Prior to Oct. 1, 1986 at
datum 3.0 ft lower.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated slightly by Whitney
Reservoir, total capacity, 4,700 acre-ft since 1966. Three diversions above station for irrigation of about
265 acres above and 2,600 acres below station.

AVERAGE DISCHARGE.--46 years, 196 ft³/s, 142,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,230 ft³/s June 6, 1986, gage height, 4.05 ft; maximum gage
height, 4.28 ft June 19, 1983; minimum, 6.8 ft³/s Apr. 12, 1984, result of upstream ice jam.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 17	0200	1,200	5.73	June 5	0400	*1,240	*5.78
May 27	0200	1,120	5.69				

Minimum discharge, 21 ft³/s, Nov. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	57	e51	49	e47	48	54	254	438	134	63	45
2	58	57	51	e46	e46	49	53	200	383	122	59	44
3	58	57	51	e45	e46	47	58	191	452	112	71	43
4	57	55	51	46	e46	47	64	204	745	113	75	42
5	56	52	51	46	e46	e45	59	214	975	129	66	42
6	55	57	51	47	e48	e47	65	215	875	121	61	43
7	54	56	50	45	e48	47	79	181	710	103	64	42
8	54	55	e50	45	47	e47	82	172	613	106	61	41
9	54	53	e50	45	47	e47	70	157	547	128	58	41
10	53	57	e49	46	47	48	72	171	505	134	56	42
11	53	50	e48	45	48	e48	86	236	447	148	54	45
12	53	50	e48	e43	e46	e48	105	343	404	143	54	47
13	59	56	e48	e44	e44	e49	121	515	355	138	51	51
14	68	55	e48	e45	e46	e50	134	647	325	125	49	58
15	61	48	e48	e47	51	50	174	690	308	107	47	55
16	56	38	e49	e46	49	51	189	863	288	104	48	51
17	56	51	e48	e45	e46	50	197	1080	295	101	46	48
18	56	66	e46	48	e45	e49	200	873	285	103	45	45
19	54	75	e46	e49	e45	e51	202	622	271	105	45	44
20	51	60	e46	e50	e44	53	221	512	267	90	46	44
21	51	57	e46	e46	e42	e51	215	555	345	88	46	44
22	54	52	e46	e47	e42	e50	185	661	293	86	45	50
23	56	e52	e47	48	e42	49	159	777	275	83	43	51
24	61	e52	e47	48	e44	e50	158	817	251	82	41	47
25	61	53	e47	e47	e43	e49	147	822	227	80	54	45
26	57	56	e48	e45	e42	e47	129	860	237	80	59	44
27	55	e55	e48	e45	e42	e47	142	930	226	80	48	44
28	54	e54	e48	47	e43	47	165	843	197	80	46	45
29	54	e52	e48	47	46	e47	184	861	172	79	45	45
30	57	e52	49	47	---	e49	244	714	149	74	44	45
31	63	---	48	48	---	51	---	558	---	71	44	---
TOTAL	1748	1640	1502	1437	1318	1508	4013	16738	11860	3249	1634	1373
MEAN	56.4	54.7	48.5	46.4	45.4	48.6	134	540	395	105	52.7	45.8
MAX	68	75	51	50	51	53	244	1080	975	148	75	58
MIN	51	38	46	43	42	45	53	157	149	71	41	41
AC-FT	3470	3250	2980	2850	2610	2990	7960	33200	23520	6440	3240	2720

CAL YR 1987	TOTAL	61332	MEAN	168	MAX	1280	MIN	38	AC-FT	121700
WTR YR 1988	TOTAL	48020	MEAN	131	MAX	1080	MIN	38	AC-FT	95250

e Estimated

BEAR RIVER BASIN

10015700 SULPHUR CREEK ABOVE RESERVOIR, NEAR EVANSTON, WY

LOCATION (REVISED).--Lat 41°07'45", long 110°48'21", in NE¼SE¼SW¼ sec. 2, T. 13 N., R. 119 W., Uinta County, Hydrologic Unit 16010101, on right bank 0.2 mi downstream from La Chapelle Creek, 3.3 mi upstream from Sulphur Creek Dam, and 12.8 mi southeast of Evanston.

DRAINAGE AREA.--64.2 mi².

PERIOD OF RECORD.--October 1957 to current year. Monthly discharge only for October and November 1957, published in WSP 1734. October 1957 to October 1987 not equivalent because of inflow between sites.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,240 ft from topographic map. Prior to October 7, 1987 at site 1.3 mi downstream at different datum.

REMARKS.--Records poor. Several diversions for irrigation above station.

AVERAGE DISCHARGE.--30 years (water years 1958-87), 19.1 ft³/s, 13,840 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,400 ft³/s June 1, 1983, gage height, 9.10 ft, from rating curve extended above 1,200 ft³/s on basis of slope-area measurement of peak flow. Flood was result of released water from temporary blockage of upstream road culverts; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 208 ft³/s May 14, gage height, 46.76 ft; minimum daily, no flow many days during July, August and September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	2.7	e1.6	e1.2	e1.8	e3.5	e21	68	8.2	.96	.05	.00
2	1.8	2.7	e1.6	e1.2	e1.4	e3.9	22	56	6.5	.76	.00	.00
3	1.8	2.7	e1.5	e1.1	e1.3	e4.1	e30	71	7.3	.68	.16	.00
4	1.4	2.7	e1.4	e1.0	e1.0	e4.1	e34	91	11	.55	.21	.00
5	1.2	2.7	e1.5	e1.1	e.89	e4.4	e39	80	13	.39	.06	.00
6	1.2	2.7	e1.4	e1.2	e1.0	e4.3	e50	63	13	.27	.01	.00
7	1.2	2.7	e1.3	e1.4	e1.1	e4.1	e58	48	10	.22	.03	.00
8	.64	3.4	e1.2	e1.3	e1.4	e3.8	e65	50	8.4	.23	.00	.00
9	.14	3.6	e1.3	e1.4	e1.5	e4.3	e79	53	9.0	.29	.00	.00
10	.09	3.2	e1.4	e1.5	e1.4	e4.2	85	42	2.1	.48	.00	.00
11	.09	3.6	e1.3	e1.8	e1.3	e3.8	96	52	1.6	.23	.00	.00
12	.08	3.5	e1.2	e1.7	e1.3	e3.6	86	80	2.5	.11	.00	.00
13	.34	3.5	e1.1	e1.6	e1.1	e4.0	78	111	3.9	.07	.00	.00
14	1.0	3.9	e1.1	e1.5	e1.3	e4.0	67	112	3.4	.05	.00	.00
15	.84	5.2	e1.2	e1.6	e1.4	e4.0	66	95	2.3	.00	.00	.00
16	.38	2.5	e1.3	e1.7	e1.4	e5.8	76	106	1.7	.00	.00	.00
17	.28	3.5	e1.4	e1.5	e1.4	e7.8	74	107	1.9	.00	.00	.00
18	.23	3.5	e1.5	e1.5	e1.6	e9.4	e70	92	3.6	.00	.00	.00
19	.18	e3.0	e1.5	e1.5	e1.7	e11	e72	71	1.9	.00	.00	.00
20	.18	e2.7	e1.4	e1.5	e1.9	12	e77	47	2.7	.00	.00	.00
21	.18	e3.0	e1.4	e1.3	e2.0	14	e80	39	2.1	.00	.00	.00
22	.23	e2.7	e1.6	e1.4	e2.2	16	e84	45	2.2	.00	.00	.00
23	.23	e2.4	e1.5	e1.4	e2.5	17	e82	36	2.2	.00	.00	.00
24	.83	e2.2	e1.3	e1.6	e2.3	17	e80	38	.52	.00	.00	.00
25	1.7	e2.2	e1.1	e1.5	e2.5	17	74	33	.29	.00	.00	.00
26	1.5	e2.0	e.98	e1.4	e2.7	e16	73	28	.24	.00	.00	.00
27	.80	e2.0	e1.1	e1.4	e2.9	e16	65	25	.48	.03	.00	.00
28	.80	e1.9	e1.2	e1.5	e2.8	e17	59	20	1.3	.08	.00	.00
29	.80	e1.6	e1.0	e1.7	e3.0	e18	50	17	1.5	.05	.00	.00
30	1.4	e1.5	e1.1	e1.8	---	e19	47	21	1.1	.03	.00	.00
31	2.7	---	e1.2	e1.9	---	e20	---	20	---	.0	.00	---
TOTAL	25.74	85.5	40.68	45.2	50.09	293.1	1939	1817	125.93	5.48	0.52	0.00
MEAN	.83	2.85	1.31	1.46	1.73	9.45	64.6	58.6	4.20	.18	.017	.00
MAX	2.7	5.2	1.6	1.9	3.0	20	96	112	13	.96	.21	.00
MIN	.08	1.5	.98	1.0	.89	3.5	21	17	.24	.00	.00	.00
AC-FT	51	170	81	90	99	581	3850	3600	250	11	1.0	.0

CAL YR 1987 TOTAL 7508.00 MEAN 20.6 MAX 143 MIN .08 AC-FT 14890
WTR YR 1988 TOTAL 4428.24 MEAN 12.1 MAX 112 MIN .00 AC-FT 8780

e Estimated

BEAR RIVER BASIN

189

10015900 SULPHUR CREEK BELOW RESERVOIR, NEAR EVANSTON, WY

LOCATION (REVISED).--Lat 41°09'17", long 110°50'22", in NE¼NW¼NE¼ sec. 33, T. 14 N., R. 119 W., Uinta County, Hydrologic Unit 16010101, on right bank 1200 ft downstream from Sulphur Creek Dam, 6.2 mi upstream from mouth, and 10.5 mi southeast of Evanston.

DRAINAGE AREA.--69.2 mi².

PERIOD OF RECORD.--April 1958 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder and concrete V-notch control. Altitude of gage is 7,120 ft from topographic map. Oct. 1, 1986 to June 9, 1987 at datum 1.0 ft higher. After June 9, 1987 at site 0.3 mi downstream at different datum.

REMARKS.--Records poor. Flow regulated by Sulphur Creek Reservoir which was enlarged in 1988 from 7,100 acre-ft to a total capacity of 19,775 acre-ft. Records prior to 1965 do not include flow over spillway of the dam.

AVERAGE DISCHARGE.--24 years (water years 1965-88), 27.1 ft³/s, 19,630 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (SINCE 1966).--Maximum daily discharge, 740 ft³/s May 15, 1984; no flow at times each year, except 1972.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 109 ft³/s May 18; no flow on many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	11	5.8	e1.4	e1.9	7.2	14	.54	33	e62	14	5.9
2	e.00	6.3	6.8	e1.4	e1.8	7.2	15	2.8	28	e62	10	7.1
3	e.00	.07	3.7	e1.3	e1.7	7.2	21	2.3	21	e64	14	9.6
4	e.00	.03	.14	e1.2	e1.6	7.2	28	3.0	22	e65	15	8.2
5	.00	.00	.13	e1.2	e1.5	8.9	30	2.4	22	e67	16	8.3
6	.00	3.6	.13	e1.3	e1.6	22	31	1.3	18	e66	16	8.2
7	.08	11	.13	e1.4	e1.6	13	17	1.4	1.4	68	16	8.5
8	.10	11	.17	e1.5	e1.7	.02	22	1.4	1.6	63	16	8.5
9	.15	11	e.12	e1.6	e1.8	.00	34	17	1.6	49	16	8.8
10	.07	11	e.10	e1.7	e1.7	.00	36	46	1.5	48	14	8.6
11	.00	5.1	e.09	e1.9	e1.7	.00	36	46	2.1	47	11	8.8
12	.00	.05	e.05	e1.8	e1.5	.00	34	46	2.4	49	7.5	8.8
13	.04	.02	e.00	e1.7	e1.4	.00	17	47	5.7	53	6.7	8.8
14	.05	4.8	e.00	e1.7	e1.6	.00	.43	48	2.7	52	6.4	8.9
15	.0	7.2	.00	e1.8	e1.6	.00	.42	47	8.7	49	6.3	8.8
16	.00	5.5	e.00	e1.8	e1.7	.00	.43	48	20	43	5.7	5.7
17	.00	4.9	e.00	e1.8	e1.9	.00	.34	64	24	42	6.0	6.8
18	.00	4.9	e.00	e1.7	e2.0	.00	.31	109	24	41	5.7	6.4
19	3.2	4.9	e.00	e1.6	e2.3	.00	.26	102	e24	40	5.9	6.1
20	12	2.4	e.00	e1.6	e2.5	.00	.23	99	e22	37	6.1	6.3
21	13	.15	e.01	e1.6	e2.6	.00	.32	86	e25	37	6.4	4.4
22	11	22	e.02	e1.6	e2.7	.00	.40	72	e30	35	7.0	6.1
23	12	28	e.02	e1.7	e2.7	6.4	.66	50	e33	30	8.0	6.4
24	12	10	e.10	e1.8	e2.9	15	2.0	28	e34	29	8.2	6.4
25	12	7.2	e.30	e1.8	e3.0	12	2.2	28	e33	26	3.8	6.6
26	12	6.0	e1.2	e1.7	e3.1	13	1.3	29	e32	26	.17	6.5
27	11	6.3	e1.3	e1.6	e3.6	18	1.6	30	e54	25	6.5	6.3
28	5.6	8.1	e1.4	e1.7	e4.5	18	1.1	30	e68	10	6.3	6.4
29	.43	8.1	e1.4	e1.9	e6.0	16	1.4	30	e66	15	6.1	6.4
30	9.8	6.7	e1.4	e2.0	---	16	1.1	31	e64	17	6.3	6.1
31	12	---	e1.4	e2.0	---	15	---	31	---	16	6.6	---
TOTAL	126.52	207.32	25.91	50.8	66.2	202.12	349.50	1179.14	724.7	1333	279.67	218.7
MEAN	4.08	6.91	.84	1.64	2.28	6.52	11.6	38.0	24.2	43.0	9.02	7.29
MAX	13	28	6.8	2.0	6.0	22	36	109	68	68	16	9.6
MIN	.00	.00	.00	1.2	1.4	.00	.23	.54	1.4	10	.17	4.4
AC-FT	251	411	51	101	131	401	693	2340	1440	2640	555	434

CAL YR 1987 TOTAL 9462.33 MEAN 25.9 MAX 165 MIN .00 AC-FT 18770
WTR YR 1988 TOTAL 4763.58 MEAN 13.0 MAX 109 MIN .00 AC-FT 9450

e Estimated

BEAR RIVER BASIN

10016900 BEAR RIVER AT EVANSTON, WY

LOCATION.--Lat 41°16'13", long 110°57'47", in NE¼ NW¼ NW¼ sec.21, T.15 N., R.120 W., Uinta County, Hydrologic Unit 16010101, on left bank 100 ft downstream from bridge on State Highway 89, in the City of Evanston.

DRAINAGE AREA.--433 mi².

PERIOD OF RECORD.--May 1984 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 6,730 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for Apr. 7 to May 14, which are fair. Natural flow of stream affected by storage reservoirs, diversions for irrigation, and return flow from irrigated areas. Results of discharge measurements, in cubic feet per second, made during the period when station was not in operation, are given below:

Oct. 2 . . . 26.8
Mar. 23 . . . 142

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,680 ft³/s, May 16, 1984, gage height, 7.35 ft; minimum daily during periods of operation, 4.1 ft³/s, Sept. 11, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,380 ft³/s, May 18, gage height, 4.61 ft; minimum daily during period of operation, 4.1 ft³/s, Sept. 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	139	420	452	71	47	9.3
2	---	---	---	---	---	---	162	320	375	59	31	7.7
3	---	---	---	---	---	---	229	314	342	55	23	10
4	---	---	---	---	---	---	346	459	484	48	45	11
5	---	---	---	---	---	---	382	451	734	49	41	10
6	---	---	---	---	---	---	411	384	745	64	34	11
7	---	---	---	---	---	---	590	327	540	61	32	11
8	---	---	---	---	---	---	568	308	404	55	30	9.2
9	---	---	---	---	---	---	356	320	327	28	28	8.7
10	---	---	---	---	---	---	333	330	292	27	19	7.7
11	---	---	---	---	---	---	360	363	266	26	16	4.1
12	---	---	---	---	---	---	388	475	213	36	15	5.6
13	---	---	---	---	---	---	391	630	188	51	9.2	8.2
14	---	---	---	---	---	---	324	781	167	52	7.8	13
15	---	---	---	---	---	---	324	799	142	49	8.8	14
16	---	---	---	---	---	---	367	940	126	46	8.3	12
17	---	---	---	---	---	---	346	1190	112	46	6.4	7.3
18	---	---	---	---	---	---	343	1280	115	45	6.2	7.7
19	---	---	---	---	---	---	311	971	87	44	5.8	11
20	---	---	---	---	---	---	295	776	76	40	5.4	13
21	---	---	---	---	---	---	380	726	137	33	4.8	15
22	---	---	---	---	---	---	377	721	137	32	4.7	14
23	---	---	---	---	---	---	324	825	125	33	4.2	19
24	---	---	---	---	---	---	424	811	100	30	5.9	19
25	---	---	---	---	---	---	398	819	81	32	9.1	17
26	---	---	---	---	---	---	265	814	73	37	8.9	15
27	---	---	---	---	---	---	324	930	95	46	14	15
28	---	---	---	---	---	---	314	831	119	63	11	15
29	---	---	---	---	---	---	289	831	116	53	9.6	16
30	---	---	---	---	---	---	333	744	92	57	8.3	17
31	---	---	---	---	---	---	---	606	---	51	8.6	---
TOTAL	---	---	---	---	---	---	10393	20496	7262	1419	508.0	353.5
MEAN	---	---	---	---	---	---	346	661	242	45.8	16.4	11.8
MAX	---	---	---	---	---	---	590	1280	745	71	47	19
MIN	---	---	---	---	---	---	139	308	73	26	4.2	4.1
AC-FT	---	---	---	---	---	---	20610	40650	14400	2810	1010	701

BEAR RIVER BASIN

191

10020100 BEAR RIVER ABOVE RESERVOIR, NEAR WOODRUFF, UT

LOCATION.--Lat 41°26'04", long 111°01'01", in NE¼NW¼NW¼ sec. 29, T. 17 N., R. 120 W., Uinta County, Wyoming, Hydrologic Unit 16010101, on right bank 9.3 mi upstream from Woodruff Narrows Dam and 10 mi southeast of Woodruff.

DRAINAGE AREA.--752 mi².

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,455 ft from river-profile map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversion for irrigation of about 43,500 acres above station.

AVERAGE DISCHARGE.--27 years, 259 ft³/s, 187,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,150 ft³/s June 2, 1983, gage height, 6.17 ft; minimum, no flow several days during August and September 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,590 ft³/s May 18, gage height, 4.36 ft; minimum daily, no flow several days during August and September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	53	e34	e31	e22	e36	119	309	389	9.9	7.0	.00
2	16	53	e35	e30	e21	e37	124	310	302	7.9	7.2	.00
3	15	52	e34	e27	e21	e37	181	302	257	5.8	6.7	.00
4	16	43	e34	e27	e22	e36	361	356	308	5.2	5.9	.00
5	16	47	e32	e28	e23	e35	440	367	500	6.3	4.2	.01
6	17	47	e33	e29	e24	e35	386	318	585	6.5	4.3	.02
7	24	53	e35	e31	e25	e34	473	282	457	5.5	3.8	.05
8	23	60	e36	e33	e27	e34	550	248	317	6.6	3.1	.04
9	23	60	e35	e34	e29	e35	362	261	247	6.2	2.7	.07
10	23	58	e34	e34	e28	e36	248	255	218	5.4	3.9	.00
11	23	57	e33	e35	e27	e34	245	276	206	2.7	4.0	.00
12	24	56	e33	e34	e26	e34	285	350	182	2.6	3.7	.00
13	29	51	e34	e33	e24	e36	294	484	175	2.8	3.4	.13
14	35	51	e35	e33	e25	e40	257	659	159	3.1	2.6	.30
15	36	56	e34	e34	e27	e53	243	717	145	3.8	1.9	.10
16	36	51	e34	e34	e26	e50	294	862	127	3.5	1.7	.07
17	32	44	e32	e33	e24	e56	269	1120	115	3.1	1.1	.44
18	29	39	e30	e32	e24	e80	259	1420	112	2.6	.85	.50
19	27	e37	e31	e29	e25	e120	246	1130	110	2.5	.66	.57
20	28	e34	e33	e26	e28	e145	231	777	98	3.5	.60	.63
21	28	e36	e35	e27	e28	e140	256	658	84	3.9	.28	.98
22	27	e38	e34	e28	e29	e148	317	606	97	3.7	.09	1.2
23	28	e36	e33	e28	e28	e172	287	699	80	3.4	.00	1.2
24	31	e34	e31	e29	e27	160	344	649	60	4.4	.18	1.2
25	37	e37	e28	e29	e25	204	352	672	46	3.5	.05	1.2
26	37	e36	e28	e28	e27	299	281	665	28	3.9	.00	1.2
27	41	e35	e29	e27	e29	321	243	729	21	4.2	.00	1.2
28	43	e32	e28	e27	e29	259	235	702	31	5.3	.02	1.2
29	42	e32	e29	e26	e32	204	223	665	22	7.2	.02	1.2
30	44	e33	e30	e25	---	157	228	629	16	7.4	.00	1.3
31	46	---	e31	e23	---	151	---	536	---	7.7	.00	---
TOTAL	899	1351	1007	924	752	3218	8633	18013	5494	150.1	69.95	14.81
MEAN	29.0	45.0	32.5	29.8	25.9	104	288	581	183	4.84	2.26	.49
MAX	46	60	36	35	32	321	550	1420	585	9.9	7.2	1.3
MIN	15	32	28	23	21	34	119	248	16	2.5	.00	.00
AC-FT	1780	2680	2000	1830	1490	6380	17120	35730	10900	298	139	29
CAL YR 1987	TOTAL	59486	MEAN	163	MAX	1220	MIN	15	AC-FT	118000		
WTR YR 1988	TOTAL	40525.86	MEAN	111	MAX	1420	MIN	.00	AC-FT	80380		

e Estimated

BEAR RIVER BASIN

10020200 WOODRUFF NARROWS RESERVOIR NEAR WOODRUFF, UT

LOCATION.--Lat 41°30'10", long 111°00'55", in SE¼NW¼NW¼ sec. 32, T. 18 N., R. 120 W., Uinta County, Wyoming, Hydrologic Unit 16010101, in gate house at Woodruff Narrows Dam on Bear River, 5.6 mi upstream from Wyoming-Utah State line, and 7.7 mi east of Woodruff.

DRAINAGE AREA.--784 mi².

PERIOD OF RECORD.--October 1965 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,405 ft from levels by Bureau of Reclamation.

REMARKS.--Records poor. Reservoir formed by earthfill, rock-faced dam. Storage began Jan. 5, 1962. Total capacity, 28,000 acre-ft below spillway crest. Total capacity increased to 57,300 in 1980. Elevation of spillway is 6,454.50 ft; gage height, 50.4 ft. Figures given herein represent total contents.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 64,310 acre-ft June 2, 1983, gage height, 53.5 ft; minimum observed, 880 acre-ft Sept. 15-25, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum, 60,470 acre-ft May 18, 19, gage height, 51.8 ft; minimum recorded, 12,870 acre-ft Sep. 30.

MONTHEND ELEVATION, IN FEET, AND INSTANTANEOUS CONTENTS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	31.5	22,380	--
Oct. 31	31.4	22,240	-140
Nov. 30	33.1	24,630	+2,390
Dec. 31	34.4	26,590	+1,960
CAL YR 1987	--	--	-31,390
Jan. 31	35.5	28,470	+1,880
Feb. 29	--	*33,430	+4,960
Mar. 31	41.9	39,640	+6,210
Apr. 30	50.7	57,980	+18,340
May 31	50.5	57,530	-450
June 30	31.8	22,800	-34,730
July 31	26.7	16,440	-6,360
Aug. 31	25.0	14,390	-2,050
Sept. 30	--	*12,870	-1,520
WTR YR 1988	--	--	-9,510

* No gage reading, contents interpolated.

BEAR RIVER BASIN

193

10020300 BEAR RIVER BELOW RESERVOIR, NEAR WOODRUFF, UT

LOCATION.--Lat 41°30'20", long 111°00'50", in NW¼NW¼ sec. 32, T. 18 N., R. 120 W., Uinta County, Wyoming, Hydrologic Unit 16010101, on right bank 1,100 ft downstream from Woodruff Narrows Dam, 1.6 mi upstream from Salt Creek, 5.4 mi upstream from Wyoming-Utah State line, and 7.7 mi east of Woodruff.

DRAINAGE AREA.--784 mi².

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 6,398.96 ft NGVD of 1929 (levels by Utah Water Resources Division from Bureau of Reclamation bench mark). Prior to Sept. 26, 1962, at site 175 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Woodruff Narrows Reservoir (station 10020200) beginning January 1962. Diversions for irrigation of about 43,500 acres above station.

AVERAGE DISCHARGE.--27 years, 256 ft³/s, 185,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,820 ft³/s June 2, 1983, gage height, 8.26 ft; no flow July 4, 5, 1962, Aug. 30, 31, Sept. 1, 2, 6, 7, 1979, Oct. 30, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,270 ft³/s May 18, gage height, 6.05 ft; minimum daily, 15 ft³/s Oct. 15-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	16	17	18	17	18	20	218	696	551	29	25
2	42	16	17	18	17	19	20	299	689	172	30	25
3	42	16	17	18	17	18	20	324	733	170	29	25
4	42	16	17	18	17	19	20	344	827	172	29	25
5	42	16	17	17	17	19	20	396	829	171	29	25
6	41	16	17	17	17	19	20	408	832	168	29	25
7	41	16	17	18	17	19	21	382	830	168	29	24
8	41	16	17	17	17	19	21	342	830	168	29	24
9	41	16	17	18	17	19	21	318	828	168	29	24
10	41	16	17	18	18	19	22	302	827	166	29	24
11	41	16	17	17	17	19	22	303	825	166	29	23
12	41	17	17	17	17	19	22	328	818	165	27	23
13	32	17	17	18	17	19	22	412	814	164	26	23
14	16	16	18	17	17	19	22	529	807	164	26	24
15	15	16	18	17	17	19	22	651	806	85	26	23
16	15	16	18	17	18	19	22	764	798	31	26	23
17	15	17	18	17	18	19	22	930	794	31	26	23
18	15	17	18	17	18	19	22	1170	784	31	26	23
19	15	17	18	17	17	20	22	1210	777	31	25	23
20	15	17	18	17	18	20	22	1010	774	31	25	23
21	15	17	18	17	18	20	22	837	767	31	25	23
22	15	17	18	17	18	20	22	742	758	30	25	23
23	15	17	18	17	18	20	22	723	750	30	25	23
24	15	17	18	17	18	20	22	845	742	30	25	23
25	15	17	18	17	18	20	22	1020	724	30	25	23
26	15	17	18	17	18	20	23	976	682	30	26	23
27	15	17	18	17	18	20	23	852	673	30	26	23
28	15	17	18	17	18	20	42	818	664	29	26	23
29	16	17	18	17	18	20	100	781	655	29	25	23
30	16	17	18	17	---	20	151	750	645	29	25	23
31	16	---	18	17	---	20	---	723	---	29	25	---
TOTAL	803	496	545	535	507	600	874	19707	22978	3300	831	707
MEAN	25.9	16.5	17.6	17.3	17.5	19.4	29.1	636	766	106	26.8	23.6
MAX	42	17	18	18	18	20	151	1210	832	551	30	25
MIN	15	16	17	17	17	18	20	218	645	29	25	23
AC-FT	1590	984	1080	1060	1010	1190	1730	39090	45580	6550	1650	1400
CAL YR 1987	TOTAL	76873	MEAN	211	MAX	1190	MIN	15	AC-FT	152500		
WTR YR 1988	TOTAL	51883	MEAN	142	MAX	1210	MIN	15	AC-FT	102900		

BEAR RIVER BASIN

10023000 BIG CREEK NEAR RANDOLPH, UT

LOCATION.--Lat $41^{\circ}36'36''$, long $111^{\circ}15'12''$, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 15, T. 10 N., R. 6 E., Rich County, Hydrologic Unit 16010101, on left bank 2.7 mi downstream from main forks and 5.2 mi southwest of Randolph.

DRAINAGE AREA (REVISED).--52.4 mi².

PERIOD OF RECORD.--March 1939 to September 1944 (fragmentary), October 1949 to September 1970. October 1986 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,410 ft from topographic map. March 1939 to September 1944 (fragmentary), at site 0.2 mi downstream at different datum, October 1949 to September 1959 at site 200 ft upstream at different datum, September 1959 to September 1970 at site 300 ft upstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--23 years (water years 1950-70, 1987-88), 15.6 ft³/s, 11,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 337 ft³/s July 11, 1957, gage height, 3.75 ft, site and datum then in use; minimum discharge, 0.9 ft³/s Aug. 4, 1961.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 60 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 26	1625	*49	*4.38				

Minimum daily discharge, 4.6 ft³/s Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	11	e9.2	e9.2	e9.2	e9.4	12	10	15	7.6	5.9	5.1
2	12	12	e9.2	e9.2	e9.0	e9.4	13	10	18	7.5	5.8	5.3
3	12	11	e9.4	e9.4	e9.0	e9.4	15	10	18	7.4	6.2	5.2
4	12	11	e9.6	e9.6	e9.0	e9.4	15	9.7	17	7.2	6.5	5.0
5	12	11	e9.6	e9.6	e9.0	e9.2	14	9.7	16	7.0	6.0	4.8
6	12	12	e9.4	e9.4	e9.0	e9.4	14	9.7	15	7.0	5.8	4.9
7	12	12	e9.2	e9.4	e9.2	e9.6	14	9.9	14	7.0	6.0	5.7
8	12	11	e9.0	e9.4	e9.2	e9.2	14	10	14	7.0	6.1	5.9
9	12	11	e9.0	e9.4	e9.2	e9.2	13	9.7	13	7.1	5.9	5.4
10	12	11	e9.0	e9.4	e9.2	e9.3	12	9.5	13	6.9	5.9	5.4
11	12	11	e9.0	e9.4	e9.2	e9.2	12	9.6	13	6.8	5.9	6.0
12	12	11	e8.6	e9.4	e9.2	e9.1	11	11	12	6.8	6.0	5.6
13	14	11	8.4	e9.2	e9.2	e9.2	11	11	12	6.9	5.7	6.0
14	14	11	e8.4	e9.2	e9.2	e9.2	10	12	11	6.8	5.7	6.3
15	12	11	e8.4	e9.4	e9.2	e9.2	10	12	11	6.5	5.7	6.3
16	12	e9.5	e8.4	e9.4	e9.2	e9.2	10	12	10	6.6	5.6	5.3
17	12	e8.0	e8.4	e9.4	e9.2	e9.1	10	12	10	6.5	5.0	5.3
18	12	e7.0	e8.4	e9.4	e9.0	e8.8	11	12	10	6.3	5.0	5.5
19	11	e7.5	e8.6	e9.4	e9.0	e8.7	10	12	9.7	6.4	5.1	6.3
20	11	e8.5	e8.6	e9.0	e9.0	e8.7	10	11	8.9	6.3	5.4	6.0
21	12	e9.0	e8.6	e9.2	e9.0	e9.2	11	11	8.5	6.2	5.2	5.9
22	12	e9.5	e8.8	e9.4	e9.2	e8.9	12	11	8.4	6.2	5.3	6.4
23	11	e9.6	e8.8	e9.4	e9.2	8.4	10	12	8.3	6.1	5.4	5.4
24	12	e9.6	e8.8	e9.4	e9.0	10	10	11	7.8	6.0	5.5	4.8
25	11	e9.9	e8.8	e9.0	e9.0	17	10	11	8.2	6.2	5.7	5.1
26	11	10	e9.2	e9.0	e9.2	23	10	11	9.1	6.4	5.7	4.7
27	11	9.6	e9.3	e9.0	e9.2	14	10	11	8.6	6.4	5.4	4.6
28	11	9.7	e9.4	e9.0	e9.4	12	10	11	8.3	6.2	5.5	5.2
29	11	e9.5	e9.4	e9.2	e9.6	12	9.7	11	8.2	6.4	5.4	5.1
30	12	e9.1	e9.4	e9.2	---	12	9.9	12	7.7	6.2	5.1	5.1
31	11	---	e9.4	e9.2	---	11	---	12	---	6.0	5.1	---
TOTAL	367	304.0	277.7	288.2	265.2	321.4	343.6	336.8	343.7	205.9	174.5	163.6
MEAN	11.8	10.1	8.96	9.30	9.14	10.4	11.5	10.9	11.5	6.64	5.63	5.45
MAX	14	12	9.6	9.6	9.6	23	15	12	18	7.6	6.5	6.4
MIN	11	7.0	8.4	9.0	9.0	8.4	9.7	9.5	7.7	6.0	5.0	4.6
AC-FT	728	603	551	572	526	637	682	668	682	408	346	325

CAL YR 1987	TOTAL	5890.7	MEAN	16.1	MAX	26	MIN	7.0	AC-FT	11680
WTR YR 1988	TOTAL	3391.6	MEAN	9.27	MAX	23	MIN	4.6	AC-FT	6730

e Estimated

BEAR RIVER BASIN

195

10026500 BEAR RIVER NEAR RANDOLPH, UT

LOCATION.--Lat 41°48'02", long 111°04'20", in SE¼ME¼ sec. 7, T. 12 N., R. 8 E., Rich County, Hydrologic Unit 16010101, on left bank 3.7 mi upstream from Twin Creek, 5.0 mi upstream from Utah-Wyoming State line, and 11 mi northeast of Randolph.

DRAINAGE AREA.--1,616 mi².

PERIOD OF RECORD.--October 1943 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,200 ft from river-profile map. Prior to Aug. 17, 1971, 0.2 mi upstream at different datum. Aug. 17, 1971 to Sept. 30, 1986 at datum 10.0 ft lower.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversion for irrigation of about 94,500 acres above station. Flow regulated by upstream reservoirs.

AVERAGE DISCHARGE.--45 years, 221 ft³/s, 160,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,630 ft³/s June 4, 1983, gage height, 8.58 ft; minimum, 1.6 ft³/s Nov. 12, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 271 ft³/s May 21, gage height, 12.81 ft; minimum daily, 10 ft³/s Sept. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	60	e78	e43	e32	e47	84	75	167	e192	43	14
2	67	61	e78	e40	e32	e46	86	80	177	e172	e39	14
3	61	59	e76	e41	e32	e45	93	97	184	e161	e36	13
4	52	58	e74	e42	e32	e47	91	143	174	e161	32	14
5	50	59	e72	e42	e33	e52	86	165	179	e170	31	13
6	50	60	e74	e41	e33	e49	80	182	205	e192	29	13
7	50	63	e76	e40	e33	e46	82	204	189	224	28	13
8	53	61	e76	e39	e34	e48	81	214	201	251	26	11
9	54	61	e74	e40	e34	e50	79	217	217	248	26	10
10	53	62	e70	e40	e34	e45	77	210	228	196	27	11
11	54	64	e71	e40	e33	e41	76	198	224	129	25	11
12	51	66	e73	e38	e34	e40	77	173	216	115	22	11
13	51	67	e76	e37	e34	e43	76	102	202	104	22	12
14	55	68	e74	e37	e35	e49	75	57	182	96	23	12
15	56	68	e70	e37	e35	e48	73	48	178	91	23	12
16	53	71	e60	e38	e35	e50	70	47	181	89	21	12
17	54	e76	e55	e39	e35	e54	71	54	177	84	19	12
18	58	e79	e54	e38	e32	e60	73	69	e170	74	20	12
19	58	e82	e57	e38	e35	e66	75	102	e162	93	24	12
20	58	e83	e61	e36	e39	e73	74	183	e153	70	25	12
21	58	e86	e61	e37	e42	e72	72	253	e150	61	25	12
22	58	e82	e61	e38	e43	e70	79	247	e152	57	25	12
23	60	e78	e60	e38	e40	e67	84	202	e159	87	20	12
24	62	e77	e58	e38	e38	e66	88	159	e164	78	14	13
25	62	e77	e53	e36	e38	e66	89	149	e170	67	13	12
26	62	e76	e50	e35	e40	e76	86	157	e180	76	14	11
27	63	e75	e50	e34	e43	e80	83	168	e190	75	13	11
28	63	e75	e49	e34	e43	e77	76	174	e198	71	14	11
29	61	e76	e47	e34	e44	e74	71	152	e202	61	14	11
30	61	e78	e47	e33	---	e76	70	151	e197	60	14	11
31	61	---	e45	e33	---	e82	---	159	---	53	14	---
TOTAL	1774	2108	1980	1176	1047	1805	2377	4591	5528	3658	721	360
MEAN	57.2	70.3	63.9	37.9	36.1	58.2	79.2	148	184	118	23.3	12.0
MAX	67	86	78	43	44	82	93	253	228	251	43	14
MIN	50	58	45	33	32	40	70	47	150	53	13	10
AC-FT	3520	4180	3930	2330	2080	3580	4710	9110	10960	7260	1430	714
CAL YR 1987	TOTAL	66609	MEAN	182	MAX	742	MIN	40	AC-FT	132100		
WTR YR 1988	TOTAL	27125	MEAN	74.1	MAX	253	MIN	10	AC-FT	53800		

e Estimated

BEAR RIVER BASIN

10028500 BEAR RIVER BELOW PIXLEY DAM, NEAR COKEVILLE, WY

LOCATION.---Lat $41^{\circ}56'20''$, long $110^{\circ}59'05''$, in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, T. 23 N., R. 120 W., Lincoln County, Hydrologic Unit 16010102, 800 ft downstream from Pixley Dam, 11 mi south of Cokeville, and 17.5 mi downstream from Twin Creek.

DRAINAGE AREA.---2,032 mi².

PERIOD OF RECORD.---October 1941 to November 1943 (published as Bear River near Cokeville), October 1952 to September 1956, May 1958 to current year (seasonal only). Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.---WRD UT-74-1: Drainage area.

GAGE.---Water-stage recorder. Altitude of gage is 6,185 ft from river-profile map. Oct. 31, 1941 to Nov. 30, 1943, at site 200 ft downstream at different datum.

REMARKS.---No estimated daily discharges. Records good. Natural flow of stream affected by diversions for irrigation, return flow from irrigated areas, and regulation by upstream reservoirs.

EXTREMES FOR PERIOD OF RECORD.---Maximum daily discharge, 2,300 ft³/s Mar. 25, 1956; minimum recorded, 0.24 ft³/s Apr. 26, 1981.

EXTREMES FOR CURRENT YEAR.---Maximum daily discharge, 346 ft³/s July 7; minimum daily, 16 ft³/s Sept. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	43	84	129	51	26
2	---	---	---	---	---	---	---	43	88	135	50	26
3	---	---	---	---	---	---	---	43	89	132	42	25
4	---	---	---	---	---	---	---	44	90	125	39	24
5	---	---	---	---	---	---	---	51	90	121	39	24
6	---	---	---	---	---	---	---	70	95	205	39	23
7	---	---	---	---	---	---	---	89	108	346	39	23
8	---	---	---	---	---	---	---	95	100	281	39	23
9	---	---	---	---	---	---	---	101	107	245	38	16
10	---	---	---	---	---	---	---	104	110	196	38	16
11	---	---	---	---	---	---	---	102	102	182	38	18
12	---	---	---	---	---	---	---	92	98	142	38	19
13	---	---	---	---	---	---	---	65	96	124	38	21
14	---	---	---	---	---	---	---	50	93	115	38	25
15	---	---	---	---	---	---	---	39	74	102	38	25
16	---	---	---	---	---	---	---	38	62	102	38	23
17	---	---	---	---	---	---	---	38	54	90	37	23
18	---	---	---	---	---	---	---	38	51	88	38	22
19	---	---	---	---	---	---	---	38	50	80	37	22
20	---	---	---	---	---	---	---	36	54	82	37	23
21	---	---	---	---	---	---	---	48	61	66	37	23
22	---	---	---	---	---	---	---	60	83	62	36	22
23	---	---	---	---	---	---	---	69	129	59	35	23
24	---	---	---	---	---	---	---	65	149	81	34	22
25	---	---	---	---	---	---	---	52	154	72	31	22
26	---	---	---	---	---	---	---	50	145	69	28	23
27	---	---	---	---	---	---	---	53	157	79	26	22
28	---	---	---	---	---	---	---	63	157	83	25	22
29	---	---	---	---	---	---	---	80	151	72	25	23
30	---	---	---	---	---	---	---	81	139	63	27	23
31	---	---	---	---	---	---	---	83	---	60	27	---
TOTAL	---	---	---	---	---	---	---	1923	3020	3788	1122	672
MEAN	---	---	---	---	---	---	---	62.0	101	122	36.2	22.4
MAX	---	---	---	---	---	---	---	104	157	346	51	26
MIN	---	---	---	---	---	---	---	36	50	59	25	16
AC-FT	---	---	---	---	---	---	---	3810	5990	7510	2230	1330

BEAR RIVER BASIN

197

10032000 SMITHS FORK NEAR BORDER, WY

LOCATION.--Lat 42°17'36", long 110°52'18", in NE¼SW¼SW¼ sec. 28, T. 27 N., R. 118 W., Lincoln County, Hydrologic Unit 16010102, on left bank 4.9 mi upstream from Howland Creek, 5.6 mi downstream from Hobble Creek, and 12.4 mi northeast of Border.

DRAINAGE AREA.--165 mi².

PERIOD OF RECORD.--May 1942 to current year.

REVISED RECORDS.--WSP 1734: 1952(M).

GAGE.--Water-stage recorder. Elevation of gage is 6,720 ft from topographic map. Prior to Oct. 16, 1945, at site 1.2 mi downstream at different datum. Oct. 16, 1945 to Nov. 1986 at site 0.4 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. One diversion for irrigation of about 200 acres above station.

AVERAGE DISCHARGE.--46 years, 199 ft³/s, 144,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,100 ft³/s June 4, 1986, gage height, 5.66 ft; minimum, 21 ft³/s Mar. 29, 1975, Jan. 24, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 586 ft³/s May 17, gage height, 3.38 ft; minimum daily, 34 ft³/s Jan. 2, 26, Feb. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	82	e55	e37	e35	40	40	280	418	195	115	82
2	78	91	e52	e34	e39	39	41	263	383	191	113	82
3	78	88	57	e36	e37	37	45	257	366	186	115	81
4	77	83	55	e38	e37	38	48	254	381	183	114	80
5	77	80	54	e40	e37	38	46	257	432	179	106	80
6	78	85	53	e43	e37	38	51	272	437	176	104	80
7	78	85	55	e40	e37	39	59	267	426	172	104	78
8	78	81	61	e35	e40	40	67	263	406	168	103	78
9	78	76	53	e40	41	43	61	264	385	166	101	78
10	77	76	53	e45	39	38	62	260	364	163	101	79
11	76	75	52	50	39	41	73	277	351	160	99	82
12	76	73	51	e46	41	41	103	312	336	157	99	82
13	76	73	47	e41	e39	39	152	358	325	155	99	85
14	80	e71	50	e44	e37	40	182	383	307	145	95	85
15	76	69	e45	47	42	48	206	398	295	143	94	81
16	74	68	e48	e43	e40	40	238	431	283	140	94	79
17	73	e68	e51	e40	e38	36	267	523	282	138	92	78
18	73	71	e54	e45	e38	37	281	554	279	138	90	78
19	71	e74	e53	e40	e40	38	279	498	262	137	89	79
20	71	e70	e50	e36	44	37	264	463	255	135	88	78
21	77	e64	e47	e40	e40	39	282	452	247	133	88	79
22	83	64	e43	e45	e38	40	287	462	239	129	87	78
23	83	e62	e39	e40	e36	40	261	488	232	127	87	78
24	84	e60	e36	e36	e34	39	250	524	224	127	87	77
25	80	63	e35	e35	e36	39	251	542	219	126	86	76
26	83	e60	e40	e34	e36	37	233	553	226	128	86	76
27	87	e55	e43	e35	e35	41	235	563	215	125	86	76
28	82	e52	e43	e37	e36	43	249	567	209	123	85	77
29	82	e52	e42	e40	e37	38	259	556	206	122	84	75
30	84	e54	e43	44	---	42	279	528	200	119	83	75
31	80	---	e41	e37	---	41	---	470	---	117	82	---
TOTAL	2426	2125	1501	1243	1105	1226	5151	12539	9190	4603	2956	2372
MEAN	78.3	70.8	48.4	40.1	38.1	39.5	172	404	306	148	95.4	79.1
MAX	87	91	61	50	44	48	287	567	437	195	115	85
MIN	71	52	35	34	34	36	40	254	200	117	82	75
AC-FT	4810	4210	2980	2470	2190	2430	10220	24870	18230	9130	5860	4700

CAL YR 1987 TOTAL 41903 MEAN 115 MAX 353 MIN 35 AC-FT 83110
WTR YR 1988 TOTAL 46437 MEAN 127 MAX 567 MIN 34 AC-FT 92110

e Estimated

BEAR RIVER BASIN

10038000 BEAR RIVER BELOW SMITHS FORK, NEAR COKEVILLE, WY

LOCATION.--Lat 42°07'36", long 110°58'21", in NW¼SE¼NE¼ sec. 28, T. 25 N., R. 119 W., Lincoln County, Hydrologic Unit 16010102, on left bank 1.1 mi upstream from Wyman Dam, 2.8 mi northwest of Cokeville, and 3.8 mi downstream from Smiths Fork.

DRAINAGE AREA.--2,447 mi².

PERIOD OF RECORD.--April 1954 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,140 ft from river-profile map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by diversion for irrigation, return flow from irrigated areas, and regulation by upstream reservoirs.

AVERAGE DISCHARGE.--34 years, 483 ft³/s, 349,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,620 ft³/s June 7, 1983, gage height, 8.75 ft; minimum, 31 ft³/s Oct. 4, 5, 6, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 716 ft³/s May 18, gage height, 4.05 ft; minimum daily, 82 ft³/s Feb. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	192	201	e120	e84	e106	e121	382	589	475	130	104
2	172	207	201	e115	e82	e108	e121	374	549	509	118	105
3	184	211	207	e108	e82	e101	e127	356	506	463	117	103
4	180	200	207	e113	e84	e100	e138	350	501	429	114	94
5	162	197	210	e115	e86	e103	e142	354	490	395	111	95
6	155	207	217	e115	e86	e106	e146	379	522	369	108	96
7	152	218	220	e113	e88	e112	e167	407	536	587	104	96
8	138	216	227	e107	e91	e123	e158	438	542	554	104	96
9	168	222	218	e112	e91	e123	e151	461	525	488	115	97
10	164	222	225	e110	e88	e121	e168	479	509	440	134	94
11	164	221	240	e106	e88	e123	e189	489	505	374	140	99
12	163	218	238	e102	e90	e120	e218	495	496	352	144	108
13	166	223	e240	e97	e90	e118	e237	513	503	308	140	114
14	176	248	e230	e96	e90	e115	306	584	499	277	130	123
15	158	230	224	e98	e92	e112	346	521	471	254	130	120
16	172	195	218	e98	e90	e110	371	519	442	237	129	116
17	161	192	157	e100	e88	e114	373	579	389	235	126	112
18	166	158	230	e98	e92	e118	392	689	376	221	120	107
19	177	236	187	e96	e96	e118	419	655	353	184	120	109
20	180	236	e180	e90	e98	e118	396	587	342	168	120	108
21	183	221	173	e94	e96	e121	389	539	340	155	121	111
22	180	224	177	e96	e92	e120	389	551	344	141	119	112
23	178	204	180	e96	e94	e118	389	581	388	135	117	110
24	191	205	e160	e98	e94	e118	365	607	438	137	117	109
25	186	200	e150	e92	e92	e118	353	613	453	157	112	104
26	189	204	e135	e89	e96	e122	350	615	463	145	108	105
27	187	e200	e128	e87	e98	e129	350	638	474	148	106	102
28	188	e200	e127	e86	e100	e124	354	636	478	160	105	101
29	189	e190	e125	e88	e100	e121	364	639	490	158	104	104
30	185	e200	e120	e87	---	e126	374	660	493	146	104	105
31	189	---	e120	e85	---	e124	---	633	---	134	107	---
TOTAL	5367	6297	5872	3107	2638	3610	8363	16323	14006	8935	3674	3159
MEAN	173	210	189	100	91.0	116	279	527	467	288	119	105
MAX	191	248	240	120	100	129	419	689	589	587	144	123
MIN	138	158	120	85	82	100	121	350	340	134	104	94
AC-FT	10650	12490	11650	6160	5230	7160	16590	32380	27780	17720	7290	6270
CAL YR 1987	TOTAL	136507	MEAN	374	MAX	1150	MIN	120	AC-FT	270800		
WTR YR 1988	TOTAL	81351	MEAN	222	MAX	689	MIN	82	AC-FT	161400		

e Estimated

BEAR RIVER BASIN

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10039500 BEAR RIVER AT BORDER, WY

LOCATION.--Lat 42°12'40", long 111°03'11", in NE¼NE¼NE¼ sec. 15, T. 14 S., R. 46 E., Bear Lake County, Idaho, Hydrologic Unit 16010102, on left bank 0.2 mi west of Wyoming-Idaho State line, 0.5 mi west of Border, and 2.1 mi upstream from Thomas Fork.

DRAINAGE AREA.--2,486 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1937 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,051.63 ft NGVD of 1929, unadjusted.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by regulation of upstream reservoirs, diversions for irrigation, and return flow from irrigated areas.

AVERAGE DISCHARGE.--51 years, 458 ft³/s, 331,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,880 ft³/s June 7, 1983, gage height, 9.69 ft; minimum, 24 ft³/s Apr. 29, 30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 561 ft³/s May 18, gage height, 3.24 ft; minimum discharge, 67 ft³/s Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	179	e190	e105	e83	e95	e110	357	486	356	118	74
2	156	195	e194	e98	e82	e97	e110	359	459	380	97	73
3	169	201	e189	e100	e81	e99	e113	338	422	357	90	72
4	170	193	e184	e104	e83	e100	e119	333	410	337	89	70
5	161	188	e176	e104	e84	e98	e120	330	391	317	87	69
6	154	194	e180	e103	e84	e96	e140	329	404	304	85	69
7	150	204	e186	e99	e83	e99	e160	350	416	403	83	69
8	144	204	e187	e90	e85	e104	e160	379	419	473	83	69
9	153	206	e180	e100	e88	e105	e180	402	409	422	85	69
10	157	209	e170	e100	e88	e110	e240	416	389	391	94	70
11	157	206	e175	e98	e85	e106	e279	415	380	340	99	69
12	157	203	e179	e94	e85	e110	e290	408	372	328	103	74
13	161	205	e187	e93	e88	e105	e300	410	366	289	102	78
14	170	226	e181	e92	e88	e104	e310	461	364	262	97	83
15	161	219	e170	e94	e90	e100	325	429	345	245	93	100
16	165	191	e150	e95	e90	e104	338	421	323	232	92	99
17	169	182	e130	e97	e88	e104	340	451	294	223	90	96
18	161	187	e140	e94	e91	e105	358	532	280	218	88	93
19	172	214	e149	e93	e92	e110	379	522	265	191	86	93
20	174	234	e154	e90	e95	e105	368	478	248	170	87	97
21	176	246	e150	e93	e93	e104	359	438	244	165	85	99
22	175	258	e144	e95	e93	e110	367	429	248	150	84	101
23	171	229	e150	e95	e96	e106	369	447	256	142	82	98
24	179	233	e143	e96	e93	e105	346	463	298	138	82	99
25	177	250	e134	e91	e91	e107	337	476	313	152	80	97
26	178	230	e123	e86	e91	e110	337	474	328	148	77	95
27	178	e219	e123	e86	e94	e114	332	483	338	144	74	97
28	177	e209	e120	e85	e95	e109	336	490	349	148	76	96
29	178	e210	e115	e86	e96	e110	344	496	363	154	74	95
30	177	e200	e115	e86	---	e105	349	512	371	141	73	97
31	177	---	e110	e83	---	e105	---	520	---	133	75	---
TOTAL	5168	6324	4878	2925	2575	3241	8215	13348	10550	7853	2710	2560
MEAN	167	211	157	94.4	88.8	105	274	431	352	253	87.4	85.3
MAX	179	258	194	105	96	114	379	532	486	473	118	101
MIN	144	179	110	83	81	95	110	329	244	133	73	69
AC-FT	10250	12540	9680	5800	5110	6430	16290	26480	20930	15580	5380	5080
CAL YR 1987	TOTAL	128520	MEAN	352	MAX	968	MIN	110	AC-FT	254900		
WTR YR 1988	TOTAL	70347	MEAN	192	MAX	532	MIN	69	AC-FT	139500		

e Estimated

BEAR RIVER BASIN

10039500 BEAR RIVER AT BORDER, WY--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year. Prior to 1981 water year, published in "Water Resources Data for Wyoming."

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1965 to September 1976, January 1978 to September 1981.

WATER TEMPERATURES: October 1965 to September 1976, January 1978 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,580 microsiemens Dec. 27, 1975; minimum daily, 312 microsiemens Apr. 3, 1969.

WATER TEMPERATURES: Maximum, 23.5°C Aug. 14, 1980; minimum, 0.0°C on many days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT , 1987										
05...	1045	172	610	8.20	9.0	9.5	18	8.90	620	K38
DEC										
17...	1000	133	720	8.20	-6.5	0.0	2.6	11.5	605	K2
APR , 1988										
14...	1055	316	590	8.40	17.0	9.5	46	9.40	605	K14
MAY										
18...	1250	561	470	8.20	13.5	11.5	44	8.30	605	320
JUL										
27...	1210	142	630	8.40	27.5	19.0	16	5.90	610	140
AUG										
23...	1300	80	560	8.30	19.5	17.5	5.8	10.8	610	46

DATE	STREP- TOCOCCEI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3
OCT , 1987										
05...	150	280	68	27	28	18	0.8	2.1	--	276
DEC										
17...	42	330	83	31	34	18	0.8	2.6	--	330
APR , 1988										
14...	K58	290	73	26	27	17	0.7	2.4	8	240
MAY										
18...	440	270	61	28	84	40	2	6.6	--	220
JUL										
27...	340	320	68	37	38	20	0.9	2.4	10	300
AUG										
23...	K12	270	65	26	26	17	0.7	1.6	--	252

DATE	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CAC03	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
OCT , 1987										
05...	226	63	32	0.2	7.9	372	322	0.51	173	--
DEC										
17...	270	83	46	0.3	9.8	444	448	0.6	159	<0.01
APR , 1988										
14...	213	79	26	0.2	10	422	371	0.57	360	0.01
MAY										
18...	180	140	110	0.4	12	543	529	0.74	822	<0.01
JUL										
27...	262	78	40	0.2	8.8	434	429	0.59	166	--
AUG										
23...	207	72	25	0.2	7.2	348	347	0.47	75.4	<0.01

K Results based on colony count outside acceptable range (non-ideal colony count).

BEAR RIVER BASIN

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10039500 BEAR RIVER AT BORDER, WY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
OCT , 1987										
05...	--	--	--	--	--	--	--	--	--	--
DEC										
17...	0.22	0.04	0.04	0.05	0.16	0.2	0.02	0.02	0.01	0.03
APR , 1988										
14...	<0.10	0.05	0.02	0.03	0.35	0.4	0.04	0.04	0.02	0.06
MAY										
18...	0.15	0.06	0.05	0.06	0.34	0.4	0.06	0.04	0.03	0.09
JUL										
27...	--	0.02	--	--	0.78	0.8	0.06	0.01	--	--
AUG										
23...	<0.10	0.02	0.03	0.04	0.38	0.4	0.03	0.03	0.02	0.06

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT , 1987											
05...	1045	10	2	130	<0.5	<1	<1	<3	5	8	<5
APR , 1988											
14...	1055	610	3	130	<0.5	<1	1	<3	3	730	<5
JUL											
27...	1210	170	3	140	<0.5	2	<1	<3	1	160	<5
AUG											
23...	1300	20	2	110	<0.5	<1	<1	<3	2	30	<5

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT , 1987										
05...	16	9	<0.1	<10	1	<1	<1.0	520	<6	8
APR , 1988										
14...	19	92	0.2	<10	9	<1	<1.0	530	<6	9
JUL										
27...	27	35	0.1	<10	<1	<1	<1.0	570	<6	26
AUG										
23...	16	17	<0.1	<10	<1	<1	<1.0	590	<6	9

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE WATER (DEG C)	SED. SUSP. SIEVE DIAM. PERCENT FINER THAN .062 MM	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
OCT , 1987						
05...	1045	172	9.5	88	91	42
DEC						
17...	1000	133	0.0	27	99	36

BEAR RIVER BASIN

10041000 THOMAS FORK NEAR WYOMING-IDAHO STATE LINE

LOCATION.--Lat 42°24'10", Long 111°01'30", in SE¼NW¼ sec. 19, T. 28 N., R. 119 W., Lincoln County, Wyoming, Hydrologic Unit 16010102, on right bank 1.3 mi upstream from Wyoming-Idaho State line, 1.5 mi downstream from Giraffe Creek, and 3.5 mi northeast of Geneva, Idaho.

DRAINAGE AREA.--113 mi².

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,280 ft from topographic map. Prior to Aug. 23, 1957, at site 0.2 mi upstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--39 years, 57.6 ft³/s, 41,730 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,860 ft³/s May 15, 1984, gage height, 5.00 ft; minimum, 2.6 ft³/s Mar. 2, 1956, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
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Apr. 17 *103 (daily)

Minimum daily, 8.7 ft³/s Sept. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	13	e11	e11	e11	e12	e17	99	55	24	12	9.0
2	12	19	e11	e11	e10	e12	e20	92	53	23	12	9.1
3	12	16	e11	e11	e10	e13	e18	88	51	22	13	9.3
4	12	13	e10	e10	e9.6	e13	e17	87	48	22	15	9.3
5	12	12	e10	e10	e10	e12	e18	85	46	21	13	9.2
6	12	13	e9.6	e11	e11	e12	e19	89	45	20	13	9.1
7	12	14	e9.6	e11	e11	e12	e22	90	43	20	13	9.0
8	12	13	e9.6	e11	e12	e13	e17	89	42	19	13	8.7
9	12	12	e9.8	e11	e12	e14	e14	86	41	19	12	8.9
10	12	12	e10	e12	e12	e13	e19	81	40	18	12	9.7
11	12	12	e11	e12	e12	e12	e22	83	39	18	12	10
12	12	12	e11	e11	e11	e11	e24	86	38	17	12	10
13	13	12	e9.8	e10	e11	e12	e26	91	38	16	12	11
14	17	13	e9.8	e11	e11	e13	e32	90	36	16	11	13
15	13	12	e11	e11	e12	e13	50	84	35	15	11	11
16	12	13	e12	e10	e11	e12	86	81	34	14	11	11
17	12	11	e12	e10	e10	e12	103	89	33	14	10	10
18	12	e11	e11	e9.8	e10	e12	100	91	35	14	10	9.9
19	12	e11	e11	e9.6	e11	e14	98	78	32	14	9.9	10
20	11	e11	e11	e9.4	e11	e15	86	74	31	14	9.7	11
21	11	e10	e10	e9.6	e11	e17	96	68	30	13	10	11
22	11	e10	e9.8	e9.8	e12	e14	95	67	29	12	9.9	10
23	11	e10	e9.6	e9.8	e12	e15	90	65	28	12	9.7	10
24	12	e11	e9.6	e9.8	e11	e16	87	64	27	12	9.6	9.8
25	12	e10	e9.4	e9.4	e11	e17	96	63	26	12	9.3	9.6
26	11	e9.6	e9.6	e9.6	e11	e18	85	60	30	13	9.4	9.5
27	11	e9.6	e9.8	e9.8	e12	e18	88	59	28	13	9.4	10
28	11	e9.4	e10	e10	e12	e16	88	58	26	14	9.5	10
29	11	e9.8	e10	e11	e12	e14	92	57	26	14	9.4	10
30	12	e9.8	e11	e12	---	e14	98	58	25	13	9.2	10
31	13	---	e11	e11	---	e16	---	57	---	13	9.2	---
TOTAL	373	354.2	321.0	324.6	322.6	427	1723	2409	1090	501	341.2	298.1
MEAN	12.0	11.8	10.4	10.5	11.1	13.8	57.4	77.7	36.3	16.2	11.0	9.94
MAX	17	19	12	12	12	18	103	99	55	24	15	13
MIN	11	9.4	9.4	9.4	9.6	11	14	57	25	12	9.2	8.7
AC-FT	740	703	637	644	640	847	3420	4780	2160	994	677	591

CAL YR 1987 TOTAL 8588.2 MEAN 23.5 MAX 85 MIN 9.4 AC-FT 17030
WTR YR 1988 TOTAL 8484.7 MEAN 23.2 MAX 103 MIN 8.7 AC-FT 16830

e Estimated

BEAR RIVER BASIN

203

10044300 DINGLE INLET CANAL NEAR DINGLE, ID

LOCATION.--Lat 42°12'20", long 111°16'08", in SE¼SE¼NE¼ sec. 14, T. 14 S., R. 44 E., Bear Lake County, Hydrologic Unit 16010201, on left bank 1 mi south of Dingle.

PERIOD OF RECORD.--June 1911 to current year. Prior to 1986, not published, records available from Utah Power & Light Co.

GAGE.--Water-stage recorder. Altitude of gage is 5,950 ft from topographic map.

REMARKS.--No estimated daily discharges. Records good.

COOPERATION.--Records collected by Utah Power & Light Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 650 ft³/s Apr. 29, 1916; no flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	12	21	21	29	36	23	28	3.2	2.0	18	1.5
2	14	7.4	22	22	29	37	26	27	2.5	2.0	15	1.4
3	9.3	6.7	22	22	29	37	28	27	2.4	2.0	9.7	1.6
4	13	6.4	22	22	30	36	31	26	2.3	1.9	2.0	2.4
5	14	5.9	21	22	30	35	33	27	2.3	1.8	1.9	2.4
6	14	5.7	21	22	30	35	33	28	2.4	1.8	1.9	2.5
7	14	5.5	20	22	30	34	33	14	2.4	2.0	1.9	2.4
8	14	6.1	20	23	31	34	33	1.5	2.5	2.0	15	2.2
9	14	5.5	20	23	31	33	33	1.1	2.7	2.0	13	2.2
10	14	4.9	19	23	31	32	33	.83	2.7	2.0	12	2.3
11	14	5.2	19	23	32	32	33	.71	2.6	2.1	12	2.6
12	14	6.0	19	24	32	31	33	.24	2.5	2.1	12	2.6
13	14	6.8	18	24	32	31	33	.54	2.5	2.1	12	2.4
14	15	7.6	18	24	32	30	33	1.1	2.5	2.2	14	2.6
15	15	8.4	18	24	33	29	33	1.3	2.6	4.7	14	2.3
16	15	9.2	18	25	33	29	33	1.4	2.6	6.8	12	2.3
17	14	10	18	25	33	28	33	1.7	2.6	6.3	12	2.3
18	14	11	18	25	33	28	33	1.7	2.7	2.7	12	2.2
19	14	12	19	26	34	27	33	1.8	2.5	13	15	2.1
20	14	12	19	26	34	26	26	1.9	2.5	17	18	2.1
21	14	13	19	26	34	26	24	2.2	2.6	20	18	2.7
22	14	14	19	26	34	25	28	2.4	2.6	20	17	17
23	14	15	19	27	35	25	30	2.3	2.5	20	21	18
24	14	16	20	27	35	24	30	2.7	2.4	19	22	17
25	14	16	20	27	35	23	30	2.7	2.3	15	22	18
26	14	17	20	27	35	23	29	2.7	2.3	13	20	17
27	14	18	20	28	36	22	28	2.7	2.3	13	17	17
28	14	19	21	28	36	22	28	2.8	2.2	12	15	16
29	14	20	21	28	36	21	27	3.0	2.1	15	14	15
30	14	20	21	28	---	20	28	3.4	2.0	17	2.2	23
31	13	---	21	29	---	20	---	3.4	---	18	1.6	---
TOTAL	428.3	322.3	613	769	944	891	911	223.12	74.3	260.5	393.2	205.1
MEAN	13.8	10.7	19.8	24.8	32.6	28.7	30.4	7.20	2.48	8.40	12.7	6.84
MAX	15	20	22	29	36	37	33	28	3.2	20	22	23
MIN	9.3	4.9	18	21	29	20	23	.24	2.0	1.8	1.6	1.4
AC-FT	850	639	1220	1530	1870	1770	1810	443	147	517	780	407
CAL YR 1987	TOTAL	5582.66	MEAN	15.3	MAX	30	MIN	.79	AC-FT	11070		
WTR YR 1988	TOTAL	6034.82	MEAN	16.5	MAX	37	MIN	.24	AC-FT	11970		

BEAR RIVER BASIN

10046000 RAINBOW INLET CANAL NEAR DINGLE, ID

LOCATION.--Lat 42°13'48", long 111°17'43", in NW¼SW¼SE¼ sec. 3, T. 14 S., R. 44 E., Bear Lake County, Hydrologic Unit 16010201, on right bank 1.5 mi west of Dingle and 1.8 mi downstream from headworks at Stewart Dam.

PERIOD OF RECORD.--January 1922 to current year. Monthly discharge only prior to October 1945, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage datum is 5,922.0 ft NGVD of 1929 (by topographic survey). Prior to Oct. 1, 1923, at site 300 ft downstream at different datum; Oct. 1, 1923 to Oct. 27, 1944, at site 0.5 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Canal diverts from Bear River at Stewart Dam in NE¼ sec. 34, T. 13 S., R. 44 E., for storage in Bear Lake. At times flow in canal is augmented by surplus water from Black Otter Slough entering at the station and by seepage and surplus water from irrigation.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--66 years, 377 ft³/s, 273,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,950 ft³/s May 27 1984; no flow Apr. 28, 1977 and Oct. 1, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 592 ft³/s Mar. 28; minimum daily, 20 ft³/s Sept. 17, 18, 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	130	127	114	126	126	377	378	206	109	55	22
2	101	140	142	112	136	136	377	391	181	189	51	29
3	103	142	149	111	132	144	374	389	125	168	49	28
4	107	145	142	108	121	150	375	369	92	182	42	31
5	112	140	142	108	115	181	383	297	77	182	37	29
6	112	147	137	104	110	178	401	222	68	173	35	31
7	108	149	143	103	108	242	417	214	69	135	37	32
8	104	152	148	103	104	254	412	220	70	120	36	34
9	89	158	140	103	95	212	411	213	64	169	34	33
10	85	169	132	99	92	201	390	196	66	220	33	33
11	88	171	203	121	91	254	358	210	63	208	34	34
12	92	184	141	138	97	223	335	193	48	181	34	37
13	93	181	178	105	100	219	333	170	44	222	37	38
14	108	179	110	94	95	204	334	157	43	194	36	39
15	110	185	106	92	87	133	353	173	40	169	34	24
16	103	186	89	97	94	159	356	159	36	143	33	21
17	97	168	95	99	116	153	354	151	35	131	30	20
18	102	125	97	105	92	153	369	189	33	113	30	20
19	98	109	109	130	99	159	382	233	31	117	31	22
20	102	103	120	124	95	165	410	216	30	105	34	23
21	110	124	120	104	104	194	426	191	32	94	29	23
22	116	146	130	104	114	243	379	173	33	88	28	22
23	103	140	129	107	131	309	389	140	32	82	30	23
24	100	151	141	111	129	463	400	138	32	70	29	24
25	101	139	147	112	134	513	384	143	31	67	31	23
26	106	151	126	113	135	526	388	174	37	67	30	22
27	110	131	112	114	129	579	386	181	40	74	28	22
28	113	135	107	119	122	592	396	188	40	63	28	20
29	114	155	110	116	124	559	389	191	45	56	27	20
30	119	132	113	122	---	468	378	211	76	58	24	21
31	155	---	113	124	---	409	---	215	---	62	22	---
TOTAL	3251	4467	3998	3416	3227	8501	11416	6685	1819	4011	1048	800
MEAN	105	149	129	110	111	274	381	216	60.6	129	33.8	26.7
MAX	155	186	203	138	136	592	426	391	206	222	55	39
MIN	85	103	89	92	87	126	333	138	30	56	22	20
AC-FT	6450	8860	7930	6780	6400	16860	22640	13260	3610	7960	2080	1590
CAL YR 1987	TOTAL	97781	MEAN	268	MAX	864	MIN	61	AC-FT	193900		
WTR YR 1988	TOTAL	52639	MEAN	144	MAX	592	MIN	20	AC-FT	104400		

BEAR RIVER BASIN

205

10046500 BEAR RIVER BELOW STEWART DAM, NEAR MONTPELIER, ID

LOCATION.--Lat 42°15'14", long 111°17'35", in NW¼NW¼NE¼ sec. 34, T. 13 S., R. 44 E., Bear Lake County, Hydrologic Unit 16010201, on right bank 300 ft downstream from Stewart Dam and 4.5 mi south of Montpelier.

DRAINAGE AREA.--2,853 mi².

PERIOD OF RECORD.--January 1922 to current year. Monthly discharge only January to September 1922, published in WSP 1314.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,950 ft from topographic map.

REMARKS.--No estimated daily discharges. Records good. Water diverted at Stewart Dam through Rainbow Inlet Canal (station 10046000) for storage in Bear Lake.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--66 years, 43.1 ft³/s, 31,230 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,050 ft³/s June 3, 1923; no flow July 15, 1956, July 13, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 37 ft³/s July 8; minimum daily, 1.8 ft³/s Aug. 29-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	13	7.9	7.7	7.4	6.7	7.7	7.8	9.8	30	11	3.7
2	13	13	7.8	7.6	7.7	6.7	7.4	8.1	9.7	32	11	3.7
3	13	13	7.8	7.5	8.0	6.8	7.4	7.7	10	28	11	3.3
4	13	13	7.8	7.4	7.6	6.8	7.2	7.4	11	23	10	3.4
5	12	13	7.7	7.3	7.1	6.9	6.3	6.8	11	19	9.6	3.4
6	13	13	7.7	7.2	6.8	7.3	7.1	7.0	11	19	9.8	3.4
7	13	13	7.7	7.1	6.7	7.7	7.1	7.5	11	24	9.8	3.4
8	13	13	7.6	7.1	6.7	8.1	6.7	7.9	11	37	9.1	3.4
9	12	13	7.6	7.2	6.6	8.6	6.4	7.7	11	34	8.8	3.3
10	12	14	7.7	7.3	6.6	8.5	6.3	7.9	11	30	7.9	3.2
11	12	15	7.7	7.4	6.5	8.3	6.2	8.0	11	16	6.7	3.1
12	12	14	7.8	7.5	6.5	8.4	6.1	8.2	11	15	7.5	3.2
13	12	11	7.9	7.6	6.9	8.2	6.0	9.1	11	15	7.8	3.6
14	13	11	8.0	7.7	6.8	8.1	5.9	10	11	14	8.0	3.5
15	13	11	8.1	7.8	6.8	8.3	5.9	11	11	14	8.2	3.1
16	13	11	7.8	7.7	6.8	8.1	5.8	10	10	14	8.4	2.8
17	13	10	7.5	7.7	7.0	8.0	5.7	10	9.9	14	8.7	3.4
18	13	9.2	7.5	7.6	6.8	7.9	6.0	9.7	9.2	14	8.6	3.9
19	13	8.9	7.7	7.6	6.8	7.7	6.5	8.7	8.2	14	8.8	3.7
20	13	8.6	7.8	7.6	6.8	7.7	6.7	8.2	8.0	14	8.9	3.5
21	13	9.0	7.8	7.5	6.8	8.5	6.9	7.8	7.5	14	8.4	3.4
22	13	8.8	7.8	7.5	7.0	11	6.7	7.6	7.6	14	8.5	3.5
23	12	8.7	7.8	7.4	7.0	15	6.7	7.7	8.0	14	9.2	3.3
24	12	9.3	7.8	7.4	7.0	20	6.7	9.4	8.8	13	9.4	3.0
25	11	9.1	7.8	7.4	7.1	14	6.8	9.5	12	13	9.1	2.9
26	12	8.9	7.8	7.4	7.1	14	6.9	9.7	11	13	7.5	2.9
27	12	8.7	7.8	7.4	7.0	17	7.0	10	14	13	3.7	2.8
28	12	8.5	7.8	7.4	6.8	15	7.3	9.8	17	13	3.6	2.5
29	13	8.3	7.8	7.4	6.8	11	7.5	9.2	25	12	1.8	2.3
30	14	8.0	7.8	7.4	---	8.5	7.7	9.7	36	11	1.8	2.5
31	15	---	7.8	7.4	---	7.6	---	9.8	---	11	3.7	---
TOTAL	392	328.0	240.9	231.2	201.5	296.4	200.6	268.9	353.7	561	246.3	97.1
MEAN	12.6	10.9	7.77	7.46	6.95	9.56	6.69	8.67	11.8	18.1	7.95	3.24
MAX	15	15	8.1	7.8	8.0	20	7.7	11	36	37	11	3.9
MIN	11	8.0	7.5	7.1	6.5	6.7	5.7	6.8	7.5	11	1.8	2.3
AC-FT	778	651	478	459	400	588	398	533	702	1110	489	193
CAL YR 1987	TOTAL	3674.5	MEAN	10.1	MAX	52	MIN	3.6	AC-FT	7290		
WTR YR 1988	TOTAL	3417.6	MEAN	9.34	MAX	37	MIN	1.8	AC-FT	6780		

BEAR RIVER BASIN

10055500 BEAR LAKE AT LIFTON, NEAR ST. CHARLES, ID

LOCATION.--Lat 42°07'16", long 111°18'52", in NE¼ sec. 16, T. 15 S., R. 44 E., Bear Lake County, Hydrologic Unit 16010201, in Lifton pumping plant of Utah Power & Light Co., 3.5 mi east of St. Charles.

DRAINAGE AREA.--435 mi², approximately (does not include Mud Lake drainage).

PERIOD OF RECORD.--October 1903 to June 1906, elevations only, published as "at Fish Haven," January 1921 to current year. Monthly contents only January 1921 to September 1945, published in WSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 5,900 ft Utah Power & Light Co. datum.

REMARKS.--Outflow regulated by gates and pumps at the north end of Bear Lake and by gates in dike at north end of Mud Lake, a shallow interconnected lake. Principal inflow to Bear Lake is from Bear River through Rainbow Inlet Canal (station 10046000) and Dingle Inlet Canals into Mud Lake, from which the inflow can enter into Bear Lake either through the pumping plant or an opening in the dividing causeway. The inflow can be routed directly into the Outlet Canal (station 10059500). Usable capacity of Bear Lake is 1,421,000 acre-ft between elevation 5,902.00 ft, lower limit of pumps, and 5,923.65 ft, upper limit of storage with existing facilities. Water is used for irrigation and power development. Figures herein given represent usable contents.

COOPERATION.--Records provided by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,423,000 acre-ft June 10, 1923, elevation, 5,923.68 ft; no usable contents Nov. 9-19, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,116,000 acre-ft May 24-June 5, elevation, 5,919.30 ft; minimum, 815,600 acre-ft Sept. 30, elevation, 5,914.92 ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

5,914	754,000	5,918	1,026,000
5,915	821,000	5,919	1,095,000
5,916	888,600	5,920	1,165,000
5,917	956,900		

RESERVOIR STORAGE, IN THOUSANDS OF ACRE FEET, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1000	984	995	1001	1014	1036	1066	1097	1116	1047	944	872
2	999	984	995	1001	1015	1036	1067	1097	1116	1043	941	868
3	998	985	995	1002	1015	1036	1069	1099	1116	1040	938	866
4	998	985	995	1002	1016	1037	1070	1100	1116	1036	936	862
5	998	985	995	1002	1017	1038	1071	1102	1116	1035	933	859
6	998	986	995	1002	1018	1038	1071	1102	1115	1031	931	857
7	997	986	995	1003	1018	1038	1071	1103	1115	1028	927	855
8	997	987	995	1004	1020	1040	1071	1104	1113	1026	924	851
9	997	987	995	1004	1021	1041	1072	1105	1113	1022	923	848
10	996	989	995	1005	1022	1042	1072	1106	1112	1019	923	845
11	996	990	995	1005	1024	1044	1073	1106	1111	1015	921	843
12	995	991	996	1006	1026	1045	1074	1106	1108	1011	919	841
13	993	992	996	1007	1027	1045	1075	1106	1107	1008	918	840
14	992	992	996	1007	1028	1047	1076	1106	1105	1004	917	839
15	991	993	996	1007	1029	1048	1076	1107	1101	1002	915	839
16	991	993	997	1008	1029	1049	1078	1107	1098	1001	912	838
17	990	993	997	1009	1029	1051	1079	1108	1095	995	910	837
18	989	993	997	1009	1029	1052	1081	1110	1092	991	908	837
19	989	993	998	1009	1029	1054	1082	1111	1088	989	906	836
20	988	993	998	1010	1030	1055	1083	1113	1085	984	904	835
21	987	993	998	1011	1031	1056	1085	1113	1082	982	901	824
22	987	993	998	1011	1031	1056	1087	1114	1079	978	897	823
23	987	994	998	1011	1032	1058	1088	1115	1075	974	895	823
24	987	994	998	1012	1033	1059	1090	1116	1072	971	893	822
25	987	994	999	1013	1033	1060	1092	1116	1067	967	890	821
26	987	994	999	1013	1034	1061	1092	1116	1064	964	887	820
27	987	995	999	1013	1035	1061	1093	1116	1061	960	885	818
28	987	995	1000	1013	1036	1062	1095	1116	1057	957	882	818
29	986	995	1000	1013	1036	1063	1096	1116	1054	954	880	817
30	985	995	1000	1013	---	1064	1096	1116	1050	950	878	816
31	984	---	1001	1013	---	1065	---	1116	---	947	875	---
MAX	1000	995	1001	1013	1036	1065	1096	1116	1116	1047	944	872
MIN	984	984	995	1001	1014	1036	1066	1097	1050	947	875	816
(#)	5917.40	5917.55	5917.64	5917.82	5918.15	5918.56	5919.01	5919.30	5918.35	5916.86	5915.80	5914.92
(*)	-16	+11	+6	+12	+23	+29	+31	+20	-66	-103	-72	-59

WTR YR 1988 (*) -184

(#) Elevation, in feet, at end of month.

(*) Change in contents, in thousands of acre-feet.

BEAR RIVER BASIN

207

10059500 BEAR LAKE OUTLET CANAL NEAR PARIS, ID

LOCATION.--Lat 42°13'00", long 111°20'35", in SW¼NW¼SW¼ sec. 8, T. 14 S., R. 44 E., Bear Lake County, Hydrologic Unit 16010201, on right bank 2,000 ft downstream from headgates (at dike) and 3 mi southeast of Paris.

PERIOD OF RECORD.--January 1922 to current year. Monthly discharge only January 1922 to September 1945, published in WSP 1314.

GAGE.--Water-stage recorder. Datum of gage is 5,912.6 ft NGVD of 1929, unadjusted.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Bear Lake (station 10055500).

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--66 years, 425 ft³/s, 307,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,080 ft³/s June 19-21, 1986; minimum daily, 1.0 ft³/s for many days in 1937, 1954, 1959, 1961, 1964, 1977-78.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,470 ft³/s June 22, 23; minimum daily, 4.9 ft³/s many days October-May.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	330	1400	1140	905
2	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	335	1410	1140	904
3	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	374	1400	1130	907
4	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	567	1410	1120	909
5	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	575	1420	1140	915
6	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	651	1400	1070	919
7	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	782	1400	973	920
8	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	793	1400	990	918
9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	816	1420	1000	924
10	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	896	1430	990	922
11	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	894	1440	893	932
12	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	808	1420	838	927
13	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	980	1350	750	820
14	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	1100	1250	738	690
15	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	1100	1250	734	628
16	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	1090	1240	732	376
17	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	1130	1250	729	411
18	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	262	1190	1250	739	421
19	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	282	1180	1260	846	407
20	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	249	1210	1250	851	366
21	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	210	1340	1240	842	242
22	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	197	1470	1230	855	163
23	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	193	1470	1210	851	30
24	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	182	1450	1190	859	30
25	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	174	1440	1170	848	30
26	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	203	1440	1160	834	29
27	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	334	1440	1160	835	29
28	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	338	1390	1170	842	27
29	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	e4.9	335	1340	1160	839	26
30	e4.9	e4.9	e4.9	e4.9	---	e4.9	e4.9	336	1360	1160	905	25
31	e4.9	---	e4.9	e4.9	---	e4.9	---	327	---	1150	909	---
TOTAL	151.9	147.0	151.9	151.9	142.1	151.9	147.0	3705.3	30941	40050	27962	15752
MEAN	4.90	4.90	4.90	4.90	4.90	4.90	4.90	120	1031	1292	902	525
MAX	4.9	4.9	4.9	4.9	4.9	4.9	4.9	338	1470	1440	1140	932
MIN	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	330	1150	729	25
AC-FT	301	292	301	301	282	301	292	7350	61370	79440	55460	31240

CAL YR 1987 TOTAL 116285.0 MEAN 319 MAX 1220 MIN 3.0 AC-FT 230700
WTR YR 1988 TOTAL 119454.0 MEAN 326 MAX 1470 MIN 4.9 AC-FT 236900

e Estimated

BEAR RIVER BASIN

10068500 BEAR RIVER AT PESCADERO, ID

LOCATION.--Lat 42°24'06", long 111°21'22", in SW¼SW¼SE¼ sec. 6, T. 12 S., R. 44 E., Bear Lake County, Hydrologic Unit 16010202, on left bank at Pescadero, 400 ft downstream from road bridge, 2 mi downstream from Bennington Creek, and 6.5 mi northwest of Mortpelier.

