

HYDROLOGIC DATA FROM NAVAL OIL SHALE RESERVES,
PARACHUTE CREEK BASIN, NORTHWESTERN
COLORADO, 1980-81

By Kenneth C. Galyean, D. Briane Adams, and Dannie L. Collins

U.S. GEOLOGICAL SURVEY

Open-File Report 83-858

Prepared in cooperation with the
U.S. DEPARTMENT OF ENERGY

Lakewood, Colorado
1985

UNITED STATES DEPARTMENT OF THE INTERIOR

WILLIAM P. CLARK, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information
write to:

District Chief
U.S. Geological Survey, MS 415
Box 25046, Denver Federal Center
Lakewood, CO 80225

Copies of this report can
be purchased from:

Open-File Services Section
Western Distribution Branch
U.S. Geological Survey, MS 306
Box 25425, Federal Center
Denver, CO 80225
Telephone: (303) 236-7476

CONTENTS

Abstract-----	Page 1
Introduction-----	1
Surface-water and water-quality data-----	4
Climate data-----	5
Selected references-----	5
Hydrologic data-----	9

ILLUSTRATIONS

	Page
Figure 1. Map showing location of Naval Oil Shale Reserves-----	2
2. Map showing location of hydrologic data-collection sites-----	3
3. Graphs showing average monthly runoff for water years 1980 and 1981 at the five streamflow-gaging stations-----	6
4. Graphs showing average monthly mean specific conductance at two streamflow-gaging stations in the Parachute Creek basin for water years 1980 and 1981-----	8

TABLES

	Page
Table 1. Hydrologic data collected at streamflow-gaging stations in water years 1980 and 1981-----	4
2. Surface-water discharge at Northwater Creek near Anvil Points for water years 1980 and 1981-----	11
3. Surface-water discharge at East Middle Fork Parachute Creek near Rio Blanco for water years 1980 and 1981-----	13
4. Surface-water discharge at East Fork Parachute Creek near Anvil Points for water years 1980 and 1981-----	15
5. Surface-water discharge at East Fork Parachute Creek near Rulison for water years 1980 and 1981-----	17
6. Surface-water discharge at Ben Good Creek near Rulison for water years 1980 and 1981-----	19
7. Water-quality data for Northwater Creek near Anvil Points-----	21
8. Water-quality data for East Middle Fork Parachute Creek near Rio Blanco-----	24
9. Water-quality data for East Fork Parachute Creek near Anvil Points-----	32
10. Water-quality data for East Fork Parachute Creek near Rulison-----	34
11. Water-quality data for Ben Good Creek near Rulison-----	40
12. Suspended-sediment data for East Middle Fork Parachute Creek near Rio Blanco-----	42
13. Suspended-sediment data for East Fork Parachute Creek near Rulison-----	46

CONTENTS

	Page
Table 14. Mean air temperature at JQS weather station for water years 1980 and 1981-----	50
15. Maximum air temperature at JQS weather station for water year 1981-----	52
16. Minimum air temperature at JQS weather station for water year 1981-----	53
17. Mean humidity at JQS weather station for water years 1980 and 1981-----	54
18. Maximum humidity at JQS weather station for water year 1981---	56
19. Minimum humidity at JQS weather station for water year 1981---	57
20. Solar radiation at JQS weather station for water years 1980 and 1981-----	58
21. Mean wind velocity at JQS weather station for water years 1980 and 1981-----	60
22. Wind direction at JQS weather station for water years 1980 and 1981-----	62
23. Precipitation data at East Middle Fork Parachute Creek precipitation gage for water years 1980 and 1981-----	64
24. Precipitation data at JQS precipitation gage for water years 1980 and 1981-----	66
25. Precipitation data at East Fork Parachute Creek precipitation gage for water years 1980 and 1981-----	68
26. JQS snow-course data for water years 1980 and 1981-----	70

METRIC CONVERSION FACTORS

<i>Multiply inch-pound unit</i>	<i>By</i>	<i>To obtain metric unit</i>
acre-foot	0.001233	cubic hectometer
cubic foot per second	0.02832	cubic meter per second
foot	0.3048	meter
gallon per minute	0.06308	liter per second
inch	0.02540	meter
mile	1.609	kilometer
mile per hour	1.609	kilometer per hour
square mile	2.590	square kilometer
ton (short)	0.9072	metric ton
ton per day	0.9072	metric ton per day

To convert degrees Celsius (°C) to degrees Fahrenheit (°F) use the following formula: $(^{\circ}\text{C} \times 9/5) + 32 = ^{\circ}\text{F}$.

National Geodetic Vertical Datum of 1929 (NGVD of 1929): A geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called mean sea level. NGVD of 1929 is referred to as sea level in this report.

HYDROLOGIC DATA FROM NAVAL OIL SHALE RESERVES,
PARACHUTE CREEK BASIN,
NORTHWESTERN COLORADO, 1980-81

By Kenneth C. Galyean, D. Briane Adams, and Dannie L. Collins

ABSTRACT

This report summarizes 2 years (water years 1980 and 1981) of additional data collected by the U.S. Geological Survey for the U.S. Department of Energy, Naval Petroleum and Oil Shale Reserves, in the Parachute Creek drainage basin of northwestern Colorado. The data are supplemental to those reported by Patt and others (1982). Data from five surface-water gages, two automatic sediment samplers, and two water-quality monitors are presented. Climate data include maximum, minimum, and average temperature and relative humidity, average wind speed and wind direction, and total daily solar radiation. Daily total precipitation is reported for three stations, and snow-course data are reported for one site.

INTRODUCTION

The Naval Oil Shale Reserves (NOSR), located in Garfield County, northwestern Colorado, is an area of potential oil-resource development (fig. 1). This report makes available the hydrologic data collected from October 1979 to October 1981 by the U.S. Geological Survey in cooperation with the U.S. Department of Energy. This report is a supplement to the report by Patt and others (1982).

Five streamflow-gaging stations, three precipitation stations, one climatic station, and one snow-course station were established to monitor and collect hydrologic data on the NOSR (fig. 2). Types and frequency of data collected in water years 1980 and 1981 at the five streamflow-gaging stations installed in the NOSR are shown in table 1.

Data collected on the NOSR are presented in the Hydrologic Data section of this report. For ease of reference, the data collected at the operating streamflow-gaging stations are presented first and include daily discharges (tables 2-6), water-quality analyses (tables 7-11), and suspended-sediment discharge rates (tables 12 and 13). The last part of the Hydrologic Data section contains climate data (tables 14-26).

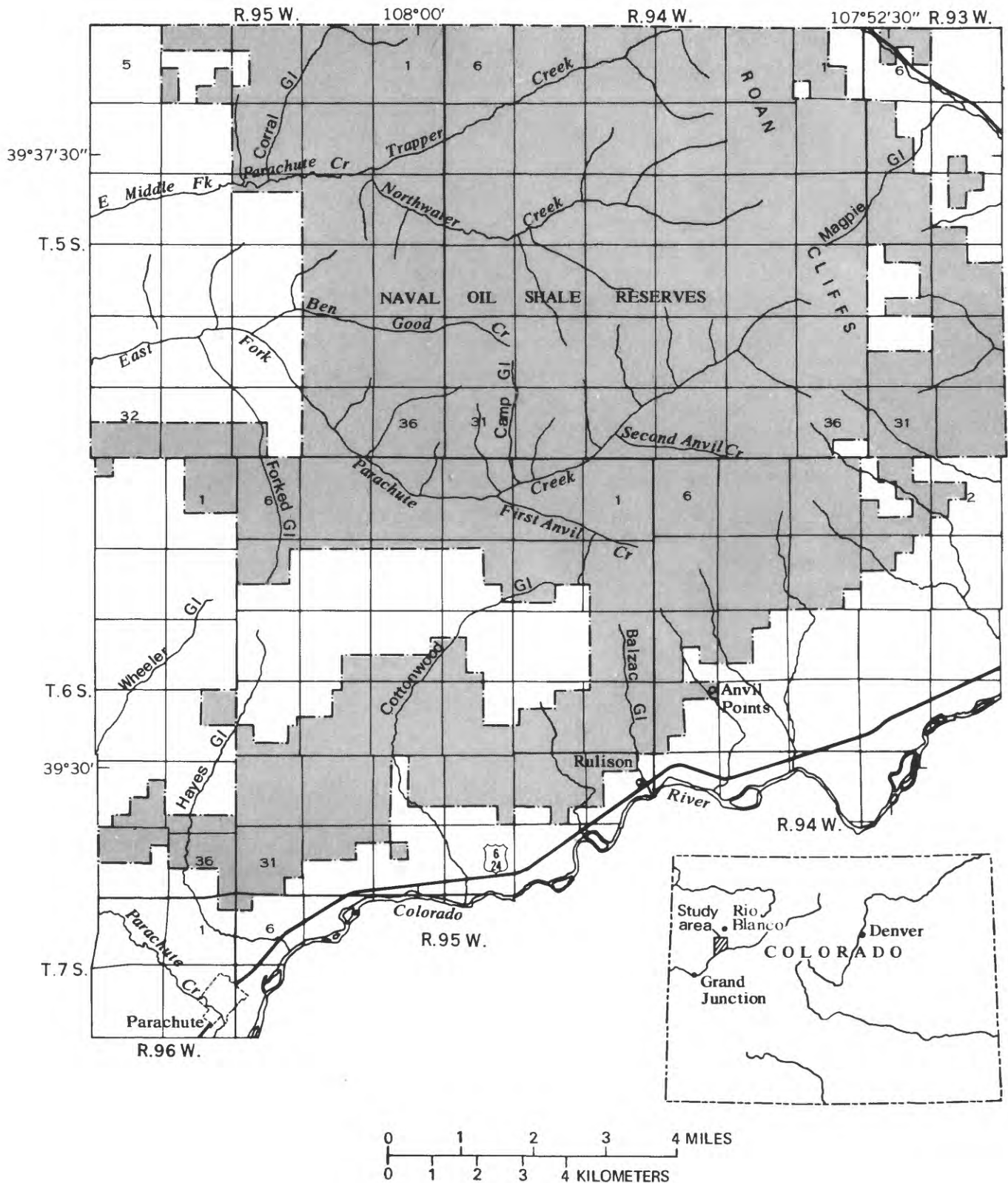


Figure 1.--Location of Naval Oil Shale Reserves.

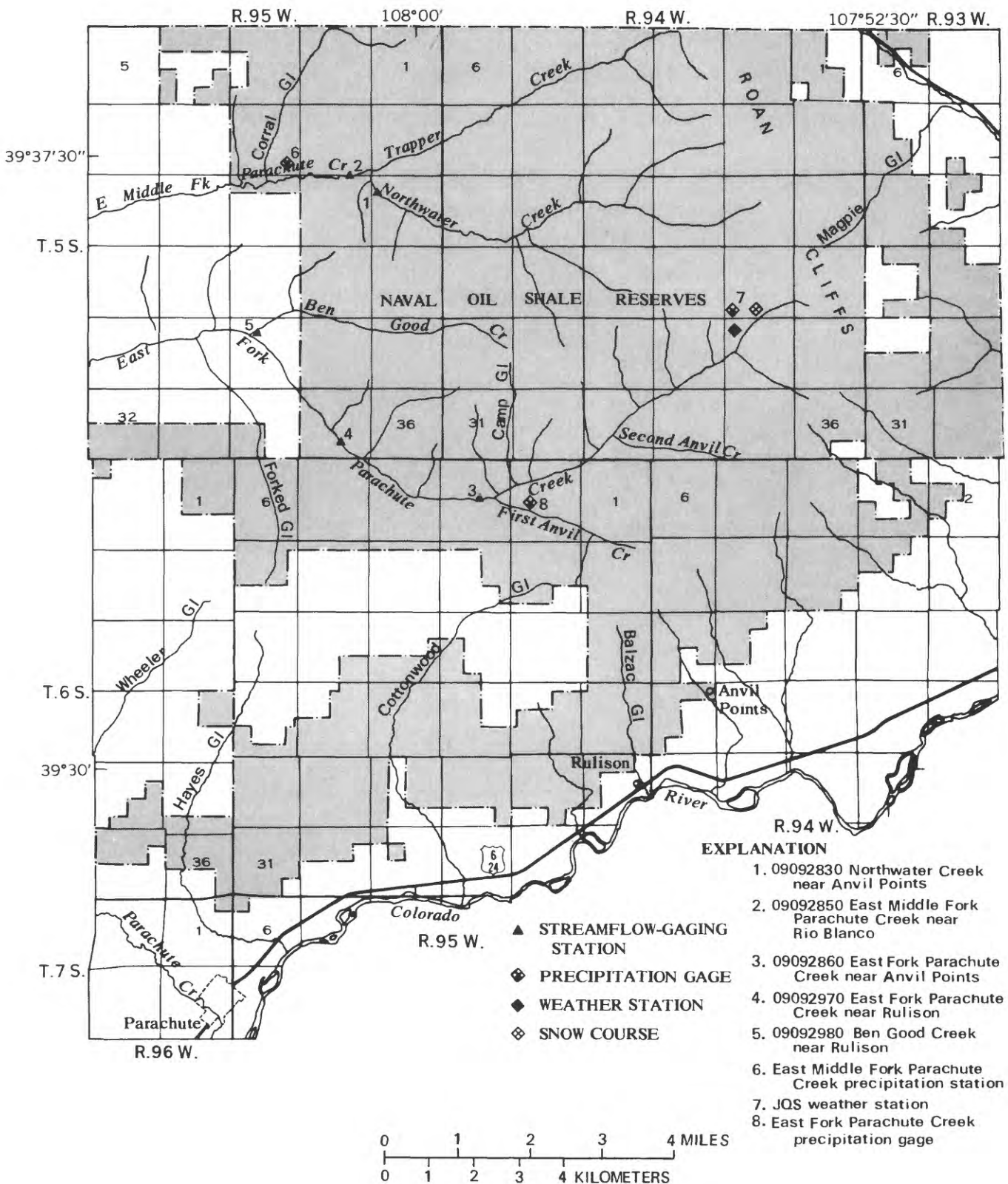


Figure 2.--Location of hydrologic data-collection sites.

Table 1.--Hydrologic data collected at streamflow-gaging stations in water years 1980 and 1981

[Numbers in parentheses indicate number of samples taken or measurements made in that water year]

Site number	Site name	Water year	Dis-charge	Specific conductance	Temper-ature	Water quality	Sedi-ment
09092830	Northwater Creek near Anvil Points.	1980	Daily	(8)	(6)	(8)	-----
		1981	Daily	(10)	(9)	(10)	-----
09092850	East Middle Fork Parachute Creek near Rio Blanco.	1980	Daily	Daily	Daily	(8)	Daily
		1981	Daily	Daily	Daily	(10)	Daily
09092960	East Fork Parachute Creek near Anvil Points.	1980	Daily	(5)	(5)	(5)	-----
		1981	Daily	(12)	(12)	(12)	-----
09092970	East Fork Parachute Creek near Rulison.	1980	Daily	Daily	Daily	(7)	(6)
		1981	Daily	Daily	Daily	(13)	Daily
09092980	Ben Good Creek near Rulison.	1980	Daily	(6)	(6)	(6)	-----
		1981	Daily	(9)	(9)	(9)	-----

SURFACE-WATER AND WATER-QUALITY DATA

Surface-water data (tables 2-6) consist of continuous streamflow monitoring at five streamflow-gaging stations. Water-quality data consist of chemical analyses of samples from five sites and specific conductance and temperature at two sites (tables 7-12), along with sediment discharge at two sites (tables 12 and 13). A more detailed discussion of equipment, techniques, and site locations may be found in Patt and others (1982).

Average monthly runoff for the 1980 and 1981 water years for the five streamflow-gaging sites is displayed in figure 3. The variations of specific conductance with time at the East Middle Fork Parachute Creek near Rio Blanco and East Fork Parachute Creek near Rulison sites are presented in figure 4.

CLIMATE DATA

Climate data tabulated in tables 14-22 include maximum, minimum, and mean daily air temperatures, maximum, minimum and mean daily relative humidity, mean wind speed, mean wind direction, and total daily solar radiation at the JQS weather station. Daily precipitation data are reported at three stations (tables 23-25), and snow-course data are reported for one site (table 26). When measured mean values for temperature, humidity, wind velocity, and solar radiation were not available, estimates were derived by correlation studies using data from nearby weather stations.

SELECTED REFERENCES

- Patt, R. O., Adams, D. B., and Collins, D. L., 1982, Hydrologic data from Naval Oil Shale Reserves, Parachute Creek basin, northwestern Colorado, 1975-79: U.S. Geological Survey Open-File/OFSS Report 82-696, 129 p.
- U.S. Geological Survey, 1981, Water resources data for Colorado--Water year 1980, Volume 2, Colorado River basin above Dolores River: U.S. Geological Survey Water-Data Report CO 80-2, 387 p.; available only from U.S. Department of Commerce, National Technical Information Service, Springfield, VA 22161, as report PB-82 188 293.
- U.S. Geological Survey, 1982, Water resources data for Colorado--Water year 1981, Volume 2, Colorado River basin above Dolores River: U.S. Geological Survey Water-Data Report CO 81-2, 854 p.; available only from U.S. Department of Commerce, National Technical Information Service, Springfield, VA 22161, as report PB-83 105 098.

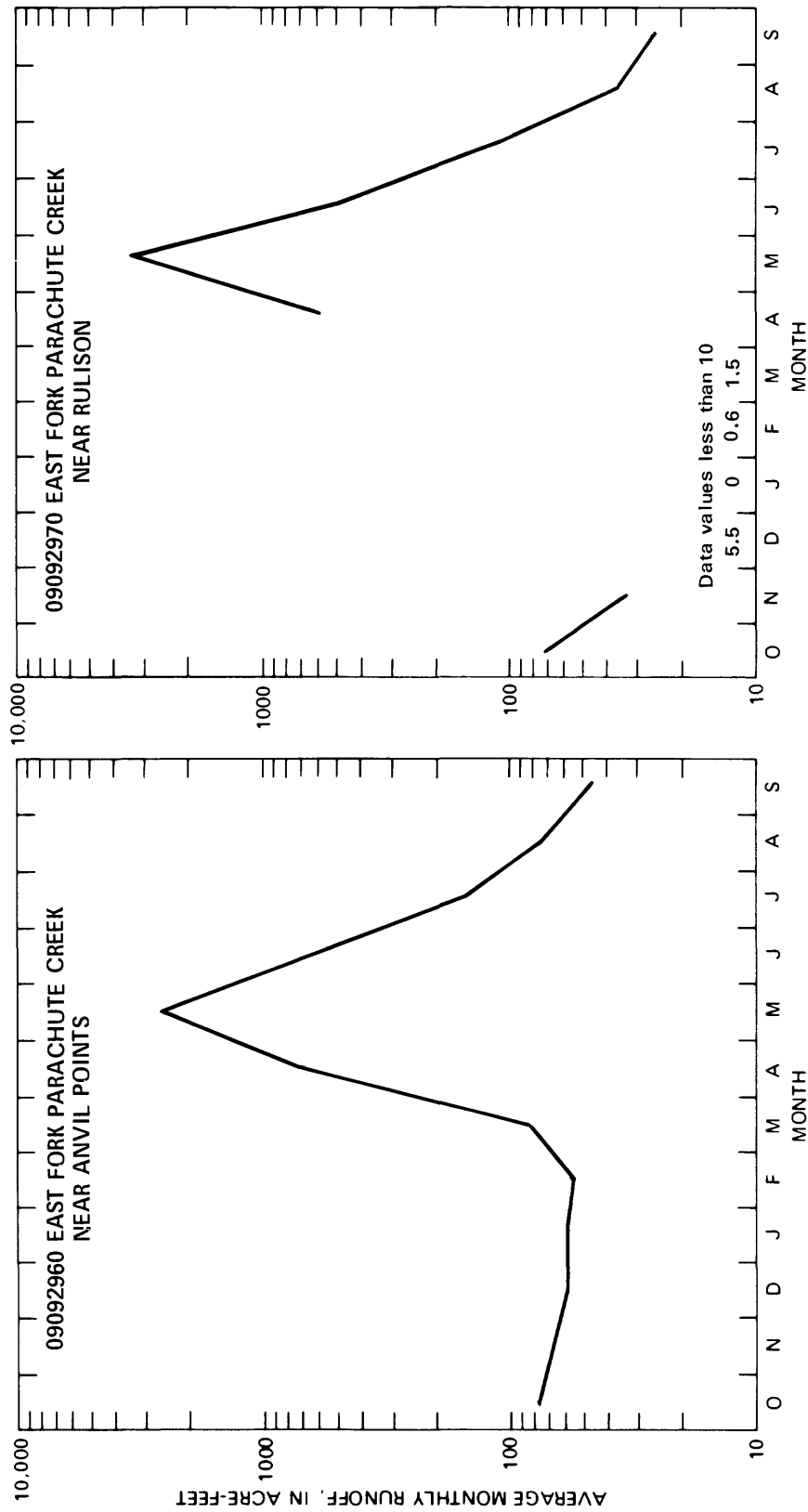


Figure 3.--Average monthly runoff for water years 1980 and 1981 at the five streamflow-gaging stations.

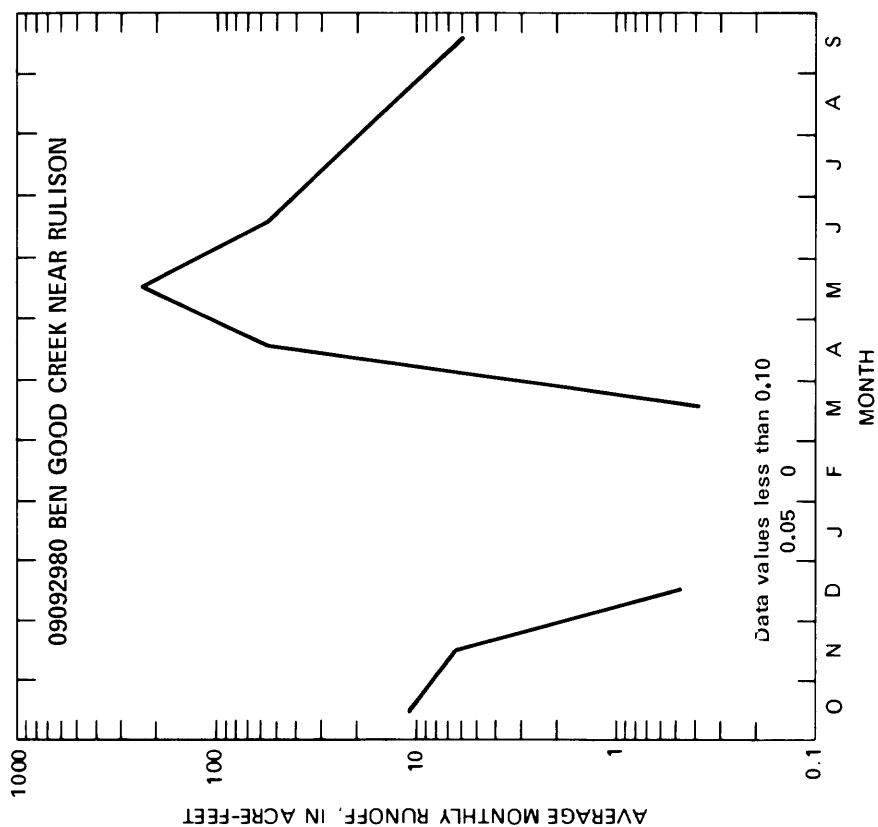


Figure 3.--Average monthly runoff for water years 1980 and 1981 at the five streamflow-gaging stations--Continued.

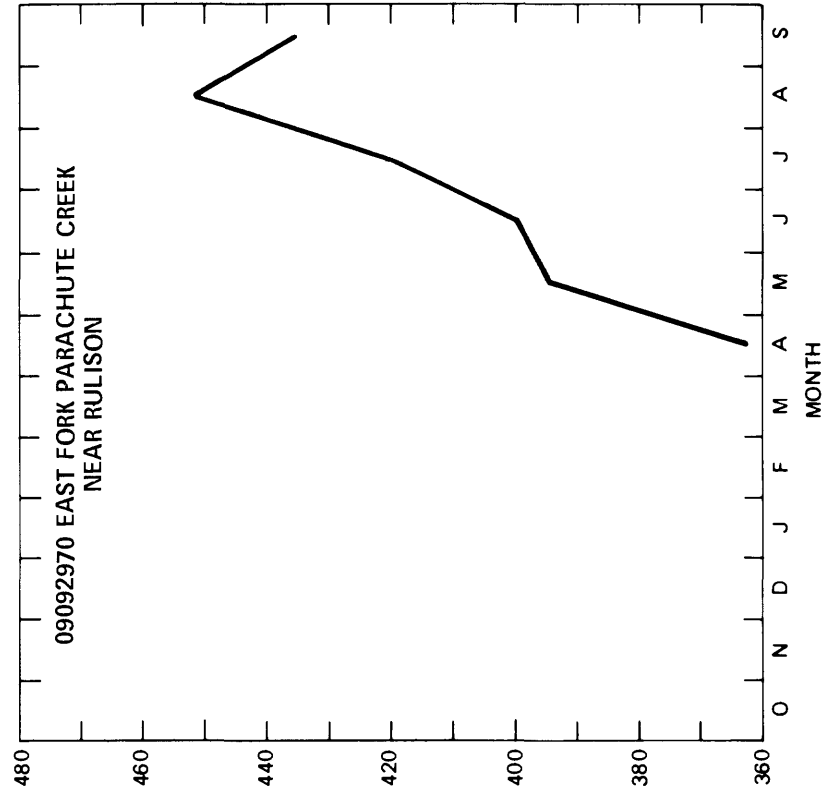
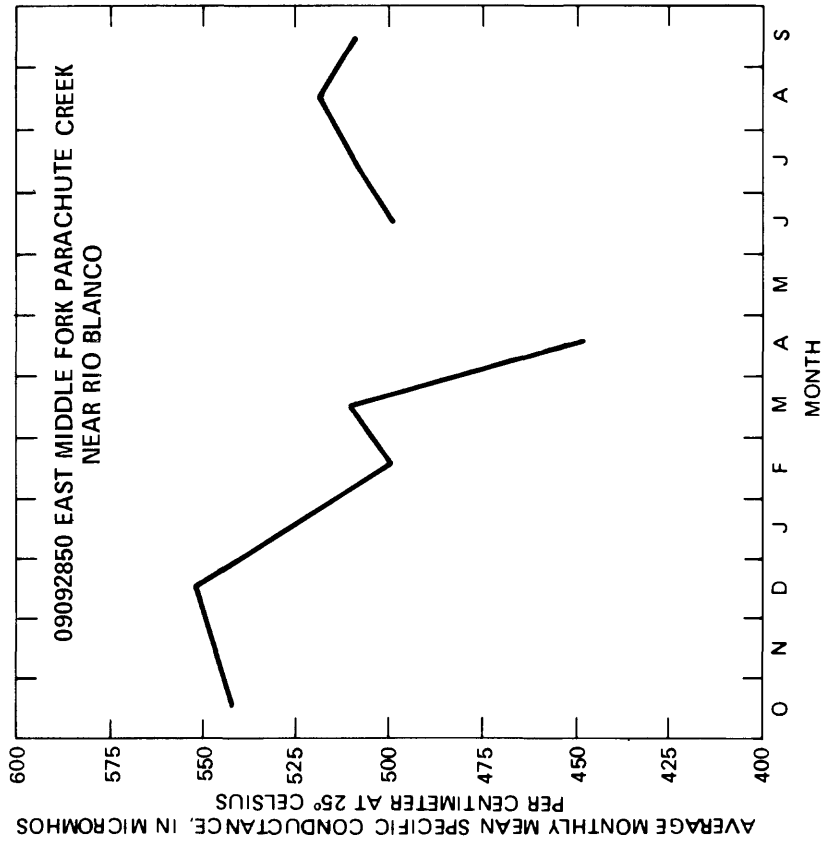


Figure 4.--Average monthly mean specific conductance at two streamflow-gaging stations in the Parachute Creek basin for water years 1980 and 1981.

HYDROLOGIC DATA

Abbreviations

The following abbreviations are used in tables:

AC-FT = acre-foot
C = Celsius
CALORIES = calories per square centimeter per day
CAL YR = calendar year
CFS = cubic foot per second

DEG C = degree Celsius
DEG-MIN-SEC = degree-minute-second
ft = foot
ft³/s = cubic foot per second
km = kilometer

km² = square kilometer
lat = latitude
long = longitude
m = meter
MAX = maximum

M-D-Y = month-day-year
MG/L = milligram per liter
m³/s = cubic meter per second
mi = mile
mi² = square mile

MICROMHOS = micromhos per centimeter at 25°C
micromhos/cm = micromhos per centimeter at 25°C
MIN = minimum
MPH = mile per hour
No. = number

PARAM = parameter
SEQ = sequence
t = metric ton
T/DAY = short ton per day
UG/L = microgram per liter

USGS = U.S. Geological Survey
WTR YR = water year
Y-M-D = year-month-day

Table 2.--Surface-water discharge at Northwater Creek near Anvil Points
for water years 1980 and 1981
[From U.S. Geological Survey, 1980, 1981]

09092830 NORTHWATER CREEK NEAR ANVIL POINTS, CO

LOCATION.--Lat 39°37'13", long 108°00'44", in NE¼NE¼ sec.14, T.5 S., R.95 W., in Garfield County, Hydrologic Unit 14010006, on right bank 50 ft (15 m) downstream from mouth of Bear Gulch, 750 ft (229 m) upstream from mouth, and 8.5 mi (14 km) southwest of Rio Blanco.

