UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SELECTED HYDROLOGIC DATA, PRICE RIVER BASIN, UTAH, WATER YEARS 1979 AND 1980

by K. M. Waddell, J. E. Dodge, D. W. Darby, and S. M. Theobald

---

U.S. GEOLOGICAL SURVEY

OPEN-FILE REPORT 82-916

Prepared in cooperation with the

U.S. BUREAU OF LAND MANAGEMENT

Salt Lake City, Utah
1982

CONTENTS

ILLUSTRATIONS
[Plate is in pocket]

TABLES

CONVERSION FACTORS

Many values in this report are given in inch-pound units. For those readers who may prefer to use metric units, the conversion factors for the terms used in this report are listed below.

Inch-pound Unit	Abbreviation	(Multiply) (by)	Metric Unit	Abbreviation
			(to obtain)	
Acre	--	0.4047	Square hectometer	hm^2
		0.004047	Square kilometer	km^2
Acre-foot	acre-ft	0.001233	Cubic hectometer	hm^3
		1233	Cubic meter	m^3
Cubic foot per second	ft^3/s	0.02832	Cubic meter per second	m^3/s
Foot	ft	0.3048	Meter	m
Gallon per minute	gal/min	0.06309	Liter per second	L/s
Inch	in.	25.40	Millimeter	mm
		2.540	Centimeter	cm
Mile	mi	1.609	Kilometer	km
Square mile	mi^2	2.590	Square kilometer	km^2

Chemical concentration and water temperature are given only in metric units. Chemical concentration is given in milligrams per liter (mg/L) or micrograms per liter (µg/L). Milligrams per liter is a unit expressing the solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. For concentrations less than 7,000 milligrams per liter, the numerical value is about the same as for concentrations in parts per million. Water temperature is given in degrees Celsius (^oC), which can be converted to degrees Fahrenheit (^oF) by the following equation: $^oF=1.8(^oC)+32$.

Altitudes in this report are referenced to "National Geodetic Vertical Datum of 1929 (NGVD of 1929"). The NGVD of 1929 is a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Cananda, formerly called "Mean Sea Level."

SELECTED HYDROLOGIC DATA, PRICE RIVER BASIN, UTAH, WATER YEARS 1979 AND 1980

by K. M. Waddell, J. E. Dodge, D. W. Darby, and S. M. Theobald

INTRODUCTION

The Price River basin in east-central Utah includes a significant part of the Wasatch Plateau and Book Cliffs coal-fields area (pl. 1) and currently (1980) is part of the most active coal-mining areas in the State.

This report presents data gathered by the U.S. Geological Survey as part of a hydrologic study carried out during the water years 1979 and 1980 in cooperation with the U.S. Bureau of Land Management. The data were obtained in the field or from private, State, and other Federal agencies. The purpose of this report is to make the data available to those engaged in coal mining, to those assessing water resources that may possibly be affected by coal mining, and to supplement two interpretive reports that will be published at a later date. Other sources of hydrologic data in the Price River basin include Waddell and others, 1978 and Sumsion, 1979.

DATA-SITE NUMBERING SYSTEM

The system of numbering wells and springs in Utah is based on the cadastral land-survey system of the U.S. Government. The number, in addition to designating the well or spring, describes its position in the land net. By the land-survey system, the State is divided into four quadrants by the Salt Lake base line and meridian, and these quadrants are designated by the uppercase letters A, B, C, and D, indicating the northeast, northwest, southwest, and southeast quadrants, respectively. Numbers designating the township and range (in that order) follow the quadrant letter, and all three are enclosed in parentheses. The number after the parentheses indicates the section, and is followed by three letters indicating the quarter section, the quarter-quarter section, and the quarter-quarter-quarter section--generally 10 acres;[1] the letters a, b, c, and d indicate, respectively, the northeast, northwest, southwest, and southeast quarters of each subdivision. The number after the letters is the serial number of the well or spring within the 10-acre tract; the letter "S" preceding the serial number denotes a spring. If a well or spring cannot be located within a 10-acre tract, one or two location letters are used and the serial number is omitted. Thus (D-13-8)4bbb-1 designates the first well constructed or visited in the NW¼NW¼NW¼ sec. 4, T. 13 S., R. 8 E., and (D-11-7)32acb-S1 designates a spring in the NW¼SW¼NE¼ sec. 32, T. 11 S., R. 7 E.. Other sites where hydrologic data were collected are numbered in the same manner, but three letters are used after the section number and no serial number is used. The number system is illustrated in figure 1.

In addition to the "location" site numbers described above, each data site is given a sequential number. These sequential site numbers identify the sites on plate 1 and figure 2.

---

[1]Although the basic land unit, the section, is theoretically 1 mi^2, many sections are irregular. Such sections are subdivided into 10-acre tracts, generally beginning at the southeast corner, and the surplus is taken up in the tracts along the north and west sides of the section.

REFERENCES CITED

Sumsion, C. T., 1979, Selected coal-related ground-water data, Wasatch Plateau-Book Cliffs area, Utah: U.S. Geological Survey Open-File Report 79-915, (also as Utah Hydrologic-Data Report 32).

U.S. Geological Survey, 1981, Water resources data for Utah: Water-Data Report UT-80-1.

Waddell, K. M., Vickers, N. L., Upton, R. J., and Contratto, P. K., 1978, Selected hydrologic data, 1931-77, Wasatch Plateau-Book Cliffs coal-fields area, Utah: U.S. Geological Survey Open-File Report 78-121, (also as Utah Basic-Data Report 31).

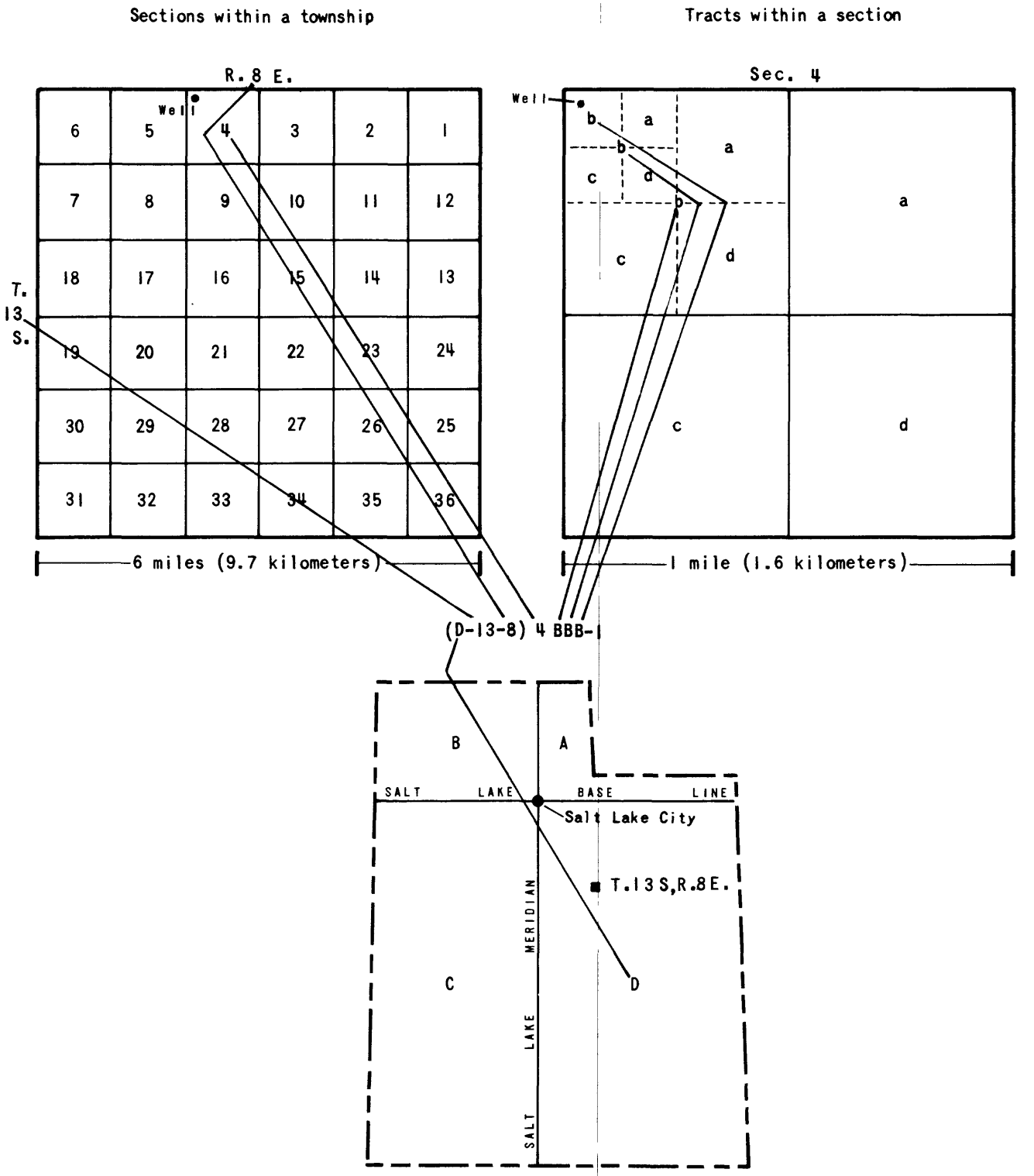

Figure 1.—Data-site numbering system used in Utah.

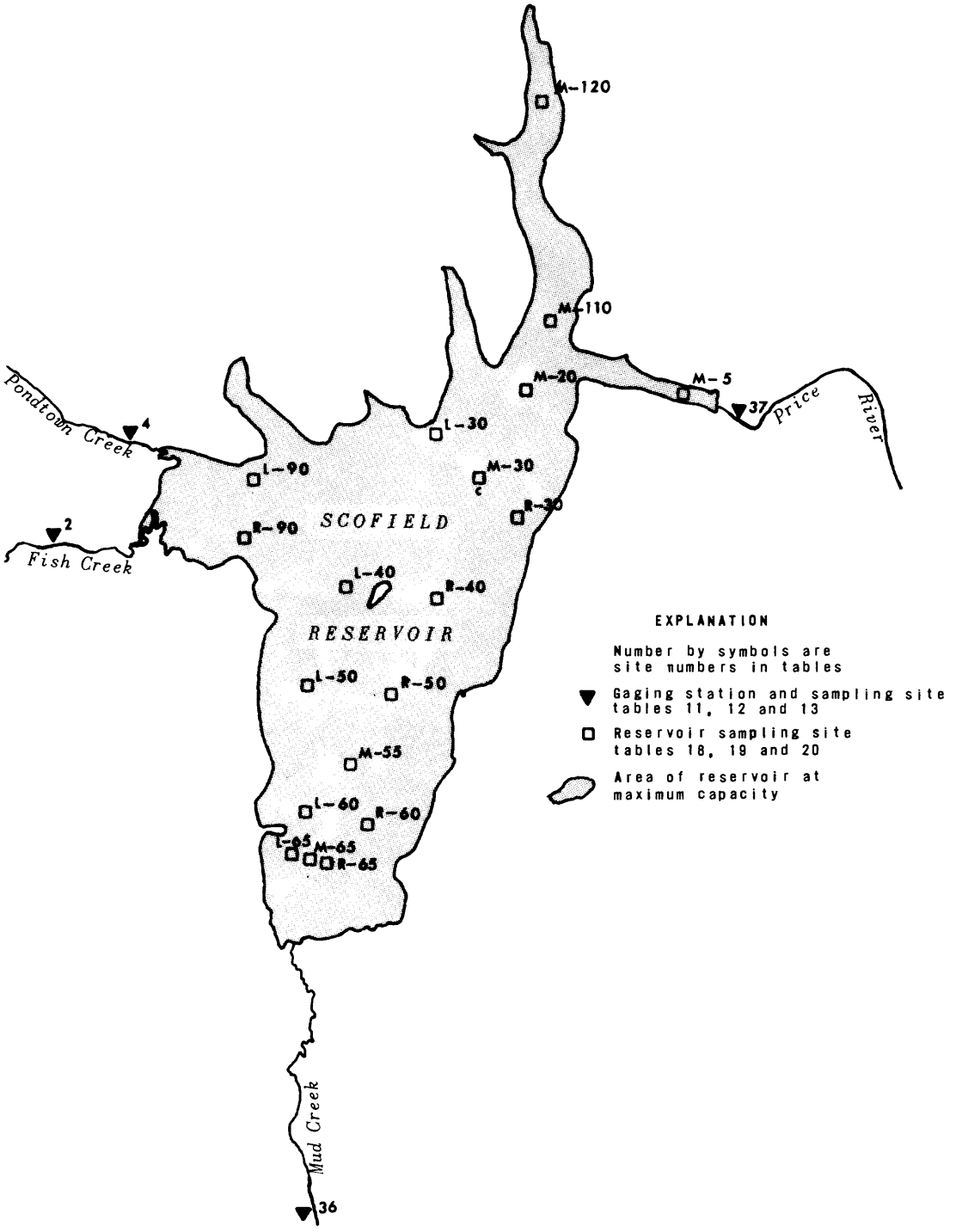

Figure 2.—Map of Scofield Reservoir area showing data-collection sites.

Table 1.—Codes used in identifying aquifers or geologic units in tables 2, 4, and 5

111ALVM	Alluvium	211BCKK	Blackhawk Formation of Mesaverde Group
124CLTN	Colton Formation	211BLGT	Blue Gate Member of Mancos Shale
124FLGF	Flagstaff Limestone	211CSLG	Castlegate Sandstone of Mesaverde Group
124GDGC	Gordon Gulch Member of Green River Formation	211MSUK	Masuk Member of Mancos Shale
124PCCK	Parachute Creek Member of Green River Formation	211PCRV	Price River Formation of Mesaverde Group
125NRHR	North Horn Formation	211SRPN	Star Point Sandstone of Mesaverde Group
200MNCS	Mancos Shale		
211ABRD	Aberdeen Sandstone Member of Blackhawk Formation		

Site No.: See plate 1.
Location: See explanation of data-site numbering system.
Owner: Owner at time well was visited by U.S. Geological Survey personnel or name listed in drillers' report.
Well finish: P, well casing perforated with oil-well type of jet perforating tool; X, uncased below blank surface casing.
Principal aquifer: See table 1 for explanation of codas.
Altitude of land surface: Interpolated from topographic map, if reported to nearest foot; surveyed if reported to nearest hundreth foot.
Water level: Reported by owner.
Use of water: I, industrial; U, unused.
Discharge: R, reported by owner.
Remarks and other data available: C, water-quality data in table 8; G, geophysical log in filas of U.S. Geological Survey, Salt Lake City, Utah; W, watar-level data in table 3.