DRAINAGE AREA.--3,705 mi².

PERIOD OF RECORD.--October 1921 to September 1954. June 1969 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 5,900 ft from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by Bear Lake (station 10055500) and diversions above station for irrigation.

AVERAGE DISCHARGE.--52 years, 666 ft³/s, 482,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,280 ft³/s June 21, 1986; minimum daily, 23 ft³/s Mar. 14-17, 1936.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,680 ft³/s July 3, 4; minimum daily, 58 ft³/s Oct. 5-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	112	e122	e77	e85	e127	268	172	543	1630	1280	999
2	71	122	125	e75	e83	e130	323	166	531	1660	1270	995
3	65	127	e125	e74	e84	e138	364	177	522	1680	1260	1000
4	60	127	e122	e74	e84	e141	354	167	641	1680	1260	1000
5	58	129	e120	e77	e84	e148	325	152	719	1660	1260	1010
6	58	131	e123	e84	e87	e148	313	124	762	1640	1170	1010
7	58	140	130	e88	e88	e146	305	114	871	1610	1130	1010
8	73	139	e126	e90	e90	e144	291	119	922	1600	1120	1010
9	65	136	e119	e91	e97	e142	275	144	940	1600	1110	1010
10	75	137	e111	e92	e100	e142	264	146	1000	1610	1050	1020
11	83	141	e108	e93	e100	e142	248	152	1040	1610	1010	1010
12	84	137	e105	e97	e100	e138	237	155	1070	1600	985	1020
13	86	130	e102	e100	e100	e133	229	166	1090	1580	914	965
14	97	133	e95	e104	e108	e131	207	162	1190	1500	872	838
15	97	123	e89	e106	e110	e131	196	159	1250	1430	854	786
16	90	e118	e87	e106	e110	e134	195	158	1280	1400	840	534
17	92	121	e83	e104	e110	e137	197	179	1270	1380	835	445
18	93	e113	e79	e102	e110	e139	196	382	1310	1370	837	453
19	96	e102	e79	e100	e110	e143	201	471	1330	1340	912	452
20	96	e104	e79	e97	e110	e151	196	507	1350	1340	933	445
21	95	e107	e80	e97	e110	e159	199	481	1410	1330	928	331
22	94	e109	e84	e96	e112	168	204	459	1540	1320	927	286
23	87	119	e82	e93	e117	197	214	442	1600	1310	929	175
24	97	129	e78	e92	e121	202	211	422	1630	1300	932	128
25	96	127	e76	e90	e121	199	227	396	1640	1290	926	123
26	83	e123	e74	e90	e120	210	230	403	1640	1290	918	127
27	84	e121	e74	e90	e121	281	220	519	1640	1280	913	122
28	101	e119	e75	e90	e123	332	210	566	1640	1280	919	112
29	100	e118	e76	e91	e125	304	202	578	1580	1280	923	107
30	103	e119	e78	e92	---	246	189	580	1580	1280	972	90
31	108	---	e78	e88	---	250	---	563	---	1280	993	---
TOTAL	2630	3713	2984	2840	3020	5333	7290	9381	35531	45160	31182	18613
MEAN	84.8	124	96.3	91.6	104	172	243	303	1184	1457	1006	620
MAX	108	141	130	106	125	332	364	580	1640	1680	1280	1020
MIN	58	102	74	74	83	127	189	114	522	1280	835	90
AC-FT	5220	7360	5920	5630	5990	10580	14460	18610	70480	89570	61850	36920
CAL YR 1987	TOTAL	174272	MEAN	477	MAX	1380	MIN	58	AC-FT	345700		
WTR YR 1988	TOTAL	167677	MEAN	458	MAX	1680	MIN	58	AC-FT	332600		

e Estimated

BEAR RIVER BASIN

209

10075000 BEAR RIVER AT SODA SPRINGS, ID

LOCATION.--Lat 42°36'50", long 111°34'58", in NW¼SW¼NW¼ sec. 29, T. 9 S., R. 42 E., Caribou County, Hydrologic Unit 16010202, on left bank 800 ft upstream from Bailey Creek road bridge and 2 mi south of Soda Springs.

DRAINAGE AREA.--3,972 mi².

PERIOD OF RECORD.--May to September 1896, May, June 1898, and October 1953 to current year in reports of Geological Survey. Irrigation season only during 1944-49, 1951-53 in reports of Bear River Hydrometric Data (Geological Survey open-file report).

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,760 ft from topographic map. May 25 to Oct. 2, 1896, May 22 to July 1, 1898, staff gage at different datum. During irrigation season 1944-49, 1950-53, water-stage recorder at site 800 ft downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by upstream reservoirs, diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--35 years, 766 ft³/s, 555,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,380 ft³/s June 9, 15, 1896, gage height, 8.40 ft, datum then in use; minimum, 41 ft³/s Nov. 16, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,650 ft³/s July 3, gage height, 4.96 ft; minimum daily, 99 ft³/s Jan. 14, Feb. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	188	e193	e169	e151	e129	e150	319	278	561	1580	1200	940
2	143	e184	e171	e147	e147	e169	432	278	543	1620	1200	937
3	133	e175	e172	e145	e115	e179	470	281	510	1630	1190	936
4	127	e188	e173	e141	e121	e203	449	279	548	1620	1180	939
5	121	e214	e180	e132	e138	e207	428	261	703	1600	1190	937
6	117	e227	e188	e114	e130	e207	411	246	725	1580	1120	937
7	120	e229	e189	e156	e131	e221	397	227	836	1540	1040	929
8	123	e233	e204	e142	e140	e154	359	229	935	1540	1040	934
9	135	e236	e205	e133	e135	e180	337	228	945	1550	1060	954
10	128	e234	e203	e134	e136	e180	327	243	969	1580	1000	953
11	135	e227	e172	e128	e140	e134	324	240	1030	1590	925	943
12	143	e229	e143	e128	e153	e182	314	243	1040	1590	909	941
13	154	e250	e140	e126	e114	e163	308	257	1060	1540	847	848
14	178	e237	e136	e99	e134	e157	314	266	1130	1460	779	774
15	171	e235	e131	e135	e113	e145	330	269	1260	1380	769	699
16	162	e176	e127	e140	e99	e187	333	265	1260	1350	763	484
17	e158	e145	e123	e134	e123	e140	342	272	1230	1340	765	472
18	e208	e130	e118	e124	e105	e192	331	369	1290	1330	762	489
19	e207	e157	e114	e147	e137	e154	338	550	1320	1300	824	490
20	e158	e207	e110	e116	e172	e190	329	599	1320	1300	879	468
21	e196	e209	e105	e114	e204	e206	292	569	1370	1280	869	322
22	e181	e191	e101	e132	e153	e266	300	516	1540	1270	865	287
23	e225	e171	e105	e127	e136	e249	300	499	1590	1260	869	188
24	e159	e169	e123	e136	e125	214	325	476	1610	1230	878	155
25	e165	e177	e142	e121	e126	232	374	445	1590	1230	877	152
26	e152	e177	e138	e132	e130	299	366	433	1620	1230	859	162
27	e178	e175	e146	e134	e130	366	317	513	1610	1220	853	155
28	e151	e181	e135	e139	e138	313	312	627	1590	1220	861	147
29	e151	e170	e145	e139	e129	274	312	619	1530	1210	865	143
30	e150	e170	e150	e154	---	286	310	620	1520	1210	920	125
31	e187	---	e162	e138	---	245	---	603	---	1210	930	---
TOTAL	4904	5896	4620	4138	3883	6444	10400	11800	34785	43590	29088	17840
MEAN	158	197	149	133	134	208	347	381	1159	1406	938	595
MAX	225	250	205	156	204	366	470	627	1620	1630	1200	954
MIN	117	130	101	99	99	134	292	227	510	1210	762	125
AC-FT	9730	11690	9160	8210	7700	12780	20630	23410	69000	86460	57700	35390

CAL YR 1987 TOTAL 196078 MEAN 537 MAX 1320 MIN 101 AC-FT 388900
WTR YR 1988 TOTAL 177388 MEAN 485 MAX 1630 MIN 99 AC-FT 351800

e Estimated

BEAR RIVER BASIN

10079000 SODA POINT RESERVOIR AT ALEXANDER, ID

LOCATION.--Lat 42°38'41", long 111°42'44", in NW¼SE¼NW¼ sec. 17, T. 9 S., R. 41 E., Caribou County, Hydrologic Unit 16010202, 0.5 mi Southeast of Alexander, 5 mi downstream from Soda Creek.

DRAINAGE AREA.--4,099 mi².

PERIOD OF RECORD.--October 1924 to current year. Prior to 1986, published in reports of the Bear River Commission.

COOPERATION.--Records provided by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 14,170 acre-ft June 13, elevation, 5,719.54 ft; minimum, 4,450 acre-ft Oct. 11, elevation, 5,704.32 ft.

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12700	12830	13150	12680	12660	12570	13150	12640	13440	12720	13140	12650
2	12150	13170	13090	12640	12640	12620	13160	12600	13450	12760	13150	12580
3	11550	13520	13020	12580	12610	12690	13310	12570	13420	12910	13170	12520
4	10970	13570	12940	12540	12610	12760	13310	12520	13260	13010	13180	12430
5	10310	13570	12890	12490	12560	12740	13250	12510	13310	12990	13180	12370
6	9640	13580	12830	12400	12540	12710	13100	12520	13470	12930	13230	12300
7	9000	13530	12830	12400	12460	12710	12910	12620	13530	12850	13200	12240
8	8110	13450	12880	12390	12430	12710	12690	12730	13680	12730	13220	12330
9	6590	13390	12980	12370	12390	12690	12380	12790	13680	12640	13320	12390
10	5000	13370	13060	12340	12360	12640	12000	12850	13690	12670	13520	12480
11	4450	13310	13120	12320	12330	12540	11690	12950	13700	12740	13500	12540
12	4710	13240	13120	12300	12330	12440	11690	13010	14030	12810	13440	12630
13	5290	13180	13020	12280	12300	12370	11690	13060	14170	13210	13400	12780
14	6060	13130	12920	12310	12260	12280	11580	13170	13760	13490	13180	13170
15	6610	13070	12900	12680	12210	12290	11450	13290	13620	13610	12970	13240
16	7190	12940	12920	13020	12180	12200	11430	13420	13550	13680	12990	13240
17	7590	12880	12900	13020	12120	12220	11510	13500	13450	13650	13040	13260
18	8060	12660	12900	13040	12030	12680	11520	13610	13230	13610	13060	13180
19	8540	12760	12920	13040	12110	12930	11630	13700	13110	13540	13120	13170
20	8900	13080	12950	13010	12500	12910	11740	13830	13020	13430	13290	13170
21	9360	13400	12940	12960	12800	12920	11830	13890	12880	13370	13350	13230
22	9440	13800	12930	12950	12770	13020	11970	13880	12620	13250	13370	13260
23	10110	13760	12930	12930	12760	13130	12100	13780	12610	13160	13400	13220
24	10470	13610	12940	12930	12720	13280	12200	13620	12660	13110	13400	13260
25	10850	13570	12910	12900	12680	13510	12320	13540	12710	13040	13310	13230
26	11130	13520	12810	12860	12650	13390	12400	13380	12770	12960	13190	13160
27	11410	13420	12770	12810	12620	13720	12500	13210	12840	12980	13070	13020
28	11790	13380	12730	12770	12590	13760	12560	13250	12890	13060	12960	12990
29	12020	13320	12690	12740	12560	13690	12590	13380	12900	13090	12850	12760
30	12260	13250	12670	12730	---	13540	12600	13360	12770	13110	12740	12400
31	12530	---	12690	12720	---	13320	---	13410	---	13130	12740	---
MAX	12700	13800	13150	13040	12800	13760	13310	13890	14170	13680	13520	13260
MIN	4450	12660	12670	12280	12030	12200	11430	12510	12610	12640	12740	12240
(#)	5717.88	5718.63	5718.05	5718.08	5717.92	5718.70	5717.96	5718.79	5718.14	5718.51	5718.10	5717.75
(*)	-590	+720	-560	+30	-160	+760	-720	+810	-640	+360	-390	-340

WTR YR 1988 (*) -720

(#) Elevation, in feet, at end of month.
(*) Change in contents, in acre-feet.

BEAR RIVER BASIN

211

10079500 BEAR RIVER AT ALEXANDER, ID

LOCATION.--Lat 42°38'42", long 111°41'51", in NE¼SW¼NW¼ sec. 17, T. 9 S., R. 41 E., Caribou County, Hydrologic Unit 16010202, on right bank 600 ft downstream from Soda hydroelectric plant of Utah Power & Light Co., 0.5 mi southeast of Alexander, and 5 mi downstream from Soda Creek.

DRAINAGE AREA.--4,099 mi².

PERIOD OF RECORD.--March 1911 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,650 ft from topographic map.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by upstream reservoirs, power development, diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--77 years, 823 ft³/s, 596,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 4,740 ft³/s Mar. 31, 1911; maximum gage height, 15.95 ft Dec. 11, 1919 (backwater from ice); minimum, 15 ft³/s Aug. 24, 1979, when reservoir gates were closed.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,780 ft³/s July 5-7; minimum daily, 78 ft³/s Oct. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	617	153	303	268	274	266	502	413	745	1720	1250	1130
2	602	153	304	269	271	265	579	417	738	1710	1240	1130
3	591	215	304	269	222	267	665	422	730	1730	1240	1130
4	584	292	308	270	269	313	723	426	722	1760	1240	1120
5	580	314	309	270	266	321	717	399	718	1780	1240	1120
6	577	346	307	269	260	321	710	330	781	1780	1150	1120
7	591	365	285	264	260	326	674	284	761	1780	1100	1100
8	920	365	286	260	259	275	740	306	704	1770	1080	999
9	926	367	275	262	258	313	738	306	612	1690	1010	1040
10	696	364	289	264	258	312	735	306	497	1650	986	1030
11	306	361	290	256	257	314	572	305	403	1640	993	1020
12	84	361	290	262	258	315	466	305	322	1550	999	1020
13	138	360	291	257	262	316	522	311	811	1330	1010	951
14	85	363	291	164	263	317	534	313	1320	1340	1010	778
15	132	365	292	152	263	294	500	316	1300	1330	884	779
16	80	365	292	167	264	339	423	318	1290	1320	813	755
17	135	359	293	242	268	124	401	321	1320	1320	819	541
18	82	239	293	238	268	138	402	421	1360	1310	826	521
19	78	172	294	250	170	273	402	574	1380	1300	833	522
20	128	145	291	250	146	296	397	664	1390	1310	915	524
21	82	176	287	252	213	300	394	709	1530	1310	961	500
22	139	218	286	253	264	334	391	712	1660	1320	974	428
23	83	299	267	255	265	333	388	731	1680	1300	986	399
24	82	299	257	257	264	214	409	734	1690	1270	1030	246
25	135	300	273	257	264	387	417	712	1710	1270	1050	244
26	91	301	272	263	266	435	410	710	1730	1270	1050	244
27	147	301	272	265	268	475	407	708	1760	1250	1050	244
28	92	302	271	267	270	541	405	706	1760	1240	1050	254
29	201	302	261	268	272	589	403	742	1750	1250	1050	335
30	142	303	246	275	---	588	409	761	1750	1260	1050	427
31	152	---	247	276	---	588	---	753	---	1260	1100	---
TOTAL	9278	8825	8826	7791	7362	10489	15435	15435	34924	45120	31989	21651
MEAN	299	294	285	251	254	338	514	498	1164	1455	1032	722
MAX	926	367	309	276	274	589	740	761	1760	1780	1250	1130
MIN	78	145	246	152	146	124	388	284	322	1240	813	244
AC-FT	18400	17500	17510	15450	14600	20800	30620	30620	69270	89500	63450	42940
CAL YR 1987	TOTAL	246462	MEAN	675	MAX	1440	MIN	78	AC-FT	488900		
WTR YR 1988	TOTAL	217125	MEAN	593	MAX	1780	MIN	78	AC-FT	430700		

BEAR RIVER BASIN

10086000 ONEIDA NARROWS RESERVOIR AT ONEIDA, ID

LOCATION.--Lat 42°16'34", long 111°44'56", in SW¼NW¼SE¼ sec. 23, T. 13 S, R. 40 E., Franklin County, Hydrologic Unit 16010202, 6 mi south of Cleveland.

DRAINAGE AREA (REVISED).--4,455 mi².

PERIOD OF RECORD.--October 1914 to current year. Prior to 1986, published in reports of Bear River Commission.

COOPERATION.--Records provided by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 10,720 acre-ft July 26, elevation, 4,882.44 ft; minimum, 7,150 acre-ft June 26, elevation, 4,871.56 ft.

REVISIONS.--Revised figures of reservoir storage for the water year 1987, superseding those published in the report for 1987 are given below.

EXTREMES FOR 1987 WATER YEAR.--Maximum contents, 10,650 acre-ft May 18, elevation, 4882.25 ft; minimum, 383 acre-ft, Oct. 1, 2, elevation, 4,841.00.

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	383	10300	10350	9920	10190	9920	8970	10160	9960	9220	7850	10490
2	383	10530	10340	9900	10070	9920	8980	9850	9940	9260	7220	9830
3	1280	10400	9700	9830	10140	9740	8210	9940	9940	9370	7960	9990
4	5040	10420	10150	10190	9810	10280	8500	9730	9870	9520	8700	10070
5	9570	10150	10150	9500	9630	9660	8540	9990	9730	10120	9110	9880
6	9370	10310	10320	9770	10000	10140	7940	9840	9890	9660	9200	10230
7	9290	10100	9820	10120	10310	9840	7680	9910	9740	9660	8950	10450
8	9760	10370	10170	9940	10310	10440	7400	10260	9890	9970	8880	10340
9	9520	10360	10220	9400	10070	9350	8540	10240	9910	9620	8860	10280
10	10480	10420	9940	9680	10140	9060	7240	10560	9940	9710	8990	10250
11	9850	10260	9800	9720	10140	8840	8200	9850	10200	9920	8970	10090
12	9670	10410	9580	10090	10140	9120	9000	10260	10090	10230	8580	10340
13	10330	10330	9840	10170	9990	9570	8180	10070	9990	10340	8070	10640
14	9720	10480	10190	10460	10160	9650	9090	10540	10420	10320	8600	9860
15	10440	10300	10280	10460	10300	9670	9490	9970	10040	10440	9010	9710
16	9780	10400	10450	10040	9920	9080	9350	10450	10490	10300	9230	9870
17	10420	10400	10390	9840	10010	9120	9360	10600	10380	10330	10080	9900
18	9810	10470	10180	10080	10300	9560	10020	10650	10310	10170	10430	9960
19	10570	10330	9880	9940	10200	9380	10520	10010	10100	10170	10540	10000
20	10420	10470	10360	9940	10080	9450	9910	10330	9510	10500	10540	10060
21	9850	10590	9850	9940	10100	9390	9880	10020	9060	10250	9930	10020
22	10450	9990	9970	9570	10300	9660	9940	10370	9160	10400	10300	9910
23	10500	10440	9740	9970	10360	9420	9960	10410	8960	9880	10610	9830
24	10050	10220	10040	10320	10040	8690	9990	10020	8560	10120	10300	9780
25	10050	10450	10280	10450	9700	8600	10210	10560	8350	10020	10270	9560
26	10290	10460	9940	9890	10120	8430	10210	10380	8470	10100	10420	9690
27	10190	10430	10010	10290	10120	8720	9970	9860	8400	10310	10140	9930
28	10010	10030	9800	10000	9920	8780	9970	10100	8420	10100	9080	9980
29	10280	10420	10070	10380	---	8970	10030	9840	8900	9150	9420	10210
30	10090	10500	9920	10370	---	9310	10100	10090	9090	9000	9850	9840
31	10300	---	10010	10080	---	9410	---	9960	---	8470	10300	---
MAX	10570	10590	10450	10460	10360	10440	10520	10650	10490	10500	10610	10640
MIN	383	9990	9580	9400	9630	8430	7240	9730	8350	8470	7220	9560
(#)	4181.25	4881.83	4880.42	4880.62	4880.16	4878.68	4880.69	4880.27	4877.72	4875.80	4881.26	4879.93
(*)	+7960	+200	-490	+70	-160	-510	+690	-140	-870	-620	+1830	-460
CAL YR 1986 (*) -450											
WTR YR 1987 (*) +7500											

(#) Elevation, in feet, at end of month.

(*) Change in contents, in acre-feet.

BEAR RIVER BASIN

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10086000 ONEIDA WARROWS RESERVOIR AT ONEIDA, ID

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9600	10460	9900	10660	10200	10310	10350	10110	10380	7970	10520	9290
2	9080	10380	10360	10150	10230	10180	10550	10360	10320	8010	10510	9680
3	8420	9860	10450	9920	10190	10320	10690	10180	10470	8300	10530	10250
4	7800	9960	10520	10280	10120	10080	10330	10290	10380	8770	10580	10070
5	7740	9910	9700	10100	10480	10370	10350	10150	10580	8790	10250	10090
6	7560	9700	10340	10310	10120	10180	10330	9540	9940	8870	10310	10230
7	8660	10040	10090	10050	10150	10570	10430	10010	9660	8670	10260	10140
8	9920	10400	10360	10030	9760	10360	10430	9930	9080	8550	10630	10170
9	10160	10580	10360	10560	10330	10370	10330	10170	8490	8890	10670	9900
10	10320	10440	10360	10600	10240	10200	10410	9900	8230	8900	10640	10430
11	10510	10390	10080	10360	10250	10090	10220	10070	8420	9340	10580	9740
12	9840	10280	10340	10210	10490	10550	10200	9800	8530	10140	10680	9940
13	9210	10320	10060	10150	10130	10020	10080	9760	8500	10300	10640	10370
14	9730	10310	9840	10400	10450	10030	9680	9990	9150	10350	10580	10460
15	9960	10440	9620	10160	9700	10400	9520	10320	9730	10090	10620	10540
16	9480	10420	9850	10040	10060	10500	9310	10350	9040	9970	10500	10560
17	8620	10260	10040	10140	9960	10210	9770	10370	8680	10360	10400	10540
18	8980	10040	10140	10270	10010	10520	10110	10660	8910	10250	10380	10540
19	9360	10070	9840	10070	10100	10420	10120	10580	8560	10410	10680	10450
20	9680	9850	10180	10190	10070	10470	10200	10150	8560	10470	10670	10640
21	10010	9880	10170	10010	10140	10120	10250	10230	7900	10080	10590	10640
22	10080	9890	9880	10420	10240	10240	10390	10310	7800	10670	10100	10620
23	9500	10120	10120	10200	10520	10240	10040	10280	7200	10470	10310	10430
24	9760	10000	10220	9850	10500	10340	10390	10390	7340	10600	9960	10550
25	10100	10230	10310	10020	10510	9930	9940	10690	7360	10390	9790	10530
26	9650	9820	10120	9940	10220	9960	10210	10220	7150	10720	9290	10400
27	9970	10360	9920	10470	10080	10390	10540	10420	7350	10500	9240	10370
28	10280	9940	9980	10120	10360	10590	9750	10330	7860	10330	9520	10280
29	10270	10000	10360	10360	10210	10020	9560	10640	7980	10510	9270	9680
30	10220	10170	10470	10360	---	10560	9330	10450	7960	10290	9820	8800
31	10250	---	10400	10500	---	10070	---	10320	---	10480	9590	---
MAX	10510	10580	10520	10660	10520	10590	10690	10690	10580	10720	10680	10640
MIN	7560	9700	9620	9850	9700	9930	9310	9540	7150	7970	9240	8800
(#)	4881.11	4880.90	4881.55	4881.82	4881.00	4880.60	4878.44	4881.33	4874.20	4881.79	4879.20	4876.82
(*)	+410	-80	+230	+100	-290	-140	-740	+990	-2360	+2520	-890	-790
CAL YR 1987 (*) +390											
WTR YR 1988 (*) -1040											

(#) Elevation, in feet, at end of month.

(*) Change in contents, in acre-feet.

BEAR RIVER BASIN

10086500 BEAR RIVER BELOW UTAH POWER & LIGHT CO.'S TAILRACE, AT ONEIDA, ID

LOCATION.--Lat 42°16'00", long 111°45'04", in NE¼SE¼NW¼ sec. 26, T. 13 S., R. 40 E., Franklin County, Hydrologic Unit 16010202, on right bank 200 ft downstream from tailrace of Oneida plant and 6 mi south of Cleveland.

DRAINAGE AREA.--4,456 mi².

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only October 1921 to September 1945, published in WSP 1314.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,800 ft from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Natural flow of stream affected by upstream reservoirs, power development, diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--67 years, 908 ft³/s, 657,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 5,480 ft³/s May 8, 1922; minimum, 3.0 ft³/s June 13, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,070 ft³/s July 15, gage height, 6.42 ft; minimum daily, 24 ft³/s Oct. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	978	94	252	243	422	345	555	200	339	1360	1120	428
2	1170	498	395	690	523	763	707	599	404	1290	1300	697
3	1120	344	131	378	385	704	984	1640	448	1160	782	806
4	1000	376	827	296	164	384	572	900	451	1270	1220	981
5	698	347	577	473	424	387	888	641	362	1360	1010	905
6	306	533	255	606	524	265	1040	850	691	1670	1210	985
7	37	355	484	476	678	656	544	292	930	1390	1100	823
8	368	227	526	319	38	513	1350	531	1090	1500	852	1130
9	1010	501	348	335	376	372	792	328	630	1140	958	697
10	877	418	454	456	730	619	584	652	589	986	847	970
11	859	611	582	610	115	347	911	394	498	874	930	814
12	879	281	320	473	531	719	804	604	680	974	919	817
13	362	616	386	369	318	272	849	510	504	1050	894	742
14	24	463	593	235	660	347	793	215	465	1210	794	713
15	451	656	620	462	448	271	1210	233	920	1310	805	682
16	375	325	134	385	301	398	565	373	1290	868	723	645
17	546	525	451	122	312	578	35	379	1330	1020	709	645
18	41	528	450	682	478	86	538	313	1210	1130	517	512
19	42	382	525	224	295	311	780	473	1160	884	574	443
20	41	247	357	348	349	347	463	781	1100	1600	822	452
21	41	283	399	286	65	705	761	691	1670	1040	907	457
22	306	258	460	544	395	275	964	726	1100	969	627	408
23	517	383	532	194	288	417	301	697	1550	1050	786	482
24	39	430	207	492	433	484	302	317	1280	1040	1090	265
25	39	462	451	299	395	415	981	475	1450	1160	848	255
26	527	388	241	547	374	753	466	726	1340	940	993	315
27	40	393	641	345	553	785	444	405	1020	1170	884	311
28	39	554	294	579	282	431	876	316	1250	1280	862	410
29	357	350	330	317	473	865	883	283	1280	1330	784	571
30	317	581	344	187	---	815	577	529	1310	954	706	1360
31	115	---	482	608	---	711	---	663	---	920	1250	---
TOTAL	13521	12409	13048	12580	11329	15340	21519	16736	28341	35899	27823	19721
MEAN	436	414	421	406	391	495	717	540	945	1158	898	657
MAX	1170	656	827	690	730	865	1350	1640	1670	1670	1300	1360
MIN	24	94	131	122	38	86	35	200	339	868	517	255
AC-FT	26820	24610	25880	24950	22470	30430	42680	33200	56210	71210	55190	39120
CAL YR 1987	TOTAL	271127	MEAN	743	MAX	1710	MIN	24	AC-FT	537800		
WTR YR 1988	TOTAL	228266	MEAN	624	MAX	1670	MIN	24	AC-FT	452800		

BEAR RIVER BASIN

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10092700 BEAR RIVER AT IDAHO-UTAH STATE LINE

LOCATION.--Lat 42°00'47", long 111°55'14", in NW¼NE¼ sec. 29, T. 16 S., R. 39 E., Franklin County, Idaho, Hydrologic Unit 16010202, on left bank 1,050 ft downstream from inlet canal to Cub River pumps, 1.1 mi downstream from Weston Creek, 1.8 mi upstream from Idaho-Utah State line, and 3.5 mi southeast of Weston.

DRAINAGE AREA.--4,881 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1970 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,420 ft from topographic map. Prior to Sept. 10, 1982 at datum 2.00 ft higher. Sept. 10, 1982 to Sept. 30, 1985 at datum 10.0 ft lower.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas.

AVERAGE DISCHARGE.--18 years, 1,395 ft³/s, 1,011,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,870 ft³/s June 14, 1984, gage height, 9.20 ft; minimum observed, 73 ft³/s June 29, 1978. Maximum gage height, 19.19 ft, Feb. 19, 1986, at datum then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,390 ft³/s Sept. 30, gage height, 15.45 ft; minimum daily, 48 ft³/s May 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	724	196	581	e650	e1080	e414	610	342	282	761	669	689
2	978	280	319	e859	e818	e594	598	337	253	751	718	366
3	945	542	423	e901	e835	e529	767	604	160	626	781	493
4	1020	185	375	e653	e758	e666	1010	517	228	614	700	813
5	1020	488	780	e1010	e531	e371	756	512	162	774	940	765
6	551	441	319	e904	e1080	e542	918	772	339	789	743	686
7	163	449	496	e1240	e937	e436	765	274	269	940	852	827
8	121	283	344	e1120	e1160	e560	890	426	469	886	558	698
9	554	361	507	e543	e478	547	984	334	644	687	681	878
10	852	511	400	e725	e1120	621	891	454	189	726	656	487
11	769	441	644	e1040	e908	557	936	394	222	542	647	1060
12	872	519	340	e977	e366	355	807	352	218	357	558	620
13	715	423	526	e807	e848	720	720	382	324	611	601	644
14	271	552	585	e681	e626	492	902	226	144	564	658	690
15	126	389	635	e738	e894	352	945	122	215	716	524	608
16	547	615	800	e804	e383	385	822	252	804	739	546	673
17	742	505	438	e588	e452	696	446	286	698	456	449	644
18	144	551	516	e526	e483	370	378	154	605	692	488	508
19	123	416	586	e807	e385	356	606	299	740	586	267	521
20	114	512	352	e296	e431	414	530	604	528	581	483	375
21	107	278	444	e178	e302	685	626	517	830	904	533	508
22	129	288	632	e464	e310	444	554	350	704	393	667	507
23	472	275	417	e709	e359	438	795	439	911	711	422	589
24	349	493	451	e852	e380	430	409	435	685	626	676	345
25	124	328	397	e732	e483	621	673	177	726	756	812	325
26	187	581	e540	e594	e559	313	600	472	822	579	749	367
27	432	275	e350	e712	e488	973	473	134	732	733	709	319
28	120	603	e700	e951	e380	611	856	241	495	779	468	359
29	114	411	e600	e908	e512	931	628	48	721	687	709	616
30	375	343	e550	e794	---	512	723	274	737	780	465	899
31	341	---	e750	e666	---	954	---	332	---	630	863	---
TOTAL	14101	12534	15797	23429	18346	16889	21618	11062	14856	20976	19592	17879
MEAN	455	418	510	756	633	545	721	357	495	677	632	596
MAX	1020	615	800	1240	1160	973	1010	772	911	940	940	1060
MIN	107	185	319	178	302	313	378	48	144	357	267	319
AC-FT	27970	24860	31330	46470	36390	33500	42880	21940	29470	41610	38860	35460

CAL YR 1987 TOTAL 280309 MEAN 768 MAX 2080 MIN 107 AC-FT 556000
WTR YR 1988 TOTAL 207079 MEAN 566 MAX 1240 MIN 48 AC-FT 410700

e Estimated

BEAR RIVER BASIN

10092700 BEAR RIVER AT IDAHO-UTAH STATE LINE--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: May 1986 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,990 mg/L, Mar. 8, 1988; minimum daily mean, 8 mg/L, Apr. 9, 14, 1987.

SEDIMENT LOADS: Maximum daily, 3,300 tons, Oct. 7, 1987; minimum daily, 3.7 tons, Apr. 9, 1987.

EXTREMES FOR CURRENT YEAR:

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,990 mg/L, Mar. 8; minimum daily mean, 11 mg/L, Apr. 25.

SEDIMENT LOADS: Maximum daily, 3,010 tons, Mar. 8; minimum daily, 12 tons, May 29.

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	e97	190	e74	39	88	138	e83	146	e97	283	e1290	1440
2	e118	312	e82	62	74	64	e84	195	e95	210	e1220	1960
3	e114	291	e98	143	96	110	e92	224	e91	205	e1210	1730
4	e117	322	e76	38	87	88	e83	146	e90	184	e1180	2120
5	e113	311	e97	128	124	261	e92	251	e93	133	e1140	1140
6	e104	155	e98	117	87	75	e92	225	e112	327	e1160	1700
7	73	32	e95	115	84	112	e105	352	e104	263	1380	1620
8	68	22	e84	64	66	61	e104	314	e120	376	1990	3010
9	e94	141	89	87	70	96	e81	119	e82	106	1340	1980
10	e106	244	103	142	81	87	e86	168	e171	517	760	1270
11	e101	210	87	104	98	170	e97	272	e160	392	790	1190
12	e105	247	90	126	82	75	e99	261	e143	141	770	738
13	e105	203	92	105	92	131	e92	200	e227	520	1280	2490
14	e83	61	90	134	126	199	e87	160	e235	397	1450	1930
15	e65	22	74	78	92	158	e85	169	e438	1060	1120	1060
16	e97	143	67	111	83	179	e77	167	e312	323	1000	1040
17	e101	202	70	95	67	79	e70	111	e382	466	1070	2010
18	e69	27	83	123	e77	107	e67	95	e486	634	1040	1040
19	e67	22	88	99	e72	114	e76	166	e588	611	900	865
20	e66	20	83	115	e64	61	e58	46	e1080	1260	860	961
21	e65	19	73	55	e64	77	e53	25	e1200	978	1000	1850
22	e65	23	87	68	e71	121	e76	95	e1170	979	870	1040
23	e90	115	62	46	e69	78	e83	159	e1230	1190	786	930
24	e95	90	74	99	e70	85	e91	209	e1220	1250	578	671
25	e67	22	57	50	e67	72	e86	170	e1260	1640	418	701
26	e67	34	96	151	e76	111	e88	141	e1350	2040	219	185
27	78	91	69	51	e90	85	e85	163	e1340	1770	198	520
28	68	22	116	189	e99	187	e98	252	e1250	1280	144	238
29	68	21	85	94	e84	136	e93	228	e1330	1840	105	264
30	e88	89	64	59	e83	123	e94	202	---	---	99	137
31	e86	79	---	---	e84	170	e86	155	---	---	199	513
TOTAL	---	3782	---	2887	---	3610	---	5586	---	21375	---	38343

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SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

[illegible]

BEAR RIVER BASIN

10099000 HIGH CREEK NEAR RICHMOND, UT

LOCATION.--Lat 41°58'40", long 111°44'55", in SW¼SW¼SE¼ sec. 5, T. 14 N., R. 2 E., Cache County, Cache National Forest, Hydrologic Unit 16010202, on right bank near forest boundary, 2 mi downstream from North Fork, and 5 mi northeast of Richmond.

DRAINAGE AREA.--16.2 mi².

PERIOD OF RECORD.--April to September 1944, April to September 1945 (monthly discharge only, published in WSP 1314), April 1946 to September 1952, February 1971 to September 1972, October 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,250 ft from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--17 years (1946-52, 1972, 1979-88), 34.0 ft³/s, 24,630 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 702 ft³/s June 1, 1986, gage height, 3.58 ft; maximum gage height, 3.67 ft Feb. 1-15, 1972, backwater from ice; minimum observed, 2.6 ft³/s Jan. 5, 1950, result of ice jam upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
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Peaks above base not determined. Maximum daily discharge 54 ft³/s, May 28.

Minimum daily discharge, 3.8 ft³/s Feb. 5, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	6.2	e5.6	e6.4	e4.3	10	8.3	40	e48	17	9.9	7.2
2	6.4	6.2	e5.6	e6.0	e4.1	10	9.5	36	e44	17	9.5	7.1
3	6.4	6.1	e5.8	e5.6	e4.1	9.5	12	35	e42	16	10	7.0
4	6.4	6.0	e5.8	e5.4	e4.0	8.9	13	35	e44	16	11	7.1
5	6.4	6.0	e6.0	e5.9	e3.8	8.3	13	36	e45	16	10	7.1
6	6.4	6.3	e6.0	e5.8	e3.8	8.3	14	38	e43	16	10	7.1
7	6.6	6.2	e6.3	e5.9	e3.9	7.8	19	36	e41	15	10	7.0
8	6.7	6.0	e6.2	e5.6	4.2	7.3	22	35	e40	15	9.9	7.2
9	6.7	6.0	e6.0	e5.6	4.3	7.2	18	34	e38	14	9.4	7.2
10	6.7	5.7	e5.8	e5.8	4.2	7.2	17	34	e36	15	9.4	7.2
11	6.7	5.4	e6.0	e6.0	e4.2	7.0	21	e36	e35	14	9.3	7.2
12	6.7	5.3	e6.0	e5.6	e4.4	8.5	26	e38	e35	14	8.8	7.2
13	6.9	5.3	e5.8	e5.1	e4.1	7.6	32	e42	e34	14	8.7	7.3
14	6.9	5.7	e5.6	e4.8	4.2	6.4	34	e45	e32	13	8.5	7.9
15	6.7	5.2	e5.6	e4.8	4.2	6.7	34	e45	e31	13	8.5	7.4
16	6.7	5.1	e5.5	4.8	4.2	6.4	38	e45	e30	13	8.4	6.9
17	6.7	5.1	e5.4	4.2	e4.0	6.4	44	e47	e30	13	8.5	6.7
18	6.7	e5.1	e5.5	4.7	4.2	6.4	e48	e48	e29	13	8.2	6.6
19	6.7	e4.8	e5.6	e4.2	4.2	6.5	38	e47	e27	13	8.3	6.4
20	6.7	e4.7	e5.4	e4.6	4.2	7.1	36	e45	e25	12	8.0	7.0
21	6.7	e4.9	e5.6	e4.5	4.3	9.1	40	e45	e24	12	8.0	6.9
22	6.7	e5.3	e5.8	e4.6	4.5	10	39	e47	22	12	8.0	6.6
23	6.5	e5.0	e6.0	e4.7	4.7	10	36	e48	22	12	7.8	6.4
24	6.3	e5.2	e5.8	e4.5	4.8	9.7	34	e50	21	12	7.6	6.1
25	6.2	e5.6	e5.6	e4.3	5.3	9.0	35	e52	20	11	7.4	6.0
26	6.2	e5.2	e5.2	e4.3	6.1	8.7	34	e53	20	11	7.4	5.9
27	6.2	e5.2	e5.6	e4.1	7.4	10	34	e53	20	11	7.4	5.8
28	6.2	e5.4	e5.8	e4.4	8.7	9.6	36	e54	19	11	7.4	6.2
29	6.2	e5.4	e5.8	e4.1	9.0	9.4	38	e52	18	11	7.2	6.3
30	6.2	e5.6	e6.2	e4.5	---	8.8	42	e51	17	10	7.2	6.2
31	6.2	---	e6.4	e4.5	---	8.3	---	e50	---	10	7.4	---
TOTAL	202.3	165.2	179.3	155.3	137.4	256.1	864.8	1352	932	412	267.1	204.2
MEAN	6.53	5.51	5.78	5.01	4.74	8.26	28.8	43.6	31.1	13.3	8.62	6.81
MAX	6.9	6.3	6.4	6.4	9.0	10	48	54	48	17	11	7.9
MIN	6.2	4.7	5.2	4.1	3.8	6.4	8.3	34	17	10	7.2	5.8
AC-FT	401	328	356	308	273	508	1720	2680	1850	817	530	405

CAL YR 1987	TOTAL	6031.9	MEAN	16.5	MAX	71	MIN	4.7	AC-FT	11960
WTR YR 1988	TOTAL	5127.7	MEAN	14.0	MAX	54	MIN	3.8	AC-FT	10170

e Estimated

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LOCATION.--Lat 41°50'36", long 111°48'47", in SW¼NW¼NW¼ Sec. 26, T. 12 N., R. 1 E., Cache County, Hydrologic unit 16010203, on left bank 15 ft upstream of a 36 in pipe leading to Summit Creek and one mi east of Smithfield.

REMARKS.--No estimated daily discharges. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 11 ft³/s Sept. 23. Minimum daily discharge, 0.17 ft³/s Aug. 2.

[illegible]

BEAR RIVER BASIN

10104700 LITTLE BEAR RIVER BELOW DAVENPORT CREEK, NEAR AVON, UT

LOCATION.--Lat $41^{\circ}30'43''$, long $111^{\circ}48'37''$, in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 14, T. 9 N., R. 1 E., Cache County, Hydrologic Unit 16010203, on right bank 0.65 mi downstream from Davenport Creek and 1.5 mi south of Avon.

DRAINAGE AREA.--61.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1960 to current year. Published as "10105700 South Fork Little Bear River near Avon," 1960-62.

REVISED RECORDS.--WRD UT-74-1: Drainage area. WDR UT-82-1: 1980-81 (M).

GAGE.--Water-stage recorder. Altitude of gage is 5,020 ft from topographic map. Prior to Oct. 1, 1985 at datum 2.0 ft lower. Oct. 1, 1985 to Mar. 2, 1987 at datum 1.0 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are fair. A few small diversions for irrigation above station.

AVERAGE DISCHARGE.--28 years, 61.0 ft³/s, 44,190 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,540 ft³/s Feb. 19, 1986, gage height, 5.58 ft; minimum, 6.3 ft³/s Feb. 3, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 129 ft³/s Apr. 23, gage height, 1.91 ft; minimum daily discharge, 14 ft³/s Sept. 5, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	25	24	22	24	35	34	76	46	20	18	16
2	23	26	24	22	25	36	41	79	44	20	18	16
3	23	24	23	22	26	36	49	77	42	20	18	16
4	23	24	23	22	25	35	61	71	40	20	19	15
5	23	24	23	22	25	34	50	67	38	19	18	14
6	23	25	23	22	25	38	50	69	37	19	17	14
7	23	25	25	22	25	35	52	72	35	19	17	15
8	23	24	23	21	24	31	47	76	34	20	16	15
9	23	24	23	21	24	31	40	68	34	18	15	16
10	23	25	27	22	24	30	39	65	33	19	15	16
11	23	24	26	23	24	29	40	67	32	18	15	16
12	24	24	21	22	24	27	41	75	32	17	16	17
13	28	23	16	23	24	27	44	85	31	17	16	17
14	27	25	16	22	23	27	46	96	30	17	16	18
15	25	23	18	22	23	28	48	98	29	17	16	17
16	24	23	20	22	23	28	51	104	29	17	15	17
17	24	24	22	22	23	26	55	115	28	17	17	16
18	24	20	21	21	23	26	60	111	27	18	17	16
19	24	22	21	20	23	28	58	97	26	18	17	17
20	23	23	20	20	23	35	55	86	26	18	17	17
21	23	23	20	22	23	44	63	80	25	18	16	18
22	24	23	22	23	24	45	75	76	25	18	16	18
23	24	23	21	23	24	43	88	73	24	18	17	18
24	23	22	18	22	24	38	85	69	23	17	17	17
25	23	24	18	23	25	40	89	66	23	16	17	17
26	23	22	20	25	25	57	71	62	24	16	16	17
27	24	21	22	24	26	56	65	58	23	17	17	17
28	24	22	22	23	29	41	63	54	22	18	17	17
29	24	23	22	24	30	35	65	50	21	18	16	17
30	24	21	22	23	---	34	72	54	21	18	16	17
31	24	---	22	23	---	32	---	51	---	18	16	---
TOTAL	736	701	668	690	710	1087	1697	2347	904	560	514	494
MEAN	23.7	23.4	21.5	22.3	24.5	35.1	56.6	75.7	30.1	18.1	16.6	16.5
MAX	28	26	27	25	30	57	89	115	46	20	19	18
MIN	23	20	16	20	23	26	34	50	21	16	15	14
AC-FT	1460	1390	1320	1370	1410	2160	3370	4660	1790	1110	1020	980
CAL YR 1987	TOTAL	15326	MEAN	42.0	MAX	124	MIN	16	AC-FT	30400		
WTR YR 1988	TOTAL	11108	MEAN	30.3	MAX	115	MIN	14	AC-FT	22030		

BEAR RIVER BASIN

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10104700 LITTLE BEAR RIVER BELOW DAVENPORT CREEK NEAR AVON, UT--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: March 1986 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 784 mg/L, June 2, 1986; minimum daily mean, 3 mg/L, Aug. 18, 1987.

SEDIMENT LOADS: Maximum daily mean, 876 tons, June 2, 1986; minimum daily mean, 0.18 ton, July 13, 1988.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 210 mg/L, Mar. 26; minimum daily mean, 4 mg/L, July 13.

SEDIMENT LOADS: Maximum daily, 39 tons, May 17; minimum daily, 0.18 ton, July 13.

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17	1.1	65	4.4	16	1.0	48	2.9	25	1.6	65	6.1
2	18	1.1	59	4.1	32	2.1	45	2.7	32	2.2	65	6.3
3	15	.93	50	3.2	44	2.7	43	2.6	36	2.5	45	4.4
4	12	.75	49	3.2	38	2.4	47	2.8	37	2.5	35	3.3
5	22	1.4	58	3.8	38	2.4	68	4.0	34	2.3	35	3.2
6	22	1.4	49	3.3	36	2.2	55	3.3	25	1.7	60	6.2
7	19	1.2	59	4.0	45	3.0	43	2.6	22	1.5	45	4.3
8	11	.68	46	3.0	50	3.1	33	1.9	21	1.4	55	4.6
9	36	2.2	14	.91	35	2.2	27	1.5	22	1.4	40	3.3
10	43	2.7	6	.40	33	2.4	22	1.3	32	2.1	35	2.8
11	36	2.2	20	1.3	32	2.2	20	1.2	35	2.3	40	3.1
12	45	2.9	22	1.4	31	1.8	20	1.2	38	2.5	55	4.0
13	61	4.6	20	1.2	22	.95	32	2.0	35	2.3	55	4.0
14	53	3.9	18	1.2	15	.65	22	1.3	28	1.7	50	3.6
15	39	2.6	18	1.1	15	.73	22	1.3	27	1.7	35	2.6
16	27	1.7	17	1.1	20	1.1	27	1.6	27	1.7	48	3.6
17	36	2.3	21	1.4	37	2.2	17	1.0	34	2.1	58	4.1
18	34	2.2	39	2.1	27	1.5	19	1.1	30	1.9	50	3.5
19	33	2.1	51	3.0	22	1.2	32	1.7	30	1.9	43	3.3
20	44	2.7	60	3.7	37	2.0	33	1.8	28	1.7	70	6.6
21	49	3.0	18	1.1	38	2.1	34	2.0	31	1.9	105	12
22	32	2.1	12	.75	17	1.0	34	2.1	33	2.1	60	7.3
23	33	2.1	13	.81	22	1.2	36	2.2	34	2.2	32	3.7
24	48	3.0	26	1.5	23	1.1	33	2.0	34	2.2	32	3.3
25	44	2.7	15	.97	36	1.7	32	2.0	33	2.2	45	4.9
26	41	2.5	28	1.7	33	1.8	31	2.1	34	2.3	210	32
27	51	3.3	22	1.2	28	1.7	21	1.4	e35	2.5	85	13
28	49	3.2	23	1.4	30	1.8	22	1.4	e35	2.7	29	3.2
29	57	3.7	22	1.4	33	2.0	34	2.2	e35	2.8	31	2.9
30	63	4.1	20	1.1	55	3.3	30	1.9	---	---	27	2.5
31	56	3.6	---	---	55	3.3	20	1.2	---	---	28	2.4
TOTAL	---	73.96	---	59.74	---	58.83	---	60.3	---	59.9	---	170.1
YEAR	1192.62											

e Estimated

BEAR RIVER BASIN

10104700 LITTLE BEAR RIVER BELOW DAVENPORT CREEK NEAR AVON, UT--Continued

SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	33	3.0	56	11	22	2.7	15	.81	21	1.0	17	.73
2	44	4.9	73	16	32	3.8	15	.81	20	.97	18	.78
3	38	5.0	40	8.3	34	3.9	18	.97	20	.97	14	.60
4	57	9.4	28	5.4	33	3.6	17	.92	20	1.0	13	.53
5	50	6.7	26	4.7	33	3.4	11	.56	18	.87	14	.53
6	37	5.0	28	5.2	36	3.6	10	.51	13	.60	15	.57
7	42	5.9	27	5.2	38	3.6	11	.56	13	.60	15	.61
8	25	3.2	32	6.6	32	2.9	11	.59	19	.82	15	.61
9	18	1.9	26	4.8	32	2.9	10	.49	20	.81	17	.73
10	18	1.9	24	4.2	31	2.8	15	.77	17	.69	16	.69
11	19	2.1	25	4.5	30	2.6	12	.58	21	.85	9	.39
12	27	3.0	37	7.5	32	2.8	5	.23	27	1.2	7	.32
13	28	3.3	75	17	34	2.8	4	.18	34	1.5	12	.55
14	25	3.1	98	25	e30	2.4	6	.28	42	1.8	18	.87
15	29	3.8	72	19	e30	2.3	9	.41	41	1.8	19	.87
16	37	5.1	101	28	e30	2.3	12	.55	32	1.3	14	.64
17	46	6.8	127	39	e30	2.3	13	.60	29	1.3	11	.48
18	50	8.1	80	24	e30	2.2	13	.63	31	1.4	12	.52
19	43	6.7	45	12	e30	2.1	13	.63	29	1.3	14	.64
20	28	4.2	38	8.8	e30	2.1	13	.63	22	1.0	16	.73
21	34	5.8	36	7.8	e30	2.0	17	.83	15	.65	16	.78
22	155	31	33	6.8	40	2.7	19	.92	12	.52	16	.78
23	160	38	36	7.1	45	2.9	19	.92	13	.60	15	.73
24	105	24	34	6.3	27	1.7	18	.83	20	.92	14	.64
25	90	22	31	5.5	21	1.3	19	.82	24	1.1	14	.64
26	45	8.6	31	5.2	32	2.1	19	.82	26	1.1	14	.64
27	40	7.0	29	4.5	25	1.6	14	.64	26	1.2	12	.55
28	35	6.0	34	5.0	16	.95	15	.73	19	.87	9	.41
29	35	6.1	35	4.7	16	.91	22	1.1	13	.56	13	.60
30	38	7.4	27	3.9	15	.85	25	1.2	11	.48	14	.64
31	---	---	22	3.0	---	---	23	1.1	11	.48	---	---
TOTAL	---	249.0	---	316.0	---	74.11	---	21.62	---	30.26	---	18.80
YEAR		1192.62										

e Estimated

BEAR RIVER BASIN

223

10108400 LOGAN, HYDE PARK & SMITHFIELD CANAL AT HEAD, NEAR LOGAN, UT

LOCATION.--Lat 41°44'35", long 111°45'40", in NE¼NW¼NE¼ sec. 31, T. 12 N., R. 2 E., Cache County, Hydrologic Unit 16010203, Cache National Forest, on left bank 487 ft downstream from head and 3.8 mi east of Logan.

PERIOD OF RECORD.--May 1963 to current year.

GAGE.--Water-stage recorder and 8-ft concrete Parshall flume. Datum of gage is 4,858.69 ft NGVD of 1929 (Bureau of Public Roads bench mark).

REMARKS.--Records good except for daily discharges less than 0.10 ft³/s, which are poor.

AVERAGE DISCHARGE.--25 years, 23.5 ft³/s, 17,030 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 111 ft³/s May 23, 1963, May 28, 1966; no flow at times most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	14	3.6	e3.8	e3.1	2.4	.00	14	43	54	33	28
2	28	11	3.6	e3.7	e3.0	2.4	.00	14	45	53	33	28
3	28	9.0	3.5	e3.4	e2.8	2.4	.00	14	45	49	32	28
4	27	9.0	3.5	e3.4	e2.8	1.4	.00	14	52	45	32	28
5	27	9.0	3.7	e3.5	e2.8	.49	.00	14	48	45	33	28
6	27	9.0	3.7	e3.6	e2.9	.54	4.9	17	50	45	33	28
7	26	9.1	4.0	e3.7	e2.9	.49	4.9	25	57	44	32	28
8	27	9.4	3.3	e3.8	e3.0	.50	5.1	25	61	43	33	28
9	27	9.0	3.2	3.9	e3.1	.61	18	25	56	43	33	28
10	26	8.7	3.2	3.8	3.2	.61	24	25	57	43	32	28
11	26	8.9	3.5	3.6	3.2	.58	28	33	57	39	32	28
12	26	9.0	3.2	3.5	3.0	.61	27	48	56	46	32	28
13	28	9.0	e3.2	3.5	3.0	.61	27	55	57	47	32	28
14	28	10	e3.1	3.5	3.0	.35	27	46	58	45	31	27
15	26	9.0	e3.0	3.6	3.0	.02	29	46	59	44	29	26
16	26	9.0	e3.1	3.5	2.6	.02	29	55	63	39	29	26
17	25	6.1	3.2	3.6	2.6	.02	33	59	62	39	29	26
18	23	3.8	3.3	3.7	2.6	.02	45	60	63	39	29	26
19	23	4.1	3.3	e3.5	2.6	.0	32	58	64	39	29	26
20	19	4.9	3.0	e3.3	2.6	.00	27	61	63	39	29	26
21	19	4.8	3.1	e3.4	2.6	.00	24	61	64	39	29	26
22	14	4.6	3.4	e3.4	2.5	.00	19	62	66	39	29	26
23	15	5.4	3.3	e3.5	2.4	.00	13	62	66	39	29	26
24	14	5.7	3.0	3.7	2.4	.00	13	46	65	36	29	26
25	14	4.4	e2.8	e3.6	2.4	.00	13	10	65	33	29	26
26	13	3.7	e2.8	e3.5	2.7	.00	13	50	66	33	29	26
27	14	3.7	e2.9	e3.5	2.4	.00	13	60	65	34	29	26
28	14	3.6	e3.5	3.7	2.4	.00	13	59	63	34	29	26
29	14	3.5	e4.0	3.6	2.4	.00	13	58	57	34	28	26
30	14	3.5	e4.0	3.3	---	.00	14	56	53	34	28	26
31	14	---	3.9	3.2	---	.00	---	49	---	34	28	---
TOTAL	679	213.9	103.9	110.3	80.0	14.07	508.90	1281	1746	1269	943	807
MEAN	21.9	7.13	3.35	3.56	2.76	.45	17.0	41.3	58.2	40.9	30.4	26.9
MAX	28	14	4.0	3.9	3.2	2.4	.45	62	66	54	33	28
MIN	13	3.5	2.8	3.2	2.4	.00	.00	10	43	33	28	26
AC-FT	1350	424	206	219	159	28	1010	2540	3460	2520	1870	1600

CAL YR 1987 TOTAL 7357.56 MEAN 20.2 MAX 73 MIN .00 AC-FT 14590
WTR YR 1988 TOTAL 7756.07 MEAN 21.2 MAX 66 MIN .00 AC-FT 15380

e Estimated

BEAR RIVER BASIN

10109000 LOGAN RIVER ABOVE STATE DAM, NEAR LOGAN, UT

LOCATION (REVISED).--Lat $41^{\circ}44'36''$, long $111^{\circ}46'55''$, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 36, T. 12 N., R. 1 E., Cache County, Hydrologic Unit 16010203, on left bank 0.5 mi upstream from State dam, and 2.5 mi east of Logan.

DRAINAGE AREA.--214 mi².

PERIOD OF RECORD.--June 1896 to current year. Published as Logan River near Logan prior to 1913. Records since May 1913 equivalent to earlier records, if records for Utah Power & Light Co.'s tailrace near Logan (station 10108000) are added. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,680 ft from topographic map. Prior to May 7, 1913, nonrecording gage at various sites within 0.5 mi downstream at different datums. May 7, 1913, to Sept. 3, 1938, water-stage recorder at present site at different datums.

REMARKS.--No estimated daily discharges. Records good. Flow affected by regulation and diversions above station for power, irrigation, and municipal culinary supply. Utah Power and Light Co. stopped diverting water from river November 1970 at which time the tailrace station (station 10108000) was discontinued. During 1963, site for gaging station for Logan, Hyde Park and Smithfield Canal (station 10108400) was relocated. Records for combined flow since that time are equivalent to previous records. For record of combined flow, see following page.

AVERAGE DISCHARGE.--River only: 75 years (water years 1914-88), 143 ft³/s, 103,600 acre-ft/yr.
Combined river and canal: 92 years, 275 ft³/s, 199,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--River only: Maximum discharge, 2,000 ft³/s Mar. 21, 1916, gage height, 5.6 ft; minimum, 5.2 ft³/s Feb. 26, 1986, result of hydro-electric plant testing.
Combined river and canal: Maximum discharge observed, 2,480 ft³/s May 24, 1907; minimum daily, 50 ft³/s Jan. 21, 1935.

EXTREMES FOR CURRENT YEAR.--River only: Maximum discharge, 559 ft³/s May 25, gage height, 3.68 ft; minimum, 7.2 ft³/s Mar. 15.
Combined river and canal: Maximum daily discharge, 585 ft³/s May 18; minimum daily, 68 ft³/s Dec. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	101	97	96	85	97	95	239	365	150	108	89
2	94	105	100	83	86	101	97	228	333	146	108	89
3	96	108	103	85	76	98	106	214	320	146	109	86
4	96	104	101	103	89	94	114	212	330	148	110	85
5	96	104	101	102	88	94	116	215	357	144	111	86
6	96	104	98	96	90	97	118	237	354	140	105	85
7	96	106	102	95	88	99	136	224	333	142	105	85
8	94	105	101	96	88	91	152	217	310	137	103	82
9	93	103	100	96	88	92	120	207	295	136	103	83
10	93	101	102	98	93	92	113	195	280	134	102	85
11	94	100	107	101	90	90	120	208	272	137	100	83
12	93	101	98	93	86	88	139	252	268	128	101	83
13	96	100	88	87	88	87	153	321	252	123	100	84
14	102	104	82	98	90	90	163	402	238	122	98	88
15	96	101	80	96	88	84	168	402	234	122	97	86
16	92	100	93	92	87	87	188	431	217	124	96	83
17	93	107	103	95	80	83	207	508	216	121	97	83
18	94	99	95	92	88	85	230	525	209	124	97	83
19	94	98	96	86	86	86	255	478	201	120	93	83
20	98	102	91	81	87	89	252	421	192	119	93	85
21	98	98	94	95	85	94	266	415	186	119	93	86
22	104	101	98	85	84	96	262	429	178	118	93	82
23	103	100	100	95	87	97	258	449	175	111	91	80
24	103	98	91	92	87	96	226	488	167	116	89	81
25	103	102	65	85	85	96	219	540	163	121	88	80
26	102	101	67	90	87	98	207	503	165	118	89	77
27	102	98	81	91	92	103	193	495	156	118	90	77
28	102	96	78	91	93	100	193	480	152	115	87	80
29	101	98	93	88	96	99	197	462	157	111	88	77
30	103	98	102	92	---	98	222	443	151	108	88	76
31	102	---	97	91	---	94	---	404	---	109	89	---
TOTAL	3025	3043	2904	2866	2537	2895	5285	11244	7226	3927	3021	2492
MEAN	97.6	101	93.7	92.5	87.5	93.4	176	363	241	127	97.5	83.1
MAX	104	108	107	103	96	103	266	540	365	150	111	89
MIN	92	96	65	81	76	83	95	195	151	108	87	76
AC-FT	6000	6040	5760	5680	5030	5740	10480	22300	14330	7790	5990	4940

CAL YR 1987 TOTAL 53029 MEAN 145 MAX 338 MIN 65 AC-FT 105200
WTR YR 1988 TOTAL 50465 MEAN 138 MAX 540 MIN 65 AC-FT 100100

BEAR RIVER BASIN

225

LOGAN RIVER ABOVE STATE DAM, NEAR LOGAN, UT--Continued
 COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF LOGAN RIVER ABOVE STATE DAM
 AND LOGAN, HYDE PARK & SMITHFIELD CANAL AT HEAD, NEAR LOGAN, UT
 WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	115	101	100	88	99	95	253	408	204	141	117
2	122	116	104	87	89	103	97	242	378	199	141	117
3	124	117	106	88	79	100	106	228	365	195	141	114
4	123	113	104	106	92	95	114	226	382	193	142	113
5	123	113	105	105	91	94	116	229	405	189	144	114
6	123	113	102	100	93	98	123	254	404	185	138	113
7	122	115	106	99	91	99	141	249	390	186	137	113
8	121	114	104	100	91	91	157	242	371	180	136	110
9	120	112	103	100	91	93	138	232	351	179	136	111
10	119	110	105	102	96	93	137	220	337	177	134	113
11	120	109	110	105	93	91	148	241	329	176	132	111
12	119	110	101	96	89	89	166	300	324	174	133	111
13	124	109	91	90	91	88	180	376	309	170	132	112
14	130	114	85	101	93	90	190	448	296	167	129	115
15	122	110	83	100	91	84	197	448	293	166	126	112
16	118	109	96	95	90	87	217	486	280	163	125	109
17	118	113	106	99	83	83	240	567	278	160	126	109
18	117	103	98	96	91	85	275	585	272	163	126	109
19	117	102	99	89	89	86	287	536	265	159	122	109
20	117	107	94	84	90	89	279	482	255	158	122	111
21	117	103	97	98	88	94	290	476	250	158	122	112
22	118	106	101	88	86	96	281	491	244	157	122	108
23	118	105	103	98	89	97	271	511	241	150	120	106
24	117	104	94	96	89	96	239	534	232	152	118	107
25	117	106	68	89	87	96	232	550	228	154	117	106
26	115	105	70	93	90	98	220	553	231	151	118	103
27	116	102	84	94	94	103	206	555	221	152	119	103
28	116	100	81	95	95	100	206	539	215	149	116	106
29	115	101	97	92	98	99	210	520	214	145	116	103
30	117	101	106	95	---	98	236	499	204	142	116	102
31	116	---	101	94	---	94	---	453	---	143	117	---
TOTAL	3704	3257	3005	2974	2617	2908	5794	12525	8972	5196	3964	3299
MEAN	119	109	96.9	95.9	90.2	93.8	193	404	299	168	128	110
MAX	130	117	110	106	98	103	290	585	408	204	144	117
MIN	115	100	68	84	79	83	95	220	204	142	116	102
AC-FT	7350	6460	5960	5900	5190	5770	11490	24840	17800	10310	7860	6540
CAL YR 1987	TOTAL	60381	MEAN	165	MAX	394	MIN	68	AC-FT	119800		
WTR YR 1988	TOTAL	58215	MEAN	159	MAX	585	MIN	68	AC-FT	115500		

BEAR RIVER BASIN

10111700 BLACKSMITH FORK BELOW MILL CREEK, NEAR HYRUM, UT

LOCATION (REVISED).--Lat $41^{\circ}35'41''$, long $111^{\circ}34'00''$, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 23, T. 10 N., R. 3 E., Cache County, Hydrologic Unit 16010203, on right bank 1.3 mi downstream from Mill Creek, and 16 mi east of Hyrum.

DRAINAGE AREA (REVISED).--78 mi².

PERIOD OF RECORD.--September 1965 to September 1969, October 1985 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,544.76 ft NGVD of 1929, unadjusted.

REMARKS.--No estimated daily discharges. Records good. No diversions or regulation above gage.

AVERAGE DISCHARGE.--7 years, 67.9 ft³/s, 49,190 acre-ft/yr.

EXTREMES₃ FOR PERIOD OF RECORD.--Maximum discharge recorded, 346 ft³/s Mar. 8, 1986, gage height, 7.11 ft; minimum, 42 ft³/s Feb. 20, 1967, Mar. 14, 1969.

EXTREMES₃ FOR CURRENT YEAR.--Maximum discharge, 65 ft³/s, Apr. 2, gage height, 5.99 ft; minimum daily discharge, 43 ft³/s, June 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	52	50	48	46	48	48	53	47	46	50	49
2	52	52	51	46	45	49	52	52	46	46	50	49
3	51	52	50	49	45	48	54	51	46	46	50	49
4	52	51	50	48	45	48	54	49	45	47	50	49
5	52	51	50	48	46	48	50	49	46	47	50	49
6	52	52	50	47	47	50	51	49	45	47	49	49
7	52	52	51	47	47	48	52	51	44	47	49	49
8	52	52	50	47	46	47	51	51	44	48	49	49
9	52	51	49	47	46	47	48	50	45	49	48	49
10	51	52	52	48	47	47	48	47	45	48	47	49
11	51	52	50	48	46	47	49	47	45	48	48	49
12	52	51	49	47	46	46	50	47	45	48	49	49
13	53	51	45	46	46	46	52	48	45	48	48	51
14	52	52	45	48	46	46	53	50	45	49	48	51
15	52	52	45	48	46	47	53	50	45	48	48	51
16	51	52	46	47	46	46	52	50	43	49	48	50
17	51	52	49	48	45	45	52	52	45	49	49	49
18	51	49	48	48	46	46	51	54	45	49	49	50
19	51	50	49	45	45	47	51	53	45	49	49	50
20	51	51	48	45	45	48	50	51	45	49	48	50
21	51	52	48	48	46	50	52	51	45	49	48	50
22	51	52	49	46	46	49	54	51	45	48	48	50
23	51	51	48	48	45	48	55	50	45	49	49	50
24	52	51	46	47	45	47	53	49	45	49	49	49
25	51	52	45	46	46	47	57	48	45	49	49	49
26	51	51	47	47	46	52	53	48	47	50	49	49
27	51	50	47	47	46	51	51	47	47	49	49	49
28	51	50	47	46	47	48	53	47	47	50	49	49
29	51	51	48	47	47	47	52	47	47	50	49	49
30	52	50	48	47	---	47	51	48	48	50	49	49
31	51	---	48	46	---	47	---	48	---	50	48	---
TOTAL	1596	1539	1498	1460	1331	1477	1552	1538	1362	1500	1512	1483
MEAN	51.5	51.3	48.3	47.1	45.9	47.6	51.7	49.6	45.4	48.4	48.8	49.4
MAX	53	52	52	49	47	52	57	54	48	50	50	51
MIN	51	49	45	45	45	45	48	47	43	46	47	49
AC-FT	3170	3050	2970	2900	2640	2930	3080	3050	2700	2980	3000	2940
CAL YR 1987	TOTAL	22135	MEAN	60.6	MAX	79	MIN	45	AC-FT	43900		
WTR YR 1988	TOTAL	17848	MEAN	48.8	MAX	57	MIN	43	AC-FT	35400		

BEAR RIVER BASIN

227

10113500 BLACKSMITH FORK ABOVE UTAH POWER & LIGHT CO.'S DAM, NEAR HYRUM, UT

LOCATION (REVISED).--Lat $41^{\circ}37'25''$, long $111^{\circ}44'17''$, in SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 8, T. 10 N., R. 2 E., Cache County, Hydrologic Unit 16010203 on right bank 1.1 mi upstream from diversion dam, and 6 mi east of Hyrum.

DRAINAGE AREA.--263 mi².

PERIOD OF RECORD.--October 1913 to current year. Monthly discharge only for October 1913, published in WSP 1314.

REVISED RECORDS.--WSP 1514: 1925. WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,020.00 ft above NGVD of 1929, from topographic map. Oct. 2, 1934 to May 27, 1987 at site 1,200 ft downstream at different datum. Prior to Oct. 2, 1934, at site 200 ft downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. A few small diversions for irrigation of about 200 acres above station. Flow is slightly regulated by powerplant above station.

AVERAGE DISCHARGE.--75 years, 133 ft³/s, 96,360 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,650 ft³/s May 14, 1984, gage height, 7.12 ft, site and datum then in use; minimum, 4.7 ft³/s Nov. 28, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 140 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 28	1600	*133	*4.29				

Minimum, 33 ft³/s Feb. 3.DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	86	83	82	75	75	77	114	88	75	68	61
2	89	88	83	71	75	82	79	112	86	74	68	60
3	87	86	83	74	71	81	83	102	86	74	69	61
4	87	86	82	83	74	81	86	103	85	73	68	61
5	85	86	82	82	74	80	84	101	85	73	67	62
6	85	86	e82	82	75	80	84	100	85	72	67	62
7	85	86	e82	81	76	81	90	105	85	72	67	61
8	85	85	83	81	76	77	92	104	76	72	68	61
9	86	84	83	81	76	77	86	103	82	72	67	62
10	85	85	84	80	78	77	85	98	80	72	66	62
11	85	e84	86	81	76	76	87	96	79	72	66	62
12	85	e84	82	81	76	73	91	99	79	72	66	62
13	88	e82	80	77	76	73	97	105	78	71	65	63
14	88	e86	78	78	76	74	104	109	79	71	65	63
15	86	e82	78	79	76	75	104	109	78	71	66	62
16	85	e82	78	79	76	73	105	109	78	71	64	63
17	85	e84	79	78	75	72	107	113	76	71	64	62
18	86	e78	80	78	74	72	104	115	76	71	64	62
19	86	e82	80	75	74	74	100	110	76	71	64	63
20	86	e84	78	70	71	77	98	106	76	71	64	63
21	87	e84	77	79	72	82	107	103	76	71	64	62
22	86	e84	78	76	80	85	113	102	78	71	63	62
23	86	e84	78	78	75	81	117	100	72	71	63	62
24	86	e82	75	78	75	79	116	98	74	71	63	62
25	86	e86	62	76	75	78	120	96	75	71	63	63
26	85	83	62	77	75	78	113	93	77	71	62	63
27	85	81	76	76	75	86	111	91	85	71	62	62
28	87	82	76	76	76	80	111	91	70	70	61	62
29	87	82	83	77	76	78	111	91	76	70	61	63
30	87	81	83	78	---	77	111	90	75	69	61	63
31	86	---	83	77	---	76	---	89	---	69	61	---
TOTAL	2671	2515	2459	2421	2179	2410	2973	3157	2371	2216	2007	1862
MEAN	86.2	83.8	79.3	78.1	75.1	77.7	99.1	102	79.0	71.5	64.7	62.1
MAX	89	88	86	83	80	86	120	115	88	75	69	63
MIN	85	78	62	70	71	72	77	89	70	69	61	60
AC-FT	5300	4990	4880	4800	4320	4780	5900	6260	4700	4400	3980	3690

CAL YR 1987	TOTAL	38713	MEAN	106	MAX	161	MIN	62	AC-FT	76790
WTR YR 1988	TOTAL	29241	MEAN	79.9	MAX	120	MIN	60	AC-FT	58000

e Estimated

BEAR RIVER BASIN

10116500 CUTLER RESERVOIR NEAR COLLINSTON, ID

LOCATION.--Lat 41°50'13", long 112°02'51", in NW¼NW¼SW¼ sec. 26, T. 13 N., R. 2 W., Box Elder County, Hydrologic Unit 16010204, 2 mi north of Beaver Dam, 6 mi north of Collinston.

DRAINAGE AREA (REVISED).--6,265 mi².

PERIOD OF RECORD.--October 1927 to current year.

COOPERATION.--Records provided by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 17,280 acre-ft Oct. 6, 24, elevation, 4,404.65 ft; minimum, 5,060 acre-ft June 16, elevation, 4,402.55 ft.

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12290	14700	15420	16150	15060	15780	15060	13990	15060	9670	13300	10200
2	11640	12620	14340	15420	13990	15780	15780	14700	15420	10080	13300	11000
3	12960	13860	14700	13990	15060	16150	15780	15420	15420	10680	13300	10380
4	14700	15060	15420	13300	14700	14700	14700	15420	15420	11000	13990	9780
5	15780	13990	13300	12620	12620	14700	13990	14700	15060	11000	13990	9780
6	17280	13990	14340	15060	13990	15060	15420	12620	13990	11000	15060	10380
7	16520	14700	13990	14700	15060	15780	14700	13300	12960	11310	15060	10680
8	16520	15420	14700	13300	15420	15060	16900	13300	12290	12620	16150	11640
9	12890	14340	14340	13300	16900	14700	16150	13990	12290	13300	16150	12290
10	15060	14700	14700	12290	14700	14700	14700	13300	12620	13650	16520	13300
11	16600	14700	13990	11960	14700	16520	15780	13300	12290	13990	16520	12960
12	16150	14700	15420	13990	15420	14700	15060	12290	11000	13650	16520	14340
13	15420	16150	13990	16520	15780	13990	16900	12290	9220	12960	16520	15060
14	15060	15060	14340	16900	15420	13990	13990	12620	8150	12620	16520	15420
15	14700	15780	13650	14700	13300	15780	16150	12620	6700	12620	16520	15780
16	14340	14700	13300	15780	13990	15780	14700	12620	5060	12960	16150	15060
17	14340	13650	14700	13990	15420	14700	16150	12620	5440	13300	15780	16150
18	15420	15060	14700	13990	13300	16900	13990	13650	5440	13300	15060	16150
19	15420	13650	14700	15420	16150	15060	13300	15060	5840	13300	14340	16150
20	15780	13650	14700	13990	12620	15780	13990	13990	6260	13300	12960	15780
21	16150	13650	14700	11960	15780	15060	13990	13650	6260	12960	11960	16150
22	16150	13300	14700	15060	14340	16150	15420	15420	6260	13300	11310	16300
23	16520	12290	15420	13300	15780	13300	16150	14340	6480	12960	11310	15780
24	17280	12960	15420	13990	15060	14340	15420	14700	7160	12960	10680	16150
25	16900	13300	14700	14700	16150	15420	16150	15420	7400	12960	10080	15780
26	16900	13990	15060	13990	13990	15420	15420	15420	7890	12960	10680	16150
27	16900	14700	13300	13650	14700	13990	15420	15780	8670	12620	10380	15060
28	16520	13990	14700	15780	15420	14340	13300	15420	9500	12620	10680	15060
29	14340	14700	14700	14340	14700	13990	13300	14700	8940	12960	10380	14700
30	13990	14700	15060	15780	---	15060	13650	14340	9380	13300	10380	13300
31	13650	---	14340	14700	---	15060	---	14700	---	13300	10380	---
MAX	17280	16150	15420	16900	16900	16900	16900	15780	15420	13990	16520	16300
MIN	11640	12290	13300	11960	12620	13300	13300	12290	5060	9670	10080	9780
(#)	4404.15	4404.30	4404.25	4404.30	4404.30	4404.35	4404.15	4404.30	4403.48	4404.10	4403.65	4404.10
(*)	+1030	+1050	-360	+360	0	+360	-1410	+1050	-5320	+3920	-2920	+2920

WTR YR 1988 (*) +680

(#) Elevation, in feet, at end of month.
(*) Change in contents, in acre-feet.

BEAR RIVER BASIN

229

10117000 HAMMOND (EAST SIDE) CANAL NEAR COLLINSTON, UT

LOCATION.--Lat 41°49'51", long 112°03'24", in SE¼ sec. 27, T. 13 N., R. 2 W., Box Elder County, Hydrologic Unit 16010204, on right bank 3,600 ft downstream from Cutler Dam and 4 mi north of Collinston.

PERIOD OF RECORD.--June 1912 to current year. Prior to 1915, published as Hammond Ditch near Collinston. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Prior to May 22, 1914, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Canal diverts from east side of Bear River at Cutler Dam for irrigation of about 58,000 acres below station in eastern Box Elder County.

COOPERATION.--Records collected by Utah Power & Light Co.

AVERAGE DISCHARGE.--74 years (water years 1913-81, 1983-88), 51.2 ft³/s, 37,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 184 ft³/s June 29, 1963, May 2, 1977; no flow at times in each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	51	.00	.00	.00	.00	.00	106	119	171	144	137
2	88	51	.00	.00	.00	.00	.00	107	120	170	146	138
3	87	51	.00	.00	.00	.00	.00	107	120	168	146	141
4	84	51	.00	.00	.00	.00	.00	107	120	169	146	136
5	84	51	.00	.00	.00	.00	.00	106	128	165	146	127
6	84	52	.00	.00	.00	.00	.00	104	141	157	147	128
7	83	33	.00	.00	.00	.00	.00	107	146	160	144	129
8	84	.00	.00	.00	.00	.00	.00	106	145	161	145	130
9	84	.00	.00	.00	.00	.00	.00	105	145	157	145	125
10	84	.00	.00	.00	.00	.00	.00	108	148	158	146	126
11	83	.00	.00	.00	.00	.00	.00	125	150	159	146	133
12	83	.00	.00	.00	.00	.00	.00	138	151	156	144	131
13	85	.00	.00	.00	.00	.00	.00	143	158	150	143	119
14	79	.00	.00	.00	.00	.00	.00	154	157	146	143	111
15	71	.00	.00	.00	.00	.00	104	150	155	147	143	109
16	69	.00	.00	.00	.00	.00	133	150	155	147	144	108
17	68	.00	.00	.00	.00	.00	144	149	156	148	143	108
18	67	.00	.00	.00	.00	.00	139	150	159	148	141	108
19	60	.00	.00	.00	.00	.00	125	152	162	148	144	103
20	52	.00	.00	.00	.00	.00	125	151	162	150	147	99
21	53	.00	.00	.00	.00	.00	116	149	160	148	148	102
22	56	.00	.00	.00	.00	.00	114	149	162	148	150	102
23	53	.00	.00	.00	.00	.00	108	149	164	147	149	102
24	51	.00	.00	.00	.00	.00	104	149	164	145	152	102
25	51	.00	.00	.00	.00	.00	103	149	163	145	152	102
26	51	.00	.00	.00	.00	.00	104	143	165	145	151	98
27	51	.00	.00	.00	.00	.00	104	140	166	146	148	92
28	51	.00	.00	.00	.00	.00	104	143	167	145	143	92
29	50	.00	.00	.00	.00	.00	103	147	168	146	138	88
30	50	.00	.00	.00	---	.00	103	127	170	147	137	80
31	51	---	.00	.00	---	.00	---	139	---	147	137	---
TOTAL	2135	340.00	0.00	0.00	0.00	0.00	1833.00	4109	4546	4744	4498	3406
MEAN	68.9	11.3	.00	.00	.00	.00	61.1	133	152	153	145	114
MAX	88	52	.00	.00	.00	.00	144	154	170	171	152	141
MIN	50	.00	.00	.00	.00	.00	.00	104	119	145	137	80
AC-FT	4230	674	.0	.0	.0	.0	3640	8150	9020	9410	8920	6760

CAL YR 1987 TOTAL 21528.00 MEAN 59.0 MAX 166 MIN .00 AC-FT 42700
WTR YR 1988 TOTAL 25611.00 MEAN 70.0 MAX 171 MIN .00 AC-FT 50800

BEAR RIVER BASIN

10117500 WEST SIDE CANAL NEAR COLLINSTON, UT

LOCATION.--Lat 41°49'55", 112°03'36", in SW¼ sec. 27, T. 13 N., R. 2 W., Box Elder County, Hydrologic Unit 16010204, on left bank 4,200 ft downstream from Cutler Dam and 4 mi north of Collinston.

PERIOD OF RECORD.--June 1912 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Prior to May 22, 1914, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Canal diverts from west side of Bear River at Cutler Dam for irrigation of about 58,000 acres below station in eastern Box Elder County.

COOPERATION.--Records collected by Utah Power & Light Co.