DRAINAGE AREA.--12.6 mi² (32.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--water-stage recorder. Altitude of gage is 7,420 ft (2,262 m), from topographic map.

REMARKS.--Records good except for winter period, which are poor. No diversions or regulation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 225 ft³/s (6.37 m³/s) May 17, 1979, gage height, 3.30 ft (1.006 m); minimum daily, 0.01 ft³/s (0.001 m³/s) Aug. 7, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 90 ft³/s (2.55 m³/s) May 22, gage height, 3.56 ft (1.085 m); minimum daily, 0.50 ft³/s (0.014 m³/s) Dec. 29 to Jan. 3, Jan. 10-13, Jan. 31, Feb. 27 to Mar. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.75	.95	.60	.50	.52	.50	1.3	51	20	3.5	1.8	.74
2	.75	.95	.60	.50	.54	.50	1.3	49	15	3.6	1.8	.74
3	.75	.95	.60	.50	.54	.50	1.3	54	14	3.7	1.7	.74
4	.74	.89	.60	.52	.54	.52	1.7	60	12	3.2	1.6	.74
5	.75	.76	.60	.54	.54	.54	2.4	68	12	3.0	1.6	.74
6	.75	.75	.60	.54	.54	.54	2.5	67	11	3.0	1.6	.74
7	.73	.81	.60	.54	.52	.51	2.3	75	9.2	3.0	1.4	.77
8	.75	.88	.60	.54	.52	.52	2.3	79	8.2	3.1	1.4	.74
9	.75	.85	.60	.52	.54	.54	2.5	72	7.5	2.9	1.3	.77
10	.75	.81	.62	.50	.56	.54	2.9	64	6.8	2.8	1.3	.99
11	.75	.75	.64	.50	.56	.60	2.7	74	6.4	2.7	1.2	.86
12	.75	.85	.64	.50	.56	.64	2.5	80	6.1	2.7	1.1	.78
13	.75	.95	.64	.50	.56	.70	2.5	68	6.0	2.7	1.2	.74
14	.77	.95	.62	.52	.56	.75	3.2	56	5.8	2.8	1.2	.74
15	.75	.95	.60	.54	.56	1.0	3.9	59	5.5	2.6	1.7	.74
16	.75	.95	.58	.56	.56	1.1	4.2	61	5.5	2.4	1.3	.70
17	.75	.95	.56	.58	.56	1.1	4.7	60	5.2	2.4	1.2	.70
18	.77	.87	.54	.59	.56	1.2	6.1	59	5.2	2.3	1.1	.70
19	.78	.87	.54	.58	.56	1.3	9.4	53	5.2	2.2	1.0	.70
20	1.1	.81	.54	.56	.56	1.4	14	48	5.0	2.2	1.0	.74
21	1.2	.75	.54	.54	.56	1.5	20	52	4.9	2.1	.96	.74
22	.97	.69	.54	.54	.56	1.5	37	81	4.6	2.1	.95	.74
23	.99	.65	.56	.54	.56	1.3	47	69	4.4	2.1	.98	.74
24	1.0	.65	.58	.56	.56	1.4	47	63	4.2	2.1	1.2	.74
25	.96	.66	.58	.58	.54	1.4	43	50	4.0	2.6	1.0	.74
26	1.0	.64	.56	.58	.52	1.3	40	45	3.8	2.4	.99	.74
27	.86	.62	.54	.56	.50	1.4	39	35	3.7	2.1	.92	.74
28	.82	.60	.52	.56	.50	1.5	43	30	3.7	2.0	.86	.74
29	1.0	.60	.50	.54	.50	1.3	51	27	3.5	1.9	.78	.70
30	.89	.60	.50	.52	---	1.3	53	24	3.4	2.2	.74	.70
31	.77	---	.50	.50	---	1.3	---	21	---	2.0	.74	---
TOTAL	25.85	23.96	17.84	16.64	15.76	30.21	493.7	1754	211.8	80.4	37.62	22.43
MEAN	.83	.80	.58	.54	.54	.97	16.5	56.6	7.06	2.59	1.21	.75
MAX	1.2	.95	.64	.58	.56	1.5	53	81	20	3.7	1.8	.99
MIN	.73	.60	.50	.50	.50	.50	1.3	21	3.4	1.9	.74	.70
AC-FT	51	48	35	33	31	60	979	3480	420	159	75	44

CAL YR 1979 TOTAL 2729.26 MEAN 7.48 MAX 130 MIN .20 AC-FT 5410
WTR YR 1980 TOTAL 2730.21 MEAN 7.46 MAX 81 MIN .50 AC-FT 5420

NOTE.--NO GAGE-HEIGHT RECORD NOV. 22 TO MAR. 6.

**Table 2.--Surface-water discharge at Northwater Creek near Anvil Points
for water years 1980 and 1981--Continued**

09092830 NORTHWATER CREEK NEAR ANVIL POINTS, CO

LOCATION.--Lat 39°37'13", long 108°00'44", in NE¼NE¼ sec.14, T.5 S., R.95 W., in Garfield County, Hydrologic Unit 14010006, on right bank 50 ft (15 m) downstream from mouth of Bear Gulch, 750 ft (229 m) upstream from mouth, and 8.5 mi (14 km) southwest of Rio Blanco.

DRAINAGE AREA.--12.6 mi² (32.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,420 ft (2,262 m), from topographic map.

REMARKS.--Records good except for winter period, which are poor. No diversions or regulation above station.

AVERAGE DISCHARGE.--5 years, 4.15 ft³/s (0.117 m³/s), 3,010 acre-ft/yr. (3.71 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 225 ft³/s (6.37 m³/s) May 17, 1979, gage height, 3.30 ft (1.006 m); minimum daily, 0.01 ft³/s (0.001 m³/s) Aug. 7, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9.0 ft³/s (0.25 m³/s) at 1700 Apr. 16, gage height, 3.13 ft (0.954 m); minimum daily, 0.30 ft³/s (0.008 m³/s) Aug. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	.95	.68	.54	.52	.75	2.0	1.7	.90	1.0	.49	.45
2	.82	1.0	.68	.54	.52	.64	2.4	3.3	1.0	1.2	.48	.36
3	.83	1.0	.68	.54	.52	.64	2.1	3.1	1.3	1.0	.47	.36
4	.75	1.0	.68	.54	.52	.64	1.3	2.3	1.2	1.0	.46	.37
5	.75	1.0	.66	.54	.52	.86	1.2	3.1	1.2	.90	.45	.38
6	.75	1.1	.64	.54	.52	.75	1.2	2.6	1.4	.90	.44	.51
7	.75	1.1	.62	.54	.52	.64	1.6	2.3	1.6	.90	.34	.52
8	.79	1.1	.62	.54	.52	.75	1.2	2.3	1.6	.90	.34	.41
9	.73	.97	.62	.54	.52	.86	2.3	2.1	1.6	.90	.33	.42
10	.75	.95	.62	.54	.52	.75	3.8	2.4	1.6	1.2	.33	1.0
11	.73	.91	.62	.54	.52	.86	4.4	1.8	1.6	.90	.38	.86
12	.97	1.1	.60	.54	.52	.86	4.0	1.9	1.5	1.0	.37	.58
13	1.1	1.4	.60	.54	.52	.86	4.1	1.6	1.2	1.4	.36	.59
14	1.2	1.0	.60	.54	.52	.97	5.4	1.6	.90	.90	.32	.48
15	1.9	.76	.60	.54	.52	1.1	7.2	2.1	.75	.90	.38	.48
16	1.5	.75	.58	.52	.52	1.2	8.0	1.8	.90	.75	.51	.48
17	1.3	.75	.56	.52	.52	1.3	8.1	1.6	1.1	1.6	.41	.48
18	1.2	.75	.56	.52	.52	1.2	6.8	1.6	1.2	1.4	.34	.36
19	1.2	.75	.56	.52	.52	1.3	6.9	1.6	1.0	.90	.30	.32
20	1.2	.80	.56	.52	.52	1.5	5.1	2.1	.90	.75	.31	.32
21	1.1	.78	.56	.52	.52	1.5	4.2	2.1	.90	.60	.31	.32
22	1.1	.76	.56	.52	.52	1.6	3.5	2.1	.75	.60	.31	.32
23	.92	.74	.56	.52	.52	2.8	3.2	2.1	.75	.89	.32	.32
24	.76	.72	.56	.52	.52	2.3	3.0	2.0	.60	.87	.36	.32
25	.93	.70	.56	.52	.75	2.0	2.4	1.9	.60	1.0	.38	.32
26	1.1	.70	.56	.52	.64	2.9	1.9	1.8	.60	.85	.33	.32
27	1.1	.70	.56	.52	.64	2.5	1.7	1.7	.90	.83	.33	.32
28	.92	.70	.56	.52	.86	2.0	1.7	1.6	1.6	.67	.34	.32
29	.84	.70	.56	.52	---	1.9	1.5	1.6	1.9	.65	.42	.32
30	.97	.70	.56	.52	---	2.4	1.3	1.6	1.2	.64	.69	.32
31	.97	---	.56	.52	---	2.1	---	1.0	---	.50	.56	---
TOTAL	30.73	26.34	18.50	16.42	15.37	42.43	103.5	62.4	34.25	28.50	12.16	12.93
MEAN	.99	.88	.60	.53	.55	1.37	3.45	2.01	1.14	.92	.39	.43
MAX	1.9	1.4	.68	.54	.86	2.9	8.1	3.3	1.9	1.6	.69	1.0
MIN	.73	.70	.56	.52	.52	.64	1.2	1.0	.60	.50	.30	.32
AC-FT	61	52	37	33	30	84	205	124	68	57	24	26

CAL YR 1980 TOTAL 2738.13 MEAN 7.48 MAX 81 MIN .50 AC-FT 5430
WTR YR 1981 TOTAL 403.53 MEAN 1.11 MAX 8.1 MIN .30 AC-FT 800

NOTE.--NO GAGE-HEIGHT RECORD NOV. 20 TO FEB. 24.

**Table 3.--Surface-water discharge at East Middle Fork Parachute Creek
near Rio Blanco for water years 1980 and 1981
[From U.S. Geological Survey 1980, 1981]**

09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO

LOCATION.--Lat 39°37'15", long 108°01'46" in NW¼NW¼ sec.14, T.5 S., R.95 W., Garfield County, Hydrologic Unit 14010006, on right bank 0.5 mi (0.8 km) upstream from mouth of Corral Gulch, 1.1 mi (1.8 km) downstream from mouth of Northwater Creek, and 9 mi (14 km) southwest of Rio Blanco.

DRAINAGE AREA.--22.1 mi² (57.2 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,400 ft (2,256 m), from topographic map.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Numerous beaver dams are located upstream. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 186 ft³/s (5.27 m³/s) May 17, 1979, gage height, 3.39 ft (1.033 m); minimum daily, 0.18 ft³/s (0.005 m³/s) Oct. 1, 2, 5, Dec. 12, 1977, Jan. 22, 23, Feb. 15, 18, 19, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 128 ft³/s (3.62 m³/s) at 1600 May 22, gage height, 2.80 ft (0.853 m); minimum daily, 0.57 ft³/s (0.016 m³/s) Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	.88	.76	.90	.92	.70	.86	68	31	5.2	2.0	1.1
2	1.2	.88	.76	.88	.90	.72	.88	76	28	5.4	2.0	1.1
3	1.2	.84	.76	.86	.90	.74	.90	73	25	5.4	1.8	1.1
4	1.1	.84	.76	.84	.88	.76	1.1	78	24	4.7	1.8	1.1
5	1.1	.84	.76	.82	.86	.78	1.3	83	22	4.2	1.9	1.1
6	1.1	.88	.76	.80	.84	.80	1.5	87	20	4.0	2.0	1.1
7	1.0	.88	.92	.78	.82	.80	1.9	101	20	3.8	2.0	1.2
8	1.0	.88	.92	.76	.80	.72	2.2	94	18	3.7	1.7	1.2
9	1.0	.96	.92	.74	.78	.72	2.3	100	17	3.3	1.4	1.1
10	1.0	.88	.92	.72	.76	.72	2.9	98	15	3.1	1.4	1.2
11	1.0	.88	.96	.70	.75	.76	3.1	100	14	3.1	1.4	1.3
12	1.0	.88	.92	.68	.76	.84	3.1	105	14	2.8	1.4	1.2
13	1.1	.88	.88	.66	.76	.84	3.3	107	12	2.8	1.4	1.1
14	1.0	.84	.84	.64	.76	.82	3.7	111	12	2.9	1.4	1.1
15	1.0	.84	.80	.62	.74	.82	5.0	108	11	2.6	1.4	1.1
16	1.0	.84	.84	.60	.74	.84	5.7	105	10	2.3	1.5	1.1
17	1.1	.80	.84	.60	.74	.80	6.4	105	9.7	2.3	1.5	1.0
18	1.1	.88	.84	.57	.76	.76	8.3	105	9.3	2.2	1.4	1.0
19	1.1	.92	.88	.68	.76	.72	12	89	8.4	2.2	1.4	1.0
20	1.3	.88	.80	.76	.76	.72	16	95	8.0	2.2	1.3	1.1
21	1.3	.88	.76	.72	.76	.74	21	102	7.4	2.2	1.3	1.1
22	1.3	.80	.76	.76	.74	.74	29	118	7.4	2.1	1.2	1.1
23	1.2	.84	.80	.96	.74	.76	36	111	6.7	2.2	1.1	1.1
24	1.2	.80	.92	1.2	.74	.76	42	94	6.7	2.2	1.3	1.1
25	1.2	.88	.92	1.1	.74	.78	42	70	6.7	2.8	1.2	1.1
26	1.1	.84	.96	1.0	.72	.76	45	56	6.2	2.4	1.2	1.1
27	1.1	.76	1.0	1.0	.72	.80	47	49	6.2	1.9	1.1	1.1
28	1.1	.76	.96	.98	.72	.80	50	44	5.7	1.9	1.1	1.1
29	1.2	.76	.92	.96	.70	.82	56	41	5.7	1.8	1.1	1.0
30	1.2	.76	.90	.94	---	.82	63	37	5.2	2.1	1.1	1.0
31	.88	---	.90	.94	---	.84	---	34	---	2.2	1.1	---
TOTAL	34.38	25.48	26.64	25.17	22.57	24.02	513.44	2644	392.3	92.0	44.9	33.1
MEAN	1.11	.85	.86	.81	.78	.77	17.1	85.3	13.1	2.97	1.45	1.10
MAX	1.3	.96	1.0	1.2	.92	.84	63	118	31	5.4	2.0	1.3
MIN	.88	.76	.76	.57	.70	.70	.86	34	5.2	1.8	1.1	1.0
AC-FT	68	51	53	50	45	48	1020	5240	778	182	89	66

CAL YR 1979 TOTAL 4255.73 MEAN 11.7 MAX 150 MIN .26 AC-FT 8440
WTR YR 1980 TOTAL 3873.00 MEAN 10.6 MAX 118 MIN .57 AC-FT 7690

NOTE.--NO GAGE-HEIGHT RECORD JAN. 27 TO MAR. 6.

**Table 3.--Surface-water discharge at East Middle Fork Parachute Creek
near Rio Blanco for water years 1980 and 1981--Continued**

U9092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO

LOCATION.--Lat 39°37'15", long 108°01'46" in NW¼NW¼ sec.14, T.5 S., R.95 W., Garfield County, Hydrologic Unit 14010006, on right bank 0.5 mi (0.8 km) upstream from mouth of Corral Gulch, 1.1 mi (1.8 km) downstream from mouth of Northwater Creek, and 9 mi (14 km) southwest of Rio Blanco.

DRAINAGE AREA.--22.1 mi² (57.2 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,400 ft (2,256 m), from topographic map.

REMARKS.--Records good except those for periods of no gage-height record, which are fair. Numerous beaver dams are located upstream. No regulation or diversion above station.

AVERAGE DISCHARGE.--5 years, 6.30 ft³/s (0.178 m³/s), 4,560 acre-ft/yr (5.62 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 186 ft³/s (5.27 m³/s) May 17, 1979, gage height, 3.39 ft (1.033 m); minimum daily, 0.18 ft³/s (0.005 m³/s) Oct. 1, 2, 5, Dec. 12, 1977, Jan. 22, 23, Feb. 15, 18, 19, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18 ft³/s (0.51 m³/s) at 1830 Apr. 16, gage height, 2.12 ft (0.646 m); minimum daily, 0.29 ft³/s (0.008 m³/s) Aug. 6, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.99	1.4	.80	.74	.67	1.1	3.4	2.8	1.0	1.2	.41	.50
2	.91	1.4	.80	.74	.67	.91	3.6	2.8	1.2	1.1	.40	.50
3	1.0	1.4	.80	.74	.67	.82	3.8	2.8	1.6	.99	.39	.50
4	1.0	1.4	.80	.74	.72	.82	4.0	2.8	1.5	.91	.39	.50
5	1.0	1.4	.80	.74	.67	.99	4.0	2.8	1.5	.77	.32	.50
6	1.0	1.4	.80	.74	.73	.99	4.0	2.9	1.6	.77	.29	.50
7	1.0	1.4	.80	.72	.73	.77	4.0	2.9	1.8	.72	.30	.50
8	1.0	1.4	.80	.72	.73	.82	4.1	2.9	1.8	.66	.30	.51
9	1.0	1.4	.80	.67	.73	.91	4.1	2.9	1.8	.72	.29	.56
10	1.1	1.3	.80	.72	.94	.99	4.1	2.9	1.8	1.1	.38	.72
11	1.1	1.4	.80	.67	.74	1.0	4.6	2.9	1.8	.77	.53	.82
12	1.1	1.4	.80	.72	.69	1.0	3.9	2.9	1.7	.82	.47	.66
13	1.3	1.6	.80	.73	.69	1.0	4.3	2.9	1.7	1.2	.40	.61
14	1.3	1.5	.80	.78	.69	1.0	7.2	2.9	1.1	.82	.36	.56
15	1.8	.54	.80	.73	.70	1.0	9.7	2.8	.71	.72	.32	.51
16	1.4	.65	.80	.73	.65	1.2	7.5	2.7	1.1	.72	.53	.56
17	1.4	.76	.80	.74	.70	1.2	10	2.6	1.7	1.1	.49	.56
18	1.4	.81	.80	.74	.70	1.3	10	2.5	1.6	1.4	.40	.56
19	1.2	.82	.78	.69	.76	1.3	9.4	2.4	1.6	.82	.40	.51
20	1.1	.80	.78	.69	.81	1.4	8.3	2.3	1.6	.72	.40	.56
21	1.0	.80	.78	.64	.81	1.5	7.0	2.2	1.6	.66	.40	.51
22	1.1	.80	.78	.69	.90	1.5	6.1	2.2	1.6	.61	.40	.46
23	1.1	.80	.78	.70	.82	1.5	5.0	2.2	1.5	.65	.40	.35
24	1.2	.80	.78	.75	.91	1.8	4.6	2.2	1.6	.80	.41	.35
25	1.3	.80	.78	.70	.99	2.0	4.5	2.1	1.7	.86	.42	.35
26	1.3	.80	.78	.70	.91	2.2	4.2	2.0	1.8	.63	.43	.35
27	1.4	.80	.78	.71	.91	2.0	4.0	1.9	2.1	.67	.44	.35
28	1.3	.80	.74	.66	.99	2.5	3.7	1.8	1.4	.56	.45	.30
29	1.1	.80	.74	.66	---	2.8	3.4	1.8	1.7	.49	.46	.35
30	1.4	.80	.74	.66	---	3.0	3.2	1.8	1.1	.48	.47	.30
31	1.4	---	.74	.66	---	3.2	---	1.1	---	.42	.50	---
TOTAL	36.70	32.18	24.38	22.02	21.63	44.52	159.7	76.7	46.31	24.86	12.55	14.87
MEAN	1.18	1.07	.79	.71	.77	1.44	5.32	2.47	1.54	.80	.40	.50
MAX	1.8	1.6	.80	.78	.99	3.2	10	2.9	2.1	1.4	.53	.82
MIN	.91	.54	.74	.64	.65	.77	3.2	1.1	.71	.42	.29	.30
AC-FT	73	64	48	44	43	88	317	152	92	49	25	29

CAL YR 1980 TOTAL 3884.76 MEAN 10.6 MAX 118 MIN .54 AC-FT 7710
WTR YR 1981 TOTAL 516.42 MEAN 1.41 MAX 10 MIN .29 AC-FT 1020

NOTE.--NO GAGE-HEIGHT RECORD NOV. 20 TO JAN. 8, MAR. 11 TO APR. 9, AUG. 20 TO SEPT. 11.

Table 4.--Surface-water discharge at East Fork Parachute Creek near
Anvil Points for water years 1980 and 1981
[From U.S. Geological Survey, 1980, 1981]

09092960 EAST FORK PARACHUTE CREEK NEAR ANVIL POINTS, CO

LOCATION.--Lat 39°33'18", long 107°58'56", in SW¼NE¼ sec.3, T.6 S., R.95 W., Garfield County, Hydrologic
Unit 14010006, on right bank 700 ft (213 m) downstream from first Anvil Creek and 4.2 mi (6.8 km) northwest
of Anvil Points.

DRAINAGE AREA.--14.5 mi² (37.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--water-stage recorder. Altitude of gage is 7,860 ft (2,396 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No diversions or
regulation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 226 ft³/s (6.40 m³/s) May 22, 1979, gage height, 3.60 ft
(1.097 m); minimum daily, 0.07 ft³/s (0.002 m³/s) Aug. 9-11, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 141 ft³/s (3.99 m³/s) at 0200 May 23, gage height, 3.12 ft
(0.951 m); minimum daily, 0.82 ft³/s (0.023 m³/s) Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.0	.98	.91	1.1	1.4	2.1	50	48	6.3	2.0	1.1
2	1.0	1.0	1.0	.91	1.1	1.4	2.1	48	44	6.9	2.0	1.0
3	1.0	1.0	1.0	.91	1.1	1.4	2.3	51	41	7.3	2.1	.98
4	1.0	.98	1.0	.91	1.1	1.3	2.5	52	37	5.8	1.9	.91
5	.98	.98	.98	.91	1.1	1.3	3.5	60	35	5.5	1.9	.85
6	.98	.98	.96	.91	1.0	1.4	4.4	69	33	5.2	1.8	.82
7	.98	.94	.94	.91	1.1	1.4	4.1	80	30	5.3	1.6	.93
8	.98	.94	.92	.91	1.1	1.4	3.5	85	28	5.7	1.5	1.1
9	.98	1.0	.86	.91	1.1	1.3	4.1	96	26	4.8	1.5	1.2
10	.96	1.0	.92	1.2	1.1	1.3	5.9	98	25	4.5	1.4	1.6
11	.98	1.0	.96	1.3	1.1	1.3	6.2	107	23	4.6	1.4	1.5
12	1.0	1.0	.96	1.0	1.1	1.3	5.3	114	22	4.4	1.4	1.2
13	1.1	1.0	.94	.91	1.1	1.3	5.9	98	21	4.4	1.7	1.1
14	1.1	1.0	.94	1.2	1.1	1.3	8.1	84	19	4.7	1.7	1.0
15	1.1	1.0	.94	1.4	1.2	1.5	12	79	18	3.9	2.9	1.1
16	1.1	1.0	.98	1.4	1.1	1.5	14	83	17	3.6	2.6	1.0
17	1.1	1.1	.98	1.5	1.1	1.5	18	95	16	3.3	1.9	1.0
18	1.1	1.2	1.0	1.3	1.2	1.5	23	91	15	3.2	1.7	1.0
19	1.1	1.1	1.0	1.3	1.5	1.5	28	85	14	3.2	1.5	.94
20	1.1	1.1	1.0	1.3	1.3	2.1	30	100	13	3.1	1.6	1.0
21	1.1	1.1	.96	1.3	1.3	2.7	34	121	12	3.0	1.5	1.0
22	1.1	1.1	.94	1.3	1.3	3.1	36	130	11	2.9	1.4	1.1
23	1.1	1.1	.94	1.3	1.2	2.7	39	136	10	3.0	1.6	1.1
24	1.1	1.0	.92	1.4	1.2	2.3	40	120	9.2	3.1	2.3	1.1
25	1.1	1.0	.91	1.4	1.2	2.7	39	100	8.5	3.3	1.9	1.1
26	1.1	1.0	.91	1.2	1.2	2.3	40	82	8.0	3.4	1.8	1.1
27	1.1	1.0	.91	1.1	1.2	2.3	40	73	7.6	2.9	1.6	1.1
28	1.1	1.0	.91	1.1	1.4	2.3	43	67	7.3	2.6	1.4	1.1
29	1.1	.98	.91	1.1	1.5	2.3	47	62	6.5	2.5	1.1	1.1
30	1.1	.96	.91	1.1	---	2.3	50	57	6.3	2.4	1.0	1.2
31	1.1	---	.91	1.1	---	2.3	---	52	---	2.2	1.1	---
TOTAL	32.74	30.56	29.39	35.40	34.2	55.7	593.0	2625	611.4	127.0	52.8	32.33
MEAN	1.06	1.02	.95	1.14	1.18	1.80	19.8	84.7	20.4	4.10	1.70	1.08
MAX	1.1	1.2	1.0	1.5	1.5	3.1	50	136	48	7.3	2.9	1.6
MIN	.96	.94	.86	.91	1.0	1.3	2.1	48	6.3	2.2	1.0	.82
AC-FT	65	61	58	70	68	110	1180	5210	1210	252	105	64

CAL YR 1979 TOTAL 5015.83 MEAN 13.7 MAX 180 MIN .39 AC-FT 9950
WTR YR 1980 TOTAL 4259.52 MEAN 11.6 MAX 136 MIN .82 AC-FT 8450

NOTE.--NO GAGE-HEIGHT RECORD OCT. 5 TO DEC. 25.

**Table 4.--Surface-water discharge at East Fork Parachute Creek near
Anvil Points for water years 1980 and 1981--Continued**

0909296C EAST FORK PARACHUTE CREEK NEAR ANVIL POINTS, CO

LOCATION.--Lat 39°33'18", long 107°58'56", in SW¼NE¼ sec.3, T.6 S., R.95 W., Garfield County, Hydrologic Unit 14010006, on right bank 700 ft (213 m) downstream from first Anvil Creek and 4.2 mi (6.8 km) northwest of Anvil Points.

DRAINAGE AREA.--14.5 mi² (37.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,860 ft (2,396 m), from topographic map.

REMARKS.--Records good except those for winter period which are fair. No diversions or regulation.