Site No.	Location	Owner	Year constructed	Well depth (ft)	Casing diameter (in.)	Well finish	Principal aquifer	Lithology of principal aquifer	Altitude of land surfaca (ft)
58.5	(D-12-12)34aba-1	Mountain Fuel Supply Co.	1979	3,177	8.625	P	211BCKK	coal	7,398
60.7	(D-13-6)13cdb-1	Coastal States Energy Co.	1979	250	–	X	211BCKK	sandstone	8,653
				310	–	–	211BCKK	–	–
				350	–	X	211SRPN	sandstone	–
				825	6.25	P	211SRPN	do.	–
				930	–	–	211SRPN	do.	–
				1,060	–	–	211SRPN	do.	–
				1,260	–	–	211SRPN	do.	–
60.8	13ddc-1	do.	1980	1,055	6	X	211SRPN	do.	8,424.08
60.9	24aaa-1	do.	1980	135	6	X	211SRPN	do.	8,372.89
66.5	(D-13-7)17cdc-1	do.	1980	250	6	X	211SRPN	do.	8,053
66.7	19cdd-1	Valley Camp Coal Co.	1980	800	6	P	211SRPN	do.	8,830
73	(D-13-8)4bbb-1	U.S. Geological Survey	1976	160	–	X	211CSLG	sandstone, silty	8,160
89.5	(D-13-12)5dac-1	Eureka Energy Co.	1979	1,744	5.5	P	211BCKK	coal	7,186
93.5	10abb-1	do.	1979	1,656	5.5	P	211CSLG	sandstone	7,727
95.5	11dad-2	do.	1979	1,402	5.5	P	211PCRV	do.	8,204
100.4	24daa-1	do.	1979	1,214	4	P	211CSLG	do.	8,416
100.6	(D-13-13)19bab-1	do.	1979	1,993	4	P	125NRHR 211PCRV 211CSLG 211BCKK	sandstone, mudstone, coal	8,254

Water level		Use of water	Discharge		Temperature (°C)	Specific conductance (μmho/cm at 25°C)	Remarks and other data available
Below land surface (ft)	Date		Rate (gal/min)	Date			
502.84	3-18-80	U	–	–	–	–	G; perforated interval; 3,103-3,108 ft.
82	10-10-79	U	–	–	–	–	–
–	–	–	–	–	–	–	–
180	10-11-79	U	–	–	–	–	–
220	10-17-79	–	–	–	–	–	–
243	10-18-79	–	–	–	–	–	–
–		–	20-25R	11- 6-79	–	–	Pumped well at 20-25 gal/min with bowls set at 380 ft below land-surface; water surface dropped below pump bowls after 2 hours of pumping.
241	12- 3-79	–	10-20R	12- 3-79	13.0	510	G; pumped well with bowls set at 480 ft below land-surface; discharge decreased from 20 gal/min at beginning of test to about 10 gal/min after 6 hours of pumping. Pumped well for 23 hours and 17 minutes.
241	12- 4-79	–	–	12- 4-79	–	510	–
241	12- 5-79	–	–	–	–	–	–
41.7	1980	U	40R	1980	–	–	30 ft. of blank surface casing; open hole below. Pumped 6 hours at 40 gal/min with 318 ft. of drawdown.
13.7	11-24-80	U	125R	11-24-80	–	–	Pumped 60 hours at 125 gal/min with 36 ft. of drawdown.
15	11-21-79	U	80R	11-21-79	–	540	W; pumped 6 hours at 80 gal/min with 55 ft. of drawdown.
600	11- -79	I	75R	11- -79	–	550	–
–	–	U	50	9-17-76	6.0	540	–
			50	9-12-79	6.0	540	–
			50	10-12-79	6.5	480	–
			50	6-12-80	6.5	480	–
			61	6-24-80	6.5	485	–
			57	7- 9-80	6.5	485	–
			53	7-24-80	6.5	490	C
			53	8- 7-80	6.5	–	–
			53	8-19-80	6.5	500	–
			65	9-11-80	6.5	500	–
			–	10- 7-80	6.5	490	–
117.50	11-26-79	U	–	–	–	–	G; W; perforated intervals; 1,556-1,557; 1,701-1,712 ft.
707.03	1-10-80	U	–	–	–	–	G; W; perforated interval; 1,400-1,650 ft.
1,117.65	12-12-79	U	–	–	–	–	G; W; perforated interval; 1,200-1,375 ft.
1,018.92	3-18-80	U	–	–	–	–	G; W; perforated interval; 1,105-1,205 ft.
303.78	11-27-79	U	–	–	–	–	G; W; perforated intervals; 210-220; 705-715; 840-980; 1,320-1,490; 1,744-1,750; 1,860-1,870; 1,890-1,897; 1,943-1,954 ft.

Table 3.--Water levels in observation wells

Site No.: See plate 1.
Location: See explanation of data-site numbering system.
Measuring point: Reference point on well (top of casing) for measurement of depth to water is above land surface.
Time: Military.

Site No.	Location	Measuring point (ft)	Water level		
			Date	Time	Below land surface (ft)
58.5	(D-12-12)34aba-1	3.70	4- 9-80	0955	502.35
			4-10-80	1030	501.70
			9-23-80	0800	501.85
			9-24-80	0800	501.68
66.5	(D-13-7)17cdc-1	1.00	8-19-80	0850	14.34
			10-16-80	1640	14.08
89.5	(D-13-12)5dac-1	2.50	11-27-79	1720	137.40
			12-12-79	1530	157.01
			12-12-79	1535	157.34
			1-10-80	1545	178.27
			2-15-80	1345	195.22
			3-17-80	1700	205.79
			4- 9-80	1500	212.65
			6- 6-80	1330	227.67
			7-18-80	1345	235.59
			8-12-80	1430	240.10
			9-30-80	1100	247.60
			11- 7-80	1100	252.64
			12-11-80	1430	256.90
93.5	(D-13-12)10abb-1	2.00	2-15-80	1130	709.86
			4- 9-80	1400	708.46
			6- 6-80	1410	710.62
			7-18-80	1415	708.85
			8-12-80	1455	709.00
			9-30-80	1130	708.24
			12-11-80	1345	708.00
95.5	(D-13-12)11dad-2	2.00	1-10-80	1120	1,121.51
			2-14-80	1530	1,121.32
			3-18-80	1100	1,119.25
			4- 9-80	1210	1,119.15
			6- 5-80	1410	1,126.67
			7-18-80	1445	1,119.25
			8-12-80	1515	1,119.32
			9-30-80	1230	1,118.35
			11- 7-80	1230	1,117.62
			12-11-80	1310	1,117.29

Table 3.--Water levels in observation wells--Continued

Site No.	Location	Measuring point (ft)	Water level		
			Date	Time	Below land surface (ft)
100.4	(D-13-12)24daa-1	1.00	4- 9-80	1120	1,023.08
			6-25-80	1727	1,033.33
			7-29-80	1330	1,034.68
			8-12-80	1630	1,035.64
			9-30-80	1345	1,039.55
			10-31-80	1030	1,041.00
			12-11-80	1100	1,042.51
100.6	(D-13-13)19bab-1	1.00	12-12-79	1105	311.26
			12-12-79	1115	310.85
			1-24-80	1240	310.40
			3-18-80	1130	295.45
			4- 9-80	1045	287.29
			6-25-80	1656	231.92
			8-12-80	1600	235.10
			9-30-80	1415	232.16
			10-31-80	1045	218.55
			11- 7-80	1405	218.00
			12-11-80	1115	761.37[1]

[1]Multiple perforations made November 17, 1980 that opened well to several geologic units, including the North Horn, Price River, Castlegate, and Blackhawk.

Table 4.--Records of miscellaneous springs

Site No: See plate 1.
Location: See explanation of data-site numbering system.
Altitude of land surface: Interpolated from topographic map.
Discharge: Measurements were made with modified (3-inch throat width) Parshall flume when discharge was greater than 30 gallons per minute; for discharge less than or equal to 30 gallons per minute, volumetric measurements were made.
Specific conductance: Field values except L, laboratory determination.
pH: Field measurements.
Principal aquifer: See table 1 for explanation of codes.
Other data available: C, water-quality data in table 8.

Site No.	Location	Altitude of land surface (ft)	Date	Discharge (gal/min)	Specific conductance (µmho/cm at 25°C)	Temperature (°C)	pH (units)	Principal aquifer	Other data available
1	(D-9-8)20dbd-S1	8,335	10- 3-80	0.21	670	8.5	--	124PCCK	--
2	21add-S1	8,495	10- 3-80	1.8	600L	6.5	--	124PCCK	--
3	27cbc-S1	8,060	10- 3-80	30	490L	8.0	--	124PCCK	--
4	(D-10-7)11cad-S1	7,675	10- 3-80	--	535L	11.0	--	124PCCK	--
5	13acb-S1	7,540	10- 3-80	1.1	630L	4.5	--	124GDGC	--
6	34dbb-S1	8,620	10- 2-80	.0	--	--	--	124FLGF	--
7	35dcd-S1	8,415	9- 7-79	--	490	6.0	7.2	124FLGF	--
			10- 2-80	3.6	480L	6.5	--	124FLGF	--
8	36ada-S1	7,550	9- 7-79	10	520	7.5	7.2	124FLGF	--
			10- 2-80	8.5	510L	6.5	--	124FLGF	--
9	(D-10-8)7cbb-S1	7,585	10- 3-80	--	540L	7.0	--	124PCCK	--
10	(D-11-7)12cca-S1	8,780	9- 6-79	.91	410	10.0	7.8	124FLGF	--
			10- 4-79	.54	400	10.5	--	124FLGF	--
16	(D-11-8)8abd-S1	7,325	9- 7-79	--	--	7.5	7.2	124CLTN	--
			10- 2-80	5.6	500L	8.0	--	124CLTN	--
18	(D-11-8)27caa-S1	7,330	10- 2-80	.0	--	--	--	124FLGF	--
19	(D-11-9)17bac-S1	7,870	10- 3-80	16	770L	7.5	--	124PCCK	--
20	35daa-S1	7,355	9- 5-79	--	--	8.5	7.3	124CLTN	--
			10- 3-80	11	1,520L	8.0	--	124CLTN	--
21	(D-11-10)12adb-S1	8,835	10- 3-80	.70	880L	6.5	--	124PCCK	--
22	23ccc-S1	7,480	9- 5-79	1.4	1,300	8.0	7.4	124PCCK	--
			10-10-79	2.0	1,260	10.5	7.4	124PCCK	--
			7-18-80	2.8	1,220	9.5	--	124PCCK	--
			10- 3-80	1.9	1,280L	9.5	--	124PCCK	--
23	(D-11-11)7cba-S1	8,800	10- 3-80	.70	780L	9.0	--	124PCCK	--
26	(D-12-6)9add-S1	8,790	8- 2-79	2.9	400	6.0	7.0	211BCKK	--
			10- 3-79	1.4	400	8.0	--	211BCKK	--
28	13ccd-S1	7,900	8- 9-79	1.5	640L	7.0	--	211BCKK	C
			8-17-79	1.8	610	--	7.5	211BCKK	--
			9-21-79	2.0	630	4.5	7.1	211BCKK	--
			6-26-80	13	520	4.0	--	211BCKK	--
29	32cab-S1	8,980	8- 3-79	43	310	5.0	7.4	211PCRV	--
30	(D-12-7)1bcb-S1	8,890	10- 2-80	.0	--	--	--	125NRHR	--
31	9bbc-S1	7,760	8-10-79	.42	99L	8.5	--	211PCRV	C
			8-23-79	.39	105	10.5	7.3	211PCRV	--
			6-26-80	1.2	89	7.5	--	211PCRV	--
32	17cbc-S1	7,630	8- 9-79	--	400L	7.5	--	211BCKK	C
			8-16-79	--	395	7.5	7.3	211BCKK	--
			10- 3-79	--	380	--	--	211BCKK	--
36	20ccd-S1	7,675	8- 9-79	--	295L	8.5	6.5	211BCKK	C
			8-16-79	5.6	280	8.5	6.6	211BCKK	--
			9-21-79	6.8	310	8.5	6.7	211BCKK	--
			6-26-80	8.7	275	8.0	--	211BCKK	--
38	28dac-S1	7,880	9- 4-79	1.6	550	8.0	7.3	211BCKK	--
			10- 4-79	1.5	540	8.0	7.3	211BCKK	--
			6-26-80	10	590	6.0	7.3	211BCKK	--
39	29bbc-S1	7,745	8- 9-79	--	--	8.0	6.9	211BCKK	--
			8-15-79	--	520L	--	6.9	211BCKK	C
			8-16-79	2.5	500	8.0	7.0	211BCKK	--
			9-21-79	2.5	550	8.0	6.9	211BCKK	--
42	(D-12-8)12add-S1	8,170	10- 6-80	4.9	530L	6.5	--	124FLGF	--
43	25bdc-S1	9,160	10- 6-80	.10	500L	5.0	--	125NRHR	--
47	33aab-S1	8,240	9-12-79	1.2	495	7.0	7.1	211PCRV	--
			10-12-79	1.1	440	7.0	--	211PCRV	--
49	(D-12-9)1ccc-S1	7,310	8-23-79	36	510	6.5	7.2	124FLGF	--