AVERAGE DISCHARGE.--74 years (water years 1913-81, 1983-88), 249 ft³/s, 180,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 787 ft³/s June 23, 1986; no flow for periods in every year except 1914.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	507	179	53	.00	.00	.00	.00	340	642	746	683	677
2	505	172	.00	.00	.00	.00	.00	383	668	745	684	671
3	505	170	.00	.00	.00	.00	.00	479	670	742	685	655
4	503	172	.00	.00	.00	.00	.00	530	672	732	687	658
5	505	174	.00	.00	.00	.00	.00	536	676	719	685	661
6	488	175	.00	.00	.00	.00	.00	535	674	723	688	656
7	451	136	.00	.00	.00	.00	.00	540	706	725	692	648
8	445	128	.00	.00	.00	.00	.00	586	736	717	690	650
9	410	128	.00	.00	.00	.00	.00	627	742	701	693	642
10	414	122	.00	.00	.00	.00	.00	627	746	701	695	631
11	415	122	.00	.00	.00	.00	.00	637	738	697	687	630
12	414	123	.00	.00	.00	.00	.00	657	734	697	674	623
13	378	124	.00	.00	.00	.00	.00	676	734	682	670	608
14	316	124	.00	.00	.00	.00	.00	698	731	661	664	605
15	317	125	.00	.00	.00	.00	.00	702	730	664	665	586
16	295	127	.00	.00	.00	.00	.00	705	735	659	684	575
17	230	129	.00	.00	.00	.00	.00	706	738	664	705	574
18	221	126	.00	.00	.00	.00	.00	621	743	660	705	573
19	224	122	.00	.00	.00	.00	359	660	745	671	708	562
20	225	112	.00	.00	.00	.00	342	661	745	697	702	537
21	227	111	.00	.00	.00	.00	354	689	735	702	706	508
22	228	111	.00	.00	.00	.00	354	709	738	696	705	505
23	229	108	.00	.00	.00	.00	356	715	743	686	710	503
24	230	104	.00	.00	.00	.00	357	711	747	680	709	502
25	231	84	.00	.00	.00	.00	362	714	742	677	703	500
26	230	59	.00	.00	.00	.00	360	726	740	676	703	490
27	230	58	.00	.00	.00	.00	356	741	742	683	702	477
28	232	59	.00	.00	.00	.00	349	737	745	692	703	478
29	236	58	.00	.00	.00	.00	344	734	742	689	700	461
30	236	57	.00	.00	.00	.00	342	623	745	688	692	439
31	193	---	.00	.00	.00	.00	---	617	---	685	683	---
TOTAL	10270	3599	53.00	0.00	0.00	0.00	4235.00	19622	21724	21557	21462	17285
MEAN	331	120	1.71	.00	.00	.00	141	633	724	695	692	576
MAX	507	179	53	.00	.00	.00	362	741	747	746	710	677
MIN	193	57	.00	.00	.00	.00	.00	340	642	659	664	439
AC-FT	20370	7140	105	.0	.0	.0	8400	38920	43090	42760	42570	34280
CAL YR 1987	TOTAL	110029.00	MEAN	301	MAX	762	MIN	.00	AC-FT	218200		
WTR YR 1988	TOTAL	119807.00	MEAN	327	MAX	747	MIN	.00	AC-FT	237600		

BEAR RIVER BASIN

231

10126000 BEAR RIVER NEAR CORINNE, UT

LOCATION.--Lat 41°34'35", long 112°06'00", in NE¼SE¼NE¼ sec. 30, T. 10 N., R. 2 W., Box Elder County, Hydrologic Unit 16010204, on right bank 1.2 mi downstream from Salt Creek, 2.0 mi northeast of Corinne, and 2.8 mi downstream from Malad River.

DRAINAGE AREA.--7,029 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1949 to September 1957, October 1963 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,204.6 ft, unadjusted. Auxiliary nonrecording gage 7,800 ft downstream July 27, 1950 to Nov. 21, 1955.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by upstream reservoirs, power development, diversions for irrigation, and return flow from irrigated areas.

AVERAGE DISCHARGE.--33 years, 1,980 ft³/s, 1,435,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,770 ft³/s May 19, 1984, gage height, 17.50 ft; minimum daily, 72 ft³/s Aug. 20, 21, 26, Sept. 8, 1964, July 5, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,050 ft³/s Apr. 18; minimum daily discharge, 83 ft³/s Aug. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	702	798	910	1130	1160	1170	1280	1520	e133	e131	117	117
2	744	e185	958	1010	1120	1090	1100	1120	e138	128	112	120
3	742	1100	1180	1250	1180	1200	1360	1450	e141	138	152	116
4	e190	760	887	1230	1090	1220	1130	1050	e142	208	115	114
5	714	1020	1090	1260	1170	1210	1280	1360	e143	206	103	121
6	650	932	1230	1040	1180	1170	1220	1380	e148	145	123	128
7	694	926	917	1040	883	926	1230	1460	e147	113	119	136
8	685	1010	982	1270	954	1140	1100	1030	e146	108	116	136
9	e170	934	1120	1260	1250	1150	1660	e900	e146	113	110	137
10	750	1030	962	1290	1260	975	1540	e880	e150	119	105	147
11	e170	867	1050	1270	1260	888	1330	e830	e159	132	85	140
12	759	1000	863	1200	1050	1150	1380	e695	e152	121	83	136
13	877	1050	1070	899	1090	1190	1250	e590	e150	117	e88	144
14	907	1210	825	1010	1190	1050	1690	e515	e153	137	e95	161
15	932	976	952	1060	1300	1000	1270	e460	e148	119	e98	170
16	687	1240	1090	1220	1150	793	1690	e510	e149	113	e97	173
17	859	1080	1140	1160	1210	995	1230	e390	e150	113	e98	286
18	779	1090	1000	1190	1170	1020	2050	e485	e150	114	88	228
19	e170	1030	1130	1150	1120	988	1490	e375	e143	110	88	188
20	694	1160	955	1030	987	1210	1630	e420	e141	106	100	431
21	e170	1030	1110	1200	1130	980	1570	e450	e142	106	119	355
22	e170	1080	966	1100	819	1030	1650	e420	e140	108	102	274
23	e170	944	1070	961	1070	1200	1800	e350	e150	108	97	267
24	729	949	1030	1250	835	1100	1860	e280	e150	114	97	463
25	907	890	1200	980	1030	1090	1750	e148	e143	112	102	439
26	703	1060	978	1030	976	1260	1440	e140	e140	112	102	368
27	751	858	953	1210	1120	999	2040	e132	e140	141	104	380
28	e180	853	1130	1040	1020	1070	1890	e130	e138	126	102	492
29	1090	896	952	1060	1070	1470	1750	e134	e133	112	107	457
30	848	1060	1130	1190	---	1020	1900	e128	e131	105	109	641
31	826	---	960	1140	---	1290	---	e130	---	112	112	---
TOTAL	19419	29018	31790	35130	31844	34044	45560	19862	4336	3847	3245	7465
MEAN	626	967	1025	1133	1098	1098	1519	641	145	124	105	249
MAX	1090	1240	1230	1290	1300	1470	2050	1520	159	208	152	641
MIN	170	185	825	899	819	793	1100	128	131	105	83	114
AC-FT	38520	57560	63060	69680	63160	67530	90370	39400	8600	7630	6440	14810

CAL YR 1987 TOTAL 441151 MEAN 1209 MAX 2970 MIN 170 AC-FT 875000
WTR YR 1988 TOTAL 265560 MEAN 726 MAX 2050 MIN 83 AC-FT 526700

e Estimated

BEAR RIVER BASIN

10126000 BEAR RIVER NEAR CORINNE, UT--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1973 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1976 to September 1981.

WATER TEMPERATURES: October 1974 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 6,140 microsiemens July 5, 1979; minimum daily, 440 microsiemens May 25, 1978.

WATER TEMPERATURES: Maximum, 30.0°C July 27, 28, 1978; minimum, 0.0°C on many days during winter period each year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT , 1987											
06...	1020	703	1640	8.40	14.5	14.0	37	8.80	660	150	K560
MAR , 1988											
07...	1300	794	1570	8.30	5.0	4.5	32	10.3	660	K33	790
MAY											
03...	1015	1450	1190	8.60	13.5	12.0	60	8.80	655	K73	300
AUG											
17...	1006	85	4400	8.60	25.5	20.0	35	7.60	650	170	230

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3
OCT , 1987										
06...	340	65	42	210	56	5	17	4	340	285
MAR , 1988										
07...	360	77	40	190	52	4	18	--	368	302
MAY										
03...	290	64	32	130	48	3	12	7	308	264
AUG										
17...	420	71	59	710	77	15	41	16	356	318

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
OCT , 1987										
06...	65	360	0.3	16	926	949	1.26	1760	--	--
MAR , 1988										
07...	80	290	0.3	19	893	906	1.21	1910	1.08	0.02
MAY										
03...	52	200	0.3	13	676	663	0.92	2650	0.48	0.04
AUG										
17...	100	1300	0.5	18	2480	2490	3.37	569	0.90	0.06

K Results based on colony count outside acceptable range (non-ideal colony count).

BEAR RIVER BASIN

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10126000 BEAR RIVER NEAR CORINNE, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
OCT , 1987 06...	--	--	--	--	--	--	--	--	--	--
MAR , 1988 07...	1.10	0.21	0.23	0.3	0.59	0.8	0.11	0.10	0.07	0.21
MAY 03...	0.52	0.33	0.01	0.01	0.97	1.3	2.00	0.04	0.01	0.03
AUG 17...	0.96	0.03	0.06	0.08	1.8	1.8	0.08	0.04	0.06	0.18

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT , 1987 06...	1020	10	4	100	<0.5	<1	<1	<3	3	10	<5
MAR , 1988 07...	1300	40	6	96	<0.5	<1	<1	<3	2	45	<5
MAY 03...	1015	20	5	87	<0.5	<1	<1	<3	4	14	<5
AUG 17...	1006	20	12	150	<0.5	3	<1	<3	2	17	<5

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT , 1987 06...	150	3	0.1	<10	2	<1	<1.0	760	<6	5
MAR , 1988 07...	150	7	<0.1	<10	1	<1	<1.0	680	<6	6
MAY 03...	99	3	<0.1	<10	7	1	<1.0	540	<6	<3
AUG 17...	420	3	<0.1	<10	<1	<1	<1.0	1600	6	6

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SED. SUSP. SIEVE DIAM. PERCENT FINER THAN .062 MM	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
OCT , 1987 06...	1020	703	14.0	91	168	319
MAR , 1988 07...	1300	794	4.5	92	104	223

WEBER RIVER BASIN

10128500 WEBER RIVER NEAR OAKLEY, UT

LOCATION.--Lat 40°44'22", long 111°14'25", in SE¼NE¼NW¼ sec. 14, T. 1 S., R. 6 E., Summit County, Hydrologic Unit 16020101, on right bank 1.2 mi downstream from South Fork, 2.5 mi upstream from Weber-Provo diversion canal, and 3.5 mi northeast of Oakley.

DRAINAGE AREA.--162 mi².

PERIOD OF RECORD.--October 1904 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WSP 790: 1934. WSP 1394: 1907-09, 1911-12, 1921-22. WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,600 ft from topographic map. Prior to Oct. 25, 1933, staff gage at site 0.2 mi downstream at different datum. Oct. 25, 1933 to Aug. 29, 1955, water-stage recorder at present site at datum 0.5 ft higher. Aug. 29, 1955 to Oct. 27, 1981 at site 0.3 mi downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Several small diversions for irrigation above station. Flow slightly regulated by several small lakes on headwaters and a small reservoir on Smith and Morehouse Creek. Total capacity of lakes and reservoir, 3,400 acre-ft.

AVERAGE DISCHARGE.--84 years, 222 ft³/s, 160,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 4,170 ft³/s June 13, 1921, gage height, 9.0 ft, site and datum then in use, from rating curve extended above 2,000 ft³/s; minimum observed, 15 ft³/s Dec. 9, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 27	0100	*959	*7.64				

Minimum daily discharge, 38 ft³/s Dec. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	52	e50	e52	55	46	56	172	346	138	93	137
2	57	52	e49	e49	e54	45	59	158	321	139	87	139
3	58	52	e47	e52	e48	44	63	152	371	124	89	137
4	57	51	e47	e56	e50	44	83	148	643	119	90	138
5	56	52	e46	e58	e52	43	122	151	771	110	85	136
6	54	55	e47	e58	e54	46	129	159	626	103	84	134
7	52	54	e47	e59	e54	43	147	155	571	100	85	134
8	52	54	e44	e60	e52	40	154	154	518	112	82	133
9	53	52	e47	e62	e54	44	137	147	451	125	80	136
10	53	53	e47	53	54	44	107	141	386	128	78	136
11	53	52	e45	53	54	44	115	153	426	131	77	136
12	53	52	e40	e52	55	40	123	198	369	123	79	135
13	55	52	e38	54	54	43	120	290	274	114	e79	139
14	58	55	e40	54	53	42	132	372	264	107	e78	139
15	53	53	e42	53	56	44	144	483	244	115	e78	162
16	51	e53	e49	55	57	42	151	622	235	117	e77	204
17	52	53	e55	53	55	42	150	814	273	114	e77	200
18	52	e53	e58	54	55	40	150	752	252	114	e76	193
19	52	e45	e56	52	51	42	148	545	260	105	e76	188
20	53	e50	e54	54	55	45	144	407	218	101	e75	182
21	53	e52	e54	54	53	50	163	437	212	105	e75	171
22	53	e52	e58	54	53	56	158	553	189	100	e74	140
23	53	e49	e58	55	53	55	140	699	175	100	e74	77
24	54	e45	e54	53	52	56	138	731	160	101	e140	60
25	55	e48	e50	52	52	55	134	778	158	108	e140	55
26	52	e48	e52	56	43	59	121	833	162	121	e140	50
27	52	e46	e56	54	43	60	133	817	179	106	e140	47
28	52	e47	e56	54	46	56	137	749	178	107	e140	46
29	52	e48	e56	52	47	55	133	748	156	97	e140	45
30	55	e45	e56	54	---	57	145	598	147	95	e140	45
31	55	---	e54	56	---	56	---	470	---	96	138	---
TOTAL	1663	1525	1552	1687	1514	1478	3836	13586	9535	3475	2966	3774
MEAN	53.6	50.8	50.1	54.4	52.2	47.7	128	438	318	112	95.7	126
MAX	58	55	58	62	57	60	163	833	771	139	140	204
MIN	51	45	38	49	43	40	56	141	147	95	74	45
AC-FT	3300	3020	3080	3350	3000	2930	7610	26950	18910	6890	5880	7490

CAL YR 1987	TOTAL	50591	MEAN	139	MAX	905	MIN	38	AC-FT	100300
WTR YR 1988	TOTAL	46591	MEAN	127	MAX	833	MIN	38	AC-FT	92410

e Estimated

10129400 ROCKPORT RESERVOIR NEAR WANSHIP, UT

LOCATION.--Lat 40°47'25", long 111°24'12", in NW¼NW¼SE¼ sec. 29, T. 1 N., R. 5 E., Summit County, Hydrologic Unit 16020101, in powerhouse on downstream side of dam on Weber River, 1.2 mi south of Wanship and 1.2 mi upstream from Silver Creek.

DRAINAGE AREA.--334 mi².

PERIOD OF RECORD.--February 1957 to current year. Month-end contents only prior to October 1960, published in WSP 1734.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Mercury gage in powerhouse read once daily. Datum of gage is NGVD of 1929 (levels by Bureau of Reclamation).

REMARKS.--Reservoir is formed by earthfill rock-faced dam; storage began in fall of 1956; dam completed March 1957. Usable capacity, 60,860 acre-ft between elevation 5,930 ft (bottom of outlet tunnel) and 6,037 ft (top of spillway) above mean sea level. Dead storage, 1,260 acre-ft. Figures given herein represent usable contents. Water is used for irrigation, domestic, and industrial purposes.

COOPERATION.--Capacity table provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 65,030 acre-ft June 24, 27, 28, 1967 and June 12, 13, 1983, elevation, 6,040.8 ft; minimum observed since storage began, 152 acre-ft Sept. 10, 15, 1959, elevation, 5,931.2 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 60,000 acre-ft June 15-17, elevation, 6,036.2 ft; minimum observed, 21,450 acre-ft Jan. 25, elevation, 5,989.8 ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

5,989	20,970	6,005	31,800	6,025	48,720
5,990	21,580	6,010	35,660	6,030	53,600
5,995	24,730	6,015	39,760	6,035	58,730
6,000	28,150	6,020	44,110	6,037	60,860

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
INSTANTANEOUS OBSERVATIONS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34950	30980	28080	24800	22310	26750	33860	41990	54800	58100	48160	39920
2	34640	30910	28010	24670	22440	27030	34090	42250	55110	57990	47870	39760
3	34330	30760	27870	24470	22620	27380	34330	42510	55510	57890	47590	39590
4	34090	30610	27800	24340	22810	27660	34560	42780	56330	57680	47310	39420
5	33940	30540	27730	24210	23000	27940	34870	42950	57270	57370	47030	39170
6	33780	30460	27660	24080	23190	28220	35190	43220	57890	57060	46750	39000
7	33630	30390	27590	24080	23380	28430	35500	43480	58410	56850	46480	38830
8	33470	30390	27450	24020	23570	28650	35740	43750	58840	56540	46200	38590
9	33320	30310	27310	23890	23700	28790	35980	44020	59150	56230	45920	38420
10	33170	30170	27240	23760	23820	28930	36300	44200	59260	56030	45650	38250
11	33090	30100	27170	23630	23950	29080	36540	44380	59580	55820	45380	38250
12	32940	30020	27100	23500	24080	29220	36790	44560	59680	55510	45010	38010
13	32860	29880	26960	23310	24210	29370	37030	44560	59790	55310	44650	37760
14	32780	29800	26820	23120	24340	29510	37270	44650	59900	54910	44290	37680
15	32710	29730	26620	23000	24540	29580	37520	45010	60000	54600	43930	37430
16	32630	29660	26480	22810	24670	29730	37760	45380	60000	54200	43660	37350
17	32560	29510	26340	22680	24800	29880	38010	45650	60000	53800	43400	37270
18	32400	29370	26200	22500	24930	30100	38250	46020	59900	53500	43040	37190
19	32250	29300	26070	22310	25060	30310	38500	46290	59680	53100	42690	37110
20	32100	29220	25930	22190	25200	30540	38750	46480	59580	52700	42340	37030
21	32030	29150	25870	22000	25330	31050	39000	46660	59470	52310	42160	36950
22	31950	29080	25730	21880	25460	31430	39340	46940	59370	51910	41900	36950
23	31880	28930	25660	21760	25600	31800	39670	47310	59150	51520	41640	36790
24	31800	28860	25530	21580	25730	32100	40010	48160	58940	51130	41380	36540
25	31730	28790	25530	21450	25870	32400	40350	49200	58840	50740	41210	36220
26	31580	28650	25460	21510	26000	32780	40690	50260	58620	50450	41030	35980
27	31430	28510	25330	21640	26140	33010	40950	51320	58620	50060	40860	35660
28	31350	28430	25260	21820	26270	33170	41210	52310	58520	49680	40690	35350
29	31280	28290	25200	21940	26480	33320	41460	53300	58410	49290	40520	35030
30	31200	28220	25060	22060	---	33550	41730	54000	58310	48820	40350	34790
31	31130	---	24930	22190	---	33700	---	54400	---	48440	40090	---
MAX	34950	30980	28080	24800	26480	33700	41730	54400	60000	58100	48160	39920
MIN	31130	28220	24930	21450	22310	26750	33860	41990	54800	48440	40090	34790
(#)	6004.1	6000.1	5995.3	5991.0	5997.6	6007.5	6017.3	6030.8	6034.6	6024.7	6015.4	6008.9
(*)	-4140	-2910	-3290	-2740	+4290	+7220	+8030	+12670	+3910	-9870	-8350	-5300

CAL YR 1987 (*) -22190
WTR YR 1988 (*) - 480

(#) Elevation, in feet, at end of month.
(*) Change in contents, in acre-feet.

WEBER RIVER BASIN

10130500 WEBER RIVER NEAR COALVILLE, UT

LOCATION.--Lat 40°53'43", long 111°24'04", in NE¼SW¼NE¼ sec. 20, T. 2 N., R. 5 E., Summit County, Hydrologic Unit 16020101, on left bank 1.2 mi upstream from high-water line of Echo Reservoir, 1.4 mi south of Coalville, 1.7 mi upstream from Chalk Creek, and 5.5 mi downstream from Silver Creek.

DRAINAGE AREA.--435 mi².

PERIOD OF RECORD.--April 1927 to current year.

REVISED RECORDS.--WSP 1314: 1943(M). WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,600 ft from topographic map. Prior to Mar. 22, 1931, non-recording gage, Mar. 22, 1931 to July 18, 1967, water-stage recorder at same site at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Many diversions for irrigation above station. No diversion between station and Echo Reservoir. Records do not include water diverted from Weber River basin through Weber-Provo diversion canal. Flow regulated by several small reservoirs above station, and since Apr. 1, 1957, by Rockport Reservoir (see station 10129400).

AVERAGE DISCHARGE.--57 years, 214 ft³/s, 155,000 acre-ft/yr, since completion of Weber-Provo diversion canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,190 ft³/s May 6, 1952; maximum gage height, 5.08 ft (present datum) May 29, 1951; minimum, 6 ft³/s Sept. 20, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 282 ft³/s July 26, gage height, 2.36 ft; minimum, 11 ft³/s May 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	207	151	148	e150	32	48	38	41	88	176	227	191
2	207	154	152	e148	e32	47	43	40	83	169	193	194
3	206	153	157	e142	e30	45	47	41	75	159	204	206
4	203	152	158	e150	e29	47	48	38	72	164	202	196
5	173	154	157	e152	e28	48	47	32	72	163	201	197
6	131	162	159	e154	e28	48	45	28	69	159	189	193
7	131	158	159	e152	e29	44	48	21	68	167	203	195
8	128	157	156	e113	e30	41	49	21	69	173	194	194
9	126	154	157	e146	32	41	42	20	74	172	198	191
10	128	157	e156	e151	33	39	41	17	73	170	195	192
11	126	156	e155	e154	31	37	42	17	71	160	185	192
12	126	154	e155	e150	33	37	44	14	72	163	188	190
13	144	153	e158	e143	e32	39	42	28	76	170	186	201
14	160	158	e155	e147	e31	37	42	73	79	191	188	202
15	146	156	e154	e150	e31	35	41	83	77	216	192	203
16	142	154	153	e148	e31	34	41	86	81	225	186	199
17	139	156	153	e143	e32	34	40	69	95	227	180	197
18	138	152	154	e143	e32	34	40	78	159	240	181	198
19	143	151	154	e142	e31	35	39	74	171	233	182	164
20	142	152	e154	e141	e32	39	38	74	181	239	189	199
21	141	152	e140	e142	e31	52	44	71	172	241	191	200
22	145	152	e116	e145	31	70	45	71	171	235	190	146
23	148	151	152	e146	32	55	43	73	175	240	189	192
24	148	150	121	e149	33	50	44	67	177	256	182	200
25	147	152	e150	e150	33	48	50	68	180	259	187	204
26	147	152	103	e148	35	70	49	68	188	267	175	202
27	146	150	e140	44	37	70	47	67	183	242	188	200
28	147	150	e142	48	52	50	43	68	180	251	192	201
29	149	151	e142	40	47	42	41	69	173	246	194	196
30	154	149	e150	33	---	40	39	81	182	252	191	193
31	154	---	e146	32	---	37	---	87	---	258	188	---
TOTAL	4672	4603	4606	3996	950	1393	1302	1685	3586	6483	5930	5828
MEAN	151	153	149	129	32.8	44.9	43.4	54.4	120	209	191	194
MAX	207	162	159	154	52	70	50	87	188	267	227	206
MIN	126	149	103	32	28	34	38	14	68	159	175	146
AC-FT	9270	9130	9140	7930	1880	2760	2580	3340	7110	12860	11760	11560

CAL YR 1987 TOTAL 61472 MEAN 168 MAX 300 MIN 30 AC-FT 121900
WTR YR 1988 TOTAL 45034 MEAN 123 MAX 267 MIN 14 AC-FT 89320

e Estimated

WEBER RIVER BASIN

237

10131000 CHALK CREEK AT COALVILLE, UT

LOCATION.--Lat 40°55'14", long 111°24'03", in NW¼NE¼SE¼ sec. 8, T. 2 N., R. 5 E., Summit County, Hydrologic Unit 16020101, on left bank 100 ft downstream from bridge on U.S. Highway 189 in Coalville and 0.3 mi upstream from mouth.

DRAINAGE AREA.--250 mi².

PERIOD OF RECORD.--November 1904, March to November 1905, April 1927 to current year.

REVISED RECORDS.--WSP 1564: 1929. WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,560.6 ft NGVD of 1929. Prior to Feb. 13, 1931, nonrecording gage at site 100 ft upstream at different datum. Feb. 13, 1931 to Oct. 15, 1941, water-stage recorder at site 300 ft upstream at different datum. Oct. 16, 1941 to Sept. 30, 1987 at datum 3.0 ft lower.

REMARKS.--No estimated daily discharges. Records good. Diversions above station used for irrigation of land in the drainage basin above the station. Flow slightly affected by Chalk Creek Reservoir, capacity, 1,600 acre-ft.

AVERAGE DISCHARGE.--61 years, 69.5 ft³/s, 50,350 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,570 ft³/s June 1, 1983, gage height, 5.26 ft; minimum, less than 1.0 ft/s for several days in 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 18	0800	*199	*4.17				

Minimum discharge, 4.5 ft³/s Mar. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	22	21	19	19	44	24	84	89	21	9.1	10
2	13	21	26	17	18	38	25	89	84	19	9.7	11
3	14	20	25	17	17	39	30	93	79	17	13	10
4	13	20	25	17	18	38	36	96	75	18	17	10
5	14	20	26	17	18	35	42	93	72	21	14	11
6	14	21	26	17	18	41	50	92	66	19	14	11
7	14	21	28	18	19	31	57	83	56	15	15	10
8	15	19	17	19	19	28	65	78	50	14	15	10
9	13	18	26	19	19	33	58	82	48	16	14	11
10	12	20	29	19	19	30	51	70	46	15	12	11
11	10	21	34	19	20	28	53	61	42	12	10	11
12	9.1	19	15	17	18	21	56	78	38	11	9.8	11
13	14	20	8.3	17	18	25	60	100	42	11	9.8	11
14	22	23	10	20	18	25	65	131	38	11	10	13
15	18	22	14	21	20	29	67	119	38	9.4	8.9	13
16	18	17	15	19	20	22	71	141	34	8.9	9.9	12
17	17	22	16	20	16	21	74	179	31	8.9	10	10
18	15	11	18	19	19	21	77	193	30	8.6	10	9.1
19	16	16	20	18	18	26	79	158	28	9.6	9.7	9.6
20	17	20	19	17	19	34	75	129	36	8.4	9.8	9.4
21	17	22	19	18	18	46	72	114	37	8.1	9.3	9.3
22	17	23	20	18	20	50	79	119	35	7.5	8.9	9.8
23	18	20	19	18	19	36	76	120	34	6.5	8.7	10
24	19	19	17	17	19	33	74	119	30	6.3	8.2	10
25	20	24	18	17	21	35	78	117	23	6.6	8.2	9.5
26	21	21	17	17	23	39	72	107	24	6.9	8.5	11
27	18	14	17	17	25	47	71	109	22	6.3	9.1	11
28	18	17	18	17	38	52	71	98	28	7.2	11	11
29	20	21	17	18	42	36	74	98	26	7.5	12	9.3
30	21	18	17	18	---	33	76	107	23	7.7	11	9.4
31	23	---	18	20	---	29	---	96	---	9.2	10	---
TOTAL	506.1	592	615.3	561	595	1045	1858	3353	1304	353.6	335.6	314.4
MEAN	16.3	19.7	19.8	18.1	20.5	33.7	61.9	108	43.5	11.4	10.8	10.5
MAX	23	24	34	21	42	52	79	193	89	21	17	13
MIN	9.1	11	8.3	17	16	21	24	61	22	6.3	8.2	9.1
AC-FT	1000	1170	1220	1110	1180	2070	3690	6650	2590	701	666	624

CAL YR 1987	TOTAL	16164.0	MEAN	44.3	MAX	193	MIN	8.3	AC-FT	32060
WTR YR 1988	TOTAL	11433.0	MEAN	31.2	MAX	193	MIN	6.3	AC-FT	22680

WEBER RIVER BASIN

10131500 ECHO RESERVOIR AT ECHO, UT

LOCATION.--Lat 40°57'50", long 111°25'55", in NE¼NW¼SW¼ sec. 30, T. 3 N., R. 5 E., Summit County, Hydrologic Unit 16020101, near outlet works at left end of Echo Dam on Weber River, 1.1 mi southeast of Echo.

DRAINAGE AREA.--726 mi².

PERIOD OF RECORD.--October 1930 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Staff gage on left side of dam read once daily. Datum of gage is NGVD of 1929 (levels by Bureau of Reclamation). Prior to 1932, elevations obtained from mercury gage in valve house and staff gage.

REMARKS.--Reservoir is formed by earthfill, rock-faced dam; storage began in October 1930; dam completed in 1931. Capacity, 73,940 acre-ft between elevation 5,450 ft (bottom of outlet tunnel) and 5,560 ft (top of radial gages in spillway) above mean sea level. Dead storage negligible. Figures given herein represent total contents. Water is used for irrigation of the Echo Project.

COOPERATION.--Capacity table provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 75,420 acre-ft June 13, 1983, elevation, 5,561.0 ft; no contents Sept. 12 to Dec. 3, 1931, Sept. 24 to Nov. 2, 1934, Oct. 12 to Nov. 21, 1944, Oct. 1 to Nov. 15, 1954, Sept. 11-20, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 73,500 acre-ft May 21-23, elevation, 5,559.7 ft; minimum, 6,689 acre-ft Sept. 20, elevation, 5,489.9 ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

5,489	6,299	5,515	22,390	5,540	47,200
5,495	9,107	5,520	26,620	5,545	53,360
5,500	11,830	5,525	31,180	5,550	59,880
5,505	14,920	5,530	36,100	5,555	66,740
5,510	18,480	5,535	41,440	5,560	73,940

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
INSTANTANEOUS OBSERVATIONS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17080	21750	33100	43120	53740	57360	62860	69580	70440	51850	30330	11370
2	17010	22150	33490	43580	53870	57620	62990	69870	70590	51100	29680	11030
3	16940	22560	33890	43810	54000	57760	63130	70150	70730	50360	28760	10640
4	16870	23050	34280	44270	54120	58020	63400	70440	70730	49620	28040	10320
5	16720	23460	34680	44730	54250	58150	63680	70730	70440	49010	27590	9995
6	16580	23630	35080	45080	54380	58280	63950	70880	69870	48400	27150	9677
7	16300	24040	35490	45540	54380	58550	64230	71160	69290	47680	26620	9366
8	16090	24470	35900	45900	54640	58810	64510	71310	68720	46840	26100	9057
9	15880	24800	36200	46250	54640	58810	64650	71600	68010	46010	25580	8705
10	15600	25230	36520	46720	54890	59080	64780	71750	67300	45190	24890	8311
11	15330	25660	36930	47320	55020	59210	65060	71890	66600	44380	24210	7972
12	15130	26010	37240	47680	55150	59340	65200	71890	65900	43580	23630	7735
13	15060	26360	37660	48040	55280	59480	65340	71890	65200	42780	23050	7456
14	15200	26710	38080	48400	55410	59610	65620	71890	64650	42000	22470	7225
15	15400	27060	38400	48770	55410	59610	65760	72040	63950	41330	21830	7225
16	15600	27500	38720	49130	55540	59740	65900	72180	63270	40660	21030	7225
17	15880	27950	39040	49500	55670	59880	66180	72180	62310	40010	20170	7179
18	16160	28310	39360	49870	55670	60150	66460	72470	61490	39360	19320	7000
19	16510	28760	39680	50240	55920	60150	66600	72920	60820	38720	18560	6821
20	16870	29130	40010	50610	55920	60410	66880	73360	60150	38180	17810	6689
21	17230	29400	40330	50980	56060	60410	67020	73500	59480	37550	17080	6732
22	17670	29770	40660	51350	56190	60680	67440	73500	58810	36820	16370	6777
23	18040	30140	40880	51720	56320	60950	67590	73500	57890	36100	15670	6777
24	18410	30610	41110	51970	56450	61220	67870	73360	57100	35290	15130	6866
25	18790	31080	41220	52350	56580	61490	68150	73060	56320	34480	14470	6911
26	19240	31460	41440	52730	56710	61630	68440	72770	55540	33890	13820	6911
27	19700	31840	41660	53110	56710	61900	68720	72180	54890	33300	13320	6866
28	20090	32130	41880	53230	56970	62040	68860	71600	54120	32710	12830	6821
29	20480	32520	42110	53360	57230	62310	69010	71020	53360	32130	12470	6732
30	20870	32810	42440	53490	---	62580	69290	70590	52600	31560	12120	6732
31	21350	---	42780	53620	---	62720	---	70440	---	30990	11710	---
MAX	21350	32810	42780	53620	57230	62720	69290	73500	70730	51850	30330	11370
MIN	15060	21750	33100	43120	53740	57360	62860	69580	52600	30990	11710	6689
(#)	5513.7	5526.7	5536.2	5545.2	5548.0	5552.1	5556.8	5557.6	5544.4	5524.8	5499.8	5490.0
(*)	+4050	+11460	+9970	+10840	+3610	+5490	+6570	+1150	-17840	-21610	-19280	-4978

CAL YR 1987 (*) -19660
WTR YR 1988 (*) -10568

(#) Elevation, in feet, at end of month.
(*) Change in contents, in acre-feet.

WEBER RIVER BASIN

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10132490 LOST CREEK RESERVOIR NEAR CROYDON, UT

LOCATION.--Lat 41°11'05", long 111°23'59", in NW¼SE¼NE¼ sec. 8, T. 5 N., R. 5 E., Morgan County, Hydrologic Unit 16020101, 1.9 mi upstream from Hell Canyon and 8.1 mi northeast of Croydon.

DRAINAGE AREA.--123 mi².

PERIOD OF RECORD.--April 1967 to current year.

GAGE.--Indicating float tape in gage house on top of dam. Datum of gage is NGVD of 1929 (levels by Bureau of Reclamation).

REMARKS.--Reservoir is formed by earthfill rock-faced dam; active storage began Apr. 22, 1967. Active capacity, 20,010 acre-ft at elevation 6,005.0 ft above mean sea level. Dead storage, 2,500 acre-ft between elevation 5,835.0 ft (streambed at dam axis) and 5,912.3 ft (top of dead storage). Figures given herein represent active contents. Water is used for irrigation, fish and wildlife propagation along Lost Creek, and irrigation, municipal, and industrial use below confluence of Lost Creek and Weber River.

COOPERATION.--Gage-height record and capacity table provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 21,270 acre-ft, May 30, June 1, 1983; elevation, 6,008.4 ft. Minimum since original filling of reservoir, 4,390 acre-ft Feb. 26, 29, 1984, elevation, 5,946.1 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 18,080 acre-ft May 26; elevation, 5,999.6 ft; minimum contents observed, 12,130 acre-ft Sept. 30; elevation, 5,980.8 ft.

MONTHEND ELEVATION, IN FEET, AND CONTENTS AT 2400, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	5,986.6	13,840	--
Oct. 31	5,986.4	13,770	-70
Nov. 30	5,987.0	13,960	+190
Dec. 31	5,987.8	14,210	+250
CAL YR 1987	--	--	+500
Jan. 31	5,989.0	14,580	+370
Feb. 29	5,990.1	14,920	+340
Mar. 31	5,991.9	15,500	+580
Apr. 30	5,996.1	16,870	+1370
May 31	5,999.5	18,040	+1170
June 30	5,996.3	16,940	-1100
July 31	5,988.7	14,490	-2450
Aug. 31	5,983.8	13,000	-1490
Sept. 30	5,980.8	12,130	-870
WTR YR 1988	--	--	-1710

* No gage reading, contents interpolated.

WEBER RIVER BASIN

10134000 EAST CANYON RESERVOIR NEAR MORGAN, UT

LOCATION.--Lat 40°55'14", long 111°35'59", in NE¼SE¼NW¼ sec. 10, T. 2 N., R. 3 E., Morgan County, Hydrologic Unit 16020102, on upstream face of concrete dam on East Canyon Creek, 9.0 mi southeast of Morgan.

DRAINAGE AREA.--144 mi².

PERIOD OF RECORD.--October 1931 to current year. October 1931 to September 1937, month-end contents only published in WSP 1314.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Elevations determined from direct readings on upstream face of dam on days shown. Datum of gage is NGVD of 1929 (levels by Bureau of Reclamation). Prior to Oct. 1, 1953, staff gage at site 500 ft east of dam and Oct. 1, 1953 to Sept. 30, 1964, tape gage on upstream face of dam then in use at different datum. Oct. 1, 1964 to Sept. 30, 1965, temporary reference marks at present datum set by Bureau of Reclamation.

REMARKS.--Reservoir was formed in 1896 by a 58-ft rockfill dam, capacity, 3,850 acre-ft, which was raised 25 ft in 1900, capacity, 9,000 acre-ft, raised 12 ft more in 1902, capacity, 14,000 acre-ft, was replaced in 1917 by concrete dam which formed a reservoir having a capacity of 25,790 acre-ft (revised), and was replaced in 1966 by present concrete thin-arch dam which forms a reservoir having an active capacity of 48,110 acre-ft between elevation 5,577.0 ft and 5,705.0 ft. Dead storage, 3,090 acre-ft. Figures given herein represent active contents. Water is used for irrigation in Morgan, Davis, and Weber Counties.

COOPERATION.--Capacity table provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 49,840 acre-ft June 1, 1983, elevation, 5,707.5 ft; no contents at times in 1931, 1934, 1937, 1946, 1954, 1961, 1965, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 40,800 acre-ft May 31, June 2, 4, 6, elevation, 5,693.8 ft; minimum observed, 25,100 acre-ft Oct. 13, 14, elevation, 5,664.9 ft.

MONTHEND ELEVATION, IN FEET, AND INSTANTANEOUS CONTENTS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	5,665.8	25,530	--
Oct. 31	5,666.8	26,000	+470
Nov. 30	5,669.9	27,500	+1500
Dec. 31	5,672.7	28,900	+1400
CAL YR 1987	--	--	-9390
Jan. 31	--	*30,440	+1540
Feb. 29	5,678.6	31,980	+1540
Mar. 31	--	*35,070	+3090
Apr. 30	5,690.1	38,530	+3460
May 31	5,693.8	40,800	+2270
June 30	--	*37,210	-3590
July 31	--	*30,810	-6400
Aug. 31	--	*27,650	-3160
Sept. 30	--	*25,720	-1930
WTR YR 1988	--	--	+190

* No gage reading, contents interpolated.

WEBER RIVER BASIN

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10134500 EAST CANYON CREEK NEAR MORGAN, UT

LOCATION.--Lat 40°55'21", long 111°36'23", in SW¼NW¼NW¼ sec. 10, T. 2 N., R. 3 E., Morgan County, Hydrologic Unit 16020102, on right bank 2,500 ft downstream from East Canyon Dam, 2.4 mi upstream from Sheep Canyon, and 8.7 mi southeast of Morgan.

DRAINAGE AREA.--144 mi².

PERIOD OF RECORD.--October 1931 to current year. Monthly discharge only prior to October 1937, published in WSP 1314.

GAGE.--Water-stage recorder and Lyman rectangular weir. Altitude of gage is 5,460 ft from river-profile map.

REVISED RECORDS.--WSP 1634, WDR UT-77-1: Drainage area.

REMARKS.--No estimated daily discharges. Records good. No diversions between station and East Canyon Reservoir (see preceding page), which completely regulates flow.

AVERAGE DISCHARGE.--57 years, 58.3 ft³/s, 42,240 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 872 ft³/s May 4, 1952, gage height, 3.49 ft; minimum daily, 0.2 ft³/s Dec. 19, 29, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 132 ft³/s June 30, July 1; minimum daily discharge, 3.8 ft³/s Dec. 16.

DISCHARGE, IN CUB'IC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	4.5	4.0	4.0	4.0	4.6	5.3	6.5	28	132	59	37
2	37	4.2	4.0	4.0	4.0	4.6	5.6	6.5	28	130	59	37
3	37	4.0	4.0	4.0	4.0	4.6	5.7	6.5	28	129	58	37
4	37	4.0	4.0	4.0	4.0	4.6	5.7	6.5	28	129	58	38
5	37	4.0	4.0	4.0	4.0	4.6	5.3	6.5	28	129	58	35
6	37	4.0	4.0	4.0	4.0	4.6	5.3	6.5	34	129	54	33
7	37	4.0	4.0	4.0	4.0	4.6	5.5	6.5	37	128	51	33
8	37	4.0	4.0	4.0	4.0	4.6	5.8	6.5	37	128	51	37
9	37	4.0	4.0	4.0	4.0	4.6	5.6	6.5	37	128	51	40
10	37	4.0	4.0	4.0	4.1	4.6	5.7	6.5	37	128	51	40
11	37	4.0	3.9	4.0	4.0	4.6	5.8	6.5	57	112	51	40
12	37	4.0	4.0	4.0	4.0	4.6	5.8	6.5	65	104	51	40
13	29	4.0	3.9	4.0	4.1	4.6	5.8	6.5	65	104	51	40
14	11	4.0	4.0	4.0	4.1	4.6	5.8	6.5	65	104	51	40
15	4.6	4.0	4.0	4.0	4.3	4.6	5.8	6.5	65	104	51	41
16	4.6	4.0	3.8	4.0	4.3	4.6	5.8	6.5	65	104	51	41
17	4.6	4.0	3.9	4.0	4.5	4.7	5.8	6.6	65	104	51	41
18	4.6	4.0	4.0	4.0	4.5	4.9	5.8	6.5	95	104	50	41
19	4.6	4.0	4.0	4.0	4.5	5.1	5.8	6.5	108	104	49	41
20	4.6	4.0	4.0	4.0	4.5	5.2	5.8	6.5	107	104	49	41
21	4.3	4.0	4.0	4.0	4.5	5.2	5.8	6.8	108	103	49	41
22	4.4	4.0	4.0	4.0	4.6	5.2	5.8	7.0	107	103	47	41
23	4.6	4.0	4.0	4.0	4.6	5.2	5.8	7.2	106	84	46	41
24	4.6	4.0	4.0	4.0	4.6	5.2	5.8	7.1	106	75	46	41
25	4.6	4.0	4.0	4.0	4.6	5.2	5.8	7.2	122	75	45	41
26	4.5	4.0	4.0	4.0	4.6	5.2	5.7	8.6	129	75	43	41
27	4.5	4.0	4.0	4.0	4.6	5.2	5.8	17	131	75	38	40
28	4.6	4.0	4.0	4.0	4.6	5.3	6.2	28	131	75	38	40
29	4.6	4.0	4.0	4.0	4.6	5.2	6.4	28	131	74	38	40
30	4.6	4.0	4.0	4.0	---	5.4	6.5	28	132	64	37	40
31	4.4	---	4.0	4.0	---	5.2	---	28	---	59	37	---
TOTAL	561.3	120.7	123.5	124.0	124.2	151.0	173.1	303.0	2282	3200	1519	1179
MEAN	18.1	4.02	3.98	4.00	4.28	4.87	5.77	9.77	76.1	103	49.0	39.3
MAX	37	4.5	4.0	4.0	4.6	5.4	6.5	28	132	132	59	41
MIN	4.3	4.0	3.8	4.0	4.0	4.6	5.3	6.5	28	59	37	33
AC-FT	1110	239	245	246	246	300	343	601	4530	6350	3010	2340
CAL YR 1987	TOTAL	20476.6	MEAN	56.1	MAX	201	MIN	3.8	AC-FT	40620		
WTR YR 1988	TOTAL	9860.8	MEAN	26.9	MAX	132	MIN	3.8	AC-FT	19560		

WEBER RIVER BASIN

10136500 WEBER RIVER AT GATEWAY, UT

LOCATION.--Lat 41°08'13", long 111°49'54", in NE¼SW¼SW¼ sec. 27, T. 5 N., R. 1 E., Morgan County, Hydrologic Unit 16020102, on left bank 400 ft downstream from tailrace of Gateway powerplant, 500 ft upstream from Union Pacific Railroad bridge, 1,200 ft downstream from Strawberry Creek, and 3,200 ft east of section house at Gateway.

DRAINAGE AREA.--1,627 mi².

PERIOD OF RECORD.--November 1889 to June 1893, July to December 1893 (gage heights only), August 1894 to September 1899, August to November 1900, January to October 1901, April to June 1903 (gage heights and discharge measurements only), July to August 1919, August 1920 to current year. Monthly discharge only for some periods, published in WSP 1314. Published as "near Uinta" 1889-1903.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,800 ft by barometer. Oct. 13, 1889 to July 11, 1903, nonrecording gage at site 1.2 mi downstream at different datum. June 22, 1919 to Oct. 22, 1929, water-stage recorder at site 900 ft upstream at different datum. Oct. 22, 1929 to Nov. 27, 1964, at sites 1,300 ft downstream at different datums.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Many diversions for irrigation above and below station. Water diverted above station by Gateway Canal since July 1957, part of which returns to river above station through tailrace of Gateway hydroelectric powerplant. Flow regulated by Rockport, Echo, Lost Creek, and East Canyon Reservoirs (see stations 10129400, 10131500, 10132490, and 10134000).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 7,980 ft³/s May 31, 1896; minimum observed, 33 ft³/s Feb. 3, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 550 ft³/s July 1, gage height, 2.45 ft; minimum daily discharge, 54 ft³/s Jan. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	288	108	91	e58	65	e160	148	355	297	471	399	234
2	268	101	97	e56	65	e190	162	324	250	467	423	211
3	272	97	98	e61	62	207	203	284	221	409	435	213
4	255	100	93	e67	61	194	227	254	165	390	442	221
5	220	96	94	e64	59	173	223	228	240	361	339	224
6	204	93	94	e61	58	197	209	212	291	367	341	220
7	214	102	97	e61	58	201	206	257	307	387	360	231
8	233	99	96	e64	57	162	230	269	307	383	417	238
9	253	97	95	e66	57	154	198	265	315	413	348	230
10	238	99	90	e65	73	149	197	258	367	403	304	239
11	214	101	100	e58	78	141	199	246	385	397	373	283
12	200	95	93	e60	77	129	187	223	365	406	416	307
13	232	85	82	57	78	125	188	243	380	400	395	315
14	273	99	70	54	74	126	202	275	345	384	374	310
15	211	93	76	56	71	128	216	281	368	356	377	259
16	215	126	75	55	e70	121	235	e267	355	354	366	214
17	165	123	80	56	e64	119	247	351	364	352	352	220
18	148	117	86	59	e66	113	238	510	428	376	395	225
19	141	114	86	58	e70	116	222	417	407	368	375	258
20	134	119	85	66	e70	131	209	326	383	372	360	219
21	128	121	67	67	e76	172	193	293	371	399	378	225
22	122	123	71	68	e82	220	250	279	381	414	401	225
23	120	119	84	68	e80	198	287	272	409	435	379	185
24	119	119	e76	66	e83	182	273	286	424	428	330	141
25	120	93	e63	66	e87	168	314	317	384	420	326	127
26	112	95	e68	66	e90	188	266	336	388	391	347	132
27	113	102	e72	65	e96	204	232	322	455	391	350	135
28	107	99	e68	64	e110	189	241	326	447	460	298	158
29	105	98	e67	60	e130	160	274	390	419	464	245	166
30	109	92	e72	66	---	162	334	479	429	414	226	120
31	109	---	e65	67	---	151	---	399	---	354	240	---
TOTAL	5642	3125	2551	1925	2167	5030	6810	9544	10647	12386	11111	6485
MEAN	182	104	82.3	62.1	74.7	162	227	308	355	400	358	216
MAX	288	126	100	68	130	220	334	510	455	471	442	315
MIN	105	85	63	54	57	113	148	212	165	352	226	120
AC-FT	11190	6200	5060	3820	4300	9980	13510	18930	21120	24570	22040	12860
CAL YR 1987	TOTAL	130240	MEAN	357	MAX	780	MIN	63	AC-FT	258300		
WTR YR 1988	TOTAL	77423	MEAN	212	MAX	510	MIN	54	AC-FT	153600		

e Estimated

WEBER RIVER BASIN

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10137500 SOUTH FORK OGDEN RIVER NEAR HUNTSVILLE, UT

LOCATION.--Lat $41^{\circ}16'07''$, long $111^{\circ}40'24''$, in SE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 12, T. 6 N., R. 2 E., Weber County, Hydrologic Unit 16020102, on right bank 0.5 mi downstream from Maggie Creek, 0.5 mi upstream from Huntsville Mountain Canal, 5.0 mi downstream from Causey Dam, and 5.0 mi east of Huntsville.

DRAINAGE AREA.--137 mi².

PERIOD OF RECORD.--March 1921 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,190 ft by barometer. Prior to Aug. 14, 1934, at site 300 ft upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. One small diversion above station. Flow regulated by Causey Reservoir since Jan. 4, 1966.

AVERAGE DISCHARGE.--67 years, 116 ft³/s, 84,040 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,890 ft³/s May 3, 1952, gage height, 5.98 ft; minimum, 9 ft³/s Feb. 28, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 226 ft³/s May 14, gage height, 2.49 ft; minimum daily discharge, 17 ft³/s Nov. 8-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	e22	e34	35	e35	42	44	91	83	96	75	43
2	44	e19	e35	e32	35	44	45	86	78	93	73	43
3	44	e18	e34	e33	e34	44	48	154	74	92	74	43
4	44	e18	e35	e33	e34	45	50	154	72	90	75	43
5	41	e18	e35	e34	e33	44	51	152	68	93	74	42
6	39	e18	e34	35	e33	47	50	154	67	92	70	41
7	38	e18	e34	35	e34	45	59	165	65	77	64	39
8	38	e17	e35	35	34	43	59	156	72	68	64	39
9	38	e17	e34	35	34	43	53	151	77	72	62	39
10	38	e17	e35	35	35	43	52	148	75	75	58	39
11	39	e17	e35	36	35	41	53	151	74	72	56	40
12	40	e18	e34	35	35	40	55	172	74	70	56	40
13	43	e18	e33	e34	35	40	55	200	74	68	56	39
14	43	e19	e34	35	34	39	61	212	74	67	56	38
15	41	e18	e33	35	34	40	61	204	67	66	56	38
16	41	e18	e32	e34	34	39	63	195	64	66	56	38
17	41	e19	e33	35	e33	39	66	198	64	66	50	37
18	41	e21	e34	35	34	39	65	197	72	66	45	36
19	41	e22	35	e34	34	41	61	176	77	67	44	36
20	41	e23	36	e33	34	43	58	158	77	68	44	37
21	39	e23	35	35	34	46	64	144	78	67	44	37
22	37	e22	36	e34	35	48	73	134	77	69	44	38
23	37	e22	35	35	35	46	73	125	77	70	44	37
24	37	e24	e34	35	36	49	84	120	77	72	44	37
25	37	e27	e34	e34	37	48	94	114	77	75	44	36
26	36	e32	e33	e33	37	50	89	108	74	75	44	34
27	30	e34	e33	35	38	53	93	102	78	78	43	35
28	30	e36	e34	35	39	49	102	96	89	78	43	35
29	e27	e34	e33	35	41	49	98	93	96	76	43	35
30	e26	e33	e34	e34	---	44	97	95	97	76	43	35
31	e24	---	35	35	---	45	---	91	---	75	43	---
TOTAL	1179	662	1060	1068	1015	1368	1976	4496	2268	2335	1687	1149
MEAN	38.0	22.1	34.2	34.5	35.0	44.1	65.9	145	75.6	75.3	54.4	38.3
MAX	44	36	36	36	41	53	102	212	97	96	75	43
MIN	24	17	32	32	33	39	44	86	64	66	43	34
AC-FT	2340	1310	2100	2120	2010	2710	3920	8920	4500	4630	3350	2280
CAL YR 1987	TOTAL	23508	MEAN	64.4	MAX	231	MIN	17	AC-FT	46630		
WTR YR 1988	TOTAL	20263	MEAN	55.4	MAX	212	MIN	17	AC-FT	40190		

e Estimated

WEBER RIVER BASIN

10139300 WHEELER CREEK NEAR HUNTSVILLE, UT

LOCATION.--Lat $41^{\circ}15'14''$, long $111^{\circ}50'32''$, in SW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 6 N., R. 1 E., Weber County, Hydrologic Unit 16020102, on right bank 150 ft upstream from mouth, 150 ft downstream from culvert under State Highway 39, 250 ft downstream from Pine View Dam on Ogden River, 3.8 mi west of Huntsville, and 7.2 mi east of Ogden.

DRAINAGE AREA.--11.1 mi².

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,800 ft from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Records do not include 542 acre-feet diverted above gage by Ogden City Water Department.

AVERAGE DISCHARGE.--30 years, 10.7 ft³/s, 7,750 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 533 ft³/s May 21, 1981, gage height, 3.95 ft from indirect measurement, maximum gage height, 5.76 ft, Feb. 18 or 19, 1986 (backwater from trash buildup on trees below gage). Flood of Feb. 18 or 19, 1986 probably exceeded that of May 21, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 40 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 23	1900	*26	*1.83				

Minimum daily discharge, 0.32 ft³/s Jan. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.79	8.0	13	.39	.44	.62	1.3	5.7	8.2	.88	.68	1.0
2	.92	7.9	13	e.37	e.44	.80	2.1	4.8	7.4	1.6	.68	.97
3	.95	8.0	13	e.36	e.42	.89	3.5	3.3	6.8	3.0	.69	.90
4	.97	9.4	13	e.36	e.41	.85	6.2	3.8	5.7	2.3	.65	.93
5	.96	11	13	.36	e.40	.79	4.9	3.6	3.3	1.5	.64	.94
6	.98	11	12	.36	e.40	1.3	5.3	3.6	3.0	.84	.58	.94
7	.94	11	12	.36	.40	1.4	6.6	5.5	2.7	1.2	.61	.87
8	.90	11	13	.37	.41	.82	5.2	6.2	2.8	1.2	.62	.85
9	.89	8.5	6.0	.38	.43	.75	3.2	6.0	2.7	1.1	.64	.81
10	.86	7.7	.73	.40	.52	.69	2.7	5.2	2.1	1.1	.65	.75
11	.90	11	.73	.40	.44	.62	2.7	4.3	1.6	1.0	.65	.79
12	.93	11	.65	.38	.44	.59	2.6	3.5	1.4	1.0	.64	.75
13	5.2	11	.58	.42	.44	.57	2.4	6.7	1.3	1.1	.77	.72
14	8.9	11	e.57	.35	.44	.56	1.9	8.6	1.3	1.0	.94	.62
15	8.9	11	e.56	.40	.44	.59	1.9	8.0	1.5	1.0	.92	.55
16	8.8	11	e.56	e.38	.44	.52	1.5	8.3	1.2	.96	1.0	.47
17	8.2	11	e.58	e.39	.45	.49	1.1	7.3	1.3	.90	.97	.47
18	8.2	12	e.59	e.38	.42	.49	1.8	14	.95	.89	1.0	.49
19	8.2	12	.59	e.36	.44	.53	1.9	14	.97	.86	1.1	.53
20	8.2	12	.55	e.34	.44	.89	1.8	12	.91	1.1	1.1	.54
21	8.2	12	.54	.32	.44	1.7	3.5	11	1.4	1.1	1.1	.52
22	8.2	12	.56	.38	.44	2.0	5.7	10	.90	1.0	1.1	.52
23	8.2	12	.54	.36	.44	1.6	11	9.9	.83	.98	1.1	.50
24	8.2	12	e.52	.38	.45	1.2	17	10	1.0	.97	1.1	.52
25	8.2	12	e.47	.45	.45	1.8	20	9.7	1.3	.97	1.1	.57
26	7.9	12	e.45	.42	.47	3.5	14	5.6	1.0	.93	1.1	.54
27	7.9	12	.44	.45	.49	4.0	13	4.4	1.0	.84	1.0	.59
28	7.9	13	.41	.44	.49	2.5	10	8.1	.95	.84	.98	.57
29	7.9	13	.42	.44	.55	1.7	8.2	8.1	.97	.78	.99	.46
30	7.9	13	e.40	.45	---	1.5	6.9	8.8	.85	.76	1.0	.38
31	7.9	---	.40	.46	---	1.3	---	8.7	---	.74	.98	---
TOTAL	163.99	329.5	119.84	12.06	12.88	37.56	169.9	228.7	67.33	34.44	27.08	20.06
MEAN	5.29	11.0	3.87	.39	.44	1.21	5.66	7.38	2.24	1.11	.87	.67
MAX	8.9	13	13	.46	.55	4.0	20	14	8.2	3.0	1.1	1.0
MIN	.79	7.7	.40	.32	.40	.49	1.1	3.3	.83	.74	.58	.38
AC-FT	325	654	238	24	26	75	337	454	134	68	54	40

CAL YR 1987 TOTAL 1962.79 MEAN 5.38 MAX 48 MIN .11 AC-FT 3890
WTR YR 1988 TOTAL 1223.34 MEAN 3.34 MAX 20 MIN .32 AC-FT 2430

e Estimated

WEBER RIVER BASIN

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10141000 WEBER RIVER NEAR PLAIN CITY, UT

LOCATION.--Lat 41°16'42", long 112°05'28", in NW¼NW¼NE¼ sec. 8, T. 6 N., R. 2 W., Weber County, Hydrologic Unit 16020102, on upstream side of right highway bridge abutment, on State Highway 40, 1 mi downstream from Fourmile Creek, 1.5 mi south of Plain City, and 6 mi upstream from mouth.

DRAINAGE AREA.--2,081 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1904 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,207.10 ft NGVD of 1929. Prior to Aug. 29, 1949, nonrecording gage at same site and datum, and Aug. 30, 1949 to June 22, 1966, water-stage recorder on right bank 50 ft upstream at same datum. Prior to Oct. 1, 1986 at datum 10.0 ft lower.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Practically entire flow is diverted during summer months for irrigation above station. Flow regulated by Rockport, Echo, Lost Creek, East Canyon, and Pine View Reservoirs; also diversion above station to Willard Bay Reservoir (see stations 10129400, 10131500, 10132490, 10134000, and 10140800).

AVERAGE DISCHARGE.--23 years (1966-88), 598 ft³/s, 433,300 acre-ft/yr since completion of storage reservoirs listed in Remarks paragraph.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,100 ft³/s May 6, 1952, gage height, 19.01 ft; practically no flow during latter part of several summers since 1915.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 266 ft³/s Oct. 13, gage height, 14.22 ft; minimum daily, 16 ft³/s Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	97	91	e64	e75	88	61	e42	e42	e28	17	24
2	91	115	90	e61	e74	83	58	e42	e41	e37	19	24
3	89	115	93	e58	e71	88	64	e43	e42	e38	52	20
4	90	107	92	e56	e72	81	69	46	e40	e42	26	20
5	87	93	90	e58	e72	72	69	48	e36	e36	24	16
6	80	104	91	e63	73	74	57	e43	e32	e24	23	21
7	79	137	117	e66	74	90	57	e38	e33	24	22	26
8	93	104	106	e70	78	75	56	e40	e34	26	41	47
9	96	100	98	e73	79	66	52	e43	e36	28	64	61
10	95	116	101	e75	91	63	50	e45	e34	39	44	48
11	98	98	103	e74	114	69	49	e43	e36	32	45	60
12	92	110	102	e73	106	72	53	e40	e37	28	43	96
13	147	114	85	e72	91	68	51	e38	e35	32	42	105
14	207	131	85	e74	86	69	57	e40	e33	33	34	114
15	170	107	90	e80	85	71	53	e42	e33	31	27	99
16	144	111	87	e86	81	63	57	e45	e36	22	21	70
17	137	117	87	e84	81	67	64	e41	e35	23	23	64
18	118	114	76	e80	74	66	74	e45	e36	19	22	70
19	104	109	72	e78	80	66	68	e47	e39	17	25	65
20	88	109	73	e76	79	65	e74	e49	e43	18	21	75
21	90	112	74	e74	81	70	e71	e52	e41	20	17	83
22	87	110	71	e76	83	81	e72	e50	e39	24	23	74
23	92	110	e72	e79	81	87	e67	e47	e40	31	47	69
24	97	107	e68	e81	82	88	e61	e46	e42	32	35	73
25	97	89	e64	e78	82	74	e64	e47	e39	22	25	66
26	95	85	e62	e78	83	71	e62	e49	e37	27	30	65
27	91	98	e61	e76	85	85	e56	e50	e38	27	46	58
28	91	95	e62	e74	86	76	e53	e49	e38	28	46	63
29	90	96	e64	e75	88	77	e49	e47	e34	41	38	69
30	111	95	e64	e76	---	54	e44	e46	e26	21	49	64
31	98	---	e68	e78	---	52	---	e43	---	19	23	---
TOTAL	3242	3205	2559	2266	2387	2271	1792	1386	1107	869	1014	1809
MEAN	105	107	82.5	73.1	82.3	73.3	59.7	44.7	36.9	28.0	32.7	60.3
MAX	207	137	117	86	114	90	74	52	43	42	64	114
MIN	79	85	61	56	71	52	44	38	26	17	17	16
AC-FT	6430	6360	5080	4490	4730	4500	3550	2750	2200	1720	2010	3590
CAL YR 1987	TOTAL	88234	MEAN	242	MAX	1060	MIN	57	AC-FT	175000		
WTR YR 1988	TOTAL	23907	MEAN	65.3	MAX	207	MIN	16	AC-FT	47420		

e Estimated

WEBER RIVER BASIN

10141000 WEBER RIVER NEAR PLAIN CITY, UT--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1975 to September 1981.
WATER TEMPERATURES: October 1975 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,130 microsiemens May 16, 1977; minimum, 120 microsiemens November 11, 1978.
WATER TEMPERATURES: Maximum, 28.5°C June 25, 26, 1977; minimum, 0.0°C Dec. 31, 1978, Jan. 1, 1979, Jan. 1, 1980.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
FEB , 1988										
05...	1215	72	870	7.90	-4.0	3.0	0.7	13.4	664	K11
MAR										
10...	1130	57	990	8.10	2.5	5.0	3.6	7.50	650	K16
MAY										
03...	1500	45	730	8.10	16.0	14.5	4.3	8.70	650	K42
AUG										
18...	0913	25	960	8.00	20.5	22.0	8.0	3.60	650	360
DATE	STREP- TOCOCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3
FEB , 1988										
05...	K30	280	72	24	72	35	2	8.8	320	262
MAR										
10...	K34	300	73	28	99	41	3	9.6	336	275
MAY										
03...	87	240	58	22	63	36	2	7.7	268	220
AUG										
18...	280	290	68	28	89	39	2	11	320	262
DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
FEB , 1988										
05...	35	99	0.2	13	491	495	0.67	95.1	2.96	0.14
MAR										
10...	40	140	0.3	14	588	586	0.8	90.3	3.17	0.13
MAY										
03...	34	87	0.3	12	410	430	0.56	49.5	2.31	0.09
AUG										
18...	31	130	0.3	14	540	541	0.73	36.9	1.51	0.09

K Results based on colony count outside acceptable range (non-ideal colony count).

WEBER RIVER BASIN

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10141000 WEBER RIVER NEAR PLAIN CITY, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
FEB , 1988										
05...	3.10	1.20	1.40	1.8	1.2	2.4	2.10	1.80	1.50	4.6
MAR										
10...	3.30	0.86	0.92	1.2	1.2	2.1	3.10	2.70	2.00	6.1
MAY										
03...	2.40	0.04	0.30	0.39	0.86	0.9	1.90	1.90	1.50	4.6
AUG										
18...	1.60	0.46	0.45	0.58	0.64	1.1	1.20	1.20	1.10	3.4

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
FEB , 1988											
05...	1215	20	2	110	<0.5	<1	3	<3	6	30	<5
MAR											
10...	1130	<10	2	110	<0.5	<1	<1	<3	5	46	<5
MAY											
03...	1500	30	3	96	<0.5	<1	<1	<3	8	13	<5
AUG											
18...	0913	10	4	140	<0.5	2	<1	<3	1	73	<5

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
FEB , 1988										
05...	54	71	<0.1	<10	8	<1	<1.0	310	<6	23
MAR										
10...	71	100	<0.1	<10	3	<1	<1.0	360	<6	32
MAY										
03...	50	65	<0.1	<10	13	<1	<1.0	290	<6	17
AUG										
18...	130	81	<0.1	<10	2	<1	<1.0	350	<6	12

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SED. SUSP. SIEVE DIAM. PERCENT FINER THAN .062 MM	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
FEB , 1988						
05...	1215	72	3.0	67	13	2.5
MAR						
10...	1130	57	5.0	82	14	2.2

JORDAN RIVER BASIN

10146400 CURRANT CREEK NEAR MONA, UT

LOCATION (REVISED).--Lat 39°48'09", long 111°51'44", in NE¼SW¼NW¼, sec. 6, T. 12 S., R. 1 E., Juab County, Hydrologic Unit 16020201, on left bank 40 ft upstream from bridge crossing, 800 ft downstream from Burraston ponds, 0.5 mi upstream from Mona Reservoir, 1 mi southwest of Mona.

DRAINAGE AREA.--225 mi².

PERIOD OF RECORD.--June 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,890 ft from topographic map. Prior to June 10, 1985, at same site, different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--10 years, 47.1 ft³/s, 34,120 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 595 ft³/s May 14, 1984, gage height, 6.30 ft; minimum, 3.4 ft³/s Aug. 1-4, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 231 ft³/s Mar. 1, gage height, 2.76 ft; minimum daily, 9.0 ft³/s Aug. 1, 14, Sept. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	21	23	e13	e16	199	28	21	18	11	9.0	9.0
2	13	21	25	e13	e15	182	24	31	16	11	9.5	9.0
3	13	20	28	e17	e15	141	23	28	15	11	9.7	9.0
4	13	19	28	e16	e14	90	21	23	14	11	9.4	9.1
5	13	19	27	e15	e16	55	21	21	13	11	9.2	9.1
6	13	26	26	e16	e17	45	20	22	13	10	9.4	9.2
7	13	28	26	e15	e17	43	19	35	12	10	9.1	9.3
8	13	26	25	e14	e17	35	17	29	12	10	9.1	9.3
9	14	23	26	e14	e17	34	17	26	12	10	9.1	9.4
10	14	22	27	e15	e16	30	17	23	12	10	9.1	9.4
11	14	21	26	e14	e17	39	18	21	12	10	9.1	9.4
12	14	21	21	e13	e17	42	18	19	12	10	9.1	9.7
13	17	21	17	e13	e18	39	18	18	12	10	9.2	10
14	20	38	17	e15	e17	42	19	16	12	10	9.0	10
15	18	36	16	e16	e17	51	27	16	12	9.9	9.2	10
16	16	24	15	e16	e16	54	24	17	12	9.7	9.2	9.9
17	16	25	16	e16	e16	57	24	18	12	9.6	9.3	9.7
18	16	22	19	e15	e18	50	34	24	12	9.6	9.4	9.7
19	15	21	21	e14	e18	47	50	24	12	9.6	9.4	9.7
20	15	22	21	e13	e20	42	30	19	12	9.7	9.4	9.7
21	16	24	21	e15	e21	33	45	17	12	9.3	9.3	9.9
22	16	24	21	e16	e22	27	55	16	12	9.3	9.3	10
23	16	25	20	e15	e23	26	41	16	12	9.4	9.2	10
24	17	22	e17	e17	e25	25	32	16	12	9.4	9.2	10
25	19	24	e14	e15	e29	24	30	15	11	9.5	9.3	10
26	18	25	e15	e17	e48	23	26	14	11	9.4	9.4	10
27	18	26	e18	e18	e65	22	24	14	11	9.6	9.5	10
28	18	25	e18	e18	83	21	23	14	11	9.5	9.5	10
29	18	25	e17	e18	141	22	22	14	11	9.4	9.4	10
30	23	23	e16	e18	---	28	20	21	11	9.3	9.3	10
31	23	---	e15	e17	---	32	---	19	---	9.1	9.1	---
TOTAL	495	719	642	477	791	1600	787	627	371	306.3	287.4	289.5
MEAN	16.0	24.0	20.7	15.4	27.3	51.6	26.2	20.2	12.4	9.88	9.27	9.65
MAX	23	38	28	18	141	199	55	35	18	11	9.7	10
MIN	13	19	14	13	14	21	17	14	11	9.1	9.0	9.0
AC-FT	982	1430	1270	946	1570	3170	1560	1240	736	608	570	574
CAL YR 1987	TOTAL	10039	MEAN	27.5	MAX	180	MIN	11	AC-FT	19910		
WTR YR 1988	TOTAL	7392.2	MEAN	20.2	MAX	199	MIN	9.0	AC-FT	14660		

e Estimated

JORDAN RIVER BASIN

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10148200 TIE FORK NEAR SOLDIER SUMMIT, UT

LOCATION.--39°57'00", long 111°12'58", in NE¼NE¼SW¼ sec. 14, T. 10 S., R. 6 E., Utah County, Hydrologic Unit 16020202, on right bank 230 ft upstream from mouth and U.S. Highway 6-50, 250 ft downstream from Denver & Rio Grande Western Railroad, 7.4 mi west of Soldier Summit, and 15.2 mi east of Thistle.

DRAINAGE AREA.--19.4 mi².

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder and artificial control. Altitude of gage is 6,120 ft from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No diversion.

AVERAGE DISCHARGE.--25 years, 6.18 ft³/s, 4,480 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 1,200 ft³/s Aug. 21, 1983, result of instantaneous removal of upstream blockage, gage height, about 7.85 ft from high-water mark, from rating curve extended above 26 ft³/s on basis of slope-area measurement; minimum, 0.15 ft³/s Aug. 19, 20, 1983, result of temporary blockage upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 14	1230	*7.6	*1.66				

Minimum daily, 1.1 ft³/s Dec. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	2.5	e2.0	e1.4	e2.7	e2.5	3.2	5.4	5.4	3.0	2.2	2.4
2	2.1	2.6	2.2	e1.4	e2.5	e2.6	3.1	5.6	4.6	2.9	2.2	2.4
3	2.1	2.7	2.2	e1.8	e2.6	e2.7	3.0	5.2	4.2	2.9	2.3	2.4
4	2.1	2.6	2.2	e2.3	e2.4	e2.3	3.4	5.1	4.2	2.9	2.3	2.4
5	2.1	2.6	2.2	e2.2	e2.5	e2.4	3.3	5.1	4.2	2.9	2.2	2.4
6	2.4	2.7	2.2	e2.3	e2.3	2.5	3.2	5.2	4.2	2.9	2.2	2.4
7	2.5	2.6	2.2	e2.2	e2.4	2.6	3.3	5.4	4.1	2.9	2.3	2.4
8	2.4	2.6	2.3	e2.3	e2.5	2.7	3.2	5.2	4.0	2.8	2.2	2.4
9	2.4	2.4	2.3	e2.2	e2.7	3.0	3.6	5.1	4.0	2.8	2.2	2.4
10	2.4	2.4	2.3	e2.5	e2.6	2.9	4.9	5.0	4.0	2.7	2.2	2.4
11	2.4	2.4	2.3	e2.7	e2.3	2.8	5.2	5.0	3.9	2.7	2.2	2.4
12	2.5	2.4	e2.0	e2.6	e2.4	2.9	5.4	5.1	4.0	2.6	2.2	2.6
13	2.6	2.4	e1.8	e2.3	e2.5	3.2	5.5	5.3	3.9	2.6	e2.2	2.6
14	2.6	e2.2	e1.6	e2.4	e2.7	4.0	5.5	5.3	3.8	2.5	e2.3	2.6
15	2.5	e2.1	e1.4	e2.5	e2.3	3.3	5.5	5.3	3.8	2.5	e2.2	2.5
16	2.5	e2.0	e1.5	e2.4	e2.4	3.2	5.4	5.3	3.7	2.4	e2.2	2.5
17	2.5	e2.2	e1.8	e2.3	e2.1	3.1	5.1	5.4	3.8	2.4	e2.3	2.5
18	2.6	e1.7	e2.0	e2.4	e2.2	3.0	5.2	5.4	3.7	2.4	e2.3	2.5
19	2.6	e2.0	e1.8	e2.1	e2.3	3.0	5.5	5.5	3.7	2.4	e2.2	2.6
20	2.6	e2.2	e1.4	e2.0	e2.4	3.1	5.5	5.5	3.7	2.4	e2.3	2.5
21	2.5	2.4	e1.5	e2.2	e2.5	2.8	5.7	5.4	3.6	2.3	e2.3	2.6
22	2.5	2.4	e2.0	e2.3	e2.6	2.9	5.5	5.2	3.5	2.3	e2.2	2.6
23	2.5	2.5	e2.0	e2.4	e2.6	2.9	5.1	5.4	3.4	2.2	e2.2	2.6
24	2.6	2.4	e1.8	e2.5	e2.7	2.9	4.9	5.2	3.3	2.2	e2.2	2.5
25	2.6	2.3	e1.1	e2.3	e2.8	3.1	6.7	5.4	3.0	2.2	e2.3	2.5
26	2.5	2.5	e1.3	e2.5	e2.3	3.2	6.5	5.2	3.4	2.2	e2.3	2.5
27	2.5	2.4	e1.6	e2.4	e2.4	3.0	6.0	5.0	3.2	2.3	e2.2	2.5
28	2.4	2.5	e1.8	e2.6	e2.4	2.9	6.0	4.9	3.2	2.3	e2.2	2.5
29	2.4	2.1	e2.1	e2.7	e2.4	3.3	6.5	4.8	3.1	2.2	e2.3	2.6
30	2.4	e2.1	e2.2	e2.9	---	3.0	5.8	4.9	3.1	2.2	e2.3	2.6
31	2.4	---	e1.7	e2.7	---	2.9	---	5.2	---	2.3	2.4	---
TOTAL	75.3	70.9	58.8	71.8	71.5	90.7	146.7	162.0	113.7	78.3	69.6	74.8
MEAN	2.43	2.36	1.90	2.32	2.47	2.93	4.89	5.23	3.79	2.53	2.25	2.49
MAX	2.6	2.7	2.3	2.9	2.8	4.0	6.7	5.6	5.4	3.0	2.4	2.6
MIN	2.1	1.7	1.1	1.4	2.1	2.3	3.0	4.8	3.0	2.2	2.2	2.4
AC-FT	149	141	117	142	142	180	291	321	226	155	138	148

CAL YR 1987	TOTAL	1064.0	MEAN	2.92	MAX	4.7	MIN	1.1	AC-FT	2110
WTR YR 1988	TOTAL	1084.1	MEAN	2.96	MAX	6.7	MIN	1.1	AC-FT	2150

e Estimated

JORDAN RIVER BASIN

10148510 SPANISH FORK BELOW HALLS FALLS NEAR SPANISH FORK, UT

LOCATION.--Lat 40°00'34", long 111°29'42", in SE¼SW¼SW¼ sec. 21, T. 9 S., R. 4 E., Utah County, Hydrologic Unit 16020202, on right bank 1.0 mi downstream from Thistle slide, 1.2 mi upstream from Diamond Fork and 12 mi southeast of Spanish Fork.

DRAINAGE AREA.--495 mi² (approximately).

PERIOD OF RECORD.--April 1983 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,000 ft from topographic map.

REMARKS.--Records good.

AVERAGE DISCHARGE.--5 years, 180 ft³/s, 130,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,420 ft³/s May 15, 1984; minimum daily, 0.80 ft³/s Apr. 17, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 229 ft³/s May 17, gage height, 75.36 ft; minimum, 3.7 ft³/s Dec. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	57	55	51	56	73	65	119	105	51	39	29
2	45	56	58	53	56	78	64	121	96	50	38	30
3	45	56	58	51	53	80	67	119	94	49	38	33
4	42	55	58	58	43	80	68	122	90	52	36	33
5	42	55	59	56	50	80	65	123	84	49	37	33
6	39	61	60	57	54	81	65	123	79	47	35	32
7	39	59	61	55	54	81	71	123	75	46	35	31
8	40	57	58	55	57	67	76	121	73	45	36	32
9	40	56	57	55	59	71	70	119	72	44	38	36
10	39	56	59	57	61	73	70	117	71	43	37	36
11	40	56	62	58	56	70	73	120	68	43	38	36
12	40	56	54	54	54	61	80	137	67	38	38	39
13	42	57	37	46	54	60	84	168	64	37	34	43
14	45	64	40	53	55	59	85	179	61	35	32	39
15	44	62	40	57	52	65	81	186	60	37	33	37
16	44	56	48	55	55	64	79	201	61	39	33	37
17	45	59	52	57	46	61	78	217	61	38	35	37
18	45	47	57	57	54	60	83	213	61	38	35	37
19	47	50	58	49	52	64	88	197	65	41	35	38
20	49	54	55	47	53	74	93	183	67	37	36	38
21	50	57	53	53	55	98	106	175	62	33	37	37
22	51	56	55	54	55	118	105	165	60	32	39	39
23	52	56	55	55	55	90	101	154	61	32	37	38
24	52	55	48	57	55	84	97	147	57	32	34	38
25	51	58	42	56	56	80	102	137	55	33	33	36
26	50	57	42	57	56	86	100	128	59	37	30	36
27	53	55	45	57	58	84	101	123	58	41	31	37
28	53	55	51	59	63	73	104	116	53	41	31	37
29	53	56	58	59	66	64	106	117	58	41	32	40
30	58	51	58	59	---	71	110	121	53	40	32	41
31	56	---	55	57	---	66	---	115	---	39	30	---
TOTAL	1435	1685	1648	1704	1593	2316	2537	4506	2050	1260	1084	1085
MEAN	46.3	56.2	53.2	55.0	54.9	74.7	84.6	145	68.3	40.6	35.0	36.2
MAX	58	64	62	59	66	118	110	217	105	52	39	43
MIN	39	47	37	46	43	59	64	115	53	32	30	29
AC-FT	2850	3340	3270	3380	3160	4590	5030	8940	4070	2500	2150	2150
CAL YR 1987	TOTAL	24504	MEAN	67.1	MAX	124	MIN	37	AC-FT	48600		
WTR YR 1988	TOTAL	22903	MEAN	62.6	MAX	217	MIN	29	AC-FT	45430		

10150500 SPANISH FORK AT CASTILLA, UT

LOCATION.--Lat 40°02'59", long 111°32'50", in SE¼NE¼NW¼ sec. 12, T. 9 S., R. 3 E., Utah County, Hydrologic Unit 16020202, on right bank 600 ft upstream from outlet of Cold Springs, 0.9 mi upstream from diversion dam of Bureau of Reclamation, 1.5 mi northwest of Castilla, and 2.8 mi downstream from Diamond Fork.

DRAINAGE AREA.--652 mi².

PERIOD OF RECORD.--September 1889 to December 1890, April 1903 to November 1917, May 1919 to September 1925, January 1933 to current year. Monthly discharge only for some periods, published in WSP 1314. Published as "near Spanish Fork" 1889-90, 1903-08.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,870 ft from topographic map. Prior to May 3, 1919, nonrecording gages at various sites 1.5 mi to 2.5 mi downstream from present site at different datums below power canal, which began diverting late in 1908. May 3, 1919, to Apr. 14, 1920, nonrecording gage, Apr. 15, 1920, to Sept. 30, 1925, and Jan. 1, 1933, to Apr. 16, 1940, water-stage recorder, at present site upstream from power canal at datum 2.00 ft lower.

REMARKS.--No estimated daily discharges. Records good. Several small diversions for irrigation above station. Flow since June 1915 includes water diverted from Strawberry Reservoir, capacity, 1,106,500 acre-ft since June 30, 1973, in Colorado River Basin via Strawberry Tunnel for irrigation in vicinity of Spanish Fork. Flow affected by mudslide and draining of resultant lake about 5 mi upstream Apr. 14 to Sept. 30, 1983.