AVERAGE DISCHARGE.--5 years, 6.89 ft³/s (0.195 m³/s), 4,990 acre-ft/yr (6.153 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 226 ft³/s (6.40 m³/s) May 22, 1979, gage height, 3.60 ft (1.097 m); minimum daily, 0.07 ft³/s (0.002 m³/s) Aug. 9-11, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 26 ft³/s (0.74 m³/s) at 1700 Apr. 16, gage height, 2.13 ft (0.649 m); minimum daily, 0.30 ft³/s (0.008 m³/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.2	1.1	.81	.72	.91	.64	3.7	2.6	1.2	.62	.68
2	1.2	1.3	1.1	.76	.72	.91	1.5	3.9	2.2	1.4	.62	.51
3	1.2	1.2	1.1	.72	.72	.91	1.6	7.8	2.9	1.4	.55	.48
4	1.1	1.2	1.1	.72	.72	.97	1.2	6.3	4.0	1.4	.48	.44
5	1.1	1.2	1.1	.72	.72	.97	1.1	5.2	2.8	1.2	.43	.37
6	1.1	1.2	1.1	.72	.72	.91	1.7	6.2	2.5	1.0	.43	.44
7	1.1	1.3	1.1	.72	.72	.91	2.5	4.8	2.3	.97	.43	.51
8	1.1	1.2	1.0	.74	.72	.91	2.0	4.1	2.1	.91	.43	.45
9	1.1	1.2	1.0	.74	.72	.91	3.7	4.1	1.9	.95	.42	.47
10	1.1	1.1	1.0	.74	.63	.82	7.7	3.7	1.7	1.5	.43	.86
11	1.1	1.1	1.0	.74	.62	.81	7.6	3.8	1.4	1.1	.74	.70
12	1.3	1.3	1.0	.74	.62	.81	6.1	3.5	1.4	1.7	.70	.58
13	1.5	1.9	1.0	.74	.62	.81	5.8	3.1	1.4	1.3	.62	.52
14	1.8	1.4	1.0	.74	.71	.81	8.1	3.0	1.4	1.2	.62	.56
15	2.9	1.3	.87	.74	.72	.89	10	2.9	1.3	.97	1.7	.53
16	2.0	1.3	.81	.74	.72	1.1	12	3.0	1.4	.81	2.3	.47
17	1.9	1.3	.81	.72	.72	1.0	13	3.2	1.3	1.0	2.1	.47
18	1.8	1.3	.81	.72	.72	.93	11	3.1	1.2	1.4	.95	.43
19	1.7	1.3	.81	.72	.72	.91	12	2.7	1.2	1.1	.75	.40
20	1.8	1.3	.81	.72	.81	.82	9.0	2.6	1.1	.85	.53	.39
21	1.7	1.3	.81	.72	.81	.81	7.2	3.0	1.1	.69	.49	.39
22	1.6	.95	.81	.72	.81	.81	5.9	3.3	1.1	.69	.48	.34
23	1.5	.81	.81	.74	.81	.94	5.5	3.4	1.1	.65	.48	.34
24	1.2	.95	.81	.74	.84	1.1	5.6	2.9	1.1	.95	.48	.34
25	1.4	1.0	.81	.76	.91	1.1	5.6	2.7	1.0	.99	.43	.34
26	1.3	1.0	.81	.76	.91	1.3	5.4	2.6	1.0	.91	.43	.34
27	1.4	1.1	.81	.76	.91	1.7	5.0	2.7	1.3	.81	.45	.34
28	1.3	1.1	.81	.76	.91	1.2	4.6	2.5	3.0	.73	.48	.33
29	1.5	1.1	.81	.74	---	1.1	4.1	2.8	3.1	.71	.48	.30
30	1.5	1.1	.81	.72	---	1.2	4.0	2.6	1.5	.62	.70	.30
31	1.2	---	.81	.68	---	.75	---	2.7	---	.63	1.2	---
TOTAL	44.6	36.01	28.53	22.81	21.00	30.03	171.14	111.9	53.4	31.74	21.95	13.62
MEAN	1.44	1.20	.92	.74	.75	.97	5.70	3.61	1.78	1.02	.71	.45
MAX	2.9	1.9	1.1	.81	.91	1.7	13	7.8	4.0	1.7	2.3	.86
MIN	1.1	.81	.81	.68	.62	.75	.64	2.5	1.0	.62	.42	.30
AC-FT	88	71	57	45	42	60	339	222	106	63	44	27

CAL YR 1980 TOTAL 4275.97 MEAN 11.7 MAX 136 MIN .81 AC-FT 8480
WTR YR 1981 TOTAL 586.73 MEAN 1.61 MAX 13 MIN .30 AC-FT 1160

**Table 5.--Surface-water discharge at East Fork Parachute Creek near
Rulison for water years 1980 and 1981
[From U.S. Geological Survey, 1980, 1981]**

09092970 EAST FORK PARACHUTE CREEK NEAR RULISON, CO

LOCATION.--Lat 39°34'03", long 108°01'14", in SE¼NW¼ sec.35, T.5 S., R.95 W., Garfield County, Hydrologic Unit 14010006, on right bank 0.3 mi (0.5 km) below East Fork Falls and 6.4 mi (10.3 km) northwest of Rulison.

DRAINAGE AREA.--20.4 mi² (52.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1976 to current year.

GAGE.--water-stage recorder. Altitude of gage is 6,880 ft (2,100 m), from topographic map. Since Apr. 25, 1980, supplementary water-stage recorder 1,000 ft (305 m) downstream at different datum.

REMARKS.--Records fair except those for period of no gage-height record, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 174 ft³/s (4.93 m³/s) May 11, 1980, gage height, 2.87 ft (0.875 m); maximum gage height, 3.49 ft (1.064 m), May 17, 1978, site and datum then in use; no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 174 ft³/s (4.93 m³/s) at 2000 May 11, gage height, 2.87 ft (0.875 m), only peak above base of 100 ft³/s (2.8 m³/s); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.96	.50	.30	.00	.00	.00	.26	76	36	5.7	1.7	.87
2	.96	.60	.00	.00	.00	.00	.28	72	32	6.3	1.7	.76
3	.96	.70	.00	.00	.00	.00	.30	75	30	6.0	1.7	.71
4	.96	.76	.00	.00	.00	.00	.32	81	27	4.6	1.5	.64
5	.94	.86	.00	.00	.00	.00	.35	90	24	4.2	1.4	.64
6	.94	.90	.00	.00	.00	.00	.40	101	22	3.9	1.4	.58
7	.94	.92	.00	.00	.00	.00	.50	113	21	4.1	1.2	.58
8	.94	.92	.00	.00	.00	.00	.60	118	19	4.3	1.1	.69
9	.94	.92	.00	.00	.00	.00	.70	134	18	3.7	1.0	.85
10	.94	.90	.00	.00	.00	.00	.90	146	16	3.5	.98	1.1
11	.94	.85	.00	.00	.00	.00	1.2	160	16	3.2	.89	1.4
12	.94	.80	.00	.00	.00	.00	2.0	132	16	3.0	.88	.95
13	.95	.70	.00	.00	.00	.00	3.0	109	15	3.3	.96	.83
14	.98	.60	.00	.00	.00	.00	4.0	98	14	3.6	.89	.73
15	.99	.56	.00	.00	.00	.00	5.0	104	13	2.9	1.7	.73
16	.99	.52	.00	.00	.00	.00	6.0	107	13	2.6	1.6	.68
17	1.0	.50	.00	.00	.00	.00	7.0	123	12	2.6	1.2	.67
18	1.1	.45	.00	.00	.00	.00	8.0	116	11	2.6	.86	.67
19	1.2	.39	.00	.00	.00	.00	11	110	11	2.4	.77	.61
20	1.0	.37	.00	.00	.00	.02	14	126	10	2.5	.83	.72
21	.90	.30	.00	.00	.00	.04	19	146	9.5	2.5	.84	.77
22	.88	.20	.00	.00	.00	.06	25	161	8.9	2.3	.80	.86
23	.86	.08	.00	.00	.00	.08	40	153	8.3	2.6	.81	.91
24	.84	.06	.00	.00	.00	.10	48	146	8.0	2.6	1.5	1.1
25	.84	.00	.00	.00	.00	.12	45	109	7.4	2.6	1.2	1.1
26	.80	.00	.00	.00	.00	.14	40	75	7.1	2.8	1.2	.85
27	.80	.00	.00	.00	.00	.16	42	67	6.8	2.2	1.1	.84
28	.80	.00	.00	.00	.00	.18	50	67	6.6	1.9	.86	.79
29	.74	.00	.00	.00	.00	.20	63	63	6.3	1.8	.83	.79
30	.70	.00	.00	.00	---	.22	70	50	5.7	1.8	.93	.79
31	.60	---	.00	.00	---	.24	---	42	---	1.8	.87	---
TOTAL	28.33	14.36	.00	.00	.00	1.56	507.81	3270	450.6	99.9	35.20	24.21
MEAN	.91	.48	.000	.000	.000	.050	16.9	105	15.0	3.22	1.14	.81
MAX	1.2	.92	.00	.00	.00	.24	70	161	36	6.3	1.7	1.4
MIN	.60	.00	.00	.00	.00	.00	.26	42	5.7	1.8	.77	.58
AC-FT	56	28	.00	.00	.00	3.1	1010	6490	894	198	70	48

CAL YR 1979 TOTAL 4584.61 MEAN 12.6 MAX 220 MIN .00 AC-FT 9090
WTR YR 1980 TOTAL 4431.97 MEAN 12.1 MAX 161 MIN .00 AC-FT 8790

NOTE.--NO GAGE-HEIGHT RECORD OCT. 1 TO APR. 25.

Table 5.--Surface-water discharge at East Fork Parachute Creek near
Rulison for water years 1980 and 1981--Continued

09092970 EAST FORK PARACHUTE CREEK NEAR RULISON, CO

LOCATION.--Lat 39°34'03", long 108°01'14", in SE¼NW¼ sec.35, T.5 S., R.95 W., Garfield County, Hydrologic Unit 14010006, on right bank 0.3 mi (0.8 km) below East Fork Falls and 6.4 mi (10.3 km) northwest of Rulison.

DRAINAGE AREA.--20.4 mi² (52.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,880 ft (2,100 m), from topographic map. Since Apr. 25, 1980, supplementary water-stage recorder 1,000 ft (305 m) downstream at different datum.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Daily discharge determined from supplementary gage and adjusted for difference in flow between sites.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 174 ft³/s (4.93 m³/s) May 11, 1980, gage height, 2.87 ft (0.875 m); maximum gage height, 3.49 ft (1.064 m), May 17, 1978, site and datum then in use; no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16 ft³/s (0.45 m³/s) at 1900 Apr. 17, on basis of computation of peak flow at supplementary gage and adjusted for difference in flow between sites. No peak above base of 100 ft³/s (2.8 m³/s); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.84	.90	.37	.00	.00	.00	.00	2.4	2.2	.73	.00	.00
2	.69	1.0	.37	.00	.00	.00	.00	2.4	1.9	.87	.00	.00
3	.75	.90	.37	.00	.00	.00	.00	7.7	2.6	.73	.00	.00
4	.84	.90	.37	.00	.00	.00	.00	6.0	3.4	.58	.00	.00
5	1.1	.93	.37	.00	.00	.00	.00	3.7	2.3	.42	.00	.00
6	1.2	1.1	.37	.00	.00	.00	.00	5.3	2.1	.38	.00	.00
7	1.2	1.1	.37	.00	.00	.00	.00	3.7	1.9	.26	.00	.00
8	1.3	1.1	.33	.00	.00	.00	.00	3.5	1.7	.23	.00	.00
9	1.3	1.1	.33	.00	.00	.00	.00	3.5	1.3	.28	.00	.16
10	1.3	1.1	.33	.00	.00	.00	1.5	3.1	.88	.77	.00	.29
11	1.3	1.0	.33	.00	.21	.00	2.7	3.3	.78	.44	.00	.23
12	1.6	1.2	.33	.00	.21	.00	2.4	2.9	.74	.77	.00	.00
13	1.9	1.7	.33	.00	.21	.00	.67	2.8	.78	.68	.00	.00
14	2.0	1.1	.00	.00	.00	.00	1.6	2.4	.97	.36	.00	.00
15	3.2	.90	.29	.00	.00	.00	5.1	2.2	1.1	.23	.00	.00
16	2.4	.60	.27	.00	.00	.00	7.9	2.6	.97	.13	.75	.00
17	2.4	.43	.27	.00	.00	.00	9.6	3.0	.77	.26	.70	.00
18	2.3	.00	.00	.00	.00	.00	9.6	2.8	.74	.49	.00	.00
19	1.9	.00	.27	.00	.00	.00	10	2.3	.63	.20	.00	.00
20	2.4	.00	.00	.00	.00	.00	8.2	2.3	.58	.28	.00	.00
21	2.3	.00	.00	.00	.00	.00	6.3	3.0	.49	.23	.00	.00
22	2.0	.00	.00	.00	.00	.00	5.1	3.0	.49	.23	.00	.00
23	1.8	.00	.00	.00	.00	.00	4.9	3.1	.39	.22	.00	.00
24	1.3	.32	.00	.00	.00	.00	4.7	2.6	.31	.32	.00	.00
25	1.1	.33	.00	.00	.00	.00	4.7	2.3	.23	.33	.00	.00
26	1.0	.33	.00	.00	.00	.00	4.2	2.0	.18	.30	.00	.00
27	1.1	.37	.00	.00	.00	.00	4.0	2.3	.36	.27	.00	.00
28	1.0	.37	.00	.00	.00	.00	3.3	2.1	1.7	.24	.00	.00
29	1.3	.37	.00	.00	---	.00	2.8	2.3	2.3	.24	.00	.00
30	1.3	.37	.00	.00	---	.00	2.8	2.2	.96	.21	.00	.00
31	.90	---	.00	.00	---	.00	---	2.3	---	.00	.00	---
TOTAL	47.02	19.52	5.67	.00	.63	.00	102.07	95.1	35.75	11.68	1.45	.68
MEAN	1.52	.65	.18	.000	.023	.000	3.40	3.07	1.19	.38	.047	.023
MAX	3.2	1.7	.37	.00	.21	.00	10	7.7	3.4	.87	.75	.29
MIN	.69	.00	.00	.00	.00	.00	.00	2.0	.18	.00	.00	.00
AC-FT	93	39	11	.00	1.2	.00	202	189	71	23	2.9	1.3
CAL YR 1980	TOTAL	4461.49	MEAN	12.2	MAX	161	MIN	.00	AC-FT	8850		
WTR YR 1981	TOTAL	319.57	MEAN	.88	MAX	10	MIN	.00	AC-FT	634		

NOTE.--NO GAGE-HEIGHT RECORD NOV. 14 TO APR. 10.

**Table 6.--Surface-water discharge at Ben Good Creek near
Rulison for water years 1980 and 1981
[From U.S. Geological Survey, 1980, 1981]**

09092980 BEN GOOD CREEK NEAR RULISON, CO

LOCATION.--Lat 39°35'25", long 108°02'26", in NE¼NW¼ sec.27, T.5 S., R.95 W., Garfield County, Hydrologic Unit 14010006, on left bank 0.2 mi (0.3 km) upstream from East Fork Parachute Creek and 8.3 mi (13.4 km) northwest of Rulison.

DRAINAGE AREA.--4.04 mi² (10.46 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1976 to current year.

GAGE.--water-stage recorder. Altitude of gage is 6,520 ft (1,990 m), from topographic map.

REMARKS.--Records good except those for periods of no gage-height record or those for winter periods which are poor. No regulation or diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13 ft³/s (0.37 m³/s) May 7, 1980, gage height, 2.78 ft (0.847 m); no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13 ft³/s (0.37 m³/s) at 0200 May 7, gage height, 2.78 ft (0.847 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	.22	.00	.00	.00	.00	.14	9.2	4.7	.82	.48	.28
2	.21	.21	.00	.00	.00	.00	.16	9.7	4.4	.87	.47	.25
3	.22	.21	.00	.00	.00	.00	.18	10	4.0	.85	.45	.25
4	.22	.22	.00	.00	.00	.00	.20	11	4.0	.79	.44	.22
5	.22	.22	.00	.00	.00	.00	.22	11	3.9	.77	.44	.22
6	.22	.22	.00	.00	.00	.00	.24	11	3.5	.73	.43	.22
7	.22	.22	.00	.00	.00	.00	.27	10	3.0	.74	.44	.22
8	.22	.21	.00	.00	.00	.00	.30	6.9	2.6	.76	.43	.22
9	.22	.21	.00	.00	.00	.00	.34	7.0	2.4	.79	.42	.22
10	.20	.21	.00	.00	.00	.00	.38	7.7	2.3	.78	.40	.22
11	.20	.21	.00	.00	.00	.00	.42	7.5	2.0	.74	.40	.21
12	.20	.22	.00	.00	.00	.00	.45	7.5	1.3	.80	.37	.21
13	.20	.21	.00	.00	.00	.00	.50	8.1	1.3	.81	.37	.20
14	.20	.18	.00	.00	.00	.00	.54	9.5	1.1	.86	.36	.20
15	.20	.18	.00	.00	.00	.00	.60	9.2	1.0	.82	.39	.20
16	.20	.18	.00	.00	.00	.00	.70	8.5	1.0	.88	.40	.19
17	.20	.17	.00	.00	.00	.00	.80	8.0	1.0	.88	.36	.18
18	.21	.17	.00	.00	.00	.00	.90	8.3	1.0	.80	.34	.18
19	.24	.18	.00	.00	.00	.00	1.1	8.5	.98	.78	.34	.17
20	.32	.18	.00	.00	.00	.00	1.3	9.5	.98	.77	.33	.17
21	.41	.18	.00	.00	.00	.00	1.7	9.3	.98	.75	.32	.17
22	.38	.15	.00	.00	.00	.00	2.3	8.1	.96	.66	.34	.17
23	.38	.10	.00	.00	.00	.00	3.2	6.4	.94	.67	.33	.17
24	.38	.06	.00	.00	.00	.00	3.8	4.9	.92	.67	.35	.17
25	.33	.03	.00	.00	.00	.00	3.0	3.6	.90	.64	.32	.16
26	.24	.00	.00	.00	.00	.02	3.9	3.5	.88	.56	.31	.16
27	.24	.00	.00	.00	.00	.04	4.5	4.1	.88	.55	.33	.15
28	.24	.00	.00	.00	.00	.06	5.6	4.4	.86	.54	.31	.15
29	.24	.00	.00	.00	.00	.08	6.8	5.1	.84	.53	.30	.15
30	.24	.00	.00	.00	---	.10	8.2	4.9	.84	.49	.29	.13
31	.23	---	.00	.00	---	.12	---	4.7	---	.48	.29	---
TOTAL	7.64	4.55	.00	.00	.00	.42	52.74	237.1	55.46	22.58	11.55	5.82
MEAN	.25	.15	.000	.000	.000	.014	1.76	7.65	1.85	.73	.37	.19
MAX	.41	.22	.00	.00	.00	.12	8.2	11	4.7	.88	.48	.28
MIN	.20	.00	.00	.00	.00	.00	.14	3.5	.84	.48	.29	.13
AC-FT	15	9.0	.00	.00	.00	.8	105	470	110	45	23	12

CAL YR 1979 TOTAL 405.81 MEAN 1.11 MAX 11 MIN .00 AC-FT 805
WTR YR 1980 TOTAL 397.86 MEAN 1.09 MAX 11 MIN .00 AC-FT 789

NOTE.--NO GAGE-HEIGHT RECORD NOV. 22 TO APR. 24.

Table 6.--Surface-water discharge at Ben Good Creek near
Rulison for water years 1980 and 1981--Continued

09092980 BEN GOOD CREEK NEAR RULISON, CO

LOCATION.--Lat 39°35'25", long 108°02'26", in NE¼NW¼ sec.27, T.5 S., R.95 W., Garfield County, Hydrologic Unit 14010006, on left bank 0.2 mi (0.3 km) upstream from East Fork Parachute Creek and 8.3 mi (13.4 km) northwest of Rulison.

DRAINAGE AREA.--4.04 mi² (10.46 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,520 ft (1,990 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record and those for winter period, which are fair. No regulation or diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13 ft³/s (0.37 m³/s) May 7, 1980, gage height, 2.78 ft (0.847 m); no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3.4 ft³/s (0.096 m³/s) at 2300 June 28, gage height, 2.24 ft (0.683 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.09	.02	.01	.00	.00	.00	.09	.09	.11	.04	.01
2	.13	.09	.02	.01	.00	.00	.00	.10	.08	.12	.03	.00
3	.13	.10	.02	.01	.00	.00	.00	.14	.09	.12	.03	.00
4	.12	.10	.03	.01	.00	.00	.00	.12	.09	.11	.03	.00
5	.12	.10	.03	.01	.00	.00	.01	.10	.08	.10	.02	.00
6	.12	.09	.04	.00	.00	.00	.01	.12	.07	.09	.03	.01
7	.11	.09	.04	.00	.00	.00	.01	.10	.07	.09	.03	.01
8	.11	.09	.04	.00	.00	.00	.01	.10	.07	.08	.03	.00
9	.11	.09	.03	.00	.00	.00	.02	.11	.06	.09	.03	.00
10	.11	.09	.03	.00	.00	.00	.02	.11	.06	.09	.05	.00
11	.11	.09	.02	.00	.00	.00	.03	.11	.06	.08	.05	.00
12	.12	.09	.02	.00	.00	.00	.04	.11	.06	.10	.05	.00
13	.12	.10	.01	.00	.00	.00	.07	.11	.06	.11	.04	.00
14	.12	.09	.01	.00	.00	.00	.10	.11	.07	.09	.03	.00
15	.11	.09	.01	.00	.00	.00	.15	.10	.08	.08	.04	.00
16	.10	.09	.00	.00	.00	.00	.07	.12	.08	.08	.04	.00
17	.10	.09	.00	.00	.00	.00	.07	.12	.07	.08	.03	.00
18	.10	.09	.00	.00	.00	.00	.06	.12	.07	.08	.02	.00
19	.10	.07	.00	.00	.00	.00	.05	.11	.07	.07	.02	.00
20	.10	.02	.00	.00	.00	.00	.06	.10	.07	.07	.01	.00
21	.10	.01	.00	.00	.00	.00	.07	.11	.07	.06	.02	.00
22	.10	.01	.00	.00	.00	.00	.07	.11	.07	.06	.02	.00
23	.09	.01	.00	.00	.00	.00	.07	.10	.07	.07	.02	.00
24	.09	.02	.01	.00	.00	.00	.08	.10	.07	.07	.02	.00
25	.09	.02	.01	.00	.00	.00	.08	.09	.07	.07	.02	.00
26	.09	.02	.01	.00	.00	.00	.08	.09	.07	.06	.01	.00
27	.09	.02	.01	.00	.00	.00	.08	.08	.08	.06	.01	.00
28	.09	.02	.01	.00	.00	.00	.09	.08	.25	.06	.01	.00
29	.09	.02	.01	.00	---	.00	.09	.09	.21	.06	.01	.00
30	.09	.02	.01	.00	---	.00	.09	.09	.14	.05	.02	.00
31	.09	---	.00	.00	---	.00	---	.09	---	.04	.01	---
TOTAL	3.28	1.92	.44	.05	.00	.00	1.58	3.23	2.55	2.50	.82	.03
MEAN	.11	.064	.014	.002	.000	.000	.053	.10	.085	.081	.026	.001
MAX	.13	.10	.04	.01	.00	.00	.15	.14	.25	.12	.05	.01
MIN	.09	.01	.00	.00	.00	.00	.00	.08	.06	.04	.01	.00
AC-FT	6.5	3.8	.9	.10	.00	.00	3.1	6.4	5.1	5.0	1.6	.06

CAL YR 1980 TOTAL 391.31 MEAN 1.07 MAX 11 MIN .00 AC-FT 776
WTR YR 1981 TOTAL 16.40 MEAN .045 MAX .25 MIN .00 AC-FT 33

NOTE.--NO GAGE-HEIGHT RECORD JAN. 7 TO APR. 14.

Table 7.--Water-quality data for Northwater Creek near Anvil Points
[From U.S. Geological Survey, 1980, 1981]

09092830 NORTHWATER CREEK NEAR ANVIL POINTS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANECUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CaCO3)	HARD- NESS, NONCAR- BONATE (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 AD- SORP- TION RATIO
OCT												
03...	1220	.89	535	8.1	11.0	8.7	210	0	52	20	33	1.0
30...	1130	.87	532	8.4	4.0	10.9	210	0	51	19	31	.9
DEC												
06...	1015	.70	530	8.2	2.0	10.1	230	0	56	22	36	1.0
JAN												
17...	1105	2.2	545	8.1	2.5	10.1	230	0	55	21	36	1.0
APR												
08...	1100	2.2	519	8.0	4.0	10.6	210	0	52	20	33	1.0
MAY												
02...	0730	45	390	7.9	--	10.0	160	0	42	14	24	.8
JUL												
08...	1430	3.1	490	8.2	--	7.6	210	--	51	19	30	.9
AUG												
06...	1215	1.6	507	8.3	14.0	--	200	0	50	19	32	1.0

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (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 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)	PHOS- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)
OCT												
03...	.7	250	41	1.7	.3	15	315	.43	.76	.08	.040	4
30...	.5	250	38	1.8	.2	14	307	.42	.72	.09	.040	4
DEC												
06...	.7	260	--	1.5	.2	15	--	--	--	.23	.030	3
JAN												
17...	.9	260	23	3.2	.2	15	313	.43	1.86	.39	.000	5
APR												
08...	.7	240	36	1.5	.2	14	305	.41	1.81	.62	.040	3
MAY												
02...	.7	180	19	1.7	.2	16	232	.32	28.5	1.2	.060	5
JUL												
08...	.8	--	32	1.4	.3	17	--	--	--	.13	.010	6
AUG												
06...	1.0	250	34	2.1	.3	16	306	.42	1.32	.05	.330	5

DATE	BARIUM, DIS- SOLVED (UG/L AS Ba)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM, DIS- SOLVED (UG/L AS Cd)	COPPER, DIS- SOLVED (UG/L AS Cu)	IRON, DIS- SOLVED (UG/L AS Fe)	LEAD, DIS- SOLVED (UG/L AS Pb)	LITHIUM, DIS- SOLVED (UG/L AS Li)	MANGA- NESE, DIS- SOLVED (UG/L AS Mn)	MERCURY, DIS- SOLVED (UG/L AS Hg)	SELE- NIUM, DIS- SOLVED (UG/L AS Se)	STRON- TIUM, DIS- SOLVED (UG/L AS Sr)	ZINC, DIS- SOLVED (UG/L AS Zn)
OCT												
03...	80	60	<1	2	10	0	20	5	.0	0	900	<3
30...	80	50	<1	0	10	0	20	6	.0	0	820	<3
DEC												
06...	90	40	<1	4	20	0	5	4	.0	0	930	<3
JAN												
17...	80	70	<1	0	<10	0	<4	4	.0	1	940	<3
APR												
08...	70	60	<1	2	<10	0	9	5	.0	1	830	<3
MAY												
02...	60	40	<1	5	<10	0	20	4	.0	1	600	<3
JUL												
08...	80	40	<1	6	<10	0	5	3	.0	1	840	3
AUG												
06...	90	60	<1	3	<10	4	6	5	.0	1	860	<3

Table 7.--Water-quality data for Northwater Creek near Anvil Points--
Continued

09092830 NORTHWATER CREEK NEAR ANVIL POINTS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	SPE- CIFIC CON- DUCT- ANCE LAB (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (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 AD- SORP- TION RATIO
OCT												
03...	1300	.81	510	517	8.0	5.0	10.8	210	51	20	33	1.0
NOV												
20...	1325	.68	548	548	7.7	.5	11.0	220	54	20	35	1.0
JAN												
08...	1310	.54	550	561	8.1	.0	--	220	54	21	37	1.1
FEB												
24...	1330	.52	530	456	8.3	1.0	9.9	230	54	22	36	1.0
APR												
23...	1450	3.0	430	433	8.2	--	8.6	180	44	16	27	.9
MAY												
13...	1400	1.9	460	465	8.2	11.0	8.4	200	49	18	29	.9
JUN												
17...	1240	1.2	490	500	8.2	17.0	8.0	210	53	19	32	1.0
JUL												
22...	1300	.58	490	467	8.5	21.0	--	200	50	19	37	1.1
AUG												
13...	1200	.36	522	522	8.3	14.0	9.0	210	53	19	36	1.2
SEP												
14...	1310	.42	527	527	8.4	16.0	8.2	220	54	20	35	1.1

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY 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)	SILICA, DIS- SOLVED (MG/L AS SiO2)	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)	PHOS- PHORUS, ORTH0, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)
OCT												
03...	.8	250	39	2.1	.2	14	312	.42	.68	.02	.000	2
NOV												
20...	.7	260	44	2.8	.3	14	329	.45	.60	.26	.070	4
JAN												
08...	.6	210	83	3.5	.2	14	342	.47	.50	.41	.040	5
FEB												
24...	.5	260	41	1.7	.2	14	328	.45	.46	.35	.030	5
APR												
23...	.7	200	28	1.6	.2	15	256	.35	2.1	.48	.080	4
MAY												
13...	.8	220	32	1.3	.2	14	279	.38	1.4	.22	.040	9
JUN												
17...	.7	240	24	1.2	.2	16	293	.40	.95	.25	.090	4
JUL												
22...	.8	240	27	1.6	.2	16	297	.40	.47	.09	.060	5
AUG												
13...	.8	260	24	1.7	.2	16	309	.42	.30	.14	.080	13
SEP												
14...	.8	260	27	1.7	.2	15	311	.42	.35	.02	.010	7

Table 7.--Water-quality data for Northwater Creek near Anvil Points--
Continued

09092830 NORTHWATER CREEK NEAR ANVIL POINTS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM, DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM, DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY, DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 03...	80	40	<1	6	20	2	7	5	.0	0	880	<3
NOV 20...	80	40	<1	5	<10	2	20	10	.0	0	910	5
JAN 08...	80	40	1	2	20	3	5	5	.0	0	920	20
FEB 24...	90	20	<1	4	10	0	20	150	.0	0	900	10
APR 23...	80	40	<1	4	10	2	6	7	.0	0	720	20
MAY 13...	80	30	<1	5	20	8	7	5	.1	0	780	5
JUN 17...	200	40	<1	3	<10	4	20	9	.0	0	850	4
JUL 22...	90	60	<1	7	10	2	10	10	.0	0	870	3
AUG 13...	90	50	<1	5	13	0	14	7	.0	0	920	5
SEP 14...	87	50	2	3	18	1	19	14	.0	0	920	27

**Table 8.--Water-quality data for East Middle Fork Parachute Creek
near Rio Blanco
[From U.S. Geological Survey, 1980, 1981]**

09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1976 to current year.

WATER TEMPERATURE: October 1976 to current year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,280 micromhos Oct. 11-30; minimum, 363 micromhos Apr. 23.

WATER TEMPERATURES: Maximum, 22.5°C Aug. 13; minimum, freezing point on many days during December to April.

SEDIMENT CONCENTRATIONS: Maximum daily, 441 mg/L May 22; minimum daily, 5 mg/L June 22.