Table 4.--Records of miscellaneous springs--Continued

Site No.	Location	Altitude of land surface (ft)	Date	Discharge (gal/min)	Specific conductance (µmho/cm at 25°C)	Temperature (°C)	pH (units)	Principal aquifer	Other data available
49	(D-12-9)1ccc-S1	7,310	9- 5-79	24	--	12.0	7.4	124FLGF	--
			10-10-79	13	540	8.5	--	124FLGF	--
			7-18-80	128	570L	7.5	--	124FLGF	--
			10- 3-80	34	530	10.0	--	124FLGF	--
50	10dda-S1	7,730	9- 5-79	2.9	550	8.0	7.4	124FLGF	--
			10- 3-80	2.3	550L	7.5	--	124FLGF	--
51	(D-12-10)34aad-S1	8,120	9- 5-79	13	600	14.0	--	125NRHR	--
52	35dbc-S1	8,070	9- 5-79	18	510	14.5	--	125NRHR	--
53	(D-12-11)20aaa-S1	7,710	8-23-79	--	600	--	--	124FLGF	--
			9- 6-79	--	570	--	--	124FLGF	--
54	21aca-S1	7,720	9- 6-79	2.0	650	13.0	--	124FLGF	--
55	21bab-S1	7,710	8-23-79	1.6	510	11.5	7.1	124FLGF	--
			9- 6-79	.93	600	15.0	--	124FLGF	--
56	28ddd-S1	7,390	10- 6-80	.20	710L	8.5	--	125NRHR	--
57	34bca-S1	7,170	10- 6-80	.40	1,050L	8.5	--	125NRHR	--
58	34cba-S1	7,120	10- 6-80	--	1,080	7.5	--	211PCRV	--
59	(D-13-5)11ada-S1	8,990	8- 3-79	4.8	385	5.7	7.8	124FLGF	--
			6-27-80	29	410	4.5	--	124FLGF	--
60	(D-13-6)13cca-S1	8,720	8- 1-80	3.7	560	4.5	--	211BCKK	C
			8- 7-80	--	--	4.5	--	211BCKK	--
			9-12-80	2.7	550	5.0	--	211BCKK	--
61	(D-13-7)5acc-S1	7,760	9- 4-79	--	600	10.0	7.3	111ALVM	--
63	5cdd-S1	7,760	8- 8-79	.55	--	8.5	7.2	211BCKK	--
			8-15-79	.51	520L	--	7.1	211BCKK	C
			8-16-79	--	520	8.5	--	211BCKK	--
			9-20-80	.31	570	9.0	7.0	211BCKK	--
65.5	17baa-S1	8,000	8- 7-80	--	445	7.5	7.3	211SRPN	--
67	22dab-S1	9,140	10- 2-80	.0	--	--	--	211BCKK	--
68	26bbb-S1	9,240	10- 2-80	.47	225L	6.5	--	211BCKK	--
70	32aac-S1	8,320	7-31-79	--	480	6.0	7.4	211SRPN	--
			7-29-80	--	550L	6.0	--	211SRPN	C
72	33dcb-S1	8,720	8-02-79	17	510	4.0	7.1	211BCKK	--
			6-27-80	65	475	3.5	--	211BCKK	--
74	(D-13-8)4ccb-S1	8,600	9-11-79	.61	510	9.5	6.3	211PCRV	--
			10- 2-80	.80	500L	8.0	--	211PCRV	--
75	4dbd-S1	9,050	9-11-79	3.8	450	6.5	7.0	211PCRV	--
			10- 2-80	4.7	410L	6.5	--	211PCRV	--
77	5adc-S1	8,240	9-11-79	1.7	365	9.0	6.2	211CSLG	--
78	8abd-S1	8,280	9-11-79	.0	--	--	--	111ALVM	--
79	8aca-S1	8,300	9-12-79	.68	165	6.0	6.1	211CSLG	--
80	8bca-S1	7,120	10- 2-80	.01	1,080L	14.0	--	211PCRV	--
81	18adb-S1	8,200	10- 2-80	28	520L	5.0	--	211BCKK	--
82	(D-13-9)7acd-S1	7,010	9- 6-79	.27	2,200	9.0	--	211SRPN	--
83	(D-13-10)7aab-S1	6,680	9- 6-79	.0	--	--	--	211BCKK	--
84	34dac-S1	6,100	9- 6-79	.0	--	--	--	111ALVM	--
85	34dca-S1	6,050	9- 6-79	.0	--	--	--	111ALVM	--
86	(D-13-11)13acc-S1	6,720	8- 1-79	9.3	1,040	9.5	7.2	211ABRD	--
87	(D-13-12)4bdc-S1	7,410	5-21-80	19	490	12.0	--	125NRHR	--
98	13aad-S1	7,920	9- 7-79	16	460	13.0	--	124FLGF	--
99	21dab-S1	6,920	8- 1-79	.5	2,150	16.0	7.4	211BCKK	--
99.5	21dac-S1	6,890	8- 1-79	18	2,600	18.5	8.2	200MNCS	--
101	(D-13-13)23cbc-S1	8,660	10- 7-80	.0	--	--	--	124GDGC	--
102	23cbd-S1	8,685	10- 7-80	.40	610L	4.5	--	124GDGC	--
103	25cdd-S1	8,710	10- 7-80	3.9	560L	5.0	--	124PCCK	--
104	26adc-S1	9,020	10- 7-80	9.3	530L	5.0	--	124PCCK	--
105	35dcd-S1	8,000	10- 7-80	2.4	720L	6.0	--	124CLTN	--
106	36ccd-S1	7,990	10- 6-80	14	680	3.5	--	124CLTN	--
107	(D-14-8)8bda-S1	7,040	10- 2-80	--	1,100	11.0	--	211MSUK	--
108	(D-14-13)1aba-S1	8,170	10- 6-80	21	820L	7.5	--	124GDGC	--
109	(D-14-14)5baa-S1	8,000	10- 7-80	28	710L	6.5	--	124GDGC	--
112	(D-15-7)13adc-S1	9,990	10- 2-80	--	355L	8.0	--	211PCRV	--
113	(D-15-9)7ddd-S1	6,350	10- 2-80	11	2,840L	10.5	--	211BLGT	--

Table 5.--Records of springs with frequent monitoring

Site No: See plate 1.
Location: See explanation of data-site numbering system.
Altitude of land surface: Interpolated from topographic map.
Discharge: Measurements were made with modified (3-inch throat width) Parshall flume when discharge was greater than 30 gallons per minute; for discharge less than or equal to 30 gallons per minute, volumetric measurements were made.
Specific conductance: Field values except L, laboratory determination.
pH: Field measurements.
Principal aquifer: See table 1 for explanation of codes.
Other data available: C, water-quality data in table 8.

Site No.	Location	Altitude of land surface (ft)	Date	Discharge (gal/min)	Specific conductance (µmho/cm at 25°C)	Temperature (°C)	pH (units)	Principal aquifer	Other data available
11	(D-11-7)18aaa-S1	7,380	9- 5-79	48	--	9.0	7.1	125NRHR	--
			6-12-80	43	630L	9.0	--	125NRHR	--
			7- 2-80	47	670	9.0	--	125NRHR	--
			7-16-80	47	700L	9.0	--	125NRHR	--
			7-23-80	43	680L	9.0	--	125NRHR	C
			8- 7-80	40	640	9.0	7.3	125NRHR	--
			8-19-80	31	620L	9.0	--	125NRHR	--
			9-11-80	31	630L	9.0	--	125NRNR	--
			10- 7-80	31	600	9.0	--	125NRHR	--
12	29aaa-S1	7,920	8-10-79	4.6	500L	10.0	7.1	211PCRV	C
			8-17-79	4.5	450	8.5	7.1	211PCRV	--
			6-12-80	6.1	475L	6.0	--	211PCRV	--
			6-24-80	5.9	475	6.5	--	211PCRV	--
			7- 1-80	5.8	440	6.5	--	211PCRV	--
			7-18-80	5.8	495L	7.0	--	211PCRV	--
			7-23-80	5.9	500L	7.0	--	211PCRV	C
			8- 7-80	5.5	470	7.5	7.2	211PCRV	--
			8-18-80	5.6	485L	7.5	--	211PCRV	--
			9-11-80	5.2	475	8.0	--	211PCRV	--
13	32aac-S1	7,760	8-10-79	--	520L	8.5	7.2	211CSLG	C
			8-17-79	6.8	485	8.5	7.1	211CSLG	--
			6-12-80	20	510L	7.0	--	211CSLG	--
			6-25-80	17	500	7.0	--	211CSLG	--
			7-11-80	14	530L	7.0	--	211CSLG	--
			7-23-80	13	530L	7.0	--	211CSLG	C
			7-28-80	13	500	7.0	--	211CSLG	--
			8- 7-80	--	510	7.0	7.2	211CSLG	--
			8-18-80	10	520L	7.5	--	211CSLG	--
			9-11-80	9.7	510	7.5	--	211CSLG	--
14	32acb-S1	7,760	8-10-79	--	390	8.5	7.1	211PCRV	--
			8-17-79	--	400	8.5	7.3	211PCRV	--
			6-12-80	18	390L	5.5	--	211PCRV	--
			6-25-80	14	410	6.0	--	211PCRV	--
			7-11-80	14	420L	6.5	--	211PCRV	--
			7-23-80	14	425L	7.0	--	211PCRV	C
			7-28-80	13	400	7.0	--	211PCRV	--
			8- 7-80	--	415	7.0	7.3	211PCRV	--
			8-18-80	13	420	8.0	--	211PCRV	--
			9-11-80	12	415	8.0	--	211PCRV	--
15	36bdb-S1	8,300	8-22-79	23	480	5.5	7.5	125NRHR	--
			6-12-80	125	470L	6.0	--	125NRHR	--
			6-24-80	73	475	6.0	--	125NRHR	--
			7-10-80	65	485L	5.5	--	125NRHR	--
			7-28-80	50	500L	5.5	7.7	125NRHR	C
			8- 7-80	43	435	5.5	7.6	125NRHR	--
			8-19-80	34	485L	5.5	--	125NRHR	--
			9-11-80	23	490L	5.5	--	125NRHR	--
			10- 7-80	16	485	5.5	--	125NRHR	--
17	(D-11-8)18abd-S1	7,920	9- 6-79	7.3	500	6.5	7.1	124FLGF	--
			10- 4-79	4.6	470	7.0	--	124FLGF	--
			6-12-80	65	490	6.0	--	124FLGF	--
			6-24-80	31	520L	6.5	--	124FLGF	--
			7-10-80	17	530L	6.5	--	124FLGF	--
			7-24-80	14	540L	6.5	--	124FLGF	C
			8- 1-80	--	--	--	7.3	124FLGF	--

Table 5.--Records of springs with frequent monitoring--Continued

Site No.	Location	Altitude of land surface (ft)	Date	Discharge (gal/min)	Specific conductance (µmho/cm at 25°C)	Temperature (°C)	pH (units)	Principal aquifer	Other data available
17	(D-11-8)18abd-S1	7,920	8-19-80	9.2	510L	6.5	--	124FLGF	--
			9-11-80	6.8	520L	6.5	--	124FLGF	--
			10- 7-80	4.8	500	6.5	--	124FLGF	--
24	(D-12-6)2dca-S1	7,820	7-29-80	--	1,160	7.5	--	211CSLG	--
			8- 1-80	4.9	1,190L	5.0	--	211CSLG	C
			8- 7-80	--	1,190	5.0	--	211CSLG	--
			8-19-80	3.5	--	5.0	--	211CSLG	--
			9-11-80	2.4	1,200	5.0	--	211CSLG	--
			10- 8-80	1.6	1,180	5.0	--	211CSLG	--
25	4ddc-S1	8,900	8- 2-79	.60	76L	8.5	5.6	211BCKK	C
			10- 3-79	.20	62	10.0	--	211BCKK	--
			6-12-80	1.3	66L	10.0	--	211BCKK	--
			6-24-80	.76	66	14.0	--	211BCKK	--
			7-11-80	.52	68L	9.0	--	211BCKK	--
			7-28-80	.34	72L	8.0	5.5	211BCKK	C
			8-19-80	--	61L	8.5	--	211BCKK	--
			9-11-80	.27	61L	8.5	--	211BCKK	--
			10- 7-80	.17	64	8.0	--	211BCKK	--
27	10aca-S1	8,280	8- 2-79	2.2	450	6.5	7.5	211CSLG	--
			10- 3-79	1.4	400	7.5	--	211CSLG	--
			6- 4-80	3.3	455	5.0	--	211CSLG	--
			6-25-80	2.9	465	5.5	--	211CSLG	--
			7-11-80	2.9	470L	5.5	--	211CSLG	--
			7-28-80	2.2	500L	6.0	--	211CSLG	C
			8- 7-80	2.0	480	6.5	7.3	211CSLG	--
			8-19-80	1.9	--	6.5	--	211CSLG	--
			9-11-80	1.9	485	6.5	--	211CSLG	--
			10- 8-80	1.7	485	6.5	--	211CSLG	--
34	(D-12-7)18ddb-S1	7,820	8-10-79	2.1	650L	6.0	7.3	211BCKK	C
			8-17-79	1.8	600	6.5	7.0	211BCKK	--
			9-21-79	1.4	--	6.5	7.0	211BCKK	--
			6- 4-80	6.5	600	7.5	--	211BCKK	--
			6-25-80	5.8	600	6.5	--	211BCKK	--
			7-11-80	4.6	640L	8.5	--	211BCKK	--
			7-24-80	4.2	650L	7.0	--	211BCKK	C
			8- 7-80	--	630	6.0	7.2	211BCKK	--
			8-18-80	3.1	630L	7.0	--	211BCKK	--
			9-11-80	2.5	640	6.5	--	211BCKK	--
			10- 8-80	2.1	640	7.0	--	211BCKK	--
35	20cbd-S1	7,675	8- 9-79	--	520L	8.5	6.9	211BCKK	--
			8-16-79	7.9	490	9.0	6.9	211BCKK	--
			9-21-79	5.8	--	9.0	7.0	211BCKK	--
			10- 4-79	5.3	470	9.5	--	211BCKK	--
			6- 4-80	12	490	7.5	--	211BCKK	--
			6-25-80	11	490	8.0	--	211BCKK	--
			7-11-80	11	510L	8.0	--	211BCKK	--
			7-24-80	12	500L	8.5	--	211BCKK	C
			8- 7-80	12	490	8.5	7.2	211BCKK	--
			8-18-80	8.9	510L	9.0	--	211BCKK	--
			9-11-80	10	500	9.0	--	211BCKK	--
			10- 8-80	8.8	500	9.0	--	211BCKK	--
37	28ccc-S1	7,675	8- 9-79	170	630	14.5	7.3	111ALVM	--
			8-15-79	198	690L	14.5	7.1	111ALVM	C
			5- 1-80	177	660	14.5	--	111ALVM	--
			6-13-80	189	650L	14.0	--	111ALVM	--
			6-24-80	270	630	14.5	--	111ALVM	--
			7-11-80	280	680L	14.0	--	111ALVM	--
			7-25-80	235	700L	14.0	--	111ALVM	C
			8- 1-80	235	--	--	--	111ALVM	--
			8- 7-80	265	--	14.0	7.0	111ALVM	--
			8-16-80	296	680L	14.0	--	111ALVM	--
			9-12-80	285	650	14.0	--	111ALVM	--
			10- 9-80	--	670	14.0	--	111ALVM	--
41	32bda-S1	7,690	9- 4-79	19	--	19.5	--	211BCKK	--
			6-13-80	--	520L	14.0	--	211BCKK	--