AVERAGE DISCHARGE.--13 years (1890, 1903-14), 172 ft³/s; 64 years (1914-17, 1919-25, 1933-88), 232 ft³/s, 168,100 acre-ft/yr; includes transmountain diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,000 ft³/s May 15, 1984, gage height, 11.53 ft; minimum, 5.8 ft³/s Dec. 18, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 604 ft³/s July 27, gage height, 4.64 ft; minimum daily discharge, 51 ft³/s Dec. 13, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	290	79	80	65	73	102	86	158	358	536	386	317
2	263	79	83	59	72	104	87	158	307	536	460	293
3	224	78	82	61	69	104	90	156	303	537	500	289
4	119	77	81	73	57	105	95	157	306	540	446	289
5	74	78	82	75	62	103	93	159	317	533	391	275
6	71	85	82	75	68	106	92	159	327	527	330	255
7	69	84	83	74	71	106	101	161	360	526	316	255
8	69	79	78	72	74	90	107	158	408	519	324	251
9	68	80	81	73	75	95	98	154	463	518	379	252
10	68	85	76	73	79	98	97	151	491	503	391	246
11	67	88	76	74	73	91	100	232	497	484	413	245
12	68	87	68	71	71	82	108	306	497	471	456	230
13	71	87	51	58	73	80	112	374	535	453	425	227
14	74	96	54	66	73	79	114	437	539	411	416	190
15	71	93	55	71	70	88	111	451	540	402	419	159
16	71	83	64	71	74	84	109	485	536	362	466	156
17	72	89	70	74	63	80	109	528	539	359	491	159
18	71	74	76	75	71	80	113	540	540	377	494	153
19	73	78	77	63	69	85	117	513	542	448	458	147
20	75	83	74	54	71	94	121	493	550	499	429	146
21	76	87	73	68	73	118	139	450	545	503	399	155
22	77	84	74	62	75	141	145	410	539	512	385	160
23	77	82	75	67	74	116	135	384	546	514	359	146
24	79	80	65	70	75	110	129	461	538	497	328	140
25	76	83	52	64	78	104	137	481	533	478	310	138
26	75	81	51	66	78	114	134	489	546	485	307	132
27	77	79	55	71	81	116	134	518	545	505	307	141
28	78	80	61	72	88	101	137	523	538	496	304	148
29	78	82	70	74	93	88	139	502	543	461	291	168
30	82	74	75	77	---	95	144	497	537	412	304	180
31	80	---	74	74	---	87	---	445	---	391	317	---
TOTAL	2883	2474	2198	2142	2123	3046	3433	11090	14365	14795	12001	6042
MEAN	93.0	82.5	70.9	69.1	73.2	98.3	114	358	479	477	387	201
MAX	290	96	83	77	93	141	145	540	550	540	500	317
MIN	67	74	51	54	57	79	86	151	303	359	291	132
AC-FT	5720	4910	4360	4250	4210	6040	6810	22000	28490	29350	23800	11980
CAL YR 1987	TOTAL	75400	MEAN	207	MAX	566	MIN	51	AC-FT	149600		
WTR YR 1988	TOTAL	76592	MEAN	209	MAX	550	MIN	51	AC-FT	151900		

JORDAN RIVER BASIN

10152000 SPANISH FORK NEAR LAKESHORE, UT

LOCATION (REVISED).--Lat 40°09'02", long 111°43'34", in NE¼NW¼SW¼ sec. 4, T. 8 S., R. 2 E., Utah County, Hydrologic Unit 16020202, on left bank 1.9 mi upstream from mouth and 1.9 mi north of Lake Shore.

DRAINAGE AREA.--675 mi².

PERIOD OF RECORD.--December 1903 to September 1907, March 1909 to December 1919, May 1920 to September 1925, January 1938 to current year. Published as "at Lake Shore" 1909, 1913-25.

REVISED RECORDS.--WSP 1314: 1904. WDR UT-77-1: Drainage area. WDR UT-86-1: 1985.

GAGE.--Water-stage recorder. Altitude of gage is 4,500 ft from topographic map. Prior to Jan. 23, 1938, nonrecording gages at several sites about 3 mi upstream at various datums. Jan. 23, 1938 to Mar. 23, 1953, water-stage recorder at present site at different datums. Mar. 24, 1953 to Sept. 15, 1957, water-stage recorder at datum 4.0 ft higher. Apr. 25, 1984 at present site, different datum.

REMARKS.--Records good Oct. 1 - May 10. Activation of irrigation diversion dam below gage on May 11 ponded water at the station. There is no gage-height record May 11 - Sept. 3. Flow regulated by many diversions for irrigation and hydroelectric powerplant. During latter part of irrigation season, only waste and return waters pass gage. Station was below all diversions until May 11.

AVERAGE DISCHARGE.--67 years (water years 1905-07, 1910-18, 1921-25, 1939-87), 102 ft³/s, 73,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,320 ft³/s May 15, 1984, gage height, 11.39 ft; no flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	95	87	21	103	125	95	88	---	---	---	---
2	40	95	96	17	95	115	102	104	---	---	---	---
3	39	95	93	31	82	122	112	75	---	---	---	---
4	40	92	91	69	64	119	113	56	---	---	---	---
5	54	90	92	61	68	128	111	39	---	---	---	---
6	37	98	93	59	93	121	111	26	---	---	---	---
7	34	101	94	66	98	114	120	30	---	---	---	---
8	48	96	91	69	84	104	109	19	---	---	---	---
9	51	92	93	72	96	104	109	14	---	---	---	---
10	45	95	92	68	99	100	113	17	---	---	---	---
11	60	97	91	62	97	95	112	---	---	---	---	---
12	63	94	86	71	95	94	74	---	---	---	---	---
13	67	95	68	65	96	94	14	---	---	---	---	---
14	79	109	76	87	99	94	11	---	---	---	---	---
15	78	107	82	74	96	89	8.1	---	---	---	---	---
16	77	93	54	94	96	94	9.2	---	---	---	---	---
17	78	98	54	93	81	96	8.9	---	---	---	---	---
18	78	85	60	79	90	100	14	---	---	---	---	---
19	75	83	56	68	90	104	24	---	---	---	---	---
20	78	89	63	52	95	117	27	---	---	---	---	---
21	80	93	59	84	94	123	37	---	---	---	---	---
22	85	91	55	52	94	143	69	---	---	---	---	---
23	88	89	57	105	98	123	79	---	---	---	---	---
24	90	88	59	78	97	125	92	---	---	---	---	---
25	88	91	30	69	106	123	96	---	---	---	---	---
26	86	91	17	78	106	127	97	---	---	---	---	---
27	87	92	35	141	106	125	76	---	---	---	---	---
28	92	89	41	107	115	82	72	---	---	---	---	---
29	93	93	93	96	119	84	68	---	---	---	---	---
30	97	84	67	101	---	67	59	---	---	---	---	---
31	96	---	49	105	---	88	---	---	---	---	---	---
TOTAL	2148	2800	2174	2294	2752	3339	2142.2	---	---	---	---	---
MEAN	69.3	93.3	70.1	74.0	94.9	108	71.4	---	---	---	---	---
MAX	97	109	96	141	119	143	120	---	---	---	---	---
MIN	34	83	17	17	64	67	8.1	---	---	---	---	---
AC-FT	4260	5550	4310	4550	5460	6620	4250	---	---	---	---	---

CAL YR 1987 TOTAL 25332.9 MEAN 69.4 MAX 214 MIN 2.1 AC-FT 50250

JORDAN RIVER BASIN

253

10153800 NORTH FORK PROVO RIVER NEAR KAMAS, UT

LOCATION.--Lat 40°35'48", long 111°05'48", in NE¼SW¼SE¼ sec. 36, T. 2 S., R. 7 E., Summit County, Hydrologic Unit 16020203, on right bank 500 ft upstream from bridge on State Highway 150, 1,500 ft upstream from mouth, and 9.5 mi southeast of Kamas.

DRAINAGE AREA.--24.4 mi².

PERIOD OF RECORD.--August 1963 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,480 ft from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Slight regulation from several small reservoirs at headwaters used for storing water for release during the summer and fall. No diversions above station.

AVERAGE DISCHARGE.--25 years, 40.7 ft³/s, 29,490 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 728 ft³/s June 5, 1986, gage height, 2.98 ft; minimum recorded, 1.9 ft³/s several days during winter of 1964-65.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 16	2200	*295	*2.18	No other peak above base discharge.			

Minimum daily discharge, 2.9 ft³/s Sept. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	4.7	7.0	e8.2	e8.6	e8.0	8.8	58	95	38	4.9	3.4
2	3.9	4.9	6.9	e7.0	e8.0	e7.6	8.7	52	91	36	5.0	3.4
3	4.0	5.5	6.9	e7.6	e6.5	e7.4	8.9	49	100	34	5.6	3.4
4	4.1	5.4	6.7	e9.0	e6.8	e7.0	8.9	49	126	32	6.2	3.3
5	3.8	4.9	6.5	e9.0	e8.0	e7.0	9.6	50	132	32	5.1	3.2
6	3.8	5.8	6.5	e8.5	e8.0	e8.0	11	54	115	30	4.9	3.1
7	3.6	5.9	6.5	e8.0	e8.4	e7.0	16	49	100	27	6.1	3.0
8	3.3	5.5	4.8	e8.0	e9.2	e6.0	20	46	88	26	5.5	2.9
9	3.3	5.1	e7.0	e8.5	e10	e8.0	22	42	79	24	5.1	3.1
10	3.3	5.1	e8.5	e9.0	e9.0	e8.0	21	43	72	22	4.8	3.2
11	3.3	4.4	e9.0	e9.0	e8.0	e7.4	25	57	65	20	4.6	3.3
12	3.4	4.4	e7.4	e7.0	e7.0	e7.0	32	88	60	18	4.5	3.4
13	6.5	4.4	e5.0	e8.0	e6.4	e7.0	42	135	55	16	4.2	4.2
14	6.8	e4.2	e7.0	e10	e6.0	e6.0	48	161	49	14	3.7	4.3
15	5.8	e3.9	e7.6	e9.0	e7.0	e8.0	56	180	45	13	4.0	4.3
16	5.0	e3.5	e8.4	e8.0	e6.4	e7.0	60	220	43	11	4.0	4.0
17	4.5	e5.5	e9.2	e9.0	e5.0	e6.0	65	228	41	9.3	3.7	3.8
18	4.3	e3.0	e10	e9.0	e6.6	e5.0	68	174	53	8.3	3.7	3.9
19	4.3	e5.0	e11	e6.0	e6.0	e5.4	60	138	55	7.8	3.7	3.8
20	4.1	e6.0	e10	e6.0	e7.0	e6.0	55	130	55	6.9	3.8	3.8
21	4.0	e5.4	e9.0	e8.0	e6.4	e6.4	54	143	54	5.9	4.0	3.8
22	4.0	e4.9	e10	e7.0	e6.0	e6.4	51	164	51	5.1	3.9	4.0
23	4.3	e4.0	e10	e8.0	e5.8	e6.0	45	184	49	4.9	3.7	3.9
24	5.9	e3.5	e8.0	e8.0	e5.4	e6.0	41	185	46	5.0	3.5	3.6
25	5.9	4.1	e6.0	e7.0	e6.0	e6.4	39	178	44	5.1	3.4	3.6
26	5.1	4.1	e7.0	e8.0	e6.4	e7.0	38	176	45	4.9	3.5	3.6
27	4.8	3.9	e8.0	e8.0	e6.8	e8.0	37	169	47	4.8	3.5	3.6
28	4.6	4.5	e8.4	e8.4	e7.4	e7.0	41	155	45	5.1	3.6	3.6
29	4.6	5.0	e8.8	e9.0	e8.0	e5.6	43	148	43	5.2	3.6	3.6
30	5.0	6.2	e9.0	e9.0	---	6.3	53	135	40	5.1	3.5	3.6
31	5.1	---	e8.7	e8.6	---	9.0	---	107	---	4.9	3.3	---
TOTAL	138.2	142.7	244.8	252.8	206.1	212.9	1087.9	3747	1983	481.3	132.6	107.7
MEAN	4.46	4.76	7.90	8.15	7.11	6.87	36.3	121	66.1	15.5	4.28	3.59
MAX	6.8	6.2	11	10	10	9.0	68	228	132	38	6.2	4.3
MIN	3.3	3.0	4.8	6.0	5.0	5.0	8.7	42	40	4.8	3.3	2.9
AC-FT	274	283	486	501	409	422	2160	7430	3930	955	263	214

CAL YR 1987	TOTAL	8718.7	MEAN	23.9	MAX	181	MIN	3.0	AC-FT	17290
WTR YR 1988	TOTAL	8737.0	MEAN	23.9	MAX	228	MIN	2.9	AC-FT	17330

e Estimated

JORDAN RIVER BASIN

10154200 PROVO RIVER NEAR WOODLAND, UT

LOCATION.--Lat 40°33'28", long 111°10'05", in NE¼NW¼SE¼ sec. 17, T. 3 S., R. 7 E., Summit County, Hydrologic Unit 16020203, on right bank on south side of State Highway 35, 0.3 mi downstream from Twin Pine Bridge, 1.6 mi downstream from South Fork and 3.5 mi southeast of Woodland.

DRAINAGE AREA.--162 mi².

PERIOD OF RECORD.--August 1963 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,950 ft from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Records include flow of Duchesne Tunnel, transmountain diversion. Flow also affected by some small irrigation diversions above station and by storage in several small reservoirs at headwaters. Information on these is available from the Provo River Water Commissioner's Report.

AVERAGE DISCHARGE.--25 years, 224 ft³/s, 162,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,040 ft³/s June 7, 1986, from rating curve extended above 2,000 ft³/s on the basis of slope-area measurement of peak flow, gage height, 7.40 ft; minimum, 22 ft³/s Nov. 9, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,630 ft³/s May 16, gage height, 5.57 ft; minimum, 29 ft³/s Nov. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	59	58	61	63	65	71	337	489	132	79	48
2	54	62	64	56	62	62	77	298	468	126	78	44
3	54	65	62	59	53	60	87	279	468	121	99	41
4	53	61	62	64	55	62	96	275	559	118	81	39
5	53	59	63	63	59	59	91	281	635	114	78	39
6	53	68	63	63	60	64	109	313	581	111	71	38
7	53	67	64	62	61	59	145	286	489	105	80	33
8	52	62	60	62	61	57	157	273	427	103	76	33
9	52	60	67	62	60	67	133	254	379	98	72	33
10	52	62	68	63	55	64	136	256	343	103	71	33
11	52	60	67	63	50	64	163	335	310	104	62	33
12	52	59	51	59	49	59	202	503	286	105	68	34
13	61	61	42	61	50	61	231	740	264	89	64	38
14	68	65	49	67	49	58	250	909	233	90	68	38
15	61	55	51	66	50	64	293	1030	223	91	69	37
16	57	52	58	63	49	61	318	1250	210	92	64	39
17	55	61	65	66	43	59	345	1380	201	86	67	38
18	54	43	68	66	49	58	346	1120	205	90	68	36
19	54	61	70	56	47	61	322	930	201	88	67	36
20	53	63	64	56	48	66	309	848	197	94	73	35
21	52	64	64	63	46	72	322	852	220	91	82	39
22	53	63	64	60	46	75	303	871	200	95	e80	42
23	55	58	66	63	45	68	274	906	205	99	e66	41
24	60	58	60	62	45	70	258	886	194	68	e54	39
25	58	65	55	59	53	72	249	850	183	75	e50	38
26	56	60	57	62	58	78	222	856	193	76	e50	38
27	54	52	62	62	60	84	231	823	199	83	e53	38
28	54	58	63	63	63	71	245	761	194	83	e52	38
29	57	60	64	64	65	66	249	740	178	75	e51	39
30	60	54	65	64	---	79	303	673	140	81	e51	38
31	60	---	63	63	---	71	---	557	---	74	e50	---
TOTAL	1717	1797	1899	1923	1554	2036	6537	20672	9074	2960	2094	1135
MEAN	55.4	59.9	61.3	62.0	53.6	65.7	218	667	302	95.5	67.5	37.8
MAX	68	68	70	67	65	84	346	1380	635	132	99	48
MIN	52	43	42	56	43	57	71	254	140	68	50	33
AC-FT	3410	3560	3770	3810	3080	4040	12970	41000	18000	5870	4150	2250
CAL YR 1987	TOTAL	65567	MEAN	180	MAX	1190	MIN	42	AC-FT	130100		
WTR YR 1988	TOTAL	53398	MEAN	146	MAX	1380	MIN	33	AC-FT	105900		

e Estimated

JORDAN RIVER BASIN

255

10155000 PROVO RIVER NEAR HAILSTONE, UT

LOCATION.--Lat 40°36'03", long 111°21'35", in SW¼NE¼SE¼ sec. 34, T. 2 S., R. 5 E., Wasatch County, Hydrologic Unit 16020203, on right bank 3 mi upstream from Ross Creek and Hailstone.

DRAINAGE AREA.--233 mi².

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,100 ft from river-profile map. Prior to Nov. 20, 1964 at datum 1.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Records include flow of Weber-Provo diversion canal and Duchesne Tunnel, a transmountain diversion. Flow also affected by irrigation diversions above station and by storage in several small reservoirs at headwaters. Information on flow of Weber-Provo diversion canal, Duchesne Tunnel, and capacities of small reservoirs is available from Provo River Water Commissioner's Report, (total capacity, 10,080 acre-ft).

AVERAGE DISCHARGE.--35 years (1954-88) 282 ft³/s, 204,300 acre-ft/yr, since completion of Duchesne Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,100 ft³/s June 7, 1986, from rating curve extended above 2,500 ft³/s; gage height, 9.91 ft from floodmarks; minimum, 11 ft³/s Aug. 20, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,220 ft³/s May 17, gage height 6.35 ft; minimum discharge, 16 ft³/s Sept. 7, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	73	e70	e70	e76	100	94	388	615	124	45	40
2	50	72	e80	e64	e74	95	106	346	576	115	40	37
3	50	77	81	e64	e67	90	125	307	552	106	55	33
4	50	76	78	e70	e64	93	138	301	653	104	70	31
5	51	72	78	e74	e66	86	126	291	774	99	66	30
6	51	81	76	e76	e72	99	136	323	719	89	72	29
7	51	83	77	e76	e76	88	169	309	595	81	85	20
8	54	78	72	e76	e76	78	188	300	517	76	79	19
9	57	72	76	e78	e76	96	156	278	508	70	70	23
10	59	73	79	e82	e74	95	183	259	484	62	65	24
11	59	71	84	e79	e70	89	208	308	442	60	61	26
12	59	67	78	e74	e66	82	236	478	404	58	67	30
13	71	72	e66	e67	e64	81	274	808	350	56	65	36
14	80	84	e57	e71	e64	80	301	1100	310	50	60	36
15	74	75	e64	e76	e66	90	323	1290	285	52	59	35
16	69	56	e70	e76	e64	86	370	1700	259	50	55	36
17	65	72	e73	e74	e59	82	390	2110	232	51	52	38
18	64	60	e80	e76	e64	79	387	1810	227	52	49	34
19	64	89	e80	e70	e68	87	372	1260	216	52	44	35
20	62	85	e76	e65	e70	92	356	989	200	54	46	33
21	61	77	e72	e67	e72	108	391	1000	231	48	53	35
22	62	74	e72	e78	e72	116	380	1160	186	48	53	49
23	62	72	e74	e78	73	102	340	1360	207	50	47	48
24	73	e63	e69	e78	74	101	322	1290	199	46	45	44
25	69	e70	e65	e74	75	107	309	1070	182	47	42	42
26	64	e70	e64	e76	75	123	268	1010	207	48	42	43
27	63	e62	e66	e78	77	125	284	1050	206	49	43	42
28	64	e63	e70	e78	88	100	288	959	201	48	43	39
29	66	e66	e74	e78	94	86	290	946	179	42	41	41
30	73	e63	e78	e76	---	104	336	869	142	41	41	40
31	79	---	e78	e76	---	92	---	723	---	46	41	---
TOTAL	1925	2168	2277	2295	2076	2932	7846	26392	10858	1974	1696	1048
MEAN	62.1	72.3	73.5	74.0	71.6	94.6	262	851	362	63.7	54.7	34.9
MAX	80	89	84	82	94	125	391	2110	774	124	85	49
MIN	49	56	57	64	59	78	94	259	142	41	40	19
AC-FT	3820	4300	4520	4550	4120	5820	15560	52350	21540	3920	3360	2080
CAL YR 1987	TOTAL	72675	MEAN	199	MAX	1220	MIN	46	AC-FT	144200		
WTR YR 1988	TOTAL	63487	MEAN	173	MAX	2110	MIN	19	AC-FT	125900		

e Estimated

JORDAN RIVER BASIN

10159500 PROVO RIVER BELOW DEER CREEK DAM, UT

LOCATION.--Lat 40°24'12", long 111°31'44", in NE¼NE¼NE¼ sec. 7, T. 5 S., R. 4 E., Wasatch County, Hydrologic Unit 16020203, on right bank 200 ft upstream from Deer Creek, 1,000 ft downstream from Deer Creek Dam, and 4.1 mi northeast of Vivian Park.

DRAINAGE AREA.--547 mi².

PERIOD OF RECORD.--May 1953 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area. WDR UT-81-1: 1980.

GAGE.--Water-stage recorder. Altitude of gage is 5,270 ft from topographic map.

REMARKS.--Records fair. Flow regulated by Deer Creek Reservoir and by small lakes at headwaters that serve as reservoirs. Small transmountain diversions from Strawberry River drain into Daniels Creek. Flow also affected by irrigation diversions above station and water diverted to Provo River by Weber-Provo diversion canal and Duchesne Tunnel, a transmountain diversion. Information is available on these stations from the Provo River Water Commissioner's Report.

AVERAGE DISCHARGE.--35 years, 376 ft³/s, 272,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,260 ft³/s June 3, 1983, gage height, 9.11 ft; no flow Feb. 2, 3, 1957, Nov. 12, 19, 1961, when reservoir gates were closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,570 ft³/s May 24, gage height, 6.51 ft; minimum daily, 48 ft³/s Nov. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	214	71	75	100	93	95	94	182	689	464	353	382
2	209	73	76	99	93	95	94	172	641	462	368	363
3	205	68	77	97	93	94	94	173	581	462	368	344
4	184	59	77	97	93	94	94	172	565	451	335	340
5	178	48	76	97	93	94	94	183	567	444	338	340
6	177	89	76	97	93	95	92	186	562	451	313	339
7	178	109	78	97	93	95	93	186	578	492	311	340
8	155	108	78	97	93	95	97	186	579	543	283	338
9	143	106	80	97	93	95	96	194	575	518	293	318
10	142	104	79	97	93	95	100	240	544	520	357	308
11	138	104	76	97	93	95	112	267	530	512	373	293
12	135	104	84	97	95	94	121	263	503	479	381	284
13	135	104	91	97	95	93	122	299	498	469	392	237
14	129	104	119	97	94	94	106	326	498	472	386	212
15	91	104	121	98	94	94	117	342	508	468	387	202
16	82	104	123	98	94	94	117	345	511	455	396	208
17	82	105	120	99	94	94	118	371	506	351	394	208
18	82	104	104	97	94	95	120	362	499	357	384	211
19	78	98	100	93	94	96	118	372	503	365	381	208
20	77	91	100	93	94	95	118	443	514	366	384	201
21	61	91	100	93	95	95	121	536	523	369	363	206
22	62	91	100	93	95	95	122	531	546	385	357	172
23	64	91	100	93	95	94	191	887	525	399	397	158
24	66	90	100	93	94	94	183	1460	489	406	397	155
25	67	89	100	93	94	94	185	1360	488	402	379	151
26	62	89	101	93	94	94	182	1090	498	383	371	148
27	61	86	101	93	94	94	183	984	484	376	367	146
28	67	79	100	93	95	94	184	932	474	364	366	149
29	64	78	100	93	95	94	183	890	448	338	377	156
30	69	76	108	93	---	94	183	709	449	365	394	156
31	68	---	101	93	---	94	---	700	---	353	391	---
TOTAL	3525	2717	2921	2964	2722	2927	3834	15343	15875	13241	11336	7273
MEAN	114	90.6	94.2	95.6	93.9	94.4	128	495	529	427	366	242
MAX	214	109	123	100	95	96	191	1460	689	543	397	382
MIN	61	48	75	93	93	93	92	172	448	338	283	146
AC-FT	6990	5390	5790	5880	5400	5810	7600	30430	31490	26260	22480	14430
CAL YR 1987	TOTAL	95641	MEAN	262	MAX	852	MIN	48	AC-FT	189700		
WTR YR 1988	TOTAL	84678	MEAN	231	MAX	1460	MIN	48	AC-FT	168000		

JORDAN RIVER BASIN

257

10163000 PROVO RIVER AT PROVO, UT

LOCATION.--Lat 40°14'16", long 111°41'55", in NE¼NW¼SE¼ sec. 3, T. 7 S., R. 2 E., Utah County, Hydrologic Unit 16020203, on left bank 1,300 ft downstream from bridge on State Highway 114, 2.1 mi west of Provo, and 2.1 mi upstream from mouth.

DRAINAGE AREA.--673 mi².

PERIOD OF RECORD.--May 1903 to June 1905, May 1933 to September 1934, January 1937 to current year. Monthly discharge only for some periods, published in WSP 1314. Published as "at San Pedro, Los Angeles and Salt Lake Railroad bridge, near Provo" 1903-04, and as "at Rio Grande Western Railroad bridge, near Provo" 1905.

REVISED RECORDS.--WSP 1564: 1904, 1934. WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,510 ft from topographic map. May 1903 to June 1905, non-recording gages at site 0.8 mi upstream at different datums. May 1933 to September 1934, nonrecording gage at present site at different datum. January 1937 to November 1938, water-stage recorder at site 1,000 ft upstream at different datum. November 1938 to August 1957, water-stage recorder at present site at datum 2.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair. Station is below all diversions. At times entire flow is diverted above station for irrigation. Flow regulated by Deer Creek Reservoir and small lakes at headwaters that serve as reservoirs. Small transmountain diversions from Strawberry River drain into Daniels Creek. Flow affected by Weber-Provo diversion canal and Duchesne Tunnel, a transmountain diversion. Certain diversions for industrial use which reach Provo Bay, an arm of Utah Lake, are made above station; however, part of this flow is used for irrigation.

AVERAGE DISCHARGE.--53 years, 211 ft³/s, 153,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,520 ft³/s May 6, 1952, gage height, 6.37 ft; no flow for several periods.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,590 ft³/s May 24, gage height, 6.50 ft; minimum, 0.39 ft³/s July 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	90	101	77	78	82	61	41	386	9.1	15	11
2	34	100	101	e77	69	83	53	52	328	11	15	11
3	49	96	103	e74	70	82	45	52	252	9.0	20	8.4
4	39	86	101	e75	71	83	45	37	191	13	18	19
5	29	82	100	79	74	84	50	28	155	13	24	20
6	28	95	100	78	70	91	44	30	113	5.4	17	16
7	23	116	107	78	65	91	44	37	68	6.3	33	8.9
8	24	107	99	73	74	87	42	32	54	11	15	12
9	26	105	103	71	78	82	36	28	49	6.6	10	11
10	34	113	104	74	88	75	35	17	30	7.2	9.3	17
11	41	105	101	80	81	77	62	20	29	12	5.3	25
12	41	105	98	81	78	74	111	19	30	11	6.6	25
13	91	108	104	70	78	77	116	16	32	8.8	9.4	49
14	84	135	112	67	75	76	53	19	34	13	10	27
15	80	114	146	70	75	75	51	15	26	22	9.9	20
16	91	112	154	72	74	69	53	17	20	13	5.1	15
17	89	108	151	74	72	68	47	30	25	12	7.8	11
18	82	104	117	75	70	70	68	46	33	11	9.3	11
19	77	102	84	66	75	65	65	38	30	12	3.3	13
20	71	92	81	77	76	63	73	31	31	8.5	5.9	12
21	66	87	82	61	73	70	87	42	28	7.4	18	15
22	59	87	86	72	75	66	93	127	30	4.6	10	21
23	70	87	83	70	73	64	103	625	16	2.9	4.7	30
24	78	92	79	61	73	62	87	1380	14	10	2.6	28
25	80	88	e76	67	73	60	87	1330	6.6	11	14	21
26	82	84	e74	81	73	57	63	840	22	14	12	19
27	71	84	e73	66	76	58	54	631	16	9.1	8.2	19
28	77	84	e74	62	75	67	53	562	17	11	8.5	16
29	81	101	74	62	77	63	42	608	17	14	5.0	23
30	88	102	75	66	---	64	37	475	8.1	13	16	35
31	85	---	e80	76	---	60	---	470	---	11	20	---
TOTAL	1893	2971	3023	2232	2159	2245	1860	7695	2090.7	322.9	367.9	569.3
MEAN	61.1	99.0	97.5	72.0	74.4	72.4	62.0	248	69.7	10.4	11.9	19.0
MAX	91	135	154	81	88	91	116	1380	386	22	33	49
MIN	23	82	73	61	65	57	35	15	6.6	2.9	2.6	8.4
AC-FT	3750	5890	6000	4430	4280	4450	3690	15260	4150	640	730	1130

CAL YR 1987 TOTAL 43173.6 MEAN 118 MAX 681 MIN 5.9 AC-FT 85630
WTR YR 1988 TOTAL 27428.8 MEAN 74.9 MAX 1380 MIN 2.6 AC-FT 54410

e Estimated

JORDAN RIVER BASIN

10164500 AMERICAN FORK ABOVE UPPER POWERPLANT, NEAR AMERICAN FORK, UT

LOCATION.--Lat 40°26'52", long 111°40'53", in SE¼NW¼NE¼ sec. 26, T. 4 S., R. 2 E., Utah County, Hydrologic Unit 16020201, on left bank 600 ft downstream from Rock Creek, 1,000 ft upstream from intake for upper power-plant of Utah Power & Light Co., 4.0 mi upstream from mouth of canyon, and 6.7 mi northeast of American Fork.

DRAINAGE AREA.--51.1 mi².

PERIOD OF RECORD.--January 1927 to current year. Monthly discharge only January 1927 to September 1945, published in WSP 1314.

REVISED RECORDS.--WSP 1634: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,950 ft from topographic map. Prior to Sept. 8, 1965, at same site at different datum. Sept. 8, 1965 to Nov. 20, 1967, at site 300 ft upstream.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Silver Lake Flat Reservoir (constructed 1971) and Tibble Reservoir; total capacity, 1,260 acre-ft.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--61 years, 56.8 ft³/s, 41,150 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge not determined, occurred July 30, 1953, gage height, 9.20 ft, from floodmark; minimum, 1.1 ft³/s Dec. 20, 1976 (result of freezeup).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 133 ft³/s May 27, gage height, 6.61 ft; minimum daily, 13 ft³/s Mar. 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	21	18	16	15	16	16	37	67	44	26	16
2	20	24	18	16	15	16	17	37	60	43	25	16
3	20	21	18	16	15	16	17	35	60	42	24	17
4	20	20	18	17	14	16	17	35	76	41	24	16
5	20	21	18	16	15	15	17	34	110	43	23	16
6	20	23	18	16	15	16	18	37	112	41	24	16
7	19	22	18	16	15	15	20	37	102	40	25	16
8	19	21	18	16	16	14	22	35	90	39	23	15
9	19	21	19	16	15	15	22	34	80	38	23	15
10	21	22	19	16	16	16	22	34	77	37	22	15
11	19	21	18	16	15	15	24	37	74	36	22	15
12	19	21	16	16	15	15	28	45	72	36	22	16
13	23	21	15	15	15	14	31	54	69	35	21	17
14	22	22	14	16	15	14	35	63	66	34	21	17
15	21	20	14	16	15	15	34	68	61	33	21	16
16	20	19	15	16	15	14	36	74	60	32	21	16
17	20	20	16	16	14	14	37	97	60	31	21	16
18	20	17	16	16	15	13	37	106	58	30	19	16
19	20	18	16	15	14	13	35	84	56	29	19	16
20	20	19	16	15	14	14	35	76	54	29	19	15
21	20	19	16	16	14	15	36	76	51	29	19	16
22	19	19	17	15	15	15	34	84	50	28	19	16
23	19	18	17	16	14	15	32	95	48	28	19	16
24	21	17	17	15	15	15	31	101	51	28	18	15
25	19	18	17	15	15	15	31	106	51	28	18	15
26	19	18	16	16	15	16	30	126	53	28	17	15
27	19	17	16	16	16	17	31	130	50	28	17	15
28	19	17	16	16	16	17	32	117	48	27	17	15
29	19	18	16	16	16	16	33	113	46	26	17	15
30	20	18	16	16	---	17	37	95	45	26	17	15
31	20	---	16	16	---	16	---	78	---	26	16	---
TOTAL	616	593	518	491	434	470	847	2180	1957	1035	639	471
MEAN	19.9	19.8	16.7	15.8	15.0	15.2	28.2	70.3	65.2	33.4	20.6	15.7
MAX	23	24	19	17	16	17	37	130	112	44	26	17
MIN	19	17	14	15	14	13	16	34	45	26	16	15
AC-FT	1220	1180	1030	974	861	932	1680	4320	3880	2050	1270	934
CAL YR 1987	TOTAL	12835	MEAN	35.2	MAX	133	MIN	14	AC-FT	25460		
WTR YR 1988	TOTAL	10251	MEAN	28.0	MAX	130	MIN	13	AC-FT	20330		

JORDAN RIVER BASIN

259

10166430 WEST CANYON NEAR CEDAR FORT, UT

LOCATION.--Lat 40°24'24", long 112°06'03", in SW¼SE¼SE¼ sec. 6, T. 5 S., R. 2 W., Utah County, on left bank 70 ft upstream from road bridge, 160 ft downstream from Left Fork, 750 ft upstream from a right bank diversion, and 5.3 mi north of Cedar Fort.

DRAINAGE AREA.--26.8 mi².

PERIOD OF RECORD.--July 1965 to October 1975, October 1986 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,650 ft from topographic map.

AVERAGE DISCHARGE.--12 years, 4.23 ft³/s, 3,060 acre-ft/yr.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,660 ft³/s Aug. 28, 1971, gage height, 7.50 ft from slope-area measurement; minimum, 0.02 ft³/s Jan. 17, 22, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 38 ft³/s May 17, gage height, 2.04 ft; minimum daily, 0.34 ft³/s several days in March and September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.2	e1.2	e.78	e.48	e.53	.39	.47	1.8	5.2	1.2	.98	.66
2	e1.2	e1.2	e.78	e.44	e.51	.34	.40	2.5	4.2	1.1	1.1	.61
3	e1.2	e1.2	e.82	e.41	e.49	.34	.40	5.6	4.9	1.1	1.1	.58
4	e1.2	1.1	e.79	e.44	e.48	.34	.40	5.6	7.7	1.1	.95	.55
5	e1.2	1.0	e.81	e.50	e.47	.34	.40	5.1	9.3	1.1	.89	.54
6	e1.1	e.98	e.76	e.54	e.45	.34	.40	5.6	8.2	1.2	.88	.54
7	e1.1	e.96	e.70	e.53	e.47	.44	.40	5.8	7.1	1.2	.85	.54
8	e1.1	1.0	e.64	e.51	e.48	.57	.40	5.0	5.9	1.2	.82	.51
9	e1.1	e1.1	e.66	e.52	e.49	.43	.42	4.8	4.7	1.2	.77	.46
10	1.1	e1.0	e.65	e.56	e.49	.53	.40	4.5	4.1	1.2	.77	.46
11	1.1	e.98	e.66	e.53	e.49	.71	.40	4.3	3.6	1.1	.77	.49
12	1.2	.98	e.61	e.48	e.50	.82	.40	5.4	3.4	1.1	.77	.50
13	1.2	.96	e.56	e.46	e.49	.96	.40	7.8	2.9	1.1	.75	.55
14	1.1	1.0	e.54	e.46	e.49	1.2	.41	12	2.7	1.1	.71	.54
15	1.1	.96	e.56	e.46	e.51	.37	.43	13	2.6	1.1	.67	.54
16	1.1	e.96	e.58	e.45	e.50	.38	.46	18	2.5	1.1	.70	.51
17	e1.2	e.95	.58	e.47	e.48	.56	.84	29	2.5	1.1	.72	.46
18	e1.2	e.92	.54	e.46	e.50	.59	.93	34	2.3	1.2	.72	.46
19	e1.1	e.90	.54	e.44	.50	.50	.84	26	2.3	1.1	.72	.46
20	e1.0	.91	.51	e.42	.47	.36	.76	20	2.1	1.1	.72	.45
21	e1.0	.86	.50	e.45	.82	.34	.73	17	2.0	1.1	.71	.43
22	e1.1	.83	.51	e.49	.84	.34	.75	16	2.0	1.0	.67	.43
23	e1.1	e.85	.53	e.48	.82	.34	.85	17	1.9	1.0	.67	.43
24	e1.1	e.83	.50	e.47	.77	.34	.96	16	1.8	1.1	.67	.41
25	e1.2	.83	.50	e.47	.56	.35	1.2	16	1.5	1.2	.67	.37
26	e1.1	.82	.51	e.47	.44	.37	1.1	17	1.5	1.1	.67	.37
27	e1.0	e.79	.53	e.46	.42	.37	1.2	17	1.4	1.3	.67	.37
28	1.1	e.76	.52	e.51	.43	.48	1.2	15	1.4	1.4	.67	.36
29	1.1	e.78	.50	e.55	.43	.57	1.3	15	1.4	1.2	.67	.34
30	1.1	e.78	e.53	e.57	---	.40	1.5	11	1.3	1.1	.67	.34
31	1.1	---	e.51	e.55	---	.51	---	7.7	---	1.0	.67	---
TOTAL	34.8	28.39	18.71	15.03	15.32	14.92	20.75	380.5	104.4	35.2	23.77	14.26
MEAN	1.12	.95	.60	.48	.53	.48	.69	12.3	3.48	1.14	.77	.48
MAX	1.2	1.2	.82	.57	.84	1.2	1.5	34	9.3	1.4	1.1	.66
MIN	1.0	.76	.50	.41	.42	.34	.40	1.8	1.3	1.0	.67	.34
AC-FT	69	56	37	30	30	30	41	755	207	70	47	28

CAL YR 1987 TOTAL 1142.00 MEAN 3.13 MAX 18 MIN .50 AC-FT 2270
WTR YR 1988 TOTAL 706.05 MEAN 1.93 MAX 34 MIN .34 AC-FT 1400

e Estimated

JORDAN RIVER BASIN

10167000 JORDAN RIVER AT NARROWS, NEAR LEHI, UT

LOCATION.--Lat 40°26'38", long 111°55'17", in NW¼SE¼NW¼ sec. 26, T. 4 S., R. 1 W., Salt Lake County.
Hydrologic Unit 16020201, at narrows 5.5 mi northwest of Lehi and 7.5 mi downstream from Utah Lake.

DRAINAGE AREA.--3,010 mi², including 255 mi² in closed basin in Cedar Valley.

PERIOD OF RECORD.--May to December 1904, July 1913 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,469.44 ft NGVD of 1929. Prior to May 16, 1920, nonrecording gage and May 16, 1920, to Sept. 30, 1934, water-stage recorder, at outlet of Utah Lake 7.5 mi upstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Figures given herein represent combined flow of Jordan River, Utah and Salt Lake Canal, and East Jordan Canal. In addition to the combined flow indicated below, 38,640 acre-ft of Utah Lake water bypassed the Jordan River narrows in the Utah Lake Distributing Company Canal. Flow may be regulated by gates and pumps at outlet of Utah Lake, pumps at Pelican Point, and diversion dam at narrows.

COOPERATION.--Records provided by the Jordan River Distribution System.

AVERAGE DISCHARGE.--75 years (1913-88), 428 ft³/s, 310,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,030 ft³/s June 20, 1984; no flow at times most years when gates are closed.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	339	42	22	27	25	34	30	246	502	643	605	560
2	343	48	23	27	25	34	29	250	501	647	590	560
3	339	43	23	27	25	29	28	259	497	645	602	550
4	340	41	23	25	25	25	27	264	498	637	589	554
5	349	42	23	26	25	25	27	264	515	629	573	554
6	344	46	24	27	25	31	27	276	517	497	570	539
7	361	46	24	27	25	27	27	300	508	518	564	525
8	355	43	24	27	25	27	25	291	517	637	572	527
9	362	43	25	26	25	24	27	312	532	633	570	513
10	362	44	24	27	26	26	24	345	543	636	584	509
11	362	44	23	26	28	26	24	364	544	632	595	421
12	357	44	23	27	28	26	25	411	548	633	600	518
13	320	22	22	26	27	26	24	450	572	634	602	513
14	291	23	23	25	28	26	13	476	584	628	602	485
15	113	26	24	26	27	26	112	499	590	635	592	471
16	42	25	24	26	26	25	193	490	589	633	588	457
17	40	23	25	25	27	27	208	473	603	631	589	437
18	39	23	25	25	27	27	221	464	624	631	595	398
19	39	23	25	26	27	25	219	473	623	641	597	433
20	39	22	26	24	28	25	220	467	628	632	599	425
21	43	22	26	25	29	24	220	480	626	601	602	400
22	43	22	25	24	30	23	221	478	640	608	597	382
23	6.0	22	25	24	33	22	219	481	629	608	592	365
24	30	22	27	25	33	26	217	485	608	607	597	351
25	25	21	25	24	34	27	218	484	646	607	580	353
26	34	20	25	24	34	26	222	509	643	608	565	337
27	37	21	25	24	35	23	278	514	638	608	566	325
28	39	20	24	24	36	29	277	509	645	596	588	325
29	39	20	26	24	37	27	272	519	641	615	567	309
30	41	20	26	24	---	26	269	508	644	607	582	297
31	41	---	27	25	---	25	---	502	---	605	574	---
TOTAL	5514.0	923	756	789	825	819	3943	12843	17395	19122	18188	13393
MEAN	178	30.8	24.4	25.5	28.4	26.4	131	414	580	617	587	446
MAX	362	48	27	27	37	34	278	519	646	647	605	560
MIN	6.0	20	22	24	25	22	13	246	497	497	564	297
AC-FT	10940	1830	1500	1560	1640	1620	7820	25470	34500	37930	36080	26570
CAL YR 1987	TOTAL	213034.0	MEAN	584	MAX	1220	MIN	6.0	AC-FT	422600		
WTR YR 1988	TOTAL	94510.0	MEAN	258	MAX	647	MIN	6.0	AC-FT	187500		

JORDAN RIVER BASIN

261

10168300 TAILRACE AT STAIRS PLANT NEAR SALT LAKE CITY, UT

LOCATION.--Lat 40°37'26", long 111°45'05", in NW¼SE¼SW¼ sec. 20, T. 2 S., R. 2 E., Salt Lake County.
Hydrologic Unit 16120204 on left bank at Stairs plant, 14 mi southeast of Salt Lake City.

DRAINAGE AREA.--49.2 mi².

PERIOD OF RECORD.--January 1925 to current year. Prior to 1986, not published, records available from Utah Power & Light Co.

GAGE.--Water-stage recorder. Altitude of gage is 5,460 ft from topographic map.

REMARKS.--No estimated daily discharges. Records good.

COOPERATION.--Records collected by Utah Power & Light Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 78 ft³/s July 1, 1954; no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 52 ft³/s May 27-30; minimum daily discharge, 9.8 ft³/s May 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	26	18	16	15	18	18	50	43	32	18	17
2	17	27	18	14	15	18	19	50	47	30	21	16
3	16	23	18	15	14	17	19	49	51	29	29	18
4	16	21	18	16	13	17	21	49	51	28	23	15
5	17	21	18	16	14	17	21	50	51	27	19	15
6	16	23	17	16	14	16	22	50	51	26	18	15
7	17	22	17	15	14	17	24	49	51	25	20	15
8	17	21	18	16	14	16	26	50	51	41	20	15
9	17	21	18	16	14	17	23	49	51	42	19	15
10	17	21	19	16	15	17	23	48	51	41	18	14
11	18	21	18	16	14	17	24	50	51	40	18	14
12	17	20	16	15	14	17	28	50	51	39	19	15
13	19	20	14	15	15	17	30	48	51	38	18	15
14	21	22	12	15	14	17	33	47	51	38	17	14
15	20	20	12	16	14	17	38	50	51	38	17	15
16	19	19	16	16	15	17	41	50	51	37	17	14
17	19	20	17	15	13	17	41	46	51	36	16	14
18	18	17	17	16	14	17	46	50	51	34	17	14
19	19	18	17	13	15	17	50	48	51	26	21	14
20	21	19	16	13	15	19	49	46	51	24	24	14
21	21	18	16	15	15	21	49	43	51	21	24	14
22	24	19	17	14	15	21	49	48	51	26	23	13
23	26	18	17	15	15	20	47	25	51	31	23	14
24	27	18	14	14	15	20	45	9.8	48	29	22	14
25	26	18	11	14	16	20	33	34	46	29	23	13
26	26	18	11	14	17	21	42	51	45	29	23	13
27	25	18	12	14	17	22	43	52	41	29	22	13
28	25	18	14	15	18	21	46	52	38	30	22	14
29	25	18	16	15	17	18	47	52	35	23	20	15
30	25	18	16	15	---	20	49	52	34	20	19	14
31	25	---	16	15	---	19	---	49	---	20	18	---
TOTAL	633	603	494	466	430	565	1046	1446.8	1448	958	628	435
MEAN	20.4	20.1	15.9	15.0	14.8	18.2	34.9	46.7	48.3	30.9	20.3	14.5
MAX	27	27	19	16	18	22	50	52	51	42	29	18
MIN	16	17	11	13	13	16	18	9.8	34	20	16	13
AC-FT	1260	1200	980	924	853	1120	2070	2870	2870	1900	1250	863
CAL YR 1987	TOTAL	9446.02	MEAN	25.9	MAX	53	MIN	.00	AC-FT	18740		
WTR YR 1988	TOTAL	9152.8	MEAN	25.0	MAX	52	MIN	9.8	AC-FT	18150		

JORDAN RIVER BASIN

10170500 SURPLUS CANAL AT SALT LAKE CITY, UT

LOCATION.--Lat 40°43'37", long 111°55'33", in SE¼SW¼SW¼ sec. 14, T. 1 S., R. 1 W., Salt Lake County, Hydrologic Unit 16020204, near right bank on upstream side of diversion dam at head of canal, and 250 ft downstream from highway bridge over Jordan River on 2100 South Street.

PERIOD OF RECORD.--December 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,223.93 ft NGVD of 1929. Prior to Oct. 22, 1952, at site 350 ft downstream, and Oct. 22, 1952 to Sept. 30, 1966, at site 400 ft downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by diversion structure at station. Canal was built to bypass floodwater of Jordan River around Salt Lake City residential and industrial area (see station 10170490 for records of combined flow of Jordan River and Surplus Canal). Several diversions for irrigation and waterfowl ponds below station.

AVERAGE DISCHARGE.--45 years, 387 ft³/s, 280,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,410 ft³/s June 1, 1984, gage height, 8.91 ft, present datum; no flow Jan. 21 to Feb. 28, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 904 ft³/s May 30, gage height, 2.35 ft; minimum daily, 138 ft³/s July 07.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	264	197	179	185	248	e192	194	438	509	211	260	225
2	280	276	173	182	219	e191	196	353	429	215	269	233
3	266	221	173	179	176	188	191	323	352	200	306	233
4	238	211	174	183	177	188	192	295	329	170	314	223
5	252	207	176	180	e184	185	188	269	369	166	265	230
6	255	215	187	185	e186	227	192	279	339	159	259	238
7	245	217	282	185	e185	239	186	294	270	138	279	223
8	261	221	230	182	e183	207	178	284	247	141	273	231
9	279	216	198	187	e183	227	180	268	219	156	213	256
10	284	277	203	191	e193	235	172	282	212	166	177	254
11	302	231	213	210	195	227	166	225	190	170	181	248
12	324	218	205	194	194	214	167	213	196	163	208	257
13	398	204	196	189	198	213	156	238	202	174	199	300
14	471	311	203	187	188	211	170	362	185	189	202	310
15	362	252	198	188	188	234	196	356	167	173	205	286
16	251	232	188	191	187	227	159	374	166	177	195	258
17	191	227	195	191	175	196	170	608	152	173	187	243
18	181	228	176	187	174	189	420	801	174	194	193	236
19	191	230	185	180	173	184	398	607	200	205	212	218
20	201	215	186	181	176	176	341	424	223	220	230	231
21	218	216	189	184	176	175	332	387	211	236	229	242
22	325	232	190	202	177	177	450	355	192	216	241	276
23	254	226	188	239	170	178	354	390	219	203	224	245
24	219	214	182	240	177	189	375	391	192	200	219	228
25	201	195	172	232	177	196	409	411	170	230	232	223
26	197	184	173	236	185	200	358	413	219	227	230	215
27	188	189	175	236	196	185	271	443	251	241	232	197
28	172	196	174	235	193	188	238	397	e255	302	231	195
29	191	193	179	235	e192	192	219	444	e207	241	242	206
30	217	187	204	251	---	213	234	723	203	243	251	213
31	207	---	194	251	---	197	---	632	---	264	248	---
TOTAL	7885	6638	5940	6278	5425	6240	7452	12279	7249	6163	7206	7173
MEAN	254	221	192	203	187	201	248	396	242	199	232	239
MAX	471	311	282	251	248	239	450	801	509	302	314	310
MIN	172	184	172	179	170	175	156	213	152	138	177	195
AC-FT	15640	13170	11780	12450	10760	12380	14780	24360	14380	12220	14290	14230
CAL YR 1987	TOTAL	230231	MEAN	631	MAX	1510	MIN	172	AC-FT	456700		
WTR YR 1988	TOTAL	85928	MEAN	235	MAX	801	MIN	138	AC-FT	170400		

e Estimated

JORDAN RIVER BASIN

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10171000 JORDAN RIVER AT SALT LAKE CITY, UT

LOCATION.--Lat 40°44'01", long 111°55'21", in SW¼SE¼NW¼ sec. 14, T. 1 S., R. 1 W., Salt Lake County, Hydrologic Unit 16020204, on right bank at 1700 South Street and about 1000 West, Salt Lake City, 4,000 ft downstream from diversion structure at head of Surplus Canal, and 1.7 mi downstream from Mill Creek.

DRAINAGE AREA.--3,438 mi² includes 255 mi² closed basin in Cedar Valley.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,220.08 ft NGVD of 1929. Prior to July 1, 1976 at site 3,200 ft upstream at same datum.

REMARKS.--Records good, except for estimated daily discharges, which are fair. Flow completely regulated since reconstruction in May 1952 of Surplus Canal diversion dam 4,000 ft upstream. Flow affected by regulation at Utah Lake, Deer Creek Reservoir, other storage and regulation, and importation of water from other basins. Many diversions above station for irrigation, industrial, and municipal water supplies. For records of Surplus Canal see station 10170500. For records of combined flow, see following page.

AVERAGE DISCHARGE.--45 years (1943-88), 146 ft³/s, 105,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 449 ft³/s Aug. 20, 1986, gage height, 4.41 ft; maximum gage height, 5.75 ft June 26, 1952; no flow May 10, 24, 1952. May 21, 22, 1962, Sept. 21, 1963, May 14 to June 1, 1964, and Sept. 6, 7, 1965 entire flow diverted to Surplus Canal. Maximum daily combined discharge (Jordan River and Surplus Canal), 4,510 ft³/s June 1, 1984; minimum daily, 89 ft³/s June 23, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 209 ft³/s Aug. 11, gage height, 2.72 ft; minimum daily discharge, 59 ft³/s Apr. 23. Maximum daily combined discharge during year (Jordan River and Surplus Canal), 900 ft³/s May 18; minimum daily, 251 ft³/s Apr. 16.

REVISIONS.--Revised figures of combined discharge for the water year 1987, superseding those published in the report for 1987 are given on page 266.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	105	116	101	63	104	76	157	123	152	146	154
2	141	110	115	101	82	102	75	133	143	166	151	155
3	140	104	114	100	115	99	75	126	154	177	153	154
4	137	102	111	102	114	98	74	121	182	176	152	152
5	138	102	109	101	114	98	76	114	185	183	150	152
6	134	104	108	102	114	102	76	109	183	183	155	154
7	132	103	118	102	114	93	81	104	174	177	163	153
8	130	101	112	102	115	89	87	101	168	182	185	156
9	129	100	116	102	115	91	87	98	162	186	194	158
10	131	105	115	103	122	91	89	99	161	176	193	158
11	131	97	115	106	118	88	92	94	157	174	205	157
12	132	101	113	104	117	87	95	93	156	170	192	157
13	143	107	112	103	117	87	96	116	159	170	185	161
14	143	120	112	103	114	87	99	113	156	172	183	159
15	131	109	111	103	114	89	98	101	155	169	173	158
16	124	108	114	102	115	86	92	98	159	165	170	158
17	118	107	118	102	116	95	92	102	156	161	171	156
18	116	107	116	102	116	103	112	99	155	156	169	154
19	118	107	111	102	115	102	70	107	151	145	168	153
20	120	106	105	102	114	100	64	143	147	151	162	149
21	121	105	105	101	113	98	63	136	143	153	161	145
22	124	107	105	86	113	95	71	129	135	151	161	148
23	116	107	105	65	112	95	59	131	140	144	161	146
24	111	109	103	64	111	92	69	135	146	143	161	145
25	110	119	101	64	111	90	113	141	147	142	160	144
26	108	129	101	63	108	89	122	140	149	141	156	145
27	108	124	101	63	108	85	130	136	150	141	156	143
28	106	117	101	63	107	82	144	127	156	144	155	139
29	108	117	101	63	106	81	136	132	152	146	157	136
30	110	117	103	63	---	81	133	137	150	143	158	137
31	105	---	102	63	---	78	---	116	---	142	158	---
TOTAL	3856	3256	3389	2803	3213	2857	2746	3688	4654	4981	5164	4536
MEAN	124	109	109	90.4	111	92.2	91.5	119	155	161	167	151
MAX	143	129	118	106	122	104	144	157	185	186	205	161
MIN	105	97	101	63	63	78	59	93	123	141	146	136
AC-FT	7650	6460	6720	5560	6370	5670	5450	7320	9230	9880	10240	9000
CAL YR 1987	TOTAL	47984	MEAN	131	MAX	214	MIN	62	AC-FT	95180		
WTR YR 1988	TOTAL	45143	MEAN	123	MAX	205	MIN	59	AC-FT	89540		

JORDAN RIVER BASIN

10171000 JORDAN RIVER AT SALT LAKE CITY, UT--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1974 to September 1978, October 1980 to September 1981.

WATER TEMPERATURES: April 1975 to September 1978, October 1980 to September 1981.

INSTRUMENTATION.--Specific conductance recorder October 1974 to September 1981; temperature recorder April 1975 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,330 microsiemens Mar. 29, 1977; minimum, 536 microsiemens June 25, 1978.

WATER TEMPERATURES: Maximum, 28.0°C Aug. 29, 30, 1975; minimum, 0.5°C Jan. 2, 3, 1976.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
FEB , 1988										
03...	1115	116	1680	7.90	2.0	7.0	1.3	9.80	660	K2
MAR										
08...	0920	87	1640	7.90	7.0	8.0	3.3	8.70	660	K1
APR										
12...	1125	97	1660	8.00	25.0	14.5	4.4	7.80	650	K2
MAY										
17...	0810	92	870	7.80	20.0	12.5	120	7.70	650	410
JUL										
26...	1250	139	1400	8.00	33.0	23.0	48	7.70	650	510
AUG										
16...	0956	168	1290	8.05	24.5	19.0	26	7.40	650	770

DATE	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3
FEB , 1988										
03...	77	530	130	51	160	39	3	15	324	266
MAR										
08...	K7	520	120	52	160	40	3	13	328	269
APR										
12...	K6	520	120	52	160	40	3	12	320	262
MAY										
17...	980	230	60	19	18	15	0.5	1.6	180	148
JUL										
26...	340	450	92	53	160	43	3	13	288	236
AUG										
16...	1060	480	99	57	180	44	4	13	300	246

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
FEB , 1988										
03...	300	210	0.3	24	1070	1070	1.46	335	3.25	0.05
MAR										
08...	290	210	0.4	22	1090	1040	1.48	257	2.51	0.09
APR										
12...	320	230	0.7	21	1200	1090	1.63	314	4.29	0.21
MAY										
17...	54	18	0.2	9.0	345	299	0.47	85.7	1.74	0.06
JUL										
26...	270	210	0.6	21	1020	982	1.39	383	3.37	0.23
AUG										
16...	300	240	0.7	21	1090	1080	1.48	494	2.92	0.18

K Results based on colony count outside acceptable range (non-ideal colony count).

JORDAN RIVER BASIN

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10171000 JORDAN RIVER AT SALT LAKE CITY, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
FEB , 1988										
03...	3.30	0.81	0.78	1.0	0.99	1.8	2.10	1.70	1.50	4.6
MAR										
08...	2.60	2.60	2.40	3.1	0.7	3.3	1.80	1.70	1.30	4.0
APR										
12...	4.50	2.70	2.10	2.7	1.6	4.3	1.80	1.70	1.40	4.3
MAY										
17...	1.80	0.34	0.29	0.37	0.46	0.8	0.70	0.67	0.55	1.7
JUL										
26...	3.60	0.42	0.42	0.54	1.5	1.9	1.80	1.80	1.80	5.5
AUG										
16...	3.10	0.79	0.78	1.0	1.5	2.3	1.40	1.30	1.20	3.7

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
MAR , 1988											
08...	0920	10	9	57	<0.5	<1	1	<3	3	14	<5
APR											
12...	1125	20	12	53	<0.5	<1	<1	<3	4	21	<5
JUL											
26...	1250	20	12	72	<0.5	<1	<1	<3	1	12	<5
AUG											
16...	0956	30	13	76	<0.5	2	<1	<3	2	26	<5

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
MAR , 1988										
08...	120	41	<0.1	<10	2	<1	<1.0	1100	<6	15
APR										
12...	110	44	0.1	<10	9	2	<1.0	1100	<6	20
JUL										
26...	120	26	0.3	<10	1	<1	<1.0	990	<6	<3
AUG										
16...	140	22	<0.1	10	<1	2	<1.0	1100	<6	13

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SED. SUSP. SIEVE DIAM. PERCENT FINER THAN .062 MM	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
MAR , 1988						
08...	0920	87	8.0	84	10	2.4

JORDAN RIVER BASIN

10170490 JORDAN RIVER AT SALT LAKE CITY, UT--Continued

Combined discharge, in cubic feet per second, of Jordan River and Surplus Canal

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1620	1620	1640	1510	1520	1460	1430	844	483	522	375	478
2	1660	1640	1650	1520	1520	1470	1420	1110	449	549	360	456
3	1660	1600	1670	1510	1510	1460	1430	878	408	503	385	508
4	1580	1600	1670	1530	1490	1430	1450	822	420	481	411	497
5	1570	1600	1660	1650	1450	1440	1430	789	425	469	413	462
6	1590	1630	1690	1610	1450	1440	1470	753	480	449	351	434
7	1590	1660	1680	1570	1450	1490	1480	758	631	452	362	443
8	1560	1630	1700	1530	1450	1490	1500	802	650	509	375	447
9	1510	1630	1640	1510	1450	1630	1430	843	565	582	393	469
10	1500	1590	1630	1520	1450	1490	1430	856	591	565	389	513
11	1460	1600	1710	1520	1440	1480	1440	866	570	576	395	505
12	1500	1590	1610	1500	1450	1460	1340	821	497	536	401	457
13	1520	1600	1550	1480	1460	1510	1410	897	441	487	394	459
14	1540	1600	1560	1480	1680	1500	757	860	409	410	452	472
15	1640	1610	1560	1480	1560	1500	593	747	388	418	746	430
16	1620	1610	1550	1450	1550	1540	970	784	406	426	673	399
17	1600	1620	1550	1490	1480	1450	677	925	381	485	613	413
18	1650	1600	1550	1470	1470	1510	823	1150	374	425	551	415
19	1620	1620	1560	1480	1430	1470	1150	1220	367	382	546	400
20	1640	1600	1560	1470	1420	1400	920	1120	428	397	497	399
21	1630	1630	1520	1470	1460	1440	546	1090	477	851	466	411
22	1600	1610	1550	1470	1470	1430	579	983	524	939	525	399
23	1590	1610	1540	1470	1490	1410	452	885	483	652	513	348
24	1600	1630	1540	1480	1490	1430	445	878	516	462	532	340
25	1580	1590	1570	1480	1490	1420	495	836	503	373	563	357
26	1580	1600	1570	1490	1440	1440	568	800	480	382	530	366
27	1590	1630	1560	1490	1420	1380	593	716	430	440	548	355
28	1560	1630	1550	1530	1460	1410	642	689	470	394	535	370
29	1610	1650	1540	1530	---	1390	684	656	519	427	475	376
30	1630	1590	1490	1520	---	1420	745	575	518	416	440	421
31	1600	---	1510	1510	---	1440	---	484	---	399	484	---
TOTAL	49200	48420	49330	46720	41400	45230	30299	26437	14283	15358	14693	12799
MEAN	1587	1614	1591	1507	1479	1459	1010	853	476	495	474	427
MAX	1660	1660	1710	1650	1680	1630	1500	1220	650	939	746	513
MIN	1460	1590	1490	1450	1420	1380	445	484	367	373	351	340
AC-FT	97590	96040	97850	92670	82120	89710	60100	52440	28330	30460	29140	25390
CAL YR 1986	TOTAL	693357	MEAN	1900	MAX	3820	MIN	406	AC-FT	1375000		
WTR YR 1987	TOTAL	394169	MEAN	1080	MAX	1710	MIN	340	AC-FT	781800		

JORDAN RIVER BASIN

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10170490 JORDAN RIVER AT SALT LAKE CITY, UT--Continued

Combined discharge, in cubic feet per second, of Jordan River and Surplus Canal

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	405	302	295	286	311	296	270	595	632	363	406	379
2	421	386	288	283	301	293	271	486	572	381	420	388
3	406	325	287	279	291	287	266	449	506	377	459	387
4	375	313	285	285	291	286	266	416	511	346	466	375
5	390	309	285	281	298	283	264	383	554	349	415	382
6	389	319	295	287	300	329	268	388	522	342	414	392
7	377	320	400	287	299	332	267	398	444	315	442	376
8	391	322	342	284	298	296	265	385	415	323	458	387
9	408	316	314	289	298	318	267	366	381	342	407	414
10	415	382	318	294	315	326	261	381	373	342	370	412
11	433	328	328	316	313	315	258	319	347	344	386	405
12	456	319	318	298	311	301	262	306	352	333	400	414
13	541	311	308	292	315	300	252	354	361	344	384	461
14	614	431	315	290	302	298	269	475	341	361	385	469
15	493	361	309	291	302	323	294	457	322	342	378	444
16	375	340	302	293	302	313	251	472	325	342	365	416
17	309	334	313	293	291	291	262	710	308	334	358	399
18	297	335	292	289	290	292	532	900	329	350	362	390
19	309	337	296	282	288	286	468	714	351	350	380	371
20	321	321	291	283	290	276	405	567	370	371	392	380
21	339	321	294	285	289	273	395	523	354	389	390	387
22	449	339	295	288	290	272	521	484	327	367	402	424
23	370	333	293	304	282	273	413	521	359	347	385	391
24	330	323	285	304	288	281	444	526	338	343	380	373
25	311	314	273	296	288	286	522	552	317	372	392	367
26	305	313	274	299	293	289	480	553	368	368	386	360
27	296	313	276	299	304	270	401	579	401	382	388	340
28	278	313	275	298	300	270	382	524	411	446	386	334
29	299	310	280	298	298	273	355	576	359	387	399	342
30	327	304	307	314	---	294	367	860	353	386	409	350
31	312	---	296	314	---	275	---	748	---	406	406	---
TOTAL	11741	9894	9329	9081	8638	9097	10198	15967	11903	11144	12370	11709
MEAN	379	330	301	293	298	293	340	515	397	359	399	390
MAX	614	431	400	316	315	332	532	900	632	446	466	469
MIN	278	302	273	279	282	270	251	306	308	315	358	334
AC-FT	23290	19620	18500	18010	17130	18040	20230	31670	23610	22100	24540	23220
CAL YR 1987	TOTAL	278183	MEAN	762	MAX	1680	MIN	273	AC-FT	551800		
WTR YR 1988	TOTAL	131071	MEAN	358	MAX	900	MIN	251	AC-FT	260000		

JORDAN RIVER BASIN

10172200 RED BUTTE CREEK AT FORT DOUGLAS, NEAR SALT LAKE CITY, UT
(Hydrologic bench mark station)

LOCATION.--Lat 40°46'48", long 111°48'19", in NE¼SE¼NW¼ sec. 35, T. 1 N., R. 1 E., Salt Lake County, Hydrologic Unit 16020204, on right bank 0.4 mi upstream from dam forming Red Butte Reservoir, and 1.7 mi north-east of Fort Douglas.

DRAINAGE AREA.--7.25 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year. Figures of monthly discharge for January 1942 to September 1963, collected by Corps of Engineers, U.S. Army, available in files of Salt Lake City District Office, Geological Survey.

GAGE.--Water-stage recorder. Altitude of gage is 5,400 ft from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. No regulation or diversion above station. Most of flow is collected in reservoir below station and used for water supply of Fort Douglas.

AVERAGE DISCHARGE.--25 years, 4.70 ft³/s, 3,410 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 105 ft³/s May 28, 1983, maximum gage height, 3.81 ft May 17, 1984; minimum, 0.23 ft³/s Dec. 22, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 25	1200	*3.2	*0.57				

Minimum, 0.52 ft³/s, Sept. 3-9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.94	1.2	1.3	1.5	1.4	1.8	1.7	2.6	1.9	1.1	.81	.64
2	.94	1.4	1.3	1.5	1.4	1.7	1.7	2.5	1.9	1.1	.87	.63
3	.96	1.3	1.3	1.5	1.2	1.7	1.8	2.5	1.8	1.1	.87	.60
4	.96	1.3	1.3	1.5	1.5	1.7	1.8	2.4	1.8	1.1	.87	.59
5	.98	1.3	1.4	1.5	1.6	1.7	1.8	2.3	1.7	1.0	.79	.61
6	1.0	1.4	1.4	1.5	1.6	1.8	1.8	2.3	1.7	1.0	.86	.63
7	1.0	1.5	1.4	1.5	1.5	1.7	1.9	2.4	1.6	1.0	.88	.63
8	.95	1.4	1.5	1.6	1.5	1.7	1.9	2.6	1.7	1.0	.86	.61
9	.98	1.3	1.5	1.5	1.5	1.7	1.9	2.4	1.7	1.0	.82	.63
10	.95	1.5	1.5	1.5	1.6	1.7	1.8	2.3	1.6	.97	.79	.61
11	.98	1.4	1.5	1.6	1.5	1.6	1.8	2.3	1.6	.95	.77	.66
12	1.0	1.3	e1.4	1.5	1.6	1.6	1.8	2.3	1.6	.95	.76	.67
13	1.4	1.3	e1.1	1.5	1.5	1.6	1.8	2.3	1.6	.95	.74	.75
14	1.3	1.7	e.75	1.5	1.4	1.5	1.9	2.3	1.5	.95	.72	.79
15	1.1	1.4	1.2	1.5	1.4	1.6	1.9	2.2	1.5	.90	.72	.71
16	1.2	1.4	1.7	1.5	1.4	1.6	1.8	2.2	1.5	.89	.72	.69
17	1.2	1.4	1.7	1.5	1.3	1.6	1.7	2.3	1.4	.88	.74	.65
18	1.2	1.6	1.6	1.5	1.5	1.6	2.0	2.6	1.4	.88	.71	.68
19	1.2	1.6	1.5	1.3	1.4	1.6	1.9	2.4	1.4	.89	.72	.73
20	1.2	1.4	1.5	1.4	1.5	1.7	1.8	2.3	1.4	.87	.70	.72
21	1.2	1.4	1.5	1.6	1.4	1.8	1.9	2.2	1.3	.87	.70	.75
22	1.2	1.4	1.6	1.5	1.5	1.8	2.3	2.1	1.3	.86	.70	.79
23	1.2	1.5	1.6	1.5	1.5	1.8	2.2	2.1	1.3	.83	.68	.75
24	1.2	1.5	1.3	1.5	1.5	1.9	2.3	2.0	1.3	.83	.69	.72
25	1.2	1.4	1.3	1.4	1.5	1.9	2.7	2.0	1.3	.83	.66	.70
26	1.2	1.3	1.5	1.5	1.6	2.0	2.7	2.0	1.3	.83	.67	.66
27	1.2	1.4	1.8	1.5	1.6	2.0	2.6	1.9	1.3	.84	.70	.65
28	1.2	1.4	1.6	1.4	1.7	1.9	2.6	1.9	1.2	.87	.69	.65
29	1.2	1.3	1.5	1.5	1.7	1.8	2.5	2.0	1.2	.83	.68	.68
30	1.3	1.5	1.5	1.5	---	1.8	2.4	2.2	1.2	.82	.65	.67
31	1.3	---	1.5	1.5	---	1.7	---	2.0	---	.81	.67	---
TOTAL	34.84	42.2	44.55	46.3	43.3	53.6	60.7	69.9	45.0	28.70	23.21	20.25
MEAN	1.12	1.41	1.44	1.49	1.49	1.73	2.02	2.25	1.50	.93	.75	.67
MAX	1.4	1.7	1.8	1.6	1.7	2.0	2.7	2.6	1.9	1.1	.88	.79
MIN	.94	1.2	.75	1.3	1.2	1.5	1.7	1.9	1.2	.81	.65	.59
AC-FT	69	84	88	92	86	106	120	139	89	57	46	40

CAL YR 1987 TOTAL 799.14 MEAN 2.19 MAX 5.8 MIN .75 AC-FT 1590
WTR YR 1988 TOTAL 512.55 MEAN 1.40 MAX 2.7 MIN .59 AC-FT 1020

e Estimated

JORDAN RIVER BASIN

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10172200 RED BUTTE CREEK AT FORT DOUGLAS, NEAR SALT LAKE CITY, UT--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1964 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: April 1964 to September 1978.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	BARO-METRIC PRES-SURE (MM HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT , 1987										
07...	1055	1.0	660	8.40	15.0	7.0	0.6	10.0	630	K4
FEB , 1988										
04...	1115	1.4	680	8.10	-12.0	0.0	0.3	11.8	634	K1
MAR										
09...	0920	1.6	680	8.50	6.0	2.0	0.5	11.0	619	K2
MAY										
17...	1230	2.1	610	8.50	10.5	10.5	15	9.20	620	16
JUN										
15...	1230	1.5	630	8.40	25.0	14.0	4.4	9.20	625	87
AUG										
22...	1155	0.79	630	8.40	20.5	13.5	0.4	8.30	625	85

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD MG/L AS C03	BICAR-BONATE WATER DIS IT FIELD MG/L AS HC03
OCT , 1987										
07...	K390	360	97	28	14	8	0.3	1.2	16	288
FEB , 1988										
04...	K1	400	110	30	16	8	0.4	1.0	--	306
MAR										
09...	K11	370	100	28	14	8	0.3	1.0	12	260
MAY										
17...	450	320	87	24	13	8	0.3	0.9	2	262
JUN										
15...	260	310	79	27	13	8	0.3	0.9	--	268
AUG										
22...	360	340	86	30	14	8	0.3	1.0	8	220

DATE	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CAC03	SULFATE DIS-SOLVED (MG/L AS S04)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)
OCT , 1987										
07...	249	110	16	0.2	12	408	361	0.55	1.16	--
FEB , 1988										
04...	251	140	15	0.6	11	473	474	0.64	1.75	<0.01
MAR										
09...	233	130	14	0.1	11	425	432	0.58	1.86	<0.01
MAY										
17...	226	100	12	0.2	11	401	379	0.55	2.31	<0.01
JUN										
15...	220	110	12	0.2	11	356	358	0.48	1.41	<0.01
AUG										
22...	193	130	13	0.1	12	395	397	0.54	0.84	--

JORDAN RIVER BASIN

10172200 RED BUTTE CREEK AT FORT DOUGLAS NEAR SALT LAKE CITY, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
OCT , 1987										
07...	--	--	--	--	--	--	--	--	--	--
FEB , 1988										
04...	<0.10	0.03	0.03	0.04	0.37	0.4	0.03	0.03	0.02	0.06
MAR										
09...	<0.10	0.03	0.03	0.04	--	<0.2	0.03	--	--	--
MAY										
17...	<0.10	0.03	0.02	0.03	--	<0.2	0.04	0.03	0.02	0.06
JUN										
15...	<0.10	0.04	<0.01	--	--	<0.2	0.04	0.02	<0.01	--
AUG										
22...	--	0.02	--	--	0.28	0.3	0.02	0.01	--	--

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
FEB , 1988											
04...	1115	10	1	68	<0.5	1	2	<3	2	8	<5
MAY											
17...	1230	10	1	64	<0.5	<1	1	<3	<1	9	<5
JUN											
15...	1230	10	1	63	<0.5	<1	1	<3	1	4	<5
AUG											
22...	1155	20	1	65	<0.5	3	<1	<3	1	22	<5

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
FEB , 1988										
04...	16	4	<0.1	<10	3	1	<1.0	590	<6	10
MAY										
17...	14	5	<0.1	<10	<1	1	<1.0	470	<6	4
JUN										
15...	15	5	<0.1	<10	1	1	<1.0	490	<6	<3
AUG										
22...	18	<1	0.6	<10	2	<1	<1.0	580	<6	<3

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SED. SUSP. SIEVE DIAM. PERCENT FINER THAN .062 MM	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
OCT , 1987						
07...	1055	1.0	7.0	30	30	0.08
FEB , 1988						
04...	1115	1.4	0.0	32	34	0.13
MAR						
09...	0920	1.6	2.0	65	9	0.04

RUSH VALLEY

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10172700 VERNON CREEK NEAR VERNON, UT

LOCATION.--Lat 39°58'46", long 112°22'46", in NE¼SW¼SW¼ sec. 2, T. 10 S., R. 5 W., Tooele County, Hydrologic Unit 16020304, on right bank 6.6 mi upstream from confluence with Dutch Creek forming Faust Creek and 8.3 mi southeast of Vernon.

DRAINAGE AREA.--25.0 mi².

PERIOD OF RECORD.--June 1958 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,200 ft from AMS topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--30 years, 3,98 ft³/s, 2,880 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 825 ft³/s Aug. 27, 1972, gage height, 5.70 ft, based on slope-area measurement; minimum, 0.41 ft³/s Nov. 20, 1961.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 1	2200	*6.4	*1.09	Feb. 17	0900	6.4	1.06

Minimum daily, 2.5 ft³/s Aug. 30, Sept. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	4.8	4.2	e4.0	4.4	4.7	4.5	4.9	4.3	3.1	3.4	2.7
2	4.3	4.7	4.2	e3.9	4.4	4.7	4.4	5.1	4.3	3.1	3.4	2.7
3	4.3	4.5	4.1	3.9	e4.0	4.6	4.4	4.9	4.3	3.1	3.4	2.7
4	4.3	4.7	3.9	3.9	e3.9	4.3	4.4	4.8	4.2	3.1	3.5	2.8
5	4.3	4.8	3.9	4.0	e4.0	4.1	4.3	4.8	3.9	2.9	3.4	2.9
6	4.4	5.0	3.9	4.0	4.1	4.2	4.4	5.1	3.9	2.8	3.5	2.9
7	4.3	4.7	3.9	3.9	4.2	4.1	4.3	5.0	3.9	2.7	3.6	2.9
8	4.3	4.4	3.8	3.9	4.2	4.1	4.4	4.9	3.8	2.7	3.5	2.9
9	4.3	4.4	3.9	3.9	4.3	4.1	4.4	4.9	3.8	2.7	3.5	2.9
10	4.3	4.4	3.9	3.9	4.4	4.1	4.4	4.9	3.7	2.7	3.5	3.0
11	4.3	4.4	3.9	3.8	4.4	4.1	4.3	4.8	3.7	2.7	3.6	3.0
12	4.4	4.4	3.8	3.7	4.4	4.1	4.3	4.8	3.8	2.8	3.7	3.4
13	4.4	4.4	e3.8	3.9	4.4	4.2	4.3	4.8	3.6	2.8	3.5	3.5
14	4.5	4.6	e3.7	3.9	4.2	4.3	4.5	4.8	3.6	2.5	3.4	3.4
15	4.4	4.4	e3.6	3.9	4.2	4.4	4.4	4.6	3.5	2.5	3.4	3.4
16	4.4	4.4	3.7	3.9	4.0	4.3	4.4	4.5	3.5	2.6	3.5	3.2
17	4.5	4.4	3.8	4.0	4.2	4.2	4.3	4.8	3.5	2.7	3.5	3.2
18	4.6	4.4	3.7	4.0	3.9	4.2	4.5	4.8	3.5	2.8	3.4	3.2
19	4.6	4.2	3.9	e3.9	4.1	4.3	4.6	4.6	3.3	3.0	3.5	3.2
20	4.7	4.2	3.7	e3.9	4.2	4.4	4.6	4.5	3.3	2.9	3.5	3.2
21	4.6	4.2	3.8	e3.8	4.1	4.3	4.7	4.5	3.3	2.9	3.3	3.4
22	4.6	4.2	3.9	e3.9	4.2	4.4	4.5	4.5	3.2	2.8	3.3	3.5
23	4.8	4.1	3.9	e4.0	4.2	4.3	4.4	4.4	3.2	2.9	3.2	3.4
24	4.7	4.1	e3.8	e4.2	4.2	4.3	4.4	4.4	3.2	2.9	3.2	3.4
25	4.6	4.2	e3.6	e4.2	4.4	4.2	4.4	4.3	3.1	3.0	3.1	3.4
26	4.6	4.2	e3.7	4.3	4.4	4.2	4.4	4.3	3.2	3.2	3.1	3.3
27	4.6	4.0	e3.8	4.2	4.5	4.2	4.3	4.3	3.2	3.2	3.1	3.3
28	4.6	4.2	3.9	4.3	4.7	4.3	4.2	4.3	3.2	3.2	2.8	3.4
29	4.7	4.2	3.9	4.4	4.8	4.0	4.4	4.7	3.2	3.2	2.8	3.4
30	5.0	4.1	3.9	4.4	---	4.2	4.7	4.6	3.2	3.1	2.7	3.5
31	4.6	---	4.1	4.4	---	4.3	---	4.5	---	3.4	2.8	---
TOTAL	139.3	131.7	119.6	124.3	123.4	132.2	132.5	145.1	107.4	90.0	103.1	95.1
MEAN	4.49	4.39	3.86	4.01	4.26	4.26	4.42	4.68	3.58	2.90	3.33	3.17
MAX	5.0	5.0	4.2	4.4	4.8	4.7	4.7	5.1	4.3	3.4	3.7	3.5
MIN	4.3	4.0	3.6	3.7	3.9	4.0	4.2	4.3	3.1	2.5	2.7	2.7
AC-FT	276	261	237	247	245	262	263	288	213	179	204	189

CAL YR 1987 TOTAL 1869.5 MEAN 5.12 MAX 10 MIN 3.6 AC-FT 3710
WTR YR 1988 TOTAL 1443.7 MEAN 3.94 MAX 5.1 MIN 2.5 AC-FT 2860

e Estimated

TOOELE VALLEY

10172765 CLOVER CREEK ABOVE BIG HOLLOW, NEAR CLOVER, UT

LOCATION.--Lat 40°20'06", long 112°31'39", in NE¼SE¼SW¼ sec. 33, T. 55 S., R. 6 W., Tooele County, Hydrologic Unit 16020304, on left bank 60 ft south of State Highway 199 at milepost 15.9, and 4.6 mi west of St. John.

DRAINAGE AREA.--6.71 mi².

PERIOD OF RECORD.--November 1984 to current year.