SEDIMENT LOADS: Maximum daily, 200 tons (181 t) May 14; minimum daily, less than 0.005 ton (0.005 t) several days during year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CaCO3)	HARD- NESS, NONCAR- BONATE (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 AD- SORP- TION RATIO
OCT												
03...	1130	1.2	550	8.1	7.5	8.4	220	0	53	20	37	1.1
30...	1315	1.0	540	8.5	5.0	10.6	210	0	51	20	34	1.0
DEC												
06...	1050	.74	580	8.1	.0	11.2	220	0	55	21	38	1.1
JAN												
17...	1100	.81	530	8.1	1.5	10.9	210	0	51	20	35	1.1
APR												
08...	1145	2.2	523	7.9	2.5	--	210	0	50	20	34	1.0
MAY												
02...	0810	.70	428	7.9	4.0	9.8	170	0	43	15	26	.9
JUL												
08...	1130	4.4	500	8.3	16.5	8.4	200	0	49	19	32	1.0
AUG												
06...	1030	2.2	523	8.0	14.0	--	200	0	50	19	34	1.0

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (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 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)	PHOS- PHORUS, ORTHOPH- OSPHATE DISSOL. (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)
OCT												
03...	.9	260	48	2.0	.3	15	334	.45	1.08	.14	.030	4
30...	.8	250	45	2.1	.2	14	318	.43	.86	.03	.040	5
DEC												
06...	1.2	240	63	2.0	.2	14	340	.46	.68	.15	.030	3
JAN												
17...	1.0	250	25	4.4	.3	13	303	.41	.66	.39	.040	5
APR												
08...	.7	230	43	1.7	.2	13	304	.41	1.81	.55	.050	3
MAY												
02...	.7	190	22	2.0	.2	17	246	.33	46.5	1.2	.020	6
JUL												
08...	.9	240	35	1.8	.3	16	300	.41	3.56	.08	.000	6
AUG												
06...	.8	250	39	2.0	.3	16	312	.42	1.85	.02	.330	5

Table 8.--Water-quality data for East Middle Fork Parachute Creek
near Rio Blanco--Continued

PARACHUTE CREEK BASIN

09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM, DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM, DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY, DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 03...	90	60	<1	2	<10	0	20	4	.0	0	850	<3
30...	80	50	<1	0	<10	0	10	4	.0	0	770	<3
DEC 06...	90	40	1	4	20	1	7	6	.0	0	840	<3
JAN 17...	80	70	<1	0	<10	0	<4	10	.0	1	790	<3
APR 08...	70	60	<1	0	<10	0	9	3	.0	1	740	<3
MAY 02...	60	40	<1	4	<10	0	30	5	.0	1	570	<3
JUL 08...	80	60	<1	6	<10	0	<4	<1	.0	1	780	<3
AUG 06...	90	60	<1	4	<10	5	6	2	.0	1	820	<3

**Table 8.--Water-quality data for East Middle Fork Parachute Creek
near Rio Blanco--Continued**

09092850 EAST MIDDLE FDRK PARACHUTE CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1976 to current year.

WATER TEMPERATURE: October 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1976. Pumping sediment sampler since October 1977.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 615 micromhos Dec. 18, 1976; minimum, 262 micromhos Mar. 23, 1977.

WATER TEMPERATURES: Maximum, 24.5°C July 18, Aug. 9, 14, 1977; minimum, freezing point most days during winter months.

SEDIMENT CONCENTRATIONS: Maximum daily, 5,360 mg/L May 16, 1979; minimum daily, 0.0 mg/L several days during winter months in the 1981 water year.

SEDIMENT LOADS: Maximum daily, 1,980 tons (1,800 t) May 16, 1979; minimum daily, less than 0.005 ton (0.005 t) several days during 1979 water year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 555 micromhos Jan. 13; minimum, 341 micromhos June 28.

WATER TEMPERATURE: Maximum, 24.0 July 6, 10, 11, 31; minimum, freezing point on many days during November to April.

SEDIMENT CONCENTRATIONS: Maximum daily, 535 mg/L June 29; minimum daily, 0.0 mg/L several days during winter months.

SEDIMENT LOADS: Maximum daily, 3.1 tons (2.8 t) June 29; minimum daily, less than 0.005 tons (0.005 t) several days during year.

WATER QUALITY DATA. WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	SPE- CIFIC CON- DUCT- ANCE LAB (UMHOS)	PH (UNITS)	TEMPEH- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (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 AD- SORP- TION RATIO
OCT												
03...	1000	.98	540	542	8.0	5.0	9.8	220	53	21	37	1.1
NOV												
20...	1120	.95	535	547	7.8	.0	10.8	220	53	20	36	1.1
JAN												
08...	1100	.73	550	558	7.9	.0	--	220	54	21	37	1.1
FEB												
24...	1030	.83	480	522	8.2	.5	10.2	230	54	22	37	1.1
APR												
23...	1230	5.1	440	447	8.3	11.0	8.8	170	43	16	30	1.0
MAY												
13...	1030	2.4	481	481	8.2	6.0	10.0	200	49	18	32	1.0
JUN												
17...	1000	1.9	510	513	8.2	10.0	9.0	210	51	20	35	1.1
JUL												
22...	1100	.77	525	528	8.3	15.0	--	210	50	20	40	1.2
AUG												
13...	0950	.63	530	539	8.1	12.5	6.8	210	51	20	40	1.3
SEP												
14...	1000	.45	530	425	8.3	11.5	9.2	220	55	20	38	1.2

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY 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 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)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)
OCT												
03...	1.0	260	44	2.3	.2	15	331	.45	.88	.01	.040	6
NOV												
20...	.8	250	43	2.1	.3	14	321	.44	.82	.16	.060	5
JAN												
08...	.7	250	48	2.4	.2	13	329	.45	.65	.32	.040	5
FEB												
24...	.6	200	48	2.0	.3	13	300	.41	.67	.31	.040	5
APR												
23...	.8	200	32	1.9	.2	15	263	.36	3.6	.69	.050	4
MAY												
13...	.6	220	36	1.6	.1	14	286	.39	2.2	.27	.020	4
JUN												
17...	.7	240	36	1.8	.2	15	306	.42	1.6	.14	.110	4
JUL												
22...	.9	250	25	1.6	.2	16	305	.41	.63	.09	.070	5
AUG												
13...	.9	270	34	2.1	.2	16	328	.45	.56	.14	.010	13
SEP												
14...	.9	260	35	1.9	.2	17	326	.44	.40	.04	.010	6

Table 8.--Water-quality data for East Middle Fork Parachute Creek
near Rio Blanco--Continued

09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM, DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM, DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY, DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 03...	80	40	<1	3	<10	1	20	7	.0	0	850	<3
NOV 20...	90	30	<1	2	10	3	20	50	.0	0	830	7
JAN 08...	90	30	<1	5	<10	1	5	4	.0	0	830	6
FEB 24...	90	20	<1	4	20	0	20	40	.0	1	820	6
APR 23...	80	40	<1	3	20	3	5	7	.0	0	650	3
MAY 13...	80	30	<1	4	<10	7	8	9	.0	0	740	5
JUN 17...	200	40	<1	4	<10	1	20	3	.0	0	800	3
JUL 22...	90	60	<1	7	10	2	20	30	.0	0	850	6
AUG 13...	90	60	<1	2	<10	0	13	4	.0	0	850	7
SEP 14...	90	60	<1	4	16	0	8	7	.0	0	840	64

Table 8.--Water-quality data for East Middle Fork Parachute Creek
near Rio Blanco--Continued

09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO--Continued												
DAY	TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980											
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.5	7.0	5.0	1.0	.0	.0	.5	.0	.5	.5	2.5	.0
2	12.5	7.0	4.5	1.5	1.0	.0	1.5	.0	1.5	.0	2.5	.0
3	12.5	7.0	5.0	2.0	1.5	.0	1.0	.0	1.5	.5	2.5	.5
4	11.5	5.0	5.5	3.0	1.5	.0	1.5	.0	2.0	.0	2.0	.0
5	12.0	5.5	5.0	2.5	1.0	.0	.5	.0	1.0	.0	2.5	.0
6	12.5	5.5	5.0	2.0	1.0	.0	1.0	.0	2.0	.5	1.5	.5
7	12.5	6.0	5.5	4.0	2.0	.0	1.0	.0	1.5	.0	2.5	.0
8	12.0	5.5	5.5	3.0	2.5	.0	1.0	.0	.5	.0	3.0	.0
9	11.5	5.5	5.0	2.5	.5	.0	2.0	.5	.5	.0	2.5	.0
10	11.0	5.0	3.5	1.0	.5	.0	.5	.0	.5	.0	2.5	.0
11	10.5	5.0	4.0	1.0	.0	.0	.5	.0	.5	.0	2.5	.0
12	---	---	3.0	.5	.0	.0	1.0	.5	.5	.0	2.0	.0
13	---	---	3.0	.5	.0	.0	2.5	1.0	1.5	.0	2.0	.0
14	---	---	3.0	.5	.0	.0	1.5	.5	1.5	.0	2.5	.0
15	---	---	3.0	.5	.0	.0	1.5	.5	2.0	.5	3.0	.0
16	---	---	2.5	.5	.5	.0	2.5	.5	3.0	.5	3.0	.0
17	---	---	4.0	.5	.5	.0	2.5	.5	2.0	.5	1.5	.0
18	---	---	4.5	.5	.0	.0	2.5	.5	2.5	.5	2.5	.0
19	---	---	2.5	1.0	.0	.0	1.5	.0	1.5	.5	3.5	.0
20	---	---	3.0	.5	1.0	.0	.5	.0	2.0	.5	2.5	.0
21	---	---	1.5	.0	1.0	.0	.5	.0	2.5	.5	3.5	.0
22	---	---	.5	.0	1.0	.0	.5	.0	2.5	.0	3.0	.5
23	---	---	1.5	.0	1.5	.0	.5	.5	2.0	.0	3.0	.5
24	---	---	2.5	.5	1.0	.0	1.0	.5	1.0	.0	4.5	.0
25	---	---	1.5	.5	1.0	.0	1.0	.5	.5	.0	2.5	.5
26	---	---	1.5	.5	1.5	.0	1.0	.0	1.5	.0	3.5	.0
27	---	---	.5	.0	1.5	.0	1.0	.5	2.0	.0	3.0	.0
28	---	---	2.0	1.0	1.0	.0	.5	.0	2.0	.0	3.0	.5
29	---	---	1.5	1.0	1.5	.0	.5	.0	2.0	.5	4.0	.5
30	---	---	1.5	1.0	.0	.0	.5	.0	---	---	3.0	.0
31	4.5	1.0	---	---	.0	.0	.5	.0	---	---	3.0	.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	4.0	.0			---	---	19.5	12.5	---	---	17.5	7.5
2	2.0	.0			---	---	21.0	10.0	---	---	18.0	8.0
3	4.0	.0			---	---	21.5	9.0	---	---	18.0	8.0
4	5.0	.0			---	---	22.0	9.5	---	---	18.5	8.5
5	5.0	.5			---	---	22.0	9.5	---	---	18.5	9.0
6	4.0	1.0			---	---	22.0	10.0	---	---	18.0	10.5
7	4.0	1.0			---	---	21.5	11.0	---	---	17.0	11.0
8	4.0	.5			---	---	19.5	9.5	---	---	15.5	11.5
9	5.0	.0			---	---	17.0	9.5	---	---	14.0	11.0
10	5.5	1.5			---	---	18.0	9.5	---	---	14.5	11.0
11	5.0	.5			---	---	20.5	10.0	21.5	12.5	15.5	8.5
12	5.5	.0			---	---	20.0	9.5	22.0	9.5	15.0	9.5
13	6.0	.0			---	---	22.0	9.0	22.5	11.5	16.5	8.5
14	7.0	.0			---	---	22.0	10.0	20.5	12.5	15.5	8.0
15	7.0	1.0			---	---	22.5	9.5	20.0	13.0	15.5	7.5
16	7.5	.5			---	---	22.0	10.0	17.5	10.5	16.0	9.5
17	8.0	.5			---	---	22.0	12.0	20.5	9.5	15.5	7.0
18	8.5	1.0			---	---	20.0	10.5	19.5	9.5	16.0	7.0
19	8.5	1.5			---	---	22.5	12.5	18.5	10.0	16.5	9.0
20	9.0	1.5			---	---	21.0	11.5	18.5	8.0	15.0	8.5
21	8.5	2.0			---	---	21.5	10.0	19.5	8.0	14.5	7.0
22	7.0	2.5			---	---	21.5	9.0	19.5	8.5	13.5	6.5
23	---	---			---	---	21.5	9.5	18.0	11.0	13.0	5.0
24	---	---			---	---	22.0	10.0	16.0	12.0	13.0	5.5
25	---	---			---	---	21.5	10.0	17.0	10.5	13.0	5.5
26	---	---			---	---	22.5	10.0	18.0	9.5	13.5	5.5
27	---	---			22.0	9.5	22.5	11.5	19.5	9.0	14.0	6.0
28	---	---			20.5	10.5	22.5	10.5	19.0	9.0	14.0	6.5
29	---	---			22.0	11.5	21.5	9.0	15.0	10.0	13.0	6.5
30	---	---			22.0	12.0	---	---	16.5	8.0	13.0	6.0
31	---	---			---	---	---	---	15.0	8.0	---	---

Table 8.--Water-quality data for East Middle Fork Parachute Creek
near Rio Blanco--Continued

09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO--Continued

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.5	6.5	4.0	1.5	2.0	.5	.0	.0	.5	.0	2.5	.0
2	11.5	4.5	4.5	1.5	3.0	.5	.5	.0	.5	.0	2.0	.0
3	11.5	5.5	4.5	1.5	3.5	1.5	1.0	.0	.5	.0	2.0	.0
4	11.5	4.5	5.5	2.5	3.0	1.5	1.5	.0	.5	.0	2.5	.0
5	11.5	5.0	4.5	2.0	2.5	1.0	1.0	.0	.5	.0	2.5	.0
6	11.5	5.0	5.0	2.0	2.5	1.5	.5	.0	.5	.0	1.0	.0
7	11.5	5.0	5.0	2.5	2.5	.5	.0	.0	.5	.0	2.0	.0
8	11.5	5.0	4.5	2.0	2.5	.5	.0	.0	.5	.0	2.0	.0
9	11.0	4.5	4.0	1.5	1.0	.0	.0	.0	1.0	.0	2.0	.0
10	10.0	4.5	4.0	1.5	.0	.0	.0	.0	.5	.0	2.0	.0
11	10.0	4.0	4.5	1.5	.0	.0	.0	.0	.0	.0	---	---
12	9.0	4.5	6.0	3.0	.5	.0	.0	.0	.5	.0	---	---
13	10.5	7.0	4.0	2.0	.0	.0	.0	.0	.5	.0	---	---
14	9.0	5.0	3.0	.5	.5	.0	.0	.0	1.0	.0	---	---
15	6.5	4.5	1.5	.0	1.0	.0	.5	.0	1.5	.5	---	---
16	5.0	1.0	1.5	.0	1.0	.0	.5	.0	1.5	.0	---	---
17	7.0	2.5	1.0	.0	1.0	.0	1.0	.0	1.5	.0	---	---
18	6.5	3.0	1.0	.0	1.0	.0	.5	.0	2.0	.0	---	---
19	6.5	2.0	1.5	.5	1.5	.0	.0	.0	2.0	.0	---	---
20	6.0	1.5	1.5	.5	1.0	.0	.5	.0	1.0	.0	---	---
21	5.5	2.0	1.5	.0	1.5	.0	.0	.0	1.5	.0	---	---
22	6.5	2.5	3.0	.5	2.0	.5	.0	.0	1.0	.0	---	---
23	4.5	1.5	2.5	1.0	2.0	.0	.0	.0	1.5	.0	---	---
24	5.0	1.0	2.5	1.0	1.5	.0	.5	.0	1.5	.0	---	---
25	5.0	1.5	1.5	1.0	2.0	1.0	.5	.0	1.5	.0	---	---
26	5.5	2.5	2.0	.0	1.0	.0	.0	.0	1.0	.0	---	---
27	4.5	2.5	2.0	.0	1.5	.0	.5	.0	2.0	.0	---	---
28	5.0	1.0	2.5	.5	2.0	.5	1.0	.0	2.0	.0	---	---
29	4.5	1.0	2.5	.5	.5	.0	1.0	.0	---	---	---	---
30	4.0	1.5	3.5	1.0	.0	.0	.5	.0	---	---	---	---
31	4.5	1.5	---	---	.0	.0	.5	.0	---	---	---	---

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	14.5	4.0	18.0	6.0	16.0	12.5	22.0	13.0	---	---
2	---	---	13.0	5.5	19.0	6.0	21.0	12.0	17.0	11.0	---	---
3	---	---	8.5	4.5	13.5	8.5	19.0	10.0	23.5	11.0	---	---
4	---	---	14.5	3.0	19.0	6.5	22.5	9.5	22.0	11.0	---	---
5	---	---	14.0	3.0	20.0	6.5	23.5	10.0	23.5	10.0	---	---
6	---	---	13.0	4.5	21.0	7.0	24.0	10.5	23.0	10.0	---	---
7	---	---	13.5	2.0	20.0	9.0	23.5	11.0	23.0	10.0	---	---
8	---	---	7.5	2.5	20.5	8.5	22.5	12.0	22.0	11.0	19.0	12.0
9	8.0	1.5	11.5	3.0	21.0	8.5	20.5	12.0	21.0	10.0	18.0	11.0
10	8.0	.5	13.5	2.0	21.0	9.0	24.0	11.0	22.5	10.5	14.5	11.0
11	8.0	.5	8.5	3.0	21.5	9.0	24.0	12.0	15.5	10.5	17.0	10.0
12	7.5	.0	9.0	3.0	20.5	8.0	21.0	13.0	14.0	10.5	15.5	9.5
13	7.5	1.5	14.0	2.0	19.0	8.0	19.0	13.5	17.5	10.5	17.0	10.0
14	9.0	.5	15.5	2.5	11.5	6.0	23.0	12.0	17.0	11.0	18.0	9.0
15	9.0	2.5	11.5	4.5	17.0	3.5	23.0	11.5	20.5	11.5	16.5	9.0
16	12.0	1.0	11.0	4.5	19.0	4.5	17.0	13.0	18.5	11.5	17.5	9.0
17	11.5	1.0	8.5	4.5	19.5	6.5	18.5	12.0	20.0	10.5	17.0	5.5
18	11.0	1.5	12.5	5.0	18.5	6.5	22.5	11.0	19.5	10.0	17.0	8.0
19	12.0	4.0	13.5	4.5	20.5	7.0	23.0	11.0	17.5	10.0	14.0	8.0
20	9.5	2.0	9.5	3.5	20.0	8.0	23.0	9.5	---	---	17.0	8.5
21	10.5	1.0	8.5	3.0	21.0	8.5	23.0	10.0	---	---	17.5	10.0
22	10.5	1.5	9.5	4.5	22.0	8.5	22.5	11.0	---	---	17.0	9.5
23	14.5	1.0	15.0	5.0	20.5	9.0	23.5	10.0	---	---	17.0	8.5
24	12.5	2.0	14.5	4.0	21.5	9.5	23.5	11.0	---	---	17.0	10.0
25	15.5	2.5	13.0	6.0	20.5	9.0	23.5	12.0	---	---	15.0	9.5
26	15.0	2.5	13.5	6.5	23.0	11.0	22.0	12.0	---	---	15.5	5.5
27	13.5	3.0	16.0	7.5	22.5	12.0	20.5	10.5	---	---	15.5	6.5
28	15.5	3.0	15.0	7.5	19.5	10.5	21.5	9.5	---	---	16.0	7.5
29	15.5	3.0	10.0	7.0	22.0	10.0	20.0	10.0	---	---	13.5	8.0
30	15.5	3.5	17.5	5.5	23.5	9.5	21.5	11.0	---	---	15.0	8.5
31	---	---	14.0	8.0	---	---	24.0	11.0	---	---	---	---

Table 8.--Water-quality data for East Middle Fork Parachute Creek
near Rio Blanco--Continued

09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	550	543	578	540	466	467	504		---	495	---	500
2	550	544	577	533	465	466	500		---	494	---	499
3	550	546	576	536	462	466	495		---	497	---	498
4	547	545	579	537	463	464	502		---	497	---	497
5	541	545	581	533	462	463	496		---	498	---	496
6	543	548	582	531	463	480	494		---	498	---	494
7	550	549	581	528	462	507	494		---	---	---	492
8	550	547	577	526	456	508	504		---	---	---	492
9	550	549	574	523	460	501	506		---	---	---	492
10	550	551	576	516	461	487	504		---	---	---	487
11	---	552	561	522	466	507	509		---	501	505	489
12	---	555	566	517	466	507	512		---	497	509	489
13	---	557	576	510	465	493	513		---	479	507	489
14	---	559	574	495	460	506	504		---	496	505	487
15	---	561	572	503	455	505	487		---	496	496	487
16	---	564	570	505	462	499	486		---	502	504	487
17	---	563	568	502	464	490	471		---	506	504	487
18	---	551	564	504	456	500	453		---	502	506	486
19	---	556	566	503	458	505	428		---	502	506	485
20	---	555	560	488	458	505	427		---	505	505	484
21	---	560	558	506	464	503	416		---	506	506	484
22	---	563	557	---	465	500	414		---	509	506	483
23	---	566	556	---	468	504	392		---	509	502	483
24	---	564	551	---	450	504	394		---	507	497	482
25	---	565	550	---	465	499	---		---	508	501	481
26	---	566	549	---	470	501	---		---	509	502	481
27	---	567	547	484	472	505	---		494	510	502	480
28	---	579	544	469	471	505	---		492	509	503	479
29	---	578	545	467	467	505	---		496	510	500	478
30	---	572	544	467	---	502	---		495	---	500	478
31	541	---	546	468	---	502	---		---	---	500	---

Table 8.--Water-quality data for East Middle Fork Parachute Creek
near Rio Blanco--Continued

09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981 MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	537	541	542	546	540	529	---	461	492	517	538	---
2	542	541	542	543	543	530	---	461	496	514	533	---
3	542	542	542	543	542	530	---	446	488	513	539	---
4	542	542	542	542	543	531	---	455	489	516	538	---
5	544	542	542	539	544	528	---	464	493	519	538	---
6	545	543	542	543	542	530	---	456	495	513	539	---
7	545	542	538	547	543	531	---	465	496	518	540	---
8	544	540	540	550	541	530	---	464	499	521	545	534
9	544	542	541	549	539	527	480	466	505	512	544	533
10	545	541	545	547	539	528	459	470	508	508	543	521
11	545	540	545	552	540	---	438	469	509	519	537	523
12	544	532	545	550	539	---	438	468	510	514	539	529
13	539	522	548	549	539	---	440	472	508	507	541	531
14	537	534	548	550	538	---	426	473	504	518	537	532
15	526	540	543	546	537	---	405	474	505	521	538	532
16	524	542	543	543	535	---	381	468	507	517	535	533
17	526	545	542	541	534	---	390	468	509	506	530	533
18	535	545	542	544	533	---	397	470	509	503	529	534
19	538	544	543	546	530	---	400	473	511	517	529	535
20	539	544	544	546	530	---	413	470	514	517	---	536
21	540	544	544	548	534	---	425	465	520	521	---	536
22	540	541	541	547	533	---	437	468	522	519	---	536
23	532	540	539	550	533	---	444	472	521	530	---	536
24	538	536	542	546	529	---	444	475	522	520	---	536
25	540	539	541	544	530	---	443	477	521	524	---	536
26	538	540	540	547	529	---	442	479	522	533	---	536
27	534	540	541	543	531	---	445	482	519	534	---	537
28	537	539	541	542	531	---	450	484	497	538	---	537
29	539	540	543	542	---	---	454	481	497	540	---	537
30	539	542	544	543	---	---	456	488	518	540	---	537
31	541	---	544	541	---	---	---	485	---	539	---	---

Table 9.--Water-quality data for East Fork Parachute Creek
near Anvil Points
[From U.S. Geological Survey, 1980, 1981]

09092960 EAST FORK PARACHUTE CREEK NEAR ANVIL POINTS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CaCO3)	HARD- NESS, NONCAR- BONATE (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 AD- SORP- TION RATIO
OCT 04...	1345	1.0	560	7.9	8.0	7.8	240	0	59	22	23	.7
MAY 29...	1200	61	415	8.2	8.5	8.6	200	0	50	17	16	.5
JUN 30...	1400	6.7	455	8.3	17.0	--	220	0	55	20	18	.5
JUL 29...	1500	2.7	460	8.3	17.5	7.4	210	0	52	20	21	.6
AUG 27...	1600	1.4	470	8.3	16.0	7.5	220	0	53	21	21	.6

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (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 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)	PHOS- PHORUS, ORTHOPH- OSPHATE DISSOL- (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)
OCT 04...	.7	260	27	1.2	.2	15	305	.41	.84	.08	.040	5
MAY 29...	.5	200	14	1.1	.1	17	242	.33	40.3	1.2	.040	4
JUN 30...	.7	240	18	2.6	.2	16	278	.38	5.03	.53	.110	1
JUL 29...	.7	240	21	1.1	.3	16	278	.38	2.07	.21	.020	5
AUG 27...	.8	240	21	1.2	.2	15	280	.38	1.11	.30	.020	4

DATE	BARIUM, DIS- SOLVED (UG/L AS Ba)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS Cd)	COPPER, DIS- SOLVED (UG/L AS Cu)	IRON, DIS- SOLVED (UG/L AS Fe)	LEAD, DIS- SOLVED (UG/L AS Pb)	LITHIUM DIS- SOLVED (UG/L AS Li)	MANGA- NESE, DIS- SOLVED (UG/L AS Mn)	MERCURY DIS- SOLVED (UG/L AS Hg)	SELE- NIUM, DIS- SOLVED (UG/L AS Se)	STRON- TIUM, DIS- SOLVED (UG/L AS Sr)	ZINC, DIS- SOLVED (UG/L AS Zn)
OCT 04...	90	50	<1	1	<10	0	6	<1	.0	1	700	4
MAY 29...	60	30	1	2	30	2	7	4	.0	1	500	5
JUN 30...	80	60	<1	1	<10	0	<4	2	.0	1	610	<3
JUL 29...	80	30	<1	1	<10	0	<4	<1	.0	1	620	<3
AUG 27...	80	60	<1	1	<10	0	5	1	.0	1	630	<3

Table 9.--Water-quality data for East Fork Parachute Creek
near Anvil Points--Continued

09092960 EAST FORK PARACHUTE CREEK NEAR ANVIL POINTS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MHOS)	SPE- CIFIC CON- DUCT- ANCE (MHOS)	PH	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (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 AD- SORP- TION RATIO
OCT												
03...	1400	1.1	470	--	8.1	7.5	9.0	240	59	23	23	.6
NOV												
05...	1500	1.2	470	--	8.2	3.0	--	230	55	22	21	.6
DEC												
04...	1400	1.1	450	530	8.2	2.5	10.0	250	62	24	24	.7
18...	1400	.96	500	552	8.2	1.5	--	250	61	23	23	.6
JAN												
28...	1100	.78	530	537	--	.0	--	250	61	23	22	.6
APR												
14...	1010	3.6	445	424	8.1	11.0	--	200	50	18	18	.6
22...	0930	5.4	410	421	8.2	3.0	9.8	200	51	18	18	.6
MAY												
07...	1400	4.5	420	448	8.2	9.0	--	220	54	20	19	.6
JUN												
02...	1600	2.0	440	474	8.2	15.5	7.2	230	56	21	21	.6
JUL												
07...	1600	.98	440	496	8.3	19.0	6.8	230	56	22	21	.6
AUG												
04...	1400	.43	525	539	8.8	16.0	9.0	230	57	22	22	.7
SEP												
28...	1700	.36	470	604	8.6	12.3	7.8	260	64	24	22	.6

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLOR- IDE, DIS- SOLVED (MG/L AS CL)	FLUOR- IDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	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)	PHOS- PHORUS, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)
OCT												
03...	.7	260	24	1.4	.2	15	304	.41	.92	.10	.070	5
NOV												
05...	.6	260	25	1.3	.2	13	296	.40	.98	.17	.030	4
DEC												
04...	1.0	270	24	1.9	.2	14	316	.43	.94	.47	.040	4
18...	.6	270	27	2.5	.1	14	318	.43	.82	.77	.050	3
JAN												
28...	.4	270	26	1.3	.2	13	313	.43	.66	.57	.010	3
APR												
14...	.8	200	23	1.2	.2	13	248	.34	2.5	.64	.000	2
22...	.6	200	23	1.1	.2	14	250	.34	3.6	.82	.030	4
MAY												
07...	.6	250	24	1.0	.2	14	285	.39	3.5	.37	.020	5
JUN												
02...	.9	240	25	1.5	.1	16	288	.39	1.6	.30	.000	4
JUL												
07...	.9	250	1.6	1.3	.1	19	274	.37	.73	.16	.030	4
AUG												
04...	.9	270	1.0	3.5	.5	18	289	.39	.34	.14	.010	6
SEP												
28...	.9	270	21	1.3	.2	17	314	.43	.31	.08	.060	4

DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM, DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM, DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY, DIS- SOLVED (UG/L AS HG)	SELLE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT												
03...	90	60	<1	2	<10	4	8	2	.0	0	700	3
NOV												
05...	80	40	<1	3	<10	1	<4	<1	.0	0	620	<3
DEC												
04...	80	60	<1	2	<10	1	<4	<1	.0	1	680	9
18...	80	30	2	0	10	0	7	1	.0	0	680	5
JAN												
28...	70	30	0	0	20	4	5	1	.0	1	640	7
APR												
14...	100	30	<1	3	30	0	7	2	.1	1	540	20
22...	60	30	<1	2	10	0	5	4	.0	1	520	30
MAY												
07...	80	30	<1	2	<10	4	7	2	.0	0	580	8
JUN												
02...	80	30	<1	2	<10	0	20	3	.0	1	620	<3
JUL												
07...	200	220	<1	3	<10	2	10	2	.1	0	650	5
AUG												
04...	90	30	<1	2	<10	5	16	<1	.1	0	670	<3
SEP												
28...	92	50	<1	1	<10	2	8	5	.1	0	720	99

**Table 10.--Water-quality data for East Fork Parachute Creek
near Rulison**
[From U.S. Geological Survey, 1980, 1981]

02092970 EAST FORK PARACHUTE CREEK NEAR RULISON, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD--October 1976 to current year.