Table 5.--Records of springs with frequent monitoring--Continued

Site No.	Location	Altitude of land surface (ft)	Date	Discharge (gal/min)	Specific conductance (µmho/cm at 25°C)	Temperature (°C)	pH (units)	Principal aquifer	Other data available
41	(D-12-7)32bda-S1	7,690	6-25-80	15	530	14.5	--	211BCKK	--
			7- 2-80	24	540	14.0	--	211BCKK	--
			7-24-80	26	550L	14.0	--	211BCKK	C
			8- 7-80	--	--	--	7.2	211BCKK	--
			8-18-80	--	550	14.0	--	211BCKK	--
			9-12-80	16	540	14.0	--	211BCKK	--
			10- 8-80	17	540	14.0	--	211BCKK	--
44	(D-12-8)28cbd-S1	8,590	9- 5-79	--	400	9.0	7.1	211PCRV	--
			10- 4-79	1.1	485	9.5	--	211PCRV	--
			6-11-80	21	490L	6.5	--	211PCRV	--
			6-20-80	14	485	6.5	--	211PCRV	--
			7- 3-80	8.2	510L	7.0	--	211PCRV	--
			7-16-80	5.0	520L	7.5	--	211PCRV	--
			7-29-80	3.3	530L	7.5	7.5	211PCRV	--
			8-19-80	2.4	510L	8.5	--	211PCRV	--
			9-11-80	1.9	510L	8.5	--	211PCRV	--
			10- 7-80	1.5	540	9.0	--	211PCRV	--
45	30bdd-S1	8,660	9- 5-79	--	540	6.0	7.0	211CSLG	--
			6-11-80	21	405L	4.5	--	211CSLG	--
			6-20-80	8.6	450	4.5	--	211CSLG	--
			7- 3-80	1.4	495L	4.5	--	211CSLG	--
			7-16-80	.12	510L	5.5	--	211CSLG	--
			7-29-80	.01	520L	5.5	7.3	211CSLG	C
46	33aaa-S1	8,240	9-12-79	5.6	495	6.0	7.2	211PCRV	--
			10-12-79	--	440	6.0	--	211PCRV	--
			6-12-80	34	--	5.0	--	211PCRV	--
			6-24-80	32	395	5.0	--	211PCRV	--
			7- 9-80	24	425L	5.0	--	211PCRV	--
			7-24-80	15	460L	5.5	--	211PCRV	C
			8- 7-80	12	410	5.5	7.3	211PCRV	--
			8-19-80	11	460L	5.5	--	211PCRV	--
			9-11-80	10	470L	5.5	--	211PCRV	--
			10- 7-80	8.4	465	5.5	--	211PCRV	--
48	38cab-S1	8,230	9-11-79	45	410	6.5	6.8	211PCRV	--
			10-12-79	37	415	6.0	--	211PCRV	--
			6-12-80	181	480L	6.0	--	211PCRV	--
			6-24-80	176	490	6.0	--	211PCRV	--
			7- 9-80	135	520L	5.5	--	211PCRV	--
			7-24-80	111	530L	5.5	--	211PCRV	C
			8- 7-80	102	470	6.0	7.3	211PCRV	--
			8-19-80	80	530L	6.0	--	211PCRV	--
			9-11-80	59	530L	5.5	--	211PCRV	--
			10- 7-80	57	520	6.0	--	211PCRV	--
62	(D-13-7)5cdd-S2	7,760	8- 8-79	2.5	395	8.5	7.4	211BCKK	--
			8-15-79	--	425L	8.5	7.3	211BCKK	C
			9-21-79	2.8	--	8.5	--	211BCKK	--
			6-13-80	2.6	410L	7.0	--	211BCKK	--
			6-24-80	2.9	430	7.0	--	211BCKK	--
			7- 2-80	2.9	430	7.0	--	211BCKK	--
			7-17-80	2.9	445L	7.5	--	211BCKK	--
			7-24-80	3.0	450L	8.0	--	211BCKK	C
			8- 7-80	--	400	9.5	7.2	211BCKK	--
			8-18-80	3.0	435L	8.5	--	211BCKK	--
			9-12-80	2.8	430	8.5	--	211BCKK	--
			10- 8-80	3.0	435	9.0	--	211BCKK	--
64	8dbb-S1	7,840	8- 8-79	1.4	430	9.5	--	211BCKK	--
			8-15-79	--	490L	8.0	7.3	211BCKK	C
			8-16-79	1.5	450	8.5	7.3	211BCKK	--
			9-20-79	1.3	520	7.5	--	211BCKK	--
			10- 4-79	1.2	440	9.0	--	211BCKK	--
			6- 4-80	1.6	445	7.0	--	211BCKK	--
			6-13-80	1.8	450L	7.0	--	211BCKK	--
			6-24-80	1.8	480	6.5	--	211BCKK	--
			7- 1-80	1.8	465	6.5	--	211BCKK	--
			7-17-80	1.7	480L	6.5	--	211BCKK	--

Table 5.--Records of springs with frequent monitoring--Continued

Site No.	Location	Altitude of land surface (ft)	Date	Discharge (gal/min)	Specific conductance (µmho/cm at 25°C)	Temperature (°C)	pH (units)	Principal aquifer	Other data available
64	(D-13-7)8dbb-S1	7,840	7-24-80	1.7	480L	7.5	--	211BCKK	C
			8- 7-80	1.7	445	7.0	7.3	211BCKK	--
			8-18-80	1.8	470L	7.5	--	211BCKK	--
			9-12-80	1.6	470	7.0	--	211BCKK	--
			10- 8-80	1.9	485	7.5	--	211BCKK	--
65	12daa-S1	8,550	9-11-79	6.6	520	4.5	7.2	211BCKK	--
			6-12-80	130	460L	4.0	--	211BCKK	--
			6-24-80	89	470	3.5	--	211BCKK	--
			7-10-80	57	480L	4.0	--	211BCKK	--
			7-23-80	42	475L	4.0	--	211BCKK	C
			8- 7-80	29	480L	4.5	7.1	211BCKK	--
			8-19-80	21	465L	5.0	--	211BCKK	--
			9-11-80	16	475L	5.0	--	211BCKK	--
			10- 2-80	9.7	475	5.0	--	211BCKK	--
66	17cda-S1	8,060	7-31-79	46	580L	9.0	7.5	211SRPN	C
			10- 4-79	--	530	9.0	--	211SRPN	--
			10-12-79	--	610	9.0	--	211SRPN	--
			4-23-80	--	540	9.0	--	211SRPN	--
			5- 1-80	84	530	9.0	--	211SRPN	--
			5-14-80	89	570	9.0	--	211SRPN	--
			5-27-80	89	580	9.0	--	211SRPN	--
			6- 4-80	--	570	9.0	--	211SRPN	--
			6-13-80	98	560L	9.0	--	211SRPN	--
			6-17-80	98	570	9.0	--	211SRPN	--
			6-24-80	107	580	9.0	--	211SRPN	--
			7- 1-80	98	570	9.0	--	211SRPN	--
			7-16-80	98	560L	9.0	--	211SRPN	--
			7-24-80	97	590L	9.0	7.2	211SRPN	C
			8- 8-80	--	--	--	7.2	211SRPN	--
			8-16-80	90	580L	9.0	--	211SRPN	--
			10- 8-80	82	570	9.0	--	211SRPN	--
76	(D-13-8)5aac-S1	8,315	9-11-79	4.0	385	9.5	6.3	211CSLG	--
			6-12-80	18	395L	5.5	--	211CSLG	--
			6-24-80	1.3	425	5.5	--	211CSLG	--
			7-10-80	4.7	480L	5.5	--	211CSLG	--
			7-24-80	2.3	490L	6.0	--	211CSLG	C
			8- 7-80	1.4	440	7.0	--	211CSLG	--
			8-19-80	1.0	485L	7.0	--	211CSLG	--
			9-11-80	1.2	495L	7.5	--	211CSLG	--
			10- 7-80	.90	510	8.5	--	211CSLG	--
88	(D-13-12)4acd-S1	7,520	5-21-80	19	490	12.0	--	124FLGF	--
			6-18-80	3.9	510	13.0	--	124FLGF	--
			7- 2-80	1.6	570L	11.0	--	124FLGF	--
			7-17-80	.01	610L	12.0	--	124FLGF	--
			7-31-80	.00	--	--	--	124FLGF	--
89	5cbc-S1	6,980	9- 7-79	3.1	1,050	11.5	--	125NRHR	--
			5-21-80	3.9	1,010	10.0	--	125NRHR	--
			6- 5-80	6.3	1,060	9.0	--	125NRHR	--
			6-18-80	4.7	1,060	8.5	--	125NRHR	--
			7- 1-80	4.6	1,060L	9.5	--	125NRHR	--
			7-16-80	4.3	1,080L	8.5	--	125NRHR	--
			7-31-80	4.3	1,060L	8.5	7.5	125NRHR	C
			8-20-80	4.3	1,080L	8.5	--	125NRHR	--
			9-12-80	4.5	1,060L	--	--	125NRHR	--
			9-19-80	4.1	1,100	8.5	--	125NRHR	--
			10-11-80	4.8	1,060L	--	--	125NRHR	--
90	8daa-S1	7,900	9- 7-79	1.8	--	--	--	124FLGF	--
			10-11-79	1.2	610	10.5	--	124FLGF	--
			6- 5-80	112	680	6.5	--	124FLGF	--
			6-19-80	65	690	6.5	--	124FLGF	--

Table 5.--Records of springs with frequent monitoring--Continued

Site No.	Location	Altitude of land surface (ft)	Date	Discharge (gal/min)	Specific conductance (µmho/cm at 25°C)	Temperature (°C)	pH (units)	Principal aquifer	Other data available
90	(D-13-12)8daa-S1	7,900	7- 3-80	37	670L	9.0	--	124FLGF	--
			7-17-80	15	690L	9.0	--	124FLGF	--
			7-30-80	9.2	680L	8.0	7.2	124FLGF	C
			8-20-80	.00	--	--	--	124FLGF	--
91	9dcc-S1	8,120	9- 7-79	1.4	600	13.0	--	124FLGF	--
			10-11-79	1.2	570	10.5	--	124FLGF	--
			6- 5-80	125	495	6.0	--	124FLGF	--
			6-19-80	69	500	8.5	--	124FLGF	--
			7- 3-80	39	560L	7.5	--	124FLGF	--
			7-17-80	14	570L	8.0	--	124FLGF	--
			7-30-80	10	590L	8.5	7.4	124FLGF	C
			8-20-80	6.6	580L	9.5	--	124FLGF	--
			9-19-80	3.3	--	9.5	--	124FLGF	--
			10-11-80	1.9	590L	9.5	--	124FLGF	--
92	9ddc-S1	8,090	9- 7-79	14	550	10.0	--	124FLGF	--
			10-11-79	5.2	530	10.0	--	124FLGF	--
			4-10-80	2.7	500	5.5	--	124FLGF	--
			6- 5-80	89	470	6.0	--	124FLGF	--
			6-18-80	56	490	6.5	--	124FLGF	--
			7- 3-80	39	540L	7.0	--	124FLGF	--
			7-17-80	26	540L	7.5	--	124FLGF	--
			7-30-80	15	540L	8.0	7.4	124FLGF	C
			8-20-80	9.4	550L	8.5	--	124FLGF	--
			9-19-80	7.1	540	9.0	--	124FLGF	--
			10-11-80	5.5	550L	9.0	--	124FLGF	--
93	10abb-S1	7,740	9- 7-80	11	530	15.5	--	124FLGF	--
			6- 5-80	249	510	8.0	--	124FLGF	--
			6-18-80	135	520	11.5	--	124FLGF	--
			7- 1-80	87	510L	11.0	--	124FLGF	--
			7-17-80	53	500L	11.5	--	124FLGF	--
			7-31-80	30	550	13.0	8.3	124FLGF	C
			8-20-80	17	530L	10.5	--	124FLGF	--
			9-19-80	13	520	11.0	--	124FLGF	--
			10-11-80	11	520L	11.5	--	124FLGF	--
94	10adb-S1	7,870	9- 7-79	.00	--	--	--	124FLGF	--
			10-10-79	7.2	590	7.0	--	124FLGF	--
			4-10-79	2.6	570	7.5	--	124FLGF	--
			6- 5-80	76	--	4.5	--	124FLGF	--
			6-18-80	67	580	4.5	--	124FLGF	--
			7- 1-80	62	610L	5.0	--	124FLGF	--
			7-17-80	52	580L	5.5	--	124FLGF	--
			7-31-80	39	610L	6.5	7.3	124FLGF	C
			8-20-80	17	610L	7.0	--	124FLGF	--
			9-18-80	13	590	7.0	--	124FLGF	--
			10-11-80	11	640L	7.5	--	124FLGF	--
95	11acd-S1	7,990	9- 7-79	1.4	590	10.0	--	124FLGF	--
			10-11-79	.73	590	9.0	--	124FLGF	--
			6- 5-80	97	620	7.0	--	124FLGF	--
			6-19-80	60	570	7.0	--	124FLGF	--
			7- 2-80	37	570L	7.5	--	124FLGF	--
			7-17-80	27	590L	8.0	--	124FLGF	--
			7-30-80	27	610L	8.0	7.3	124FLGF	C
			8-20-80	18	610L	8.5	--	124FLGF	--
			9-18-80	15	620	8.5	--	124FLGF	--
			10-11-80	13	620L	8.5	--	124FLGF	--
96	12adb-S1	8,360	9- 7-79	2.1	640	13.0	--	124CLTN	--
			6- 5-80	103	--	--	--	124CLTN	--
			6-19-80	16	550	7.0	--	124CLTN	--
			7- 2-80	8.4	--	--	--	124CLTN	--
			7-17-80	1.8	630L	8.5	--	124CLTN	--