GAGE.--Water-stage recorder and sharp crested weir. Elevation of gage is 5,660 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31 ft³/s June 1, 1986, gage height, 2.05 ft; minimum daily, 1.1 ft³/s many days during January and February, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8.3 ft³/s May 17, gage height, 1.48 ft; minimum daily, 1.1 ft³/s many days during January and February.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	1.8	1.8	e1.2	e1.1	2.1	1.9	3.8	3.9	2.9	2.2	1.7
2	1.9	1.8	1.8	e1.1	e1.1	1.9	1.9	3.4	3.6	2.9	2.2	1.8
3	1.9	1.9	1.8	e1.2	e1.1	1.8	2.1	3.1	3.6	2.8	2.2	1.7
4	1.9	1.9	1.8	e1.3	e1.1	1.9	2.2	2.9	4.1	2.9	2.2	1.6
5	1.9	1.9	1.8	e1.3	e1.1	2.0	2.5	2.9	4.3	3.0	2.2	1.6
6	1.9	1.9	1.8	e1.3	e1.1	2.0	2.8	3.3	4.2	2.7	2.2	1.6
7	1.9	1.9	1.8	e1.3	e1.1	2.0	3.9	3.2	4.0	2.7	2.3	1.6
8	1.9	1.9	1.8	e1.3	e1.1	1.9	4.3	3.1	3.8	3.1	2.2	1.6
9	1.9	1.9	1.7	e1.4	e1.2	1.7	3.4	3.1	3.6	2.9	2.2	1.6
10	1.9	1.9	1.8	e1.4	e1.2	1.9	2.9	3.0	3.5	3.2	2.2	1.6
11	1.9	1.9	1.8	e1.5	e1.2	1.9	2.9	3.3	3.5	3.1	2.2	1.6
12	1.9	1.8	1.7	e1.4	e1.2	1.9	3.6	4.3	3.2	3.1	2.2	1.7
13	2.0	1.8	e1.7	e1.3	e1.2	1.9	4.2	5.8	3.1	3.2	2.2	1.8
14	2.1	1.9	e1.6	e1.3	e1.2	1.8	4.3	6.6	3.0	3.0	2.1	1.7
15	2.0	1.9	e1.6	e1.4	e1.3	1.8	4.1	6.0	2.8	2.6	2.1	1.6
16	1.9	1.8	e1.6	e1.3	e1.3	1.8	4.1	6.7	2.6	2.6	2.1	1.6
17	1.9	1.8	1.6	e1.2	e1.3	1.9	3.9	7.6	2.5	2.5	2.0	1.6
18	1.9	1.9	1.6	e1.2	e1.3	1.8	3.9	6.7	2.7	2.5	1.9	1.6
19	1.9	1.8	1.6	e1.2	e1.3	1.8	3.8	5.6	3.0	2.5	1.9	1.6
20	1.9	1.8	1.6	e1.1	e1.4	1.9	3.7	4.8	3.0	2.5	1.8	1.6
21	1.9	1.8	1.6	e1.2	1.4	2.8	3.5	4.5	2.9	2.5	1.8	1.7
22	1.9	1.8	1.6	e1.2	1.4	3.3	3.4	4.6	3.0	2.4	1.8	1.7
23	1.9	1.8	1.6	e1.2	1.4	3.0	3.2	4.9	2.8	2.4	1.8	1.6
24	1.9	1.8	1.6	e1.2	1.4	3.0	3.1	5.2	2.6	2.4	1.8	1.6
25	1.9	1.8	1.5	e1.2	1.5	2.9	2.9	5.4	2.7	2.4	1.7	1.6
26	1.9	1.8	e1.1	e1.1	1.6	2.5	2.9	5.4	2.9	2.4	1.8	1.6
27	1.9	1.8	e1.2	e1.1	1.8	3.2	2.7	5.5	2.9	2.3	1.8	1.5
28	1.9	1.8	e1.2	e1.1	2.1	2.7	2.9	5.1	2.8	2.2	1.7	1.6
29	1.8	1.8	e1.3	e1.1	2.4	2.3	3.1	5.2	2.9	2.2	1.8	1.6
30	1.8	1.8	e1.3	e1.2	---	2.1	3.8	4.7	2.8	2.2	1.7	1.5
31	1.8	---	e1.2	e1.1	---	1.9	---	4.2	---	2.2	1.7	---
TOTAL	59.0	55.2	49.5	38.4	38.9	67.4	97.9	143.9	96.3	82.3	62.0	48.8
MEAN	1.90	1.84	1.60	1.24	1.34	2.17	3.26	4.64	3.21	2.65	2.00	1.63
MAX	2.1	1.9	1.8	1.5	2.4	3.3	4.3	7.6	4.3	3.2	2.3	1.8
MIN	1.8	1.8	1.1	1.1	1.1	1.7	1.9	2.9	2.5	2.2	1.7	1.5
AC-FT	117	109	98	76	77	134	194	285	191	163	123	97
CAL YR 1987	TOTAL	1108.9	MEAN	3.04	MAX	7.6	MIN	1.1	AC-FT	2200		
WTR YR 1988	TOTAL	839.6	MEAN	2.29	MAX	7.6	MIN	1.1	AC-FT	1670		

e Estimated

TOOELE VALLEY

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10172795 BOX ELDER WASH NEAR GRANTSVILLE, UT

LOCATION.--Lat 40°29'42", long 112°31'52", in SE¼NE¼SW¼ sec. 4, T. 4 S., R. 6 W., Tooele County, Hydrologic Unit 16020304, on left bank 0.5 mi west of county road and 6.5 mi southwest of Grantsville.

DRAINAGE AREA.--9.84 mi².

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,700 ft from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2.0 ft³/s, many days in October 1987; minimum daily discharge, 0.33 ft³/s, May 27, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.2 ft³/s, Oct. 13, gage height, 1.05 ft; minimum daily discharge, 0.33 ft³/s, May 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.79	.63	.63	e.46	e.43	.48	.39	.48	.63	e.61	.58	.58
2	.81	.63	.67	e.45	e.43	.48	.39	.48	.57	e.61	.57	.58
3	.79	.67	.69	e.46	e.43	.45	.39	.48	.63	e.61	.58	.58
4	.72	.69	.69	e.46	e.43	.43	.39	.48	.68	e.60	.65	.57
5	.69	.69	.69	e.47	e.43	.43	.39	.53	.76	e.62	.63	.57
6	.69	.69	.65	e.48	e.41	.43	.39	.53	.85	e.60	.63	.63
7	.69	.69	.64	e.48	e.41	.43	.39	.53	.79	e.60	.68	.63
8	.78	.69	.63	e.48	e.41	.40	.39	.53	.81	e.61	.66	.63
9	.85	.69	.64	e.48	e.43	.39	.39	.53	.76	e.58	.63	.63
10	.87	.69	.64	e.48	e.44	.39	.39	.53	.74	e.57	.50	.63
11	.79	.68	.63	e.47	e.44	.39	.42	.53	.75	e.59	.53	.63
12	.73	.63	.63	e.47	.43	.39	.43	.53	.77	e.59	.50	.65
13	.72	.63	.63	e.47	.43	.39	.43	.57	.78	e.60	.51	.70
14	.64	.64	e.62	e.47	.44	.39	.45	.58	.77	e.61	.56	.67
15	.63	.63	e.62	e.47	.48	.39	.48	.56	.76	e.62	.45	.66
16	.63	.63	e.63	e.47	.48	.39	.51	.57	.73	.69	.40	.63
17	.63	.64	e.63	e.47	.48	.39	.53	.58	.75	.67	.39	.69
18	.63	.69	e.63	e.47	.48	.39	.58	.49	.75	.67	.44	.69
19	.64	.69	e.63	e.46	.48	.39	.58	.46	.74	.75	.41	.69
20	.69	.69	e.62	e.45	.48	.39	.57	.35	.74	.77	.40	.74
21	.69	.69	e.61	e.45	.48	.39	.53	.38	.68	.74	.36	.76
22	.64	.69	e.61	e.46	.48	.39	.55	.39	.67	.69	.37	.75
23	.63	.69	e.55	e.47	.48	.39	.53	.44	.67	.67	.55	.75
24	.63	.69	e.50	e.46	.48	.39	.51	.43	.61	.68	.62	.75
25	.63	.69	e.47	e.45	.48	.39	.49	.39	.63	.66	.60	.75
26	.63	.69	e.44	e.44	.48	.39	.49	.34	.62	.64	.53	.75
27	.63	.69	e.45	e.43	.48	.39	.53	.33	e.61	.77	.58	.75
28	.63	.67	e.46	e.43	.48	.39	.49	.34	e.63	.78	.63	.81
29	.63	.63	e.46	e.45	.48	.39	.48	.42	e.63	.71	.62	.81
30	.63	.63	e.47	e.44	---	.39	.48	.61	e.63	.67	.61	.81
31	.63	---	e.47	e.44	---	.39	---	.60	---	.65	.59	---
TOTAL	21.41	20.07	18.33	14.29	13.19	12.50	13.96	14.99	21.14	20.23	16.76	20.47
MEAN	.69	.67	.59	.46	.45	.40	.47	.48	.70	.65	.54	.68
MAX	.87	.69	.69	.48	.48	.48	.58	.61	.85	.78	.68	.81
MIN	.63	.63	.44	.43	.41	.39	.39	.33	.57	.57	.36	.57
AC-FT	42	40	36	28	26	25	28	30	42	40	33	41

CAL YR 1987 TOTAL 360.02 MEAN .99 MAX 1.7 MIN .44 AC-FT 714
WTR YR 1988 TOTAL 207.34 MEAN .57 MAX .87 MIN .33 AC-FT 411

e Estimated

10172800 SOUTH WILLOW CREEK NEAR GRANTSVILLE, UT

LOCATION.--Lat 40°29'47", long 112°34'25", in SW¼NW¼SW¼ sec. 6, T. 4 S., R. 6 W., Tooele County, Hydrologic Unit 16020304, on right bank 200 ft upstream from Forest Service Guard Station, 1.7 mi above Wasatch National Forest boundary, 9.2 mi southwest of Grantsville, and 14.8 mi west of Tooele.

DRAINAGE AREA.--4.19 mi². Area at crest-stage gage site, 3.26 mi².

PERIOD OF RECORD.--July 1963 to current year. Annual maximum only, July 1960 to July 1963, at crest-stage gage site.

REVISED RECORDS.--W 1983: 1982.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,360 ft from topographic map. Prior to July 23, 1963, crest-stage gage only, at site 1.4 mi upstream at different datum.

REMARKS.--No estimated daily discharges. Records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--25 years, 7.00 ft³/s, 5,070 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 92 ft³/s June 8, 1964, gage height, 2.27 ft; minimum discharge, 1.6 ft³/s Mar. 10, 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 18	0300	*12	*1.43				

Maximum daily also 12 ft³/s, May 18, 19, 29.

Minimum daily discharge, 2.2 ft³/s several days during September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	2.6	2.8	2.6	2.6	2.6	3.3	5.0	10	4.6	2.8	2.4
2	2.8	2.6	2.8	2.6	2.6	2.6	3.3	5.0	9.1	4.4	2.6	2.4
3	2.8	2.6	2.8	2.6	2.6	2.6	3.1	5.0	8.6	4.3	2.6	2.4
4	2.7	2.6	2.8	2.6	2.6	2.6	3.1	5.2	8.9	4.3	2.6	2.4
5	2.9	2.6	2.8	2.6	2.6	2.6	3.1	4.8	8.9	4.4	2.6	2.4
6	3.0	2.6	2.8	2.6	2.6	2.7	3.1	4.8	8.7	4.2	2.6	2.4
7	3.1	2.6	2.8	2.6	2.6	2.6	3.3	4.9	8.5	4.1	2.8	2.4
8	3.1	2.6	2.8	2.6	2.6	2.6	3.5	4.7	8.9	4.1	2.7	2.4
9	2.9	2.6	2.8	2.6	2.6	2.6	3.6	4.7	9.0	4.0	2.6	2.4
10	2.6	2.7	2.8	2.6	2.6	2.6	3.6	4.7	8.8	3.8	2.6	2.4
11	2.6	2.8	2.8	2.6	2.6	2.6	3.8	5.0	8.4	3.7	2.6	2.5
12	2.7	2.8	2.8	2.6	2.4	2.6	4.0	5.5	8.1	3.6	2.6	2.7
13	2.7	2.8	2.8	2.6	2.4	2.6	4.2	7.0	7.5	3.6	2.6	2.7
14	2.6	2.9	2.8	2.6	2.4	2.6	5.1	8.9	7.4	3.4	2.6	2.6
15	2.6	2.8	2.8	2.6	2.4	2.6	5.3	9.6	7.1	3.3	2.6	2.6
16	2.6	2.8	2.8	2.6	2.4	2.6	5.4	11	6.7	3.3	2.6	2.5
17	2.6	2.8	2.8	2.6	2.4	2.6	5.7	11	6.4	3.3	2.6	2.3
18	2.6	2.8	2.8	2.6	2.4	2.6	5.8	12	6.4	3.2	2.6	2.2
19	2.6	2.8	2.8	2.6	2.4	2.6	5.3	12	6.0	3.1	2.6	2.2
20	2.6	2.8	2.8	2.6	2.4	2.6	5.4	11	5.9	3.1	2.5	2.3
21	2.6	2.8	2.8	2.6	2.4	2.7	5.6	10	5.7	3.1	2.4	2.5
22	2.6	2.8	2.8	2.6	2.4	2.8	5.7	9.8	5.7	3.1	2.4	2.3
23	2.6	2.8	2.6	2.6	2.4	2.9	5.7	10	5.7	3.0	2.4	2.2
24	2.6	2.8	2.6	2.6	2.4	3.1	5.4	10	5.5	2.9	2.4	2.2
25	2.6	2.8	2.6	2.6	2.4	3.1	5.2	10	5.3	2.8	2.4	2.2
26	2.6	2.8	2.6	2.6	2.4	3.3	4.8	11	5.3	2.8	2.4	2.2
27	2.6	2.8	2.6	2.6	2.4	3.3	4.4	11	5.2	2.9	2.4	2.2
28	2.6	2.8	2.6	2.6	2.5	3.3	4.4	11	5.0	2.8	2.4	2.2
29	2.6	2.8	2.6	2.6	2.6	3.3	4.4	12	4.9	2.8	2.4	2.2
30	2.6	2.8	2.6	2.6	---	3.3	4.8	11	4.7	2.8	2.4	2.2
31	2.6	---	2.6	2.6	---	3.3	---	11	---	2.8	2.4	---
TOTAL	83.7	82.2	85.0	80.6	72.1	86.5	133.4	258.6	212.3	107.6	78.8	71.0
MEAN	2.70	2.74	2.74	2.60	2.49	2.79	4.45	8.34	7.08	3.47	2.54	2.37
MAX	3.1	2.9	2.8	2.6	2.6	3.3	5.8	12	10	4.6	2.8	2.7
MIN	2.6	2.6	2.6	2.6	2.4	2.6	3.1	4.7	4.7	2.8	2.4	2.2
AC-FT	166	163	169	160	143	172	265	513	421	213	156	141

CAL YR 1987	TOTAL	1776.4	MEAN	4.87	MAX	27	MIN	2.6	AC-FT	3520
WTR YR 1988	TOTAL	1351.8	MEAN	3.69	MAX	12	MIN	2.2	AC-FT	2680

TOOELE VALLEY

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10172805 NORTH WILLOW CREEK NEAR GRANTSVILLE, UT

LOCATION.--Lat 40°31'58", long 112°34'19", in NW¼NE¼NW¼ sec. 30, T. 3 S., R. 6 W., Tooele County, Hydrologic Unit 16020304, on left bank 100 ft upstream from Wasatch National Forest boundary and 200 ft upstream from North Willow Irrigation Company diversion structure, and 7.4 mi southwest of Grantsville.

DRAINAGE AREA.--5.38 mi².

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,960 ft from topographic map.

REMARKS.--No estimated daily discharges. Records good.

AVERAGE DISCHARGE.--9 years, 6.65 ft³/s, 4,820 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 145 ft³/s May 16, 1984; minimum daily, 1.5 ft³/s several days during September, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 17	2000	*14	*2.93				

Minimum daily discharge, 1.5 ft³/s several days during September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.1	2.2	2.2	2.2	2.5	3.2	7.1	6.0	2.4	1.8	1.6
2	1.8	2.2	2.3	2.2	2.2	2.5	3.2	7.0	5.3	2.3	1.8	1.6
3	1.8	2.2	2.3	2.2	2.1	2.5	3.2	6.9	5.3	2.2	1.8	1.6
4	1.8	2.2	2.3	2.1	2.0	2.4	3.2	6.9	5.6	2.1	1.8	1.6
5	1.8	2.2	2.3	2.2	2.0	2.4	3.2	7.1	6.2	2.1	1.8	1.6
6	1.8	2.2	2.3	2.2	2.1	2.5	3.3	7.3	6.4	2.1	1.8	1.6
7	1.8	2.2	2.3	2.2	2.1	2.4	3.5	7.6	5.7	2.1	2.0	1.5
8	1.8	2.2	2.2	2.2	2.1	2.4	3.7	7.6	5.1	2.0	1.8	1.5
9	1.8	2.2	2.3	2.2	2.1	2.4	3.8	7.2	4.8	1.9	1.7	1.5
10	1.9	2.2	2.4	2.2	2.1	2.4	4.0	6.8	4.4	1.8	1.7	1.5
11	1.9	2.1	2.4	2.2	2.2	2.4	3.9	6.9	4.1	1.8	1.6	1.6
12	2.0	2.1	2.3	2.2	2.2	2.4	4.0	7.8	4.0	1.8	1.6	1.7
13	2.2	2.1	2.3	2.2	2.2	2.3	4.2	9.7	3.9	1.7	1.6	1.9
14	2.3	2.3	2.2	2.2	2.2	2.4	4.9	12	4.2	1.7	1.6	1.8
15	2.2	2.2	2.2	2.2	2.2	2.4	5.4	12	4.6	1.7	1.6	1.7
16	2.2	2.1	2.2	2.2	2.2	2.4	5.4	12	4.0	1.7	1.6	1.7
17	2.2	2.1	2.2	2.2	2.2	2.4	5.7	13	3.9	1.7	1.6	1.6
18	2.1	2.2	2.2	2.2	2.2	2.4	6.6	13	3.7	1.7	1.6	1.6
19	2.1	2.2	2.3	2.2	2.2	2.5	6.9	12	3.6	1.7	1.6	1.6
20	2.2	2.2	2.3	2.2	2.2	2.7	7.0	11	3.5	1.7	1.6	1.6
21	2.2	2.2	2.3	2.1	2.2	3.0	7.3	10	3.3	1.7	1.6	1.7
22	2.1	2.2	2.3	2.1	2.2	3.2	7.1	10	3.3	1.7	1.6	1.7
23	2.2	2.2	2.3	1.8	2.2	3.4	6.7	9.9	3.1	1.6	1.6	1.6
24	2.2	2.2	2.2	2.1	2.2	3.6	6.4	9.6	2.8	1.6	1.6	1.6
25	2.1	2.2	2.2	2.1	2.2	3.5	6.2	9.4	2.7	1.7	1.6	1.5
26	2.1	2.2	2.2	2.1	2.3	3.5	5.8	9.2	2.8	1.7	1.6	1.5
27	2.1	2.2	2.2	2.1	2.4	3.6	5.6	9.1	2.7	1.8	1.6	1.5
28	2.1	2.2	2.2	2.1	2.4	3.6	5.4	8.5	2.6	1.9	1.6	1.5
29	2.1	2.2	1.8	2.1	2.5	3.5	5.6	8.4	2.5	1.8	1.6	1.5
30	2.1	2.2	2.1	2.2	---	3.5	6.1	8.0	2.5	1.8	1.6	1.5
31	2.1	---	2.2	2.2	---	3.4	---	7.0	---	1.8	1.6	---
TOTAL	62.9	65.5	69.5	66.9	63.6	86.5	150.5	280.0	122.6	57.3	51.6	48.0
MEAN	2.03	2.18	2.24	2.16	2.19	2.79	5.02	9.03	4.09	1.85	1.66	1.60
MAX	2.3	2.3	2.4	2.2	2.5	3.6	7.3	13	6.4	2.4	2.0	1.9
MIN	1.8	2.1	1.8	1.8	2.0	2.3	3.2	6.8	2.5	1.6	1.6	1.5
AC-FT	125	130	138	133	126	172	299	555	243	114	102	95

CAL YR 1987	TOTAL	1415.3	MEAN	3.88	MAX	24	MIN	1.8	AC-FT	2810
WTR YR 1988	TOTAL	1124.9	MEAN	3.07	MAX	13	MIN	1.5	AC-FT	2230

GREAT SALT LAKE DESERT

10172870 TROUT CREEK NEAR CALLAO, UT

LOCATION.--Lat 39°44'39", long 113°53'21", in SW¼NW¼SW¼ sec. 28, T. 12 S., R. 18 W., Juab County, Hydrologic Unit 16020306, on left bank 2.9 mi upstream from Birch Creek and 14 mi southwest of Callao.

DRAINAGE AREA.--8.19 mi².

PERIOD OF RECORD.--October 1958 to current year. Monthly discharge only for October and November 1958, published in WSP 1734.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,200 ft from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No diversion above station.

AVERAGE DISCHARGE.--30 years, 5.90 ft³/s, 4,270 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 177 ft³/s June 2, 1983, gage height, 2.84 ft; minimum, 0.24 ft³/s Feb. 25, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 18	1000	*59	*2.19	June 5	0900	46	2.10

Minimum daily discharge, 1.30 ft³/s several days in August and September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.7	e2.1	e2.0	e2.1	2.6	3.6	8.7	23	5.4	1.9	1.4
2	1.8	2.6	e2.1	e1.9	e2.0	2.6	3.3	8.6	22	5.1	1.9	1.4
3	1.8	2.7	e2.1	e1.7	e2.0	2.6	3.3	8.5	23	5.0	2.0	1.4
4	1.8	2.6	2.1	e1.8	e2.0	2.5	3.4	8.3	32	4.8	1.9	1.3
5	1.8	2.8	2.1	e1.9	e1.9	2.4	3.7	7.9	44	4.6	1.8	1.3
6	1.8	3.6	2.1	e2.0	e2.0	2.3	3.9	7.5	43	4.3	1.8	1.3
7	1.8	3.1	2.1	e2.1	e2.0	2.3	4.6	7.0	37	4.1	1.9	1.3
8	1.8	3.0	2.2	e2.2	e2.1	2.4	5.2	6.6	31	4.0	1.8	1.3
9	1.9	2.9	2.1	e2.1	e2.2	2.2	5.1	6.2	26	3.8	1.7	1.3
10	1.9	2.8	2.2	e2.3	e2.1	2.7	5.0	5.9	22	3.6	1.7	1.3
11	1.9	2.6	2.4	e2.2	e2.2	3.0	5.7	6.3	19	3.4	1.6	1.4
12	2.1	2.5	e2.2	e2.1	e2.2	3.6	7.4	8.8	17	3.3	1.6	1.5
13	2.8	2.5	e2.1	e2.0	e2.1	3.0	10	20	15	3.3	1.5	1.8
14	2.4	2.8	e2.0	e2.1	e2.1	3.1	12	30	13	3.2	1.5	1.7
15	2.2	2.6	e2.1	e2.0	e2.2	2.4	11	34	12	3.1	1.4	1.6
16	2.2	2.6	e2.2	e2.0	e2.1	2.6	11	44	11	3.0	1.4	1.6
17	2.1	2.5	e2.3	e2.0	e2.0	3.5	11	55	11	2.9	1.3	1.5
18	2.1	2.8	2.1	e1.9	e1.9	2.7	12	48	10	2.9	1.3	1.6
19	2.1	2.9	2.1	e1.9	e2.0	2.5	11	36	10	2.8	1.3	1.6
20	2.1	2.3	2.1	e1.8	e2.0	2.7	10	29	10	2.7	1.4	1.6
21	2.1	2.2	e2.2	e1.9	e2.0	3.1	9.1	26	9.6	2.6	1.4	1.9
22	2.1	2.2	e2.1	e1.9	e2.1	3.3	8.1	27	9.1	2.5	1.4	1.7
23	2.2	2.2	e2.0	e2.0	e2.1	3.3	7.3	30	8.7	2.5	1.3	1.6
24	2.2	2.3	e1.9	e2.0	e2.2	3.5	6.6	33	8.3	2.5	1.3	1.5
25	2.1	2.2	e1.8	e2.1	e2.2	3.4	6.0	32	7.8	2.4	1.3	1.5
26	2.1	e2.3	e1.7	e2.0	e2.2	3.7	5.7	33	7.3	2.4	1.5	1.5
27	2.1	e2.2	e1.8	e2.0	e2.3	4.4	5.5	34	6.8	2.4	1.5	1.5
28	2.1	e2.1	e1.9	e1.9	e2.4	4.4	5.6	31	6.5	2.3	1.4	1.5
29	2.5	e2.0	e2.0	e2.0	2.6	4.5	6.0	31	6.2	2.2	1.4	1.5
30	2.8	e2.0	e2.0	e2.1	---	4.0	7.5	29	5.9	2.0	1.4	1.5
31	2.4	---	e2.0	e2.2	---	3.9	---	25	---	1.9	1.4	---
TOTAL	64.9	76.6	64.2	62.1	61.3	95.2	209.6	717.3	507.2	101.0	48.0	44.9
MEAN	2.09	2.55	2.07	2.00	2.11	3.07	6.99	23.1	16.9	3.26	1.55	1.50
MAX	2.8	3.6	2.4	2.3	2.6	4.5	12	55	44	5.4	2.0	1.9
MIN	1.8	2.0	1.7	1.7	1.9	2.2	3.3	5.9	5.9	1.9	1.3	1.3
AC-FT	129	152	127	123	122	189	416	1420	1010	200	95	89

CAL YR 1987 TOTAL 1843.9 MEAN 5.05 MAX 35 MIN 1.5 AC-FT 3660
WTR YR 1988 TOTAL 2052.3 MEAN 5.61 MAX 55 MIN 1.3 AC-FT 4070

e Estimated

GREAT SALT LAKE DESERT

277

10172903 GREAT SALT LAKE, WEST POND, NEAR WENDOVER, UT

LOCATION.--Lat 40°57'52", long 113°19'17", in SW¼SE¼NW¼ sec. 28, T. 3 N., R. 13 W., Tooele County,
Hydrologic Unit 16020308, 17 mi northwest of Knolls and 42 mi northeast of Wendover.

PERIOD OF RECORD.--December 1987 to September 1988.

GAGE.--Water-stage recorder. Datum of gage, 4,200.00 ft NGVD of 1929.

REMARKS.--To compensate for wind effect and seiches, elevations given for the gage are taken from a mean-slope line defined by several days' gage-height graph, preceding and following 0001 hours, for the 1st and 15th of each month. Wind effects may cause substantial changes in elevations, which are not shown in the published elevations. Specific gravity and temperature were collected from water surface near the gage.

EXTREMES FOR PERIOD OF OPERATION.--Maximum elevation, 4,216.40 ft May 1; minimum, 4,215.05 ft Aug. 15.

GAGE HEIGHT AND ELEVATION, IN FEET, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Day	Gage height	Elevation	Temperature, water (Deg. C)	Specific Gravity (20.0°C)
Oct. 1	--	--	--	--
15	--	--	--	--
Nov. 1	--	--	--	--
15	--	--	--	--
Dec. 7	16.30	4,216.30	--	--
15	16.20	4,216.20	--	--
Jan. 1	16.20	4,216.20	2.0	1.142
15	16.15	4,216.15	--	--
Feb. 1	16.15	4,216.15	0.0	1.146
15	16.15	4,216.10	--	--
Mar. 1	16.20	4,216.20	10.0	1.158
15	16.30	4,216.30	--	--
Apr. 1	16.35	4,216.35	4.5	1.167
15	16.35	4,216.35	--	--
May 1	16.40	4,216.40	10.5	1.182
15	16.20	4,216.20	--	--
June 1	16.05	4,216.05	20.0	1.220
15	15.75	4,215.75	--	--
July 1	15.60	4,215.60	--	1.225
15	15.40	4,215.40	--	--
Aug. 1	15.25	4,215.25	25.0	1.226
15	15.05	4,215.05	--	--
Sept. 1	15.15	4,215.15	22.5	1.230
15	15.35	4,215.35	--	--

TRIBUTARIES BETWEEN GREAT SALT LAKE DESERT AND BEAR RIVER

10172952 DUNN CREEK NEAR PARK VALLEY, UT

LOCATION.--Lat 41°51'31", long 113°19'35", in NW¼NW¼NW¼ sec. 15, T. 13 N., R. 13 W., Box Elder County, Hydrologic Unit 16020308, on right bank 150 ft upstream from diversion structure, 200 ft downstream from confluence of left hand and right hand forks, and 2.9 mi north of Park Valley.

DRAINAGE AREA.--8.72 mi².

PERIOD OF RECORD.--May 1971 to September 1973, October 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,250 ft from topographic map. Prior to Aug. 26, 1982 at site 110 ft downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diversion for flood-flows, located approximately 300 ft upstream.

AVERAGE DISCHARGE.--14 years, 6.28 ft³/s, 4,550 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 150 ft³/s May 28, 1983; minimum, 0.14 ft³/s Mar. 17, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 63 ft³/s July 16, gage height, 1.96 ft; minimum daily, 1.1 ft³/s several days in September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	2.0	1.5	e1.3	e1.5	e2.3	2.3	6.4	8.8	4.8	3.4	1.7
2	1.7	2.8	1.6	e1.2	e1.4	2.3	2.5	6.3	8.4	4.6	3.3	1.7
3	1.7	2.3	1.5	e1.2	e1.4	2.2	2.9	6.2	8.7	4.4	3.5	1.6
4	1.7	2.0	1.5	e1.3	e1.4	2.2	2.8	6.1	10	4.2	3.3	1.7
5	1.7	1.8	1.5	e1.4	e1.4	2.2	2.6	5.9	12	4.1	3.3	1.6
6	1.7	2.4	1.5	e1.5	e1.5	1.9	2.6	6.3	11	4.0	3.4	1.6
7	1.6	2.0	1.4	e1.4	e1.5	1.9	2.8	6.1	9.7	3.9	4.0	1.5
8	1.7	1.9	1.4	e1.4	e1.7	2.1	2.5	5.9	8.9	3.7	3.5	1.5
9	1.7	1.8	1.5	e1.5	e1.8	1.8	2.7	5.7	8.4	3.6	3.3	1.4
10	1.7	1.9	1.8	e1.6	e1.8	e1.7	2.8	5.5	8.1	3.4	3.2	1.4
11	1.7	1.8	e1.5	e1.5	e1.9	e1.7	3.1	5.5	8.0	3.3	3.0	1.5
12	1.7	1.7	e1.4	e1.4	e1.8	1.8	3.3	6.3	8.0	3.3	3.0	1.4
13	3.4	1.9	e1.4	e1.4	e1.9	1.8	3.6	9.4	7.7	3.2	2.9	1.5
14	2.5	1.7	e1.3	e1.4	e1.9	1.7	4.5	11	7.5	3.1	2.8	1.5
15	2.1	1.7	e1.4	e1.5	e1.9	1.6	4.9	12	7.3	3.0	2.7	1.4
16	2.0	1.7	e1.4	e1.5	e1.8	1.6	5.2	14	7.2	6.5	2.7	1.4
17	1.9	1.6	e1.4	e1.5	e1.8	1.7	5.8	15	7.2	4.7	2.6	1.3
18	1.8	1.6	e1.5	e1.5	e1.9	1.8	7.9	13	7.1	4.0	2.4	1.3
19	1.8	1.7	e1.5	e1.4	e1.9	2.1	7.8	12	6.9	3.8	2.4	1.3
20	1.7	1.6	e1.4	e1.4	e1.9	2.4	7.3	11	7.0	3.7	2.4	1.4
21	1.7	1.6	e1.4	e1.4	e2.0	2.4	7.0	11	6.9	3.6	2.3	1.3
22	1.7	1.6	e1.4	e1.4	e2.0	2.1	6.6	12	6.7	3.6	2.2	1.2
23	2.0	1.4	e1.3	e1.5	e2.0	2.1	6.4	12	6.4	3.5	2.2	1.2
24	2.2	1.4	e1.3	e1.5	e2.1	2.0	6.4	12	6.1	3.5	2.0	1.2
25	1.9	1.3	e1.2	e1.5	e2.1	2.2	6.3	11	5.9	3.4	2.0	1.1
26	1.8	1.7	e1.2	e1.5	e2.1	2.6	6.0	12	5.9	3.5	2.0	1.1
27	1.7	1.6	e1.3	e1.5	e2.1	2.3	5.9	12	5.6	3.9	1.9	1.1
28	1.6	1.6	e1.3	e1.6	e2.1	2.4	5.8	11	5.6	3.9	1.9	1.1
29	1.9	1.6	e1.3	e1.6	e2.1	2.1	5.6	12	5.2	3.5	1.9	1.1
30	2.1	1.6	e1.3	e1.7	---	2.0	6.1	11	5.0	3.4	1.8	1.1
31	2.0	---	e1.3	e1.6	---	e2.1	---	9.6	---	3.4	1.7	---
TOTAL	58.1	53.3	43.7	45.1	52.7	63.1	142.0	295.2	227.2	118.5	83.0	41.2
MEAN	1.87	1.78	1.41	1.45	1.82	2.04	4.73	9.52	7.57	3.82	2.68	1.37
MAX	3.4	2.8	1.8	1.7	2.1	2.6	7.9	15	12	6.5	4.0	1.7
MIN	1.6	1.3	1.2	1.2	1.4	1.6	2.3	5.5	5.0	3.0	1.7	1.1
AC-FT	115	106	87	89	105	125	282	586	451	235	165	82

CAL YR 1987 TOTAL 1382.1 MEAN 3.79 MAX 15 MIN 1.2 AC-FT 2740
WTR YR 1988 TOTAL 1223.1 MEAN 3.34 MAX 15 MIN 1.1 AC-FT 2430

e Estimated

SEVIER LAKE BASIN

279

10173450 MAMMOTH CREEK ABOVE WEST HATCH DITCH, NEAR HATCH, UT

LOCATION.--Lat 37°37'19", long 112°31'07", in NE¼NW¼SW¼ sec. 3, T. 37 S., R. 6 W., Garfield County, Hydrologic Unit 16030001, on left bank 0.5 mi upstream from West Hatch ditch diversion, 2 mi upstream from Spring Hollow, 4.5 mi upstream from mouth, and 5 mi southwest of Hatch.

DRAINAGE AREA.--105 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,300 ft from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. One small diversion for irrigation above station.

AVERAGE DISCHARGE.--24 years, 52.7 ft³/s, 38,180 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 838 ft³/s June 19, 1983, gage height, 5.13 ft; minimum recorded, 0.06 ft³/s Dec. 25, 1977, Jan. 1, 22, 1978, result of ice jam.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 17	0330	*463	*4.04	No other peak greater than base discharge.			

Minimum daily discharge, 9.0 ft³/s Jan. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	30	e17	e10	e16	e14	13	70	233	70	40	37
2	17	35	e16	e11	e15	15	12	70	237	68	40	33
3	16	38	e17	e12	e14	15	12	72	238	67	53	30
4	16	30	e18	e12	e13	16	12	68	251	63	58	29
5	16	32	19	e12	e13	16	12	69	252	60	62	28
6	16	31	19	e12	e13	14	13	73	236	57	58	28
7	16	29	19	e12	e13	13	15	73	213	55	48	27
8	16	26	e15	e12	e14	13	18	70	197	54	43	27
9	16	24	e14	e12	e14	13	19	68	185	53	40	27
10	16	23	e13	e12	e14	e13	19	72	172	52	38	27
11	16	23	e13	e12	e14	e13	21	94	160	50	39	26
12	16	22	e13	e12	e14	e12	26	134	151	50	38	27
13	18	22	e14	e12	e14	e12	34	225	144	49	36	28
14	19	23	e14	e12	e14	e12	40	332	137	47	35	27
15	19	e23	e15	e12	e14	12	39	375	129	46	33	26
16	18	e22	e15	e12	e13	12	38	403	120	45	33	25
17	17	e21	e15	e11	e13	12	36	440	117	44	32	25
18	17	e20	e15	e10	e13	e12	33	412	113	43	32	24
19	16	e20	e14	e9.8	e13	12	34	392	112	42	31	24
20	16	e20	e14	e9.0	e13	e12	36	362	102	41	31	24
21	16	e23	e14	e10	e12	e12	38	367	108	40	32	25
22	16	e20	e13	e11	e12	12	35	382	97	40	33	25
23	18	20	e12	e12	e12	e12	34	383	93	41	32	24
24	19	21	e12	e13	e12	12	32	340	91	46	30	24
25	18	20	e12	e13	e12	12	33	381	90	41	30	23
26	18	e20	e11	e14	e13	12	32	364	85	40	33	23
27	18	e19	e10	e15	e13	13	33	353	84	44	46	22
28	17	e19	e10	e16	e13	13	39	316	78	47	44	22
29	19	e18	e10	e16	e14	13	47	317	75	42	36	22
30	28	e17	e10	e16	---	13	60	271	73	42	33	22
31	29	---	e10	e16	---	12	---	244	---	41	35	---
TOTAL	550	711	433	380.8	387	399	865	7592	4373	1520	1204	781
MEAN	17.7	23.7	14.0	12.3	13.3	12.9	28.8	245	146	49.0	38.8	26.0
MAX	29	38	19	16	16	16	60	440	252	70	62	37
MIN	16	17	10	9.0	12	12	12	68	73	40	30	22
AC-FT	1090	1410	859	755	768	791	1720	15060	8670	3010	2390	1550

CAL YR 1987	TOTAL	15154	MEAN	41.5	MAX	283	MIN	10	AC-FT	30060
WTR YR 1988	TOTAL	19195.8	MEAN	52.4	MAX	440	MIN	9.0	AC-FT	38070

e Estimated

SEVIER LAKE BASIN

10174500 SEVIER RIVER AT HATCH, UT

LOCATION.--Lat 37°39'04", long 112°25'46", in SW¼SW¼NW¼ sec. 28, T. 36 S., R. 5 W., Garfield County, Hydrologic Unit 16030001, on right bank at highway bridge, 0.2 mi east of Hatch, and 2.8 mi downstream from Mammoth Creek.

DRAINAGE AREA.--340 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1911 to September 1928, June 1939 to current year. Monthly discharge only for some periods, published in WSP 1314. Published as "near Hatchtown" 1911 and as "near Hatch" 1912.

REVISED RECORDS.--WSP 960: 1939-40. WSP 1284: 1916. WSP 1564: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,870 ft from river-profile map. See WSP 1734 for history of changes prior to Oct. 4, 1949. Relocated at present site Aug. 22, 1978.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Small diversions for irrigation above station. No regulation since Hatchtown Dam failed in 1914.

AVERAGE DISCHARGE.--66 years, 126 ft³/s, 91,290 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge not determined, occurred May 25, 1914, when Hatchtown Dam failed; maximum recorded, 1,490 ft³/s May 26, 1922, gage height, 5.25 ft, datum then in use; minimum daily, 10 ft³/s for several days in 1912 when water was stored in Hatchtown Reservoir. Minimum natural flow, 20 ft³/s Aug. 30, 31, Sept. 1, 7-9, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 17	0930	*616	*2.51	No other peak greater than base discharge.			

Minimum daily discharge, 46 ft³/s Jan. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	101	71	e56	58	93	76	191	335	142	98	92
2	58	95	74	e58	59	76	76	186	359	139	114	90
3	56	113	74	e56	59	75	76	188	355	134	127	84
4	56	104	74	e56	e58	75	78	183	355	130	118	82
5	57	103	77	e58	e52	77	78	181	351	127	120	84
6	57	116	74	59	e54	75	79	189	323	115	127	81
7	57	104	72	58	e55	71	83	191	292	113	113	80
8	59	95	66	55	e56	66	88	187	262	109	101	79
9	60	91	69	e51	e56	68	88	176	245	106	98	78
10	58	89	71	e52	e58	68	91	172	231	105	97	80
11	58	86	68	e54	60	63	90	183	222	103	96	79
12	58	85	63	e50	62	62	95	221	217	103	99	81
13	67	84	e63	e54	68	63	106	309	212	102	95	83
14	63	88	e59	e54	65	64	121	461	205	102	91	81
15	62	81	e56	e55	65	65	123	506	199	105	88	80
16	61	81	e57	e54	69	61	140	551	190	100	83	78
17	60	85	e58	e56	66	57	152	585	187	95	82	78
18	60	81	e64	e54	60	58	146	575	189	94	81	78
19	61	79	e61	e55	62	59	140	558	186	95	81	81
20	62	79	e58	e46	60	62	139	522	175	93	81	79
21	63	79	e56	e50	64	66	157	514	179	94	85	79
22	62	78	e56	e54	67	70	155	535	170	90	89	81
23	73	79	e55	e55	72	73	157	515	164	91	86	78
24	76	77	e53	e56	79	82	148	465	163	98	84	79
25	73	75	e56	e57	92	80	148	490	162	97	84	81
26	67	72	e58	e56	103	83	150	484	154	94	85	78
27	68	69	e54	e58	107	87	156	476	154	100	96	79
28	67	70	e56	e58	146	88	162	413	151	112	95	77
29	74	72	e58	e62	121	79	167	430	149	103	91	74
30	87	70	e60	63	---	80	177	399	145	101	83	74
31	81	---	e52	60	---	76	---	353	---	101	86	---
TOTAL	1979	2581	1943	1720	2053	2222	3642	11389	6681	3293	2954	2408
MEAN	63.8	86.0	62.7	55.5	70.8	71.7	121	367	223	106	95.3	80.3
MAX	87	116	77	63	146	93	177	585	359	142	127	92
MIN	56	69	52	46	52	57	76	172	145	90	81	74
AC-FT	3930	5120	3850	3410	4070	4410	7220	22590	13250	6530	5860	4780

CAL YR 1987 TOTAL 35724 MEAN 97.9 MAX 316 MIN 51 AC-FT 70860
WTR YR 1988 TOTAL 42865 MEAN 117 MAX 585 MIN 46 AC-FT 85020

e Estimated

SEVIER LAKE BASIN

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10174500 SEVIER RIVER AT HATCH, UT--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1985 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: January 1985 to current year.

EXTREMES FOR PERIOD OF RECORD:

SEDIMENT CONCENTRATIONS: Maximum daily mean, 6,000 mg/L Aug. 23, 1987; minimum daily mean, 5 mg/L several days during July, 1986.

SEDIMENT LOADS: Maximum daily, 1,900 tons Aug. 23, 1987; minimum daily, 1.2 tons July 29, 31, Oct. 27, Nov. 16, 1986.

EXTREMES FOR CURRENT YEAR:

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,800 mg/L Nov. 5; minimum daily mean, 8 mg/L July 10, Sept. 28, 29.

SEDIMENT LOADS: Maximum daily, 833 tons May 16; minimum daily, 1.6 tons Sept. 29.

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16	2.5	42	11	25	4.8	116	18	50	7.8	300	75
2	17	2.7	60	15	25	5.0	123	19	105	17	180	37
3	23	3.5	100	31	24	4.8	102	15	75	12	130	26
4	31	4.7	80	22	24	4.8	104	16	110	17	90	18
5	29	4.5	1800	501	24	5.0	70	11	85	12	90	19
6	27	4.2	130	41	24	4.8	50	8.0	105	15	95	19
7	26	4.0	63	18	24	4.7	64	10	88	13	103	20
8	25	4.0	68	17	24	4.3	72	11	55	8.3	108	19
9	24	3.9	61	15	25	4.7	58	8.0	40	6.0	88	16
10	25	3.9	53	13	41	7.9	76	11	60	9.4	75	14
11	40	6.3	70	16	25	4.6	64	9.3	40	6.5	68	12
12	32	5.0	63	14	33	5.6	95	13	50	8.4	63	11
13	48	8.7	40	9.1	130	22	83	12	50	9.2	54	9.2
14	41	7.0	27	6.4	125	20	52	7.6	50	8.8	66	11
15	33	5.5	33	7.2	50	7.6	34	5.0	45	7.9	70	12
16	25	4.1	26	5.7	40	6.2	40	5.8	60	11	55	9.1
17	24	3.9	26	6.0	38	6.0	37	5.6	70	12	42	6.5
18	26	4.2	26	5.7	30	5.2	105	15	39	6.3	57	8.9
19	27	4.4	26	5.5	40	6.6	90	13	60	10	75	12
20	28	4.7	26	5.5	23	3.6	170	21	50	8.1	90	15
21	26	4.4	26	5.5	30	4.5	183	25	50	8.6	93	17
22	23	3.9	26	5.5	25	3.8	150	22	95	17	118	22
23	30	5.9	25	5.3	185	27	120	18	90	17	127	25
24	27	5.5	25	5.2	135	19	92	14	125	27	123	27
25	20	3.9	25	5.1	280	42	55	8.5	120	30	105	23
26	26	4.7	25	4.9	245	38	95	14	500	139	118	26
27	29	5.3	25	4.7	140	20	75	12	390	113	110	26
28	28	5.1	25	4.7	130	20	80	13	700	276	112	27
29	32	6.4	25	4.9	95	15	50	8.4	615	201	98	21
30	34	8.0	25	4.7	85	14	47	8.0	---	---	80	17
31	40	8.7	---	---	115	16	62	10	---	---	50	10
TOTAL	---	153.5	---	815.6	---	357.5	---	387.2	---	1034.3	---	610.7

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

[illegible]

SEVIER LAKE BASIN

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10180000 SEVIER RIVER NEAR CIRCLEVILLE, UT

LOCATION.--Lat 38°06'15", long 112°20'08", in NE¼SW¼NW¼ sec. 20, T. 31 S., R. 4 W., Garfield County, Hydrologic Unit 16030001, on left bank 2 mi upstream from Pine Creek and 6 mi southwest of Circleville.

DRAINAGE AREA.--986 mi².

PERIOD OF RECORD.--May to September 1912, April 1914 to September 1927 (fragmentary 1923, 1925-57), October 1949 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WSP 1180: 1922(M). WSP 1314: 1916. WRD UT-75-1: 1969. WDR UT-78-1: Drainage area. WDR UT-83-1: 1972(M).

GAGE.--Water-stage recorder. Altitude of gage is 6,240 ft from river-profile map. May 10 to Sept. 19, 1912, non-recording gage at site 300 ft upstream at different datum. Apr. 23, 1914 to Sept. 30, 1927, and Nov. 21, 1949 to Aug. 6, 1954, water-stage recorder at site 300 ft upstream at datum 0.23 ft higher.

REMARKS.--Records good except for estimated daily values, which are poor. Many diversions above and below station.

AVERAGE DISCHARGE.--48 years (1914-22, 24, 1949-88), 149 ft³/s, 108,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,980 ft³/s Dec. 26, 1971, June 2, 1983, gage height, 7.06 ft; minimum daily, 18 ft³/s June 30, July 1, 5, 1960, June 23, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1938 may have exceeded that of June 2, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 539 ft³/s Aug. 4, gage height, 3.45 ft; minimum discharge, 55 ft³/s Dec. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	154	136	e111	128	270	150	192	304	135	117	179
2	61	162	137	e106	128	212	146	202	286	147	88	133
3	61	171	139	e110	123	186	144	202	279	143	99	102
4	62	180	143	e148	123	176	136	200	269	145	246	87
5	64	173	149	e158	119	177	139	185	261	134	106	82
6	64	229	150	e167	116	176	140	177	275	127	116	86
7	64	225	146	e150	114	167	142	186	260	123	132	87
8	62	191	137	e137	122	154	146	188	244	119	109	83
9	69	179	135	e123	122	149	147	176	223	114	99	71
10	74	172	150	e141	122	152	138	160	207	107	90	69
11	74	167	153	e165	126	146	127	149	199	104	81	69
12	79	163	138	e148	132	141	126	168	188	101	85	74
13	108	162	98	e131	144	142	134	213	186	98	85	84
14	127	166	108	e144	147	143	143	287	179	84	90	84
15	111	170	137	e150	140	145	152	355	163	75	90	80
16	104	155	150	130	147	143	214	401	160	72	80	79
17	106	158	154	133	132	136	263	439	158	78	79	72
18	108	154	143	135	132	136	279	486	166	78	79	67
19	120	148	148	118	123	138	247	471	166	76	85	70
20	115	144	141	106	127	144	210	434	166	68	83	72
21	115	145	136	113	131	156	247	428	158	65	80	74
22	116	146	142	125	140	164	278	419	162	71	80	73
23	125	144	146	135	151	165	264	428	165	74	91	76
24	135	142	128	138	164	170	246	422	164	79	79	73
25	146	141	122	141	182	162	231	399	165	82	84	74
26	136	139	e105	146	209	161	223	395	164	82	103	71
27	131	142	e100	126	230	170	219	379	188	73	114	79
28	130	142	e109	122	252	175	216	366	167	85	120	84
29	132	141	e119	127	301	172	198	349	157	96	188	83
30	152	138	e150	137	---	165	193	369	140	98	128	87
31	144	---	e122	135	---	158	---	339	---	104	130	---
TOTAL	3161	4843	4171	4156	4327	5051	5638	9564	5969	3037	3236	2504
MEAN	102	161	135	134	149	163	188	309	199	98.0	104	83.5
MAX	152	229	154	167	301	270	279	486	304	147	246	179
MIN	61	138	98	106	114	136	126	149	140	65	79	67
AC-FT	6270	9610	8270	8240	8580	10020	11180	18970	11840	6020	6420	4970

CAL YR 1987 TOTAL 48102 MEAN 132 MAX 384 MIN 59 AC-FT 95410
WTR YR 1988 TOTAL 55657 MEAN 152 MAX 486 MIN 61 AC-FT 110400

e Estimated

SEVIER LAKE BASIN

10183500 SEVIER RIVER NEAR KINGSTON, UT

LOCATION.--Lat $38^{\circ}12'22''$, long $112^{\circ}12'25''$, in SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 16, T. 30 S., R. 3 W., Piute County, Hydrologic Unit 16030001, on left bank 1,000 ft upstream from bridge on State Highway 62, 1.1 mi west of Kingston, and 1.9 mi upstream from East Fork.

DRAINAGE AREA.--1,131 mi².

PERIOD OF RECORD.--June 1914 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,980 ft from river-profile map. Prior to Sept. 20, 1918, at site 1 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--74 years, 129 ft³/s, 93,460 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 3,000 ft³/s (including estimated flow of 360 ft³/s in overflow channel bypassing station), Mar. 4, 1938, gage height, 5.20 ft from rating curve extended above 600 ft³/s; minimum, 0.90 ft³/s July 26, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 386 ft³/s May 18, gage height, 2.17 ft; minimum discharge, 20 ft³/s July 20-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	174	173	e140	e158	317	176	143	197	58	45	111
2	39	189	173	e132	e157	252	174	130	173	57	43	101
3	40	197	176	e145	e155	219	164	114	151	65	34	36
4	44	213	167	e159	e145	204	155	104	142	79	151	31
5	46	209	190	e168	e131	201	162	82	132	75	60	28
6	46	265	187	e173	e128	204	139	68	133	73	39	29
7	46	268	184	e158	e139	196	93	73	125	47	45	31
8	46	239	179	e150	e155	182	97	82	101	39	44	31
9	41	217	172	e144	e158	182	99	77	94	47	32	27
10	44	206	173	e163	e160	184	85	70	92	36	29	28
11	50	202	177	e175	e169	179	84	62	82	31	25	34
12	58	202	178	e161	e175	173	76	52	73	27	25	34
13	75	201	139	e150	e169	174	81	48	71	27	26	48
14	91	205	e150	e146	e168	175	97	138	65	30	28	42
15	87	209	e158	e144	e181	177	109	227	56	28	26	46
16	105	197	e167	e142	e187	176	145	268	53	28	26	41
17	105	196	e171	e141	e179	168	214	293	58	25	24	45
18	102	193	175	e140	e173	167	233	364	63	26	25	45
19	109	188	180	e135	e181	171	220	367	64	26	26	44
20	109	185	174	e137	e188	179	170	341	61	23	25	39
21	105	184	168	e141	193	191	203	321	56	21	28	35
22	103	185	e160	e142	196	199	261	314	53	21	29	35
23	117	184	e151	e146	190	198	227	315	58	21	27	37
24	137	181	e142	e149	201	208	204	310	54	24	27	49
25	149	179	e135	e152	213	191	200	282	59	24	32	54
26	147	177	e129	e151	234	199	206	283	58	25	37	60
27	144	176	e126	e145	255	213	201	263	75	24	36	61
28	142	181	e138	e141	274	213	178	256	64	26	40	46
29	138	180	e151	e141	333	200	154	230	66	27	96	47
30	142	175	e165	e161	---	199	147	253	63	28	82	46
31	144	---	e155	e160	---	187	---	232	---	34	58	---
TOTAL	2789	5957	5063	4632	5345	6078	4754	6162	2592	1122	1270	1341
MEAN	90.0	199	163	149	184	196	158	199	86.4	36.2	41.0	44.7
MAX	149	268	190	175	333	317	261	367	197	79	151	111
MIN	38	174	126	132	128	167	76	48	53	21	24	27
AC-FT	5530	11820	10040	9190	10600	12060	9430	12220	5140	2230	2520	2660

CAL YR 1987 TOTAL 42717 MEAN 117 MAX 303 MIN 18 AC-FT 84730
WTR YR 1988 TOTAL 47105 MEAN 129 MAX 367 MIN 21 AC-FT 93430

e Estimated

10183900 EAST FORK SEVIER RIVER NEAR RUBYS INN, UT

LOCATION.--Lat 37°34'33", long 112°15'54", in NE¼SE¼NW¼ sec. 19, T. 37 S., R. 4 W., Garfield County, Hydrologic Unit 16030002, Dixie National Forest, on left bank about 100 ft upstream from highway bridge, 0.6 mi downstream from Skunk Creek, 3.6 mi upstream from Tropic Reservoir Dam, 9.1 mi southwest of Rubys Inn, and 10.5 mi southeast of Hatch.

DRAINAGE AREA.--71.6 mi².

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WRD UT-74-1: 1973.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,860 ft from river-profile map. Prior to October 10, 1966, on right bank at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No diversions above station.

AVERAGE DISCHARGE.--27 years, 17.5 ft³/s, 12,680 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 448 ft³/s May 23, 1980, gage height, 3.28 ft; no flow for several days in February and March 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 5	2130	60	1.90	Aug. 26	1730	*73	*1.95
Apr. 16	2130	69	2.03				

Minimum daily, 6.0 ft³/s Dec. 26, Jan. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	47	e7.0	e6.4	e8.9	e12	e20	37	20	14	12	15
2	7.8	33	e7.0	e6.6	e8.4	e11	25	36	19	13	12	12
3	7.7	40	e7.0	e7.0	e7.7	e11	28	37	17	12	26	11
4	7.9	30	e7.2	e7.0	e7.2	e11	28	36	16	11	16	9.7
5	7.7	32	e7.4	e7.4	e7.4	e11	28	35	15	10	11	9.0
6	7.7	38	e7.4	e7.6	e7.8	e11	29	35	14	9.8	11	9.0
7	7.7	30	e7.4	e7.8	e8.1	e11	29	36	13	9.2	11	9.1
8	7.7	28	e7.2	e7.9	e8.6	e10	27	35	13	8.9	9.9	9.2
9	7.8	25	e6.8	e8.0	e8.6	e10	23	33	13	11	8.8	8.8
10	7.9	23	e7.0	e8.0	e8.6	e10	22	31	13	13	8.6	10
11	8.2	21	e7.6	e8.0	e8.6	e9.7	22	30	13	11	8.5	9.6
12	9.0	e19	e7.8	e7.9	e8.6	e9.6	22	29	13	9.0	11	17
13	22	e17	e7.6	e7.9	e8.6	e9.2	21	28	13	8.4	9.2	19
14	16	e15	e7.0	e7.9	e8.6	e9.1	31	29	12	7.9	7.8	13
15	12	e13	e6.8	e7.8	e8.6	e9.6	30	28	12	7.7	7.5	12
16	11	e12	e7.0	e7.4	e8.6	e9.8	52	29	11	7.5	7.1	10
17	11	e11	e7.2	e6.9	e8.7	e10	48	31	13	7.3	7.1	9.7
18	10	e11	e7.6	e6.5	e8.7	e11	39	32	14	7.2	7.6	9.3
19	10	e10	e7.8	e6.2	e8.7	e11	33	29	13	6.7	8.4	8.9
20	9.9	e10	e8.0	e6.0	e8.8	e12	32	26	12	6.5	8.1	9.0
21	10	e9.5	e8.0	e6.2	e8.9	e13	40	25	13	6.5	8.7	8.8
22	10	e9.1	e7.9	e6.6	e9.0	e15	37	23	12	6.5	12	11
23	15	e8.8	e7.6	e6.9	e9.0	e16	36	23	11	6.9	13	10
24	21	e8.3	e6.8	e7.5	e9.1	e17	37	22	12	8.3	10	9.3
25	20	e8.0	e6.4	e8.0	e9.1	e17	45	21	14	8.8	11	8.9
26	14	e7.8	e6.0	e8.4	e10	e17	46	20	13	9.5	25	8.9
27	13	e7.6	e6.4	e9.0	e11	e17	42	19	14	14	19	9.0
28	12	e7.4	e7.2	e9.5	e13	e17	40	19	14	13	17	8.7
29	21	e7.2	e7.4	e9.9	e13	e15	37	19	19	12	16	8.4
30	32	e7.1	e7.6	e9.8	---	e16	36	25	16	14	14	8.6
31	20	---	e7.2	e9.2	---	e18	---	23	---	17	13	---
TOTAL	384.8	545.8	224.3	237.2	259.9	387.0	985	881	417	307.6	367.3	311.9
MEAN	12.4	18.2	7.24	7.65	8.96	12.5	32.8	28.4	13.9	9.92	11.8	10.4
MAX	32	47	8.0	9.9	13	18	52	37	20	17	26	19
MIN	7.7	7.1	6.0	6.0	7.2	9.1	20	19	11	6.5	7.1	8.4
AC-FT	763	1080	445	470	516	768	1950	1750	827	610	729	619
CAL YR 1987	TOTAL	5166.8	MEAN	14.2	MAX	51	MIN	5.1	AC-FT	10250		
WTR YR 1988	TOTAL	5308.8	MEAN	14.5	MAX	52	MIN	6.0	AC-FT	10530		

e Estimated

SEVIER LAKE BASIN

10188000 OTTER CREEK RESERVOIR NEAR ANTIMONY, UT

LOCATION.--Lat $38^{\circ}10'15''$, long $112^{\circ}01'25''$, in NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 28, T. 30 S., R. 2 W., Piute County, Hydrologic Unit 16030002, near spillway on right side of dam on Otter Creek, 3.7 mi northwest of Antimony and 9.3 mi east of Kingston.

DRAINAGE AREA.--373 mi².

PERIOD OF RECORD.--January 1914 to September 1915, January 1934 to current year. Published as "near Coyote" 1914.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Staff gage read intermittantly and on last day of each month. Altitude of gage is 6,350 ft by barometer.

REMARKS.--Reservoir was formed in 1898 by a 15-ft earthfill, rock-faced dam which was raised some each year to the ultimate height of 45 ft in 1915. The dam has a concrete core through the center. Capacity, 52,700 acre-ft between gage height zero (bottom of outlet gage) and 36.0 ft (top of flashboards on spillway). At times, additional flashboards are added or surcharge occurs increasing the stage to 37.0 ft, capacity, 55,200 acre-ft. Spillway crest is at gage height 33.5 ft. Figures given herein represent total contents. Reservoir stores water from Otter Creek and also water diverted from East Fork Sevier River, for irrigation in Sevier River basin.

COOPERATION.--Gage-height record provided by Otter Creek Reservoir Company. Revised capacity table, based on Soil Conservation Service survey in 1960, used since Oct. 1, 1962.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 56,760 acre-ft May 31, 1982, gage height, 37.6 ft; minimum observed, 200 acre-ft Sept. 10, 1956, gage height, 1.0 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 53,950 acre-ft Apr. 26, May 21, gage height, 36.5 ft; minimum observed, 32,080 acre-ft Oct. 8, gage height, 26.9 ft.

MONTHEND ELEVATION, IN FEET, AND INSTANTANEOUS CONTENTS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	26.7	31,690	--
Oct. 31	28.3	34,950	+3,260
Nov. 30	30.8	40,310	+5,360
Dec. 31	32.7	44,650	+4,340
CAL YR 1987	--	--	-5,280
Jan. 31	34.4	48,710	+4,060
Feb. 29	35.9	52,410	+3,700
Mar. 31	36.3	53,420	+1,010
Apr. 30	36.4	53,680	+260
May 31	36.2	53,170	-510
June 30	34.2	48,220	-4,950
July 31	31.9	42,800	-5,420
Aug. 31	29.6	37,700	-5,100
Sept. 30	27.3	32,890	-4,810
WTR YR 1988	--	--	+1,200

SEVIER LAKE BASIN

287

10189000 EAST FORK SEVIER RIVER NEAR KINGSTON, UT

LOCATION.--Lat 38°11'49", Long 112°09'01", in NW¼SW¼SE¼ sec. 13, T. 30 S., R. 3 W., Piute County, Hydrologic Unit 16030002, on left bank 1,500 ft upstream from bridge on State Highway 22, 2.2 mi east of Kingston, 4.6 mi upstream from mouth, and 10 mi downstream from Otter Creek.

DRAINAGE AREA.--1,207 mi².

PERIOD OF RECORD.--March 1913 to current year.

REVISED RECORDS.--WSP 750: 1931-32. WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,150 ft from river-profile map. Prior to Apr. 29, 1914, staff gage at site 0.5 mi upstream at different datum. Apr. 29, 1914 to June 2, 1939, water-stage recorder at site 4,000 ft downstream at different datum. June 3, 1939 to July 29, 1970, water-stage recorder at site 2,500 ft downstream at different datum. July 30, 1970 to July 12, 1983, water stage recorder 60 ft downstream at different datum.

REMARKS.--Records fair. Diversions for irrigation above and below station. Also diversion upstream for storage in Otter Creek Reservoir (see station 10188000); flow regulated by reservoir.

AVERAGE DISCHARGE.--75 years, 80.2 ft³/s, 58,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,030 ft³/s May 12, 1941, gage height, 5.05 ft; minimum, 1.0 ft³/s Jan. 25, 1976, gage height, 0.52 ft, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 329 ft³/s May 14, gage height, 2.43 ft; minimum discharge, 9.1 ft³/s Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	22	e14	e15	e38	e216	e123	285	129	107	100	123
2	12	20	14	e16	e41	e220	e137	243	121	121	99	123
3	11	22	15	e16	e49	e181	e132	200	116	119	99	122
4	13	20	15	e17	e43	e135	e134	157	100	120	97	121
5	18	19	16	e17	46	e144	e149	143	92	115	97	124
6	14	23	17	e16	52	e130	168	141	86	119	99	124
7	15	22	16	e15	41	e128	212	144	81	113	99	126
8	14	20	e15	e16	40	e130	239	143	72	107	97	127
9	14	18	e14	e16	41	e170	196	136	69	105	102	129
10	14	18	e14	e15	41	e158	178	122	67	107	127	130
11	15	17	e13	e14	41	e155	192	141	62	104	128	128
12	14	17	e13	e13	41	e151	218	176	135	104	130	131
13	18	18	e12	e14	42	e153	234	223	139	106	126	136
14	17	19	e13	e16	42	e158	231	254	137	104	125	133
15	14	20	e14	e19	43	e160	218	242	135	103	126	132
16	14	21	e15	e18	41	e153	209	224	131	101	126	134
17	14	18	e15	e17	38	e149	204	219	127	102	126	133
18	14	e18	e16	e19	38	e158	224	226	128	103	126	133
19	14	e18	e16	e19	37	e160	240	199	124	101	127	134
20	15	e18	e16	e18	37	e160	214	180	123	102	125	134
21	13	18	e17	e20	36	e160	228	160	120	105	125	131
22	13	17	e17	e21	36	e160	233	158	118	105	124	131
23	15	17	e14	e21	38	e160	209	156	118	102	123	131
24	14	17	e13	e23	40	e158	204	149	113	101	122	131
25	18	17	e12	e22	42	e158	202	138	109	101	123	129
26	17	17	e14	e25	48	e164	198	135	108	103	127	130
27	18	e17	e15	e28	e118	e168	198	126	119	103	126	128
28	18	e16	e15	e31	e130	e177	213	127	116	99	124	49
29	19	e15	e15	e32	e146	e171	232	125	115	100	123	43
30	24	e14	e16	e32	---	e132	273	131	111	102	123	40
31	22	---	e16	e33	---	e137	---	130	---	103	124	---
TOTAL	477	553	457	614	1466	4914	6042	5333	3321	3287	3645	3620
MEAN	15.4	18.4	14.7	19.8	50.6	159	201	172	111	106	118	121
MAX	24	23	17	33	146	220	273	285	139	121	130	136
MIN	11	14	12	13	36	128	123	122	62	99	97	40
AC-FT	946	1100	906	1220	2910	9750	11980	10580	6590	6520	7230	7180
CAL YR 1987	TOTAL	35650	MEAN	97.7	MAX	469	MIN	11	AC-FT	70710		
WTR YR 1988	TOTAL	33729	MEAN	92.2	MAX	285	MIN	11	AC-FT	66900		

e Estimated

SEVIER LAKE BASIN

10191000 PIUTE RESERVOIR NEAR MARYSVALE, UT

LOCATION.--Lat 38°19'26", long 112°11'26", in NW¼NE¼NW¼ sec. 3, T. 29 S., R. 3 W., Piute County, Hydrologic Unit 16030001, at Piute Dam on Sevier River, 9.0 mi south of Marysville.

DRAINAGE AREA.--2,438 mi².

PERIOD OF RECORD.--March 1914 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Staff gage read at irregular intervals. Datum of gage is 5,900.8 ft NGVD of 1929 (levels by Office of State Engineer).

REMARKS.--Reservoir is formed by earthfill dam; storage began in summer of 1910. Capacity, 71,830 acre-ft between gage heights 10 ft (approximate bottom of reservoir) and 76 ft (top of flashboards on spillway since 1941). Spillway crest is at gage height 70.2 ft. No dead storage. Water is used for irrigation. Revised capacity table, based on Soil Conservation Service survey in 1960, used since Oct. 1, 1962.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 83,050 acre-ft June 5, 1983, gage height, 79.8 ft, original capacity table; no contents at times in several years.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 71,830 acre-ft several days in March and April, gage height, 76.0 ft; minimum observed, 18,010 acre-ft Oct. 3, 10, gage height, 46.0 ft.

MONTHEND ELEVATION, IN FEET, AND INSTANTANEOUS CONTENTS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	45.8	17,760	--
Oct. 31	49.0	21,980	+4,220
Nov. 30	57.5	34,910	+12,930
Dec. 31	64.4	47,060	+12,150
CAL YR 1987	--	--	+13,080
Jan. 31	69.7	57,420	+10,360
Feb. 29	74.2	67,330	+9,910
Mar. 31	75.9	71,570	+4,240
Apr. 30	75.7	71,060	-510
May 31	75.2	69,770	-1,290
June 30	70.7	59,510	-10,260
July 31	--	*36,430	-23,080
Aug. 31	--	*22,470	-13,960
Sept. 30	50.5	24,100	+1,630
WTR YR 1988	--	--	+6,340

(*) No gage height reading, contents interpolated.

SEVIER LAKE BASIN

289

10191500 SEVIER RIVER BELOW PIUTE DAM, NEAR MARYSVALE, UTAH

LOCATION.--Lat 38°19'43", long 112°11'30", in NW¼SW¼SE¼ sec. 34, T. 28 S., R. 3 W., Piute County, Hydrologic Unit 16030003, on left bank 0.25 mi downstream from Piute Dam and 8.5 mi south of Marysville.

DRAINAGE AREA.--2,441 mi².

PERIOD OF RECORD.--May to August 1911, May 1912 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,870 ft by barometer. Prior to May 4, 1912, nonrecording gage at site 0.25 mi upstream at different datums. May 4, 1912 to Mar. 31, 1935, water-stage recorder at site 0.05 mi upstream at different datum. Apr. 1, 1935 to Apr. 7, 1936, at datum 0.7 ft higher. Apr. 8, 1936 to Feb. 25, 1970, at datum 0.5 ft higher. Feb. 26, 1970 to Apr. 22, 1979 at site 0.25 mi downstream at different datum. Apr. 22, 1979 to Sept. 30, 1985, at datum 10.0 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Piute Reservoir (see station 10191000).

AVERAGE DISCHARGE.--76 years (1912-88), 219 ft³/s, 158,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,600 ft³/s May 23, 24, 1922, gage height, 4.45 ft site and datum then in use; practically no flow at times when reservoir gates were closed.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 641 ft³/s Aug. 20; minimum daily discharge, 7.0 ft³/s several days during January and February.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	49	22	e21	e7.0	171	370	441	266	575	463	460
2	66	49	22	e21	e7.0	257	370	438	266	572	492	437
3	68	48	21	e21	e7.0	261	367	415	266	599	553	382
4	68	35	22	e21	e7.0	260	365	412	249	595	534	344
5	67	24	22	e21	e7.0	258	357	409	193	594	497	322
6	66	23	22	e21	e7.0	260	335	402	169	587	461	287
7	66	23	e21	e30	e7.0	221	335	399	169	586	446	257
8	66	23	e21	e7.0	e7.0	159	309	396	153	597	402	257
9	66	22	e21	e7.0	e7.0	186	292	414	144	627	348	233
10	66	22	e21	e7.0	e7.0	262	292	443	194	630	320	174
11	65	22	e21	e7.0	e7.0	255	291	459	234	626	290	176
12	64	23	e21	e7.0	e7.0	243	291	481	208	612	225	162
13	64	22	e21	e7.0	e7.0	243	308	491	206	596	257	147
14	64	22	e21	e7.0	e7.0	252	319	481	218	586	299	97
15	64	22	e21	e7.0	e7.0	282	320	402	328	583	346	99
16	64	22	e21	e7.0	e25	282	320	354	383	568	363	99
17	64	22	e21	e7.0	e68	282	323	303	435	522	458	96
18	64	22	e21	e7.0	e68	281	228	240	485	523	490	76
19	64	22	e21	e7.0	e68	279	337	161	478	589	536	76
20	64	21	e21	e7.0	e68	277	435	199	474	610	641	110
21	64	20	e21	e7.0	e68	279	448	286	468	603	629	130
22	64	20	e21	e7.0	e68	280	505	335	462	564	617	130
23	54	20	e21	e7.0	e68	280	565	341	464	505	580	130
24	49	20	e21	e7.0	e68	278	586	359	461	480	586	130
25	49	20	e21	e7.0	e68	288	564	365	454	439	594	131
26	49	21	e21	e7.0	99	307	528	379	456	472	587	131
27	49	21	e21	e7.0	100	306	499	353	500	479	583	133
28	49	22	e21	e7.0	102	307	471	353	560	428	550	132
29	49	22	e21	e7.0	113	338	466	346	572	395	492	113
30	49	22	e21	e7.0	---	369	443	330	565	393	490	91
31	49	---	e21	e7.0	---	370	---	294	---	463	486	---
TOTAL	1880	746	656	324.0	1156.0	8373	11639	11481	10480	16998	14615	5542
MEAN	60.6	24.9	21.2	10.5	39.9	270	388	370	349	548	471	185
MAX	68	49	22	30	113	370	586	491	572	630	641	460
MIN	49	20	21	7.0	7.0	159	228	161	144	393	225	76
AC-FT	3730	1480	1300	643	2290	16610	23090	22770	20790	33720	28990	10990

CAL YR 1987 TOTAL 89025.2 MEAN 244 MAX 754 MIN 6.2 AC-FT 176600
WTR YR 1988 TOTAL 83890.0 MEAN 229 MAX 641 MIN 7.0 AC-FT 166400

e Estimated

SEVIER LAKE BASIN

10194000 SEVIER RIVER ABOVE CLEAR CREEK, NEAR SEVIER, UT

LOCATION.--Lat 38°34'20", long 112°15'27", in NE¼NW¼NE¼ sec. 5, T. 26 S., R. 4 W., Sevier County, Hydrologic Unit 16030003, on right bank 0.6 mi upstream from bridge on U.S. Highway 89, 0.7 mi upstream from Clear Creek, and 1.0 mi south of Sevier.

DRAINAGE AREA.--2,707 mi².

PERIOD OF RECORD.--May 1911 to November 1916 (published as Sevier River at Sevier), April 1939 to September 1955, October 1960 to current year. Records for November 1916 to September 1929 (published as Sevier River at Sevier) include flow of Clear Creek and are not equivalent.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,560 ft by barometer. Prior to May 16, 1912, nonrecording gage, and May 16, 1912 to Sept. 30, 1929, water-stage recorder, at site 0.8 mi downstream at different datums (datum lowered 1.0 ft Mar. 31, 1913).

REMARKS.--Records good except for estimated daily discharges, which are poor. Many diversions above station for irrigation. Flow regulated by Piute Reservoir.

AVERAGE DISCHARGE.--48 years (1912-16, 1939-55, 1960-88), 249 ft³/s, 180,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--(Not including flow of Clear Creek): Maximum discharge, 2,500 ft³/s June 3, 1983, gage height, 4.82 ft; minimum, 2.3 ft/s Dec. 13, 1964. 1916-29 (including flow of Clear Creek): Maximum discharge, 2,800 ft³/s during last week of May 1922, computed on basis of records for station near Marysville; minimum, 9.8 ft/s March 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 631 ft³/s July 11; minimum daily discharge, 23 ft³/s Jan. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	80	52	e44	e25	130	371	443	357	596	470	455
2	84	79	46	e45	e25	219	372	445	346	583	469	428
3	83	82	46	e48	e25	268	372	433	347	602	584	421
4	82	78	46	e49	e25	277	372	421	369	610	510	366
5	82	66	46	e49	e25	283	372	418	404	601	478	352
6	84	61	46	e49	e26	285	357	420	338	598	452	339
7	83	56	46	e48	e26	288	351	419	319	592	432	327
8	82	53	47	e49	e26	224	347	416	303	591	418	315
9	84	53	49	e56	e26	195	330	415	278	615	376	298
10	84	51	49	e30	e26	211	319	447	256	629	349	274
11	84	52	48	e26	e26	272	315	457	338	631	339	242
12	85	61	51	e25	e26	287	311	483	350	615	330	220
13	91	52	e49	e24	e26	288	312	519	332	612	304	207
14	89	52	e47	e25	e26	311	340	548	318	590	283	173
15	88	50	e42	e25	e26	318	341	534	336	584	307	128
16	88	51	e45	e25	e26	295	345	540	463	579	355	125
17	89	50	e46	e25	e26	294	358	507	488	547	388	124
18	88	50	e47	e25	e29	294	335	458	553	521	432	112
19	90	52	e48	e24	e37	294	316	377	571	537	454	101
20	91	48	e48	e23	e52	293	383	329	565	586	507	98
21	90	48	e49	e24	e72	291	442	362	570	586	541	147
22	90	47	e49	e25	e72	289	458	457	574	582	539	157
23	91	47	e49	e25	e73	292	513	485	558	536	524	157
24	81	46	e48	e25	e76	288	542	484	553	495	511	156
25	79	46	e45	e25	e84	289	551	494	544	474	519	155
26	76	46	e37	e25	93	306	521	502	532	456	519	155
27	76	46	e41	e25	115	315	511	487	523	501	521	157
28	75	45	e45	e25	117	316	473	468	565	478	512	156
29	78	45	e46	e25	115	322	465	475	593	422	476	156
30	83	47	e47	e25	---	361	457	450	589	411	457	127
31	78	---	e50	e25	---	371	---	417	---	434	457	---
TOTAL	2620	1640	1450	988	1372	8766	11852	14110	13232	17194	13813	6628
MEAN	84.5	54.7	46.8	31.9	47.3	283	395	455	441	555	446	221
MAX	92	82	52	56	117	371	551	548	593	631	584	455
MIN	75	45	37	23	25	130	311	329	256	411	283	98
AC-FT	5200	3250	2880	1960	2720	17390	23510	27990	26250	34100	27400	13150
CAL YR 1987	TOTAL	104797	MEAN	287	MAX	764	MIN	25	AC-FT	207900		
WTR YR 1988	TOTAL	93665	MEAN	256	MAX	631	MIN	23	AC-FT	185800		

e Estimated

SEVIER LAKE BASIN

291

10194200 CLEAR CREEK ABOVE DIVERSIONS, NEAR SEVIER, UT

LOCATION.--Lat 38°34'45", long 112°17'22", in NW¼NW¼SW¼ sec. 31, T. 25 S., R. 4 W., Sevier County, Hydrologic Unit 16030003, on left bank at south side of State Highway 13, 1.8 mi west of Sevier, 2.3 mi upstream from mouth, and 17.2 mi southwest of Richfield.

DRAINAGE AREA.--164 mi².

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,680 ft from topographic map.

REMARKS.--Records fair. Flow regulated by several small reservoirs, combined capacity about 1,000 acre-ft, at headwaters.

AVERAGE DISCHARGE.--31 years, 38.8 ft³/s, 28,110 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 906 ft³/s Aug. 26, 1988, gage height, 2.40 ft; minimum, 1.5 ft³/s Feb. 21, 1976, gage height, 0.85 ft, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 906 ft³/s Aug. 26, gage height 2.40 ft; minimum discharge, 8.0 ft³/s Dec. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	14	15	e10	12	23	29	44	119	57	28	e20
2	12	14	15	e9.7	12	21	31	44	103	53	24	e19
3	12	13	15	e10	12	20	39	52	102	51	47	e19
4	12	13	15	e11	12	19	46	e64	140	50	41	e18
5	13	13	15	e11	19	19	48	e86	170	45	28	e17
6	14	19	14	e12	19	21	62	79	177	43	27	e17
7	13	17	14	e11	17	21	87	73	151	41	27	e17
8	13	16	11	e10	16	15	75	67	131	38	23	e16
9	13	14	15	e10	16	19	44	60	117	37	21	e16
10	13	14	15	e10	13	17	44	62	112	36	19	e15
11	13	14	14	e11	13	16	51	73	108	36	20	e15
12	13	13	9.5	e10	13	19	55	101	105	34	21	e15
13	14	14	9.0	e9.5	14	24	59	139	93	33	18	e15
14	15	16	10	e9.8	12	22	64	160	89	32	16	e15
15	12	13	11	e10	14	21	61	183	120	31	15	15
16	11	12	9.0	e11	14	14	75	221	111	31	14	14
17	11	15	9.0	e12	14	21	133	281	86	30	14	13
18	11	10	11	e11	14	24	49	292	85	30	13	12
19	11	14	10	e11	16	22	36	264	81	29	13	13
20	11	16	9.5	e10	16	26	32	188	81	29	13	13
21	11	16	8.5	e11	16	34	57	173	90	29	14	14
22	11	14	10	e12	16	44	49	177	86	28	14	20
23	11	13	12	e11	16	53	42	194	76	27	13	16
24	12	13	12	e11	16	60	34	197	71	27	13	14
25	12	14	e11	e11	17	46	30	187	67	27	15	14
26	12	14	e10	e11	18	55	28	188	64	27	52	13
27	11	11	e10	e10	19	76	29	202	73	26	31	13
28	11	14	e11	e10	21	60	34	193	66	25	23	13
29	12	14	e11	e11	23	45	34	193	64	23	e22	13
30	14	12	e12	e12	---	41	41	176	62	23	e22	13
31	13	---	e11	12	---	32	---	141	---	29	e21	---
TOTAL	379	419	364.5	332.0	450	950	1498	4554	3000	1057	682	457
MEAN	12.2	14.0	11.8	10.7	15.5	30.6	49.9	147	100	34.1	22.0	15.2
MAX	15	19	15	12	23	76	133	292	177	57	52	20
MIN	11	10	8.5	9.5	12	14	28	44	62	23	13	12
AC-FT	752	831	723	659	893	1880	2970	9030	5950	2100	1350	906
CAL YR 1987	TOTAL	11339.7	MEAN	31.1	MAX	143	MIN	4.1	AC-FT	22490		
WTR YR 1988	TOTAL	14142.5	MEAN	38.6	MAX	292	MIN	8.5	AC-FT	28050		

e Estimated

SEVIER LAKE BASIN

10205000 SEVIER RIVER NEAR SIGURD, UT

LOCATION.--Lat 38°52'13", long 111°57'14", in SW¼NE¼SW¼ sec. 19, T. 22 S., R. 1 W., Sevier County, Hydrologic Unit 16030003, on left bank 200 ft downstream from county road bridge, 0.5 mi downstream from Rocky Ford Dam, 2.3 mi northeast of Sigurd, and 5.0 mi upstream from Lost Creek.

DRAINAGE AREA.--3,375 mi².

PERIOD OF RECORD.--July to September 1912, July 1914 to current year. Prior to October 1938, published as "near Vermillion."

REVISED RECORDS.--WSP 1394: 1927-28, 1947.

GAGE.--Water-stage recorder. Altitude of gage is 5,180 ft by barometer. July to September 1912, nonrecording gage 0.3 mi downstream at different datum. July 31, 1914 to Apr. 19, 1917, nonrecording gage and Apr. 20, 1917 to Oct. 16, 1935, water-stage recorder, at present site at datum 2.00 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by reservoirs above station. During irrigation season practically entire flow through Rocky Ford Dam is diverted above station for irrigation below station.