PERIOD OF DAILY RECORDS--

SPECIFIC CONDUCTANCE: October 1976 to current year.

WATER TEMPERATURE: October 1976 to current year.

INSTRUMENTATION--water-quality monitor since October 1976. Pumping sediment sampler since December 1976.

REMARKS--Daily maximum and minimum specific-conductance data available in District Office.

EXTREMES FOR CURRENT YEAR--

SPECIFIC CONDUCTANCE: Maximum, 570 micromhos Oct. 9; minimum, 115 micromhos June 10.

WATER TEMPERATURES: Maximum, 19.5°C July 11, 17, 21, 22; minimum recorded, 0.0°C Nov. 8.

SEDIMENT CONCENTRATIONS: Maximum daily, not determined; minimum daily, not determined.

SEDIMENT LOADS: Maximum daily, not determined; minimum daily, not determined.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW- INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE- WATER (DEG C)	OXYGEN- DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (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 AD- SOP- TION RATIO
OCT 09...	1300	.93	590	8.0	4.0	10.1	220	0	52	22	24	.7
APR 25...	1200	46	390	8.4	4.0	11.1	180	1	44	17	22	.7
MAY 16...	1400	121	380	8.4	7.5	9.7	180	0	46	16	20	.6
JUN 10...	1500	27	440	8.3	14.0	8.1	200	0	52	18	14	.5
JUL 01...	1400	6.7	460	8.4	15.0	8.1	210	0	52	20	22	.7
JUL 17...	1400	3.2	460	8.7	14.5	7.9	220	0	53	21	23	.7
AUG 13...	1600	1.1	440	8.7	16.5	7.8	200	0	46	20	24	.7
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINIT- Y (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 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)	PHOS- PHORUS, ORTHOPH- OSPHATE DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)
JCT 09...	.6	250	33	1.4	.2	14	299	.41	.75	.07	.030	5
APR 25...	2.0	180	23	2.3	.1	17	242	.33	30.2	1.3	--	3
MAY 16...	.5	190	14	1.4	.1	18	241	.33	78.7	2.3	.310	4
JUN 10...	.6	230	19	1.9	.1	17	269	.37	19.8	.82	.010	4
JUL 01...	.6	220	24	.7	.3	15	269	.37	4.87	.23	.000	4
JUL 17...	.9	240	23	1.0	.3	16	284	.39	2.46	.20	.010	4
AUG 13...	.7	220	25	1.3	.2	16	266	.36	.81	.01	.010	5
DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM, 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)	LITHIUM, DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY, DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 09...	80	60	<1	0	<10	1	7	<1	.0	0	680	<3
APR 25...	60	30	1	3	10	3	4	2	.0	1	580	10
MAY 16...	80	30	<1	2	20	0	7	<1	.0	1	550	<3
JUN 10...	70	40	<1	4	<10	6	6	1	.0	1	570	<3
JUL 01...	80	60	<1	1	<10	0	<4	<1	.0	1	670	<3
JUL 17...	80	50	<1	2	<10	1	<4	<1	.0	1	680	<3
AUG 13...	80,	140	2	1	<10	3	9	<1	.0	1	660	<3

Table 10.--Water-quality data for East Fork Parachute Creek
near Rulison--Continued

09092970 EAST FORK PARACHUTE CREEK NEAR RULISON, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1976 to current year.

WATER TEMPERATURE: October 1976 to current year.

SUSPENDED-SEDIMENT DISCHARGE: December 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1976. Pumping sediment sampler since December 1976.

REMARKS.--Daily maximum and minimum specific-conductance data available in District Office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 620 micromhos Feb. 13, 1981; minimum, 97 micromhos Dec. 18, 1981.

WATER TEMPERATURES: Maximum, 20.5°C June 26, 1981; minimum, 0.0°C several days during year.

SEDIMENT CONCENTRATIONS: Maximum daily, 1.680 mg/L May 17, 1978; minimum daily, 1 mg/L July 29, 1981.

SEDIMENT LOADS: Maximum daily, 485 tons (440 t) May 17, 1978; minimum daily, 0.01 ton (0.01 t) on many days during 1978 water year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 620 micromhos Feb. 13; minimum, 97 micromhos Dec. 18.

WATER TEMPERATURES: Maximum, 20.5°C June 26, July 10; minimum 0.0°C many days during October to April.

SEDIMENT CONCENTRATIONS: Maximum daily, 397 mg/L June 28, 1981; minimum daily, 1 mg/L July 29, 1981.

SEDIMENT LOADS: Maximum daily, 1.7 tons (1.5 t) April 17, 1981; minimum daily, .01 ton (0.01 t) on many days during 1981 water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	SPE- CIFIC CON- DUCT- ANCE LAB (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO
OCT												
02...	1400	.51	480	501	8.4	4.0	--	230	55	23	25	.7
NOV												
12...	1500	.66	440	483	8.6	4.5	10.3	220	52	22	23	.7
DEC												
01...	1500	.37	440	527	8.4	1.0	10.6	240	56	23	25	.7
MAR												
04...	1100	.83	490	522	8.1	1.0	--	250	61	23	21	.6
APR												
17...	1500	6.7	350	505	8.3	8.5	9.7	180	44	16	18	.6
27...	1200	3.9	--	--	--	8.5	--	--	--	--	--	--
MAY												
05...	1200	3.9	--	--	--	6.5	--	--	--	--	--	--
05...	1400	3.9	420	436	8.7	6.5	8.3	210	51	20	22	.7
27...	1400	1.5	420	453	8.6	11.0	8.2	210	51	20	22	.7
28...	1300	2.1	--	--	--	1.1	--	--	--	--	--	--
JUN												
10...	1130	1.2	--	--	--	11.5	--	--	--	--	--	--
10...	1400	.84	450	467	8.4	11.5	--	220	54	21	23	.7
30...	1330	1.0	--	--	--	15.0	--	--	--	--	--	--

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L 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 SI02)	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- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)
OCT												
02...	.8	250	30	1.5	.2	15	302	.41	.42	.00	.050	4
NOV												
12...	.7	240	28	1.4	.2	12	285	.39	.51	.14	.000	5
DEC												
01...	.7	260	32	1.4	.2	13	310	.42	.31	.36	.030	4
MAR												
04...	.5	260	27	1.4	.2	13	307	.42	.69	.72	.030	5
APR												
17...	.8	180	27	--	.2	13	--	--	--	.68	.000	4
27...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	1.2	250	.7	1.2	.2	14	262	.36	2.8	.17	.020	5
27...	.8	230	28	1.1	.2	14	276	.38	1.1	.06	.060	4
28...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	.8	240	7.6	1.0	.1	17	271	.37	.61	.18	.030	6
30...	--	--	--	--	--	--	--	--	--	--	--	--

Table 10.--Water-quality data for East Fork Parachute Creek
near Rulison--Continued

09092970 EAST FORK PARACHUTE CREEK NEAR RULISON, CO--Continued
WATER-QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM, DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM, DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY, DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT												
02...	80	50	2	0	<10	1	8	<1	.0	0	740	<3
NOV												
12...	70	20	<1	3	<10	1	5	<1	.0	0	660	<3
DEC												
01...	80	70	<1	1	<10	0	8	<1	.0	1	730	<3
MAR												
04...	80	30	<1	22	10	1	6	2	.0	1	630	10
APR												
17...	100	30	<1	3	40	0	6	2	.0	1	500	8
27...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	70	40	<1	2	10	5	8	2	.1	1	590	6
27...	70	30	<1	4	<10	1	5	1	.4	1	630	10
28...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	300	40	<1	3	10	2	10	1	.2	0	660	10
30...	--	--	--	--	--	--	--	--	--	--	--	--

Table 10.--Water-quality data for East Fork Parachute Creek
near Rulison--Continued

09092970 EAST FORK PARACHUTE CREEK NEAR RULISON, CO--Continued

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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

Table 10.--Water-quality data for East Fork Parachute Creek
near Rulison--Continued

07092970 EAST FORK PARACHUTE CREEK NEAR RULISON, CO--Continued
TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.5	3.5	.0	.0	.0	.0			---	---		
2	6.5	2.0	.0	.0	.0	.0			---	---		
3	6.5	1.5	.0	.0	.0	.0			---	---		
4	6.5	2.0	.5	.0	.0	.0			---	---		
5	7.0	2.0	1.0	.0	.0	.0			---	---		
6	7.0	3.5	2.0	.0	.0	.0			---	---		
7	7.0	2.5	2.0	.5	.0	.0			---	---		
8	7.0	3.0	1.5	.0	.0	.0			---	---		
9	6.5	2.5	1.5	.0	.0	.0			---	---		
10	5.5	1.0	2.0	.0	.0	.0			---	---		
11	6.0	1.0	2.5	.0	.0	.0			.0	.0		
12	7.0	2.0	4.0	.0	.0	.0			.0	.0		
13	8.0	6.0	2.5	.0	.0	.0			.0	.0		
14	7.0	5.0	.0	.0	.0	.0			---	---		
15	4.5	1.0	.0	.0	.0	.0			---	---		
16	1.0	.0	.0	.0	.0	.0			---	---		
17	2.0	.0	.0	.0	.0	.0			---	---		
18	2.5	.0	---	---	.0	.0			---	---		
19	1.0	.0	---	---	.0	.0			---	---		
20	1.0	.0	---	---	---	---			---	---		
21	1.0	.0	---	---	---	---			---	---		
22	2.0	.0	---	---	---	---			---	---		
23	.0	.0	---	---	---	---			---	---		
24	.0	.0	.0	.0	---	---			---	---		
25	.0	.0	.0	.0	---	---			---	---		
26	.0	.0	.0	.0	---	---			---	---		
27	.0	.0	.0	.0	---	---			---	---		
28	.0	.0	.0	.0	---	---			---	---		
29	.0	.0	.0	.0	---	---			---	---		
30	.0	.0	.0	.0	---	---			---	---		
31	.0	.0	---	---	---	---			---	---		

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	12.5	5.0	14.0	6.0	15.5	13.5	---	---	---	---
2	---	---	12.5	6.5	15.0	6.5	18.0	14.0	---	---	---	---
3	---	---	8.0	5.0	12.5	9.0	16.5	10.5	---	---	---	---
4	.0	.0	10.5	3.0	15.0	7.0	18.5	9.5	---	---	---	---
5	.0	.0	10.0	3.0	16.5	7.0	19.5	10.5	---	---	---	---
6	.0	.0	9.5	4.5	18.0	8.0	19.5	10.5	---	---	---	---
7	---	---	7.5	1.0	17.5	10.0	20.0	12.5	---	---	---	---
8	---	---	3.5	1.5	18.0	9.0	18.0	12.5	---	---	---	---
9	---	---	6.5	2.0	18.0	9.5	19.0	13.0	---	---	12.5	11.0
10	.5	.0	9.0	1.0	19.0	10.0	20.5	11.5	---	---	12.5	10.0
11	1.0	.0	6.5	2.5	19.0	9.0	20.0	13.0	---	---	9.5	9.0
12	3.0	.0	6.5	2.5	16.0	8.0	19.5	14.0	---	---	---	---
13	4.5	1.0	8.5	.5	15.0	8.5	17.5	14.5	---	---	---	---
14	6.5	.0	11.5	2.0	8.5	3.5	19.0	13.5	---	---	---	---
15	5.5	2.5	9.0	4.0	10.5	1.0	18.0	11.5	---	---	---	---
16	8.0	1.5	7.5	5.0	13.0	2.0	15.5	13.0	15.0	10.5	---	---
17	8.0	1.5	6.5	4.0	15.5	5.5	15.5	12.5	15.5	9.0	---	---
18	8.0	2.5	9.5	5.0	14.0	5.0	18.5	12.0	---	---	---	---
19	7.5	3.0	11.0	5.0	17.0	6.0	18.5	11.5	---	---	---	---
20	5.0	2.0	8.0	3.5	18.0	8.0	17.5	9.5	---	---	---	---
21	7.0	.5	6.5	2.5	18.0	8.5	17.5	10.5	---	---	---	---
22	6.5	1.0	8.0	4.0	18.0	8.5	17.5	11.5	---	---	---	---
23	9.0	.5	11.0	4.5	18.5	9.0	19.5	11.5	---	---	---	---
24	9.5	2.5	11.0	4.0	18.5	10.0	18.5	11.0	---	---	---	---
25	11.5	3.0	12.5	6.5	18.5	9.5	18.5	12.0	---	---	---	---
26	10.5	2.5	13.5	7.5	20.5	11.0	18.0	12.0	---	---	---	---
27	10.5	3.0	14.5	8.5	19.5	13.5	16.0	10.5	---	---	---	---
28	11.5	2.5	14.0	9.0	18.0	13.0	15.0	9.5	---	---	---	---
29	13.0	3.0	11.0	7.5	17.5	10.5	16.5	10.5	---	---	---	---
30	12.5	4.0	14.0	6.5	20.0	10.5	19.5	11.5	---	---	---	---
31	---	---	11.5	9.0	---	---	---	---	---	---	---	---

Table 10.--Water-quality data for East Fork Parachute Creek
near Rulison--Continued

09092970 EAST FORK PARACHUTE CREEK NEAR RULISON, CU--Continued												
SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980												
MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	485	470										
2	485	470					---	373	399	376	437	455
3	485	470					---	377	396	422	440	456
4	487	470					---	386	393	423	442	458
5	488	465					---	391	410	434	447	458
							---	392	435	436	448	458
6	488	465					---	394	405	437	449	454
7	488	465					---	386	401	435	452	454
8	488	465					---	386	267	435	454	456
9	488	476					---	383	310	439	456	459
10	487	488					---	400	353	441	458	456
11	486	487					---	395	432	443	459	460
12	486	493					---	381	438	444	462	459
13	485	497					---	366	438	445	463	463
14	484	494					---	381	440	444	460	462
15	483	500					---	388	442	446	456	463
16	483	502					---	400	442	446	460	467
17	482	494					---	434	370	432	461	464
18	481	486					---	420	332	388	462	469
19	480	490					---	406	295	385	463	470
20	480	488					---	390	300	396	461	471
21	480	494					---	369	308	388	460	473
22	480	480					---	347	315	388	458	474
23	480	457					---	339	325	383	454	477
24	475	453					---	372	336	380	448	478
25	475	453					---	380	335	381	448	480
26	475	451					---	388	337	380	450	481
27	475	444					---	393	338	364	448	480
28	470	431					---	394	357	347	448	482
29	470	430					---	370	397	371	446	484
30	470	430					---	372	400	374	448	486
31	470	---					---	401	---	429	452	---

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981												
MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	487	485	446		---		---	400	429	440	---	---
2	480	489	464		---		---	402	430	435	---	---
3	470	480	462		---		---	405	424	436	---	---
4	470	469	463		---		148	415	425	434	---	---
5	471	471	464		---		265	423	428	432	---	---
6	472	470	475		---		438	415	429	434	---	---
7	478	467	474		---		---	424	430	434	---	---
8	480	469	481		---		---	425	430	437	---	---
9	481	474	491		---		---	422	429	429	---	374
10	481	474	490		---		333	422	432	430	---	387
11	481	473	372		550		337	420	435	426	---	452
12	476	461	447		591		346	417	435	436	---	---
13	476	454	131		596		354	419	436	430	---	---
14	469	472	---		---		348	420	435	424	---	---
15	458	415	164		---		333	420	433	426	---	---
16	460	431	188		---		337	415	434	427	456	---
17	461	445	102		---		348	415	433	431	446	---
18	470	---	---		---		351	415	431	429	---	---
19	475	---	101		---		357	416	432	427	---	---
20	476	---	---		---		363	414	432	431	---	---
21	477	---	---		---		377	415	434	428	---	---
22	479	---	---		---		381	416	435	429	---	---
23	501	---	---		---		387	418	433	426	---	---
24	517	184	---		---		388	420	434	431	---	---
25	520	301	---		---		388	419	438	430	---	---
26	496	347	---		---		387	420	436	427	---	---
27	475	386	---		---		391	422	438	429	---	---
28	490	402	---		---		397	427	423	431	---	---
29	502	419	---		---		401	0	406	431	---	---
30	492	434	---		---		396	427	421	427	---	---
31	481	---	---		---		---	424	---	---	---	---

Table 11.--Water-quality data for Ben Good Creek near Rulison
[From U.S. Geological Survey 1980, 1981]

09092980 BEN GOOD CREEK NEAR RULISON, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS, AS (MG/L CaCO3)	HARD- NESS, NONCAR- BONATE (MG/L CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)	SODIUM, DIS- SOLVED (MG/L AS Na)	SODIUM AD- SORP- TION RATIO
APR 25...	1015	2.8	475	8.3	4.0	11.2	190	0	45	19	40	1.3
MAY 16...	1300	7.4	450	8.5	8.5	9.2	180	0	43	17	37	1.2
JUN 12...	1300	1.4	625	8.3	12.0	8.4	250	0	54	27	44	1.2
JUL 01...	1300	.87	600	8.3	14.5	8.4	250	0	49	30	48	1.3
16...	1200	.88	600	8.7	12.0	8.4	240	0	49	29	47	1.3
AUG 13...	1200	.38	610	8.3	11.5	9.1	250	0	52	28	47	1.3
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY (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)	SOLIOS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIOS, DIS- SOLVED (TONS PER AC-FT)	SOLIOS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHOPH- OSPHATE DISSOL- (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)
APR 25...	.8	210	46	2.3	.1	18	304	.41	2.30	1.1	--	3
MAY 16...	.9	200	33	2.7	.1	19	281	.38	5.65	1.5	.050	3
JUN 12...	1.1	280	67	4.1	.4	18	390	.53	1.57	.94	.030	2
JUL 01...	1.0	260	66	2.3	.8	18	377	.51	.89	.83	.000	2
16...	1.0	270	64	3.3	.7	18	379	.52	.90	.62	.040	3
AUG 13...	.7	250	66	3.2	.5	19	371	.50	.38	.47	.010	3
DATE	BARIUM, DIS- SOLVED (UG/L AS Ba)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS Cd)	COPPER, DIS- SOLVED (UG/L AS Cu)	IRON, DIS- SOLVED (UG/L AS Fe)	LEAD, DIS- SOLVED (UG/L AS Pb)	LITHIUM DIS- SOLVED (UG/L AS Li)	MANGA- NESE, DIS- SOLVED (UG/L AS Mn)	MERCURY DIS- SOLVED (UG/L AS Hg)	SELE- NIUM, DIS- SOLVED (UG/L AS Se)	STRON- TIUM, DIS- SOLVED (UG/L AS Sr)	ZINC, DIS- SOLVED (UG/L AS Zn)
APR 25...	80	30	< 1	1	< 10	1	9	< 1	.0	1	1100	5
MAY 16...	70	50	< 1	2	< 10	2	10	< 1	.0	1	1000	< 3
JUN 12...	80	90	< 1	1	< 10	0	10	< 1	.1	1	1300	< 3
JUL 01...	90	90	< 1	3	< 10	0	10	< 1	.0	1	1400	< 3
16...	90	80	< 1	1	< 10	0	10	< 1	.0	1	1400	< 3
AUG 13...	100	130	< 1	0	< 10	2	20	< 1	.0	1	1500	< 3

Table 11.--Water-quality data for Ben Good Creek near Rulison--Continued

09092980 BEN GOOD CREEK NEAR RULISON, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW- INSTAN- TANFOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHUS)	SPE- CIFIC CON- DUCT- ANCE LAB (UMHUS)	PH	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (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 AD- SORP- TION RATIO
OCT												
06...	1440	.10	580	597	8.4	11.0	8.2	230	47	28	51	1.5
NOV												
12...	1300	.09	560	540	8.4	7.5	10.2	220	44	26	49	1.4
DEC												
01...	1200	.02	540	495	8.3	2.0	10.4	210	68	10	19	.6
JAN												
02...	1330	.13	520	612	8.3	2.0	11.6	220	46	26	52	1.5
APR												
16...	1300	.04	540	624	8.4	7.5	9.4	230	50	25	49	1.4
MAY												
27...	1100	.09	560	591	8.3	10.0	8.8	230	48	26	50	1.4
JUN												
09...	1300	.06	560	582	8.4	13.5	7.8	210	43	25	49	1.5
JUL												
30...	1200	.04	572	582	9.1	12.4	6.6	210	37	27	53	1.8
AUG												
27...	1100	.01	588	594	8.5	12.0	6.4	230	46	27	53	1.7

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINIT- Y LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLOR- IDE, DIS- SOLVED (MG/L AS CL)	FLUOR- IDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTIT- UENTS, 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- PHORUS, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)
OCT												
06...	1.0	250	93	3.1	.5	19	395	.54	.11	.06	.030	2
NOV												
12...	1.2	260	63	3.3	.6	17	362	.49	.09	.02	.000	3
DEC												
01...	8.2	210	41	14	.3	35	328	.45	.02	1.3	.250	4
JAN												
02...	1.5	250	67	1.5	.6	17	364	.50	.13	.21	.020	3
APR												
16...	1.9	260	60	12	.6	18	375	.51	.04	.16	.000	2
MAY												
27...	.9	270	61	2.7	.5	18	372	.51	.09	.21	.050	2
JUN												
09...	1.0	260	59	2.9	.5	18	356	.48	.06	.01	--	3
JUL												
30...	1.2	240	65	3.0	.5	20	353	.48	.04	.10	.030	4
AUG												
27...	1.0	260	68	3.1	.5	21	379	.52	.01	.33	.010	3

DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM, DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM, DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY, DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT												
06...	90	90	<1	0	<10	5	20	<1	.0	0	1400	<3
NOV												
12...	80	60	<1	0	<10	1	20	<1	.0	0	1300	<3
DEC												
01...	200	90	1	2	10	0	20	50	.0	3	360	20
JAN												
02...	90	90	<1	10	10	7	20	<1	.2	0	1300	8
APR												
16...	100	90	<1	2	20	2	20	1	.0	0	1300	5
MAY												
27...	80	80	<1	2	<10	2	20	<1	.3	0	1400	6
JUN												
09...	100	90	<1	2	<10	7	20	<1	.0	0	1400	3
JUL												
30...	90	100	<1	1	<10	0	21	2	.6	1	1300	10
AUG												
27...	90	100	<1	0	<10	0	22	3	.0	0	1400	60

Table 12.--Suspended-sediment data for East Middle Fork Parachute Creek
near Rio Blanco
[From U.S. Geological Survey, 1980, 1981]

09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	1.2	---	.10	.88		.00	.76	---	.03
2	1.2	---	.10	.88		.00	.76	---	.00
3	1.2	36	.11	.84		.00	.76	---	.01
4	1.1	---	.10	.84		.00	.76	---	.02
5	1.1	---	.10	.84		.00	.76	---	.03
6	1.1	---	.10	.88		.00	.76	24	.05
7	1.0	---	.10	.88		.00	.92	---	.04
8	1.0	---	.10	.88		.01	.92	---	.04
9	1.0	---	.10	.96		.01	.92	---	.08
10	1.0	---	.10	.88		.00	.92	---	.08
11	1.0	---	.10	.88		.00	.96	---	.10
12	1.0	---	.10	.88		.00	.92	---	.08
13	1.1	---	.10	.88		.00	.88	---	.05
14	1.0	---	.10	.84		.00	.84	---	.02
15	1.0	---	.10	.84		.00	.80	---	.00
16	1.0	---	.10	.84		.00	.84	---	.00
17	1.1	---	.10	.80		.00	.84	---	.00
18	1.1	---	.10	.88		.00	.84	---	.00
19	1.1	---	.10	.92		.01	.88	---	.01
20	1.3	---	.10	.88		.01	.80	---	.00
21	1.3	---	.10	.88		.00	.76	---	.00
22	1.3	---	.10	.80		.00	.76	---	.00
23	1.2	---	.10	.84		.00	.80	---	.00
24	1.2	---	.10	.80		.00	.92	---	.05
25	1.2	---	.10	.88		.00	.92	---	.05
26	1.1	---	.10	.64		.00	.96	---	.08
27	1.1	---	.10	.76		.00	1.0	---	.10
28	1.1	---	.05	.76		.00	.96	---	.08
29	1.2	---	.03	.76		.00	.92	---	.05
30	1.2	8	.02	.76		.00	.90	---	.01
31	.88	---	.00	---			.90	---	.01
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	.90		.01	.92		.01	.70		.00
2	.88		.01	.90		.01	.72		.00
3	.86		.00	.90		.01	.74		.00
4	.84		.00	.88		.01	.76		.00
5	.82		.00	.86		.00	.78		.00
6	.80		.00	.84		.00	.80		.00
7	.78		.00	.82		.00	.80		.00
8	.76		.00	.80		.00	.72		.00
9	.74		.00	.78		.00	.72		.00
10	.72		.00	.76		.00	.72		.00
11	.70		.00	.75		.00	.76		.00
12	.68		.00	.76		.00	.84		.00
13	.66		.00	.76		.00	.84		.00
14	.64		.00	.76		.00	.82		.00
15	.62		.00	.74		.00	.82		.00
16	.60		.00	.74		.00	.84		.00
17	.50		.00	.74		.00	.80		.00
18	.57		.00	.76		.00	.76		.00
19	.68		.00	.76		.00	.72		.00
20	.76		.00	.76		.00	.72		.00
21	.72		.00	.76		.00	.74		.00
22	.76		.00	.74		.00	.74		.00
23	.96		.05	.74		.00	.76		.00
24	1.2		.10	.74		.00	.76		.00
25	1.1		.10	.74		.00	.78		.00
26	1.0		.10	.72		.00	.78		.00
27	1.0		.10	.72		.00	.80		.00
28	.98		.05	.72		.00	.80		.00
29	.96		.03	.70		.00	.82		.00
30	.94		.01	---			.82		.00
31	.94		.01	---			.84		.00

Table 12.--Suspended-sediment data for East Middle Fork Parachute Creek
near Rio Blanco--Continued

09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	.86	---	.01	68	---	100	31	24	2.0
2	.88	---	.05	76	---	98	28	21	1.6
3	.90	---	.10	73	---	100	25	---	1.0
4	1.1	---	.20	78	---	130	24	---	1.0
5	1.3	---	.20	83	---	40	22	---	1.0
6	1.5	---	.30	87	---	50	20	---	1.0
7	1.9	---	.30	101	---	110	20	---	1.0
8	2.2	48	.30	94	---	60	18	---	.80
9	2.3	---	.60	100	---	100	17	---	.70
10	2.9	---	.70	98	---	90	15	---	.60
11	3.1	---	.70	100	---	100	14	---	.50
12	3.1	---	.80	105	---	130	14	---	.50
13	3.3	---	.20	107	---	140	12	---	.40
14	3.7	---	.30	111	---	200	12	---	.40
15	5.0	---	.40	108	231	67	11	---	.40
16	5.7	---	.60	105	---	70	10	---	.30
17	6.4	---	1.5	105	---	70	9.7	---	.30
18	8.3	---	3.0	105	---	70	9.3	14	.35
19	12	---	5.0	89	---	50	8.4	51	1.2
20	16	---	10	95	---	60	8.0	35	.78
21	21	---	20	102	---	100	7.4	9	.13
22	29	---	30	118	441	140	7.4	5	.10
23	36	---	30	111	380	114	6.7	20	.36
24	42	---	30	94	190	48	6.7	9	.16
25	42	---	40	70	125	24	6.7	7	.13
26	45	---	40	56	66	10	6.2	12	.20
27	47	---	40	49	57	7.5	6.2	24	.40
28	50	---	50	44	40	4.8	5.7	25	.38
29	56	---	50	41	40	4.4	5.7	12	.18
30	63	---	70	37	30	3.0	5.2	30	.42
31	---	---	---	34	24	2.2	---	---	---