Table 5.--Records of springs with frequent monitoring--Continued

Site No.	Location	Altitude of land surface (ft)	Date	Discharge (gal/min)	Specific conductance (µmho/cm at 25°C)	Temperature (°C)	pH (units)	Principal aquifer	Other data available
96	(D-13-12)12adb-S1	8,360	7-30-80	4.1	650L	9.0	7.2	124CLTN	C
			8- 8-80	5.7	--	--	--	124CLTN	--
			8-20-80	7.0	640L	9.0	--	124CLTN	--
			9-19-80	6.3	660	8.5	--	124CLTN	--
			10-11-80	5.6	660L	8.5	--	124CLTN	--
97	12cbb-S1	7,940	9- 7-79	1.3	580	13.5	--	124FLGF	--
			10-11-79	.95	610	8.0	--	124FLGF	--
			6- 5-80	89	490	5.5	--	124FLGF	--
			6-19-80	39	510	6.5	--	124FLGF	--
			7- 2-80	18	540	6.5	--	124FLGF	--
			7-17-80	8.2	590L	6.5	--	124FLGF	--
			7-30-80	4.0	610L	6.5	7.3	124FLGF	C
			8-20-80	1.6	610L	7.0	--	124FLGF	--
			9-18-80	1.6	630	7.5	--	124FLGF	--
			10-11-80	.89	640L	7.5	--	124FLGF	--
100	23cbb-S1	6,950	2-29-80	7.5	750	4.5	7.0	211BCKK	--
			5- 2-80	29	980	5.0	6.8	211BCKK	--
			5-15-80	24	1,070	5.0	--	211BCKK	--
			6- 5-80	13	1,050	6.0	--	211BCKK	--
			6-18-80	10	1,080	6.0	--	211BCKK	--
			7- 1-80	8.7	1,060L	7.0	--	211BCKK	--
			7-16-80	7.1	1,060L	8.0	--	211BCKK	--
			7-28-80	6.6	1,050L	8.5	7.2	211BCKK	C
			8-20-80	6.2	1,000L	9.5	--	211BCKK	--
			9-12-80	6.5	1,010L	--	--	211BCKK	--
			9-19-80	5.5	1,010	10.0	-	211BCKK	--
			10-11-80	6.6	980L	--	--	211BCKK	--

Table 6.--Discharge, specific conductance, and temperature of water discharging from abandoned mine portal (site 71) at town of Clear Creek

[Site shown on plate 1]

Discharge: Determined with 90°-notch weir.
Specific conductance: Field measurements.

Date	Discharge (ft^3/s)	Specific conductance (µmho/cm at 25°C)	Temperature (°C)
1979			
Aug. 2	--	630	7.0
Oct. 1	0.30	--	--
4	.30	650	7.0
15	.30	--	--
31	.30	--	--
Nov. 15	.29	--	--
21	.28	--	--
30	.26	--	--
Dec. 14	.21	--	--
15	.22	--	--
31	.24	--	--
1980			
Jan. 15	.24	--	--
31	.26	--	--
Feb. 15	.26	--	--
29	.24	--	--
Mar. 15	.24	--	--
30	.26	--	--
Apr. 15	.26	--	--
23	.26	--	--
30	.32	--	--
May 14	.32	650	7.0
15	.32	--	--
1980			
May 27	0.37	660	7.0
30	.44	--	--
June 4	.44	660	7.0
13	.46	670	7.0
15	.49	--	--
17	.49	700	6.5
24	.59	710	7.0
30	.59	--	--
July 2	.63	690	7.0
15	.63	--	--
17	.56	--	--
25	.52	690	7.0
31	.56	--	--
Aug. 7	.58	--	7.0
15	.59	--	--
19	.59	--	7.0
31	.59	--	--
Sept. 5	.59	--	--
15	.49	--	--
30	.49	--	--
Oct. 22	.49	--	--

Table 7.--Data for water discharged from the Blackhawk Formation to coal mines

Site No.: See plate 1.
Location: See explanation of data-site numbering system.
Altitude of land surface: Interpolated from topographic map.
Specific conductance: Field values except L, laboratory determination.
pH: Field measurements.
Other data available: C, water-quality data in table 8.

Site No.	Location	Name of mine	Altitude of land surface (ft)	Date	Temperature (°C)	Specific conductance (μmho/cm at 25° C)	pH (units)	Other data available
69.5	(D-13-7)30bbb	Valley Camp	9,100	8- 5-80	4.5	350L	7.7	C
98.5	(D-13-12)18abd	Soldier Creek	6,164	8-15-80	16.5	970L	7.5	C
110	(D-14-14)20bbb	Sunnyside	7,100	8- 5-80	10.0	750L	7.4	C
110.4	28cab	do.	6,092	8- 5-80	13.0	1,160L	7.5	C
110.6	34bcd	do.	5,940	8- 5-80	13.0	1,370L	7.3	C
111	(D-15-7)12daa	Plateau	8,503	8- 5-80	8.0	800L	7.2	C
112.5	24cab	King	8,185	8- 5-80	8.5	710	7.1	-
114	(D-16-14)2bcd	Horse Canyon	5,625	8- 5-80	10.0	2,670L	7.6	C
115	11caa	do.	5,700	8- 5-80	11.0	4,220L	8.0	C

Site No.: See plate 1.
Location: See explanation of data-site numbering system.
Specific conductance. Field values except L, laboratory determination.
pH: Field measurements.

Site No.	Location	Date	Temperature (°C)	Discharge (gal/min)	Specific conductance (µmho/cm at 25°C)	Milligrams per liter: Dissolved solids (sum of constituents)	Dissolved silica (as SiO_2)	Dissolved calcium (as Ca)	Dissolved magnesium (as Mg)	Dissolved sodium (as Na)	Dissolved potassium (as K)	Alkalinity (as $CaCO_3$)	Dissolved sulfate (as SO_4)	Dissolved chloride (as Cl)
11	(D-11-7)18aaa-S1	7-23-80	9.0	43	680L	346	9.5	78	31	15	1.6	240	31	35
12	29aaa-S1	8-10-79	10.0	4.6	500L	285	10	74	14	6.4	.8	240	13	7.8
		7-23-80	7.0	5.9	500L	277	11	75	14	6.1	1.0	230	9.4	7.2
13	32aac-S1	8-10-79	8.5	–	520L	295	10	76	18	6.7	.8	250	17	8.2
		7-23-80	7.0	13	530L	302	11	77	18	6.7	.8	260	15	8.8
14	32acb-S1	7-23-80	7.0	14	425L	231	11	82	11	6.8	.7	180	15	12
15	36bdb-S1	7-28-80	5.5	50	500L	246	6.7	67	22	2.7	.5	210	9.4	4.9
17	(D-11-8)18abd-S1	7-24-80	6.5	14	540L	289	5.8	64	28	5.4	.8	270	9.8	5.6
24	(D-12-6)2dca-S1	8- 1-80	5.0	4.9	1,190L	815	5.9	170	57	6.5	5.3	290	390	4.3
25	4ddc-S1	8- 2-79	8.5	.60	76L	54	9.0	7.1	1.8	2.9	.4	11	10	3.3
		7-28-80	8.0	.34	72L	40	6.9	7.5	1.8	2.5	.3	16	2.3	2.8
27	10aca-S1	7-28-80	6.0	2.2	500L	278	8.1	80	12	5.8	1.4	210	34	9.0
28	13ccd-S1	8- 9-79	7.0	1.5	640L	374	9.3	97	18	8.4	1.5	290	53	11
31	(D-12-7)9bbc-S1	8-10-79	8.5	.42	99L	66	8.5	11	2.3	3.7	.5	18	10	3.5
32	17cbc-S1	8- 9-79	7.5	–	400L	233	11	60	7.2	9.8	1.7	170	24	14
34	18ddb-S1	8-10-79	6.0	2.1	650L	374	8.9	100	16	9.3	1.1	270	46	28
		7-24-80	7.0	4.2	650L	375	9.5	100	17	9.1	1.3	270	44	29
35	20cbd-S1	8- 9-79	8.5	–	520L	301	9.6	78	14	9.6	1.6	220	39	12
		7-24-80	8.5	12	500L	293	9.5	74	14	9.5	1.7	210	36	14
36	20ccd-S1	8- 9-79	8.5	–	295L	167	10	41	5.7	7.8	1.2	120	17	9.6
37	28ccc-S1	8-15-79	14.5	198	690L	410	9.4	92	34	9.5	4.7	340	48	6.8
		7-25-80	14.0	235	700L	348	9.1	85	33	8.7	5.0	260	43	6.8
39	29bbc-S1	8-15-79	–	–	520L	297	11	81	11	10	1.1	240	21	16
41	32bda-S1	7-24-80	14.0	26	550L	301	9.8	56	30	16	5.3	270	15	5.8
44	(D-12-8)28cbd-S1	7-29-80	7.5	3.3	500	267	6.8	80	28	4.4	.5	230	18	5.9
45	30bdd-S1	7-29-80	5.5	<.01	520L	284	7.7	89	10	3.5	1.1	220	21	5.7
46	33aaa-S1	7-24-80	5.5	15	460L	263	10	68	13	6.7	1.4	180	43	9.6
48	33cab-S1	7-24-80	5.5	111	530L	293	7.2	72	22	3.6	.7	260	20	4.3
60	(D-13-6)13cca-S1	8- 1-80	4.5	3.7	560	291	6.3	78	23	3.2	1.7	260	14	3.2
62	(D-13-7)5cdd-S2	8-15-79	8.5	–	425L	246	12	69	6.9	8.0	.9	200	13	11
		7-24-80	8.0	3.0	450L	248	12	72	7.4	8.4	1.1	200	11	12
63	5cdd-S1	8-15-79	–	.51	520L	302	11	84	11	9.4	1.2	240	24	15
64	8dbb-S1	8-15-79	8.0	–	490L	279	12	84	9.2	7.4	.8	220	15	9.1
		7-24-80	7.5	1.7	480L	272	12	80	8.8	6.8	.7	220	12	8.9
65	12daa-S1	7-23-80	4.0	42	475L	271	6.9	81	11	3.6	1.1	230	20	4.1
66	17cda-S1	7-31-79	9.0	46	580L	333	6.7	73	29	3.8	2.5	250	61	5.0
		7-24-80	9.0	97	590L	334	7.0	75	30	3.9	2.6	250	59	5.2
69.5	30bbb	8- 5-80	4.5	–	350L	192	4.9	55	12	1.7	.7	180	5.3	2.0
70	32aac-S1	7-29-80	6.0	–	550L	295	6.3	73	24	3.2	2.9	240	38	4.3
71	33cba	7-25-80	7.0	255	690	422	7.0	99	35	3.0	2.7	320	78	3.3
73	(D-13-8)4bbb-1	7-24-80	6.5	53	490	304	8.0	77	14	3.9	3.6	180	80	6.6
76	5aac-S1	7-24-80	6.0	2.3	490L	282	12	81	9.2	5.4	1.2	190	43	7.5
89	(D-13-12)5cbc-S1	7-31-80	8.5	4.3	1,060L	629	8.1	30	28	180	4.2	480	39	49
90	8daa-S1	7-30-80	8.0	9.2	680L	356	7.5	69	39	17	.7	320	25	4.7
91	9dcc-S1	7-30-80	8.5	10	590L	324	7.9	73	29	7.9	1.2	290	23	3.7
92	9ddc-S1	7-30-80	8.0	15	540L	285	6.5	67	25	9.2	1.0	250	21	4.6
93	10abb-S1	7-31-80	13.0	30	550	262	6.6	64	26	14	.7	210	20	3.1
94	10adb-S1	7-31-80	6.5	39	610L	339	7.4	89	20	9.9	1.4	310	20	3.9
95	11acd-S1	7-30-80	8.0	27	610L	345	10	59	32	24	1.2	310	28	3.3
96	12adb-S1	7-30-80	9.0	4.1	650L	330	7.6	57	33	28	1.1	300	19	2.9
97	12cbb-S1	7-30-80	6.5	4.0	610L	340	6.8	71	30	14	.7	300	32	4.5
98.5	18abd	8-15-80	16.5	–	970L	589	8.0	51	38	120	13	490	53	8.8
100	23cbb-S1	7-28-80	8.5	6.6	1,050L	651	12	98	69	25	5.7	360	210	14
110	(D-14-14)20bbb	8- 5-80	10.0	–	750L	462	13	57	45	45	1.8	290	120	4.9
110.4	28cab	8- 5-80	13.0	–	1,160L	752	11	52	57	130	5.7	300	300	13
110.6	34bcd	8- 5-80	13.0	–	1,370L	917	14	80	89	110	4.0	340	400	14
111	(D-15-7)12daa	8- 5-80	8.0	–	800L	485	7.1	100	51	3.6	2.0	360	100	4.3
114	(D-16-14)2bcd	8- 5-80	10.0	–	2,790	2,160	9.7	140	180	310	5.7	310	1,300	27
115	11caa	8- 5-80	11.0	–	4,220L	3,300	8.0	150	190	660	10	390	2,000	40