AVERAGE DISCHARGE.--74 years, 112 ft³/s, 81,140 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,400 ft³/s May 30, 1922, gage height, 6.1 ft, present datum, from rating curve extended above 600 ft³/s on basis of maximum discharge for other Sevier River stations; practically no flow (seepage only) at times when Rocky Ford Reservoir gates are closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 435 ft³/s Apr. 3, gage height, 3.03 ft; minimum daily discharge, 0.88 ft³/s May 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	95	125	131	e147	263	e410	75	7.3	12	13	99
2	33	92	127	121	e141	268	e420	109	24	16	9.6	100
3	49	86	135	129	e144	285	e430	111	38	49	15	107
4	61	86	134	132	e132	252	e420	87	53	32	41	111
5	67	95	136	143	e120	236	e410	47	57	29	79	113
6	187	103	135	157	e125	260	e410	29	71	21	89	119
7	224	102	136	152	e128	275	388	27	104	16	98	105
8	205	106	138	149	e133	304	320	33	79	15	106	81
9	184	105	137	148	e140	350	303	60	37	13	73	62
10	149	106	142	148	e141	335	330	59	23	12	44	30
11	107	102	142	144	e146	e370	287	48	19	8.5	42	38
12	77	103	137	138	e150	e355	203	41	15	6.7	32	e65
13	75	120	125	124	e154	e350	182	32	12	7.5	19	e120
14	97	128	116	131	e160	e370	160	31	21	11	17	132
15	104	127	129	141	e161	e365	146	73	34	14	12	143
16	119	122	130	134	e170	e370	112	120	29	10	11	138
17	129	120	124	134	e169	e370	132	144	33	7.3	9.2	119
18	133	112	133	137	e173	e380	206	140	41	6.8	5.0	86
19	133	105	144	131	196	e390	203	144	37	6.8	6.0	78
20	131	108	143	112	202	e405	88	93	28	7.2	8.8	78
21	136	111	139	124	212	e415	26	30	29	7.6	7.3	73
22	97	117	147	126	224	e420	55	11	31	6.5	4.4	46
23	92	122	157	125	232	e415	223	5.8	38	4.9	5.0	40
24	92	121	147	126	230	e420	298	5.7	46	4.8	5.6	49
25	93	122	123	126	231	e425	288	9.1	43	12	2.5	57
26	94	125	112	125	231	e395	277	6.0	35	11	2.5	61
27	97	124	119	134	234	e390	194	3.0	26	22	2.6	61
28	93	122	128	146	247	e400	184	2.2	20	45	2.9	61
29	94	121	142	e141	259	e400	153	1.6	15	53	4.2	70
30	94	119	140	e146	---	e410	83	.97	13	45	41	84
31	88	---	136	e147	---	e410	---	.88	---	22	74	---
TOTAL	3354	3327	4158	4202	5132	11053	7341	1579.25	1058.3	534.6	881.6	2526
MEAN	108	111	134	136	177	357	245	50.9	35.3	17.2	28.4	84.2
MAX	224	128	157	157	259	425	430	144	104	53	106	143
MIN	20	86	112	112	120	236	26	.88	7.3	4.8	2.5	30
AC-FT	6650	6600	8250	8330	10180	21920	14560	3130	2100	1060	1750	5010

CAL YR 1987 TOTAL 56933.5 MEAN 156 MAX 532 MIN 2.0 AC-FT 112900
WTR YR 1988 TOTAL 45146.75 MEAN 123 MAX 430 MIN .88 AC-FT 89550

e Estimated

SEVIER LAKE BASIN

293

10205030 SALINA CREEK NEAR EMERY, UT

LOCATION.--Lat 38°54'43", long 111°31'47", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, T. 22 S., R. 3 E., Sevier County, Hydrologic Unit 16030003, on right bank, 2.5 mi upstream from Soil Conservation Service retention dam, 15.3 mi west of Emery, and 18.4 mi east of Salina.

DRAINAGE AREA.--51.8 mi².

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,000 ft from topographic map. Prior to June 9, 1971, at site 300 ft downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No diversion above station. Slight regulation from small reservoirs at headwaters.

AVERAGE DISCHARGE.--25 years, 20.1 ft³/s, 14,560 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 621 ft³/s May 27, 1983, gage height, 5.44 ft; minimum discharge, 0.80 ft³/s Nov. 9, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 60 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 17	1800	*121	*3.73	No other peak greater than base discharge.			

Minimum daily discharge, 3.5 ft³/s Jan. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	7.7	e8.0	e4.5	e6.0	e14	e18	29	36	14	12	9.1
2	8.0	7.7	e7.5	e4.0	e6.0	e14	e20	23	32	13	12	8.9
3	7.9	7.8	e6.5	e4.5	e6.0	e14	e23	27	31	13	12	8.8
4	7.9	7.4	e6.0	e5.0	e6.0	e14	e25	31	30	14	11	8.7
5	7.9	7.9	6.5	e5.5	e6.0	e13	e22	29	29	13	10	8.7
6	7.8	8.8	5.2	e6.0	e6.0	e16	e21	30	27	13	10	8.7
7	7.8	8.4	5.7	e5.5	e6.5	e17	e28	25	25	12	10	8.6
8	7.8	7.8	e6.0	e6.0	e6.5	e13	e29	24	24	12	10	8.5
9	7.9	7.5	6.5	e5.5	e7.0	e15	e17	24	22	12	10	8.5
10	7.8	7.4	5.7	e6.0	e7.5	e14	e17	33	21	12	10	8.5
11	7.7	7.1	5.7	e6.5	e8.0	e11	e19	46	20	12	10	8.4
12	8.1	7.0	e5.0	e6.5	e9.0	e12	21	53	20	12	10	9.1
13	9.4	7.1	e5.5	e6.0	e10	e12	25	61	19	12	9.8	9.5
14	8.8	7.7	e5.5	e5.5	e9.5	e12	24	59	18	12	9.6	9.0
15	8.1	6.5	e6.0	e6.0	e9.0	e13	20	64	17	12	9.8	8.7
16	7.9	9.8	e6.5	e5.5	e9.0	e13	25	67	17	12	9.6	8.6
17	7.8	7.2	e6.0	e5.0	e8.0	e12	32	84	16	11	9.5	8.5
18	7.7	13	e6.5	e4.5	e8.0	e12	26	90	17	11	9.5	8.4
19	7.7	9.8	e7.0	e4.0	e9.0	e13	21	75	16	11	9.5	8.5
20	7.5	9.3	e7.0	e3.5	e10	e15	20	69	16	11	9.6	8.4
21	7.4	7.0	e7.5	e4.0	e10	e19	19	70	15	11	9.7	8.5
22	7.4	6.4	e7.5	e4.0	e11	e25	17	74	15	11	9.5	8.7
23	7.9	7.1	e7.0	e4.5	e12	e21	16	70	14	11	9.4	8.4
24	8.0	7.9	e6.0	e4.5	e14	e23	14	61	14	11	9.6	8.3
25	7.7	6.0	e4.5	e4.5	e14	e19	14	57	14	12	9.4	8.3
26	7.5	6.2	e4.5	e5.0	e15	e22	13	57	14	11	9.7	8.1
27	7.5	7.6	e5.0	e5.0	e16	e27	15	51	14	12	9.4	8.0
28	7.4	e7.5	e5.5	e5.5	e15	e22	23	47	14	11	9.2	8.0
29	7.5	6.4	e5.5	e6.0	e15	e15	25	45	16	12	9.1	8.0
30	8.6	e7.5	e5.0	e6.5	---	e17	35	44	14	12	9.1	8.0
31	7.7	---	e5.0	e6.5	---	e16	---	40	---	13	9.1	---
TOTAL	244.4	232.5	187.3	161.5	275.0	495	644	1559	597	371	307.1	256.4
MEAN	7.88	7.75	6.04	5.21	9.48	16.0	21.5	50.3	19.9	12.0	9.91	8.55
MAX	9.4	13	8.0	6.5	16	27	35	90	36	14	12	9.5
MIN	7.4	6.0	4.5	3.5	6.0	11	13	23	14	11	9.1	8.0
AC-FT	485	461	372	320	545	982	1280	3090	1180	736	609	509

CAL YR 1987 TOTAL 5590.9 MEAN 15.3 MAX 84 MIN 3.0 AC-FT 11090
WTR YR 1988 TOTAL 5330.2 MEAN 14.6 MAX 90 MIN 3.5 AC-FT 10570

e Estimated

SEVIER LAKE BASIN

10206000 SALINA CREEK AT SALINA, UT

LOCATION.--Lat 38°57'24", long 111°51'58", in SW¼NW¼NW¼ sec. 25, T. 21 S., R. 1 W., Sevier County, Hydrologic Unit 16030003, on right bank 150 ft upstream from bridge on U.S. Highway 89 in Salina and 0.8 mi upstream from mouth.

DRAINAGE AREA.--292 mi².

PERIOD OF RECORD.--April to September 1914 (fragmentary), April 1915 to September 1916, October 1917 to September 1919, November 1942 to September 1955, water year 1960 (annual maximum), October 1960 to current year.

REVISED RECORDS.--WSP 1734: Drainage area. WSP 2127: 1953(M), 1960(M), 1965(M). WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,140 ft estimated on basis of nearby benchmark. Prior to Mar. 23, 1915, nonrecording gage at site 150 ft downstream at different datum. Mar. 23, 1915 to Oct. 16, 1917, nonrecording gage, and Oct. 17, 1917 to Sept. 30, 1919, water-stage recorder at site about 0.2 mi upstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions above and below station for irrigation.

AVERAGE DISCHARGE.--43 years (water years 1916, 1918-19, 1944-55, 1961-88), 29.4 ft³/s, 21,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,650 ft³/s June 7, 1984, gage height, 8.32 ft; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 17	1000	250	3.51	May 16	0330	*294	*3.64

Minimum discharge, .38 ft³/s Sept. 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	18	17	e7.0	e9.0	e33	30	101	85	2.6	1.1	.78
2	3.0	26	22	e6.0	e9.0	e31	32	72	71	1.5	3.4	1.2
3	2.8	21	18	e7.0	e8.0	e30	41	79	60	1.3	3.4	1.1
4	3.2	22	14	e8.0	e7.0	30	53	91	59	1.4	5.5	1.1
5	2.6	20	16	e9.0	e7.0	26	47	65	57	1.2	1.8	1.2
6	2.3	34	15	e10	e7.0	29	45	77	55	.94	2.8	.99
7	2.7	23	15	e9.0	e8.0	32	62	57	46	.86	4.8	.81
8	2.7	20	12	e9.0	e10	19	60	46	44	.84	2.3	.82
9	3.0	17	17	e8.0	e10	24	24	40	33	.98	1.2	.86
10	3.3	16	18	e8.0	e13	22	20	67	28	1.3	1.2	.86
11	3.3	15	21	e11	e15	15	36	108	28	1.0	1.1	.75
12	2.9	15	e8.0	e9.0	e17	24	41	149	25	2.2	1.5	1.0
13	6.8	16	e9.0	e9.0	e20	23	55	162	29	2.0	1.6	1.9
14	12	21	e9.0	e8.0	e19	21	61	176	15	1.5	1.6	1.5
15	12	15	e10	e10	e18	28	51	178	12	1.3	1.6	.69
16	9.3	11	e11	e9.0	e17	24	78	196	13	.81	.91	.52
17	9.8	18	e12	e8.0	e18	30	172	209	12	.77	.87	.53
18	11	9.5	e11	e7.0	e18	25	108	187	19	.79	.86	.52
19	11	20	e11	e6.0	e19	28	70	136	14	.68	1.0	.53
20	10	23	e12	e4.0	e21	35	69	106	17	.68	1.1	.50
21	10	17	e12	e5.0	e22	45	99	113	13	.64	1.2	.75
22	11	18	e13	e5.0	e24	53	66	123	15	.67	1.1	.86
23	14	16	e11	e6.0	e25	46	40	132	11	.82	1.0	.91
24	15	16	e9.0	e6.0	e27	46	38	122	10	.87	.77	1.2
25	17	16	e7.0	e6.0	e29	34	29	98	10	.87	.74	1.4
26	16	16	e6.0	e7.0	e30	52	27	118	11	1.0	.77	.78
27	16	16	e6.0	e7.0	e31	63	26	116	8.6	.86	1.1	1.6
28	15	17	e7.0	e8.0	e34	50	47	95	7.1	.80	1.2	1.2
29	15	21	e8.0	e10	e35	32	57	100	8.0	.98	1.1	1.5
30	24	14	e8.0	e12	---	38	101	105	4.1	1.4	1.2	.72
31	18	---	e7.0	e11	---	29	---	101	---	1.4	.85	---
TOTAL	287.4	547.5	372.0	245.0	527.0	1017	1685	3525	819.8	34.96	50.67	29.08
MEAN	9.27	18.2	12.0	7.90	18.2	32.8	56.2	114	27.3	1.13	1.63	.97
MAX	24	34	22	12	35	63	172	209	85	2.6	5.5	1.9
MIN	2.3	9.5	6.0	4.0	7.0	15	20	40	4.1	.64	.74	.50
AC-FT	570	1090	738	486	1050	2020	3340	6990	1630	69	101	58

CAL YR 1987	TOTAL	10324.21	MEAN	28.3	MAX	208	MIN	.87	AC-FT	20480
WTR YR 1988	TOTAL	9140.41	MEAN	25.0	MAX	209	MIN	.50	AC-FT	18130

e Estimated

SEVIER LAKE BASIN

295

10208500 OAK CREEK NEAR FAIRVIEW, UT

LOCATION.--Lat 39°40'26", long 111°24'30", in NW¼NE¼SW¼ sec. 19, T. 13 S., R. 5 E., Sanpete County, Hydrologic Unit 16030004, on right bank 2.1 mi upstream from mouth and 3.7 mi northeast of Fairview.

DRAINAGE AREA.--11.8 mi².

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,550 ft from topographic map. Prior to Nov. 16, 1983, at datum 10.0 ft lower.

REMARKS.--No estimated daily discharges. Records fair. No diversion or regulation above station.

AVERAGE DISCHARGE.--24 years, 12.7 ft³/s, 9,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,190 ft³/s May 30, 1983, gage height, 5.99 ft result of indirect measurement of peak flow; minimum, 0.78 ft³/s Nov. 29, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 25 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 16	1800	*120	*9.32	No other peak greater than base discharge.			
Minimum, .80 ft ³ /s Mar. 8.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	2.7	2.1	2.1	2.2	2.8	2.9	18	22	5.9	3.1	2.9
2	1.9	2.8	2.2	2.1	2.1	2.5	3.1	18	21	5.8	3.0	2.8
3	1.9	2.7	2.2	2.1	2.1	2.4	3.5	18	20	5.6	3.4	2.7
4	1.9	2.6	2.3	2.1	2.0	2.3	3.8	20	18	6.7	3.2	2.7
5	1.9	2.5	2.5	2.2	2.1	2.4	3.7	23	17	6.3	3.0	2.7
6	2.0	3.6	2.3	2.3	2.0	2.5	4.3	25	16	5.8	3.0	2.7
7	2.0	3.2	2.4	2.2	2.1	2.3	5.6	26	14	5.6	3.1	2.6
8	2.0	3.0	2.1	2.2	2.1	2.0	5.8	24	13	5.4	3.0	2.7
9	2.0	2.7	2.5	2.1	2.1	2.5	5.2	24	12	5.5	2.9	2.7
10	2.0	2.7	2.3	2.2	2.1	2.0	5.4	25	11	5.6	2.8	2.7
11	2.0	2.6	2.4	2.2	2.1	2.5	6.1	30	11	5.3	2.8	2.7
12	2.1	2.5	1.9	2.2	2.1	2.2	6.9	41	10	4.9	2.8	3.0
13	2.9	2.6	1.8	2.1	2.1	2.2	8.1	57	9.7	4.8	2.8	3.2
14	2.8	2.9	1.6	2.2	2.1	2.3	8.5	75	9.1	4.5	2.7	2.9
15	2.4	2.5	1.6	2.2	2.1	2.3	8.7	92	8.6	4.4	2.7	2.8
16	2.3	2.3	1.9	2.2	2.1	2.3	10	98	8.1	4.2	2.7	2.6
17	2.3	2.6	2.4	2.3	2.0	2.2	10	93	7.7	4.1	2.7	2.5
18	2.2	1.8	2.3	2.3	2.1	2.3	11	88	7.6	4.0	2.6	2.6
19	2.3	2.5	2.2	2.1	2.1	2.4	11	76	7.2	3.9	2.5	2.6
20	2.3	2.6	2.1	2.0	2.0	2.7	12	69	8.4	3.9	2.6	2.5
21	2.3	2.5	2.1	2.1	2.1	3.0	12	62	7.8	3.7	2.8	2.9
22	2.4	2.4	2.2	2.0	2.1	3.1	12	57	7.2	3.7	2.8	2.8
23	2.5	2.4	2.3	2.1	2.1	2.9	10	51	6.8	3.6	2.6	2.4
24	2.8	2.3	2.2	2.0	2.2	2.8	9.9	45	6.6	3.6	2.5	2.3
25	2.7	2.3	2.1	2.0	2.2	2.9	9.6	42	6.3	3.8	2.5	2.3
26	2.5	2.3	2.1	2.0	2.3	3.3	9.3	39	8.4	3.7	4.3	2.2
27	2.5	2.2	2.1	2.1	2.3	3.7	9.8	35	7.4	3.6	4.0	2.2
28	2.5	2.3	2.2	2.1	2.5	3.2	11	32	7.2	3.4	3.0	2.2
29	2.5	2.2	2.2	2.2	2.7	2.9	13	30	6.9	3.1	2.9	2.2
30	3.0	2.1	2.2	2.2	---	3.2	16	28	6.3	3.4	2.8	2.3
31	2.7	---	2.2	2.1	---	2.9	---	25	---	3.3	2.8	---
TOTAL	71.6	76.4	67.0	66.3	62.2	81.0	248.2	1386	322.3	141.1	90.4	78.4
MEAN	2.31	2.55	2.16	2.14	2.14	2.61	8.27	44.7	10.7	4.55	2.92	2.61
MAX	3.0	3.6	2.5	2.3	2.7	3.7	16	98	22	6.7	4.3	3.2
MIN	1.9	1.8	1.6	2.0	2.0	2.0	2.9	18	6.3	3.1	2.5	2.2
AC-FT	142	152	133	132	123	161	492	2750	639	280	179	156

CAL YR 1987	TOTAL	3183.8	MEAN	8.72	MAX	66	MIN	1.6	AC-FT	6320
WTR YR 1988	TOTAL	2690.9	MEAN	7.35	MAX	98	MIN	1.6	AC-FT	5340

SEVIER LAKE BASIN

10215700 OAK CREEK NEAR SPRING CITY, UT

LOCATION.--Lat $39^{\circ}26'52''$, long $111^{\circ}25'29''$, in SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, sec. 1, T. 16 S., R. 4 E., Sanpete County, on right bank about 400 ft upstream from powerplant diversion, 0.8 mi downstream from South Fork, and 4.5 mi southeast of Spring City.

DRAINAGE AREA.--8.35 mi².

PERIOD OF RECORD.--October 1964 to September 1974, June 1979 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,400 ft from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are fair. No diversion above station. Flow includes discharge of Spring City tunnel (transmountain diversion from Colorado River Basin).

AVERAGE DISCHARGE.--19 years, 11.4 ft³/s, 8,260 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 300 ft³/s July 23, 1965, gage height, 3.75 ft from floodmark, from rating curve extended above 75 ft³/s; minimum, 0.93 ft³/s Mar. 6, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 40 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 26	1900	51	2.13	June 5	2000	*74	*2.36

Minimum discharge, 2.6 ft³/s Mar. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	5.2	3.9	3.3	3.5	3.6	3.8	6.5	31	12	6.9	6.2
2	5.2	5.2	3.9	3.3	3.4	3.5	3.8	6.2	32	12	7.0	6.2
3	5.3	5.1	3.9	3.3	3.2	3.5	3.9	6.1	37	12	7.6	5.9
4	5.3	5.1	3.9	3.3	e3.1	3.5	4.0	6.5	46	12	7.2	5.9
5	5.3	5.2	4.2	3.3	3.3	3.5	3.9	6.6	54	11	6.7	5.9
6	5.4	5.2	4.1	3.6	3.1	3.5	4.1	6.5	39	10	7.3	5.9
7	5.3	4.4	4.0	3.5	3.1	3.4	4.7	6.2	31	10	6.8	6.0
8	5.3	4.3	e3.9	3.5	3.1	e3.3	4.6	6.3	27	9.7	6.4	5.9
9	5.2	4.2	4.1	3.5	3.1	3.5	4.3	6.4	25	9.5	6.4	5.9
10	5.2	4.4	4.1	3.5	3.2	3.6	4.4	6.8	23	9.7	6.3	5.9
11	5.1	4.2	4.1	3.5	3.3	3.5	5.0	7.7	23	9.7	6.4	5.9
12	5.2	4.1	e3.9	3.5	3.3	3.6	5.2	10	22	9.3	6.4	6.0
13	5.8	4.1	e3.7	e3.3	3.3	e3.6	5.6	13	21	9.0	6.2	6.1
14	5.8	4.1	e3.5	3.4	3.3	e3.5	5.6	15	20	9.0	6.2	6.0
15	5.3	4.1	e3.2	3.3	3.3	3.5	5.4	18	20	8.6	6.4	5.9
16	5.2	4.1	3.3	3.3	3.3	3.5	5.6	22	19	8.6	6.6	5.9
17	5.2	4.2	3.4	3.3	e3.2	3.5	5.7	24	19	8.3	6.6	5.9
18	5.2	e4.1	3.3	3.3	3.3	3.5	5.7	21	18	8.0	6.7	5.8
19	5.1	4.3	3.3	3.4	3.1	3.6	5.7	21	17	7.6	6.7	5.5
20	5.0	4.2	3.2	e3.2	3.1	3.8	5.8	21	17	7.3	6.8	5.6
21	5.1	4.1	3.1	3.5	3.2	3.9	5.9	24	17	7.0	6.7	6.0
22	5.1	4.1	3.2	3.6	e3.2	3.9	5.7	30	17	7.6	6.5	5.8
23	5.2	3.9	3.3	3.5	3.3	3.7	5.2	37	17	7.3	6.4	5.7
24	5.3	3.9	e3.2	3.5	3.3	3.7	5.1	36	17	7.3	6.4	5.6
25	5.1	3.9	e3.1	3.4	3.3	3.8	5.1	39	16	7.1	6.4	5.6
26	5.1	3.9	3.3	3.5	3.3	4.0	5.2	42	16	7.2	6.6	5.6
27	5.0	3.9	3.3	3.5	3.3	4.2	5.6	41	14	7.3	6.5	5.6
28	5.0	3.9	3.3	3.5	3.3	3.7	6.3	41	14	7.0	6.2	5.6
29	5.1	3.9	3.3	3.5	3.4	e3.6	6.6	41	13	6.9	6.2	5.4
30	5.4	3.9	3.3	3.5	---	3.8	7.1	36	13	7.1	6.2	5.3
31	5.1	---	3.3	3.5	---	3.7	---	32	---	6.9	6.2	---
TOTAL	162.2	129.2	110.6	106.1	94.2	112.5	154.6	635.8	695	272.0	203.9	174.5
MEAN	5.23	4.31	3.57	3.42	3.25	3.63	5.15	20.5	23.2	8.77	6.58	5.82
MAX	5.8	5.2	4.2	3.6	3.5	4.2	7.1	42	54	12	7.6	6.2
MIN	5.0	3.9	3.1	3.2	3.1	3.3	3.8	6.1	13	6.9	6.2	5.3
AC-FT	322	256	219	210	187	223	307	1260	1380	540	404	346

CAL YR 1987	TOTAL	2955.7	MEAN	8.10	MAX	36	MIN	3.1	AC-FT	5860
WTR YR 1988	TOTAL	2850.6	MEAN	7.79	MAX	54	MIN	3.1	AC-FT	5650

e Estimated

SEVIER LAKE BASIN

297

10215900 MANTI CREEK BELOW DUGWAY CREEK, NEAR MANTI, UT

LOCATION.--Lat 39°15'33", long 111°34'45", in NE¼SE¼SE¼ sec. 9, T. 18 S., R. 3 E., Sanpete County, Hydrologic Unit 16030004, on right bank 200 ft downstream from a side road bridge 0.6 mi upstream from upper powerplant, 2.3 mi east of cattle guard at Manti-LaSal forest boundary, and 3.5 mi east of Manti.

DRAINAGE AREA.--26.4 mi².

PERIOD OF RECORD.--October 1964 to September 1974; October 1978 to current year.

REVISED RECORDS.--WRD UT-81-1: 1979, 1980(M).

GAGE.--Water-stage recorder. Altitude of gage is 6,800 ft from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Records do not include flow diverted around station in an 8-inch pipeline, for culinary water for the city of Manti, and generation of power at the upper powerplant. Records include flow of a small transmountain diversion from San Rafael River basin.

AVERAGE DISCHARGE.--20 years, 32.9 ft³/s, 23,840 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 682 ft³/s June 9, 1973, gage height, 2.93 ft; minimum, 0.9 ft³/s Nov. 3, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 16	1804	71	1.47	June 4	1910	*114	*1.77
Minimum, 1.9 ft ³ /s Feb. 4.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	6.6	4.3	3.7	3.3	5.8	9.4	28	76	47	18	e8.6
2	6.4	5.9	4.4	3.7	3.4	5.1	9.1	26	88	45	17	e8.6
3	6.3	5.7	4.4	3.7	3.5	4.9	8.7	26	94	44	20	8.6
4	5.9	5.2	4.3	3.9	3.5	4.8	8.8	26	101	45	21	8.5
5	5.8	5.8	4.9	3.8	3.6	4.9	8.4	26	104	44	19	8.4
6	5.6	7.2	4.5	4.1	3.7	5.0	11	26	105	42	22	8.3
7	5.4	6.4	4.4	3.9	3.8	4.7	15	24	102	41	21	8.0
8	6.3	6.1	e4.5	3.9	3.9	5.8	14	24	94	40	20	8.0
9	6.4	5.5	e4.7	3.9	3.8	6.7	13	23	90	39	19	8.0
10	5.4	5.5	4.4	3.7	3.8	7.6	14	26	87	39	19	7.9
11	5.3	4.8	4.5	3.9	3.6	9.7	16	33	82	38	e20	7.9
12	5.7	4.8	e4.4	3.6	4.0	8.8	19	39	78	36	e20	8.5
13	7.7	5.0	e4.2	3.5	4.1	7.6	22	45	73	36	e17	9.2
14	8.1	4.7	e4.7	3.3	3.7	7.2	23	53	69	36	e15	9.1
15	6.3	5.8	e4.9	3.3	3.7	5.0	22	59	67	35	e12	8.6
16	5.8	e6.0	e4.7	3.2	3.7	5.5	27	65	66	32	e10	8.2
17	5.6	e7.5	e5.0	3.1	4.2	4.5	32	66	63	31	e9.0	7.8
18	5.5	e7.2	4.9	3.1	3.5	6.9	28	64	61	29	e8.0	7.6
19	5.3	e7.3	3.9	3.0	3.4	7.2	25	61	61	28	e8.0	7.6
20	5.0	e7.3	3.9	2.8	3.6	8.1	25	60	60	26	e8.3	7.3
21	5.1	e6.0	3.9	2.7	3.9	9.0	26	63	57	24	e8.3	7.5
22	5.2	5.4	3.9	2.7	4.2	7.6	23	65	57	23	e8.0	8.7
23	5.3	5.2	e4.0	2.7	4.2	6.5	21	65	56	23	e7.7	7.7
24	5.6	e5.3	4.0	2.7	4.5	6.0	20	71	59	22	e7.7	7.5
25	5.7	5.4	3.7	2.7	4.7	6.8	19	73	55	21	e8.3	7.3
26	5.2	4.6	e3.9	2.8	5.1	8.7	18	79	53	20	e8.3	7.0
27	5.9	5.3	e4.0	3.1	5.1	10	20	76	51	19	e8.3	6.9
28	5.1	4.8	e3.9	3.4	5.7	9.4	23	78	50	18	e8.3	6.7
29	5.1	4.4	3.9	3.5	6.1	16	26	76	50	18	e8.3	6.7
30	6.9	4.1	3.9	3.5	---	9.1	30	76	48	18	e8.3	6.7
31	5.7	---	3.7	3.3	---	9.6	---	71	---	18	e8.8	---
TOTAL	181.4	170.8	132.7	104.2	117.3	224.5	576.4	1593	2157	977	413.6	237.4
MEAN	5.85	5.69	4.28	3.36	4.04	7.24	19.2	51.4	71.9	31.5	13.3	7.91
MAX	8.1	7.5	5.0	4.1	6.1	16	32	79	105	47	22	9.2
MIN	5.0	4.1	3.7	2.7	3.3	4.5	8.4	23	48	18	7.7	6.7
AC-FT	360	339	263	207	233	445	1140	3160	4280	1940	820	471

CAL YR 1987	TOTAL	6869.8	MEAN	18.8	MAX	106	MIN	3.7	AC-FT	13630
WTR YR 1988	TOTAL	6885.3	MEAN	18.8	MAX	105	MIN	2.7	AC-FT	13660

e Estimated

SEVIER LAKE BASIN

10217000 SEVIER RIVER BELOW SAN PITCH RIVER, NEAR GUNNISON, UT

LOCATION (REVISED).--Lat 39°10'22", long 111°52'54", in SE¼SW¼NE¼ sec. 11, T. 19 S., R. 1 W., Sanpete County, Hydrologic Unit 16030003, on left bank 1.0 mi downstream from San Pitch River and 4.0 mi west of Gunnison.

DRAINAGE AREA.--4,921 mi².

PERIOD OF RECORD.--March 1912 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage is 5,025 ft from topographic map. Prior to Oct. 28, 1938, at same site at datum 0.36 ft higher. Since Apr. 16, 1986 at different site and datum.

REMARKS.--Records poor. Flow regulated by reservoirs and many diversions for irrigation above station. Most of flow diverted above station during irrigation season.

AVERAGE DISCHARGE.--76 years, 266 ft³/s, 192,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 5,400 ft³/s May 29, 1984; minimum, 5.6 ft³/s July 17-21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 947 ft³/s Mar. 9, gage height, 7.30 ft; minimum daily discharge, 49 ft³/s Aug. 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e110	e180	e280	e330	306	569	609	296	e200	e65	e76	130
2	e115	e200	e285	e320	306	548	639	283	e215	e55	e80	148
3	e120	e195	e295	e310	e310	e520	664	303	e230	e70	e100	152
4	e125	e190	e310	e330	e290	e540	672	280	e240	e130	e97	154
5	e140	e210	e300	e360	e275	e480	669	214	e240	e110	e115	161
6	e150	e230	e300	e370	e265	e520	592	196	e280	e95	e145	161
7	e200	e245	e300	371	e280	e580	600	189	e290	e85	e160	171
8	e260	e240	e310	364	e285	e770	531	171	e220	e75	e180	166
9	e240	e230	e310	363	e290	e880	389	172	e180	e70	e200	149
10	e210	e235	e320	361	e300	e850	339	187	e140	e65	e170	155
11	e180	e220	e330	371	e305	e840	338	202	e115	e60	e130	138
12	e160	e215	e340	363	e310	e810	297	232	e100	e55	128	144
13	e130	e260	e320	354	e320	e680	238	259	e90	e55	120	186
14	e120	e310	e300	336	e320	e710	236	281	e75	e60	101	226
15	e150	e330	e280	348	e325	e700	226	284	e85	e75	71	248
16	e200	e320	e290	359	e330	e680	259	327	e110	e110	59	283
17	e210	e310	e300	355	e330	e680	324	367	e95	e105	54	264
18	e220	e300	e290	362	e335	e700	366	413	e105	e100	49	235
19	e220	e290	e320	362	e345	e710	377	377	e115	e90	49	203
20	e220	e265	e335	349	e355	e730	323	329	e110	69	50	197
21	e220	e270	e320	331	e370	e710	261	275	e95	e76	53	187
22	e230	e280	e320	354	e380	e760	255	233	e85	e69	63	188
23	e190	e285	e350	358	e400	e690	249	229	e90	e60	65	160
24	e180	e300	e370	362	e420	e690	375	238	e100	e59	82	147
25	e180	e295	e330	440	e440	e740	442	207	e120	e63	95	181
26	e185	e290	e320	336	e455	e750	428	208	e130	e58	97	188
27	e185	e300	e290	278	e480	e780	412	248	e100	e69	110	183
28	e195	e295	e310	288	e510	e740	332	242	e85	e67	109	173
29	e190	e290	e330	294	e560	e660	341	204	e75	e79	95	171
30	e185	e285	e360	297	---	e740	328	231	e70	e87	92	177
31	e190	---	e345	300	---	e680	---	246	---	e90	102	---
TOTAL	5610	7865	9760	10676	10197	21437	12111	7923	4185	2376	3097	5426
MEAN	181	262	315	344	352	692	404	256	139	76.6	99.9	181
MAX	260	330	370	440	560	880	672	413	290	130	200	283
MIN	110	180	280	278	265	480	226	171	70	55	49	130
AC-FT	11130	15600	19360	21180	20230	42520	24020	15720	8300	4710	6140	10760

CAL YR 1987 TOTAL 119626 MEAN 328 MAX 800 MIN 41 AC-FT 237300
WTR YR 1988 TOTAL 100663 MEAN 275 MAX 880 MIN 49 AC-FT 199700

e Estimated

10218500 SEVIER BRIDGE RESERVOIR NEAR JUAB, UT

LOCATION.--Lat 39°22'20", long 112°01'57", in NW¼NW¼NW¼ sec. 1, T. 17 S., R. 2 W., Juab County, Hydrologic Unit 16030003, at Sevier Bridge Dam on Sevier River, 9.0 mi northeast of Scipio.

DRAINAGE AREA.--5,155 mi².

PERIOD OF RECORD.--January 1914 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Staff gage below gage height 60 ft and wire-weight gage above, at left end of dam, read once daily. Datum of gage is 4,937.51 ft NGVD of 1929.

REMARKS.--Reservoir was formed by a 30-ft earthfill dam. Storage began about 1904. Dam ultimately raised to 90 ft by June 1916. Capacity, 236,000 acre-ft between gage heights 6.0 ft (approximate bottom of outlet tunnel) and 80.0 ft (top of flashboard on spillway). No dead storage. Water is used for irrigation. Revised capacity table, based on Soil Conservation Service survey in 1961, used since Oct. 1, 1962.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 271,600 acre-ft June 21-24, 1983; gage height, 83.0 ft; no storage at times in 1927-28, 1930-36, 1951, 1960-61.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 235,100 acre-ft Apr. 5-8, gage height, 79.9 ft; minimum contents observed, 106,500 acre-ft Sept. 5-14, gage height, 63.3 ft.

Capacity table (gage height, in feet, and contents, in acre-feet)

63	105,000	70	146,200	79	225,400
64	109,800	72	161,300	80	236,150
65	114,900	75	186,500		
68	132,600	78	215,100		

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
INSTANTANEOUS OBSERVATIONS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107900	119300	137200	156700	176100	197600	232900	226500	207100	173600	139900	107900
2	107900	119900	137900	156700	176900	198500	234000	226500	207100	171900	139200	107400
3	108400	120400	138500	157500	177800	199500	234000	226500	207100	171100	137900	107000
4	108400	121000	139200	158200	178700	201400	234000	226500	206200	169400	137200	107000
5	108400	121600	139900	159000	178700	202300	235100	226500	205200	168600	135900	106500
6	108900	122200	140600	159000	179500	203300	235100	225400	204200	167000	134600	106500
7	108900	123400	141300	161300	179500	205200	235100	225400	203300	165400	133200	106500
8	109300	123900	141300	161300	180400	206200	235100	224400	202300	164600	132600	106500
9	109800	124500	142000	162100	180400	207100	234000	224400	201400	162900	132600	106500
10	110300	125100	142700	162100	181300	208100	234000	223400	200400	162100	131900	106500
11	110300	125100	143400	162900	182200	210100	234000	222300	199500	160600	131300	106500
12	110300	125700	144100	162900	183000	211100	232900	221300	198500	159000	130700	106500
13	110300	126300	144800	164600	183000	213100	232900	221300	197600	157500	130700	106500
14	110800	126900	144800	164600	183900	214100	231900	220300	196600	156700	129400	106500
15	111300	126900	145500	164600	184800	216100	231900	219200	195700	155100	128200	107000
16	111900	128200	146200	165400	184800	217200	230800	218200	194700	154400	127600	107000
17	112400	128800	147000	165400	185700	219200	229700	217200	192900	152900	126300	107400
18	112400	129400	147700	167000	186500	220300	228600	215100	191100	151400	125100	107400
19	112900	130100	148400	167800	186500	222300	227600	215100	190200	149900	123900	107900
20	113400	130700	148400	168600	187500	223400	227600	215100	189300	148400	122800	108400
21	113900	131300	149200	168600	188400	224400	226500	215100	187500	147700	121600	108400
22	114400	131900	149900	169400	189300	224400	227600	214100	185700	146200	119300	108400
23	114900	132600	150700	169400	190200	225400	226500	214100	184800	144800	117700	108400
24	115500	132600	151400	170200	191100	226500	226500	213100	183000	144100	116000	108900
25	116000	133200	e152100	170200	192000	227600	225400	213100	181300	143400	114400	108900
26	116000	135200	152900	171100	192900	228600	226500	212100	180400	142700	112900	108900
27	116600	e135200	152900	171100	193800	229700	226500	211100	177800	142000	111900	109300
28	117100	135900	153600	171900	194700	229700	227600	210100	176900	141300	110800	109300
29	117700	135900	154400	173600	195700	230800	227600	209100	176100	141300	109800	109300
30	118200	136500	154400	174400	---	231900	227600	209100	174400	141300	109300	109800
31	118800	---	155900	175300	---	231900	---	208100	---	140600	108900	---
MAX	118800	136500	155900	175300	195700	231900	235100	226500	207100	173600	139900	109800
MIN	107900	119300	137200	156700	176100	197600	225400	208100	174400	140600	108900	106500
(#)	65.7	68.6	71.3	73.7	76.0	79.6	79.2	77.3	73.6	69.2	63.8	64.0
(*)	+10900	+17700	+19400	+19400	+20400	+36200	-4300	-19500	-33700	-33800	-31700	+900

CAL YR 1987 (*) -58200

WTR YR 1988 (*) + 1900

(#) Gage height, in feet, at end of month.

(*) Change in contents, in acre-feet.

e Estimated.

SEVIER LAKE BASIN

10219000 SEVIER RIVER NEAR JUAB, UT

LOCATION.--Lat 39°22'29", long 112°02'20", in SE¼SW¼SE¼ sec. 35, T. 16 S., R. 2 W., Juab County, Hydrologic Unit 16030005, on right bank 0.5 mi downstream from Sevier Bridge Dam and 11.6 mi southwest of Juab.

DRAINAGE AREA.--5,165 mi².

PERIOD OF RECORD.--September 1911 to current year.

GAGE.--Water-stage recorder and rubble masonry control since Apr. 16, 1914. Altitude of gage is 4,940 ft by barometer. Prior to Apr. 16, 1914, staff gage 500 ft upstream at different datum. Apr. 16, 1914 to Apr. 7, 1938, water-stage recorder at present site and datum. Apr. 8, 1938 to Mar. 31, 1942, water-stage recorder at site 1,300 ft upstream at different datum. Apr. 1, 1942 to July 15, 1961, water-stage recorder on left bank same site and datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by Sevier Bridge Reservoir (see station 10218500).

AVERAGE DISCHARGE.--77 years, 266 ft³/s, 192,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,190 ft³/s June 25, 1983, gage height, 10.90 ft; practically no flow at times when reservoir gates were closed.

EXTREMES₃ FOR CURRENT YEAR.--Maximum discharge, 833 ft³/s Aug. 22, gage height, 3.09 ft; minimum daily discharge, 3.0 ft³/s Dec. 16-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	3.5	e3.3	e3.2	e3.6	4.0	194	376	410	632	463	375
2	30	3.4	e3.3	e3.2	e3.6	4.0	244	369	408	631	692	378
3	29	3.4	e3.3	e3.2	e3.6	4.0	341	367	410	629	697	252
4	29	3.4	e3.3	e3.2	e3.6	4.0	346	365	476	628	695	153
5	14	3.4	e3.3	e3.2	e3.6	4.0	360	363	539	628	694	153
6	5.1	3.4	e3.2	e3.4	e3.6	4.0	458	362	539	627	565	153
7	4.9	3.4	e3.2	e3.4	e3.6	4.0	560	364	546	626	451	153
8	4.9	3.4	e3.2	e3.4	e3.6	4.1	573	364	542	625	296	130
9	4.7	3.4	e3.2	e3.4	e3.6	5.2	573	612	542	625	295	116
10	84	3.4	e3.2	e3.4	e3.6	5.9	573	768	542	624	293	116
11	175	3.5	e3.1	e3.4	e3.6	6.2	571	774	539	621	289	116
12	175	4.1	e3.1	e3.4	e3.6	7.0	567	774	539	623	377	116
13	173	5.5	e3.1	e3.4	e3.6	8.5	566	775	542	623	484	116
14	55	6.5	e3.1	e3.4	e3.6	11	567	773	539	621	520	116
15	4.3	6.5	e3.1	e3.4	e3.6	13	719	772	535	620	522	116
16	4.0	3.6	e3.0	e3.4	e3.6	15	798	767	564	622	547	104
17	3.8	e3.4	e3.0	e3.4	e3.6	16	807	606	769	624	665	95
18	3.6	e3.4	e3.0	e3.4	e3.6	17	808	438	774	625	675	93
19	3.6	e3.4	e3.0	e3.4	e3.6	19	810	436	774	622	675	93
20	3.6	e3.4	e3.0	e3.4	e3.6	21	679	433	769	620	674	93
21	3.6	e3.4	e3.0	e3.4	e3.6	167	372	430	769	620	693	93
22	3.6	e3.4	e3.0	e3.4	e3.6	244	370	426	769	622	827	93
23	3.6	e3.4	e3.0	e3.4	e3.6	249	369	481	769	619	825	93
24	3.6	e3.4	e3.2	e3.4	e3.6	252	367	539	769	587	823	82
25	3.6	e3.4	e3.2	e3.4	3.4	254	369	540	765	312	762	75
26	3.6	e3.4	e3.2	e3.6	3.4	317	371	539	765	159	656	41
27	3.6	e3.4	e3.2	e3.6	3.5	427	368	541	703	156	534	5.9
28	3.6	e3.4	e3.2	e3.6	3.6	438	369	539	638	157	531	6.1
29	3.6	e3.4	e3.2	e3.6	3.7	485	367	531	636	155	372	5.9
30	3.6	e3.4	e3.2	e3.6	---	566	369	466	635	155	306	5.6
31	3.6	---	e3.2	e3.6	---	470	---	410	---	319	333	---
TOTAL	917.1	111.4	97.6	105.6	104.0	4045.9	14805	16300	18516	16357	17231	3537.5
MEAN	29.6	3.71	3.15	3.41	3.59	131	493	526	617	528	556	118
MAX	175	6.5	3.3	3.6	3.7	566	810	775	774	632	827	378
MIN	3.6	3.4	3.0	3.2	3.4	4.0	194	362	408	155	289	5.6
AC-FT	1820	221	194	209	206	8030	29370	32330	36730	32440	34180	7020

CAL YR 1987 TOTAL 142080.0 MEAN 389 MAX 1160 MIN 3.0 AC-FT 281800
WTR YR 1988 TOTAL 92128.1 MEAN 252 MAX 827 MIN 3.0 AC-FT 182700

e Estimated

SEVIER LAKE BASIN

301

10219200 CHICKEN CREEK NEAR LEVAN, UT

LOCATION (REVISED).--Lat $39^{\circ}33'00''$, Long $111^{\circ}49'31''$, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 33, T. 14 S., R. 1 E., Juab County, Hydrologic Unit 16030005, on left bank 125 ft upstream from county road culvert, 50 ft upstream from diversion structure, 0.5 mi upstream from mouth of canyon, and 2.0 mi east of Levan.

DRAINAGE AREA.--27.9 mi².

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,540 ft from topographic map. Prior to Jan. 18, 1978 at site 350 ft downstream at different datum. Jan. 18, 1978 to June 19, 1986 at site 600 ft downstream at same datum.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--26 years, 9.04 ft³/s, 6,550 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 390 ft³/s Sept. 8, 1981, gage height, 5.70 ft, from rating curve extended above 250 ft³/s on basis of velocity-area study; no flow Feb. 11, 14, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 15 ft³/s not determined. Maximum daily discharge, 10 ft³/s May 26; minimum daily discharge 0.10 ft³/s Feb. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.54	e.51	e.42	e.12	e.18	e.26	e.78	e5.4	e5.4	1.7	.97	.38
2	e.53	e.50	e.43	e.14	e.15	e.26	e.90	e5.2	e4.2	1.5	1.2	.38
3	e.52	e.52	e.44	e.15	e.11	e.25	e1.1	e5.1	e3.9	1.5	1.3	.38
4	e.52	e.54	e.44	e.16	e.10	e.25	e1.3	e5.0	e3.7	1.5	1.3	.38
5	e.51	e.57	e.44	e.18	e.12	e.25	e1.5	e5.0	e3.6	1.5	1.2	.38
6	e.50	e.58	e.43	e.19	e.13	e.27	e1.8	e4.9	e3.5	1.5	.89	.46
7	e.49	e.49	e.43	e.19	e.16	e.29	e2.2	e4.9	e3.4	1.3	.85	.55
8	e.49	e.49	e.42	e.17	e.20	e.26	e2.1	e4.9	e3.2	1.3	.53	.41
9	e.49	e.49	e.41	e.15	e.23	e.24	e2.0	e4.9	e3.2	1.5	.50	.27
10	e.49	e.49	e.40	e.14	e.23	e.23	e2.1	e4.9	e3.1	1.5	e.49	.21
11	e.51	e.48	e.38	e.14	e.22	e.22	e2.1	e4.9	e2.9	1.5	e.49	.21
12	e.52	e.48	e.31	e.14	e.21	e.22	e2.2	e5.2	e2.8	1.3	e.48	.24
13	e.68	e.48	e.25	e.15	e.20	e.22	e2.4	e5.5	e2.7	1.3	e.47	.21
14	e.70	e.47	e.23	e.15	e.18	e.23	e2.7	e5.8	e2.6	1.3	e.46	.15
15	e.51	e.47	e.20	e.17	e.16	e.23	e3.0	e6.4	e2.6	1.2	e.45	.15
16	e.50	e.46	e.21	e.18	e.14	e.25	e4.5	e7.0	e2.5	1.1	e.44	.15
17	e.49	e.45	e.23	e.19	e.13	e.28	e5.8	e7.6	e2.5	.98	e.44	.15
18	e.49	e.44	e.26	e.20	e.13	e.36	e5.6	e8.4	e2.5	.86	e.44	.15
19	e.49	e.43	e.24	e.16	e.13	e.40	e5.4	e8.9	e2.5	.86	e.44	.15
20	e.49	e.43	e.23	e.12	e.12	e.45	e5.3	e8.8	e2.4	.86	e.44	.15
21	e.49	e.42	e.23	e.13	e.11	e.49	e5.3	e8.6	e2.4	.86	e.43	.16
22	e.49	e.42	e.22	e.14	e.11	e.43	e5.0	e8.6	e2.4	.83	e.43	.22
23	e.49	e.42	e.19	e.14	e.11	e.39	e4.8	e8.7	e2.4	.79	e.42	.21
24	e.49	e.42	e.16	e.15	e.11	e.34	e4.5	e9.1	e2.5	.87	e.42	.21
25	e.49	e.42	e.14	e.16	e.12	e.36	e4.5	e9.5	e2.3	.99	.41	.21
26	e.49	e.42	e.12	e.16	e.13	e.37	e4.7	e10	e2.2	.92	.48	.21
27	e.49	e.42	e.12	e.18	e.14	e.41	e5.0	e9.9	e2.2	1.0	.41	.21
28	e.50	e.42	e.12	e.19	e.16	e.45	e5.2	e9.8	e2.1	1.0	.38	.21
29	e.51	e.41	e.14	e.20	e.20	e.50	e5.5	e9.4	e2.1	.64	.38	.21
30	e.56	e.41	e.15	e.21	---	e.58	e5.8	e8.8	e2.0	.64	.38	.21
31	e.54	---	e.14	e.20	---	e.65	---	e8.0	---	.78	.39	---
TOTAL	16.00	13.95	8.53	5.05	4.42	10.39	105.08	219.1	85.8	35.38	18.31	7.57
MEAN	.52	.46	.28	.16	.15	.34	3.50	7.07	2.86	1.14	.59	.25
MAX	.70	.58	.44	.21	.23	.65	5.8	10	5.4	1.7	1.3	.55
MIN	.49	.41	.12	.12	.10	.22	.78	4.9	2.0	.64	.38	.15
AC-FT	32	28	17	10	8.8	21	208	435	170	70	36	15
CAL YR 1987	TOTAL	505.85	MEAN	1.39	MAX	6.8	MIN	.12	AC-FT	1000		
WTR YR 1988	TOTAL	529.58	MEAN	1.45	MAX	10	MIN	.10	AC-FT	1050		

e Estimated

SEVIER LAKE BASIN

10224000 SEVIER RIVER NEAR LYNNDYL, UT

LOCATION.--Lat 39°28'55", long 112°23'35", in NW¼NE¼SE¼ sec. 27, T. 15 S., R. 5 W., Millard County.
Hydrologic Unit 16030005, on right bank 1.6 mi downstream from highway bridge and 3.5 mi southwest of Lynndyl.

DRAINAGE AREA.--5,966 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1914 to October 1919, October 1942 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Prior to Oct. 1, 1979 at site 80 ft upstream. Elevation of gage is 4,660 ft by barometer.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Sevier Bridge Reservoir about 35 mi upstream (see station 10218500). Several diversions for irrigation between reservoir and station.

AVERAGE DISCHARGE.--51 years, 254 ft³/s, 184,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 5,020 ft³/s June 15-17, 1983; minimum, 2.4 ft³/s Jan. 26, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 767 ft³/s Apr. 21, gage height, 6.14 ft; minimum daily discharge, 21 ft³/s several days during December.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	165	97	22	e29	e73	112	520	398	351	585	93	242
2	165	93	21	e30	e76	139	286	419	355	590	287	285
3	111	62	21	e33	e78	162	249	419	356	602	462	287
4	123	31	21	e36	e82	166	345	405	349	626	521	268
5	107	28	21	e40	e83	155	338	402	367	627	528	137
6	105	28	21	e40	e80	148	335	407	445	607	543	127
7	86	27	22	e43	e78	144	358	418	453	585	495	120
8	70	26	22	e46	e76	138	416	421	459	548	394	116
9	70	25	21	e49	e74	135	438	414	435	469	341	112
10	70	24	21	e54	e70	135	445	532	431	481	280	94
11	72	24	e21	e55	e68	134	487	726	430	469	288	87
12	205	24	e23	e56	e66	133	461	736	439	456	303	87
13	244	24	e25	e57	e63	129	454	754	439	454	338	93
14	268	27	e27	e59	e61	127	445	751	422	443	424	92
15	260	25	e28	e59	e60	128	448	722	412	433	488	90
16	137	24	e27	e60	e61	134	530	732	404	438	497	93
17	92	23	e25	e60	e63	132	653	713	372	459	490	99
18	93	23	e23	e60	e65	133	680	645	504	488	578	88
19	91	24	e23	e61	e66	133	713	444	561	506	611	83
20	89	23	e22	e62	e68	132	721	387	585	519	601	59
21	91	23	e21	e64	e70	133	719	344	575	528	571	60
22	91	23	e21	e65	e72	153	468	333	557	515	553	62
23	86	23	e21	e66	e74	310	453	313	561	515	602	59
24	90	22	e22	e67	e76	328	457	306	577	518	643	55
25	72	23	e24	e68	e77	337	443	383	576	512	650	53
26	86	23	e26	e69	e79	339	410	405	583	364	640	44
27	85	22	e28	e70	e80	361	400	418	596	168	556	46
28	84	22	e30	e70	e82	472	402	406	570	109	455	70
29	87	22	e31	e69	e84	485	397	398	573	89	435	40
30	98	22	e31	e68	---	462	403	405	568	80	364	31
31	102	---	e30	e70	---	536	---	407	---	74	259	---
TOTAL	3595	907	742	1735	2105	6665	13874	14963	14305	13857	14290	3179
MEAN	116	30.2	23.9	56.0	72.6	215	462	483	477	447	461	106
MAX	268	97	31	70	84	536	721	754	596	627	650	287
MIN	70	22	21	29	60	112	249	306	349	74	93	31
AC-FT	7130	1800	1470	3440	4180	13220	27520	29680	28370	27490	28340	6310

CAL YR 1987 TOTAL 134602 MEAN 369 MAX 1150 MIN 21 AC-FT 267000
WTR YR 1988 TOTAL 90217 MEAN 246 MAX 754 MIN 21 AC-FT 178900

e Estimated

SEVIER LAKE BASIN

303

10224000 SEVIER RIVER NEAR LYNNDYL, UT--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1951 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1951 to September 1980, October 1980 to September 1981, continuous.

WATER TEMPERATURES: March 1951 to September 1980, October 1980 to September 1981, continuous.

INSTRUMENTATION.--Conductance and water temperature recorder October 1980 to September 1981.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 8,300 microsiemens Dec. 27, 1962; minimum daily, 395 microsiemens Feb. 17, 1980.

WATER TEMPERATURES: Maximum recorded, 33.0°C Aug. 23, 1981; minimum, 0.0°C on many days during winter period of most years.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT , 1987											
27...	1100	87	1880	8.40	17.0	12.0	--	--	--	--	--
NOV											
24...	1445	22	3750	8.30	5.5	6.0	0.7	11.7	649	K2	K1
DEC											
15...	1345	29	3970	8.10	3.0	1.0	--	--	--	--	--
FEB , 1988											
04...	1545	82	2160	8.30	-6.0	0.0	1.8	12.2	653	K1	24
MAR											
22...	1105	130	2570	8.40	14.0	10.0	17	9.50	645	K1	48
JUN											
03...	1000	347	1720	8.30	27.0	19.0	39	7.55	645	24	38
JUL											
08...	0930	583	1670	8.10	31.0	22.0	--	--	646	--	--
AUG											
11...	1045	281	1740	8.30	29.0	20.5	35	7.20	644	60	540

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3
OCT , 1987										
27...	530	81	79	220	47	4	6.2	--	--	--
NOV										
24...	790	120	120	540	59	9	9.0	0	478	392
DEC										
15...	790	120	120	540	59	9	8.7	--	--	--
FEB , 1988										
04...	510	78	76	240	50	5	5.9	0	338	277
MAR										
22...	760	120	110	270	44	4	7.0	20	296	275
JUN										
03...	430	62	66	210	51	5	5.8	0	324	266
JUL										
08...	400	57	62	200	52	4	2.6	--	--	--
AUG										
11...	420	59	67	210	51	5	6.0	0	372	305

K Results based on colony count outside acceptable range (non-ideal colony count).

SEVIER LAKE BASIN

10224000 SEVIER RIVER NEAR LYNNDYL, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
OCT , 1987										
27...	310	430	0.3	15	1140	1260	1.55	269	--	--
NOV										
24...	680	770	0.5	23	2480	2500	3.37	145	0.75	0.01
DEC										
15...	710	710	0.5	26	2580	2470	3.51	199	--	--
FEB , 1988										
04...	340	350	0.4	22	1340	1290	1.82	298	--	<0.01
MAR										
22...	550	340	0.2	17	1760	1670	2.39	618	--	<0.01
JUN										
03...	290	260	0.5	19	1080	1070	1.47	1010	--	<0.01
JUL										
08...	260	250	0.4	20	1040	1000	1.41	1640	--	--
AUG										
11...	270	260	0.3	21	1070	1050	1.46	812	0.45	0.01

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
OCT , 1987										
27...	0.47	--	0.02	0.03	--	--	--	--	<0.01	--
NOV										
24...	0.76	0.06	0.05	0.06	--	<0.2	0.01	<0.01	0.01	0.03
DEC										
15...	0.80	--	0.10	0.13	--	--	--	--	<0.01	--
FEB , 1988										
04...	0.77	0.08	0.06	0.08	0.32	0.4	0.02	<0.01	<0.01	--
MAR										
22...	0.61	0.03	0.04	0.05	0.47	0.5	0.02	0.01	<0.01	--
JUN										
03...	0.57	0.04	0.04	0.05	0.46	0.5	0.04	0.02	<0.01	--
JUL										
08...	0.63	--	0.09	0.12	--	--	--	--	0.02	0.06
AUG										
11...	0.46	0.01	0.02	0.03	0.69	0.7	0.02	0.02	<0.01	--

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
FEB , 1988											
04...	1545	20	5	200	<10	<1	20	<1	1	<10	<5
MAR											
22...	1105	10	5	100	<10	<1	20	<1	3	20	<5
AUG											
11...	1045	30	10	90	<0.5	<1	10	<3	2	6	<5

SEVIER LAKE BASIN

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10224000 SEVIER RIVER NEAR LYNNDYL, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
FEB , 1988 04...	60	70	<0.1	5	<1	<1	<1.0	1000	2	10
MAR 22...	80	30	0.2	3	<1	<1	<1.0	2300	6	<10

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)
OCT , 1987 27...	1100	260
DEC 15...	1345	610
JUL , 1988 08...	0930	270

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SED. SUSP. SIEVE DIAM. PERCENT FINER THAN .062 MM	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
NOV , 1987 24...	1445	22	6.0	16	23	1.3
FEB , 1988 04...	1545	82	0.0	36	49	11
MAR 22...	1105	130	10.0	78	74	26
JUN 03...	1000	347	19.0	--	157	147
AUG 11...	1045	281	20.5	86	176	134

SEVIER LAKE BASIN

10224100 OAK CREEK ABOVE LITTLE CREEK, NEAR OAK CITY, UT

LOCATION.--Lat 39°21'23", long 112°13'55", in NE¼NE¼NW¼ sec. 7, T. 17 S., R. 3 W., Millard County, Hydrologic Unit 16030005, Fish Lake National Forest, on right bank 0.3 mi upstream from a 12-inch pipeline diversion at Walker's Fork and 5.7 mi east of Oak City.

DRAINAGE AREA.--5.58 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,480 ft from topographic map.

REMARKS.--Records poor. No regulation or diversion above station.

AVERAGE DISCHARGE.--24 years, 3.23 ft³/s, 2,340 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 120 ft³/s Apr. 29, 1973, gage height, 2.21 ft; minimum, 0.03 ft³/s Dec. 31, 1967, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 17	1200	*17	*1.30	No other peak greater than base discharge.			

Minimum daily, 0.25 ft³/s Sept. 3, 6-10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	.56	.58	e.45	e1.05	e.74	2.0	9.3	3.9	1.0	.46	.27
2	.34	.59	.59	e.44	e1.04	e.73	2.0	9.2	3.6	1.0	.51	.27
3	.35	.59	.64	e.45	e.99	e.71	2.1	9.3	3.3	.91	.57	.25
4	.36	.58	.66	e.49	e.85	e.70	2.3	9.2	3.1	1.0	.50	.27
5	.38	.63	.72	e.70	e.62	e.67	2.5	8.8	3.0	.88	.47	.28
6	.40	.67	.68	e.93	e.58	e.66	2.9	9.1	2.8	.87	.54	.25
7	.41	.64	.76	e.98	e.59	e.64	3.4	9.4	2.7	.81	.54	.25
8	.40	.61	e.73	e.99	e.60	e.63	3.7	9.6	2.6	.77	.48	.25
9	.36	.58	.74	e.97	e.61	e.61	3.5	9.6	2.5	.75	.44	.25
10	.36	.58	.75	e.92	e.61	e.59	3.5	9.7	2.5	.74	.41	.25
11	.38	.58	.72	e.87	e.63	e.57	3.8	9.9	2.4	.71	.43	.29
12	.41	.57	e.70	e.81	e.64	e.58	4.1	11	2.4	.69	.43	.39
13	.86	.59	e.64	e.82	e.65	e.58	5.5	13	2.2	.71	.39	.43
14	.64	e.58	e.61	e.94	e.66	e.58	7.5	13	2.1	.66	.36	.36
15	.51	e.56	e.65	e1.05	e.67	e.59	8.0	13	2.1	.62	.35	.34
16	.50	e.54	.70	e1.05	e.68	.87	7.9	13	2.0	.59	.35	.30
17	.49	e.52	e.73	e1.00	e.69	.82	8.0	14	2.0	.60	.36	.27
18	.49	e.53	e.76	e.80	e.70	.87	8.5	11	2.0	.56	.36	.29
19	.49	e.54	e.80	e.60	e.72	.89	8.7	9.3	2.0	.57	.38	.32
20	.49	e.55	e.85	e.51	e.73	.97	9.0	8.9	1.8	.52	.42	.31
21	.50	.58	e.89	e.48	e.74	1.1	9.7	8.5	1.8	.49	.41	.52
22	.47	.58	e.88	e.48	e.76	1.3	9.8	8.0	1.7	.47	.37	.44
23	.50	.58	e.74	e.49	e.77	1.4	9.8	7.3	1.6	.46	.33	.38
24	.52	e.57	e.63	e.49	e.78	1.5	9.8	6.7	1.5	.47	.32	.35
25	.53	e.57	e.54	e.51	e.79	1.5	9.9	6.2	1.5	.49	.32	.33
26	.50	e.56	e.43	e.54	e.79	1.8	9.6	5.9	1.5	.53	.43	.33
27	.50	e.56	e.43	e.64	e.78	2.2	9.4	5.6	1.4	.52	.41	.31
28	.51	e.56	e.43	e.86	e.78	2.2	9.1	5.3	1.3	.50	.34	.34
29	.61	e.56	e.44	e1.00	e.75	e2.1	9.0	5.0	1.2	.46	.31	.35
30	.69	e.57	e.45	e1.05	---	2.0	8.9	4.6	1.1	.44	.29	.35
31	.56	---	e.47	e1.05	---	2.0	---	4.2	---	.46	.27	---
TOTAL	14.84	17.28	20.34	23.36	21.25	33.10	193.9	276.6	65.6	20.25	12.55	9.59
MEAN	.48	.58	.66	.75	.73	1.07	6.46	8.92	2.19	.65	.40	.32
MAX	.86	.67	.89	1.0	1.0	2.2	9.9	14	3.9	1.0	.57	.52
MIN	.33	.52	.43	.44	.58	.57	2.0	4.2	1.1	.44	.27	.25
AC-FT	29	34	40	46	42	66	385	549	130	40	25	19
CAL YR 1987	TOTAL	410.80	MEAN	1.13	MAX	5.0	MIN	.22	AC-FT	815		
WTR YR 1988	TOTAL	708.66	MEAN	1.94	MAX	14	MIN	.25	AC-FT	1410		

e Estimated

10234500 BEAVER RIVER NEAR BEAVER, UT

LOCATION.--Lat 38°16'50", long 112°34'25", in SW¼SW¼SE¼ sec. 18, T. 29 S., R. 6 W., Beaver County, Hydrologic Unit 16030007, on left bank 4.2 mi east of Beaver.

DRAINAGE AREA.--91.0 mi².

PERIOD OF RECORD.--June to September 1906, March 1914 to current year.

REVISED RECORDS.--WDR UT-80-1: 1979.

GAGE.--Water-stage recorder. Altitude of gage is 6,200 ft from topographic map. Prior to Mar. 30, 1914, nonrecording gage, and Mar. 30, 1914 to Oct. 15, 1937, water-stage recorder, at site 800 ft upstream at different datum. Oct. 16, 1937 to Mar. 20, 1959, at site 1,800 ft upstream at different datum. Mar. 21, 1959 to Mar. 21, 1978 at site 3,800 ft upstream at different datum. Mar. 21, 1978 to May 28, 1983, at site 1,800 ft upstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No diversion for irrigation above station. Water diverted for hydroelectric power, but returned to stream above station. Some regulation by powerplants and several small reservoirs.

AVERAGE DISCHARGE.--74 years, 53.2 ft³/s, 38,540 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,080 ft³/s July 22, 1936, gage height, 7.27 ft, site and datum then in use, from rating curve extended above 500 ft³/s; minimum, 1.8 ft³/s Dec. 6, 1976, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 14	2100	341	2.11	Aug. 26	1700	182	1.71
Aug. 2	2330	*578	*2.97				

Minimum daily discharge, 17 ft³/s Dec. 13-16, Feb. 4-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	28	27	e25	18	24	29	74	176	86	59	38
2	22	27	26	e26	18	24	31	68	166	86	99	37
3	22	26	23	e26	e18	23	32	67	168	89	106	36
4	22	24	23	e26	e17	23	33	66	209	85	67	35
5	22	26	23	e26	e17	24	34	65	210	78	64	35
6	22	30	22	e24	e17	25	41	67	202	72	77	36
7	22	29	21	e24	e17	23	50	69	196	70	73	36
8	22	27	24	e24	e18	21	52	67	179	69	67	34
9	23	25	24	e23	18	24	48	69	169	66	66	34
10	22	25	21	e23	18	24	48	75	157	63	64	34
11	22	22	18	e23	19	25	54	95	149	60	65	33
12	23	23	e18	e23	18	26	62	137	139	60	65	26
13	34	24	e17	e22	19	29	64	195	127	62	62	23
14	31	25	e17	e22	19	30	61	257	126	68	63	30
15	26	21	e17	e22	19	24	56	276	126	67	61	30
16	25	24	e17	e23	19	25	63	261	124	70	60	29
17	24	24	e18	e23	e19	29	68	269	122	67	60	28
18	23	23	e18	e23	e19	30	68	259	115	66	57	27
19	23	26	e19	e23	e19	26	65	238	116	64	53	26
20	22	25	e20	e24	20	26	65	217	108	61	48	26
21	24	22	e21	e24	19	29	66	215	102	59	48	25
22	25	20	e26	e23	19	31	61	226	94	58	47	27
23	28	20	e25	e23	20	32	56	229	88	58	48	27
24	28	20	e25	e23	20	33	55	220	84	54	47	27
25	28	24	e24	e22	21	33	55	217	82	56	52	25
26	25	23	e24	e22	23	38	53	223	78	57	76	25
27	25	33	e23	e21	23	42	59	222	71	58	51	25
28	25	37	e23	e20	24	39	67	211	84	56	41	24
29	26	25	e23	e19	26	37	68	227	90	57	39	23
30	29	25	e24	e19	---	35	75	207	91	58	38	23
31	26	---	e24	e18	---	32	---	182	---	57	39	---
TOTAL	763	753	675	709	561	886	1639	5270	3948	2037	1862	884
MEAN	24.6	25.1	21.8	22.9	19.3	28.6	54.6	170	132	65.7	60.1	29.5
MAX	34	37	27	26	26	42	75	276	210	89	106	38
MIN	22	20	17	18	17	21	29	65	71	54	38	23
AC-FT	1510	1490	1340	1410	1110	1760	3250	10450	7830	4040	3690	1750

CAL YR 1987 TOTAL 17506 MEAN 48.0 MAX 143 MIN 17 AC-FT 34720
WTR YR 1988 TOTAL 19987 MEAN 54.6 MAX 276 MIN 17 AC-FT 39640

e Estimated

BEAVER RIVER BASIN

10237000 BEAVER RIVER AT ADAMSVILLE, UT

LOCATION.--Lat 38°15'13", long 112°45'56", in NE¼SW¼SW¼ sec. 28, T. 29 S., R. 8 W., Beaver County, Hydrologic Unit 16030007, on right bank 50 ft upstream from bridge on State Highway 21, 1.6 mi upstream from Indian Creek, and 1.6 mi east of Adamsville.

DRAINAGE AREA.--303 mi².

PERIOD OF RECORD.--December 1913 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 5,550 ft from topographic map. Prior to Sept. 15, 1936, water-stage recorder and Sept. 15, 1936, to Oct. 15, 1937, nonrecording gage, at site 1.2 mi downstream at different datum. Oct. 16, 1937, to May 28, 1946, water-stage recorder at site 1.3 mi downstream at different datum. May 29, 1946, to Mar. 19, 1970 at site 1.80 mi downstream at different datum. Mar. 20, 1970, to July 25, 1979 at site 450 ft downstream at different datum.

REMARKS.--Records poor. One small diversion between station and Minersville Reservoir. Several ditches above station divert practically entire flow during irrigation season to supply Adamsville and Beaver irrigated areas.

AVERAGE DISCHARGE.--74 years (1914-88), 39.5 ft³/s, 28,620 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,700 ft³/s June 19, 20, 1983; no flow during summer and fall months in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 359 ft³/s Aug. 3, gage height, 5.30 ft; no flow July 18-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	e45	e47	e37	e47	e59	e40	e35	e93	10	14	9.8
2	5.2	e45	e47	e39	e46	e54	e47	e35	e88	8.8	8.7	8.7
3	4.9	e47	e47	e41	e45	e50	e48	e39	e81	8.0	101	8.0
4	4.5	e43	e46	e42	e40	e48	e47	e38	e64	11	13	7.7
5	e4.2	e44	e46	e43	e40	e47	e47	e36	e60	7.6	9.8	8.2
6	e3.9	e50	e43	e38	e41	e50	e47	e33	e50	3.9	10	7.8
7	e3.8	e52	e40	e37	e42	e44	e51	e32	e45	2.5	12	7.3
8	e3.9	e54	e40	e36	e43	e42	e41	e28	e44	3.7	8.4	6.5
9	e4.4	e52	e40	e35	e43	e46	e41	e22	e42	2.1	7.3	7.4
10	e5.6	e43	e40	e35	e44	e40	e42	e19	e39	1.5	5.6	8.9
11	e6.4	e40	e39	e34	e45	e36	e42	e22	e37	2.2	8.4	e9.4
12	e10	e40	e39	e34	e45	e38	e40	e27	e35	.75	12	e12
13	e62	e42	e38	e35	e45	e40	e38	e54	e34	.96	8.6	e14
14	e65	e50	e38	e36	e45	e44	e37	e78	e33	.92	7.3	e16
15	e56	e48	e38	e38	e44	e47	e37	e86	e32	1.4	7.4	e15
16	e45	e43	e42	e38	e44	e39	e37	e111	e22	1.6	7.6	e12
17	e33	e42	e45	e37	e42	e40	e49	e113	e12	2.0	7.1	e10
18	e31	e41	e43	e35	e41	e50	e87	e99	e7.0	1.7	7.3	e8.6
19	e31	e40	e41	e34	e41	e57	e85	e80	e8.0	.00	7.3	e7.6
20	e32	e40	e40	e33	e44	e55	e59	e71	10	.00	7.3	e7.0
21	e33	e42	e39	e32	e47	e51	e60	e103	20	.00	7.7	e6.8
22	e37	e43	e38	e33	e52	e50	e62	e77	16	.00	7.5	e6.4
23	e43	e45	e37	e34	e56	e49	e62	e78	15	.00	6.8	e6.0
24	e42	e48	e37	e34	e57	e53	e58	e79	22	.00	7.5	e5.6
25	e40	e48	e37	e35	e58	e53	e52	e72	39	.00	10	e5.2
26	e35	e49	e36	e38	e50	e52	e41	e59	25	.03	10	e4.8
27	e37	e48	e35	e40	e50	e55	e39	e64	19	.05	18	e4.5
28	e40	e48	e36	e43	e50	e63	e43	e68	16	.00	14	e4.1
29	e44	e47	e37	e46	e61	e44	e38	e84	13	.04	13	e3.7
30	e48	e47	e37	e47	---	e51	e39	e123	11	.53	9.6	e3.4
31	e47	---	e36	e47	---	e39	---	e125	---	16	9.7	---
TOTAL	863.1	1366	1244	1166	1348	1486	1456	1990	1032.0	87.28	383.9	242.4
MEAN	27.8	45.5	40.1	37.6	46.5	47.9	48.5	64.2	34.4	2.82	12.4	8.08
MAX	65	54	47	47	61	63	87	125	93	16	101	16
MIN	3.8	40	35	32	40	36	37	19	7.0	.00	5.6	3.4
AC-FT	1710	2710	2470	2310	2670	2950	2890	3950	2050	173	761	481

CAL YR 1987 TOTAL 8473.28 MEAN 23.2 MAX 81 MIN .00 AC-FT 16810
WTR YR 1988 TOTAL 12664.68 MEAN 34.6 MAX 125 MIN .00 AC-FT 25120

e Estimated

BEAVER RIVER BASIN

309

10238500 MINERSVILLE RESERVOIR NEAR MINERSVILLE, UT

LOCATION.--Lat 38°13'03", long 112°50'05", in SE¼NE¼NW¼ sec. 11, T. 30 S., R. 9 W., Beaver County, Hydrologic Unit 16030007, at right end of Rocky Ford Dam on Beaver River, 5.0 mi east of Minersville.

DRAINAGE AREA.--534 mi².

PERIOD OF RECORD.--April to August 1915, November 1915 to September 1917, December 1917 to March 1921, June to September 1922, October 1937 to current year. Month-end contents only for some periods, published in WSP 1314. Published as Rockyford Reservoir near Minersville prior to October 1, 1967.

REVISED RECORDS.--WDR UT-75-1: Drainage area.

GAGE.--Staff gage. Datum of gage is at 5,452.0 ft NGVD of 1929 (levels by topographic survey).

REMARKS.--Reservoir is formed by earthfill dam completed in 1914. Capacity, 23,260 acre-ft between gage height, 8.0 ft (bottom of outlet tunnel) and 51.0 ft (spillway crest). Prior to fall of 1937, the spillway crest was at elevation 52.5 ft; capacity, 24,910 acre-ft. Dead storage negligible. Figures given herein represent total contents. Water is used for irrigation in vicinity of Minersville and Milford.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 26,330 acre-ft June 24-29, 1969, gage height, 53.8 ft. No contents at times in 1915, 1918-19, 1939, 1956, and 1977.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 23,190 acre-ft May 9, gage height, 52.4 ft; minimum observed, 7,970 acre-ft, Sept. 10, gage height, 34.2 ft.

MONTHEND ELEVATION, IN FEET, AND CONTENTS AT 2400, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	--	*6,760	--
Oct. 31	--	*8,630	+1,870
Nov. 30	--	*11,910	+3,280
Dec. 31	--	*13,950	+2,040
CAL YR 1987	--	--	-2,870
Jan. 31	--	*15,690	+1,740
Feb. 29	--	*18,770	+3,080
Mar. 31	--	*20,950	+2,180
Apr. 30	--	*22,890	+1,940
May 31	--	*21,470	-1,420
June 30	--	*19,270	-2,200
July 31	--	*13,720	-5,550
Aug. 31	--	*9,510	-4,210
Sept. 30	--	*8,060	-1,450
WTR YR 1988	--	--	+1,300

(*) No gage height reading, contents interpolated.

BEAVER RIVER BASIN

10239000 BEAVER RIVER AT ROCKY FORD DAM, NEAR MINERSVILLE, UT

LOCATION.--Lat 38°13'03", long 112°50'22", in SE¼NW¼NW¼ sec. 11, T. 30 S., R. 9 W., Beaver County, Hydrologic Unit 16030007, on right bank and 0.5 mi downstream from Rocky Ford Dam and 4.8 mi east of Minersville.

DRAINAGE AREA.--535 mi².

PERIOD OF RECORD.--December 1913 to September 1936, April 1937 to current year.

REVISED RECORDS.--WSP 1564: 1920, 1924. WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Concrete control since Nov. 12, 1916. Altitude of gage is 5,400 ft by barometer. Prior to June 1, 1916, at site 1,500 ft upstream at different datum.

REMARKS.--No estimated daily discharges. Records fair. One small diversion between dam and station. Flow regulated by Minersville Reservoir (formerly published as Rockyford Reservoir). Numerous diversions for irrigation and municipal use above reservoir.

AVERAGE DISCHARGE.--73 years (1914-36, 1937-88), 41.5 ft³/s, 30,070 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,220 ft³/s June 12, 1983, gage height, 4.74 ft, from rating curve extended above 500 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 0.4 ft³/s Mar. 20, 1914.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 165 ft³/s May 17, gage height, 1.80 ft; minimum, 4.3 ft³/s Sept. 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	8.4	7.1	9.7	10	13	12	14	99	130	57	113
2	9.0	8.3	7.1	9.3	11	12	12	14	98	90	47	116
3	9.0	8.1	7.1	9.2	11	12	12	14	98	134	55	116
4	9.4	7.7	7.1	8.4	11	13	12	14	97	134	55	102
5	9.6	8.1	7.1	8.4	11	13	12	15	95	134	55	98
6	9.4	7.7	7.6	8.8	11	13	13	30	94	139	55	93
7	9.2	7.1	7.8	8.6	11	13	13	31	94	142	54	81
8	9.3	7.0	7.7	9.0	12	13	13	33	94	141	55	82
9	9.5	6.6	7.7	9.0	12	13	13	44	99	141	65	83
10	9.7	6.5	7.7	9.0	11	13	13	76	110	140	73	78
11	9.5	6.5	7.8	9.0	11	13	13	86	104	132	89	67
12	9.2	6.5	8.3	9.0	12	12	13	125	93	142	91	68
13	9.3	6.5	8.3	9.0	11	12	13	121	102	142	90	67
14	9.0	6.8	8.3	9.0	10	12	13	121	93	141	94	44
15	8.5	6.5	8.3	9.4	10	13	13	125	64	140	114	33
16	8.4	6.5	8.3	9.0	11	12	13	151	56	130	122	34
17	8.3	6.5	8.3	9.0	11	12	14	155	61	111	132	19
18	8.3	6.5	8.3	9.0	11	12	13	156	46	93	135	11
19	8.3	6.6	8.6	9.0	11	12	13	147	33	76	144	10
20	8.3	6.7	8.8	9.0	11	12	14	133	30	85	143	10
21	8.3	7.0	9.0	9.6	11	12	13	122	32	90	141	10
22	8.3	7.0	9.1	9.7	12	12	13	115	38	95	139	10
23	8.3	7.0	9.1	9.7	12	12	13	107	48	99	138	11
24	7.7	6.9	9.0	9.7	12	13	13	106	51	98	133	11
25	7.7	7.0	9.0	9.7	12	13	13	109	53	94	125	7.9
26	7.7	6.5	9.0	9.7	13	13	12	110	61	90	122	4.6
27	7.7	6.5	9.0	9.9	12	13	12	110	62	74	104	4.9
28	7.6	6.5	9.0	10	12	13	13	105	72	64	97	5.1
29	7.6	6.7	9.6	10	12	13	13	105	105	70	103	4.9
30	7.7	7.0	9.7	10	---	13	13	108	122	71	105	5.7
31	8.3	---	9.7	10	---	12	---	93	---	70	105	---
TOTAL	267.1	209.2	258.5	287.8	328	389	385	2795	2304	3432	3037	1400.1
MEAN	8.62	6.97	8.34	9.28	11.3	12.5	12.8	90.2	76.8	111	98.0	46.7
MAX	9.7	8.4	9.7	10	13	13	14	156	122	142	144	116
MIN	7.6	6.5	7.1	8.4	10	12	12	14	30	64	47	4.6
AC-FT	530	415	513	571	651	772	764	5540	4570	6810	6020	2780
CAL YR 1987	TOTAL	15634.1	MEAN	42.8	MAX	148	MIN	6.5	AC-FT	31010		
WTR YR 1988	TOTAL	15092.7	MEAN	41.2	MAX	156	MIN	4.6	AC-FT	29940		

10242000 COAL CREEK NEAR CEDAR CITY, UT

LOCATION.--Lat 37°40'20", long 113°02'02", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 36 S., R. 11 W., Iron County, Hydrologic Unit 16030006, on right bank, 1.2 mi east of Cedar City, and 3.0 mi from the mouth of Right Hand Creek.

DRAINAGE AREA.--80.9 mi².

PERIOD OF RECORD.--May to September 1915 (gage heights and discharge measurements only), October 1915 to July 1916, September 1916 to July 1918, September 1918 to November 1919, May 1935 to September 1937, April 1938 to current year. Records prior to November 1919 exclude flow of power canal; records would be equivalent if flow in canal added.

REVISED RECORD.--WSP 1714: Drainage area.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,000 ft from topographic map. Prior to Mar. 30, 1939, nonrecording gages and Mar. 30, 1939 to May 14, 1945, water-stage recorder at several sites about 0.5 mi upstream at various datums. May 15, 1945 to Oct. 10, 1951, May 4 to July 2, 1952, water-stage recorder at site 2 mi upstream at different datum. July 3, 1952 to Nov. 17, 1967, water-stage recorder at site 600 ft upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversion above station for irrigation.

AVERAGE DISCHARGE.--52 years (1935-37, 1938-88), 33.9 ft³/s, 24,560 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,620 ft³/s July 23, 1969, gage height, 11.67 ft from flood-mark, based on slope-area measurement of July 16, 1967 and applied to site and datum now in use; minimum, 0.3 ft³/s Nov. 5, 14, 17, 26, 1959, Feb. 17, 1960, Feb. 24, 1961.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 550 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 13	2100	*603	*7.15	No other peak greater than base discharge.			