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	5.2	---	.30	2.0	---	.40	1.1	---	.10
2	5.4	---	.20	2.0	---	.40	1.1	---	.10
3	5.4	---	.20	1.8	---	.40	1.1	---	.10
4	4.7	---	.20	1.8	---	.30	1.1	---	.10
5	4.2	---	.10	1.9	---	.20	1.1	---	.10
6	4.0	---	.10	2.0	20	.10	1.1	---	.10
7	3.8	---	.10	2.0	---	.20	1.2	---	.10
8	3.7	---	.10	1.7	---	.30	1.2	---	.10
9	3.3	---	.10	1.4	---	.20	1.1	---	.10
10	3.1	---	.10	1.4	---	.10	1.2	---	.10
11	3.1	---	.10	1.4	11	.04	1.3	---	.20
12	2.8	---	.60	1.4	---	.10	1.2	---	.10
13	2.8	---	.60	1.4	---	.10	1.1	---	.10
14	2.9	---	.60	1.4	---	.20	1.1	---	.10
15	2.6	---	.60	1.4	---	.20	1.1	---	.10
16	2.3	---	.50	1.5	---	.20	1.1	---	.10
17	2.3	---	.50	1.5	---	.20	1.0	---	.10
18	2.2	---	.40	1.4	---	.20	1.0	---	.10
19	2.2	---	.40	1.4	---	.20	1.0	---	.10
20	2.2	---	.40	1.3	---	.20	1.1	---	.10
21	2.2	---	.40	1.3	---	.20	1.1	---	.10
22	2.1	---	.40	1.2	---	.20	1.1	---	.10
23	2.2	---	.40	1.1	---	.20	1.1	---	.10
24	2.2	---	.60	1.3	---	.10	1.1	---	.10
25	2.8	---	.50	1.2	---	.10	1.1	---	.10
26	2.4	---	.30	1.2	---	.10	1.1	---	.10
27	1.9	---	.30	1.1	---	.10	1.1	---	.10
28	1.9	---	.30	1.1	---	.10	1.1	---	.10
29	1.8	---	.30	1.1	---	.10	1.0	---	.10
30	2.1	---	.40	1.1	---	.10	1.0	---	.10
31	2.2	---	.40	1.1	---	.10	---	---	---
TOTAL	92.0		10.50	44.9	---	5.64	33.1		3.10
YEAR	3878.00		2760.32						

Table 12.--Suspended-sediment data for East Middle Fork Parachute Creek
near Rio Blanco--Continued

09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	.99		.10	1.4		.02	.80		.01
2	.91		.06	1.4		.02	.80		.01
3	1.0		.02	1.4		.02	.80		.01
4	1.0		.02	1.4		.02	.80		.01
5	1.0		.02	1.4		.02	.80		.01
6	1.0		.02	1.4		.02	.80		.01
7	1.0		.02	1.4		.02	.80		.01
8	1.0		.02	1.4		.02	.80		.01
9	1.0		.02	1.4		.02	.80		.01
10	1.1		.02	1.3		.02	.80		.01
11	1.1		.02	1.4		.02	.80		.01
12	1.1		.02	1.4		.02	.80		.01
13	1.3		.02	1.6		.04	.80		.01
14	1.3		.02	1.5		.04	.80		.01
15	1.8		.04	.54		.00	.80		.01
16	1.4		.02	.65		.00	.80		.01
17	1.4		.02	.76		.01	.80		.01
18	1.4		.02	.81		.01	.80		.01
19	1.2		.02	.82		.01	.78		.01
20	1.1		.02	.80		.01	.78		.01
21	1.0		.02	.80		.01	.78		.01
22	1.1		.02	.80		.01	.78		.01
23	1.1		.02	.80		.01	.78		.01
24	1.2		.02	.80		.01	.78		.01
25	1.3		.02	.80		.01	.78		.01
26	1.3		.02	.80		.01	.78		.01
27	1.4		.02	.80		.01	.78		.01
28	1.3		.02	.80		.01	.74		.01
29	1.1		.02	.80		.01	.74		.01
30	1.4		.02	.80		.01	.74		.01
31	1.4		.02	---			.74		.01
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	.74	---	.01	.67	---	.00	1.1		.02
2	.74	---	.01	.67	---	.00	.91		.01
3	.74	---	.01	.67	---	.00	.82		.01
4	.74	---	.02	.72	---	.00	.82		.01
5	.74	---	.02	.67	---	.00	.99		.01
6	.74	---	.02	.73	---	.01	.99		.02
7	.72	---	.02	.73	---	.01	.77		.05
8	.72	13	.02	.73	---	.01	.82		.06
9	.67	---	.00	.73	---	.01	.91		.08
10	.72	---	.01	.94	---	.02	.99		.09
11	.67	---	.00	.74	---	.01	1.0		.10
12	.72	---	.01	.69	---	.00	1.0		.10
13	.73	---	.01	.69	---	.00	1.0		.10
14	.78	---	.01	.69	---	.00	1.0		.10
15	.73	---	.01	.70	---	.00	1.0		.10
16	.73	---	.01	.65	---	.00	1.2		.10
17	.74	---	.01	.70	---	.00	1.2		.10
18	.74	---	.01	.70	---	.00	1.3		.10
19	.69	---	.00	.76	---	.01	1.3		.10
20	.69	---	.00	.81	---	.01	1.4		.20
21	.64	---	.00	.81	---	.01	1.5		.20
22	.69	---	.00	.90	---	.01	1.5		.20
23	.70	---	.00	.82	---	.01	1.5		.20
24	.75	---	.01	.91	9	.02	1.8		.30
25	.70	---	.00	.99	---	.01	2.0		.40
26	.70	---	.00	.91	---	.01	2.2		.40
27	.71	---	.00	.91	---	.01	2.0		.40
28	.66	---	.00	.99	---	.01	2.5		.50
29	.66	---	.00	---	---	---	2.8		.60
30	.66	---	.00	---	---	---	3.0		.60
31	.66	---	.00	---	---	---	3.2		.60

Table 12.--Suspended-sediment data for East Middle Fork Parachute Creek
near Rio Blanco--Continued

09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL				MAY			JUNE		
1	3.4	---	.60	2.8	9	.07	1.0	61	.16
2	3.6	---	.60	2.8	32	.24	1.2	41	.13
3	3.8	---	.60	2.8	48	.36	1.6	40	.17
4	4.0	---	.60	2.8	56	.42	1.5	---	.17
5	4.0	---	.60	2.8	34	.26	1.5	---	.17
6	4.0	---	.60	2.9	23	.18	1.6	---	.17
7	4.0	---	.60	2.9	13	.10	1.8	---	.17
8	4.1	---	.60	2.9	22	.17	1.8	---	.16
9	4.1	---	.60	2.9	32	.25	1.8	---	.16
10	4.1	---	.60	2.9	30	.23	1.8	---	.16
11	4.6	---	.60	2.9	26	.20	1.8	---	.16
12	3.9	---	.60	2.9	27	.21	1.7	---	.16
13	4.3	---	.60	2.9	62	.49	1.7	---	.16
14	7.2	---	1.0	2.9	86	.67	1.1	---	.16
15	9.7	---	2.0	2.8	117	.88	.71	---	.10
16	7.5	---	1.0	2.7	82	.60	1.1	---	.16
17	10	---	2.0	2.6	77	.54	1.7	0	.00
18	10	---	2.0	2.5	62	.42	1.6	40	.17
19	9.4	---	2.0	2.4	61	.40	1.6	35	.15
20	8.3	---	1.5	2.3	56	.35	1.6	32	.14
21	7.0	---	1.0	2.2	55	.33	1.6	26	.11
22	6.1	---	1.0	2.2	58	.34	1.6	22	.10
23	5.0	57	.77	2.2	54	.32	1.5	20	.08
24	4.6	65	.81	2.2	72	.43	1.6	18	.08
25	4.5	51	.62	2.1	45	.26	1.7	21	.10
26	4.2	49	.56	2.0	55	.30	1.8	23	.11
27	4.0	43	.46	1.9	56	.29	2.1	22	.12
28	3.7	35	.35	1.8	54	.26	1.4	308	2.4
29	3.4	23	.21	1.8	47	.23	1.7	535	3.1
30	3.2	10	.09	1.8	53	.26	1.1	74	.22
31	---	---	---	1.1	85	.25	---	---	---
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY				AUGUST			SEPTEMBER		
1	1.2	18	.06	.41	3	.00	.50	3	.00
2	1.1	22	.07	.40	4	.00	.50	2	.00
3	.99	18	.05	.39	4	.00	.50	3	.00
4	.91	18	.04	.39	2	.00	.50	5	.00
5	.77	19	.04	.32	2	.00	.50	4	.00
6	.77	13	.03	.29	2	.00	.50	5	.00
7	.72	10	.02	.30	2	.00	.50	8	.01
8	.66	8	.01	.30	2	.00	.51	7	.00
9	.72	9	.02	.29	2	.00	.56	4	.00
10	1.1	26	.08	.38	2	.00	.72	8	.02
11	.77	8	.02	.53	2	.00	.82	6	.01
12	.82	12	.03	.47	4	.00	.66	6	.01
13	1.2	31	.13	.40	6	.00	.61	9	.01
14	.82	8	.02	.36	4	.00	.56	8	.01
15	.72	6	.01	.32	5	.00	.51	10	.01
16	.72	4	.00	.53	6	.00	.56	2	.00
17	1.1	26	.14	.49	6	.00	.56	10	.02
18	1.4	23	.10	.40	4	.00	.56	18	.03
19	.82	12	.03	.40	3	.00	.51	11	.02
20	.72	16	.03	.40	2	.00	.56	4	.00
21	.66	21	.04	.40	3	.00	.51	10	.01
22	.61	12	.02	.40	4	.00	.46	9	.01
23	.65	9	.02	.40	3	.00	.35	8	.00
24	.80	9	.02	.41	2	.00	.35	8	.00
25	.86	7	.02	.42	2	.00	.35	6	.00
26	.63	3	.00	.43	2	.00	.35	5	.00
27	.67	6	.01	.44	2	.00	.35	5	.00
28	.56	2	.00	.45	3	.00	.30	5	.00
29	.49	14	.02	.46	3	.00	.35	5	.00
30	.48	6	.00	.47	3	.00	.30	8	.00
31	.42	4	.00	.50	7	.00	---	---	---

Table 13.--Suspended-sediment data for East Fork Parachute Creek
near Rulison
[From U.S. Geological Survey 1980, 1981]

09092970 EAST FORK PARACHUTE CREEK NEAR RULISON, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1976 to current year.

WATER TEMPERATURE: October 1976 to current year.

INSTRUMENTATION.--water-quality monitor since October 1976. Pumping sediment sampler since December 1976.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 590 micromhos Oct. 9; minimum, 115 micromhos June 10.

WATER TEMPERATURES: Maximum, 19.5°C July 11, 17, 21, 22; minimum recorded, 0.0°C Nov. 8.

SEDIMENT CONCENTRATIONS: Maximum daily, not determined; minimum daily, not determined.

SEDIMENT LOADS: Maximum daily, not determined; minimum daily, not determined.

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTANTANEOUS (CFS)	SEDIMENT- MENT, SUSPENDED (MG/L)	SEDIMENT- DIS- CHARGE, SUSPENDED (T/DAY)	DATE	TIME	STREAM- FLOW, INSTANTANEOUS (CFS)	SEDIMENT- MENT, SUSPENDED (MG/L)	SEDIMENT- DIS- CHARGE, SUSPENDED (T/DAY)
JUN					JUL				
03...	1230	0.93	14	0.04	17...	1200	3.2	7	0.06
04...					31...	1200	1.5	3	0.01
10...	1400	27	22	1.6	AUG				
12...	1600	6.7	11	0.20	13...	1600	1.1	1	0.00

Table 13.--Suspended-sediment data for East Fork Parachute Creek
near Rulison--Continued

09092970 EAST FORK PARACHUTE CREEK NEAR RULISON, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
APR					JUN				
17...	1500	6.7	61	1.1	10...	1130	1.2	10	.03
27...	1200	3.9	5	.05	30...	1330	1.0	16	.04
MAY									
05...	1200	3.9	4	.04					
28...	1300	2.1	8	.05					

Table 13.--Suspended-sediment data for East Fork Parachute Creek
near Rulison--Continued

09092970 EAST FORK PARACHUTE CREEK NEAR RULISON, CO--Continued
SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	.84		.05	.90		.05	.37		.02
2	.69		.05	1.0		.06	.37		.02
3	.75		.04	.90		.05	.37		.02
4	.84		.05	.90		.05	.37		.02
5	1.1		.06	.93		.05	.37		.02
6	1.2		.06	1.1		.06	.37		.02
7	1.2		.06	1.1		.06	.37		.02
8	1.3		.06	1.1		.06	.33		.01
9	1.3		.06	1.1		.06	.33		.01
10	1.3		.06	1.1		.06	.33		.01
11	1.3		.06	1.0		.06	.33		.01
12	1.6		.07	1.2		.06	.33		.01
13	1.9		.08	1.7		.07	.33		.01
14	2.0		.08	1.1		.06	.00		---
15	3.2		.12	.90		.05	.29		.01
16	2.4		.09	.60		.04	.27		.01
17	2.4		.09	.43		.04	.27		.01
18	2.3		.09	.00		---	.00		---
19	1.9		.08	.00		---	.27		.01
20	2.4		.09	.00		---	.00		---
21	2.3		.09	.00		---	.00		---
22	2.0		.08	.00		---	.00		---
23	1.8		.08	.00		---	.00		---
24	1.3		.06	.32		.01	.00		---
25	1.1		.06	.33		.01	.00		---
26	1.0		.06	.33		.01	.00		---
27	1.1		.06	.37		.02	.00		---
28	1.0		.06	.37		.02	.00		---
29	1.3		.06	.37		.02	.00		---
30	1.3		.06	.37		.02	.00		---
31	.90		.05	---			.00		---
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	.00			.00		---	.00		
2	.00			.00		---	.00		
3	.00			.00		---	.00		
4	.00			.00		---	.00		
5	.00			.00		---	.00		
6	.00			.00		---	.00		
7	.00			.00		---	.00		
8	.00			.00		---	.00		
9	.00			.00		---	.00		
10	.00			.00		---	.00		
11	.00			.21		.02	.00		
12	.00			.21		.02	.00		
13	.00			.21		.02	.00		
14	.00			.00		---	.00		
15	.00			.00		---	.00		
16	.00			.00		---	.00		
17	.00			.00		---	.00		
18	.00			.00		---	.00		
19	.00			.00		---	.00		
20	.00			.00		---	.00		
21	.00			.00		---	.00		
22	.00			.00		---	.00		
23	.00			.00		---	.00		
24	.00			.00		---	.00		
25	.00			.00		---	.00		
26	.00			.00		---	.00		
27	.00			.00		---	.00		
28	.00			.00		---	.00		
29	.00			---			.00		
30	.00			---			.00		
31	.00			---			.00		

Table 13.--Suspended-sediment data for East Fork Parachute Creek
near Rulison--Continued

09092970 EAST FORK PARACHUTE CREEK NEAR RULISON, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL				MAY			JUNE		
1	.00	---	---	2.4	2	.01	2.2	12	.07
2	.00	---	---	2.4	5	.03	1.9	13	.07
3	.00	---	---	7.7	54	1.1	2.6	10	.07
4	.00	---	---	6.0	10	.02	3.4	18	.16
5	.00	---	---	3.7	2	.02	2.3	10	.06
6	.00	---	---	5.3	3	.05	2.1	12	.07
7	.00	---	---	3.7	3	.03	1.9	10	.05
8	.00	---	---	3.5	4	.04	1.7	7	.03
9	.00	---	---	3.5	4	.03	1.3	6	.02
10	1.5	---	.03	3.1	3	.02	.88	14	.03
11	2.7	---	1.6	3.3	3	.02	.78	22	.05
12	2.4	---	1.5	2.9	3	.02	.74	17	.03
13	.67	---	.02	7.8	4	.03	.78	31	.06
14	1.6	---	.06	2.4	4	.02	.97	28	.07
15	5.1	---	.95	2.2	3	.02	1.1	20	.06
16	7.9	---	1.1	2.6	3	.02	.97	14	.04
17	9.6	65	1.7	3.0	4	.03	.77	20	.04
18	9.6	48	1.2	2.8	3	.02	.74	17	.03
19	10	32	.86	2.3	2	.01	.63	8	.01
20	8.2	23	.51	2.3	3	.02	.58	10	.02
21	6.3	18	.31	3.0	4	.03	.49	10	.01
22	5.1	13	.18	3.0	4	.03	.49	11	.01
23	4.9	11	.15	3.1	8	.06	.39	13	.01
24	4.7	22	.28	2.6	6	.04	.31	13	.01
25	4.7	15	.19	2.3	7	.04	.23	13	.01
26	4.2	8	.08	2.0	7	.04	.18	14	.01
27	4.0	5	.05	2.3	8	.05	.36	21	.02
28	3.3	5	.04	2.1	10	.05	1.7	397	1.5
29	2.8	4	.03	2.3	29	.18	2.3	241	1.5
30	2.8	6	.05	2.2	13	.08	.96	32	.08
31	---	---	---	2.3	7	.04	---	---	---
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY				AUGUST			SEPTEMBER		
1	.73	18	.04	.00		---	.00		---
2	.87	16	.04	.00		---	.00		---
3	.73	12	.02	.00		---	.00		---
4	.58	45	.07	.00		---	.00		---
5	.42	33	.04	.00		---	.00		---
6	.38	24	.02	.00		---	.00		---
7	.26	12	.01	.00		---	.00		---
8	.23	16	.01	.00		---	.00		---
9	.28	9	.01	.00		---	.16		.01
10	.77	9	.02	.00		---	.29		.03
11	.44	8	.01	.00		---	.23		.02
12	.77	12	.02	.00		---	.00		---
13	.68	9	.02	.00		---	.00		---
14	.36	5	.01	.00		---	.00		---
15	.23	4	.01	.00		---	.00		---
16	.13	5	.01	.75		.04	.00		---
17	.26	9	.01	.70		.04	.00		---
18	.49	6	.01	.00		---	.00		---
19	.20	5	.01	.00		---	.00		---
20	.28	6	.01	.00		---	.00		---
21	.23	6	.01	.00		---	.00		---
22	.23	4	.01	.00		---	.00		---
23	.22	6	.01	.00		---	.00		---
24	.32	4	.01	.00		---	.00		---
25	.33	8	.01	.00		---	.00		---
26	.30	10	.01	.00		---	.00		---
27	.27	4	.01	.00		---	.00		---
28	.24	2	.01	.00		---	.00		---
29	.24	1	.01	.00		---	.00		---
30	.21	3	.01	.00		---	.00		---
31	.00	---	---	.00		---	---		---

Table 14.--Mean air temperature at JQS weather station for water years 1980 and 1981

STATION NUMBER 393529107545900, METEOROLOGICAL SOURCE AGENCY USGS

TEMPERATURE, AIR (DEG C), WATER YEAR 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.3*	-10.8*	-16.5*	-3.0	-4.1*	-3.4*	-6.0*	3.8	8.1	13.9*	18.5*	11.5*
2	17.4*	-7.0*	-8.0*	-6.4	-2.4*	-1.0*	-7.0*	4.3	10.0	11.2*	18.2*	15.0*
3	11.1*	-2.3*	-3.2*	-7.0	0.9*	0.5*	-4.4*	6.2	14.2	15.3*	18.8*	16.4*
4	13.3*	-1.3*	-0.4*	-3.8	-2.1*	-1.8*	-4.4*	5.9	13.5	11.2*	16.9*	16.0*
5	14.9*	-3.2*	-3.2*	-2.1*	-3.8*	-0.9*	3.1*	7.2	14.0	-	18.3*	16.7
6	15.8*	-2.3*	-2.0	-6.6*	-1.0*	-2.6*	1.0*	6.5	12.7	-	20.2*	15.7*
7	16.3*	-0.4*	.3	-6.3*	-6.8*	-3.0*	-5.0*	4.8	12.4	15.8*	20.6*	13.2*
8	16.7*	-3.2*	.1	-2.9*	-14.4*	-4.1*	-3.1*	5.1	15.5	15.3	20.8*	10.3*
9	8.1*	-2.3*	.5	-1.4*	-12.1*	-3.5*	1.6	3.9	16.1	18.0	19.8*	9.4*
10	13.7*	-5.1*	.5	-3.7*	-7.6*	-2.2*	-2	4.3	17.4	19.1	18.6*	9.9*
11	15.0*	-6.1*	-12.5	-8.9*	-6.2*	-1.8*	-4.8	1.9	16.7	20.1	17.8*	9.9*
12	13.3*	-6.1*	-9.4	-0.2*	-3.4*	-5.4*	-4.8	-1.9	15.9	17.7	18.0*	10.6*
13	14.6*	-5.1*	-5.5	2.5*	-0.9*	-3.6*	-3.4	2.9	15.4	13.4	15.5*	13.1
14	12.3*	-5.1*	-3.0	0.6*	0.2*	0.1*	2.7	3.4	14.4	15.2	16.2*	13.3
15	12.2*	-5.1*	-1.4	-3.2*	0.1*	3.7*	5.1	4.8	10.7	17.4	11.6	14.1
16	8.1*	-4.2*	-4	-4.1*	-1.5*	-8.8*	2.4	4.8	12.1	18.9	11.5	15.3
17	9.7*	-0.4*	1.5	-2.8*	-0.3*	-7.9*	6.2	.6	15.8	20.7	15.0	12.5
18	11.3*	-1.3*	3.5	-3.0	0.3*	-0.5*	8.2	5.3	17.8	20.6	16.4	19.1
19	13.2*	-7.0*	1.2	-11.3*	0.4*	-1.0*	9.7	9.1	16.5	19.8	12.9*	15.6*
20	1.2*	-7.0*	-8	-10.5*	-1.4*	-2.0*	10.7	11.3	17.0	19.2	9.9*	8.9*
21	-1.4*	-12.7*	-2.5	-9.2*	-1.8*	1.7*	9.7	14.0	16.5	20.1	13.3*	9.7*
22	0.6*	-14.6*	-5.4	-9.8*	-2.4*	-3.1*	7.2	14.6	17.1	20.3	17.5*	5.4*
23	6.3*	-9.9*	-7.8	-6.8*	-4.5*	-3.3*	4.9	9.9	18.2	17.2	15.0*	7.8*
24	7.8*	-8.0*	-4.2	-3.1*	-5.9*	-1.2*	3.3	5.2	17.7	16.9	11.8*	8.6*
25	12.0*	-4.2*	-9	-4.6*	-4.2*	-6.0*	4.1	1.3	19.5	17.1	11.3*	9.1*
26	10.8*	-5.1*	-3.2	-13.4*	-0.8*	-6.4*	3.7	5.7	19.9	17.7	12.5*	11.8*
27	4.7*	-15.6*	-7.1	-7.2*	2.1*	-4.6*	6.5	10.3	17.4	19.0*	14.0*	13.1*
28	5.7*	-19.4*	-7.1	-10.3*	2.6*	-5.0*	8.7	10.5	15.3*	21.1*	16.3*	13.6*
29	-1.8*	-20.3*	-9.9	-3.6*	-3.1*	-4.2*	6.9	6.9	19.7*	23.0	15.1	12.1*
30	-4.4*	-20.3*	-5.2	-10.6*	-4.8*	-4.8*	3.6	10.1	18.1*	16.5*	13.8*	14.2*
31	-7.4*	-2.6*	-2.6*	-9.8*	-9.2*	-9.2*	9.7	9.7	18.0*	18.0*	9.3*	9.3*
TOTAL	287.4*	-215.4*	-114.7*	-172.5*	-83.1*	-95.3*	71.2*	192.3*	465.9*	509.7*	485.4*	372.3*
MEAN	9.3*	-7.2*	-3.7*	-5.6*	-2.9*	-3.1*	2.4*	6.2*	15.5*	16.4*	15.7*	12.4*
MAX	17.4*	-0.4*	3.5	2.5*	2.6*	3.7*	10.7	14.6	19.9	23.0	20.8*	19.1
MIN	-7.4*	-20.3*	-16.5*	-13.4*	-14.4*	-9.2*	-7.0*	-1.9	8.1*	11.2*	9.3*	5.4*

Table 14.--Mean air temperature at JQS weather station for water years 1980 and 1981--Continued

STATION NUMBER 393529107545900, METEOROLOGICAL SOURCE AGENCY USGS

TEMPERATURE, AIR (DEG C), WATER YEAR 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.8*	3.4*	-0.9*	2.1	-11.2	-1.6	0.9*	11.5*	-	9.4*	17.0	11.8
2	8.4*	3.5*	2.3*	.6	-12.4	-3.1	4.1*	9.5*	-	12.0*	16.7	14.2
3	10.5*	2.1*	4.0*	-4	-7.4	-4.4	-5.4*	-0.1*	6.9*	12.5*	19.2	12.5
4	12.3*	3.5*	2.9*	-3	-5.4	-4.3	-8.3*	2.8*	8.4*	14.4*	18.9	14.6
5	12.2*	5.0*	-2.7*	-3.6	-7.3	-2.9	-4.6*	6.2*	11.3*	4.8*	19.3	13.8
6	12.2*	5.8*	-1.3	-5.3	-6.5	-3.1	2.3*	3.9*	15.0*	24.1	20.5	9.0
7	13.1*	6.6*	-3.1	-2.3	-8.5	-4.8	-1.5*	0.4*	20.0	20.0	17.7	10.2
8	12.8*	5.7*	-3.8	-1.2	-7.7	-5.4	-1.5*	-2.3*	18.1*	18.2	16.0	11.4
9	11.9*	6.5*	-7.4	-1.6	-5.7	-4.0	5.0*	0.5*	16.4*	16.5	16.2	11.9
10	7.6*	7.9*	-8.8	-1.4	-10.8	-2.8	7.2*	5.1*	15.2*	14.1	12.8	10.0
11	10.9*	6.9*	-8.2	-1.5	-14.5	-2.7	6.4*	1.8*	14.8*	17.0	8.3	9.0
12	8.6*	3.9*	-2.6	-1.1	-6.8	-2.2	5.5*	0.6*	16.9*	15.2	9.9	10.7
13	6.7*	-6.7*	.5	-1.5	-3.4	-3.2	5.9*	1.4*	9.2*	14.0	10.7	10.6
14	4.5*	1.3*	.6	-2.0	-7.5	-2.0	4.9*	9.1*	0.4*	14.2	11.6	10.8
15	0.3*	-0.5*	-1.9	-3.8	-3	-1.4	3.7*	7.3*	4.1*	17.2	13.6	11.7
16	-3.0*	-1.7*	-5	-4.6	-6	-1.1	5.5*	1.4*	9.8*	16.2	11.9	12.9
17	-1.7*	-0.1*	1.5	-2.7	.2	-4.9	8.7*	0.3*	13.9*	12.3	13.0	12.0
18	0.0*	2.7*	3.7	-3.2	-7	-6.5	8.1*	5.3*	11.6*	12.6	15.3	13.3
19	2.2*	4.3*	1.6	-4.4	1.1	-3.4	4.8*	3.9*	15.2*	15.1	15.4	13.8
20	3.2*	4.8*	.5	-3.2	.4	-5	3.4*	2.6*	16.6*	18.6	17.0	13.3
21	4.1*	6.9*	-1.4	-2.4	-9.5	-4.7	2.9*	2.1*	17.2*	19.2	16.8	12.4
22	3.8*	6.9*	-1.8	.9	-6.8	-3.2	1.3*	4.2*	16.5*	19.2	11.7	13.9
23	-4.1*	6.4*	-1.4	1.2	-2.0	-1	4.7*	5.4*	18.0*	17.6	13.8	13.4
24	-0.5*	3.4*	-2.0	-1.2	1.3	-1.2	9.6*	6.5*	17.8*	14.0	13.6	12.4
25	3.9*	1.9*	-4.4	-6.5	2.2	-2.2	10.9*	7.5*	18.1*	12.8	13.9	11.3
26	2.2*	2.9*	-2	-10.2	-7	3.8	11.2*	8.7*	18.5*	13.3	16.9	7.9
27	-4.4*	4.1*	1.5	-7.3	-4.2	-1.4	8.7*	8.2*	14.2*	11.1	15.7	9.9
28	-5.8*	8.3*	3.2	-3.3	-3.2	-4.9	5.5*	6.9*	11.3*	14.8	14.5	13.3
29	-1.4*	10.1*	2.8	-4.8		-4.5	9.0*	7.7*	-	17.1	14.8	13.6
30	3.6*	11.7*	.2	-4.9		-2.7	9.9*	10.0*	-	17.7	12.7	11.5
31	5.2*	.0		-10.6		-8.6		7.3*		18.8	11.3	
TOTAL	153.1*	127.5*	-27.1*	-90.4	-130.7	-93.8	128.8*	145.7*	351.6*	474.0*	456.4	356.9
MEAN	4.9*	4.3*	-0.9*	-2.9	-4.7	-3.0	4.3*	4.7*	13.5*	15.3*	14.7	11.9
MAX	13.8*	11.7*	4.0*	1.2	2.2	3.8	11.2*	11.5*	18.5*	19.2	20.5	14.6
MIN	-5.8*	-6.7*	-8.8	-10.6	-14.5	-8.6	-8.3*	-2.3*	0.4*	4.8*	8.3	7.9