	Micrograms per liter												
Dissolved fluoride (as F)	Dissolved nitrogen ($NO_2 + NO_3$)	Dissolved arsenic (as As)	Dissolved boron (as B)	Dissolved chromium (as Cr)	Dissolved copper (as Cu)	Dissolved iron (as Fe)	Dissolved lead (as Pb)	Dissolved mercury (as Hg)	Dissolved zinc (as Zn)	Dissolved strontium (as Sr)	Dissolved lithium (as Li)	Dissolved selenium (as Se)	pH (units)
0.2	0.00	1	130	1	0	<10	0	0.1	10	330	20	2	7.2
.2	3.2	0	30	0	–	10	200	1.0	20	100	20	0	–
.2	3.4	0	50	0	0	<10	0	1.1	6	110	10	0	7.2
.2	1.6	0	20	20	–	0	210	1.3	6	110	20	0	–
.2	1.9	1	10	7	0	<10	2	.9	6	110	10	0	–
.1	1.0	1	100	0	0	10	2	.0	6	110	8	0	7.3
.1	1.3	1	100	1	0	<10	2	.1	10	100	7	0	7.7
.3	1.5	1	30	0	1	<10	0	.0	6	650	10	2	–
.2	.00	0	190	0	0	<10	2	.0	20	720	50	2	–
.1	2.8	1	20	10	–	230	270	2.1	40	30	10	0	5.6
.1	1.4	1	20	0	2	250	2	1.5	20	30	<4	0	5.5
.4	.08	0	60	0	0	<10	1	.0	10	130	10	1	7.3
.3	.05	0	20	10	–	30	380	1.1	20	160	30	1	–
.1	3.4	1	10	20	–	10	120	.7	7	50	20	0	–
.2	.53	0	30	10	–	10	200	2.3	30	140	20	2	–
.3	.44	0	10	20	–	10	180	1.0	9	160	30	2	7.3
.3	.40	1	60	0	0	10	1	1.8	4	170	20	2	–
.3	.95	0	30	10	–	10	200	1.9	7	180	20	1	6.9
.4	1.6	1	60	0	1	<10	0	.0	20	170	10	1	–
.2	.47	0	20	10	–	20	140	1.8	40	110	20	1	6.5
.3	.04	0	50	10	–	20	280	.2	4	420	40	0	7.1
.2	.00	2	140	1	0	10	2	.0	9	410	30	0	–
.2	.27	0	20	20	–	10	180	2.0	10	160	30	1	6.9
.5	.00	0	70	0	0	<10	0	.3	<3	580	30	0	–
.3	1.1	0	110	0	0	<10	3	.0	<3	220	10	1	7.5
.1	3.0	1	100	0	0	<10	2	.0	<3	120	9	0	7.3
.3	.63	1	30	0	3	10	0	.7	5	140	10	1	–
.2	1.4	0	40	0	2	<10	1	1.1	<3	190	10	0	–
.2	1.1	0	40	0	0	<10	4	.0	6	210	20	0	–
.2	.87	0	20	20	–	10	210	1.2	7	120	20	1	7.3
.4	.82	1	30	0	0	10	0	.0	7	130	10	1	–
.3	.37	0	30	10	–	20	310	1.6	10	150	20	2	7.1
.2	2.0	0	20	10	–	10	320	1.8	30	130	20	0	7.3
.3	2.3	1	50	0	0	<10	0	.3	10	130	10	0	–
.4	1.0	1	50	1	2	10	0	.0	4	130	10	1	–
.2	.02	0	20	10	–	840	140	1.0	50	160	20	0	7.5
.3	.00	1	50	0	1	880	3	.0	4	170	10	0	7.2
.2	.37	1	20	0	0	<10	0	.0	6	60	6	0	7.7
.2	.00	1	60	0	0	<10	2	.0	50	160	20	0	–
.4	.00	1	110	0	0	720	2	.0	10	190	10	0	7.2
.4	.00	1	40	1	1	1,600	1	.8	<3	290	20	0	6.9
.3	1.9	1	40	0	2	<10	0	.0	<3	120	9	0	–
.5	.00	0	170	0	0	<10	0	.9	<3	960	20	0	7.5
.6	.02	0	70	0	3	<10	0	1.0	<3	360	10	1	7.2
.5	.61	1	50	0	1	<10	0	.0	<3	260	10	1	7.4
.3	.00	1	120	0	0	<10	2	.0	<3	250	7	1	7.4
.5	.00	1	60	0	1	<10	0	.0	<3	290	8	1	8.3
.3	.02	0	50	0	0	<10	0	.6	<3	260	6	0	7.3
.5	.00	0	50	0	1	10	0	.0	<3	350	9	1	7.3
.3	.00	2	140	0	0	20	2	.0	<3	360	10	0	7.2
.5	.00	1	70	0	1	<10	0	.0	<3	300	10	1	7.3
1.2	.00	1	460	0	0	<10	0	.2	<3	1,100	140	0	7.5
.4	.00	1	150	1	3	200	2	1.1	5	480	30	0	7.2
.2	.00	0	60	0	1	<10	1	.0	3	370	10	0	7.4
.4	.24	1	150	0	1	<10	1	.0	<3	1,100	30	0	7.5
.2	.01	1	90	0	1	<10	1	.0	7	790	20	0	7.3
.2	.00	1	30	0	1	280	0	.0	<3	220	20	0	7.2
.2	.37	0	430	0	0	20	1	.0	10	3,600	80	0	7.6
.3	.00	1	1,200	0	0	20	1	.0	10	2,000	140	0	8.0

Table 9.--Streamflow records for two stations for water year 1979
[from U.S. Geological Survey, 1981]

Price River near Scofield, Utah
U.S. Geological Survey gaging station 09311500

Location.--SE¼SE¼SE¼ sec. 10, T.12 S., R.7 E., (site 37, plate 1), downstream from Scofield Reservoir Dam, 5 mi northeast of Scofield, and 9 mi upstream from White River.

Drainage Area.--155 mi^2 approximately.

Records Available[1].--November 1917 to October 1918, April to November 1919, April to December 1920, July to September 1921, June to September 1925, April 1926 to September 1931, October 1938 to September 1968, October 1979 to September 1980 (discontinued). Prior to October 1938, published as "Fish Creek near Scofield."

Gage.--Water-stage recorder and concrete control. Datum of gage is 7,570.13 ft [National Geodetic Vertical Datum of 1929] (levels by U.S. Bureau of Reclamation). November 17, 1917, to September 30, 1921, and October 25, 1930, to November 1, 1945, water-stage recorder and June 15 to September 30, 1925, and April 27, 1926, to September 30, 1931, staff gage, near site at various datums.

Remarks.--Records good except for periods of algae and moss growth, which are fair.

Average Discharge.--36 years (1926-31, 1938-68, 1979-80), 60.8 ft^3/s, 44,001 acre-ft/yr.

Extremes for Current Year.--Maximum discharge, 700 ft^3/s June 6-8, gage height, 3.66 ft; minimum daily, 2.3 ft^3/s October 29-31.

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	84	5.1	7.0	7.2	6.6	6.0	97	2.1	621	188	183	110
2	74	6.6	7.0	7.2	6.6	6.0	98	2.1	651	184	181	108
3	63	6.6	7.0	7.2	6.6	6.0	99	2.1	645	177	172	109
4	63	6.6	7.0	7.2	6.2	6.0	99	2.1	645	171	169	120
5	63	7.2	7.0	7.2	6.5	6.0	100	2.1	651	174	163	122
6	63	7.2	7.0	6.6	6.6	6.0	99	2.1	682	167	157	124
7	63	7.2	7.0	6.6	6.5	6.0	100	2.1	694	166	154	124
8	63	7.2	7.0	6.6	6.6	6.0	187	2.1	694	170	152	114
9	63	7.2	7.0	6.9	6.4	6.0	232	2.1	682	171	158	100
10	62	6.9	7.2	6.0	6.3	6.3	233	2.1	682	172	161	39
11	62	6.6	7.2	6.0	6.0	6.5	232	2.1	669	174	161	18
12	61	6.8	7.2	6.0	6.0	6.0	230	2.1	651	179	176	19
13	61	7.2	7.2	6.2	6.0	6.0	233	2.1	639	171	184	19
14	60	7.2	7.2	6.6	6.0	6.2	232	2.1	603	162	189	20
15	53	7.9	7.2	6.6	6.2	32	159	2.1	574	181	194	20
16	26	7.9	7.2	6.6	6.6	49	103	2.1	538	193	193	20
17	11	7.2	7.2	6.6	6.6	50	103	2.1	491	199	188	24
18	11	7.2	7.2	6.6	6.5	51	103	2.1	395	204	185	38
19	11	7.2	7.2	6.6	6.6	50	101	2.1	374	202	185	58
20	11	7.2	7.2	6.6	6.6	52	103	2.1	279	201	182	64
21	11	7.2	7.2	6.6	6.6	36	103	2.1	271	198	171	61
22	9.4	7.2	7.2	6.6	6.6	15	103	2.1	257	206	168	61
23	8.6	7.2	7.2	6.6	6.6	15	103	4.7	225	205	165	52
24	8.6	7.2	7.2	6.6	6.6	15	103	44	215	205	159	36
25	8.6	7.2	7.2	6.6	6.6	11	2.1	127	201	205	157	23
26	8.3	7.2	7.2	6.5	6.6	71	2.1	195	192	201	143	54
27	7.9	7.2	7.2	6.2	6.7	143	2.1	241	186	190	127	66
28	4.3	7.2	7.2	6.6	6.6	143	2.1	384	185	195	117	65
29	2.3	7.2	7.2	6.4	6.6	147	2.1	557	203	193	117	65
30	2.3	7.2	7.2	6.4	---	107	2.1	586	195	187	116	65
31	2.3	---	7.2	6.6	---	97	---	586	---	186	110	---
TOTAL	1,101.6	212.2	221.4	204.8	187.5	1,169.0	3,367.6	2,770.9	13,990	5,778	5,037	1,918
MEAN	35.5	7.07	7.14	6.61	6.47	37.7	112	89.4	466	186	162	63.9
MAX	84	7.9	7.2	7.2	6.7	147	233	586	694	206	194	124
MIN	2.3	5.1	7.0	6.0	6.0	6.0	2.1	2.1	185	162	110	18
AC-FT	2,190	421	439	406	372	2,320	6,680	5,500	27,750	11,460	9,990	3,800

WTR YR 1980 TOTAL 35,958.0 MEAN 98.2 MAX 694 MIN 2.1 AC-FT 71,320

[1]No gage-height record Nov. 14 - Dec. 14 and April 24 - May 23. Estimates for these periods were obtained using records provided by the U.S. Bureau of Reclamation.

Table 9.--Streamflow records for two stations for water year 1979--Continued

Pondtown Creek near Scofield Reservoir, Scofield, Utah
[U.S. Geological Survey gaging station 09310550]

Location.--NW¼NW¼NE¼ sec.18, T.12 S., R.7 E., (site 4, plate 1), upstream from mouth and 4 mi northwest of Scofield.

Drainage Area.--78.6 mi^2.

Period of Record[1].--October 1979 to September 1980 (discontinued).

Gage.--Water-stage recorder. Altitude of gage is 7,635 ft from topographic map (datum is National Geodetic Vertical Datum of 1929).

Remarks.--Records good except those affected by beaver dams and winter ice periods, which are poor.

Extremes for Current Year.--Maximum discharge, 108 ft^3/s May 23, gage height, 2.73 ft; minimum recorded, 0.62 ft^3/s Nov. 14-16.

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	0.90	0.84	0.70	0.76	0.90	0.92	1.1	18	52	5.6	1.4	1.6
2	.90	.80	.70	.76	.90	.94	1.2	22	48	5.0	1.3	1.6
3	.90	.78	.70	.76	.90	.94	1.2	25	48	4.6	1.4	1.4
4	.90	.76	.70	.78	.90	.94	1.2	29	54	4.3	1.4	1.4
5	.90	.74	.70	.78	.90	.96	1.3	33	57	3.9	1.4	1.5
6	.92	.72	.70	.78	.90	.96	1.5	42	55	4.0	1.5	1.4
7	.92	.70	.70	.78	.90	.98	1.6	47	49	4.4	1.5	1.8
8	.92	.68	.70	.80	.90	.98	1.4	45	45	4.2	1.5	2.7
9	.90	.66	.72	.80	.90	.98	1.9	46	40	4.0	1.5	3.3
10	.90	.66	.72	.80	.90	1.0	2.2	45	35	3.7	1.5	2.6
11	.90	.64	.72	.82	.90	1.0	2.0	36	31	3.6	1.6	2.2
12	.92	.64	.72	.90	.90	1.0	1.7	32	28	3.5	1.7	1.8
13	.92	.64	.72	.98	.90	1.0	1.8	29	24	3.3	1.8	1.6
14	.92	.62	.72	1.2	.90	1.0	1.9	27	21	3.2	1.8	1.4
15	.92	.62	.72	1.0	.90	1.0	2.2	27	19	3.1	1.7	1.4
16	.94	.62	.74	.98	.90	1.0	2.8	28	17	2.9	1.7	1.7
17	.98	.64	.74	.96	.90	1.0	3.8	29	15	2.7	1.6	1.5
18	1.1	.64	.74	.94	.90	1.0	5.8	29	14	2.6	1.6	1.4
19	2.2	.64	.74	.92	.90	1.0	8.8	34	13	2.4	1.5	1.4
20	3.3	.66	.74	.90	.90	1.0	14	49	12	2.2	1.4	1.4
21	2.3	.66	.74	.88	.90	1.0	12	67	11	2.0	1.4	1.4
22	1.9	.66	.74	.88	.90	1.0	10	84	11	1.9	1.5	1.4
23	1.6	.66	.74	.88	.90	1.0	11	96	10	1.7	1.5	1.4
24	1.3	.66	.74	.90	.90	1.1	13	89	9.6	1.6	1.7	1.5
25	1.2	.66	.74	.90	.90	1.1	15	70	9.3	1.5	1.9	1.6
26	1.1	.66	.74	.90	.90	1.1	14	56	8.4	1.5	1.8	1.5
27	1.0	.66	.74	.90	.92	1.1	15	49	7.2	1.5	1.9	1.4
28	.98	.68	.74	.90	.92	1.1	20	47	6.4	1.5	1.6	1.4
29	.96	.68	.76	.90	.92	1.1	21	50	6.0	1.5	1.5	1.4
30	.92	.70	.76	.90	---	1.1	19	53	6.4	1.5	1.8	1.4
31	.88	---	.76	.90	---	1.1	---	56	---	1.5	1.7	---
TOTAL	36.30	20.38	22.54	27.24	26.16	31.40	209.4	1,389	762.3	90.9	49.1	49.5
MEAN	1.17	.68	.73	.88	.90	1.01	6.98	44.8	25.4	2.93	1.58	1.65
MAX	3.3	.84	.76	1.2	.92	1.1	21	96	57	5.6	1.9	3.3
MIN	.88	.62	.70	.76	.90	.92	1.1	18	6.0	1.5	1.3	1.4
AC-FT	72	40	45	54	52	62	415	2,760	1,510	180	97	98

WTR YR 1980 TOTAL 2,714.22 MEAN 7.42 MAX 96 MIN .62 AC-FT 5,380

[1] No gage-height record November 1-15.