Minimum daily discharge, 7.0 ft³/s Jan. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	53	e11	e7.0	e12	23	26	148	78	e40	24	15
2	9.1	39	e12	e8.6	e12	19	34	118	72	e37	20	13
3	9.0	34	e13	e9.4	e11	19	36	112	62	e35	50	13
4	8.9	31	e14	e10	e11	20	36	125	62	e34	23	13
5	8.9	49	e15	e11	e11	21	39	130	e62	e32	19	13
6	8.9	42	e16	e11	e12	23	48	109	e60	e31	21	14
7	8.9	38	e14	e11	e13	19	57	95	e58	e30	19	13
8	8.9	36	e13	e11	e14	17	55	85	e56	e29	17	13
9	8.9	35	e12	e11	e16	20	49	100	e55	e28	16	13
10	8.9	32	e16	e11	e17	15	53	140	e54	e26	16	13
11	9.1	28	e19	e10	e16	18	66	225	e52	e25	17	12
12	14	25	e13	e10	e15	16	80	306	e50	e24	16	13
13	31	23	e10	e9.8	e17	17	88	373	e50	e23	15	15
14	25	20	e9.0	e10	15	18	112	281	e53	e22	14	14
15	15	14	e9.2	e11	15	19	98	295	e56	e21	14	13
16	12	e14	13	e11	14	16	137	317	e64	e21	14	13
17	12	e15	14	e10	13	18	130	367	e70	e20	13	12
18	11	e17	13	e9.2	13	18	127	261	e80	e20	13	12
19	11	e16	13	e8.8	13	25	111	206	e76	e19	13	12
20	11	e18	9.8	e8.6	14	32	112	166	e73	e19	14	12
21	11	e19	12	e9.2	16	32	112	165	e70	e18	15	12
22	11	e18	14	e10	17	30	90	164	e68	e20	17	13
23	23	e16	10	e9.8	18	33	82	146	e66	e24	17	13
24	32	e15	8.5	e10	20	32	79	130	e68	e20	16	12
25	24	e14	8.6	e10	22	31	93	128	e62	e18	16	12
26	18	e14	e8.4	e10	24	39	97	116	e54	e18	33	12
27	15	e12	e9.4	e11	25	43	111	94	e50	e19	41	11
28	14	e12	e10	e12	24	34	124	75	e48	e19	18	11
29	42	e12	e9.0	e14	25	28	143	77	e45	e22	17	11
30	30	e11	e8.0	e14	---	29	172	70	e43	e25	15	11
31	23	---	e7.3	e13	---	25	---	71	---	22	16	---
TOTAL	483.6	722	364.2	322.4	465	749	2597	5195	1817	761	589	379
MEAN	15.6	24.1	11.7	10.4	16.0	24.2	86.6	168	60.6	24.5	19.0	12.6
MAX	42	53	19	14	25	43	172	373	80	40	50	15
MIN	8.9	11	7.3	7.0	11	15	26	70	43	18	13	11
AC-FT	959	1430	722	639	922	1490	5150	10300	3600	1510	1170	752

CAL YR 1987 TOTAL 11201.4 MEAN 30.7 MAX 256 MIN 5.0 AC-FT 22220
WTR YR 1988 TOTAL 14444.2 MEAN 39.5 MAX 373 MIN 7.0 AC-FT 28650

e Estimated

RAFT RIVER BASIN

13077700 GEORGE CREEK NEAR YOST, UT

LOCATION.--Lat 41°55'07", long 113°28'51", in SE¼SW¼SW¼ sec. 20, T. 14 N., R. 14 W., Box Elder County, Hydrologic Unit 17040201, on right bank 1,000 ft upstream from section corner and boundary of Sawtooth National Forest, 4.5 mi southeast of Yost, 5 mi south of Utah-Idaho State line, and 16 mi southwest of Strevell, Idaho.

DRAINAGE AREA.--7.84 mi².

PERIOD OF RECORD.--July 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,000 ft from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--29 years, 7.99 ft³/s, 5,790 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 295 ft³/s May 30, 1983, gage height, 1.78 ft; minimum, 1.0 ft³/s July 14-19, 1976, Feb. 5, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 46 ft³/s May 16, gage height, 1.14 ft; minimum daily, 1.4 ft³/s Sept. 26-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	3.3	2.3	e2.2	e2.4	e2.7	2.1	12	19	4.5	2.3	1.8
2	2.2	3.9	2.4	e2.0	e2.1	e2.6	2.5	10	18	4.2	2.3	1.7
3	2.1	3.3	2.5	e1.7	e2.0	e2.5	2.7	9.5	17	3.7	2.3	1.7
4	2.0	2.7	2.5	e2.2	e1.9	e2.5	2.4	9.0	19	3.6	2.3	1.7
5	2.0	2.5	2.5	e2.3	e2.0	e2.4	2.4	8.7	23	3.4	2.2	1.7
6	2.1	3.0	2.5	e2.5	e2.1	e2.3	3.3	9.0	24	3.3	2.3	1.8
7	2.2	2.7	2.5	e2.6	e2.2	e2.2	2.9	8.2	22	3.2	3.9	1.7
8	2.2	2.5	2.2	e2.7	e2.3	e2.3	2.6	8.1	19	3.1	2.8	1.7
9	2.2	2.5	2.5	e2.7	e2.5	1.9	2.7	7.8	16	2.9	2.4	1.7
10	2.2	2.5	2.6	e2.2	e2.6	1.9	3.0	7.8	15	2.9	2.4	1.9
11	2.2	2.4	2.4	e2.0	e2.5	1.9	4.2	9.5	13	2.8	2.7	2.0
12	2.2	2.4	2.3	e1.9	e2.5	1.9	5.9	15	12	2.8	2.9	2.0
13	4.4	2.6	2.2	e2.1	e2.4	1.9	7.6	22	11	2.8	2.7	2.0
14	3.3	2.6	2.2	e2.4	e2.3	1.9	11	22	11	2.9	2.6	e2.0
15	2.8	2.1	2.1	e2.1	e2.3	1.9	12	24	9.9	2.8	2.5	e1.9
16	2.6	2.5	2.0	e2.0	e2.2	1.9	12	31	9.3	4.0	2.6	e1.9
17	2.2	2.4	2.1	e2.2	e2.1	1.9	14	35	9.0	3.7	2.5	e1.8
18	2.2	2.2	2.2	e2.1	e2.1	1.9	14	27	8.4	3.1	2.5	e1.8
19	2.2	2.5	2.2	e2.0	e2.2	1.8	13	23	7.8	3.0	2.4	e1.8
20	2.2	2.5	e2.0	e1.8	e2.4	2.0	13	21	7.3	2.9	2.4	e1.9
21	2.2	2.5	e2.1	e2.0	e2.4	2.1	12	20	6.8	2.8	2.4	e1.8
22	2.2	2.5	e2.3	e2.3	e2.5	2.0	11	22	6.5	2.8	2.3	e1.7
23	2.4	2.4	e2.2	e2.5	e2.5	2.0	10	24	6.1	2.7	2.0	e1.7
24	2.6	2.4	e1.9	e2.3	e2.6	1.9	9.6	25	5.8	2.5	1.9	e1.7
25	2.3	2.5	e1.7	e2.2	e2.6	1.9	8.7	25	5.6	2.5	2.0	e1.6
26	2.2	2.5	e1.8	e2.2	e2.7	2.5	8.7	26	5.5	2.6	2.0	e1.5
27	2.2	2.3	e1.7	e2.1	e2.8	2.2	8.9	27	5.4	2.7	2.0	e1.5
28	2.2	2.3	e1.9	e2.0	e2.8	2.1	9.9	25	5.2	2.7	1.9	e1.5
29	2.8	2.3	e2.1	e2.2	e2.8	2.1	12	24	4.9	2.5	1.8	e1.5
30	2.9	2.3	e2.3	e2.5	---	2.2	13	23	4.7	2.4	1.8	e1.5
31	2.8	---	e2.5	e2.5	---	2.0	---	21	---	2.4	1.9	---
TOTAL	74.5	77.1	68.7	68.5	68.8	65.3	237.1	581.6	347.2	94.2	73.0	52.5
MEAN	2.40	2.57	2.22	2.21	2.37	2.11	7.90	18.8	11.6	3.04	2.35	1.75
MAX	4.4	3.9	2.6	2.7	2.8	2.7	14	35	24	4.5	3.9	2.0
MIN	2.0	2.1	1.7	1.7	1.9	1.8	2.1	7.8	4.7	2.4	1.8	1.5
AC-FT	148	153	136	136	136	130	470	1150	689	187	145	104

CAL YR 1987 TOTAL 1972.7 MEAN 5.40 MAX 31 MIN 1.6 AC-FT 3910
WTR YR 1988 TOTAL 1808.5 MEAN 4.94 MAX 35 MIN 1.5 AC-FT 3590

e Estimated

GREAT SALT LAKE BASIN

Compilation of data through the 300 ft breach opening

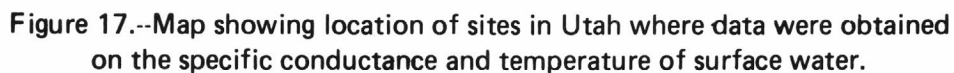
Lat 41°13'20", long 112°50'30"
1.2 mi east of Lakeside and 1500 ft
east of west shore

Date of measurement	Discharge (ft ³ /s)	Specific gravity	Temperature (°C)
Oct. 27, 1987	(a) 3,960 (b) 522	1.050 1.123	15.0 16.0
Nov. 23	(a) 4,380 (b) 362	1.050 1.123	7.5 9.5
Dec. 28	(a) 4,020 (b) 408	1.052 1.126	-2.0 -1.0
Jan. 27, 1988	(a) 3,040 (b) 922	1.052 1.125	-0.5 -1.0
Feb. 26	(a) 4,120 (b) 494	1.052 1.123	7.5 6.5
Mar. 29	(a) 4,810 (b) 181	1.055 1.122	5.5 6.0
Apr. 26	(a) 4,660 (b) 188	1.054 1.120	12.5 12.0
May 20	(a) 3,300 (b) 378	1.054 1.118	18.0 18.5
June 27	(a) 2,720 (b) 472	1.052 1.116	27.0 27.5
July 26	(a) 2,200 (b) 691	1.054 1.118	29.0 28.5
Aug. 29	(a) 2,980 (b) 187	1.060 1.125	25.5 26.0
Sep. 27	(a) 244 (b) 3,580	1.130 1.130	18.0 18.0

(a) indicates flow from south to north
(b) indicates flow from north to south

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements Date	Discharge (ft ³ /s)
WEBER RIVER BASIN						
10132500 Lost Creek	Weber River	Lat 41°10'35", long 111°24'20" Morgan County, 9.5 mi north- east of Croydon.	133 mi ²	1922* 1942-67*	10- 1-87 12- 1-87 3-14-88 6-30-88	19 11 11 42
JORDAN RIVER BASIN						
10168150 Big Cottonwood Cr at Silver Fork	Jordan River	Lat 40°37'46", long 111°36'19"	8.16 mi ²		6- 2-88 6-20-88 7-20-88 9-15-88	9.5 4.7 4.9 .71
10168250 Big Cottonwood Cr at Storm Mt.	Jordan River	Lat 40°37'33", long 111°44'02"	45.5 mi ²		6- 2-88 6-20-88 7-20-88 9-16-88	82 66 26 15

* Operated as a continuous gaging station.



MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)
COLORADO RIVER BASIN									
TRIBUTARIES BETWEEN DOLORES RIVER AND GREEN RIVER									
09183000 COURTHOUSE WASH NEAR MOAB, UT (Lat 38°36'46", Long 109°34'45")									
OCT , 1987					APR , 1988				
27... 1010	.13	10.0	810	28... 1430	.45	23.0	970		
DEC 16... 1340	.32	.0	1080	JUN 06... 1545	.00	--	--		
FEB , 1988				JUL 20... 0845	.04	17.0	870		
09... 1400	.20	.0	930	AUG 31... 0915	.08	19.0	840		
MAR 09... 1415	.96	16.0	900						
09183500 MILL CREEK ABOVE SHELEY TUNNEL, NEAR MOAB, UT (Lat 38°28'59", Long 109°24'12")									
NOV , 1987				MAY , 1988					
12... 1000	12	3.0	170	19... 1445	65	8.5	130		
DEC 16... 1035	9.5	.0	220	JUN 06... 0930	49	9.5	155		
FEB , 1988				JUL 20... 1400	13	17.0	200		
09... 0915	7.5	.5	215	AUG 31... 1325	12	16.5	180		
MAR 09... 0945	8.4	2.5	260						
APR 28... 1025	18	8.0	220						
09184000 MILL CREEK NEAR MOAB, UT (Lat 38°33'44", Long 109°30'48")									
OCT , 1987				APR , 1988					
27... 1130	7.6	11.0	250	28... 1245	11	24.5	340		
DEC 16... 0835	8.0	.0	290	JUN 06... 1330	23	20.5	175		
FEB , 1988				JUL 20... 1030	10	19.5	220		
09... 1200	9.3	.0	270	AUG 31... 1020	6.6	18.5	260		
MAR 09... 1200	6.7	6.5	300						
09186500 INDIAN CREEK ABOVE COTTONWOOD CREEK, NEAR MONTICELLO, UT (Lat 37°58'20", Long 109°31'07")									
APR , 1988				JUL , 1988					
06... 1545	8.3	13.0	150	22... 1010	1.6	14.5	360		
MAY 17... 1005	60	7.0	150	AUG 24... 1100	1.1	24.0	340		
JUN 29... 1515	6.4	20.0	170						
09187550 INDIAN CREEK BELOW BOGUS POCKET, NEAR MONTICELLO, UT (Lat 38°09'06", Long 109°37'30")									
OCT , 1987				FEB , 1988					
08... 1055	.96	18.0	810	17... 0950	2.1	.0	800		
NOV 24... 1100	6.1	2.0	740	MAR 02... 1235	14	10.0	760		
DEC 22... 1100	13	.0	800	APR 05... 1040	17	8.0	650		
JAN , 1988									
27... 1210	1.4	.0	820						
GREEN RIVER BASIN									
09235100 CROUSE CREEK NEAR VERNAL, UT (Lat 40°47'43", Long 109°05'26")									
NOV , 1987				MAY , 1988					
16... 1630	1.3	.0	310	26... 1830	1.2	18.0	300		
DEC 17... 1030	1.4	.0	--	JUN 30... 1015	2.4	13.0	300		
MAR , 1988				JUL 28... --	.83	19.0	290		
31... 1540	1.7	2.0	355	SEP 01... 1010	.85	13.0	305		
APR 27... 1000	1.7	4.5	425						

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)
GREEN RIVER BASIN--Continued 09235600 POT CREEK ABOVE DIVERSIONS, NEAR VERNAL, UT (Lat 40°46'05", Long 109°19'06")									
OCT , 1987					JUN , 1988				
05... 1700	.32	14.5	295		30... 1230	.31	18.0	210	
NOV					JUL				
18... 1630	.73	.0	--		28... --	.00	--	--	
APR , 1988					SEP				
27... 1110	12	7.5	180		01... --	.00	--	--	
MAY									
26... 1600	4.2	18.5	115						
09261700 BIG BRUSH CREEK ABOVE RED FLEET RESERVOIR, NEAR VERNAL, UT (Lat 40°35'20", Long 109°27'53")									
OCT , 1987					APR , 1988				
05... 1430	21	12.0	400		27... 1545	44	10.5	190	
NOV					MAY				
19... 0930	19	3.5	425		25... 1630	157	9.5	105	
DEC					JUN				
16... 0900	16	.5	440		29... 1500	47	16.5	205	
JAN , 1988					JUL				
26... 1500	18	1.0	--		27... 1430	34	18.0	225	
MAR					AUG				
09... 1815	15	3.0	--		31... 1415	20	15.0	300	
30... 1700	16	5.5	385						
09266500 ASHLEY CREEK NEAR VERNAL, UT (Lat 40°34'39", Long 109°37'17")									
OCT , 1987					MAY , 1988				
09... 0920	41	8.5	145		26... 0940	262	7.5	57	
NOV					JUN				
19... 1710	24	6.5	190		29... 1735	121	13.5	92	
DEC					JUL				
16... 1700	26	5.5	335		27... 1640	60	13.5	115	
MAR , 1988					AUG				
30... 1500	22	7.0	--		31... 1710	32	10.0	170	
APR									
28... 0925	49	6.5	140						
09267500 MOSBY CANAL NEAR LAPOINT, UT (Lat 40°36'30", Long 109°53'00")									
OCT , 1987					JUL , 1988				
09... 1405	3.3	8.0	<50		20... 1235	8.2	14.5	<50	
MAY , 1988					AUG				
02... 1715	1.3	.5	--		17... 0910	5.9	11.0	<50	
JUN									
01... 1730	26	7.5	<50						
09268500 NORTH FORK OF DRY FORK NEAR DRY FORK, UT (Lat 40°38'34", Long 109°48'37")									
OCT , 1987					JUN , 1988				
09... 1030	2.1	5.0	<50		02... 1155	9.1	6.5	<50	
NOV					JUL				
11... 1215	1.2	3.0	<50		21... 1245	3.0	10.5	<50	
DEC					AUG				
17... 0855	1.3	.0	<50		16... 1605	1.4	10.0	<50	
MAY , 1988									
04... 1035	3.8	2.0	<50						
09268900 BROWNIE CANYON ABOVE SINKS, NEAR DRY FORK, UT (Lat 40°39'34", Long 109°45'01")									
NOV , 1987					JUN , 1988				
11... 1100	2.2	.0	<50		02... 0815	24	3.0	<50	
DEC					JUL				
17... 1240	2.8	.0	--		21... 1545	5.5	11.0	<50	
MAR , 1988					AUG				
24... 1240	1.4	.0	305		16... 1055	4.8	7.5	<50	
MAY									
04... 1320	12	1.0	--						

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)
GREEN RIVER BASIN--Continued									
09270500 DRY FORK AT MOUTH, NEAR DRY FORK, UT (Lat 40°31'35", Long 109°36'18")									
OCT , 1987					MAY , 1988				
09...	0805	2.7	9.0	600	04...	1635	2.3	12.0	--
NOV					JUN				
11...	0735	3.3	4.0	680	02...	1455	32	16.5	250
DEC					JUL				
17...	1405	3.3	.0	800	21...	0830	.86	15.0	610
MAR , 1988									
25...	0945	2.1	2.0	910					
09275500 WEST FORK DUCHESNE RIVER NEAR HANNA, UT (Lat 40°27'01", Long 110°53'01")									
OCT , 1987					MAY , 1988				
06...	1605	14	13.5	475	19...	1440	52	9.5	305
NOV					25...	1330	42	10.5	320
05...	1540	17	8.0	460	JUN				
DEC					29...	1125	29	16.0	410
09...	1155	18	.0	500	AUG				
MAR , 1988					10...	1430	12	19.5	445
23...	1205	17	1.5	510	SEP				
APR					14...	1240	12	11.0	475
27...	1415	29	12.5	430					
09277500 DUCHESNE RIVER NEAR TABIONA, UT (Lat 40°08'01", Long 110°36'06")									
OCT , 1987					MAY , 1988				
06...	1830	75	14.0	580	25...	1740	153	14.5	320
NOV					JUN				
06...	1200	137	8.0	520	29...	1425	83	19.0	520
DEC					AUG				
09...	1025	113	3.0	520	10...	1020	54	12.0	630
MAR , 1988					SEP				
23...	1525	80	6.5	490	14...	1525	62	11.5	600
APR									
27...	0955	123	7.5	420					
09278000 SOUTH FORK ROCK CREEK NEAR HANNA, UT (Lat 40°32'54", Long 110°41'37")									
OCT , 1987					MAY , 1988				
05...	1245	8.4	5.0	--	24...	1845	35	6.0	110
NOV					JUN				
05...	1025	4.6	1.0	225	28...	0910	20	7.5	--
DEC					AUG				
14...	1440	2.9	.0	235	04...	1140	8.2	9.5	180
MAR , 1988					SEP				
22...	1820	2.5	.5	240	15...	1530	5.6	6.5	205
APR									
26...	1255	9.5	.0	190					
09278500 ROCK CREEK NEAR HANNA, UT (Lat 40°32'44", Long 110°39'20")									
OCT , 1987					MAY , 1988				
05...	1120	49	7.0	--	24...	1540	576	7.0	<50
NOV					JUN				
04...	1710	67	5.5	96	28...	1040	48	12.0	145
DEC					AUG				
14...	1650	27	.0	71	04...	1320	244	16.5	<50
MAR , 1988					SEP				
22...	1505	13	3.5	120	15...	1345	37	11.5	77
APR									
26...	1510	37	8.5	93					
09279000 ROCK CREEK NEAR MOUNTAIN HOME, UT (Lat 40°29'36", Long 110°34'39")									
OCT , 1987					APR , 1988				
05...	1000	75	7.0	--	26...	1725	44	7.5	180
NOV					MAY				
04...	1010	65	4.0	140	24...	0955	566	6.5	51
DEC					JUN				
15...	1020	33	.5	200	30...	1120	72	12.0	145
MAR , 1988					SEP				
22...	1055	31	3.0	235	15...	1100	44	7.0	155

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

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GREEN RIVER BASIN--Continued									
09279100 ROCK CREEK NEAR TALMAGE, UT (Lat 40°18'40", Long 110°29'36")									
OCT , 1987					MAY , 1988				
07... 1415	63	12.5	240	26... 1640	376	13.5	88		
NOV 06... 0950	54	7.0	330	JUN 30... 1645	61	23.5	245		
DEC 09... 1440	70	.0	295	AUG 09... 1250	189	16.5	105		
MAR , 1988				SEP 13... 1330	54	9.5	270		
24... 1435	36	7.0	410						
APR 28... 1450	43	11.5	330						
09279150 DUCHESNE RIVER ABOVE KNIGHT DIVERSION, NEAR DUCHESNE, UT (Lat 40°16'14", Long 110°26'31")									
OCT , 1987					MAY , 1988				
07... 1820	138	13.0	480	26... 1345	463	13.5	190		
NOV 03... 1630	229	10.5	430	JUN 29... 1610	123	22.0	485		
DEC 09... 1640	207	2.5	450	AUG 09... 1620	238	20.5	255		
MAR , 1988				SEP 13... 1615	121	12.5	530		
26... 1745	145	7.5	480						
APR 28... 1400	173	12.0	415						
09285000 STRAWBERRY RIVER NEAR SOLDIER SPRINGS, UT (Lat 40°08'00", Long 111°01'27")									
OCT , 1987					MAY , 1988				
05... 1330	16	7.0	350	23... 1205	27	6.5	330		
NOV 02... 1120	14	5.5	360	JUN 27... 1050	21	7.0	305		
DEC 08... 1240	13	5.0	345	SEP 03... 1155	24	7.5	330		
MAR , 1988				12... 1400	29	7.0	330		
25... 1245	29	4.0	350						
09286100 RED CREEK ABOVE RESERVOIR NEAR FRUITLAND, UT (Lat 40°19'48", Long 110°51'43")									
OCT , 1987					MAY , 1988				
08... 1255	1.6	9.0	560	19... 1110	11	8.5	425		
NOV 23... 1230	2.2	.0	640	25... 1040	7.9	11.0	440		
DEC 15... 1530	4.5	.0	690	JUL 01... 0900	2.3	12.0	475		
MAR , 1988				AUG 05... 1030	1.0	14.0	495		
25... 1335	2.9	6.5	550	SEP 14... 1745	1.2	12.0	580		
APR 27... 1710	6.5	14.0	510						
09286700 CURRANT CREEK BELOW CURRANT CREEK DAM NEAR FRUITLAND, UT (Lat 40°19'51", Long 111°02'56")									
OCT , 1987					MAY , 1988				
05... 1700	7.9	10.0	310	23... 1540	23	7.0	345		
NOV 02... 1420	8.4	9.5	325	JUN 27... 1600	26	10.0	285		
DEC 08... 1635	8.1	3.0	340	AUG 03... 1610	9.6	11.0	290		
MAR , 1988				SEP 12... 1620	7.6	8.5	295		
21... 1410	7.8	5.5	370						
APR 25... 1620	21	4.0	355						
09288000 CURRANT CREEK NEAR FRUITLAND, UT (Lat 40°12'01", Long 110°54'25")									
OCT , 1987					MAY , 1988				
05... 1840	26	12.0	470	23... 1750	44	17.5	405		
NOV 02... 1640	31	9.0	460	JUL 01... 1120	39	14.0	410		
DEC 10... 1335	31	3.5	460	AUG 08... 1250	27	16.0	450		
MAR , 1988				SEP 16... 1000	25	7.5	485		
21... 1650	38	9.5	470						
APR 25... 1900	47	8.0	440						

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

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GREEN RIVER BASIN--Continued									
09288180 STRAWBERRY RIVER NEAR DUCHESNE, UT (Lat 40°09'17", Long 110°33'15")									
OCT , 1987					MAY , 1988				
06...	1210	95	10.5	870	27...	1005	148	12.5	680
NOV					JUN				
03...	1340	105	10.5	830	29...	0825	117	17.0	710
DEC					AUG				
10...	1120	94	1.5	800	08...	1620	74	21.5	850
MAR , 1988					SEP				
23...	1845	101	6.0	850	14...	1005	89	8.5	820
APR									
29...	0915	137	8.0	690					
09289500 LAKE FORK RIVER ABOVE MOON LAKE, NEAR MOUNTAIN HOME, UT (Lat 40°36'24", Long 110°31'35")									
OCT , 1987					JUL , 1988				
08...	1130	42	5.5	--	18...	1520	52	--	<50
NOV					AUG				
10...	1105	47	2.0	--	19...	1050	42	10.0	<50
09291000 LAKE FORK RIVER BELOW MOON LAKE, NEAR MOUNTAIN HOME, UT (Lat 40°33'23", Long 110°29'02")									
MAY , 1988					AUG , 1988				
03...	1010	194	4.5	--	18...	1300	126	14.0	<50
31...	1740	374	7.5	<50					
JUL									
19...	1045	307	17.0	<50					
09292500 YELLOWSTONE RIVER NEAR ALTONAH, UT (Lat 40°30'43", Long 110°20'27")									
OCT , 1987					MAY , 1988				
08...	1510	92	8.5	82	03...	1925	61	5.5	--
NOV					JUN				
10...	1520	80	6.0	94	01...	0930	164	5.5	<50
DEC					JUL				
16...	1500	70	.0	220	19...	1610	141	18.5	55
MAR , 1988					AUG				
23...	1340	50	4.0	--	18...	1005	77	11.5	81
09295000 DUCHESNE RIVER AT MYTOM, UT (Lat 40°12'01", Long 110°03'47")									
OCT , 1987					MAY , 1988				
07...	0945	90	11.0	1150	26...	0940	260	14.0	620
NOV					JUN				
03...	0915	88	9.5	1530	30...	0840	83	18.0	1290
DEC					AUG				
10...	0840	320	.5	790	09...	0930	54	18.0	1170
MAR , 1988					SEP				
24...	1115	302	4.5	950	13...	0940	65	10.5	1260
APR									
28...	0940	117	12.0	1330					
09299500 WHITEROCKS RIVER NEAR WHITEROCKS, UT (Lat 40°35'13", Long 109°55'37")									
OCT , 1987					JUN , 1988				
28...	1325	44	7.0	--	03...	1020	136	8.0	<50
NOV					JUL				
27...	1015	26	.0	--	20...	1040	75	12.0	<50
DEC					AUG				
29...	1000	31	.5	60	17...	1315	52	16.0	<50
MAY , 1988									
05...	1015	66	3.5	--					
09306800 BITTER CREEK NEAR BONANZA, UT (Lat 39°45'12", Long 109°21'15")									
OCT , 1987					MAY , 1988				
06...	1700	12	15.0	1760	24...	1750	16	16.5	3040
NOV					JUN				
05...	1640	15	9.0	2820	28...	1720	11	18.5	3250
DEC					JUL				
15...	1130	3.4	.5	4200	26...	1625	5.0	23.0	3530
MAR , 1988									
29...	1740	20	10.0	3010					
APR									
26...	1735	19	13.5	--					

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)
GREEN RIVER BASIN--Continued									
09308500 MINNIE MAUD CREEK NEAR MYTON, UT (Lat 39°47'55", Long 110°33'55")									
OCT , 1987					MAY , 1988				
06... 1445	1.1	18.0	820		31... 1005	9.6	5.5	620	
NOV 16... 1200	2.1	.0	900		JUL 25... 1020	1.9	15.0	590	
FEB , 1988					AUG 29... 1200	12	21.0	780	
01... 1000	.28	.0	870						
MAY 02... 1200	28	5.0	520						
09309600 FAIRVIEW TUNNEL NEAR FAIRVIEW, UT (Lat 39°40'03", Long 111°18'41")									
OCT , 1987					JUL , 1988				
05... 1600	.00	--	--		26... 1345	16	21.0	190	
JUN , 1988					AUG 31... 0925	6.3	14.5	150	
02... 1215	5.7	11.0	380						
09310000 GOOSEBERRY CREEK NEAR SCOFIELD, UT (Lat 39°42'57", Long 111°17'58")									
OCT , 1987					JUN , 1988				
06... 1700	3.2	14.0	170		01... 1010	46	8.5	390	
NOV 18... 0930	3.4	.0	180		JUL 26... 1620	5.3	25.5	120	
MAR , 1988					AUG 31... 1130	3.2	17.5	130	
31... 1155	4.8	1.5	410						
09310500 FISH CREEK ABOVE RESERVOIR, NEAR SCOFIELD, UT (Lat 39°46'28", Long 111°11'25")									
OCT , 1987					MAY , 1988				
07... 1250	7.7	9.0	370		03... 0855	89	1.0	340	
NOV 18... 1255	8.1	.0	400		JUN 02... 1510	93	12.5	390	
FEB , 1988					JUL 26... 1150	13	18.0	240	
01... 1500	8.9	.0	400		AUG 30... 0915	8.6	13.0	180	
MAR 30... 1240	15.5	.0	285						
09312600 WHITE RIVER BELOW TABBYUNE CREEK, NEAR SOLDIER SUMMIT, UT (Lat 39°52'33", Long 111°02'12")									
OCT , 1987					MAR , 1988				
07... 1105	3.7	12.0	670		22... 1120	9.4	1.5	530	
NOV 18... 1510	3.4	.0	600		MAY 03... 1240	77	6.5	490	
DEC 29... 1205	4.3	.0	600		31... 1555	36	10.0	520	
FEB , 1988					JUL 26... 0940	5.3	18.0	470	
10... 1240	4.7	.0	600		AUG 30... 1315	2.4	17.5	490	
MAR 04... 1040	6.2	.0	630						
09312700 BEAVER CREEK NEAR SOLDIER SUMMIT, UT (Lat 39°49'50", Long 110°58'07")									
OCT , 1987					MAR , 1988				
08... 0900	.80	4.0	490		22... 1235	4.5	4.5	370	
NOV 19... 1120	1.1	.0	510		MAY 03... 1350	14	10.0	490	
DEC 29... 1315	1.3	.0	500		31... 1345	11	7.0	420	
FEB , 1988					JUL 26... 0830	.60	13.0	375	
10... 1400	.62	.0	500		AUG 30... 1430	1.0	21.0	360	
MAR 04... 1220	1.8	2.5	450						
09312800 WILLOW CREEK NEAR CASTLE GATE, UT (Lat 39°46'37", Long 110°47'30")									
OCT , 1987					MAR , 1988				
08... 1105	.88	5.0	460		22... 1515	100	1.5	630	
NOV 16... 1515	2.0	.0	1000		MAY 02... 1530	37	10.0	630	
DEC 29... 1420	.47	.0	1100		31... 1315	15	11.5	700	
FEB , 1988					JUL 25... 1310	1.9	22.0	800	
11... 1030	1.1	.0	1000		AUG 29... 1540	1.3	20.5	600	
MAR 08... 1245	13	.5	1000						

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)
DIRTY DEVIL RIVER BASIN									
09330500 MUDDY CREEK NEAR EMERY, UT (Lat 38°58'55", Long 111°14'55")									
OCT , 1987					APR , 1988				
09...	0905	11	4.0	395	01...	0900	7.2	.0	425
NOV					MAY				
19...	0925	3.6	.0	580	13...	0900	67	5.5	420
JAN , 1988					JUL				
27...	0910	4.4	.0	480	01...	0905	43	11.0	395
FEB					AUG				
19...	0910	3.1	.0	530	03...	0940	42	16.0	360
MAR					SEP				
04...	0915	13	.5	490	15...	0955	16	5.5	390
09333500 DIRTY DEVIL RIVER ABOVE POISON SPRING WASH, NEAR HANKSVILLE, UT (Lat 38°05'39", Long 110°24'24")									
OCT , 1987					MAY , 1988				
06...	1130	47	16.0	1490	03...	1140	85	14.0	1500
DEC					JUN				
03...	1120	140	1.5	1340	16...	1350	11	30.0	2570
JAN , 1988					JUL				
04...	1130	43	.0	1600	18...	1300	1.1	32.0	3070
FEB					SEP				
17...	1200	208	.5	1330	02...	1210	43	23.0	2940
MAR									
16...	1400	171	8.0	1380					
09337000 ESCALANTE RIVER BASIN									
09337000 PINE CREEK NEAR ESCALANTE, UT (Lat 37°51'45", Long 111°38'07")									
OCT , 1987					MAY , 1988				
08...	1135	2.7	8.5	390	05...	1205	12	--	335
DEC					JUN				
01...	1220	2.1	1.0	--	10...	1250	6.2	14.5	--
FEB , 1988					JUL				
10...	1255	2.4	1.0	425	13...	1205	9.1	17.0	--
APR					AUG				
06...	1210	5.1	6.0	--	26...	1340	7.4	17.0	260
09337500 ESCALANTE RIVER NEAR ESCALANTE, UT (Lat 37°46'41", Long 111°34'26")									
OCT , 1987					MAY , 1988				
08...	0945	1.9	7.0	2070	05...	0940	7.6	--	1060
DEC					AUG				
01...	1355	7.6	4.5	--	26...	1230	12	19.0	690
FEB , 1988									
10...	1115	5.5	4.0	1260					
APR									
06...	1020	6.4	6.0	--					
09378170 SAN JUAN RIVER BASIN									
09378170 SOUTH CREEK ABOVE RESERVOIR NEAR MONTICELLO, UT (Lat 37°50'48", Long 109°22'08")									
OCT , 1987					APR , 1988				
08...	0910	.29	6.0	350	12...	1115	7.0	5.0	280
NOV					MAY				
13...	1300	3.5	5.0	230	17...	1410	12	15.0	200
23...	1435	1.5	1.5	250	JUN				
DEC					29...	1210	2.1	12.0	290
21...	1600	.60	.0	300	JUL				
JAN , 1988					21...	1440	.42	19.0	300
26...	0910	.50	.5	--	AUG				
FEB					24...	0900	.28	13.0	360
19...	1005	1.3	.5	430					
09378200 MONTEZUMA CREEK AT GOLF COURSE, AT MONTICELLO, UT (Lat 37°51'38", Long 109°20'30")									
OCT , 1987					APR , 1988				
07...	1455	.22	14.5	1890	12...	0830	.02	5.5	1090
NOV					MAY				
23...	1310	.77	1.5	1170	17...	1310	3.2	8.5	580
DEC					JUN				
21...	1430	.72	.0	980	29...	1125	1.3	13.0	1480
JAN , 1988					JUL				
26...	1200	.98	.0	--	22...	0830	.67	10.0	1020
FEB					AUG				
19...	0845	.72	.0	1410	24...	0815	.83	12.0	2230
MAR									
02...	0835	2.2	2.0	800					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)
SAN JUAN RIVER BASIN--Continued									
09378630 RECAPTURE CREEK NEAR BLANDING, UT (Lat 37°45'20", Long 109°28'33")									
OCT , 1987					MAY , 1988				
05... 1210	.01	13.5	210	17... 1425	7.5	10.0	150		
NOV 23... 1010	.13	.0	185	JUN 29... 0830	.57	11.0	200		
MAR , 1988				JUL 21... 1220	.07	19.0	210		
25... 1000	2.2	3.0	160	AUG 11... 1250	.07	18.5	150		
APR 11... 1350	4.0	8.0	180						
09378650 RECAPTURE CREEK BELOW JOHNSON CREEK, NEAR BLANDING, UT (Lat 37°40'51", Long 109°27'43")									
OCT , 1987				APR , 1988					
05... 1325	.00	--	--	11... 1510	19	10.0	215		
NOV 23... 1145	.13	.0	200	MAY 18... 1310	27	15.0	200		
DEC 21... 1315	.00	--	--	JUN 29... 1035	5.3	19.5	200		
JAN , 1988				JUL 21... 1310	.02	22.0	205		
25... 1125	.00	--	--	AUG 11... 1400	.00	--	--		
FEB 18... 1530	.00	--	--						
MAR 25... 1130	18	6.0	200						
KANAB CREEK BASIN									
09403600 KANAB CREEK NEAR KANAB, UT (Lat 37°06'02", Long 112°32'50")									
OCT , 1987				APR , 1988					
05... 1405	8.6	--	500	27... 1230	15	14.0	--		
NOV 11... 1140	14	10.5	760	JUN 10... 0915	11	13.0	500		
DEC 17... 1320	9.7	.5	495	JUL 06... 1450	6.7	30.0	470		
FEB , 1988				AUG 09... 1715	6.2	23.0	510		
05... 1415	15	8.0	440	SEP 12... 1335	7.5	15.5	500		
MAR 21... 1535	14	17.5	730						
VIRGIN RIVER BASIN									
09404450 EAST FORK VIRGIN RIVER NEAR GLENDALE, UT (Lat 37°20'19", Long 112°36'13")									
OCT , 1987				APR , 1988					
05... 1310	5.5	7.0	510	13... 1505	16	12.0	540		
NOV 11... 1010	17	5.0	550	JUN 10... 1400	7.5	18.0	520		
DEC 17... 1145	13	7.0	560	JUL 06... 1350	7.7	19.0	490		
FEB , 1988				AUG 09... 1320	7.5	17.0	495		
05... 1225	14	2.0	445						
MAR 21... 1250	18	9.5	530						
09405200 DEEP CREEK NEAR CEDAR CITY, UT (Lat 37°31'18", Long 112°53'01")									
OCT , 1987				AUG , 1988					
05... 0910	.97	4.5	430	10... 1035	2.0	11.0	405		
MAY , 1988				SEP 16... 1130	.99	9.0	445		
23... 1045	5.5	8.0	430						
JUL 06... 1145	1.9	12.0	<50						
09405250 EAST FORK DEEP CREEK NEAR CEDAR CITY, UT (Lat 37°30'35", Long 112°52'58")									
MAY , 1988				AUG , 1988					
23... 1150	12	8.0	370	10... 1145	2.3	12.0	395		
JUL 06... 1105	3.0	10.0	--	SEP 16... 1230	2.5	9.5	425		

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)
VIRGIN RIVER BASIN--Continued									
09405900 NORTH CREEK NEAR VIRGIN, UT (Lat 37°14'14", Long 113°09'01")									
OCT , 1987					APR , 1988				
05... 1225	1.4	18.5	790	26... 1250	43	12.5	375		
NOV 16... 1235	6.2	7.5	740	MAY 16... 1115	3.7	19.0	850		
DEC 21... 1240	4.0	5.0	720	JUN 13... 1020	1.8	17.5	820		
FEB , 1988				AUG 15... 1045	.68	22.0	940		
17... 1220	3.8	6.5	670						
APR 01... 1100	5.0	10.0	--						
09406000 VIRGIN RIVER AT VIRGIN, UT (Lat 37°10'22", Long 113°10'48")									
OCT , 1987				MAY , 1988					
05... 1520	71	22.5	840	31... 1455	223	16.5	--		
NOV 16... 1535	127	9.5	860	JUN 27... 1335	116	24.0	720		
DEC 21... 1010	127	3.0	800	JUL 15... 1035	89	21.0	710		
FEB , 1988				AUG 15... 1220	89	22.0	770		
17... 1015	128	3.0	780	SEP 19... 1240	100	15.5	760		
APR 07... 1320	250	14.5	600						
MAY 03... 1515	379	15.5	580						
09406150 LAVERKIN CREEK NEAR LAVERKIN, UT (Lat 37°12'17", Long 113°17'03")									
OCT , 1987				MAY , 1988					
02... 1310	2.3	--	1470	02... 1515	31	14.0	840		
NOV 13... 1145	7.5	10.0	1240	JUN 09... 1430	9.1	25.0	960		
DEC 29... 1005	6.7	.5	1130	JUL 19... 1430	1.9	29.0	--		
FEB , 1988				AUG 09... 1115	6.8	22.0	1680		
08... 1125	7.8	4.5	1030						
MAR 17... 1320	10	11.0	970						
09407000 ASH CREEK ABOVE TOQUERVILLE, UT (Lat 37°16'00", Long 113°16'43")									
NOV , 1987				MAY , 1988					
11... 1500	6.8	9.0	195	31... 1025	6.4	9.5	--		
DEC 29... 1305	3.3	.5	285	JUN 27... 1145	2.5	24.0	210		
MAR , 1988				AUG 09... 0935	1.0	18.5	220		
17... 1100	.20	8.0	250						
APR 27... 1205	24	11.5	--						
09408000 LEEDS CREEK NEAR LEEDS, UT (Lat 37°16'03", Long 113°22'12")									
OCT , 1987				JUN , 1988					
02... 1105	3.8	12.0	275	09... 1105	21	13.0	185		
NOV 11... 1405	9.2	9.0	245	JUL 11... 1030	11	14.5	205		
DEC 29... 1205	4.7	1.0	280	SEP 13... 1115	5.5	10.0	--		
MAY , 1988									
02... 1035	14	6.0	255						
09408150 VIRGIN RIVER NEAR HURRICANE, UT (Lat 37°09'45", Long 113°23'42")									
OCT , 1987				MAY , 1988					
02... 1205	59	20.0	2980	02... 1420	430	12.0	--		
NOV 16... 1130	72	9.0	2600	31... 1455	277	18.0	1370		
DEC 29... 1120	132	4.0	2050	JUN 24... 1625	165	26.0	--		
FEB , 1988				JUL 18... 1405	82	28.0	2790		
08... 1240	207	7.0	1580	AUG 12... 1025	146	18.0	2000		
MAR 25... 1505	161	17.0	--						

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)
VIRGIN RIVER BASIN--Continued									
09408175 ST. GEORGE-WASHINGTON CANAL NEAR WASHINGTON, UT (Lat 37°06'54", Long 113°26'18")									
OCT , 1987					MAY , 1988				
16... 1400	48	16.0	--		11... 1200	87	17.0	--	
JAN , 1988					JUN				
07... 1305	46	8.0	1550		23... 0930	56	22.0	1790	
27... 1140	21	7.0	2370		JUL				
MAR					19... 1150	73	28.0	--	
28... 1125	85	10.0	1690		AUG				
MAY					12... 0750	85	16.5	--	
02... 1320	43	11.0	--						
09408195 FORT PIERCE WASH NEAR ST. GEORGE, UT (Lat 37°00'03", Long 113°28'05")									
OCT , 1987					MAY , 1988				
01... 1045	1.9	--	110		10... 1240	21	--	90	
NOV					16... 1345	62	7.0	45	
09... 1200	24	3.0	81		JUN				
DEC					13... 1320	25	10.0	76	
16... 1310	4.6	.0	110		JUL				
FEB , 1988					13... 1405	13	15.0	98	
04... 1250	4.6	.0	96		AUG				
MAR					05... 1225	9.4	15.0	105	
23... 1145	8.0	--	91						
APR									
12... 1520	14	7.5	84						
09408400 SANTA CLARA RIVER NEAR PINE VALLEY, UT (Lat 37°23'00", Long 113°28'57")									
OCT , 1987					MAY , 1988				
01... 1045	1.9	--	110		10... 1240	21	--	90	
NOV					16... 1345	62	7.0	45	
09... 1200	24	3.0	81		JUN				
DEC					13... 1320	25	10.0	76	
16... 1310	4.6	.0	110		JUL				
FEB , 1988					13... 1405	13	15.0	98	
04... 1250	4.6	.0	96		AUG				
MAR					05... 1225	9.4	15.0	105	
23... 1145	8.0	--	91						
APR									
12... 1520	14	7.5	84						
09408500 SANTA CLARA-PINTO DIVERSION NEAR PINTO, UT (Lat 37°28'04", Long 113°28'21")									
NOV , 1987					APR , 1988				
09... 1020	15	3.0	130		25... 1355	35	7.0	125	
MAR , 1988					JUN				
07... 1625	7.3	1.0	145		13... 1200	6.9	9.0	--	
APR									
12... 1300	15	6.5	110						
09409880 SANTA CLARA RIVER AT GUNLOCK, UT (Lat 37°16'55", Long 113°46'00")									
OCT , 1987					APR , 1988				
01... 1235	3.5	20.0	450		25... 1705	122	15.0	290	
NOV					JUN				
09... 1405	32	8.0	410		08... 1550	35	20.0	325	
DEC					JUL				
16... 1450	23	3.0	395		11... 1355	11	27.0	345	
FEB , 1988					SEP				
04... 1435	22	5.0	--		10... 1840	10	23.0	385	
MAR									
23... 1335	14	17.0	355						
09410100 SANTA CLARA RIVER BELOW WINDSOR DAM, NEAR SANTA CLARA, UT (Lat 37°11'22", Long 113°46'02")									
OCT , 1987					MAY , 1988				
01... 1320	.10	24.5	820		20... 1440	86	17.0	--	
NOV					JUN				
09... 1610	5.5	9.0	500		14... 1230	13	17.0	420	
FEB , 1988					JUL				
25... 1725	3.4	12.0	520		18... 1100	18	17.0	385	
MAY					SEP				
02... 1335	58	13.0	440		16... 1125	5.5	--	375	

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)
VIRGIN RIVER BASIN--Continued									
09413000 SANTA CLARA RIVER AT ST. GEORGE, UT (Lat 37°04'26", Long 113°34'56")									
OCT , 1987					APR , 1988				
01...	1050	1.6	15.0	2400	14...	1110	8.4	15.0	1580
NOV					MAY				
11...	1125	8.6	12.0	1430	03...	1430	34	16.0	810
DEC					20...	1250	72	18.0	--
21...	1115	2.6	5.0	2200	31...	1120	27	16.0	--
FEB , 1988					JUN				
04...	1025	3.2	4.5	--	24...	1425	4.5	27.0	--
MAR					AUG				
14...	1345	5.3	15.5	1850	10...	1350	8.4	23.0	1780
09413200 VIRGIN RIVER NEAR BLOOMINGTON, UT (Lat 37°04'14", Long 113°34'55")									
OCT , 1987					MAY , 1988				
01...	1110	47	19.0	3410	19...	1350	548	19.0	--
NOV					JUN				
11...	1215	140	13.5	2520	01...	1335	214	19.0	1640
DEC					24...	1230	143	28.0	--
21...	1155	106	6.5	3010	AUG				
FEB , 1988					10...	1230	116	21.0	2520
04...	1135	220	5.0	--					
MAR									
18...	1205	157	11.0	2160					
BEAR RIVER BASIN									
10011500 BEAR RIVER NEAR UTAH-WYOMING STATE LINE (Lat 40°57'55", Long 110°51'10")									
OCT , 1987					JUN , 1988				
07...	1350	53	9.0	210	30...	1235	160	14.5	120
NOV					AUG				
17...	1205	47	.0	220	01...	1535	64	20.0	165
APR , 1988					SEP				
27...	1120	106	4.0	210	14...	1345	60	9.5	215
MAY									
25...	1205	807	7.5	215					
10015700 SULPHUR CREEK ABOVE RESERVOIR, NEAR EVANSTON, WY (Lat 41°07'45", Long 110°48'21")									
OCT , 1987					JUN , 1988				
07...	1545	1.3	14.0	570	29...	0920	2.0	15.0	590
NOV					AUG				
17...	1350	3.7	.0	260	01...	--	7.1	23.5	510
DEC					SEP				
15...	1345	1.2	.0	820	14...	1450	.00	15.0	660
MAY , 1988									
23...	1205	36	12.0	345					
10015900 SULPHUR CREEK BELOW RESERVOIR, NEAR EVANSTON, WY (Lat 41°09'17", Long 110°50'22")									
NOV , 1987					JUN , 1988				
16...	1430	4.3	3.0	430	30...	1330	63	--	500
APR , 1988					AUG				
26...	1130	1.1	3.5	820	01...	1250	.92	22.0	500
MAY									
23...	1455	30	16.0	345					
10020100 BEAR RIVER ABOVE RESERVOIR, NEAR WOODRUFF, UT (Lat 41°26'04" Long 111°01'01")									
NOV , 1987					MAY , 1988				
17...	1550	49	.0	275	24...	1600	700	13.5	200
DEC					JUN				
16...	1620	33	.0	--	30...	1730	15	24.0	520
APR , 1988					AUG				
27...	1455	338	7.5	550	05...	1010	4.7	17.5	600

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BEAR RIVER BASIN--Continued									
10020300 BEAR RIVER BELOW RESERVOIR, NEAR WOODRUFF, UT (Lat 41°30'20", Long 111°00'50")									
APR . 1988					JUL . 1988				
27... 1650	23	9.0	495		06... 1515	164	21.0	375	
MAY 24... 1310	859	15.0	385		SEP 13... 1530	23	13.0	475	
10023000 BIG CREEK NEAR RANDOLPH, UT (Lat 41°36'36", Long 111°15'12")									
NOV . 1987					JUL . 1988				
18... 1350	6.8	.0	160		01... 1150	7.9	17.0	405	
DEC 16... 1055	8.2	.0	365		AUG 03... 1130	6.2	17.5	360	
MAR . 1988					SEP 15... 1150	6.4	10.0	360	
02... 1740	9.5	1.5	370						
MAY 25... 1450	11	18.0	400						
10026500 BEAR RIVER NEAR RANDOLPH, UT (Lat 41°48'02", Long 111°04'20")									
NOV . 1987					MAY . 1988				
18... 1625	78	.0	340		27... 1320	175	16.0	--	
DEC 18... 1510	529	.0	740		JUL 07... 1150	187	23.0	820	
APR . 1988					AUG 03... 1450	32	21.0	700	
28... 1410	68	9.0	560						
10028500 BEAR RIVER BELOW PIXLEY DAM, NEAR COKEVILLE, WY (Lat 41°56'20", Long 110°59'05")									
APR . 1988					AUG . 1988				
28... 1600	46	9.5	650		04... 1630	41	21.5	810	
MAY 27... 1130	52	16.0	280		SEP 15... 1600	24	14.0	500	
JUL 07... 1410	330	23.5	750						
10032000 SMITHS FORK NEAR BORDER, WY (Lat 42°17'36", Long 110°52'18")									
NOV . 1987					JUL . 1988				
19... 1650	202	.0	355		08... 1300	173	14.5	315	
19... 1800	77	.0	280		AUG 04... 1330	114	15.5	340	
DEC 17... 1320	51	.0	380		SEP 15... 1750	84	12.0	335	
MAY 20... 1025	559	9.0	200						
10038000 BEAR RIVER BELOW SMITHS FORK, NEAR COKEVILLE, WY (Lat 42°07'36", Long 110°58'21")									
DEC . 1987					AUG . 1988				
18... 1220	195	.0	250		04... 1140	120	17.0	620	
APR . 1988					SEP 16... 1405	119	10.0	590	
29... 1620	361	8.5	360						
MAY 26... 1540	610	14.0	455						
10041000 THOMAS FORK NEAR WYOMING-IDAHO STATE LINE (Lat 42°24'10", Long 111°01'30")									
NOV . 1987					JUL . 1988				
19... 1230	11	.0	1490		07... 1630	20	21.5	840	
DEC 17... 1640	11	.0	1530		AUG 03... 1600	13	17.5	1000	
APR . 1988					SEP 16... 1150	11	13.0	1120	
29... 1340	89	7.0	1330						
MAY 26... 1850	63	19.0	690						

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)
BEAR RIVER BASIN--Continued									
10068500 BEAR RIVER AT PESCADERO, ID (Lat 42°24'06", Long 111°21'22")									
NOV , 1987					AUG , 1988				
19...	1100	101	.0	375	04...	0910	1250	19.5	720
DEC					SEP				
18...	1030	780	.0	295	16...	0955	476	13.0	540
JUL , 1988									
08...	0950	1650	20.5	680					
10092700 BEAR RIVER AT IDAHO-UTAH STATE LINE (Lat 42°00'47", Long 111°55'14")									
OCT , 1987					JUN , 1988				
07...	1545	151	15.0	990	20...	1400	395	22.0	850
NOV					JUL				
09...	--	194	8.5	990	22...	1415	262	23.0	900
MAR , 1988					AUG				
02...	1650	233	8.5	1150	18...	1530	135	23.0	890
APR					SEP				
18...	1530	132	11.5	1210	13...	1530	446	15.0	870
10099000 HIGH CREEK NEAR RICHMOND, UT (Lat 41°58'40", Long 111°44'40")									
OCT , 1987					JUN , 1988				
07...	1215	6.6	8.0	260	21...	1145	22	10.0	285
NOV					JUL				
10...	1130	6.0	6.5	295	19...	1200	13	10.5	315
DEC					AUG				
29...	1410	6.7	1.0	--	19...	--	8.5	11.5	305
MAR , 1988					SEP				
01...	1230	10	5.5	--	14...	1445	8.1	9.0	300
APR									
18...	1115	44	6.0	265					
10103000 LOGAN, HYDE PARK & SMITHFIELD CANAL NEAR SMITHFIELD, UT (Lat 41°50'36", Long 111°48'47")									
JUL , 1988					SEP , 1988				
07...	--	2.6	24.0	275	14...	--	7.2	16.5	330
10104700 LITTLE BEAR RIVER BELOW DAVENPORT CREEK, NEAR AVON, UT (Lat 41°30'45", Long 111°48'40")									
OCT , 1987					JUN , 1988				
06...	--	24	11.0	375	21...	0910	25	15.0	370
NOV					JUL				
11...	--	24	9.0	270	20...	1130	20	16.0	390
DEC					AUG				
28...	1425	22	3.0	--	19...	1100	18	13.0	410
FEB , 1988					SEP				
29...	--	29	7.0	--	15...	1030	18	10.0	415
APR									
19...	0955	56	6.5	270					
10108400 LOGAN, HYDE PARK & SMITHFIELD CANAL AT HEAD, NEAR LOGAN, UT (Lat 41°44'35", Long 111°45'40")									
NOV , 1987					MAY , 1988				
10...	0805	8.5	4.0	270	26...	1305	62	9.0	280
DEC					JUN				
29...	0850	4.2	5.0	--	29...	1530	55	14.5	335
MAR , 1988					JUL				
01...	0910	2.5	7.5	400	27...	1500	33	13.0	340
31...	--	.00	--	--	AUG				
APR					30...	--	27	12.5	350
20...	1215	13	9.0	360					
10109000 LOGAN RIVER ABOVE STATE DAM, NEAR LOGAN, UT (Lat 41°44'36", Long 111°46'55")									
NOV , 1987					JUN , 1988				
10...	0930	109	4.0	290	30...	1115	146	11.0	370
DEC					JUL				
29...	1110	103	5.0	--	28...	1130	109	13.5	360
MAR , 1988					AUG				
01...	0935	95	8.5	405	30...	1500	92	13.5	390
31...	1520	89	9.0	410					
APR									
28...	1315	195	8.5	360					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)
BEAR RIVER BASIN--Continued									
10111700 BLACKSMITHS FORK BELOW MILL CREEK NEAR HYRUM, UT (Lat 41°35'41", Long 111°34'00")									
OCT , 1987					MAY , 1988				
06...	1515	51	11.0	465	26...	1000	50	9.0	385
DEC					JUL				
28...	1130	49	4.0	--	20...	1430	46	15.0	395
FEB , 1988					AUG				
29...	1320	46	9.5	395	31...	1015	45	8.0	405
APR									
19...	0735	53	7.0	400					
10113500 BLACKSMITH FORK ABOVE UTAH POWER & LIGHT CO.'S DAM, NEAR HYRUM, UT (Lat 41°37'25", Long 111°44'17")									
OCT , 1987					APR , 1988				
06...	1720	88	11.0	390	28...	--	103	9.0	360
NOV					MAY				
11...	1030	81	7.0	400	26...	1130	93	12.0	380
DEC					JUN				
28...	1400	71	1.0	--	29...	1200	75	15.5	385
FEB , 1988					JUL				
29...	1635	76	7.0	390	27...	1130	67	15.0	375
MAR					AUG				
31...	1115	72	6.0	390	30...	1100	59	13.0	385
WEBER RIVER BASIN									
10128500 WEBER RIVER NEAR OAKLEY, UT (Lat 40°44'22", Long 111°14'25")									
OCT , 1987					MAY , 1988				
29...	0740	51	6.0	--	16...	1030	636	6.5	--
NOV					27...	1000	819	6.0	--
27...	1445	46	.5	--	JUN				
DEC					30...	1410	155	17.0	215
29...	1500	54	.5	325	JUL				
JAN , 1988					28...	1330	95	15.5	250
28...	1005	51	.0	--	AUG				
FEB					30...	1350	140	15.0	180
25...	1415	52	--	345					
APR									
27...	1045	127	4.5	260					
10130500 WEBER RIVER NEAR COALVILLE, UT (Lat 40°53'43", Long 111°24'04")									
OCT , 1987					MAY , 1988				
01...	1720	215	17.5	370	04...	1050	39	8.0	500
NOV					JUN				
10...	1045	160	7.5	430	23...	1045	177	12.0	410
DEC					AUG				
16...	1415	149	1.0	420	10...	1300	191	14.5	375
MAR , 1988					SEP				
15...	0950	37	2.5	560	20...	0900	193	12.0	385
10131000 CHALK CREEK AT COALVILLE, UT (Lat 40°55'14", Long 111°24'03")									
OCT , 1987					MAY , 1988				
01...	1520	16	13.5	780	04...	1245	109	8.0	610
NOV					JUN				
10...	1315	22	7.5	710	23...	1315	33	18.0	600
DEC					AUG				
16...	1240	14	2.0	860	10...	1100	12	13.0	--
MAR , 1988					SEP				
15...	1210	24	2.0	730	20...	1100	9.7	10.5	860
10134500 EAST CANYON CREEK NEAR MORGAN, UT (Lat 40°55'21", Long 111°36'23")									
OCT , 1987					APR , 1988				
01...	1350	38	7.5	580	28...	1120	6.0	13.5	530
NOV					JUN				
10...	1450	3.8	8.5	570	30...	1220	134	12.5	590
DEC					AUG				
16...	0955	4.2	5.5	590	18...	1400	51	9.0	580
MAR , 1988					SEP				
11...	1130	5.0	7.0	--	20...	1330	41	8.0	600

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)
WEBER RIVER BASIN--Continued									
10136500 WEBER RIVER AT GATEWAY, UT (Lat 41°08'13", Long 111°49'54")									
OCT , 1987					MAR , 1988				
02... 1515	270	13.5	500		31... 0935	141	4.5	610	
NOV 13... 1450	80	8.5	610		APR 28... 1525	239	12.0	340	
DEC 18... 1400	90	2.0	650		AUG 08... 1145	410	17.0	--	
MAR , 1988									
02... 1610	196	7.0	590						
10137500 SOUTH FORK OGDEN RIVER NEAR HUNTSVILLE, UT (Lat 41°16'07", Long 111°40'24")									
OCT , 1987					MAY , 1988				
02... 1000	44	8.5	375		05... 1305	152	11.0	275	
NOV 09... 1305	17	5.5	385		JUN 24... 0945	77	9.0	215	
DEC 18... 1145	35	.5	390		AUG 08... 1250	64	10.0	365	
MAR , 1988					SEP 15... 0930	38	9.0	335	
02... 1055	42	5.0	370						
10139300 WHEELER CREEK NEAR HUNTSVILLE, UT (Lat 41°15'14", Long 111°50'32")									
OCT , 1987					JUN , 1988				
02... 1200	.90	11.0	420		24... 1245	1.0	17.0	305	
NOV 09... 1125	12	10.5	325		AUG 08... 1350	.67	26.0	--	
MAR , 1988					SEP 15... 1145	.66	11.0	355	
02... 1155	.65	8.0	475						
MAY 05... 1105	3.7	8.5	315						
JORDAN RIVER BASIN									
10146400 CURRANT CREEK NEAR MONA, UT (Lat 39°48'09", Long 111°51'44")									
OCT , 1987					JUN , 1988				
08... 1745	13	14.0	1280		02... 0915	17	13.5	1620	
MAR , 1988					JUL 20... 1150	9.7	20.0	--	
03... 1045	128	2.0	2890		AUG 30... 0900	9.3	18.0	960	
APR 28... 0915	23	12.0	2160						
10148200 TIE FORK NEAR SOLDIER SUMMIT, UT (Lat 39°57'00", Long 111°12'58")									
OCT , 1987					MAR , 1988				
07... 0915	2.8	5.0	690		22... 1055	3.0	5.5	600	
NOV 19... 1035	1.2	.0	720		MAY 03... 1125	5.2	5.5	600	
DEC 29... 1105	2.5	.0	650		31... 1455	5.8	10.0	700	
FEB , 1988					JUL 12... 1235	2.8	16.5	580	
10... 1115	2.6	1.5	620		AUG 30... 1120	2.3	17.0	560	
MAR 08... 1440	2.1	1.0	660						
10148510 SPANISH FORK BELOW HALLS FALLS NEAR SPANISH FORK, UT (Lat 40°00'34", Long 111°29'34")									
OCT , 1987					MAY , 1988				
06... 1020	36	7.0	760		23... 1535	150	17.5	600	
NOV 10... 1515	59	9.0	--		JUN 01... 1540	103	15.5	630	
DEC 14... 1525	56	.5	--		JUL 20... 1500	37	24.0	73	
MAR , 1988					AUG 30... 1240	34	19.5	73	
02... 1440	78	8.5	850						
APR 26... 1415	98	12.0	--						

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)
JORDAN RIVER BASIN--Continued									
10150500 SPANISH FORK AT CASTILLA, UT (Lat 40°02'59", Long 111°32'50")									
OCT , 1987					APR , 1988				
06...	1230	71	11.5	--	26...	1700	137	13.5	800
NOV					JUN				
10...	1320	89	10.0	820	01...	1650	330	15.5	580
DEC					JUL				
15...	1500	58	3.0	940	21...	1430	500	22.0	500
MAR					AUG				
02...	1725	106	9.0	950	31...	1020	351	15.0	430
10152000 SPANISH FORK NEAR LAKESHORE, UT (Lat 40°09'02", Long 111°43'34")									
OCT , 1987					JAN , 1988				
05...	1820	65	14.5	880	14...	1400	161	1.0	--
NOV					MAR				
11...	1545	93	--	900	01...	1550	133	8.0	880
DEC					APR				
15...	1600	67	.5	980	26...	1045	110	7.5	820
10153800 NORTH FORK PROVO RIVER NEAR KAMAS, UT (Lat 40°35'48", Long 111°05'48")									
OCT , 1987					APR , 1988				
07...	1425	3.4	9.0	--	27...	1425	33	7.0	--
NOV					MAY				
09...	1440	4.3	8.0	<50	19...	1630	140	6.5	--
DEC					JUL				
15...	1020	7.9	.0	50	29...	1455	5.6	17.5	<50
MAR , 1988					AUG				
22...	1250	7.8	.0	51	31...	1045	3.7	11.5	<50
22...	1410	6.7	.0	--					
10154200 PROVO RIVER NEAR WOODLAND, UT (Lat 40°33'28", Long 111°10'05")									
OCT , 1987					MAY , 1988				
07...	1645	54	11.0	--	16...	1345	1080	8.5	66
NOV					19...	1415	916	7.0	--
12...	0810	57	2.5	240	27...	1235	785	7.5	59
DEC					JUL				
15...	1350	53	2.0	245	29...	1150	76	14.5	190
JAN , 1988					AUG				
28...	0805	60	2.0	--	31...	1250	50	15.0	250
APR									
27...	1650	223	10.0	100					
10155000 PROVO RIVER NEAR HAILSTONE, UT (Lat 40°36'03", Long 111°21'35")									
OCT , 1987					MAY , 1988				
08...	1030	57	8.5	250	27...	1510	1030	11.5	--
NOV					JUL				
12...	0955	69	3.0	240	29...	1025	43	18.0	195
MAR , 1988					AUG				
27...	1100	112	6.0	225	31...	1730	38	21.5	325
MAY									
02...	1200	339	6.0	--					
10159500 PROVO RIVER BELOW DEER CREEK DAM, UT (Lat 40°24'12", Long 111°31'44")									
NOV , 1987					MAY , 1988				
09...	1340	101	12.0	480	23...	1315	1020	15.0	425
DEC					JUL				
17...	1645	122	5.5	475	19...	1425	369	17.0	--
MAR , 1988					AUG				
02...	1130	95	5.0	580	31...	1415	383	15.5	400
APR									
25...	1150	187	6.0	485					

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)
JORDAN RIVER BASIN--Continued									
10163000 PROVO RIVER AT PROVO, UT (Lat 40°14'16", Long 111°41'55")									
OCT , 1987					APR , 1988				
05... 1440	30	16.0	450	25... 1640	94	9.0	580		
NOV 11... 1315	106	9.5	420	JUN 01... 1245	392	12.0	520		
DEC 14... 1210	105	1.5	435	JUL 19... 1750	9.8	24.5	580		
MAR , 1988				AUG 29... 1250	1.8	22.0	510		
01... 1350	78	7.0	570						
10164500 AMERICAN FORK ABOVE UPPER POWERPLANT, NEAR AMERICAN FORK, UT (Lat 40°26'52", Long 111°40'53")									
OCT , 1987				MAY , 1988					
06... 1605	19	12.0	520	27... 1030	136	10.0	--		
NOV 09... 0940	19	5.5	500	JUN 02... 1625	60	11.0	420		
DEC 16... 1650	15	3.5	530	JUL 13... 0905	35	13.0	--		
MAR , 1988				21... 1010	30	12.5	420		
03... 1735	16	7.0	600	AUG 17... 1040	21	13.0	--		
10... 1000	16	2.0	--	SEP 07... 1040	16	11.0	--		
APR 22... 1030	35	7.0	--						
28... 1315	33	9.5	510						
10166430 WEST CANYON NEAR CEDAR FORT, UT (Lat 40°24'24", Long 112°06'03")									
OCT , 1987				APR , 1988					
09... 1415	1.1	13.0	720	27... 1045	1.4	10.5	780		
NOV 12... 1130	.97	9.0	680	JUN 01... 1050	5.7	12.0	470		
DEC 10... 1200	.66	3.5	740	JUL 18... 1055	1.4	17.0	540		
MAR , 1988				SEP 02... 1020	.61	14.0	420		
01... 1020	.34	6.0	700						
10167000 JORDAN RIVER AT NARROWS, NEAR LEHI, UT (Lat 40°26'38", Long 111°55'17")									
OCT , 1987				APR , 1988					
14... 1230	74	15.0	1360	28... 1650	82	15.0	1490		
NOV 13... 1545	22	2.5	2060	JUN 02... 1410	99	18.5	1480		
DEC 17... 1320	25	1.5	1820	JUL 22... 0755	129	24.5	1530		
MAR , 1988				AUG 01... 1215	106	22.0	1610		
03... 1400	27	9.5	1990						
10170500 SURPLUS CANAL AT SALT LAKE CITY, UT (Lat 40°43'37", Long 111°55'33")									
OCT , 1987				MAR , 1988					
09... 1245	280	15.5	1590	03... 1440	198	12.0	1690		
NOV 12... 1125	230	11.5	1670	JUN 27... 1235	240	23.5	--		
DEC 14... 1605	225	6.5	1750	AUG 19... 1300	224	20.0	1150		
FEB , 1988									
09... 1410	180	6.0	1840						
RUSH VALLEY									
10172700 VERNON CREEK NEAR VERNON, UT (Lat 39°58'46", Long 112°22'46")									
OCT , 1987				APR , 1988					
08... 1500	4.2	13.0	510	27... 1320	4.1	15.5	500		
NOV 12... 1400	4.5	9.0	420	JUN 01... 1440	4.2	14.0	330		
DEC 10... 1510	4.1	8.0	465	JUL 18... 1340	2.9	19.0	390		
MAR , 1988				AUG 31... 1450	2.9	19.0	400		
04... 1025	4.1	6.0	540						

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)
TOOELE VALLEY									
10172765 CLOVER CREEK ABOVE BIG HOLLOW NEAR CLOVER, UT (Lat 40°19'58", Long 112°31'24")									
OCT , 1987					APR , 1988				
12... 1555	1.9	11.0	360	27... 1530	2.7	15.5	315		
NOV 13... 1015	1.8	6.5	310	JUN 02... 1050	3.0	11.5	280		
DEC 16... 1110	1.6	2.0	340	JUL 15... 1210	2.0	15.0	295		
MAR , 1988				AUG 31... 1145	2.0	13.5	305		
04... 1630	1.9	7.0	310						
10172795 BOX ELDER WASH NEAR GRANTSVILLE, UT (Lat 40°29'42", Long 112°31'52")									
OCT , 1987				JUN , 1988					
12... 1330	.68	12.0	560	02... 1305	.54	17.0	455		
DEC 09... 1440	.62	4.0	520	AUG 31... 1000	.56	13.0	480		
APR , 1988									
14... 1400	.42	11.0	480						
10172800 SOUTH WILLOW CREEK NEAR GRANTSVILLE, UT (Lat 40°29'47", Long 112°34'25")									
OCT , 1987				JUN , 1988					
12... 1205	2.8	8.0	350	03... 1300	9.1	--	160		
DEC 09... 1300	2.9	4.0	310	JUL 14... 1340	3.3	13.5	260		
APR , 1988				SEP 01... 1315	2.4	11.0	280		
14... 1145	5.0	6.5	260						
10172805 NORTH WILLOW CREEK NEAR GRANTSVILLE, UT (Lat 40°31'58", Long 112°34'19")									
OCT , 1987				JUN , 1988					
12... 1005	2.0	9.0	--	03... 1025	4.8	11.5	185		
DEC 09... 1040	2.2	4.0	275	JUL 14... 1220	1.7	15.5	270		
APR , 1988									
14... 0945	4.8	7.0	210						
GREAT SALT LAKE DESERT									
10172870 TROUT CREEK NEAR CALLAO, UT (Lat 39°44'39", Long 113°53'21")									
NOV , 1987				JUL , 1988					
25... 1045	2.1	.0	82	20... 1440	2.7	16.0	60		
MAY , 1988				SEP 15... 1325	1.7	--	66		
11... 1055	6.1	--	69						
JUN 16... 1355	11.0	14.0	<50						
TRIBUTARIES BETWEEN GREAT SALT LAKE DESERT AND BEAR RIVER									
10172952 DUNN CREEK NEAR PARK VALLEY, UT (Lat 41°51'31", Long 113°19'35")									
OCT , 1987				MAY , 1988					
07... 1705	1.4	14.0	220	10... 1615	5.4	15.0	140		
NOV 24... 1650	1.8	1.0	170	JUN 15... 1010	7.3	11.5	--		
JAN , 1988				AUG 09... 1530	3.0	20.5	195		
05... 1705	1.4	1.5	155						
MAR 01... 1300	2.8	--	175						
SEVIER LAKE BASIN									
10173450 MAMMOTH CREEK ABOVE WEST HATCH DITCH, NEAR HATCH, UT (Lat 37°37'19", Long 112°31'07")									
OCT , 1987				MAY , 1988					
02... 1455	17	13.0	215	04... 1155	70	--	215		
NOV 09... 1035	26	3.0	205	JUN 08... 1120	200	6.0	175		
DEC 09... 1115	12	--	225	JUL 12... 1015	49	9.5	205		
APR , 1988				AUG 25... 1515	30	14.0	205		
04... 1115	12	3.0	--						

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)
SEVIER LAKE BASIN--Continued									
10180000 SEVIER RIVER NEAR CIRCLEVILLE, UT (Lat 38°06'15", Long 112°20'08")									
OCT , 1987					MAY , 1988				
05...	1040	62	7.0	510	11...	1350	154	--	420
NOV					JUN				
09...	1045	177	5.0	450	08...	1440	257	6.0	365
FEB , 1988					JUL				
03...	1300	124	1.0	420	18...	1950	70	23.0	--
MAR , 1988					AUG				
21...	1200	153	6.0	420	17...	1525	85	21.0	465
APR					18...	1215	81	18.0	460
11...	1550	127	--	415	19...	1145	81	15.5	475
10183500 SEVIER RIVER NEAR KINGSTON, UT (Lat 38°12'22", Long 112°12'25")									
OCT , 1987					MAY , 1988				
05...	1130	45	11.0	550	18...	1120	384	11.0	--
NOV					25...	1120	284	12.0	320
09...	1200	221	8.0	540	JUN				
JAN , 1988					29...	1135	66	18.0	--
15...	1145	144	4.5	--	JUL				
FEB					26...	1245	28	--	580
26...	1010	232	5.0	430	AUG				
APR					19...	1245	29	18.0	640
05...	1050	165	8.0	440					
28...	1305	181	14.0	475					
10183900 EAST FORK SEVIER RIVER NEAR RUBYS INN, UT (Lat 37°34'33", Long 112°15'54")									
OCT , 1987					MAY , 1988				
08...	1345	8.0	8.0	445	04...	1620	37	--	485
DEC					JUN				
01...	1025	7.0	.5	--	09...	1515	13	17.5	--
FEB , 1988					JUL				
11...	1125	20	.5	520	12...	1515	9.1	22.0	--
APR					AUG				
11...	1320	20	8.5	480	26...	1645	28	18.0	--
10189000 EAST FORK SEVIER RIVER NEAR KINGSTON, UT (Lat 38°11'49", Long 112°09'01")									
OCT , 1987					MAY , 1988				
05...	1220	17	11.0	540	25...	1320	135	16.0	440
NOV					JUN				
09...	1225	18	11.0	610	29...	1230	116	20.0	--
JAN , 1988					JUL				
28...	1125	31	2.0	430	26...	1400	105	--	445
FEB					AUG				
26...	1125	43	7.0	480	17...	1005	125	16.0	--
APR					18...	1345	143	19.0	405
05...	1205	145	6.0	--					
28...	1415	227	11.0	370					
10191500 SEVIER RIVER BELOW PIUTE DAM, NEAR MARYSVALE, UT (Lat 38°19'43", Long 112°11'30")									
OCT , 1987					APR , 1988				
05...	1335	67	26.0	485	05...	1305	358	6.0	495
NOV					MAY				
09...	1335	21	12.0	500	04...	1310	399	10.0	465
JAN , 1988					25...	1505	363	13.0	455
15...	1005	7.0	1.0	--	JUN				
FEB					30...	1230	569	17.0	455
25...	1125	68	--	540					
10194000 SEVIER RIVER ABOVE CLEAR CREEK, NEAR SEVIER, UT (Lat 38°34'20", Long 112°15'27")									
OCT , 1987					JUL , 1988				
07...	1120	84	7.5	510	08...	1315	590	--	440
FEB , 1988					AUG				
03...	1035	25	1.0	540	02...	0915	453	20.0	425
MAR					09...	0925	386	18.5	465
15...	1325	300	--	495	10...	0940	345	18.5	460
MAY					11...	1820	360	17.0	470
04...	1455	413	11.0	465					
26...	0900	518	12.0	400					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)
SEVIER LAKE BASIN--Continued 10194200 CLEAR CREEK ABOVE DIVERSIONS, NEAR SEVIER, UT (Lat 38°34'45", Long 112°17'22")									
OCT , 1987					MAY , 1988				
07... 1030	13	7.5	270		05... 1120	86	7.0	240	
NOV 09... 1515	14	9.0	260		26... 1000	191	8.0	130	
FEB , 1988					JUN 29... 0925	69	14.5	--	
03... 0935	13	1.0	285		JUL 27... 1100	28	--	265	
MAR 15... 1200	14	--	315		SEP 14... 1050	18	10.0	--	
APR 05... 1605	49	4.0	--						
10205000 SEVIER RIVER NEAR SIGURD, UT (Lat 38°52'13", Long 111°57'14")									
OCT , 1987					MAY , 1988				
07... 1325	209	15.0	1190		11... 1400	48	18.5	1040	
NOV 17... 1330	120	5.0	970		JUN 29... 1430	15	23.5	1090	
JAN , 1988					AUG 02... 1000	8.6	20.5	930	
05... 1300	150	2.5	650		SEP 14... 0810	131	12.5	1480	
FEB 18... 1215	173	4.0	1220						
MAR 30... 1200	413	5.5	640						
10205030 SALINA CREEK NEAR EMERY, UT (Lat 38°54'43", Long 111°31'47")									
OCT , 1987					JUN , 1988				
08... 1210	8.1	6.5	445		30... 1530	14	19.5	430	
NOV 18... 1315	14	.0	510		AUG 02... 1210	12	15.0	435	
FEB , 1988					SEP 14... 1545	8.8	12.0	470	
03... 1410	6.2	1.5	380						
MAY 12... 1415	35	13.5	445						
10206000 SALINA CREEK AT SALINA, UT (Lat 38°57'24", Long 111°51'58")									
OCT , 1987					MAY , 1988				
08... 1340	2.0	15.0	2420		12... 1225	135	11.5	510	
NOV 18... 1500	13	.0	1560		JUN 30... 1300	3.2	21.5	2600	
JAN , 1988					AUG 02... 1500	1.2	22.5	2820	
05... 1500	9.3	.0	1310		SEP 14... 1015	1.9	10.5	2730	
FEB 18... 1415	21	.0	1350						
MAR 03... 1315	31	8.0	1310						
31... 1230	23	4.0	1140						
10208500 OAK CREEK NEAR FAIRVIEW, UT (Lat 39°40'26", Long 111°24'30")									
OCT , 1987					MAY , 1988				
06... 1455	2.2	10.0	475		04... 1115	19	5.0	390	
NOV 17... 1025	2.7	3.0	470		JUN 02... 1010	21	6.0	420	
DEC 28... 1210	2.3	2.0	500		JUL 28... 0930	3.4	13.5	390	
FEB , 1988					AUG 31... 1535	2.8	18.5	400	
09... 1355	2.3	3.0	510						
MAR 21... 1300	2.9	5.0	370						
10215700 OAK CREEK NEAR SPRING CITY, UT (Lat 39°26'52", Long 111°25'29")									
OCT , 1987					JUN , 1988				
06... 1245	5.2	7.0	370		01... 1350	34	9.0	380	
NOV 17... 1300	4.2	2.0	400		JUL 27... 1455	7.6	20.0	300	
FEB , 1988					SEP 01... 1540	6.4	14.5	320	
02... 1200	3.3	2.0	430						
MAY 04... 1420	6.9	8.5	390						

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)
SEVIER LAKE BASIN--Continued									
10215900 MANTI CREEK BELOW DUGWAY CREEK, NEAR MANTI, UT (Lat 39°15'33", Long 111°34'45")									
OCT , 1987					MAY , 1988				
06...	1020	5.5	5.0	570	05...	0850	24	3.0	490
NOV					JUN				
17...	1420	8.0	.0	550	01...	1140	92	7.0	430
DEC					JUL				
28...	1550	3.9	.0	740	29...	0750	18	14.0	500
FEB , 1988					SEP				
02...	1535	3.7	1.0	610	02...	0720	8.6	11.0	430
MAR									
21...	1400	9.7	5.0	420					
10217000 SEVIER RIVER BELOW SAN PITCH RIVER, NEAR GUNNISON, UT (Lat 39°10'22", Long 111°52'54")									
OCT , 1987					MAY , 1988				
08...	0940	242	12.0	1730	12...	0915	201	13.5	1560
NOV					JUN				
18...	1000	308	2.5	1750	30...	1040	70	15.5	2440
JAN , 1988					JUL				
06...	1100	372	1.5	1210	19...	1210	96	19.0	3060
FEB					SEP				
03...	0830	310	1.5	1740	14...	1200	226	14.0	1840
MAR									
31...	1145	655	4.5	1090					
10219000 SEVIER RIVER NEAR JUAB, UT (Lat 39°22'29", Long 112°02'20")									
OCT , 1987					APR , 1988				
09...	1425	4.6	18.0	1750	29...	0930	366	--	1700
NOV					JUN				
13...	1605	7.3	10.0	1760	02...	1215	415	16.0	1670
DEC					JUL				
16...	1635	3.0	3.0	1820	07...	1620	607	18.5	1660
FEB , 1988					AUG				
24...	1235	3.6	7.5	1860	24...	1230	790	20.5	1750
10219200 CHICKEN CREEK NEAR LEVAN, UT (Lat 39°33'00", Long 111°49'31")									
OCT , 1987					APR , 1988				
09...	1050	.49	10.5	1210	29...	0810	5.4	9.0	750
NOV					MAY				
13...	1300	.48	10.5	1170	13...	0905	8.4	12.0	660
DEC					JUN				
16...	1355	.20	3.0	1220	02...	1405	4.2	20.5	750
FEB , 1988					16...	1020	3.0	6.0	820
24...	1625	.11	11.0	1210	AUG				
APR					24...	0820	.45	11.5	1070
14...	0920	2.7	10.0	860					
10224100 OAK CREEK ABOVE LITTLE CREEK, NEAR OAK CITY, UT (Lat 39°21'23", Long 112°13'55")									
OCT , 1987					MAY , 1988				
08...	1540	.36	12.5	290	12...	1335	12.0	12.0	120
NOV					JUN				
12...	1530	.51	6.5	280	15...	1325	1.9	6.0	185
DEC					JUL				
16...	1105	.70	.5	280	18...	1435	.47	20.0	255
FEB , 1988					AUG				
25...	1140	.79	3.0	250	23...	1240	.39	17.5	280
APR									
13...	1550	7.0	10.5	130					
BEAVER RIVER BASIN									
10234500 BEAVER RIVER NEAR BEAVER, UT (Lat 38°16'50", Long 112°34'25")									
OCT , 1987					JUN , 1988				
28...	1500	26	10.0	130	20...	1315	105	12.0	98
NOV					JUL				
24...	1245	27	.5	145	25...	1550	55	18.0	115
DEC					AUG				
28...	1135	23	.5	--	25...	1040	47	14.5	115
JAN , 1988					SEP				
25...	1400	22	.0	130	10...	1335	32	14.0	--
MAR					23...	1515	27	12.0	135
24...	1145	32	7.0	135					
APR									
26...	1030	49	4.0	140					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)
BEAVER RIVER BASIN--Continued									
10237000 BEAVER RIVER AT ADAMSVILLE, UT (Lat 38°15'13", Long 112°45'56")									
OCT . 1987					MAY . 1988				
06...	1125	4.0	11.5	820	18...	1120	102	12.0	290
NOV					JUN				
24...	1420	48	8.0	385	06...	0700	44	--	380
FEB . 1988					JUL				
01...	1230	47	.5	370	11...	1155	2.4	23.0	730
MAR					AUG				
24...	1430	53	--	295	25...	1300	10	24.5	680
10239000 BEAVER RIVER AT ROCKY FORD DAM, NEAR MINERSVILLE, UT (Lat 38°13'03", Long 112°50'22")									
OCT . 1987					MAY . 1988				
06...	1235	9.2	15.0	590	18...	1300	163	14.0	540
NOV					JUN				
24...	1530	7.4	12.0	590	08...	0855	100	--	530
FEB . 1988					JUL				
01...	1420	11	5.0	580	11...	1415	118	20.0	550
MAR					SEP				
24...	1545	12	14.5	580	10...	1115	85	19.0	--
APR									
26...	1435	12	15.0	--					
CEDAR CITY VALLEY									
10242000 COAL CREEK NEAR CEDAR CITY, UT (Lat 37°40'20", Long 113°02'02")									
OCT . 1987					MAY . 1988				
15...	1510	13	13.5	530	11...	1020	176	--	310
NOV					JUN				
27...	1345	17	.5	590	15...	2000	56	16.0	--
FEB . 1988					JUL				
10...	1515	17	5.5	540	20...	0900	19	11.5	560
APR					SEP				
12...	0850	66	2.5	415	12...	1435	13	9.5	570
RAFT RIVER BASIN									
13077700 GEORGE CREEK NEAR YOST, UT (Lat 41°55'07", Long 113°28'51")									
OCT . 1987					JUN . 1988				
07...	1430	2.2	--	125	15...	1325	9.5	13.0	--
NOV					AUG				
24...	1240	2.3	3.0	--	10...	1245	2.4	24.0	125
JAN . 1988					SEP				
05...	1310	2.2	4.0	--	09...	1050	2.0	12.0	155
MAY									
10...	1240	7.5	8.5	110					

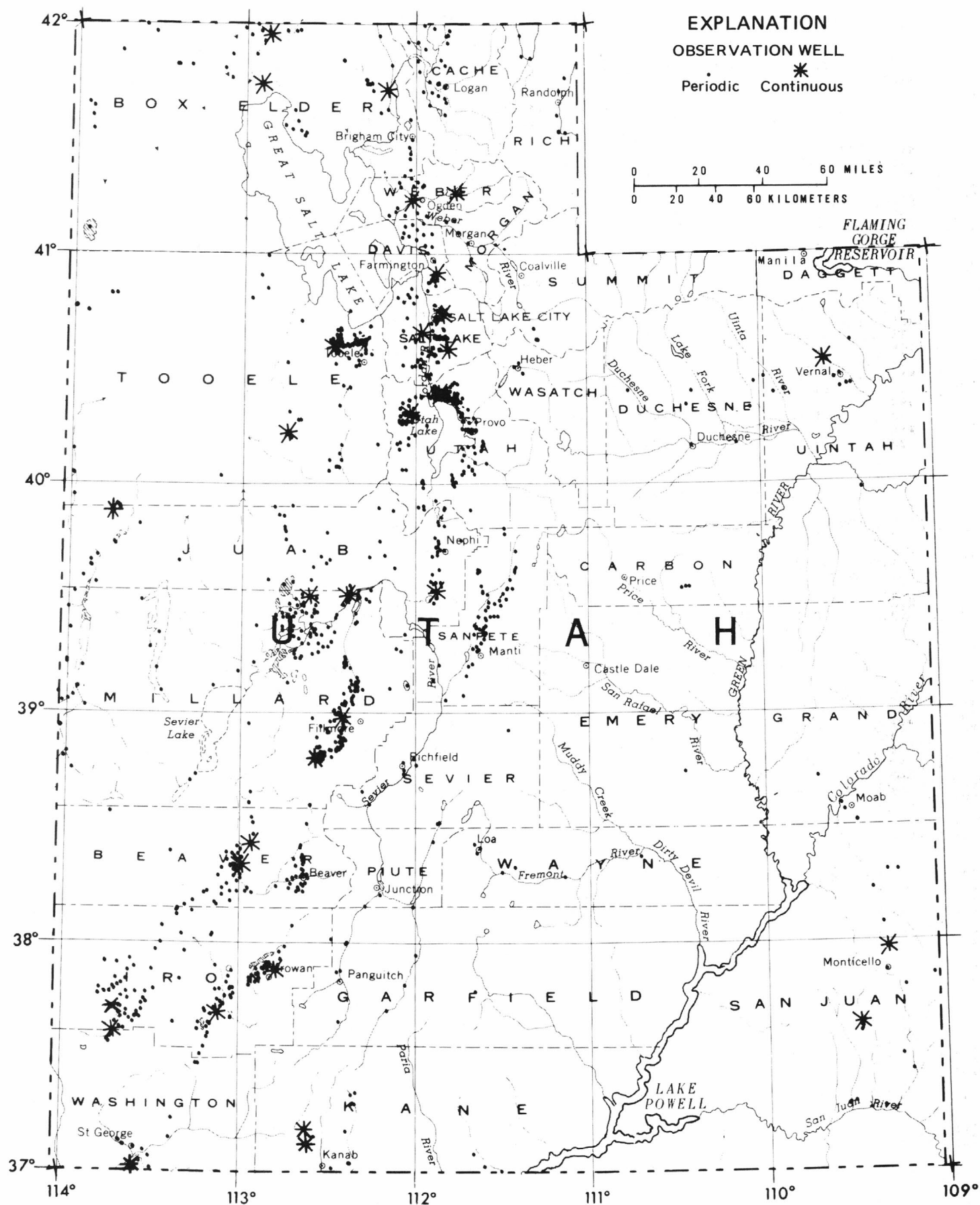


Figure 18.--Location of observation wells in Utah where data were obtained on ground-water levels.