* Values estimated

Table 15.--Maximum air temperature at JQS weather station for water year 1981

STATION NUMBER 393529107545900, METEOROLOGICAL SOURCE AGENCY USGS

TEMPERATURE, AIR (Deg C)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	-	-	7.7	-7.7	3.8	-	-	-	-	24.9	18.9
2	-	-	-	4.2	-1.5	3.2	-	-	-	-	24.6	19.7
3	-	-	-	4.9	3.2	-1.2	-	-	-	-	25.6	21.2
4	-	-	-	4.6	.5	2.2	-	-	-	-	25.2	20.7
5	-	-	-	1.9	-1.1	7.2	-	-	-	-	25.7	21.8
6	-	-	1.9	3.3	-2.2	4.8	-	-	-	24.2	27.1	15.3
7	-	-	-1.4	7.6	-2.7	1.1	-	-	-	26.8	25.1	16.5
8	-	-	-5	7.2	-2.6	2.4	-	-	-	25.2	23.8	18.9
9	-	-	-3.4	6.5	-2.9	5.5	-	-	-	24.7	23.5	20.1
10	-	-	-9	6.2	-5.2	6.7	-	-	-	22.9	22.9	18.3
11	-	-	.7	7.4	-7.2	2.3	-	-	-	23.3	12.8	16.4
12	-	-	7.9	7.6	3.3	4.5	-	-	-	24.5	15.2	17.3
13	-	-	10.0	4.6	6.1	3.9	-	-	-	21.5	17.1	19.1
14	-	-	9.7	2.9	4.1	9.0	-	-	-	21.4	18.4	18.8
15	-	-	7.6	.2	8.0	5.1	-	-	-	22.5	20.2	20.1
16	-	-	5.5	1.5	8.5	3.6	-	-	-	24.0	20.5	19.8
17	-	-	10.7	2.8	4.3	2.4	-	-	-	18.8	20.0	19.9
18	-	-	8.5	3.2	4.5	2.7	-	-	-	20.4	21.2	19.9
19	-	-	5.9	2.5	7.7	3.9	-	-	-	21.9	22.9	21.5
20	-	-	5.1	1.7	4.4	1.9	-	-	-	24.3	23.5	20.2
21	-	-	3.4	7.3	-1.4	-7	-	-	-	24.5	23.6	20.0
22	-	-	2.8	12.1	2.5	5.2	-	-	-	25.4	17.1	20.1
23	-	-	2.3	7.5	6.9	9.3	-	-	-	24.7	21.5	20.2
24	-	-	.8	2.6	7.6	4.2	-	-	-	26.0	18.8	20.3
25	-	-	.9	-1.5	6.7	6.7	-	-	-	22.4	21.8	18.2
26	-	-	5.2	-5.0	4.1	8.7	-	-	-	21.4	23.6	14.9
27	-	-	8.9	-2.9	7.1	6.9	-	-	-	20.2	24.6	18.9
28	-	-	12.0	1.2	3.0	.1	-	-	-	21.3	21.1	19.7
29	-	-	6.2	-1.4	-	2.1	-	-	-	24.1	21.7	20.1
30	-	-	6.7	-2.7	-	.6	-	-	-	24.4	20.5	17.9
31	-	-	6.0	-5.5	-	-2.2	-	-	-	24.1	20.3	17.9
TOTAL	-	-	122.7	100.3	59.0	115.9	-	-	-	604.9	674.8	574.2
MEAN	-	-	4.7	3.2	2.1	3.7	-	-	-	23.3	21.8	19.1
MAX	-	-	12.0	12.1	8.5	9.3	-	-	-	26.8	27.1	21.8
MIN	-	-	-3.4	-5.5	-7.7	-2.2	-	-	-	18.8	12.8	14.9

Table 16.--Minimum air temperature at JQS weather station for water year 1981

STATION NUMBER 393529107545900, METEOROLOGICAL SOURCE AGENCY USGS

TEMPERATURE, AIR (Deg C)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	-	-	-1.8	-13.5	-5.2	-	-	-	-	12.0	6.2
2	-	-	-	-2.0	-17.4	-6.0	-	-	-	-	9.5	9.5
3	-	-	-	-3.6	-12.3	-7.5	-	-	-	-	12.6	6.3
4	-	-	-	-3.3	-8.5	-6.2	-	-	-	-	12.0	9.1
5	-	-	-	-6.8	-13.4	-7.6	-	-	-	-	11.2	9.7
6	-	-	-3.0	-9.4	-9.5	-5.6	-	-	-	-	13.3	6.6
7	-	-	-4.9	-6.7	-12.8	-7.0	-	-	-	13.8	10.1	8.1
8	-	-	-6.2	-6.4	-10.6	-10.3	-	-	-	10.3	8.1	6.8
9	-	-	-10.0	-5.8	-7.8	-8.4	-	-	-	11.8	8.5	7.1
10	-	-	-12.0	-5.1	-18.2	-7.2	-	-	-	8.9	6.2	5.6
11	-	-	-12.9	-5.7	-21.6	-5.1	-	-	-	12.2	6.7	5.8
12	-	-	-7.5	-5.5	-11.3	-4.9	-	-	-	10.1	6.0	5.7
13	-	-	-4.1	-7.2	-8.3	-7.3	-	-	-	10.6	6.5	5.4
14	-	-	-4.4	-6.4	-3.8	-6.0	-	-	-	10.4	7.4	6.2
15	-	-	-7.0	-6.5	-4.3	-7.0	-	-	-	9.5	10.1	6.1
16	-	-	-4.4	-7.7	-5.9	-5.5	-	-	-	11.7	7.4	6.5
17	-	-	-2.5	-6.2	-2.1	-9.3	-	-	-	9.9	6.9	4.4
18	-	-	.0	-7.3	-5.1	-11.6	-	-	-	8.5	8.1	7.9
19	-	-	-1.9	-10.0	-2.2	-8.4	-	-	-	9.5	10.7	7.4
20	-	-	-3.6	-7.3	-8.4	-3.0	-	-	-	11.5	11.3	8.8
21	-	-	-4.6	-8.4	-12.7	-6.8	-	-	-	12.9	12.0	6.7
22	-	-	-4.6	-4.9	-12.3	-8.5	-	-	-	13.1	7.1	10.0
23	-	-	-3.1	-3.1	-7.5	-4.2	-	-	-	11.5	8.9	8.1
24	-	-	-4.3	-4.2	-2.8	-3.6	-	-	-	8.7	9.6	7.0
25	-	-	-7.3	-11.2	-1.7	-7.2	-	-	-	7.9	8.7	8.0
26	-	-	-3.1	-14.1	-4.1	.0	-	-	-	8.2	10.5	.4
27	-	-	-3.3	-10.4	-9.8	-6.7	-	-	-	5.6	10.1	4.3
28	-	-	-.8	-.8	-7.7	-6.8	-	-	-	8.6	9.5	8.5
29	-	-	-1.3	-6.0	-.9	-9.2	-	-	-	11.8	9.7	9.1
30	-	-	-5.3	-9.2	-.8	-8.9	-	-	-	12.3	7.8	6.4
31	-	-	-3.6	-13.5	-13.1	-13.1	-	-	-	13.9	7.1	
TOTAL	-	-	-125.5	-210.4	-225.4	-213.8	-	-	-	263.2	285.6	207.8
MEAN	-	-	-4.8	-6.8	-9.1	-6.9	-	-	-	10.5	9.2	6.9
MAX	-	-	.0	-3.1	-1.7	.0	-	-	-	13.9	13.3	10.0
MIN	-	-	-12.9	-14.1	-21.6	-13.1	-	-	-	5.6	6.0	.4

Table 17.--Mean humidity at JQS weather station for water years 1980 and 1981

STATION NUMBER 393529107545900, METEOROLOGICAL SOURCE AGENCY USGS

HUMIDITY, RELATIVE (PERCENT), WATER YEAR 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.9*	79.0	72.9*	71.3	53.9*	72.0*	57.1*	71.9*	42.1	69.5*	43.2*	40.6*
2	27.7*	70.8*	51.2*	85.6*	65.5*	62.3*	87.9*	72.9*	32.9	82.9*	45.9*	27.2*
3	38.7*	47.1	54.3*	74.3	50.0*	64.8*	69.5*	72.3	20.6	54.2*	31.3*	22.9*
4	24.5*	56.4*	50.2*	63.3	69.3*	82.3*	57.5*	80.5	24.6	38.3*	24.6*	31.2*
5	22.3*	77.0*	62.6*	-	62.9*	60.2*	50.2*	71.7	23.2	-	28.4*	26.6*
6	23.7*	57.4*	53.9	-	54.1*	88.4*	53.0*	70.0	26.5	-	28.1*	48.6*
7	18.5*	92.4*	66.7	-	83.3*	79.4*	61.2*	84.2	31.9	45.7*	27.3*	64.0*
8	21.4*	92.4*	74.7	-	65.4*	73.6*	49.0*	70.3*	24.6	60.0	28.1*	83.2*
9	55.0*	-	69.7	-	56.6*	62.5*	52.8	67.5*	26.5	49.6	35.1*	84.5*
10	31.3*	61.5*	60.7	-	54.5*	60.7*	63.4	65.0*	25.3	46.5	30.4*	77.6*
11	32.0*	84.2*	70.2	-	52.5*	71.1*	75.6	87.8*	19.6	41.9	20.6*	57.5*
12	39.6*	63.6*	44.4	-	52.3*	71.3*	61.7	79.6*	22.0	51.2	30.4*	65.4*
13	43.6*	56.4*	29.1	-	47.9*	53.8*	56.0	72.6*	18.1	66.9	57.4*	46.3
14	47.3*	59.5*	20.1	-	78.7*	49.2*	48.6	72.9*	18.1	59.2	53.3*	39.3
15	55.9*	53.3*	30.3	-	83.7*	50.1*	47.7	68.1	37.9	32.7	62.1	41.0
16	67.1*	-	36.7	-	77.6*	75.8*	41.2	79.1*	35.7	34.8	65.6	38.6
17	55.2*	44.0*	36.7	-	72.5*	54.4*	32.4	69.8	27.1	26.0	43.3	35.3
18	58.1*	91.4*	26.3	82.7	79.9*	34.6*	30.2	65.1	25.1	28.8	30.4	31.2*
19	47.7*	97.6*	30.4	-	72.5*	53.8*	29.9	52.1	29.2	29.2	32.2*	28.8*
20	98.5*	89.4*	56.8	-	85.0*	57.5*	29.4	46.9	27.0	30.6	44.7*	48.2*
21	89.5*	84.2*	76.9	65.9*	72.6*	50.9*	51.7	42.0	25.1	28.7	27.4*	33.3*
22	74.2*	76.0*	90.4	64.3*	71.2*	-	67.2	43.1	24.5	34.1	23.6*	45.4*
23	55.3*	-	86.4	60.0*	83.7*	-	71.2*	40.6	18.4	45.6	62.1*	28.2*
24	51.0*	81.1*	62.1	54.0*	66.7*	-	69.7*	47.1	19.2	49.5	-	35.1*
25	39.0*	66.7*	48.2	67.6*	55.5*	-	43.1	43.3	19.6	49.2	-	29.6*
26	49.0*	77.0*	66.8	81.8*	47.2*	-	45.1	36.6	21.7	38.1	-	29.3*
27	62.6*	74.9*	85.8	72.7*	47.0*	-	39.1	28.2	22.9	28.6*	-	32.0*
28	54.4*	76.0*	71.5	89.8*	49.6*	66.0*	45.9	25.0	15.3*	23.7*	-	32.9*
29	98.8*	72.9*	82.9	85.5*	87.0*	67.0*	55.5*	39.1	19.7*	32.6	-	28.8*
30	84.9*	65.7*	53.0	65.7*	78.6*	68.3*	78.6*	27.0	18.1*	59.7*	21.9*	25.5*
31	81.5*	44.3*	44.3*	70.3*	-	70.3*	-	25.0	-	46.8*	48.8*	-
TOTAL	1576.2	1947.9*	1766.0*	1154.8*	1898.6*	1600.3*	1621.4*	1817.5*	742.8*	1284.5*	946.2*	1151.3*
MEAN	50.8	72.1*	60.0*	72.2*	65.5*	64.0*	54.0*	58.6*	24.8*	41.4*	45.1*	38.4*
MAX	98.8	97.6*	90.4*	89.8*	87.0*	88.4*	87.9*	87.8*	42.1	82.9*	62.1*	84.5*
MIN	18.5	44.0*	20.1*	54.0*	47.0*	34.6*	29.4*	25.0*	15.3*	23.7*	20.6*	22.9*

* values estimated

Table 17.--Mean humidity at JQS weather station for water years 1980 and 1981--Continued

STATION NUMBER 393529107545900, METEOROLOGICAL SOURCE AGENCY USGS

HUMIDITY, RELATIVE (PERCENT), WATER YEAR 1981

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.2*	37.5*	41.5*	49.6	92.7	68.2	38.4*	35.6*	49.0*	59.5*	44.9	67.0*
2	37.3*	35.6*	30.1*	50.6	85.2	89.3	35.5*	52.4*	49.0*	63.0*	44.1	48.7
3	31.2	51.8*	28.5*	69.3	91.4	91.4	65.4*	70.0*	64.3*	65.0*	21.1	65.8
4	27.5*	59.5*	30.1*	70.6	29.6	88.1	61.4*	47.1*	52.2*	39.8*	21.0	45.3
5	28.5*	57.7*	81.0*	91.5	51.1	81.7	48.5*	46.7*	46.9*	37.7*	15.7	58.2
6	33.0*	46.9*	77.0	85.6	54.6	91.9	37.3*	49.9*	41.2*	17.3	14.6	92.4
7	29.7*	41.1*	93.6	57.6	59.6	95.4	61.6*	42.0*	40.1*	33.7	20.6	91.4
8	30.5*	37.9*	94.1	48.6	55.1	89.7	51.6*	56.9*	33.9*	41.3	24.1	81.9
9	28.5*	36.7*	95.2	45.5	72.0	83.0	40.7*	53.5*	39.5*	52.3	28.7	69.0
10	39.6*	20.9*	88.1	45.1	85.3	73.6	36.0*	42.4*	46.2*	81.1	61.1	83.0
11	32.2*	27.6*	65.6	46.0	46.8	58.0	35.4*	47.6*	43.9*	68.4	93.5	88.7
12	55.1*	63.9*	35.1	32.4	84.2	86.3	35.5*	49.7*	33.8*	81.4	92.5	72.6
13	63.4*	28.9*	28.9	25.3	60.6	82.8	36.9*	33.0*	43.1*	86.4	88.1	75.4
14	75.8*	81.2*	25.5	31.6	38.0	70.3	44.6*	-	51.6*	86.4	81.3	62.2
15	68.4*	79.5*	45.5	60.0	58.8	73.7	57.5*	43.8*	45.9*	42.3	71.1	55.4
16	87.0*	78.0*	54.8	80.4	52.2	68.6	51.6*	64.2*	38.1*	45.3	76.4	40.0
17	80.1*	67.1*	78.4	89.7	61.5	88.6	41.4*	68.1*	34.0*	84.0	66.8	32.1
18	73.9*	55.9*	59.7	85.9	70.1	83.9	40.0*	55.0*	38.4*	89.8	36.2	20.2
19	65.3*	54.8*	65.1	76.2	58.1	54.0	51.1*	41.6*	38.8*	63.7	41.8	22.7
20	63.2*	61.1*	69.5	66.9	62.9	69.8	46.8*	59.2*	41.9*	19.5	35.3	22.3
21	50.8*	55.7*	80.2	41.2	84.2	94.6	41.0*	54.9*	38.7*	16.6	27.7	54.8
22	40.6*	58.5*	83.1	33.3	68.1	84.4	59.6*	55.2*	41.2*	21.8	74.6	31.2
23	54.5*	67.3*	88.9	29.7	56.2	62.9	37.3*	55.0*	37.8*	32.5	65.5	35.5
24	45.5*	86.9*	90.9	36.7	40.3	80.4	34.4*	52.2*	-	69.2	55.0	50.8
25	25.3*	65.9*	85.2	73.9	23.0	73.6	37.8*	55.8*	-	77.5	58.5	54.2
26	48.6*	68.9*	57.0	71.1	59.8	32.7	33.7*	51.7*	44.4*	76.8	36.2	49.6
27	87.2*	66.2*	69.3	57.7	83.8	75.7	36.8*	52.0*	50.3*	78.7	43.2	21.7
28	73.9*	48.2*	68.7	61.0	71.3	89.3	48.5*	62.9*	59.8*	36.5	48.2	18.6
29	61.0*	50.2*	58.8	94.4	91.7	87.4	41.6*	58.1*	48.0*	25.9	48.5	23.6
30	48.5*	28.2*	58.0	75.4	87.4	87.4	40.9*	51.9*	42.5*	23.5	72.4	31.2
31	43.4*	42.4	42.4	94.6	87.2	87.2	40.9*	58.9*	58.9*	27.3	81.7	-
TOTAL	1556.7*	1684.6*	1969.5*	1877.2	1717.5	2448.1	1328.8*	1566.9*	1234.5*	1644.1*	1590.3	1565.4
MEAN	50.2*	56.2*	63.5*	60.6	61.3	79.0	44.3*	52.2*	44.1*	53.0*	51.3	52.2
MAX	87.2*	93.9*	95.2	94.6	85.3	95.4	65.4*	70.0*	64.3*	89.8	93.5	92.4
MIN	25.3*	28.2*	25.5	25.3	23.0	32.7	33.7*	33.0*	33.8*	16.6	14.6	18.6

* values estimated

Table 18.--Maximum humidity at JQS weather station for water years 1981

STATION NUMBER 393529107545900, METEOROLOGICAL SOURCE AGENCY USGS

HUMIDITY, RELATIVE (PERCENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	-	-	58.5	98.5	89.1	-	-	-	-	67.9	89.6
2	-	-	-	55.9	97.8	100.0	-	-	-	-	64.1	55.5
3	-	-	-	95.1	73.6	100.0	-	-	-	-	48.7	97.9
4	-	-	-	84.4	39.4	100.0	-	-	-	-	48.2	97.7
5	-	-	-	100.0	81.3	100.0	-	-	-	-	20.0	91.1
6	-	-	99.2	100.0	61.6	100.0	-	-	-	-	18.5	97.7
7	-	-	99.1	84.6	78.1	100.0	-	-	-	63.8	42.1	96.3
8	-	-	99.4	68.0	60.9	100.0	-	-	-	71.5	46.6	95.1
9	-	-	100.0	60.8	100.0	100.0	-	-	-	74.5	52.9	91.5
10	-	-	97.3	59.1	100.0	94.9	-	-	-	97.1	96.3	96.6
11	-	-	98.2	57.8	67.2	61.8	-	-	-	87.4	97.1	96.7
12	-	-	47.7	51.7	99.4	100.0	-	-	-	96.0	97.6	92.3
13	-	-	51.6	31.3	85.3	100.0	-	-	-	96.0	96.8	93.9
14	-	-	45.2	52.6	49.7	91.0	-	-	-	95.6	94.4	83.5
15	-	-	65.6	93.1	96.4	98.6	-	-	-	62.0	89.6	81.6
16	-	-	62.5	96.3	64.6	88.1	-	-	-	89.2	96.0	68.1
17	-	-	93.6	100.0	92.4	100.0	-	-	-	96.2	94.0	52.3
18	-	-	71.3	99.6	94.7	100.0	-	-	-	96.6	69.3	29.2
19	-	-	80.9	99.2	68.0	74.2	-	-	-	92.3	71.0	45.3
20	-	-	90.4	85.7	97.1	100.0	-	-	-	37.0	69.1	27.9
21	-	-	94.4	53.1	98.6	100.0	-	-	-	27.9	52.3	94.8
22	-	-	93.5	57.4	86.9	100.0	-	-	-	47.4	96.0	44.7
23	-	-	100.0	35.5	72.7	80.3	-	-	-	48.1	92.7	50.8
24	-	-	99.8	55.3	56.1	100.0	-	-	-	95.7	90.6	87.8
25	-	-	100.0	99.0	24.9	100.0	-	-	-	97.9	73.9	69.6
26	-	-	67.4	86.8	100.0	42.5	-	-	-	95.8	65.7	78.0
27	-	-	92.2	61.7	100.0	100.0	-	-	-	96.5	64.3	28.0
28	-	-	83.4	82.0	94.4	100.0	-	-	-	64.1	61.8	22.3
29	-	-	69.3	100.0	100.0	100.0	-	-	-	58.1	79.9	38.6
30	-	-	76.8	99.2	100.0	100.0	-	-	-	44.4	96.4	48.1
31	-	-	60.6	99.1	100.0	100.0	-	-	-	56.1	97.8	97.8
TOTAL	-	-	2139.4	2364.5	2239.5	2920.6	-	-	-	1887.2	2251.4	2142.3
MEAN	-	-	82.3	76.3	80.0	94.2	-	-	-	75.4	72.6	71.4
MAX	-	-	100.0	100.0	100.0	100.0	-	-	-	97.9	97.8	97.9
MIN	-	-	45.2	31.3	24.9	42.5	-	-	-	27.9	18.5	22.3

Table 19.--Minimum humidity at JQS weather station for water year 1981

STATION NUMBER 393529107545900, METEOROLOGICAL SOURCE AGENCY USGS

HUMIDITY, RELATIVE (PERCENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	-	-	29.2	71.4	51.1	-	-	-	-	16.3	45.9
2	-	-	-	36.5	46.4	57.5	-	-	-	-	19.0	38.3
3	-	-	-	51.2	21.0	61.2	-	-	-	-	12.9	23.1
4	-	-	-	54.1	23.9	58.3	-	-	-	-	15.0	22.9
5	-	-	-	57.4	28.2	45.4	-	-	-	-	12.9	19.3
6	-	-	39.0	41.8	33.9	55.8	-	-	-	17.3	12.0	67.2
7	-	-	78.9	26.0	45.6	67.0	-	-	-	13.3	12.8	60.0
8	-	-	80.4	20.3	43.0	59.9	-	-	-	15.6	14.4	48.2
9	-	-	79.0	24.2	45.5	38.9	-	-	-	19.8	14.8	28.3
10	-	-	57.9	25.9	54.2	28.6	-	-	-	37.9	17.1	42.0
11	-	-	35.8	20.3	26.6	50.5	-	-	-	42.9	77.4	51.7
12	-	-	20.3	19.1	52.9	53.5	-	-	-	33.5	69.8	47.3
13	-	-	18.1	21.0	28.8	36.4	-	-	-	52.7	54.3	37.3
14	-	-	18.4	26.1	24.8	29.8	-	-	-	35.3	49.6	30.0
15	-	-	23.6	28.2	29.6	43.6	-	-	-	23.4	39.2	23.9
16	-	-	57.1	59.8	36.0	53.4	-	-	-	15.3	40.4	18.9
17	-	-	48.4	62.6	46.6	56.2	-	-	-	47.5	29.2	15.8
18	-	-	44.4	56.5	41.6	42.6	-	-	-	52.5	16.9	15.0
19	-	-	49.4	39.9	45.7	26.7	-	-	-	33.7	21.6	14.6
20	-	-	55.7	43.7	48.7	37.4	-	-	-	14.5	14.1	15.4
21	-	-	62.0	20.7	52.0	74.5	-	-	-	13.5	15.2	17.3
22	-	-	64.3	18.3	46.4	48.1	-	-	-	12.8	43.6	17.4
23	-	-	72.8	20.7	27.9	33.3	-	-	-	16.5	31.3	18.8
24	-	-	63.3	26.4	21.9	50.5	-	-	-	14.9	31.3	17.5
25	-	-	57.4	44.1	20.2	22.3	-	-	-	33.2	30.3	26.1
26	-	-	43.5	52.6	25.1	27.5	-	-	-	44.3	17.0	20.0
27	-	-	51.1	52.6	40.0	29.0	-	-	-	37.9	14.9	15.9
28	-	-	46.5	53.1	48.6	55.9	-	-	-	19.4	25.1	15.4
29	-	-	52.3	72.8	-	64.6	-	-	-	15.7	16.2	15.3
30	-	-	22.1	53.3	-	67.2	-	-	-	14.8	40.0	20.3
31	-	-	24.5	68.3	-	66.8	-	-	-	17.5	30.0	-
TOTAL	-	-	1266.0	1226.5	1076.4	1493.1	-	-	-	695.5	854.5	849.0
MEAN	-	-	48.7	39.6	38.4	48.2	-	-	-	26.8	27.6	28.3
MAX	-	-	80.4	72.8	54.2	74.5	-	-	-	52.7	77.4	67.2
MIN	-	-	18.1	18.3	20.2	22.3	-	-	-	12.8	12.0	14.6

Table 20.--Solar radiation at JQS weather station for water years 1980 and 1981

STATION NUMBER 393529107545900, METEOROLOGICAL SOURCE AGENCY USGS

SOLAR RADIATION, INCIDENTAL, INTENSITY, IN CALORIES, WATER YEAR 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	295.1*	197.5*	144.2*	48.3*	180.9*	259.6*	359.2*	198.9*	426.6	260.1*	269.3*	361.7*
2	249.4*	231.5*	91.7*	25.0*	98.0*	83.1*	137.5*	275.5*	522.6	193.5*	357.4*	361.0*
3	283.1*	133.6*	119.4*	51.2*	113.0*	100.5*	326.9*	187.5*	540.6	419.0*	327.9*	313.5*
4	278.4*	122.2*	104.4*	62.3*	112.6*	126.8*	337.7*	-	556.2	151.9*	438.2*	322.1*
5	282.7*	176.3*	140.0*	120.8*	193.2*	187.9*	272.1*	203.6*	562.8	-	406.4*	281.2*
6	275.5*	174.7*	64.2	100.5*	66.1*	-	193.7*	200.7*	550.2	-	421.5*	215.6*
7	148.5*	42.7*	26.4	70.0*	47.6*	204.5*	253.3*	128.2*	535.8	67.6*	417.1*	148.5*
8	268.2*	59.7*	94.5*	85.6*	59.0*	215.2*	385.0*	429.0	474.6	510.0	410.3*	120.0*
9	262.1*	85.3*	106.8	19.6*	122.5*	233.7*	509.4	190.2	537.6*	504.0	333.1*	66.7*
10	261.0*	154.1*	57.6	68.2*	209.9*	298.3*	349.8	164.4	538.8	412.2	414.6*	103.2*
11	242.4*	80.3*	101.6*	50.1*	193.5*	167.6*	232.8	163.5*	493.2	484.2	419.0*	264.9*
12	226.2*	198.9*	37.8	-	194.6*	206.3*	528.6	100.8	640.8	147.0*	316.1*	130.9*
13	241.8*	176.2*	44.4	134.6*	168.7*	309.3*	517.8	548.4	488.5	185.4	196.5*	480.0
14	103.3*	174.7*	54.6	-	66.8*	78.9*	472.8	222.6*	486.9	508.8	302.6*	387.6
15	241.7*	174.7*	54.6	77.5*	79.6*	405.6*	406.2	484.2	564.6	543.6	322.8	299.8*
16	247.4*	174.0*	45.6	30.2*	107.3*	249.4*	475.2	217.2	559.2	531.6	549.0	319.1*
17	176.6*	130.7*	58.2	82.8*	116.9*	344.6*	470.4	192.0	413.4	452.0*	398.4	435.0
18	202.1*	59.0*	52.2	73.2*	161.6*	326.1*	477.6	438.0	546.0	444.5*	406.9*	423.0*
19	172.4*	-	52.2	40.2*	147.2*	311.9*	467.4	313.2	428.4	398.1*	326.7*	186.1*
20	-	-	28.8	94.1*	32.7*	339.2*	448.2	364.2	526.2	373.4	400.1*	312.4*
21	-	49.1*	28.2	138.2*	131.0*	321.8*	314.4	517.8	531.6	436.2	395.5*	243.4*
22	157.0*	49.1*	24.9*	144.9*	90.2*	-	332.4	420.0	551.4	412.0*	383.8*	310.3*
23	206.8*	56.2*	26.3*	165.5*	41.2*	161.2*	336.6	525.0	527.4	197.4	257.2*	302.6*
24	173.4*	52.6*	69.7*	153.8*	138.9*	319.7*	132.0	276.6	452.1	252.0	199.0*	301.0*
25	220.2*	122.9*	28.2	136.4*	250.3*	-	496.2	570.6	480.5	363.6	190.6*	297.6*
26	202.2*	25.6*	62.6*	122.9*	240.4*	90.8*	487.8	396.6	549.0	412.8	333.8*	293.6*
27	220.8*	83.9*	41.2*	98.4*	253.5*	319.8*	421.2	521.4	554.4	443.2*	345.7*	187.6*
28	156.9*	127.9*	16.0*	-	234.0*	167.8*	481.8	563.4	472.2*	338.9*	381.1*	155.9*
29	27.3*	142.8*	133.0*	22.8*	62.9*	232.4*	236.5*	382.8	440.8*	255.7*	251.2*	286.9*
30	133.8*	32.0*	98.8*	196.0*	167.8*	167.8*	137.4	564.0	308.2*	271.4*	221.1*	278.7*
31	173.2*	-	145.3*	224.8*	235.2*	-	-	548.4	-	383.7*	187.2*	-
TOTAL	6129.5	3290.2*	2153.4*	2637.9*	3914.1*	6465.0*	10997.9*	10308.7*	15260.6*	10338.8*	10580.1*	8189.9*
MEAN	211.4*	117.5*	369.5*	94.2*	135.0*	222.9*	366.6*	332.5	508.7*	356.5*	341.3*	273.0*
MAX	295.1*	231.5*	145.3*	224.8*	253.5*	405.6*	528.6*	570.6	562.8*	543.6*	549.0*	480.0*
MIN	27.3*	25.6*	16.0*	19.6*	32.7*	78.9*	132.0*	100.8*	308.2*	67.6*	187.2*	66.7*