Table 10.--Discharge and specific conductance of water at seepage study sites

Specific conductance: Field measurements.

Stream	Site No. (see pl.1)	Date	Discharge (ft^3/s)	Specific conductance (µmho/cm at 25°C)
		Mud Creek drainage basin		
Mud Creek	5	10-12-79	0.11	385
		9-05-80	.45	400
	6	10-12-79	.05	380
		9-05-80	.34	--
Long Canyon	7	10-12-79	.01	350
		9- 5-80	.03	400
Mud Creek	8	10-12-79	.04	385
		9- 5-80	.39	405
Finn Canyon	9	10-12-79	.02	520
		9- 5-80	.04	540
Mine inflow	10	10-12-79	.29	650
		9- 5-80	.59	690
Barn Canyon	10.5	10-12-79	0	--
		9- 5-80	.05	480
Mud Creek	11	10-12-79	.42	620
		9- 5-80	.98	580
Boardinghouse Canyon	13	10-12-79	.53	465
		9- 5-80	1.2	495
Mud Creek	14	10-12-79	.02	530
		9- 5-80	.01	620
Slaughter House Canyon	15	10-12-79	0	--
		9- 5-80	.02	530
Mud Creek	16	10-12-79	.99	--
		9- 5-80	2.0	530
Broads Canyon	17	10-12-79	0	--
		9- 5-80	.01	550
Mud Creek	19	10-12-79	1.4	500
		9- 5-80	2.4	520
Eccles Canyon	20	10-11-79	.08	445
		9- 5-80	.12	445
	21	10-11-79	.08	430
		9- 5-80	([1])	--
Unnamed	22	10-11-79	.04	405
		9- 5-80	([1])	--
	23	10-11-79	.03	500
		9- 5-80	([1])	--
Eccles Canyon	24	10-11-79	.14	390
		9- 5-80	.31	470
South Fork Canyon	25	10-11-79	.11	375
		9- 5-80	.28	395
Eccles Canyon	26.5	10-11-79	.67	465
		9- 5-80	1.1	485

Table 10.--Discharge and specific conductance of water at seepage study sites--Continued

Stream	Site No. (see pl. 1)	Date	Discharge (ft^3/s)	Specific conductance (μmho/cm at 25°C)
		Mud Creek basin--Continued		
Whiskey Canyon	27	10-11-79	0.53	--
		9- 5-80	.25	--
Eccles Canyon	28	10-11-79	.93	320
		9- 5-80	1.7	495
	30	10-11-79	1.0	475
		9- 5-80	2.1	490
Mud Creek	31	10-12-79	2.5	495
		9- 5-80	4.1	510
Green Canyon	32	10-12-79	.02	490
		9- 5-80	0	--
Mud Creek	33	10-12-79	2.4	--
		9- 5-80	4.7	500
	34	10-12-79	2.7	500
		9- 5-80	4.6	475
Winter Quarters Canyon	35	10-12-79	.30	580
		9- 5-80	.51	600
		Soldier Creek drainage basin		
Soldier Creek	38	10-10-79	.20	880
		9- 4-80	.57	910
	39	10-10-79	.20	800
		9- 4-80	.61	870
Unnamed	40	10-10-79	.18	830
		9- 4-80	.27	720
	41	10-10-79	.01	700
		9- 5-80	.04	610
Soldier Creek	42	10-10-79	.43	830
		9- 5-80	.92	800
Pine Canyon	43	10-10-79	.02	590
		9- 4-80	.03	580
	44	10-10-79	.01	540
		9- 4-80	.04	480
Unnamed	45	10-10-79	.02	530
		9- 4-80	.03	510
Pine Canyon	46	10-10-79	.02	530
		9- 4-80	.05	435
		10-11-80	.07	500

Table 10.--Discharge and specific conductance of water at seepage study sites--Continued

Stream	Site No. (see pl. 1)	Date	Discharge (ft^3/s)	Specific conductance (µmho/cm at 25°C)
Soldier Creek drainage basin--Continued				
Unnamed	47	10-10-79	0.01	500
		9- 4-80	.01	450
		10-11-80	.01	475
Pine Canyon	48	10-11-79	.09	495
		9- 4-80	.16	520
		10-11-80	.14	560
Unnamed	49	10-10-79	.01	550
		9- 4-80	.01	530
		10-11-80	.01	540
Pine Canyon	50	10-10-79	.10	570
		9- 4-80	.23	530
		10-11-80	.17	550
	52	10-10-79	.12	630
		9- 4-80	.24	560
		10-11-80	.19	580
Unnamed	53	10-10-79	0	--
		9- 4-80	0	--
Soldier Creek	54	10-10-79	.69	820
		9- 4-80	1.3	780
Unnamed	55	10-10-79	0	--
		9- 4-80	0	--
Soldier Creek	56	10-10-79	.42	860
		9- 4-80	1.2	780
	57	10-10-79	.60	920
		9- 4-80	1.3	780
Unnamed	58	10-10-79	0	--
		9- 4-80	0	--
Soldier Creek	59	10-10-79	.56	870
		9- 4-80	1.4	1,070

[1] Culvert diversion prevented measurement.

Site No.: See plate 1.
Specific conductance: Field measurements.
pH: Field measurements.

Table 11.--Inorganic chemical analyses of major ions

Stream	Site No.	Date of sample	Temperature (°C)	Discharge (ft^3/s)	Specific conductance (µmhos/cm at 25°C)	pH (units)	Dissolved solids, sum of constituents (Milligrams)	Dissolved silica (as SiO_2) (Milligrams)	Dissolved calcium (as Ca) (Milligrams)	Dissolved magnesium (as Mg) (Milligrams)	Dissolved sodium (as Na) (Milligrams)
Gooseberry Creek	1	7-20-79	20.0	9.3	265	7.8	148	2.2	39	11	1.9
		7-30-80	21.5	9.2	210	-	95	1.2	21	9.1	.8
Fish Creek	2	11-16-78	.0	10	540	-	-	-	-	-	-
		4- 3-79	.0	7.8	420	-	-	-	-	-	-
		5-18-79	3.5	393	300	-	-	-	-	-	-
		6-12-79	18.0	131	360	-	-	-	-	-	-
		7-18-79	19.5	22	335	8.3	191	4.7	55	12	2.9
		8-16-79	10.5	15	330	-	-	-	-	-	-
		9-19-79	13.0	8.0	320	-	-	-	-	-	-
		10-18-79	8.0	8.0	300	-	-	-	-	-	-
		11-15-79	1.0	10	360	-	202	4.6	57	14	2.4
		12-13-79	.0	12	415	-	-	-	-	-	-
		2- 6-80	.0	10	390	-	-	-	-	-	-
		2-21-80	3.5	9.6	425	-	-	-	-	-	-
		4-24-80	7.0	84	330	-	-	-	-	-	-
		5-28-80	6.0	413	330	-	189	4.6	60	9.2	1.9
		5-29-80	11.0	468	300	-	-	-	-	-	-
		6-19-80	12.5	227	330	-	-	-	-	-	-
		7-15-80	18.5	39	330	-	189	4.1	52	12	2.5
		8-14-80	18.0	18	310	-	-	-	-	-	-
		8-20-80	8.5	14	330	-	192	4.6	49	12	2.6
		10- 8-80	14.0	12	300	-	-	-	-	-	-
Pondtown Creek	3	7-18-79	14.5	1.4	420	8.2	246	5.8	66	13	3.9
	4	7-18-79	20.0	1.3	415	8.3	244	6.1	68	13	4.3
		11-15-79	2.5	.64	550	-	347	6.7	94	18	6.1
		12-13-79	.0	.72	530	-	-	-	-	-	-
		2- 6-80	.0	.91	440	-	-	-	-	-	-
		4-24-80	.5	13	320	-	190	5.0	56	9.1	3.2
		5- 7-80	-	45	305	-	177	5.1	53	7.6	2.6
		5-27-80	8.0	52	345	-	200	5.5	63	8.7	2.6
		7-15-80	19.5	3.2	425	-	251	5.6	70	13	4.0
		8-20-80	14.0	.14	430	-	246	5.5	67	13	4.4
Mud Creek	5	7-17-79	13.0	2.1	295	8.2	159	3.7	43	10	1.9
		7-30-80	12.0	.83	330	-	190	4.2	52	12	2.2
		9- 5-80	6.0	.45	405	-	233	5.1	61	16	3.1
	8	9- 5-80	6.5	.39	415	-	231	4.9	60	16	2.8
	11	9- 5-80	7.0	.98	580	-	346	6.6	81	27	4.9
	13	9- 5-80	7.5	1.2	500	-	286	5.9	70	24	3.3
	16	9- 5-80	5.5	2.0	530	-	301	6.3	74	25	4.4
	18	7-17-79	15.0	2.8	465	8.1	262	5.2	63	19	4.2
		7-30-80	17.5	3.4	460	-	236	5.6	67	21	4.0
	19	9- 5-80	6.0	2.4	530	-	306	6.4	71	26	5.0
Eccles Canyon	20	7-17-79	13.0	-	455	8.3	258	5.8	75	13	3.5
		7-29-80	10.0	.26	430	-	236	4.7	73	13	2.8
		9- 5-80	10.0	.12	480	-	257	6.4	72	14	3.2
	24	9- 5-80	10.0	.31	550	-	271	6.9	72	19	4.3
	26.5	9- 5-80	11.0	1.1	520	-	268	6.4	67	20	3.3
	29	7-17-79	14.0	2.7	460	8.3	275	6.2	67	21	3.5
		10-12-79	7.0	.96	510	8.5	364	6.2	81	29	3.7
		11- 9-79	3.0	.95	550	8.0	330	6.3	79	27	4.1
		12-12-79	1.0	1.0	560	8.1	312	7.0	79	27	4.8
		1-15-80	3.0	1.0	520	8.0	302	6.5	74	24	3.5
		2- 5-80	2.0	1.0	550	8.2	322	6.8	77	28	3.5
		3- 4-80	3.0	.82	570	8.0	325	6.8	73	25	9.0
		4- 8-80	3.0	1.0	560	8.1	343	7.4	77	26	5.7
		4-23-80	4.5	4.0	460	-	280	7.0	71	19	6.9
		5- 8-80	4.5	16	315	-	180	5.3	50	11	2.8
		5-21-80	5.0	21	330	8.3	189	5.5	50	11	2.6
		5-22-80	-	29	285	-	161	5.1	43	9.4	2.7
		6-26-80	12.0	8.3	365	8.6	209	5.7	57	13	2.5
		7-10-80	11.5	4.0	430	8.6	253	5.5	62	17	3.0
		7-16-80	14.5	2.9	465	-	271	5.8	68	19	9.5
		8-15-80	12.0	1.7	500	8.5	269	6.7	67	22	3.8
		8-18-80	12.0	1.3	490	-	283	10	69	24	4.0
		9-19-80	10.0	2.2	510	7.9	288	7.0	69	26	4.0
Mud Creek	30	9- 5-80	10.5	2.2	495	-	280	6.6	64	25	4.4
	31	9- 5-80	6.0	4.2	520	-	298	6.5	68	26	4.9
	33	9- 5-80	7.0	4.7	510	-	286	6.4	66	26	4.8
	34	7-17-79	18.5	3.6	473	8.2	273	6.6	67	21	4.7
		9- 5-80	8.0	4.6	485	-	281	6.0	61	25	5.0
	35	10-17-78	9.5	2.7	520	8.5	310	6.4	72	26	5.8
		11-14-78	-	4.9	590	8.4	329	6.6	76	26	6.5
		12- 9-78	.0	3.4	620	8.3	357	7.1	86	28	6.2
	36	1-17-79	.0	3.1	580	8.3	330	7.3	77	25	5.7
		2-20-79	.0	3.0	600	8.1	342	7.7	84	26	5.3