GROUND-WATER LEVELS

BEAVER COUNTY

38255112555101. LOCAL NUMBER, (C-27-10)25cbd-1.

LOCATION.--Lat 38°25'51", long 112°55'51", Hydrologic Unit 16030007.

Owner: Phillips Petroleum.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 400 ft.

DATUM.--Land-surface datum is 5,320 ft above mean sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--April 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 323.75 ft below land-surface datum, May 15, 1976; lowest, 327.42 ft below land-surface datum, Oct. 6, 1985.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	326.48	326.42	326.71	326.95	326.59	326.43	326.31	326.78	326.59	326.38	326.47	326.48
10	326.36	326.29	326.81	326.75	326.54	326.64	326.55	326.53	326.47	326.46	326.45	326.48
15	326.41	326.17	326.92	326.97	326.62	326.62	326.60	326.64	326.43	326.37	326.45	326.43
20	326.38	326.35	326.74	326.44	326.47	326.64	326.69	326.55	326.39	326.34	326.45	326.41
25	326.27	326.48	326.80	326.61	326.53	326.51	326.59	326.56	326.44	326.38	326.43	326.35
EOM	326.40	326.51	326.68	326.76	326.60	326.50	326.70	326.34	326.34	326.41	326.40	326.44

382020112585901. LOCAL NUMBER, (C-28-10)28cdd-1.

LOCATION.--Lat 38°20'20", Long 112°58'59", Hydrologic Unit 16030007.

Owner: Wiseman.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled irrigation artesian well, diameter 16 in., depth 360 ft, cased to 60 ft.

DATUM.--Land-surface datum is 5,019 ft above mean sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--April 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.99 ft below land-surface datum, Sep. 30, Oct. 1, 1984; lowest, 59.26 ft below land-surface datum, Oct. 8, 1965.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.13	21.07	21.90	22.67	23.37	23.50	24.10	29.51	e32.85	35.11	e33.50	e31.30
10	21.25	21.24	22.06	22.81	23.44	23.57	24.19	31.52	e32.10	e35.20	e33.10	e30.90
15	21.13	21.33	22.17	22.90	23.52	23.67	24.24	34.78	e31.35	e35.15	e32.90	29.31
20	21.04	21.53	22.30	23.03	23.64	23.78	24.25	e35.10	e30.60	e34.77	e32.50	26.00
25	20.93	21.63	22.40	23.17	23.68	23.87	24.34	e34.35	30.82	e34.37	e32.10	24.31
EOM	20.99	21.76	22.57	23.24	23.49	23.97	26.29	e33.60	32.78	e33.90	e31.70	23.55

BOX ELDER COUNTY

414236112101201. LOCAL NUMBER, (B-11-3)10abb-4.

LOCATION.--Lat 41°42'36", long 112°10'12", Hydrologic Unit 16010204.

Owner: Rocky Mountain Packing Company.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 705 ft, cased to 437 ft.

DATUM.--Land-surface datum is 4,318 ft above mean sea level. Measuring point: Top of casing, 0.50 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--October 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.00 ft below land-surface datum, July 27, Sep. 12, 1984; lowest, 24.43 ft below land-surface datum, Mar. 5, 9, 10, 1982.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.99	18.03	18.26	18.75	19.20	19.56	19.97	20.29	20.32	20.30	20.19	20.07
10	17.94	18.08	18.33	18.77	19.26	19.65	20.16	20.36	20.39	20.32	20.17	19.99
15	17.94	18.04	18.42	18.82	19.29	19.70	20.15	20.41	20.39	20.30	20.11	20.01
20	17.98	18.19	18.45	18.86	19.39	19.85	20.16	20.38	20.38	20.33	20.08	19.95
25	17.98	18.18	18.50	19.07	19.46	19.86	20.18	20.37	20.35	20.30	20.10	19.96
EOM	18.02	18.21	18.63	19.04	19.53	19.92	20.24	20.26	20.33	20.23	20.02	20.05

e Estimated.

GROUND-WATER LEVELS

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BOX ELDER COUNTY--Continued

414411112543701. LOCAL NUMBER, (B-12-9)30cda-1.

LOCATION.--Lat 41°44'11", long 112°54'37", Hydrologic Unit 16020309.

Owner: U.S. Geological Survey.

AQUIFER.--Basalt.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 8 in., depth 162 ft, cased to 131 ft.

DATUM.--Land-surface datum is 4,239 ft above mean sea level. Measuring point: Top of casing, 2.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--August 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 23.08 ft below land-surface datum, May 25, 31, July 25, 1987; lowest, 25.53 ft below land-surface datum, Oct. 15, 20, 1981.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.58	e23.58	23.60	23.58	23.63	23.55	23.50	23.36	23.35	23.55	23.70	23.86
10	23.59	e23.58	23.58	23.57	23.58	23.52	23.48	23.41	23.42	23.62	23.72	23.88
15	23.56	e23.59	23.60	23.56	23.54	23.49	23.43	23.35	23.48	23.66	23.72	23.95
20	e23.56	e23.59	23.61	23.62	23.59	23.51	23.39	23.38	23.53	23.68	23.70	24.00
25	e23.57	23.60	23.61	23.62	23.57	23.52	23.41	23.35	23.60	23.66	23.78	24.02
EOM	e23.57	23.62	23.61	23.56	23.54	23.51	23.39	23.39	23.54	23.67	23.82	24.02

415703112514501. LOCAL NUMBER, (B-14-9)9add-1.

LOCATION.--Lat 41°57'03", long 112°51'45", Hydrologic Unit 16020309.

Owner: Hogan.

AQUIFER.--Basalt.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 20 in., depth 400 ft, cased to 395 ft.

DATUM.--Land-surface datum is 4,384 ft above mean sea level. Measuring point: Top of casing, at land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--July 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 160.12 ft below land-surface datum, Apr. 16, 1988; lowest, 177.03 ft below land-surface datum, Oct. 1, 1981.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	166.69	163.43	162.24	161.59	161.54	161.00	160.49	161.49	168.79	172.03	172.60	172.68
10	166.03	163.35	162.16	161.53	161.22	160.68	160.44	162.29	169.51	172.70	173.62	171.92
15	165.41	163.14	162.19	161.34	161.04	160.56	160.23	163.65	167.91	173.28	173.67	172.79
20	164.85	162.74	162.17	161.68	161.21	160.59	160.63	166.10	169.13	173.41	174.00	172.74
25	164.47	162.53	162.06	161.60	161.07	160.63	161.12	168.04	170.37	173.54	173.96	173.44
EOM	163.81	162.53	161.95	161.30	160.83	160.51	161.41	168.77	171.16	172.97	173.07	172.10

DAVIS COUNTY

405447111524301. LOCAL NUMBER, (A-2-1)18abd-12.

LOCATION.--Lat 40°54'47", long 111°52'43", Hydrologic Unit 16020102.

Owner: T. Q. Williams.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Jetted unused artesian well, diameter 2 in., depth 90 ft, cased to 90 ft.

DATUM.--Land-surface datum is 4,285 ft above mean sea level. Measuring point: Top of recorder shelter support, 2.40 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--May 1938 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 31.60 ft above land-surface datum, June 9, 1944; lowest, 2.70 ft above land-surface datum Aug. 5, 1961.

WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.90	18.50	18.30	17.70	17.20	15.50	14.70	13.10	11.40	8.10	8.90	11.20
10	17.80	18.60	18.20	16.50	16.00	15.90	12.90	e12.50	9.50	7.10	9.40	11.00
15	18.00	18.50	18.30	16.80	14.20	16.00	13.30	11.90	9.00	7.00	9.50	e11.00
20	18.30	18.70	18.60	17.80	13.80	e15.50	12.50	12.40	8.50	8.30	9.30	e11.10
25	18.20	18.20	18.90	18.40	14.20	14.50	13.20	12.00	8.10	8.20	10.50	e11.20
EOM	18.20	18.20	17.80	17.00	15.50	14.10	13.20	10.90	7.90	8.50	10.90	e11.30

e Estimated.

GROUND-WATER LEVELS

IRON COUNTY

375241112471001. LOCAL NUMBER, (C-34-8)5bca-1.

LOCATION.--Lat 37°52'41", long 112°47'10", Hydrologic Unit 16030006.

Owner: Paragonah Canal Company.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 420 ft.

DATUM.--Land-surface datum is 5,802 ft above mean sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--September 1935 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 13.45 ft below land-surface datum, June 26, 1949; lowest, 42.40 ft below land-surface datum, Sept. 7, 1981.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	31.64	31.28	31.42	32.42	33.16	33.35	33.53	33.51	32.57	31.88	31.72	31.30
10	31.82	31.21	31.64	32.59	33.19	33.32	33.55	33.56	32.51	31.89	31.36	31.29
15	31.97	31.11	31.86	32.64	33.24	33.33	33.53	33.45	32.44	31.94	31.35	31.27
20	32.06	31.02	32.03	32.86	33.37	33.42	33.50	33.35	32.29	32.03	31.33	31.24
25	32.01	31.08	32.14	32.96	33.37	33.48	33.58	33.14	32.06	32.09	31.39	31.25
EOM	31.79	31.31	32.36	32.99	33.30	33.46	33.51	32.93	31.86	32.06	31.37	31.12

374132113063601. LOCAL NUMBER, (C-36-11)8aab-1.

LOCATION.--Lat 37°41'32", long 113°06'36", Hydrologic Unit 16030006.

Owner: Cedar City Corporation.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 220 ft.

DATUM.--Land-surface datum is 5,563 ft above mean sea level. Measuring point: Top of casing, 3.50 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--September 1935 to December 1943, March 1945 to March 1973, April 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.67 ft below land-surface datum, Sept. 27, 1943; lowest, 100.08 ft below land-surface datum, Sept. 10, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	60.12	e57.39	e55.49	53.82	52.81	51.80	51.12	50.30	50.72	54.16	e59.80	e61.04
10	59.61	e57.08	e55.18	53.69	52.55	51.58	51.24	50.50	50.99	55.81	e60.54	e61.37
15	59.33	e56.77	e54.86	53.36	52.25	51.35	50.87	50.64	51.42	57.14	e60.75	e61.59
20	58.53	e56.45	54.67	53.35	52.26	51.40	50.69	50.24	51.53	57.67	e60.64	---
25	58.22	e56.13	54.40	53.20	52.05	51.31	50.72	50.02	51.83	e58.25	e60.52	---
EOM	e57.90	e55.81	54.14	52.82	51.86	51.11	50.32	49.60	53.25	e59.05	e60.77	---

374053113415101. LOCAL NUMBER, (C-36-16)6cbc-1.

LOCATION.--Lat 37°40'53", long 113°41'51", Hydrologic Unit 16030006.

Owner: RedCo Silver, Inc.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., depth 270 ft, perforated 81-85 ft, 95-100 ft, 114-120 ft, 144-147 ft, 156-162 ft, 182-184 ft, 188-193 ft, 198-202 ft, 218-222 ft, 227-232 ft, 249-252 ft, 257-259 ft, 263-267 ft.

DATUM.--Land-surface datum is 5,210.67 ft above mean sea level. Measuring point: Bottom lip of access pipe, at land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--December 1951 to December 1953, April 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 73.35 ft below land-surface datum, Apr. 4, 1952; lowest, 146.98 ft below land-surface datum, Sept. 4, 5, 1987.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	145.29	142.99	140.90	139.12	137.66	136.51	135.82	134.93	139.05	141.26	143.16	145.74
10	144.89	142.62	140.59	138.82	137.42	136.32	135.53	135.44	139.66	e142.38	143.58	145.76
15	144.51	142.14	140.31	138.43	137.11	136.12	135.34	136.43	139.84	143.16	144.02	145.06
20	144.27	141.69	140.13	138.34	137.10	136.13	135.11	137.42	140.02	143.58	144.65	144.75
25	144.06	141.40	139.84	138.10	e136.81	136.10	135.03	138.05	139.94	143.97	145.09	144.38
EOM	143.49	141.16	139.58	137.72	e136.44	135.91	134.67	138.52	140.49	143.73	145.26	144.00

e Estimated.

GROUND-WATER LEVELS

343

IRON COUNTY--Continued

373643113415301. LOCAL NUMBER, (C-36-17)36add-1.

LOCATION.--Lat 37°36'43", long 113°41'53", Hydrologic Unit 16030006.

Owner: Sherwood Bracken.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 14 in., depth 202 ft.

DATUM.--Land-surface datum is 5,269.89 ft above mean sea level. Measuring point: Top of casing, 0.50 ft above land-surface datum.

REMARKS.--There are several nearby pumped wells. Records good.

PERIOD OF RECORD.--July 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 112.40 ft below land-surface datum, Mar. 24, 1950; lowest, 190.45 ft below land-surface datum, Sept. 23, 1988.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	184.61	182.09	180.49	179.23	178.59	178.11	177.66	177.01	183.07	187.93	189.42	189.72
10	184.12	181.80	180.28	178.98	178.60	177.90	177.42	177.36	184.00	188.87	e189.22	189.92
15	183.68	181.45	179.95	178.93	178.32	177.67	177.30	178.90	183.87	e189.47	e189.24	190.13
20	183.18	181.06	179.84	179.00	178.23	177.78	177.15	180.89	184.26	---	e189.26	190.33
25	182.85	181.06	179.75	178.90	178.18	177.79	177.21	181.69	184.95	---	189.27	190.34
EOM	182.38	180.72	179.52	178.67	178.06	177.58	176.84	182.52	186.60	---	189.52	189.98

JUAB COUNTY

395259113430401. LOCAL NUMBER, (C-11-17)12cbb-1.

LOCATION.--Lat 39°52'59", long 113°43'04", Hydrologic Unit 16020306.

Owner: Dorcy Sabey.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled irrigation artesian well, diameter 16 in, depth unknown.

DATUM.--Land-surface datum is 4,390.00 ft above mean sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.82 ft below land-surface datum, June 26, 1987; lowest, 51.90 ft below land-surface datum, Aug. 10, 1988.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	49.03	48.94	49.00	49.17	49.32	49.40	49.49	e49.75	48.88	49.69	50.62	50.96
10	49.00	48.93	49.03	49.21	49.31	49.38	49.48	e49.83	48.84	49.56	51.90	50.76
15	48.98	48.83	49.07	49.19	49.29	49.39	49.49	49.70	48.88	50.74	50.62	50.69
20	48.99	48.84	49.14	49.24	49.36	49.43	49.60	49.59	48.79	50.21	50.81	50.81
25	48.99	48.88	49.16	49.28	49.37	49.45	49.77	49.30	48.98	50.44	50.79	51.00
EOM	48.95	48.98	49.19	49.26	49.34	49.45	e49.67	49.10	49.45	51.51	50.90	51.42

393143111523301. LOCAL NUMBER, (C-15-1)12aba-1.

LOCATION.--Lat 39°31'43", long 111°52'33", Hydrologic Unit 16030005.

Owner: R. C. Mangelson.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled stock artesian well, diameter 6 in., depth 117 ft, cased to 117 ft.

DATUM.--Land-surface datum is 5,196.90 ft above mean sea level. Measuring point: Top of casing, 1.50 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--August 1935 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 28.41 ft below land-surface datum, May 21, 1985; lowest, 62.16 ft below land-surface datum, June 20, 1936.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	44.72	45.09	45.45	45.73	46.08	46.20	46.35	46.49	48.08	49.95	51.32	52.42
10	44.70	45.15	45.51	45.80	46.08	46.11	46.39	46.60	48.36	50.56	51.67	52.48
15	44.71	45.19	45.58	45.78	46.09	46.14	46.38	47.02	48.39	50.33	51.98	52.58
20	44.83	45.26	45.63	45.95	46.17	46.24	46.40	47.21	48.91	50.65	52.15	52.69
25	44.96	45.29	45.68	45.99	46.19	46.29	46.46	47.32	49.05	51.45	52.43	52.78
EOM	45.01	45.34	45.74	45.96	46.19	46.26	46.41	47.77	49.30	51.69	52.55	52.86

e Estimated.

GROUND-WATER LEVELS

KANE COUNTY

37090112335001. LOCAL NUMBER, (C-42-6)19baa-1.

LOCATION.--Lat 37°09'01", long 112°33'50", Hydrologic Unit 15010003.

Owner: Kanab City.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 27 in., depth 560 ft.

DATUM.--Land-surface datum is 5,660.00 ft above mean sea level. Measuring point: Top of casing, 1.6 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--May 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 160.51 ft below land-surface datum, Jan. 18, 1988; lowest, 167.20 ft below land-surface datum, Aug. 25, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	161.22	161.07	161.06	161.05	161.39	161.22	161.25	160.99	161.06	161.23	161.21	161.30
10	161.24	161.39	161.26	161.25	161.21	160.90	161.38	161.46	161.27	161.15	161.19	161.14
15	161.12	160.94	161.17	160.95	161.02	160.78	161.04	161.24	161.36	161.29	161.17	161.35
20	161.26	161.21	161.19	161.34	161.28	161.28	160.93	161.26	161.32	161.37	161.18	161.09
25	161.39	160.96	161.02	161.46	161.26	161.33	161.26	161.25	161.24	161.41	161.36	161.47
EOM	161.11	161.19	161.35	160.90	161.09	160.92	160.88	161.17	161.15	161.21	161.23	161.36

370523112334702. LOCAL NUMBER, (C-42-6)30dcc-2.

LOCATION.--Lat 37°05'23", long 112°33'47", Hydrologic Unit 15010003.

Owner: Kanab City.

AQUIFER.--Consolidated Navajo Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 230 ft.

DATUM.--Land-surface datum is 5,280.00 ft above mean sea level. Measuring point: Top of casing, 2.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 53.30 ft below land-surface datum, Apr. 25, 1986; lowest, 61.71 ft below land-surface datum, Sept. 30, 1988.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	56.69	57.33	57.09	57.20	---	58.18	59.48	59.49	60.12	60.63	e60.97	61.11
10	57.06	58.22	57.52	57.18	57.67	58.62	60.05	59.13	60.19	e60.69	61.03	61.12
15	56.96	57.89	58.22	57.66	57.52	59.02	59.67	58.78	60.27	e60.75	61.05	e61.23
20	56.80	57.50	57.88	58.30	58.02	59.18	59.26	58.55	60.36	e60.80	61.06	e61.40
25	56.70	57.32	57.59	58.08	58.46	59.25	59.04	59.30	60.45	e60.86	61.08	e61.58
EOM	57.59	57.23	57.38	57.67	58.26	59.50	58.80	59.98	60.54	e60.92	61.09	e61.71

MILLARD COUNTY

393046112231301. LOCAL NUMBER, (C-15-5)15dad-1.

LOCATION.--Lat 39°30'46", long 112°23'13", Hydrologic Unit 16030005.

Owner: Anaconda Copper Co.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 1,190 ft, cased to 1,115 ft,

perforated 860-1,050 ft.

DATUM.--Land-surface datum is 4,780 ft above mean sea level. Measuring point: Top of 12-in. casing, 2.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--January 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 99.03 ft below land-surface datum, Apr. 2, 1986; lowest, 174.62 ft below land-surface datum, Aug. 24, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	100.26	100.24	100.19	100.01	100.36	100.15	100.01	99.78	100.01	99.98	100.16	100.03
10	100.36	100.45	100.33	100.09	100.19	100.00	100.13	100.10	100.15	100.05	99.98	100.04
15	100.35	100.24	100.17	100.05	100.14	99.97	99.96	99.89	100.11	100.12	99.87	100.24
20	100.22	100.26	100.36	100.28	100.27	100.04	99.76	100.01	100.19	100.15	99.84	100.01
25	100.37	100.26	100.25	100.28	100.18	100.13	99.94	100.09	100.07	100.12	100.00	100.28
EOM	100.26	100.16	100.14	100.09	100.08	100.06	99.70	99.99	100.07	100.15	100.10	100.35

e Estimated.

GROUND-WATER LEVELS
MILLARD COUNTY--Continued

345

393020112362201. LOCAL NUMBER, (C-15-7)23bac-1.

LOCATION.--Lat 39°30'20", long 112°36'22", Hydrologic Unit 16030007.

Owner: U.S. Geological Survey.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 182 ft.

DATUM.--Land-surface datum is 4,629 ft above mean sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--August 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.77 ft below land-surface datum, Apr. 20, 1988; lowest, 15.91 ft below land-surface datum, Oct. 16, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.92	8.77	8.60	8.20	8.17	8.06	7.95	7.82	7.93	8.26	8.53	8.66
10	8.90	8.80	8.54	8.19	8.12	7.97	7.96	7.87	8.02	8.33	8.51	8.60
15	8.86	8.75	8.44	8.14	8.06	7.92	7.88	7.85	8.07	8.39	8.53	8.62
20	8.85	8.76	8.41	8.17	8.10	7.93	7.77	7.89	8.10	8.45	8.54	8.55
25	8.86	8.72	8.35	8.19	8.06	7.98	7.85	7.93	8.17	8.50	8.59	8.57
EOM	8.78	8.70	8.32	8.08	8.02	7.91	7.81	7.92	8.20	8.52	8.61	8.56

385844112245801. LOCAL NUMBER, (C-21-5)21aba-1.

LOCATION.--Lat 38°58'44", long 112°24'58", Hydrologic Unit 16030005.

Owner: Delbert Crapo.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., depth 246 ft, cased to 220 ft.

DATUM.--Land-surface datum is 4,744.44 ft above mean sea level. Measuring point: Top of casing, 0.50 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--May 1929 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.96 ft above land-surface datum, Feb. 24, 1949; lowest, 83.02 ft below land-surface datum, July 20, 1965.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	e19.80	17.50	16.66	16.16	15.92	15.56	e16.50	19.82	23.17	e27.30	28.01	28.52
10	19.36	17.35	16.55	16.12	15.81	e15.45	e18.00	21.46	24.11	e27.10	27.40	27.94
15	18.75	17.12	16.44	15.99	15.69	e15.20	19.42	22.65	26.49	e26.80	28.62	e27.40
20	18.38	16.96	16.43	16.14	15.75	e15.00	19.74	22.78	e27.40	26.54	29.05	e26.15
25	18.17	16.86	16.34	16.02	15.63	14.75	18.96	23.56	28.00	26.50	28.84	24.88
EOM	17.78	16.78	16.37	15.85	15.56	e15.00	20.81	23.96	e27.60	27.96	28.72	24.39

384906112330601. LOCAL NUMBER, (C-23-6)17baa-1.

LOCATION.--Lat 38°49'06", long 112°33'06", Hydrologic Unit 16030005.

Owner: Boyd Watts.

AQUIFER.--

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 18 in., depth 262 ft, cased to 140 ft.

DATUM.--Land-surface datum is 4,711.00 ft above mean sea level. Measuring point: Top of casing, 2.0 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--June 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.34 ft below land-surface datum, Jan. 28, 1987; lowest, 54.03 ft below land-surface datum, Sept. 6, 1979.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	28.26	27.99	27.89	27.77	28.27	27.87	27.77	29.75	e30.65	e31.45	29.85	e29.00
10	28.23	28.14	27.94	27.83	28.07	27.74	27.70	30.62	e30.50	e31.80	29.83	e28.70
15	28.15	28.04	27.94	27.72	27.89	27.59	28.25	31.19	30.37	e32.15	29.52	e28.40
20	28.14	27.93	28.02	28.09	28.04	27.74	28.62	e31.15	e30.40	32.92	29.54	28.10
25	28.20	27.90	28.00	28.28	27.94	27.80	29.29	e30.95	e30.75	31.25	29.02	28.06
EOM	28.02	28.02	28.03	28.11	27.81	27.67	29.36	e30.80	e31.10	30.28	e29.30	27.97

e Estimated.

GROUND-WATER LEVELS

SALT LAKE COUNTY

403916111575901. LOCAL NUMBER, (C-2-1)9ccc-1.

LOCATION.--Lat 40°39'16", long 111°57'59", Hydrologic Unit 16020204.

Owner: Salt Lake County Conservancy District.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled artesian unused public supply well, diameter 16 in., depth 795 ft, perforated 187-372 ft.

DATUM.--Land-surface datum is 4,461 ft above mean sea level. Measuring point: Top of casing, 2.10 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--April 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 49.75 ft below land-surface datum, Oct. 25, 1971; lowest, 86.80 ft below land-surface datum, July 25, 1982.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	68.20	64.44	62.66	61.59	61.26	61.06	61.04	60.89	60.58	69.77	73.60	75.63
10	67.42	64.15	62.44	61.47	61.15	60.93	61.09	61.03	61.64	70.59	73.96	75.78
15	66.63	63.73	62.26	61.35	61.05	60.89	61.04	60.93	64.08	71.33	74.36	74.28
20	66.04	63.40	62.13	61.39	61.13	60.98	60.98	60.88	66.16	72.04	74.72	72.44
25	65.52	63.13	61.94	61.37	61.09	61.02	61.01	60.79	67.72	72.59	75.07	70.95
EOM	64.87	62.92	61.81	61.17	61.02	60.97	60.94	60.69	68.94	73.17	75.32	69.70

404356111503901. LOCAL NUMBER, (D-1-1)16caa-1.

LOCATION.--Lat 40°43'56", long 111°50'39", Hydrologic Unit 16020204.

Owner: Salt Lake City Corporation.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 20 in., depth 502 ft, cased to 502 ft, perforated 90-486 ft.

DATUM.--Land-surface datum is 4,489.69 ft above mean sea level. Measuring point: Top of casing, at land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--September 1934 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 47.32 ft below land-surface datum, Jun. 19-22, 1984; lowest, 70.65 ft below land-surface datum, Apr. 29, 1935.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	54.21	54.53	54.79	55.08	55.49	---	---	---	---	---	---	---
10	54.29	54.58	54.83	55.12	55.55	---	---	---	---	e53.44	---	---
15	54.33	54.61	54.88	55.18	55.61	---	---	---	53.92	---	e54.36	---
20	54.38	54.66	54.93	55.27	55.71	---	---	---	---	---	---	---
25	54.43	54.70	54.98	55.32	55.78	---	---	---	---	---	---	---
EOM	54.48	54.75	55.04	55.40	55.86	---	---	---	---	---	---	e54.82

403452111484301. LOCAL NUMBER, (D-3-1)2ccc-1.

LOCATION.--Lat 40°34'52", long 111°48'43", Hydrologic Unit 16020204.

Owner: Metropolitan Water District.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 24 in., depth 1,007 ft, perforated 525-990 ft.

DATUM.--Land-surface datum is 5,000 ft above mean sea level. Measuring point: Top of flange, at land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--March 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 515.66 ft below land-surface datum, Nov. 25, 1958; lowest, 575.35 ft below land-surface datum, Sept. 30, 1988.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	565.10	563.20	560.29	557.03	555.38	553.68	552.40	555.45	561.42	568.67	571.72	574.00
10	565.46	562.87	560.06	556.54	554.84	553.23	552.37	556.44	563.38	569.62	571.64	574.41
15	565.54	561.86	559.50	555.98	554.34	552.80	553.07	557.65	564.87	570.29	571.90	574.82
20	565.14	561.24	559.12	556.21	554.46	552.92	553.44	558.75	565.93	571.04	572.42	574.98
25	564.87	560.90	558.53	556.09	554.13	552.90	554.23	559.94	566.91	571.60	573.07	574.96
EOM	563.89	560.75	557.95	555.24	553.75	552.40	554.82	561.00	567.88	571.71	573.39	575.35

e Estimated.

GROUND WATER LEVELS

347

SAN JUAN COUNTY

375802109191301. LOCAL NUMBER, (D-33-24)30dab-1.

LOCATION.--Lat 38°58'02", long 109°19'13", Hydrologic Unit 14080203.

Owner: A. E. C.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled unused well, diameter 10 in., depth 319 ft.

DATUM.--Land-surface datum is 6,916 ft above mean sea level. Measuring Point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--July 1955 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 161.51 ft below land-surface datum, May 29, 1988; lowest, 202.89 ft below land-surface datum, July 25, 1958.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	163.84	163.42	163.02	162.70	162.80	162.48	162.18	161.94	161.90	161.96	161.90	162.08
10	163.75	163.53	163.09	162.88	162.63	162.08	162.39	162.18	162.04	161.91	161.90	161.94
15	163.58	162.94	162.91	162.61	162.50	162.09	162.13	162.09	162.08	161.95	161.93	162.00
20	163.68	163.36	162.82	e162.69	162.55	162.48	161.96	161.93	162.07	162.02	161.90	161.81
25	163.73	162.96	162.62	e162.91	162.63	162.40	162.07	162.07	162.02	162.10	162.03	161.99
EOM	163.56	163.03	162.82	162.48	162.51	161.99	161.85	161.81	161.93	161.92	161.91	161.94

373830109283201. LOCAL NUMBER, (D-36-22)22daa-1.

LOCATION.--Lat 37°38'30", long 109°28'32", Hydrologic Unit 14080201.

Owner: Joseph L. Nielson.

AQUIFER.--

WELL CHARACTERISTICS.--Drilled stock artesian well, diameter 7 in., depth 140 ft.

DATUM.--Land-surface datum is 6,200 ft above mean sea level. Measuring point: Top of recorder platform, 3.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--October 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 35.54 ft below land-surface datum, Sept. 20, 1988; lowest, 57.23 ft below land-surface datum, Oct. 20, 1960.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	38.54	39.02	39.41	39.77	40.50	40.58	40.33	39.58	37.84	36.89	36.15	36.09
10	38.57	39.34	39.62	40.12	40.38	40.08	40.47	39.69	37.78	36.75	36.19	35.89
15	38.55	38.76	39.62	39.82	40.28	40.12	40.19	39.25	37.58	36.68	36.21	35.87
20	38.81	39.36	39.59	40.06	40.53	40.61	39.99	38.96	37.33	36.58	36.14	35.51
25	39.00	39.09	39.49	40.42	40.67	40.57	40.07	38.70	37.13	36.45	36.38	35.71
EOM	38.96	39.39	39.87	40.02	40.53	40.06	39.68	38.22	36.92	36.18	36.18	35.60

TOOELE COUNTY

403539112282901. LOCAL NUMBER, (C-2-6)36dcc-1.

LOCATION.--Lat 40°35'39", long 112°28'29", Hydrologic Unit 16020304.

Owner: E. C. Walk.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., depth 176 ft, cased to 166 ft.

DATUM.--Land-surface datum is 4,373.70 ft above mean sea level. Measuring point: Top of casing, at land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--June 1940 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 72.82 ft below land-surface datum, June 11, 1952; lowest, 98.81 ft below land-surface datum, Oct. 7, 1961.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	87.46	86.79	86.46	86.30	86.39	86.31	86.57	86.82	87.59	88.54	89.10	89.26
10	87.51	86.80	86.40	86.31	86.36	86.25	86.53	86.98	87.81	88.70	89.10	89.16
15	87.33	86.71	86.40	86.25	86.27	86.22	86.57	87.11	87.89	88.81	89.36	89.32
20	87.11	86.57	86.42	86.35	86.36	86.25	86.60	87.18	87.93	88.96	e89.54	89.34
25	87.03	86.54	86.39	86.40	86.34	86.49	86.68	87.34	88.36	89.01	e89.67	89.48
EOM	86.92	86.52	86.40	86.30	86.30	86.57	86.86	87.52	88.52	89.04	89.43	89.48

e Estimated.

GROUND-WATER LEVELS
TOOELE COUNTY--Continued

401312112442301. LOCAL NUMBER, (C-7-8)10cbd-1.

LOCATION.--Lat 40°13'12", long 112°44'23", Hydrologic Unit 16020305.

Owner: Dugway Proving Ground.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 175 ft, cased to 175 ft, perforated 115-175 ft.

DATUM.--Land-surface datum is 4,850 ft above mean sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--November 1946 to March 1947, January 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 73.32 ft below land-surface datum, Jan. 26, 1951; lowest, 93.67 ft below land-surface datum, Oct. 15, 1966.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	76.07	75.69	75.41	75.14	75.15	74.90	74.88	74.70	75.02	75.90	76.61	77.33
10	76.08	75.80	75.38	75.07	75.03	74.78	74.77	74.93	75.28	75.93	76.67	77.42
15	75.94	75.70	75.36	75.00	74.92	74.67	74.74	74.85	75.42	76.20	76.76	77.57
20	75.94	75.49	75.42	75.21	75.03	74.78	74.63	75.02	75.49	76.38	76.91	77.54
25	75.97	75.46	75.38	75.20	74.96	74.87	74.76	75.04	75.62	76.43	77.10	77.70
EOM	75.77	75.54	75.41	75.01	74.82	74.76	74.66	75.16	75.79	76.45	77.25	77.74

UINTAH COUNTY

403158109372201. LOCAL NUMBER, (D-3-20)25abc-2.

LOCATION.--Lat 40°31'58", long 109°37'22", Hydrologic Unit 14060002.

Owner: H. T. Peltier.

AQUIFER.--Glacial outwash.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 12 in., depth 43 ft, cased to 32 ft.

DATUM.--Land-surface datum is 5,992 ft above mean sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--May 1965 to August 1966, March 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.97 ft below land-surface datum, July 5, 1966; lowest, 7.50 ft below land-surface datum, Sept. 5, 1974.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.59	6.22	6.22	6.19	6.03	5.95	6.22	6.36	6.37	5.97	6.46	7.15
10	6.58	6.15	6.20	6.12	6.01	6.04	6.27	6.45	6.37	6.18	6.58	7.13
15	6.25	6.17	6.35	6.14	6.00	6.07	6.13	6.43	6.23	6.37	6.70	6.86
20	6.36	6.22	6.29	6.09	6.01	6.08	6.23	6.22	6.15	6.50	6.87	6.97
25	6.31	6.24	6.28	6.09	5.95	6.12	6.03	6.30	6.20	6.62	6.96	6.89
EOM	6.19	6.27	6.28	6.01	5.93	6.19	6.29	6.30	5.90	6.57	7.03	6.94

UTAH COUNTY

401818112014501. LOCAL NUMBER, (C-6-2)14aba-1.

LOCATION.--Lat 40°18'18", long 112°01'45", Hydrologic Unit 16020201.

Owner: Coop Security Corp.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused irrigation artesian well, diameter 16 in., depth 1,258 ft, cased to 1,254 ft.

DATUM.--Land-surface datum is 4,865.70 ft above mean sea level. Measuring point: Top of casing, at land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--December 1954 to April 1955, March 1963 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 109.06 ft below land-surface datum, Apr. 12, 1955; lowest, 141.41 ft below land-surface datum, Aug. 15, 1965.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	111.91	111.68	111.52	111.32	111.35	111.15	111.06	110.95	110.97	111.02	111.05	111.07
10	111.85	111.74	111.51	111.32	111.26	111.06	111.11	111.05	111.03	111.04	111.02	111.00
15	111.77	111.58	111.47	111.28	111.17	111.03	110.99	111.00	111.06	111.07	111.05	111.05
20	111.81	111.64	111.48	111.38	111.23	111.11	110.94	111.00	111.07	111.13	111.06	110.97
25	111.81	111.56	111.43	111.42	111.20	111.11	110.97	111.01	111.05	111.12	111.11	111.01
EOM	111.70	111.57	111.44	111.22	111.14	111.02	110.93	110.95	111.03	111.07	111.04	111.01

GROUND-WATER LEVELS
UTAH COUNTY--Continued

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402333111513401. LOCAL NUMBER, (D-5-1)8dcc-1.
LOCATION.--Lat 40°23'33", long 111°51'34", Hydrologic Unit 16020201.
Owner: Lehi Irrigation Co.
AQUIFER.--Unconsolidated alluvium.
WELL CHARACTERISTICS.--Drilled unused irrigation artesian well, diameter 14 in., depth 240 ft, cased to 240 ft, perforated at 85, 105, 165, and 200 ft.
DATUM.--Land-surface datum is 4,555.03 ft above mean sea level. Measuring point: Top of recorder platform, 3.50 ft above land-surface datum.
REMARKS.--Water level affected by nearby pumping. Missing record from May 29 to June 2, June 7 to July 18.
PERIOD OF RECORD.--September 1935 to December 1936, April 1947, March 1962 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.07 ft above land-surface datum, Apr. 10, 1983, 1984; lowest, 35.29 ft below land-surface datum, Aug. 31, 1963.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.14	9.63	8.18	8.42	8.36	8.19	8.68	10.58	18.13	---	23.06	23.43
10	14.94	9.42	8.07	8.42	8.30	8.08	9.63	10.92	---	---	22.06	23.31
15	13.05	8.81	8.22	8.43	8.19	8.02	11.50	15.35	---	---	22.38	21.28
20	12.02	8.58	8.33	8.40	8.24	8.13	10.42	15.46	---	24.18	23.19	20.62
25	11.30	8.28	8.32	8.46	8.22	8.26	9.70	17.68	---	23.81	23.25	20.40
EOM	10.24	8.19	8.47	8.23	8.17	8.28	9.87	17.90	---	24.10	23.17	20.39

WASHINGTON COUNTY

370231113320301. LOCAL NUMBER, (C-43-15)16dac-1.
LOCATION.--Lat 37°02'31", long 113°32'03", Hydrologic Unit 15010009.
Owner: Kent Bentley.
AQUIFER.--Unconsolidated alluvium.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 14 in., depth unknown.
DATUM.--Land-surface datum is 2,678.00 ft above mean sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.
REMARKS.--Records good.
PERIOD OF RECORD.--September 1985 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 41.75 ft below land-surface datum, Apr. 18, 1987; lowest, 43.34 ft below land-surface datum, Oct. 24, 25, 1987.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	43.13	43.06	42.87	42.74	42.72	42.49	42.31	42.00	41.94	42.12	42.31	42.23
10	43.22	43.07	42.92	42.75	42.64	42.41	42.26	42.12	42.02	42.11	42.15	42.20
15	43.24	43.03	42.92	42.61	42.53	42.27	42.25	42.04	42.08	42.22	42.14	42.29
20	43.26	42.90	42.97	42.82	42.61	42.36	42.15	42.07	42.12	42.32	42.19	42.24
25	43.34	42.89	42.86	42.76	42.51	42.35	42.19	42.02	42.11	42.38	42.26	42.40
EOM	43.17	42.98	42.90	42.59	42.45	42.28	41.96	42.07	42.04	42.39	42.25	42.37

WEBER COUNTY

411544111461001. LOCAL NUMBER, (A-6-2)18bad-1.
LOCATION.--Lat 41°15'44", long 111°46'10", Hydrologic Unit 16020102.
Owner: U.S. Bureau of Reclamation.
AQUIFER.--Unconsolidated alluvium.
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 8 in., depth 155 ft, perforated 105-115 ft, 125-145 ft.
DATUM.--Land-surface datum is 4,924 ft above mean sea level. Measuring point: Top of casing, 2.00 ft above land-surface datum.
REMARKS.--Records good.
PERIOD OF RECORD.--January 1956 to March 1966, October 1968 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.93 ft below land-surface datum, June 5, 1985; lowest, 34.96 ft below land-surface datum, Nov. 30, 1956.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.93	25.23	25.30	25.01	24.35	23.40	23.55	22.19	21.46	23.78	26.24	27.99
10	28.04	25.54	25.09	24.89	24.25	23.90	23.74	21.83	21.42	24.93	24.79	28.05
15	28.00	25.00	25.01	23.92	24.14	23.12	24.47	22.43	20.91	25.34	26.69	26.52
20	26.26	25.42	25.02	23.81	24.16	24.51	23.59	21.30	22.72	25.63	27.75	28.54
25	26.11	25.48	24.19	24.48	24.13	24.54	22.19	22.37	23.93	26.18	28.21	28.54
EOM	26.15	25.47	24.65	24.36	24.01	22.95	22.52	21.46	24.21	26.49	28.46	29.45

GROUND-WATER LEVELS
WEBER COUNTY--Continued

411348112013601. LOCAL NUMBER, (B-6-2)26ada-1.

LOCATION.--Lat 41°13'48", long 112°01'36", Hydrologic Unit 16020102.

Owner: Amalgamated Sugar Company.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 16 in., depth 595 ft, cased to 400 ft.

DATUM.--Land-surface datum is 4,275 ft above mean sea level. Measuring point: Top of casing, 0.10 ft below land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--August 1935 to December 1950, January 1953 to October 1961, February 1963 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.50 ft above land-surface datum, Mar. 11, 1937; lowest, 15.22 ft below land-surface datum, Sept. 19, 1988.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	e7.70	7.09	6.87	6.13	5.78	5.60	5.58	7.18	8.31	10.57	13.12	e14.62
10	7.72	6.95	6.62	6.01	5.71	5.53	6.08	7.33	8.54	11.12	13.33	e14.87
15	7.50	6.63	6.43	5.90	5.65	5.48	6.51	7.49	8.82	11.57	13.51	e15.12
20	7.45	6.65	6.63	5.89	5.67	5.53	6.84	7.66	9.11	12.03	13.75	15.18
25	7.37	6.70	6.45	5.87	5.64	5.53	6.92	7.86	9.47	12.42	e14.07	15.03
EOM	7.22	6.76	6.31	5.73	5.60	5.49	7.05	8.08	10.03	12.79	e14.37	14.85

e Estimated.

QUALITY OF GROUND WATER
 WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

STATION NUMBER	LOCAL IDENTIFIER	GEOLOGIC UNIT	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)
BEAVER COUNTY											
381516112422201	(C-29- 8)25cac- 1	100VLFL	250	06-21-88	310	-	20.0	98	0	30	5.6
381714113003401	(C-29-10)18daa- 1	100VLFL	298	06-28-88	365	7.3	15.5	160	38	47	10
381901113014101	(C-29-11) 1add- 1	100VLFL	64	06-21-88	1270	7.2	16.5	510	220	150	32
381055113152701	(C-30-13)25abb- 1		74	03-02-88	1330	-	12.0	--	--	--	--
BOX ELDER COUNTY											
412214112023301	(B- 7- 2) 2cba- 5	100VLFL	342	08-31-88	420	7.6	13.0	--	--	--	--
412405112022501	(B- 8- 2)26bcd- 1	100VLFL	118	08-31-88	470	7.7	13.0	--	--	--	--
413545113544901	(B-10-18) 9dca- 1		526	06-30-88	1100	-	10.5	--	--	--	--
413452113543701	(B-10-18)21aab- 1	100VLFL	62	06-30-88	1240	-	10.5	--	--	--	--
413358113543801	(B-10-18)28aab- 1	100VLFL	250	06-30-88	1240	-	10.0	--	--	--	--
413300113543001	(B-10-18)33aaa- 1		84	06-30-88	3230	7.1	11.5	1400	1000	390	98
413306113543801	(B-10-18)33aba- 1	100VLFL	92	06-30-88	1670	-	10.0	--	--	--	--
413240113543801	(B-10-18)33adc- 1	100VLFL	94	06-30-88	1970	-	13.0	--	--	--	--
414551112170101	(B-12- 4)22aac- 1		680	06-27-88	1240	-	17.0	--	--	--	--
414552112161001	(B-12- 4)23bad- 1		665	06-27-88	1290	-	17.0	--	--	--	--
414405112165701	(B-12- 4)34adb- 1		333	06-27-88	1890	-	16.5	--	--	--	--
414339112173401	(B-12- 4)34cca- 1	100VLFL	292	06-27-88	1820	7.3	16.5	550	370	120	60
414406112163601	(B-12- 4)35bbc- 1	100VLFL	668	06-27-88	1460	-	17.0	--	--	--	--
414745113063901	(B-12-11) 4bcc- 1	100VLFL	230	07-01-88	3080	-	19.0	840	670	180	95
414813113075401	(B-12-11) 5bbb- 1	100VLFL	245	07-01-88	1750	-	14.0	--	--	--	--
414747113073701	(B-12-11) 5bdc- 1		190	07-01-88	2860	7.2	13.5	--	--	--	--
414710113071601	(B-12-11) 8abb- 1		275	07-01-88	2490	-	14.0	980	810	280	68
414721113072601	(B-12-11) 8baa- 1	100VLFL	320	07-01-88	2830	-	12.5	--	--	--	--
415833112145001	(B-14- 4) 1dad- 1		212	06-28-88	730	7.2	11.0	260	2	81	14
415800112462601	(B-14- 8) 5cdd- 1		180	06-28-88	2070	-	16.0	--	--	--	--
415828112472601	(B-14- 8) 6acd- 1		460	06-28-88	1560	-	19.0	--	--	--	--
415825112470501	(B-14- 8) 6add- 1		460	06-28-88	2200	-	19.0	--	--	--	--
415844112525201	(B-14- 9) 4bbb- 2	100VLFL	375	06-28-88	2980	-	23.0	--	--	--	--
415847112532901	(B-14- 9) 5baa- 1	100VLFL	405	06-29-88	1160	-	19.0	--	--	--	--
415847112540401	(B-14- 9) 5bbb- 1	100VLFL	300	06-29-88	770	7.3	15.5	290	160	85	20
415754112551301	(B-14- 9) 7bbb- 1		608	06-29-88	850	7.5	17.5	290	150	80	22
415637112513401	(B-14- 9)16daa- 1		400	06-28-88	2330	-	12.5	--	--	--	--
415635112533001	(B-14- 9)17caa- 1		608	06-29-88	2850	-	18.0	--	--	--	--
415637112544101	(B-14- 9)18bdd- 1		400	06-29-88	1920	-	16.5	--	--	--	--
415608112551201	(B-14- 9)19bbb- 1		350	06-29-88	1200	-	15.0	--	--	--	--
415723112562201	(B-14-10)12cbb- 1		395	06-29-88	1020	-	17.0	--	--	--	--
415956112525201	(B-15- 9)28cbc- 1	100VLFL	400	06-28-88	6630	7.0	24.5	2400	2300	650	180
415927112543801	(B-15- 9)31abc- 1	100VLFL	407	06-29-88	640	-	16.0	--	--	--	--
415927112525201	(B-15- 9)33bbc- 1	100VLFL	410	06-28-88	6830	-	23.5	--	--	--	--
415908112484801	(B-15- 9)36cad- 1		255	06-28-88	1450	-	19.0	--	--	--	--
415939112562201	(B-15-10)36bbb- 1	100VLFL	613	06-29-88	475	7.3	16.0	180	43	53	12
CACHE COUNTY											
414216111511001	(A-11- 1) 8dda- 3	100VLFL	85	09-27-88	520	7.6	10.5	--	--	--	--
415020111520401	(A-13- 1)29bcd- 1	100VLFL	173	09-26-88	470	7.9	14.0	--	--	--	--
DAVIS COUNTY											
405535111525101	(A- 2- 1) 7aba- 4	100VLFL	450	09-02-88	260	7.8	15.0	72	0	15	8.4
405019111560001	(B- 1- 1)10aac- 1		231	09-06-88	2900	-	16.5	--	--	--	--
405258111544101	(B- 2- 1)26aad- 3	100VLFL	--	09-02-88	920	-	12.5	--	--	--	--
405229111551301	(B- 2- 1)26cda- 5		305	09-06-88	1160	-	18.0	--	--	--	--
410340112030001	(B- 4- 2)27aba- 1		304	09-01-88	640	7.8	16.0	--	--	--	--
410830111584001	(B- 5- 1)29bdc- 1		627	08-06-88	610	7.4	12.0	--	--	--	--
410835111591501	(B- 5- 1)30ada- 1		900	09-06-88	580	7.5	13.0	--	--	--	--
410850112035501	(B- 5- 2)21ddd- 1		110	09-01-88	1100	-	13.0	--	--	--	--
410759112073601	(B- 5- 3)25dcd- 1	100VLFL	520	09-06-88	370	-	16.0	--	--	--	--

GEOLOGICAL UNIT (AQUIFER):

100VLFL - VALLEY FILL OR BASIN FILL, CENOZOIC AGE.
 110ALVM - HOLOCENE ALLUVIUM, HOLOCENE AGE.
 112PLCN - PLEISTOCENE SERIES, PLEISTOCENE AGE.
 112PVNT - PAVANT FLOW, PLEISTOCENE AGE.

QUALITY OF GROUND WATER
WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

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DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	ALKA- LINITY (CACO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS (P) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED BORON (B) (UG/L)
BEAVER COUNTY												
21	8.2	100	40	6.0	0.30	71	244	0.35	<0.01	15	63	60
18	3.9	121	41	28	0.60	33	259	1.20	0.04	<3	2	40
46	8.8	284	110	160	0.50	39	734	4.00	0.04	<3	6	90
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BOX ELDER COUNTY												
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290	11	349	620	660	0.30	46	2330	1.80	0.05	20	10	620
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160	4.4	179	120	440	0.10	21	1040	2.60	0.01	11	2	80
320	15	174	47	870	0.50	9.2	1640	0.65	0.02	20	<10	240
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110	9.4	169	68	680	0.30	24	1360	3.40	0.01	10	<10	80
64	1.8	258	30	19	0.30	38	517	26.0	0.05	39	<1	90
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32	9.5	137	36	150	0.30	54	480	2.50	0.02	27	1	40
42	8.0	139	27	170	0.90	61	497	0.69	0.02	12	2	50
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720	40	106	55	2200	0.30	25	3940	2.10	0.02	40	20	110
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18	8.2	139	20	56	0.30	59	313	0.82	0.02	9	<1	30
CACHE COUNTY												
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DAVIS COUNTY												
27	1.0	95	18	11	0.10	17	155	<0.10	--	55	49	20
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GEOLOGICAL UNIT (AQUIFER)--CONTINUED

122BRHD - BRIAN HEAD FORMATION, MIOCENE AGE.
220JRSC - JURASSIC SYSTEM, JURASSIC AGE.
220NVJO - NAVAJO SANDSTONE OF GLEN CANYON GROUP, JURASSIC-TRIASSIC AGE.

QUALITY OF GROUND WATER
WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

STATION NUMBER	LOCAL IDENTIFIER	GEOLOGIC UNIT	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)
IRON COUNTY											
375440112520001	(C-33- 8)20cdd- 3		125	03-03-88	410	-	12.0	--	--	--	--
375257112483501	(C-33- 8)31ccc- 1		450	06-08-88	520	7.9	15.0	--	--	--	--
375320112510001	(C-33- 9)35acd- 2	100VLFL	500	08-26-88	485	7.3	13.5	230	22	47	27
375151112525002	(C-34- 9) 9bbd- 2		324	06-08-88	650	7.5	12.0	--	--	--	--
374834113384301	(C-34-16)28dcc- 2	100VLFL	148	06-06-88	1160	7.5	12.0	460	330	140	27
374753113464601	(C-34-17)32cca- 1	100VLFL	306	06-06-88	530	7.7	21.0	180	21	57	9.0
374619113053101	(C-35-11) 9dba- 1		--	06-08-88	560	7.8	14.0	--	--	--	--
374550113040601	(C-35-11)11ccc- 1		263	06-08-88	900	7.9	14.0	--	--	--	--
374304113052901	(C-35-11)33aac- 1		136	07-14-88	1120	7.5	12.0	670	420	160	66
374649113305801	(C-35-15) 3dcc- 3		316	06-06-88	1730	7.6	14.0	690	560	160	71
374623113381301	(C-35-16) 9add- 1		150	06-06-88	900	7.5	12.0	--	--	--	--
374412113384503	(C-35-16)21dcc- 3	100VLFL	300	06-06-88	760	7.5	13.5	330	120	100	19
374227113394101	(C-35-16)32dcd- 2	100VLFL	140	06-06-88	850	7.4	16.0	360	150	110	21
373915113125601	(C-36-12)21cbb- 1	100VLFL	228	06-08-88	340	8.0	14.0	170	40	43	14
374209113322203	(C-36-15) 4bad- 3	100VLFL	320	06-07-88	780	8.2	19.5	130	0	40	6.9
373854113411501	(C-36-16)19abb- 1	100VLFL	352	06-07-88	510	7.6	12.0	190	20	58	11
373656113415201	(C-36-17)36aad- 1	100VLFL	363	07-14-88	450	7.4	11.0	--	--	--	--
JUAB COUNTY											
394545111531001	(C-12- 1)24baa- 1	100VLFL	66	06-22-88	125	-	12.0	--	--	--	--
394215111530501	(C-13- 1) 1cdd- 1		150	06-22-88	990	6.8	11.5	--	--	--	--
393313111524001	(C-14- 1)36aca- 1	100VLFL	--	06-24-88	1230	-	11.5	--	--	--	--
393231111550201	(C-15- 1) 3abb- 2	100VLFL	493	06-24-88	1250	-	13.5	--	--	--	--
394518111515801	(D-12- 1)19dbb- 1	100VLFL	248	06-22-88	1230	-	12.5	--	--	--	--
394225111495701	(D-13- 1) 4cca- 1	100VLFL	375	06-23-88	1470	6.9	--	480	120	130	38
394224111502601	(D-13- 1) 5ddb- 2	100VLFL	352	06-23-88	1550	6.7	11.0	510	120	140	39
394137111515001	(D-13- 1) 7dbc- 1		210	06-23-88	1430	7.0	11.5	470	140	110	48
393312111521001	(D-14- 1)31bcb- 1	100VLFL	--	06-23-88	1170	-	12.0	--	--	--	--
KANE COUNTY											
371034112230401	(C-42- 5)11bdb- 1		160	08-09-88	415	7.7	13.5	190	71	48	18
370050112274501	(C-44- 5) 6cbb- 1		--	08-09-88	4420	7.7	17.5	--	--	--	--
MILLARD COUNTY											
392939112224101	(C-15- 5)26baa- 1		1150	09-27-88	800	-	18.5	260	110	51	31
391234112233701	(C-18- 5)34adb- 3		512	06-27-88	2450	7.1	16.0	890	610	190	100
391235112241301	(C-18- 5)34bca- 2		523	06-29-88	1370	-	17.0	--	--	--	--
391710112334701	(C-18- 6) 6aba- 2	100VLFL	812	09-21-88	355	-	16.0	--	--	--	--
390930112195801	(C-19- 4)17ccb- 1		357	06-29-88	560	-	16.0	--	--	--	--
390758112194601	(C-19- 4)29bcd- 1		390	06-27-88	890	7.4	15.0	380	150	82	43
391043112220001	(C-19- 5)12abc- 1		357	06-29-88	590	-	16.0	--	--	--	--
390628112201401	(C-20- 4) 6aca- 1	100VLFL	506	06-29-88	1450	7.1	13.0	560	290	130	58
390116112255901	(C-21- 5) 5abd- 1	100VLFL	206	06-27-88	2250	-	17.0	--	--	--	--
390044112261402	(C-21- 5) 5dbc- 2	100VLFL	565	06-27-88	890	-	20.0	--	--	--	--
390027112264001	(C-21- 5) 6ccc- 1	100VLFL	110	06-27-88	1150	-	13.0	--	--	--	--
385939112272303	(C-21- 5) 7cdd- 3		--	06-27-88	1210	7.4	13.0	--	--	--	--
390005112262301	(C-21- 5) 8bdc- 2	100VLFL	407	06-27-88	840	7.5	18.0	360	180	83	37
390002112261401	(C-21- 5) 8dbb- 2	100VLFL	400	06-27-88	3550	7.4	18.0	--	--	--	--
385911112270501	(C-21- 5)18dba- 1		104	06-27-88	930	-	13.0	--	--	--	--
385806112254001	(C-21- 5)20dad- 1		293	06-29-88	670	-	15.0	--	--	--	--
385752112243201	(C-21- 5)28aaa- 1		510	06-28-88	650	-	15.5	--	--	--	--
385714112264701	(C-21- 5)29cbc- 1		900	06-28-88	2680	7.1	19.5	1100	830	280	98
385715112271201	(C-21- 5)30dbc- 3	100VLFL	773	06-28-88	2000	7.5	20.0	660	400	160	63
385656112263101	(C-21- 5)32bba- 1		600	06-28-88	2290	-	18.0	--	--	--	--
385650112243601	(C-21- 5)33aad- 1		352	06-29-88	690	-	14.5	--	--	--	--
385335112262101	(C-22- 5)17cdd- 1		260	06-28-88	760	-	14.0	--	--	--	--
385336112260801	(C-22- 5)17dcd- 1	100VLFL	350	06-28-88	840	-	14.0	--	--	--	--
385311112261101	(C-22- 5)20acd- 2	100VLFL	255	06-28-88	830	-	14.0	--	--	--	--

GEOLOGICAL UNIT (AQUIFER):

100VLFL - VALLEY FILL OR BASIN FILL, CENOZOIC AGE.
 110ALVM - HOLOCENE ALLUVIUM, HOLOCENE AGE.
 112PLCM - PLEISTOCENE SERIES, PLEISTOCENE AGE.
 112PVNT - PAVANT FLOW, PLEISTOCENE AGE.

QUALITY OF GROUND WATER
WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

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DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	ALKA- LINITY (CACO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS (P) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED BORON (B) (UG/L)
IRON COUNTY												
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17	2.4	207	27	17	0.20	24	297	2.60	0.01	<3	<1	30
41	11	131	110	220	0.50	62	699	2.10	0.01	11	<1	110
37	10	159	80	25	0.50	71	389	0.94	0.01	8	<1	180
15	3.0	254	390	15	0.20	16	846	6.50	0.02	<3	<1	50
100	8.1	134	460	230	0.40	58	1180	1.60	0.03	17	9	340
21	9.5	206	47	79	0.20	48	465	4.10	0.03	11	<1	30
22	11	216	47	110	0.30	46	512	3.40	0.04	11	<1	40
13	6.1	125	59	11	0.30	45	268	0.27	0.02	22	7	40
120	7.6	171	140	50	1.7	56	534	2.00	0.02	35	1	300
22	8.2	170	18	28	0.40	36	297	3.10	0.04	17	2	40
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JUAB COUNTY												
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130	3.9	361	110	180	0.20	25	860	6.10	0.03	10	<1	90
150	3.7	393	110	200	0.20	26	930	5.80	0.03	11	<1	80
130	3.1	328	92	200	0.20	27	835	6.40	0.03	11	1	70
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KANE COUNTY												
10	4.8	123	87	9.4	0.20	11	271	1.90	0.03	--	<1	30
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MILLARD COUNTY												
61	27	148	100	92	0.10	26	481	0.91	0.01	<3	<1	100
150	3.4	279	240	480	0.30	23	1520	37.0	0.01	20	<10	180
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29	1.4	232	27	110	0.30	19	495	10.0	<0.01	12	<1	40
76	3.0	277	200	160	0.40	24	849	7.20	0.01	13	<1	120
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59	1.7	181	100	95	0.30	21	514	1.90	0.01	6	<1	120
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230	11	277	640	390	0.50	19	1840	1.30	<0.01	20	<10	890
160	10	256	400	270	0.40	19	1240	1.10	0.01	14	<1	590
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GEOLOGICAL UNIT (AQUIFER)--CONTINUED

122BRHD - BRIAN HEAD FORMATION, MIOCENE AGE.
220JRSC - JURASSIC SYSTEM, JURASSIC AGE.
220NVJO - NAVAJO SANDSTONE OF GLEN CANYON GROUP, JURASSIC-TRIASSIC AGE.

QUALITY OF GROUND WATER
WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

STATION NUMBER	LOCAL IDENTIFIER	GEOLOGIC UNIT	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)
MILLARD COUNTY--Continued											
385308112250302	(C-22- 5)21acd- 2		340	06-28-88	1010	-	14.0	--	--	--	--
385303112234801	(C-22- 5)22adc- 2	100VLFL	260	06-28-88	1330	7.2	15.0	--	--	--	--
385135112250301	(C-22- 5)33abd- 1	100VLFL	375	06-28-88	940	7.5	13.0	340	160	100	21
385130112244201	(C-22- 5)33ada- 1		256	06-28-88	520	-	13.0	--	--	--	--
PIUTE COUNTY											
381440111584001	(C-29- 2)35bad- 1	122BRHD	197	07-27-88	395	7.6	15.0	200	15	54	15
381003112010301	(C-30- 2)28bdc- 1		135	07-27-88	410	7.7	13.0	--	--	--	--
SALT LAKE COUNTY											
405047112014301	(B- 1- 2) 2dac- 1	100VLFL	440	09-19-88	850	8.0	26.5	46	0	12	3.9
404659112005601	(B- 1- 2)36baa- 1	100VLFL	464	09-19-88	6300	-	26.5	--	--	--	--
404306112031201	(C- 1- 2)22bdd- 4	100VLFL	35	09-30-88	1980	-	13.0	--	0	--	--
403408111543201	(C- 3- 1)12ccb- 1	100VLFL	118	09-27-88	920	7.6	20.0	280	95	61	32
402721111555801	(C- 4- 1)23dab- 1	100VLFL	262	09-30-88	1130	7.2	13.5	370	150	77	42
404506111523301	(D- 1- 1) 7abd- 6	100VLFL	130	09-20-88	1220	7.0	12.0	540	290	130	53
403742111503201	(D- 2- 1)21dbc- 1	100VLFL	740	06-28-88	240	7.7	11.5	110	16	28	9.7
SAN JUAN COUNTY											
371716109325501	(D-40-22)30bbb- 1	220JRSC	825	09-07-88	800	8.8	19.5	--	--	--	--
371621109211001	(D-40-23)27baa- 1	220JRSC	672	09-07-88	3000	7.6	19.0	--	--	--	--
SANPETE COUNTY											
393630111383301	(D-14- 2)13aaa- 1	100VLFL	71	08-29-88	500	-	12.0	--	--	--	--
393311111371701	(D-14- 3)31dad- 1	100VLFL	45	08-29-88	470	-	13.0	--	--	--	--
393123111364801	(D-15- 3) 8cda- 3	100VLFL	75	08-29-88	500	-	14.0	--	--	--	--
392740111345301	(D-16- 3) 4aaa- 1	100VLFL	160	09-01-88	1120	-	11.0	--	--	--	--
392451111355801	(D-16- 3)21bbc- 1	100VLFL	152	09-01-88	560	-	11.5	--	--	--	--
392421111353601	(D-16- 3)21cdb- 1	100VLFL	98	09-01-88	1210	7.4	11.5	510	180	81	75
392214111390301	(D-17- 2) 1bca- 2	100VLFL	225	08-30-88	475	-	13.0	--	--	--	--
392033111394501	(D-17- 2)14baa- 1	100VLFL	337	08-31-88	490	-	12.0	--	--	--	--
392153111375201	(D-17- 3) 6cab- 1	100VLFL	160	08-30-88	720	-	11.0	--	--	--	--
392129111364001	(D-17- 3) 8bab- 1	100VLFL	186	08-30-88	660	-	10.0	--	--	--	--
391816111371901	(D-17- 3)30dbd- 1	100VLFL	103	08-30-88	600	-	12.0	--	--	--	--
391648111401301	(D-18- 2)11bcc- 2	100VLFL	62	07-28-88	750	7.5	11.0	360	110	62	51
SEVIER COUNTY											
385910111512101	(C-21- 1)13abd- 1		291	09-16-88	760	8.1	18.0	--	--	--	--
384800112002001	(C-23- 2)15dcb- 4	100VLFL	75	09-15-88	960	7.6	11.0	--	--	--	--
384702112031001	(C-23- 2)19dab- 1	100VLFL	75	09-15-88	550	7.6	15.0	--	--	--	--
384450112034001	(C-24- 2) 6abc- 1	100VLFL	308	09-14-88	1440	7.2	11.0	710	470	180	63
383140111522001	(C-26- 1)23ddb- 1	100VLFL	200	07-27-88	175	8.2	13.0	75	0	24	3.6
TOOELE COUNTY											
403802112301201	(C- 2- 6)23cbb- 1	100VLFL	210	06-22-88	1120	7.5	20.0	130	0	29	13
UINTAH COUNTY											
403116109360601	(D- 3-21)30dcd- 1	220NVJO	138	03-08-88	570	-	--	16	0	3.9	1.5
UTAH COUNTY											
401730111594501	(C- 6- 1)18cdd- 1		265	06-22-88	660	7.6	27.0	250	45	54	27
401607112023401	(C- 6- 2)26cbb- 1	100VLFL	505	06-22-88	500	-	11.5	--	--	--	--
401610112053101	(C- 6- 2)29bdd- 1	100VLFL	150	06-22-88	430	7.6	10.5	210	19	53	19
400315111572001	(C- 9- 1) 4ccc- 1	100VLFL	--	06-15-88	1390	7.5	14.0	--	--	--	--
402145111531101	(D- 5- 1)19ccc- 1	111ALVM	150	09-06-88	220	8.3	17.5	--	--	--	--
402103111461601	(D- 5- 2)30ccb- 2		225	09-06-88	810	7.3	11.0	350	110	77	39

GEOLOGICAL UNIT (AQUIFER):

100VLFL - VALLEY FILL OR BASIN FILL, CENOZOIC AGE.
 110ALVM - HOLOCENE ALLUVIUM, HOLOCENE AGE.
 112PLCN - PLEISTOCENE SERIES, PLEISTOCENE AGE.
 112PVNT - PAVANT FLOW, PLEISTOCENE AGE.

QUALITY OF GROUND WATER
WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

357

DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	ALKA- LINITY (CACO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS (P) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED BORON (B) (UG/L)
MILLARD COUNTY--Continued												
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46	1.8	172	38	150	0.30	14	491	3.90	0.02	4	<1	70
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PIUTE COUNTY												
14	8.5	182	19	22	0.20	45	290	0.63	--	52	3	30
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SALT LAKE COUNTY												
160	3.8	214	2.4	150	1.8	30	493	<0.10	0.03	60	25	340
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80	8.0	189	120	130	0.20	34	580	0.37	0.02	9	<1	140
100	9.1	215	140	160	0.50	28	695	2.20	0.06	21	<1	170
42	2.6	255	170	130	0.20	19	725	5.70	0.04	39	20	100
8.4	1.4	94	24	7.6	0.40	11	151	0.86	0.01	7	<1	10
SAN JUAN COUNTY												
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SANPETE COUNTY												
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68	2.4	267	200	78	0.30	21	739	3.40	--	--	--	150
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32	1.5	254	83	13	0.30	11	424	4.00	--	--	--	70
SEVIER COUNTY												
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67	4.8	241	490	23	0.20	31	1010	2.30	<0.01	4	11	220
9.2	4.5	81	5.1	10	0.20	41	148	0.32	--	9	<1	30
TOOELE COUNTY												
170	13	156	32	230	0.50	54	638	0.63	0.02	16	1	90
UINTAH COUNTY												
130	3.9	231	61	2.4	0.70	7.0	349	<0.10	<0.01	22	7	170
UTAH COUNTY												
46	3.7	201	65	60	0.70	26	405	0.48	0.03	5	<1	100
11	2.5	192	18	16	0.30	11	250	0.89	0.07	10	<1	20
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35	1.7	241	150	22	0.20	15	494	2.20	0.01	11	2	60

GEOLOGICAL UNIT (AQUIFER)--CONTINUED

122BRHD - BRIAN HEAD FORMATION, MIOCENE AGE.
220JRSC - JURASSIC SYSTEM, JURASSIC AGE.
220NVJO - NAVAJO SANDSTONE OF GLEN CANYON GROUP, JURASSIC-TRIASSIC AGE.

QUALITY OF GROUND WATER
WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

STATION NUMBER	LOCAL IDENT- I- FIER	GEO- LOGIC UNIT	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)
UTAH COUNTY--Continued											
401414111435301	(D- 7- 2) 4cbb- 2		144	09-06-88	580	7.5	12.5	250	19	59	24
401021111362701	(D- 7- 3) 33baa- 6	100VLFL	138	06-15-88	550	-	13.0	--	--	--	--
400941111352701	(D- 7- 3) 34cdb- 1	112PLCN	445	06-15-88	580	7.7	13.0	290	47	69	29
WASHINGTON COUNTY											
373456113423501	(C-37-17) 12bdc- 2		290	06-06-88	540	7.3	12.5	220	0	67	12
371305113470401	(C-41-17) 17cba- 1		626	06-07-88	435	7.6	21.0	220	25	65	14
370915113232302	(C-42-14) 11aca- 2		--	07-15-88	1300	-	22.0	--	--	--	--
370515113310302	(C-42-15) 34dba- 2		--	07-15-88	5100	-	17.0	--	--	--	--
370036113282801	(C-43-14) 31bbb- 1		--	06-07-88	3390	7.5	19.0	2000	1900	550	150
WAYNE COUNTY											
382717111365601	(D-27- 3) 19aaa- 1		285	07-28-88	1600	7.4	11.0	900	800	270	56
381902111321101	(D-29- 3) 1cab- 1	110ALVM	433	07-28-88	180	8.3	15.0	83	14	22	6.9
WEBER COUNTY											
411153112064602	(B- 5- 2) 6bdd- 3	100VLFL	609	09-01-88	365	8.1	13.5	--	--	--	--
411153112064601	(B- 5- 2) 6bdd- 4	100VLFL	303	09-01-88	450	8.0	16.5	--	--	--	--
411702112071701	(B- 6- 2) 6cbc- 2	100VLFL	512	08-31-88	2070	-	16.5	--	--	--	--
411708112105701	(B- 6- 3) 4dab- 1		540	08-31-88	840	-	20.5	--	--	--	--
411523112082101	(B- 6- 3) 15cbc- 1	100VLFL	20	08-31-88	440	-	16.5	--	--	--	--
411830111581501	(B- 7- 1) 29ddc- 1		245	09-01-88	330	-	12.5	--	--	--	--
411807111580501	(B- 7- 1) 32ada- 4		60	09-01-88	315	-	13.0	--	--	--	--
412011112041401	(B- 7- 2) 16dcd- 2	100VLFL	1176	08-31-88	340	8.1	25.5	--	--	--	--
411940112050501	(B- 7- 2) 20daa- 1		150	08-31-88	1380	-	14.0	--	--	--	--
411821112034601	(B- 7- 2) 34bbb- 2	100VLFL	517	08-31-88	1780	7.7	19.0	--	--	--	--

GEOLOGICAL UNIT (AQUIFER):

100VLFL - VALLEY FILL OR BASIN FILL, CENOZOIC AGE.
 110ALVM - HOLOCENE ALLUVIUM, HOLOCENE AGE.
 112PLCN - PLEISTOCENE SERIES, PLEISTOCENE AGE.
 112PVNT - PAVANT FLOW, PLEISTOCENE AGE.

QUALITY OF GROUND WATER
WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

359

DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	ALKA- LINITY (CACO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS (P) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED BORON (B) (UG/L)
UTAH COUNTY--Continued												
30	3.4	227	65	29	0.20	18	365	<0.10	0.03	550	77	50
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17	3.2	245	54	15	0.30	13	354	1.40	0.02	24	<1	30
WASHINGTON COUNTY												
32	10	225	21	31	0.30	45	371	4.10	0.07	16	2	90
15	5.7	195	37	17	0.30	22	296	0.63	0.03	8	4	50
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130	14	92	2100	79	0.30	15	3130	7.90	<0.01	20	<10	600
WAYNE COUNTY												
31	9.4	108	790	16	0.10	29	1280	2.20	--	9	<1	80
8.8	6.0	69	28	8.3	0.20	45	168	0.27	--	27	<1	40
WEBER COUNTY												
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GEOLOGICAL UNIT (AQUIFER)--CONTINUED

122BRHD - BRIAN HEAD FORMATION, MIOCENE AGE.
220JRSC - JURASSIC SYSTEM, JURASSIC AGE.
220NVJO - NAVAJO SANDSTONE OF GLEN CANYON GROUP, JURASSIC-TRIASSIC AGE.

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI).

Multiply inch-pound units	By	To obtain SI units
<i>Length</i>		
inches (in)	2.54×10^1	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^0	kilometers (km)
<i>Area</i>		
acres	4.047×10^3	square meters (m ²)
	4.047×10^{-1}	square hectometers (hm ²)
	4.047×10^{-3}	square kilometers (km ²)
square miles (mi ²)	2.590×10^0	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785×10^0	liters (L)
	3.785×10^0	cubic decimeters (dm ³)
	3.785×10^{-3}	cubic meters (m ³)
million gallons	3.785×10^3	cubic meters (m ³)
	3.785×10^{-3}	cubic hectometers (hm ³)
cubic feet (ft ³)	2.832×10^1	cubic decimeters (dm ³)
	2.832×10^{-2}	cubic meters (m ³)
cfs-days	2.447×10^3	cubic meters (m ³)
	2.447×10^{-3}	cubic hectometers (hm ³)
acre-feet (acre-ft)	1.233×10^3	cubic meters (m ³)
	1.233×10^{-3}	cubic hectometers (hm ³)
	1.233×10^{-6}	cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	2.832×10^1	liters per second (L/s)
	2.832×10^1	cubic decimeters per second (dm ³ /s)
	2.832×10^{-2}	cubic meters per second (m ³ /s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm ³ /s)
	6.309×10^{-5}	cubic meters per second (m ³ /s)
million gallons per day	4.381×10^1	cubic decimeters per second (dm ³ /s)
	4.381×10^{-2}	cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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