* values estimated

Table 20.--Solar radiation at JQS weather station for water years 1980 and 1981--Continued

STATION NUMBER 393529107545900, METEOROLOGICAL SOURCE AGENCY USGS

SOLAR RADIATION, INCIDENTAL, INTENSITY, IN CALORIES, WATER YEAR 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	275.8*	190.3*	187.0*	653.2	29.2*	683.2	277.1*	221.3*	-	167.6*	269.6	341.2
2	275.4*	131.5*	166.3*	718.7	107.1*	161.6	283.5*	174.4*	-	347.4*	575.9	586.6
3	245.5*	93.0*	155.1*	715.5	177.0*	115.2*	146.3*	-	-	315.0*	440.6	448.3
4	271.6*	156.5*	123.3*	661.0	177.4*	187.7*	233.2*	257.4*	-	457.3*	626.6	191.6
5	262.1*	174.8*	64.7*	285.3	199.7*	241.8*	322.5*	211.1*	-	447.1*	250.8	414.9
6	257.4*	124.0*	113.7*	574.5	101.6*	-	361.9*	215.0*	-	-	155.6	205.7
7	258.2*	154.1*	9.5	672.8	125.3	30.9*	127.6*	235.3*	-	74.5	159.8	324.3
8	248.2*	141.2*	23.6*	637.3	515.1	265.0	253.7*	110.5*	156.6*	174.4	221.6	277.9
9	250.3*	172.0*	42.9*	710.3	93.1*	551.0	362.7*	196.4*	384.5*	156.5	395.7	498.9
10	247.8*	146.8*	158.2	708.2	233.0	443.1	367.9*	167.2*	436.0*	146.7	205.2	290.1
11	231.0*	117.4*	74.9	716.1	91.4*	699.8	371.3*	127.4*	456.9*	350.0	385.1	370.6
12	85.9*	93.6*	111.0*	724.4	583.6	119.9*	291.6*	164.6*	473.5*	111.9	390.7	426.3
13	220.4*	19.6*	65.2	447.9	529.1	185.5*	218.8*	248.0*	433.0*	295.6	228.8	331.0
14	111.2*	104.7*	643.5	182.7	733.2	283.5*	229.0*	246.2*	283.1*	237.3	328.2	401.9
15	139.6*	215.8*	677.9	727.2	481.7	272.4*	228.0*	196.9*	467.5*	121.5	488.0	294.3
16	93.6*	141.9*	683.5	632.7	735.2	23.9	240.9*	141.8*	476.9*	554.3	132.7	427.9
17	110.3*	291.4*	555.1	636.0	734.1	251.1	302.2*	84.0*	165.5*	212.0	294.8	581.8
18	94.6*	305.6*	302.9	670.0	734.9	590.9	206.0*	188.6*	369.6*	129.7	649.6	652.9
19	234.9*	259.6*	178.8	636.7	735.0	362.6	317.2*	-	445.8*	243.5	685.7	291.3
20	233.2*	192.4*	111.0*	597.2	698.0	467.4	357.2*	103.2*	382.8*	446.3	677.0	80.3
21	221.5*	258.4*	95.3*	154.6*	129.9	62.8*	248.1*	119.3*	449.2*	559.7	685.4	540.2
22	193.2*	98.1*	90.0*	157.1*	87.9	156.6*	338.5*	84.0*	468.0*	163.6	558.9	219.6
23	219.0*	254.2*	33.9	151.6*	533.1	206.4*	396.8*	158.3*	289.9*	646.3	259.3	201.6
24	217.4*	13.1*	13.9	142.4	727.2	137.4*	341.0*	136.4*	451.3*	232.4	485.1	572.5
25	216.3*	132.1*	130.5	114.3	559.5	45.4	373.4*	108.8*	390.0*	324.0	470.0	428.5
26	67.8*	221.1*	238.1	117.6*	385.0	169.4	401.5*	158.1*	445.8*	439.2	614.2	481.2
27	30.1*	101.2*	212.8	61.7*	145.9	20.1	358.1*	-	341.9*	339.6	379.7	583.6
28	136.7*	165.1*	206.3	100.4*	99.5	31.8	407.0*	-	258.4*	645.5	126.7	475.6
29	215.9*	190.4*	326.3	121.5*	311.2*	311.2*	401.9*	-	-	150.1	652.2	509.4
30	194.8*	123.2*	643.6	23.1*	49.2*	49.2*	376.8*	-	-	692.3	396.7	480.0
31	164.7*	-	601.1	208.6	-	69.0	-	-	-	684.2	167.9	-
TOTAL	6024.4*	4783.2*	7039.9*	13117.6*	10478.7*	7197.8*	9191.7*	4063.1*	8026.2*	9865.6*	12358.1	11930.0
MEAN	194.3*	159.4*	227.1*	423.1*	374.2*	239.9*	306.4*	169.3*	382.2*	318.2	398.6*	397.7
MAX	275.8*	305.6*	683.5	727.2	735.2	699.8	407.0*	257.4*	477.0*	692.3	685.7	652.9
MIN	30.1*	13.1*	9.5*	23.1*	79.2*	20.1*	127.6*	84.0*	156.6*	74.5*	126.7	80.3

* values estimated

Table 21.--Mean wind velocity at JQS weather station for water years 1980 and 1981

STATION NUMBER 393529107545900, METEOROLOGICAL SOURCE AGENCY USGS

WIND VELOCITY (MPH), WATER YEAR 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	-	-	.8	0.8*	0.8*	1.0*	2.2	2.1	1.3*	1.0*	1.4*
2	-	-	-	1.4	0.8*	2.3*	1.5*	.8	3.6	1.1*	1.2*	2.5*
3	-	-	-	1.9*	1.6*	2.7*	0.8*	1.0	4.3	1.8*	2.5*	2.5*
4	-	-	-	1.3*	0.9*	1.2*	1.2*	1.3	4.2	0.6*	1.8*	0.7*
5	-	-	-	3.0*	0.7*	4.0*	2.3*	.9	3.7	-	2.0*	0.8*
6	-	-	1.2	3.6*	1.2*	1.8*	2.6*	1.2	4.4	-	2.9*	1.0*
7	-	-	.4	2.0*	2.3*	1.6*	2.4*	.8	1.9	3.1*	1.9*	1.3*
8	-	-	.8	5.1*	1.2*	1.2*	1.0*	2.7	1.5	2.0	2.2*	1.1*
9	-	-	.6	3.6*	0.5*	2.1*	2.8	3.2	1.4	.8	1.9*	0.5*
10	-	-	3.7	5.4*	0.6*	1.5*	3.3	3.9	2.2	1.1	1.3*	1.3*
11	-	-	1.1	2.0*	0.5*	1.8*	4.5	4.0	2.7	1.0	0.8*	3.1*
12	-	-	1.1	5.0*	2.5*	2.7*	2.6	3.4	3.2	2.1	2.1*	1.0*
13	-	-	.6	4.4*	2.2*	2.4*	1.0	1.1	2.7	1.4	1.4*	2.2
14	-	-	.9	1.9*	3.3*	1.6*	1.1	0.9*	3.6	2.4	1.4*	2.2
15	-	-	1.4	0.5*	1.7*	3.9*	1.7	1.4	1.5	1.9	2.0	2.6
16	-	-	.5	0.4*	0.8*	1.8*	1.6	1.2	1.1	1.1	1.6	2.4
17	-	-	.4	1.6*	2.7*	1.7*	.9	1.5	1.0	2.2	1.9	1.9
18	-	-	.0	.8	2.8*	2.4*	1.6	1.0	1.7	2.3	3.1	2.6*
19	-	-	1.0	1.7*	2.8*	1.6*	1.3	1.6	1.2	3.1	3.0*	4.4*
20	-	-	2.2	0.7*	1.3*	1.2*	2.4	.7	1.9	.7	1.0*	1.4*
21	-	-	.9	1.0*	2.2*	2.7*	1.5	1.7	2.0	1.4	1.0*	2.8*
22	-	-	2.1	0.6*	1.6*	1.4*	1.9	2.0	1.9	1.6	2.2*	1.0*
23	-	-	.4	0.8*	1.4*	1.2*	2.0	4.7	3.3	1.1	3.3*	1.1*
24	-	-	1.1	0.9*	0.5*	1.7*	2.6	4.7	2.6	.9	1.6*	1.2*
25	-	-	2.9	2.7*	0.8*	1.3*	1.7	4.2	2.4	1.7	1.4*	0.6*
26	-	-	.9	1.1*	1.2*	0.7*	1.2	1.9	3.0	.9	1.0*	1.2*
27	-	-	1.0	3.8*	1.6*	0.8*	.8	2.9	2.5	0.9*	2.3*	1.0*
28	-	-	1.2	0.5*	1.9*	2.2*	.8	3.4	1.1*	0.9*	3.6*	0.8*
29	-	-	.9	3.4*	1.4*	1.2*	1.5	2.9	1.9*	2.2	3.0*	0.7*
30	-	-	.5	0.6*	.5	2.8*	.9	2.5	1.4*	1.1*	3.2*	0.7*
31	-	-	-	0.6*	0.5*	0.5*	3.4	3.4	1.2*	0.6*	1.2*	1.2*
TOTAL	-	-	27.5	63.1*	43.8*	56.8*	52.5*	68.1*	72.1*	43.1*	60.7*	47.9*
MEAN	-	-	.9	2.0*	1.5*	1.8*	1.8*	2.2	2.4*	1.5*	2.0*	1.6*
MAX	-	-	3.7	5.4*	3.3*	4.0*	4.5	4.7	4.4	3.1*	3.6*	4.4*
MIN	-	-	-	0.5*	0.5*	0.5*	0.8*	0.5*	1.0*	0.6*	0.8*	0.6*

*values estimated

Table 21.--Mean wind velocity at JQS weather station for water years 1980 and 1981--Continued

STATION NUMBER 393529107545900, METEOROLOGICAL SOURCE AGENCY USGS

WIND VELOCITY (MPH), WATER YEAR 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3*	-	-	5.3	5.8	4.3	10.7*	1.4*	-	4.5*	5.4	6.5
2	1.2*	-	-	5.6	3.6	4.4	11.9*	4.8*	-	4.8*	3.9	6.5
3	0.7*	-	-	3.4	4.0	4.6	6.6*	4.4*	2.4*	4.2*	4.7	6.9
4	0.6*	-	-	4.5	3.8	6.9	5.0*	2.9*	3.3*	4.1*	5.6	5.4
5	1.1*	-	-	5.9	3.8	3.6	5.3*	7.2*	3.8*	4.1*	5.3	6.5
6	0.8*	-	10.7	4.6	7.8	4.5	9.2*	8.8*	6.5*	10.0	5.6	4.5
7	0.8*	-	8.3	3.6	5.1	3.9	4.7*	5.9*	9.1*	5.2	6.0	4.5
8	0.6*	-	5.6	3.7	9.4	3.7	6.7*	5.4*	11.2*	5.8	5.8	5.4
9	0.9*	-	3.2	3.2	9.4	5.0	11.1*	4.1*	7.6*	4.6	5.3	3.4
10	1.1*	-	3.4	3.1	12.4	4.3	9.7*	6.1*	7.5*	5.6	5.4	4.3
11	1.7*	-	3.4	3.8	8.2	7.5	9.7*	8.3*	7.0*	4.3	5.3	4.1
12	3.0*	-	3.3	4.8	4.5	4.8	9.1*	5.7*	12.0*	4.4	3.7	4.7
13	2.0*	-	3.2	3.9	3.6	4.3	3.4*	3.3*	9.7*	5.3	4.5	4.6
14	2.7*	-	4.1	5.6	6.9	4.6	4.4*	8.7*	5.2*	3.9	4.8	6.0
15	3.2*	-	3.1	4.3	4.4	4.0	8.2*	10.7*	4.0*	3.9	3.5	5.1
16	1.2*	-	4.8	3.7	3.3	6.4	6.8*	5.5*	8.8*	4.1	4.3	4.0
17	1.3*	-	2.8	2.5	4.9	8.9	6.0*	5.2*	9.7*	4.4	4.6	5.2
18	0.6*	-	4.7	3.4	4.8	3.3	5.1*	3.3*	4.7*	3.5	4.5	4.5
19	0.8*	-	6.7	3.8	5.4	5.6	9.0*	1.7*	6.8*	6.1	3.9	4.8
20	0.5*	-	2.9	5.7	11.3	9.8	8.9*	11.7*	6.7*	5.3	4.0	5.3
21	1.1*	-	3.6	5.1	8.3	7.5	7.7*	11.2*	7.5*	6.5	5.3	6.0
22	2.2*	-	4.6	4.6	3.5	3.8	3.8*	5.5*	3.4*	6.4	4.1	6.7
23	1.0*	-	8.5	4.3	4.0	3.8	3.6*	3.8*	6.1*	4.8	4.6	5.8
24	0.9*	-	5.7	8.1	7.3	5.5	3.9*	3.1*	4.4*	5.9	3.4	5.6
25	1.3*	-	5.0	5.0	7.8	5.2	7.8*	4.0*	4.0*	6.7	4.4	8.6
26	2.1*	-	7.7	4.7	9.4	9.1	10.3*	7.2*	8.0*	7.1	4.6	8.1
27	2.3*	-	3.7	5.8	7.7	11.0	6.7*	5.4*	7.5*	6.4	4.7	5.0
28	0.7*	-	4.7	9.2	4.5	5.3	4.5*	2.0*	5.0*	5.3	3.9	7.5
29	0.3*	-	4.5	8.3	-	7.0	3.6*	2.7*	-	4.2	6.4	7.9
30	1.0*	-	4.4	9.6	-	10.4	4.2*	3.1*	-	4.5	6.5	6.7
31	1.0*	-	4.1	5.5	-	6.9	-	5.3*	-	5.3	6.7	-
TOTAL	4.0*	-	126.6	154.9	175.0	179.8	207.1*	165.7*	171.6	161.2*	150.7	170.3
MEAN	1.3*	-	4.9	5.0	6.2	5.8	6.9*	5.3*	6.6*	5.2*	4.9	5.7
MAX	3.2*	-	8.5	9.6	12.4	11.0	11.9*	11.7*	12.0*	7.1	6.7	8.6
MIN	0.3*	-	2.8	2.5	3.3	3.3	3.4*	1.4*	2.4*	3.5	3.4	3.4

* values estimated

Table 22.--Wind direction at JQS weather station for water years 1980 and 1981

STATION NUMBER 393529107545900, METEOROLOGICAL SOURCE AGENCY USGS

WIND DIRECTION (DEGREES), WATER YEAR 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	-	-	228.8	-	-	-	105.3	212.9	-	-	223.7
2	-	-	-	73.4	-	-	-	99.5	204.0	-	-	-
3	-	-	-	237.1	-	-	-	149.9	217.9	-	-	-
4	-	-	-	255.2	-	-	-	104.1	233.9	-	-	-
5	-	-	-	-	-	-	-	168.4	238.8	-	-	-
6	-	-	179.1	-	-	-	-	205.6	247.5	-	-	-
7	-	-	110.5	-	-	-	-	168.2	160.7	-	-	-
8	-	-	171.8	-	-	-	179.2	238.1	137.5	211.8	-	-
9	-	-	178.3	-	-	-	212.4	233.3	107.4	207.8	-	-
10	-	-	246.6	-	-	-	260.9	218.4	147.7	124.9	-	-
11	-	-	173.2	-	-	-	28.1	233.5	215.5	176.7	-	-
12	-	-	143.3	-	-	-	19.6	220.8	243.7	159.6	-	-
13	-	-	40.5	-	-	-	157.6	165.1	206.8	168.7	-	203.7
14	-	-	197.1	-	-	-	185.4	-	222.9	166.8	-	198.9
15	-	-	220.4	-	-	-	229.8	102.2	220.0	181.3	232.2	230.6
16	-	-	125.1	-	-	-	88.7	181.2	153.8	253.3	189.8	228.3
17	-	-	90.4	-	-	-	96.0	129.8	150.7	139.3	176.9	289.9
18	-	-	43.6	109.7	-	-	160.2	111.4	178.0	191.0	160.8	234.8
19	-	-	151.7	-	-	-	154.1	196.4	182.2	179.6	222.7	233.4
20	-	-	238.4	-	-	-	143.3	41.0	164.1	239.1	-	-
21	-	-	143.3	-	-	-	185.1	133.9	227.2	198.7	-	-
22	-	-	235.0	-	-	-	116.9	128.3	180.5	142.1	227.2	-
23	-	-	224.2	-	-	-	156.5	219.3	215.5	181.7	-	-
24	-	-	205.8	-	-	-	85.0	212.3	236.2	144.7	223.1	-
25	-	-	230.0	-	-	-	89.0	237.0	180.2	135.2	-	-
26	-	-	43.4	-	-	-	72.6	172.7	180.2	147.3	-	-
27	-	-	109.2	-	-	-	139.3	195.1	188.3	201.4	-	-
28	-	-	154.7	-	-	-	133.5	224.1	274.6	179.4	219.6	-
29	-	-	231.0	-	-	-	138.0	240.4	-	151.7	238.9	-
30	-	-	149.8	-	-	-	82.6	191.3	-	207.2	242.6	-
31	-	-	-	-	-	-	105.3	234.5	-	-	-	-

Table 22.--Wind direction at JQS weather station for water years 1980 and 1981--Continued

STATION NUMBER 393529107545900, METEOROLOGICAL SOURCE AGENCY USGS

WIND DIRECTION (DEGREES), WATER YEAR 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	-	-	148.3	264.1	223.4	-	-	-	-	193.9	212.7
2	-	-	-	217.7	226.5	143.5	-	-	-	-	172.7	210.0
3	-	-	-	178.4	201.5	235.5	-	-	-	-	220.6	177.0
4	-	-	-	217.2	193.1	259.0	-	-	-	-	226.0	214.6
5	-	-	-	250.4	183.7	213.6	-	-	-	-	198.6	202.1
6	-	-	62.6	156.2	226.4	185.1	-	-	-	223.9	230.7	187.7
7	-	-	63.2	189.1	235.8	228.0	-	-	-	212.6	177.0	106.4
8	-	-	63.6	184.8	221.0	222.1	-	-	-	161.0	149.2	148.9
9	-	-	61.3	150.2	215.7	183.8	-	-	-	174.4	192.6	207.5
10	-	-	63.3	169.1	246.8	183.3	-	-	-	176.1	195.8	156.0
11	-	-	62.5	188.9	220.4	98.2	-	-	-	219.6	115.6	172.3
12	-	-	86.1	178.5	191.2	191.1	-	-	-	159.6	109.6	151.6
13	-	-	88.2	124.5	219.5	188.4	-	-	-	185.6	194.5	162.5
14	-	-	87.4	187.9	215.7	205.3	-	-	-	182.7	223.6	156.4
15	-	-	79.7	225.6	230.8	219.3	-	-	-	199.4	202.3	135.1
16	-	-	76.8	176.0	214.0	229.3	-	-	-	205.2	165.9	185.4
17	-	-	85.6	216.6	228.7	252.8	-	-	-	152.4	165.7	216.0
18	-	-	86.7	183.9	238.7	230.3	-	-	-	192.2	193.3	176.2
19	-	-	101.4	232.5	226.8	211.6	-	-	-	195.3	208.8	214.9
20	-	-	234.8	252.0	225.3	186.4	-	-	-	240.2	225.1	219.6
21	-	-	219.1	193.8	219.2	243.6	-	-	-	225.3	235.4	197.7
22	-	-	231.5	176.3	198.9	200.7	-	-	-	227.0	225.3	219.5
23	-	-	213.6	155.9	215.7	229.9	-	-	-	220.2	223.9	215.5
24	-	-	249.9	207.7	211.4	237.5	-	-	-	182.0	199.0	196.7
25	-	-	225.9	232.2	187.2	192.8	-	-	-	152.3	178.0	201.6
26	-	-	215.4	231.9	182.4	179.7	-	-	-	141.1	231.0	233.7
27	-	-	227.9	212.0	161.1	179.5	-	-	-	181.5	173.7	192.0
28	-	-	205.9	201.5	212.6	242.8	-	-	-	242.6	220.5	211.0
29	-	-	205.8	196.9	-	230.9	-	-	-	215.8	219.3	204.2
30	-	-	192.0	176.1	-	221.6	-	-	-	220.7	158.4	224.5
31	-	-	219.5	233.7	-	232.3	-	-	-	225.3	191.9	

Table 23.--Precipitation data at East Middle Fork Parachute Creek
precipitation gage for water years 1980 and 1981

PRECIPITATION DATA
(in inches)

Station: East Middle Fork Parachute Year: 1980

Latitude and Longitude: 39°37'15" 108°01'46"

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1				Chart missing	Chart missing		0.23	0.13		0.16		
2							0.13			0.23		
3												
4						✓						
5			✓			---						
6			---	Chart missing no data	Chart missing no data	0.16						0.08
7		Click stopped	Chart missing			0.07				0.22		
8		total for period=1.75"	---			0.01						
9			Chart missing									
10			no data									0.17
11						0.22						
12												
13										0.24		
14												
15						0.15						
16						0.03						
17												
18												0.08
19												
20	0.63											0.35
21	0.14					0.14						
22						0.23						
23						0.03		0.04				
24						0.32		0.06				
25						0.39						
26										0.57		
27												
28						0.02						0.28
29	0.38					0.02	0.40					
30	---					0.32	0.12			0.04		
31	✓	✓	✓	✓	✓							
Sum							0.88	0.23	0.00	1.46	0.00	0.96

Table 23.--Precipitation data at East Middle Fork Parachute Creek
precipitation gage for water years 1980 and 1981--Continued

PRECIPITATION DATA
(in inches)

Station: East Middle Fork Parachute Year: 1981

Latitude and Longitude: 39°37'15" 108°01'46"

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1					0.05					0.03		
2									0.15	0.24		0.12
3									0.06			
4												
5			0.03	0.30								0.07
6			0.02									0.20
7			0.21									0.15
8												
9			0.02							0.30		0.08
10											0.13	0.16
11										0.06	0.02	
12	0.29	0.30								0.08	0.02	
13	0.07	0.39										
14	0.50	0.02										
15	0.07								0.12		0.03	
16	0.44								0.10		0.05	
17	0.35								0.17	0.41		
18												
19												
20									0.26			
21									0.16			0.04
22		0.03	0.06						0.45		0.02	
23			0.14							0.17	0.03	
24		0.17								0.34	0.08	
25		0.11								0.07	0.02	
26	0.03				0.37				0.34	0.12		
27	0.08								0.31		0.06	
28				0.20					1.65			
29								0.11			0.18	
30				0.13							0.06	
31				0.34								
Sum	1.83	1.02	0.48	0.97					2.51	1.82	0.70	0.82

Table 24.--Precipitation data at JQS precipitation gage for
water years 1980 and 1981

PRECIPITATION DATA
(in inches)

Station: JQS

Year: 1980

Latitude and Longitude: 39°35'34" 107°54'59"

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1						0.21		0.04		0.24		
2						0.07		0.20		0.33		
3						0.64		0.05				
4		0.05				0.31		0.20				
5				0.05		0.06		0.12			0.07	
6			0.19			0.03		0.15				
7				0.05				0.24		0.19		
8		0.05		0.04	0.13							
9		0.05		0.25				0.27				0.03
10		0.05	0.04	0.21				0.49				0.26
11				0.07			0.09	0.75				
12			0.07	0.15				0.46		0.07	0.10	
13			0.06	0.05						0.15	0.03	
14				0.08	0.17			0.29			0.12	
15				0.07	0.08			0.06			0.58	
16					0.04			0.27				
17								0.76				
18		0.17		0.03	0.30							
19		0.15		0.05	0.07							0.09
20	0.55	0.10			0.34							
21	0.08	0.03			0.58							
22	0.04	0.10			0.05						0.29	
23		0.04	0.05		0.04							
24		0.03			0.02			0.07				
25		0.07								0.38		
26		0.11		0.05								
27		0.04									0.19	
28			0.15	0.51	0.52							
29				0.62	0.39		0.24					
30							0.40		0.03			
31												
Sum	0.67	1.04	0.56	2.28	2.73			4.42	0.03	1.36	1.38	0.38

Table 24.--Precipitation data at JQS precipitation gage for
water years 1980 and 1981--Continued

PRECIPITATION DATA
(in inches)

Station: JQS

Year: 1981

Latitude and Longitude: 39°35'34" 107°54'59"

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1									0.03	0.15		↓
2								0.45	0.12	0.13		↓
3						↓	0.65	0.90	0.79	0.03		
4						↓	0.15	0.05				
5			0.07	0.26								0.04
6			0.28					0.47				0.16
7			0.13			0.17						0.03
8			0.02			0.06		0.10				
9								0.10		0.64		0.20
10												0.06
11								0.25		0.13		
12	0.31	0.34							0.03	0.20		
13	0.09	0.17								0.04		
14	0.40	0.03										
15		0.05					0.06					
16								0.20				
17	0.18					0.25		0.26		0.40		
18	0.21					0.14						
19	0.63						0.13					
20								0.02				
21			0.03			0.15		0.18				
22			0.13			0.22		0.28				
23		0.12	0.20					0.02		0.30		
24		0.19				0.25				0.19		
25						0.03		0.07		0.07		
26	0.04					0.11		0.02	0.25	0.12		
27	0.06					0.10		0.05	0.87			
28						0.26		0.02	0.55			
29						0.04		0.06				
30				↓	↓							
31				↓	↓			0.26				
Sum	1.92	0.90	0.86				0.99	3.76	2.46	2.40		

Table 25.--Precipitation data at East Fork Parachute Creek
precipitation gage for water years 1980 and 1981

PRECIPITATION DATA
(in inches)

Station: East Fork Parachute

Year: 1980

Latitude and Longitude: 39°33'20" 107°58'12"

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1					0.07	0.02	0.04	0.10		0.13		
2							0.10			0.42		
3						0.06						
4						0.11						
5						0.02						
6						0.10						0.01
7		0.07			0.05	0.35	0.02	0.05		0.19		
8		0.22				0.04	0.21	0.05				
9		0.09		0.05				0.05				0.05
10				0.03				0.21				0.27
11		0.04	0.13	0.53				0.18				0.01
12				0.15		0.13		0.35		0.02	0.08	
13					0.02			0.06		0.20	0.07	
14				0.20	0.35			0.03			0.05	
15				0.10	0.16	0.02		0.04			0.84	
16					0.10	0.03						
17						0.07		0.36				
18		0.58		0.11	0.30			0.02				
19		0.29			0.10							
20	0.89	0.22			0.25							
21		0.04			0.10						0.01	
22			0.06		0.10	0.12						
23		0.01	0.07		0.12	0.06					0.29	
24		0.04	0.05		0.03	0.10				0.08		
25		0.15			0.02	0.17		0.05				
26		0.26				0.05						
27						0.02						
28				0.82	0.02							
29	0.31		0.04	0.65	0.04							
30				0.03		0.06	0.28					
31				0.05		0.31						
Sum	1.20	2.01	0.35	2.72	1.83	1.84	0.65	1.55	0.00	1.04	1.35	0.34

Table 25.--Precipitation data at East Fork Parachute Creek
precipitation gage for water years 1980 and 1981--Continued

PRECIPITATION DATA
(in inches)

Station: East Fork Parachute

Year: 1981

Latitude and Longitude: 39°33'20" 107°58'12"

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1						↓				0.10		
2						↓		0.65	0.09	0.05		0.08
3						↓	0.72	0.65	0.35	0.05		0.01
4							0.08					
5			0.15	0.30				0.32				0.06
6			0.15			0.19		0.18				0.13
7			0.26			0.03						0.01
8								0.06				
9			0.03					0.12		0.46	0.01	0.44
10											0.21	0.01
11								0.22		0.06	0.06	
12	0.28	0.29			Clock stopped total for period=2.6"					0.12	0.06	
13	0.10	0.31									0.01	
14	0.65	0.03										0.17
15	0.23			0.05			0.11	0.06			0.57	
16	0.73			0.11		0.29		0.12			0.13	
17	0.12					0.02		0.28		0.23		
18							0.05	0.01		0.01	0.02	
19												0.03
20						0.16		0.13				
21						0.21		0.27				
22		0.02	0.15					0.39				
23		0.04	0.05							0.31	0.02	
24		0.27				0.13				0.25		
25								0.05		0.05	0.03	
26	0.05					0.10			0.15	0.07		
27	0.10					0.13		0.06	0.75		0.17	
28						0.24			0.25			
29						0.01		0.27	0.05		0.14	
30						0.52					0.52	
31				↓				0.26			0.02	
Sum	2.26	0.96	0.75				0.96	4.10	1.54	1.76	1.97	0.94

Table 26.--*JQS snow-course data for water years 1980 and 1981*

[Lat N. 39°35'35", long W. 107°55'00". Elevation 8,860 feet above sea level]

Date (M-D-Y)	Depth (inches)	Water content (inches)	Density (percent)
1-17-80	29.3	7.2	24.7
2-29-80	49.8	14.0	28.3
4-03-80	59.4	22.1	37.2
3-04-81	20.3	4.1	20.2
4-01-81	27.5	6.4	23.4