per liter					Micrograms per liter							
Dissolved potassium (as K)	Alkalinity (as $CaCO_3$)	Dissolved sulfate (as SO4)	Dissolved chloride (as Cl)	Dissolved fluoride (as F)	Dissolved arsenic (as As)	Dissolved boron (as B)	Dissolved copper (as Cu)	Dissolved iron (as Fe)	Dissolved lead (as Pb)	Dissolved mercury (as Hg)	Dissolved selenium (as Se)	Dissolved zinc (as Zn)
0.1	133	11	1.6	0.1	1	10	-	0	0	0.0	0	<3
.2	92	5.5	1.3	.1	-	0	-	40	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
.6	160	15	2.9	.2	-	10	-	160	-	.0	0	10
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
.8	170	17	3.4	.1	1	10	1	20	3	-	0	<3
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	0	20	<10	-	13	-	0	4
-	-	-	-	-	0	-	2	-	2	.0	0	10
.6	170	5.8	2.2	.1	1	30	3	10	0	.0	0	<3
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
.7	170	11	2.5	1.3	1	30	1	20	0	.0	0	<3
-	-	-	-	-	-	-	-	-	-	-	-	-
.8	160	23	3.9	.1	1	0	0	30	0	.0	0	<3
-	-	-	-	-	-	-	-	-	-	-	-	-
2.2	217	18	5.2	.3	1	20	-	420	45	.0	0	10
1.2	208	19	6.1	.2	1	30	-	450	-	.0	0	10
1.4	260	55	8.7	.1	0	20	0	10	12	-	0	4
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	0	20	<10	-	21	-	0	<3
1.0	150	18	5.5	.3	0	30	1	10	3	.0	0	<3
1.0	150	11	3.5	.1	1	6	2	20	1	.0	0	<3
.7	170	9.6	4.8	.1	1	20	4	20	0	.0	0	4
1.2	220	18	6.1	.3	1	40	1	40	0	.0	0	440
1.1	210	21	7.9	.2	1	8	0	10	0	.0	0	<3
.6	139	14	2.0	.1	0	20	-	0	79	.0	0	9
.6	170	14	2.5	.1	-	20	-	20	-	-	-	-
.7	200	23	3.4	.1	-	-	-	-	-	-	-	-
.9	200	22	3.8	.2	-	-	-	-	-	-	-	-
2.2	270	56	5.5	.2	-	-	-	-	-	-	-	-
1.6	240	33	3.9	.2	-	-	-	-	-	-	-	-
1.8	230	45	5.9	.2	-	-	-	-	-	-	-	-
1.7	212	35	5.9	.2	1	40	-	20	-	.0	0	30
1.6	160	34	6.0	.1	-	30	-	10	-	-	-	-
2.1	240	44	7.0	.2	-	-	-	-	-	-	-	-
1.1	-	18	3.2	.2	1	20	-	10	45	.0	0	10
1.0	200	13	3.1	.2	-	30	-	40	-	-	-	-
1.3	230	14	3.1	.2	-	-	-	-	-	-	-	-
1.8	230	22	4.5	.2	-	-	-	-	-	-	-	-
2.0	230	27	4.2	.2	-	-	-	-	-	-	-	-
1.7	230	32	4.5	.1	0	30	-	10	-	.0	0	10
2.6	240	94	4.6	-	-	-	-	-	-	-	-	-
2.2	270	44	4.5	-	-	-	-	-	-	-	-	-
2.4	240	43	4.5	.2	1	30	-	10	0	-	0	5
2.3	250	39	4.7	-	-	-	-	-	-	-	-	-
2.3	260	42	4.8	-	-	-	-	-	-	-	-	-
2.1	250	40	15	.2	1	30	-	<10	0	-	0	<3
2.3	280	45	12	-	-	-	-	-	-	-	-	-
2.1	200	35	15	.2	0	40	9	50	5	.0	0	10
1.3	140	16	3.9	.1	0	8	4	40	1	.0	0	<3
1.3	170	16	3.8	-	-	-	-	-	-	-	-	-
1.3	130	13	3.2	.2	1	30	6	30	0	.0	0	4
1.1	179	19	2.0	.1	1	0	-	20	2	-	0	<3
1.6	210	33	4.6	-	-	-	-	-	-	-	-	-
1.8	220	25	7.9	.3	1	40	2	30	0	.0	0	20
2.1	240	37	10	-	-	-	-	-	-	-	-	-
1.9	220	36	5.5	.2	0	20	0	<10	0	.0	0	180
2.7	300	41	6.5	-	-	-	-	-	-	-	-	-
2.1	220	39	5.8	.2	-	-	-	-	-	-	-	-
2.1	230	44	7.1	.2	-	-	-	-	-	-	-	-
2.1	220	42	6.6	.2	-	-	-	-	-	-	-	-
2.1	-	32	6.2	.2	1	40	-	40	-	.0	0	10
2.4	220	-	7.6	.2	-	-	-	-	-	-	-	-
2.7	232	50	7.6	-	-	-	-	-	-	-	-	-
2.8	245	56	8.7	-	-	-	-	-	-	-	-	-
2.8	271	55	8.2	.2	0	60	-	10	30	-	1	10
2.4	254	52	7.5	-	-	-	-	-	-	-	-	-
2.2	250	55	9.0	-	-	-	-	-	-	-	-	-

Table 11.--Inorganic chemical analyses of major ions and

Stream	Site No.	Date of sample	Temperature (°C)	Discharge (ft^3/s)	Specific conductance (µmhos/cm at 25°C)	pH (units)	Dissolved solids, sum of consituents (Milligrams)	Dissolved silica (as SiO_2) (Milligrams)	Dissolved calcium (as Ca) (Milligrams)	Dissolved magnesium (as Mg) (Milligrams)	Dissolved sodium (as Na) (Milligrams)
Mud Creek	36	3-17-79	0.0	5.4	570	8.1	354	6.4	88	25	8.8
		4-19-79	3.5	9.1	560	8.4	317	6.4	80	21	8.3
		5-10-79	3.0	13	450	8.4	247	5.5	62	17	5.5
		6-14-79	9.5	32	320	8.1	171	4.9	44	11	2.6
		7-16-79	18.0	4.6	490	8.4	271	6.4	61	20	4.5
		8- 4-79	17.0	3.3	500	8.4	295	7.1	65	24	5.8
		9-13-79	17.0	1.9	530	8.5	314	6.2	70	26	5.7
		10-12-79	7.0	2.8	520	8.4	304	6.2	61	29	5.4
		11- 9-79	.0	5.4	560	8.1	330	5.7	75	27	5.9
		11-16-79	.0	4.3	610	-	391	7.4	89	30	7.6
		12-12-79	.5	3.6	650	8.1	388	8.0	93	30	7.0
		1-15-80	.0	1.6	530	7.9	299	6.2	67	20	15
		2- 5-80	.0	5.1	590	8.1	350	7.1	84	27	8.3
		2- 6-80	1.0	3.2	580	-	-	-	-	-	-
		3- 4-80	.0	4.5	590	8.2	342	7.1	79	25	7.9
		4- 8-80	.0	4.0	600	8.2	367	7.3	83	27	9.7
		4-23-80	-	27	455	-	-	-	-	-	-
		5-21-80	7.0	73	350	8.3	193	6.1	53	12	3.8
		5-28-80	9.0	80	335	-	192	6.1	53	11	3.7
		6-26-80	16.5	39	340	8.4	190	5.7	52	11	3.0
		7-10-80	16.5	17	405	8.5	226	5.3	56	16	3.9
		7-16-80	16.0	12	445	-	254	5.6	67	18	4.1
		8-15-80	12.5	7.2	510	8.4	312	7.3	71	21	5.2
		8-18-80	19.0	3.6	500	-	279	6.6	63	23	6.5
		9-19-80	16.0	5.2	530	8.0	302	6.5	70	27	6.2
		10-16-80	7.5	6.9	560	8.3	338	6.4	78	25	8.4
		11-13-80	1.0	5.5	610	8.4	-	-	-	-	-
Price River	37	11-15-79	4.5	6.0	300	-	160	5.5	38	13	3.4
		2- 6-80	4.5	6.0	335	-	-	-	-	-	-
		4-23-80	3.0	103	315	-	184	7.0	44	14	3.6
		5-28-80	8.5	384	300	-	168	4.6	45	11	3.2
		7-15-80	19.0	181	315	-	180	2.8	49	12	2.7
		8-20-80	17.0	182	290	-	168	1.9	43	11	2.9
Soldier Creek	38	9- 4-80	15.0	.57	940	-	551	10	42	50	100
	39	9- 4-80	13.5	.61	910	-	518	10	40	49	100
	42	7-19-79	25.0	-	690	8.4	443	9.4	38	40	63
		5- 8-80	-	35	470	-	270	8.0	48	22	24
		7-31-80	20.5	1.1	720	-	425	9.1	32	41	73
		9- 4-80	10.0	.92	820	-	492	9.1	40	44	86
Pine Canyon	44	9- 4-80	15.5	.04	500	-	268	6.6	61	23	8.9
	46	9- 4-80	16.5	.05	450	-	238	6.3	46	24	12
	48	9- 4-80	-	.17	520	-	291	6.7	60	29	13
	51	7-19-79	19.5	-	520	8.4	333	7.0	53	35	20
		5- 8-80	-	8.7	490	-	265	5.6	57	22	12
		7-31-80	15.0	.59	530	-	312	6.8	50	36	20
	52	9- 4-80	12.5	.24	580	-	321	6.7	50	37	20
Soldier Creek	54	9- 4-80	8.5	1.3	790	-	479	8.5	44	45	75
	56	9- 4-80	8.5	1.2	770	-	480	8.4	44	45	74
	57	7-19-79	20.5	-	670	8.7	612	7.9	44	42	45
		7-31-80	17.5	3.1	670	-	420	8.0	44	43	54
		9- 4-80	8.5	1.3	790	-	489	8.6	45	47	76
	59	10-20-78	7.0	.35	900	8.6	589	8.1	56	51	90
		11-17-78	.0	.66	990	8.4	628	7.6	54	49	91
		7-14-79	22.0	2.2	660	8.6	384	8.2	38	41	39
		8- 2-79	20.5	1.5	710	8.5	476	8.1	43	44	55
		9-12-79	18.0	.55	850	8.6	503	7.7	41	48	75
		10-11-79	5.0	.53	900	8.5	599	8.2	61	57	82
		11- 7-79	.0	.68	1,020	8.3	672	8.8	65	56	86
		5- 8-80	-	45	500	-	277	6.9	48	23	21
		5-20-80	13.0	39	590	8.5	359	7.6	62	32	25
		6-25-80	20.5	6.6	740	8.8	459	8.2	53	44	48
		7-11-80	21.0	4.0	700	8.6	385	8.2	43	43	46
		8-14-80	22.0	1.7	1,080	8.8	696	8.2	53	58	110
		9- 4-80	9.0	1.4	1,050	-	692	8.2	55	58	110
		9-22-80	14.0	1.3	910	8.6	528	8.3	49	51	78
		11-15-80	.0	2.5	1,050	8.7	645	8.8	61	55	87

trace metals in water from selected stream sites--Continued

per liter					Micrograms per liter							
Dissolved potassium (as K)	Alkalinity (as $CaCO_3$)	Dissolved sulfate (as SO_4)	Dissolved chloride (as Cl)	Dissolved fluoride (as F)	Dissolved arsenic (as As)	Dissolved boron (as B)	Dissolved copper (as Cu)	Dissolved iron (as Fe)	Dissolved lead (as Pb)	Dissolved mercury (as Hg)	Dissolved selenium (as Se)	Dissolved zinc (as Zn)
2.4	254	55	14	0.2	0	50	-	10	1	-	0	10
2.3	220	50	14	-	-	-	-	-	-	-	-	-
1.9	180	36	8.8	-	-	-	-	-	-	-	-	-
1.2	139	18	4.1	.1	1	0	-	40	3	-	0	10
2.3	230	34	5.8	-	-	-	-	-	-	-	-	-
7.5	230	42	6.8	-	-	-	-	-	-	-	-	-
2.9	240	51	7.5	.2	1	0	-	20	0	-	0	<3
3.1	240	50	7.5	-	-	-	-	-	-	-	-	-
2.4	270	49	7.5	-	-	-	-	-	-	-	-	-
3.1	270	82	8.8	.2	0	60	2	10	5	-	0	7
2.7	290	60	8.4	.2	2	40	-	10	0	-	0	3
2.9	210	39	21	-	-	-	-	-	-	-	-	-
2.4	260	52	12	-	-	-	-	-	-	-	-	-
-	-	-	-	-	0	40	<10	-	28	-	0	7
2.3	260	50	12	.2	0	40	-	10	0	-	0	6
2.4	270	59	16	-	-	-	-	-	-	-	-	-
-	-	-	-	-	0	-	3	-	4	0.0	0	10
1.3	160	21	5.4	-	-	-	-	-	-	-	-	-
1.3	140	24	5.6	.2	1	30	4	30	0	.0	0	<3
1.2	150	23	2.4	.1	1	10	-	20	1	-	0	<3
1.7	190	30	5.1	-	-	-	-	-	-	-	-	-
1.7	200	31	5.4	.4	1	50	1	10	0	.0	0	4
3.1	240	52	7.5	-	-	-	-	-	-	-	-	-
2.1	210	43	8.6	.2	1	30	0	10	0	.0	0	<3
2.6	350	49	8.6	-	-	-	-	-	-	-	-	-
2.7	260	50	14	.2	-	60	-	20	-	-	-	-
-	270	-	-	-	-	-	-	-	-	-	-	-
1.2	130	16	4.0	.1	0	20	2	20	4	-	0	4
-	-	-	-	-	1	20	<10	-	19	-	0	20
1.2	150	18	4.6	.2	1	10	1	10	3	.0	0	4
1.1	140	15	2.6	.2	1	20	2	<10	0	.0	0	<3
1.1	160	12	3.9	.3	1	30	2	20	0	.0	0	5
.8	150	14	4.5	.1	1	4	0	<10	0	.0	0	<3
2.4	390	93	18	1.5	-	-	-	-	-	-	-	-
2.1	350	88	18	.5	-	-	-	-	-	-	-	-
1.7	309	91	12	.4	-	90	-	10	-	.0	2	20
2.6	200	39	5.5	.2	1	40	2	20	2	.0	1	<3
2.1	290	81	12	.4	-	120	-	<10	-	-	-	-
1.9	340	91	15	.4	-	-	-	-	-	-	-	-
1.4	240	19	3.2	.3	-	-	-	-	-	-	-	-
1.2	210	19	3.4	.3	-	-	-	-	-	-	-	-
.9	250	26	4.4	.3	-	-	-	-	-	-	-	-
.9	267	49	5.6	.3	1	50	-	10	-	.0	1	10
1.3	230	25	3.2	.2	1	20	0	40	1	.0	1	<3
1.0	240	48	5.9	.3	-	50	-	<10	-	-	-	-
.9	240	50	12	.4	-	-	-	-	-	-	-	-
1.8	320	98	14	.4	-	-	-	-	-	-	-	-
1.9	320	100	14	.4	-	-	-	-	-	-	-	-
1.6	-	110	8.3	.3	1	100	-	10	0	.0	1	10
1.9	270	94	12	.4	-	80	-	<10	-	-	-	-
2.0	310	110	14	.4	-	-	-	-	-	-	-	-
3.4	358	150	15	-	-	-	-	-	-	-	-	-
2.8	376	180	16	.4	2	110	-	<0	0	-	3	10
2.1	250	96	11	-	-	-	-	-	-	-	-	-
5.9	270	130	11	.4	1	110	-	10	0	-	1	20
3.2	300	130	16	-	-	-	-	-	-	-	-	-
3.2	340	170	15	-	-	-	-	-	-	-	-	-
2.8	390	200	16	.4	3	110	-	20	0	-	1	4
2.2	210	44	5.2	.2	0	40	2	20	1	.0	1	<3
1.6	280	58	6.3	.4	1	50	-	<10	0	-	2	<3
2.6	300	110	11	-	-	-	-	-	-	-	-	-
2.1	280	62	11	-	-	-	-	-	-	-	-	-
8.0	340	230	22	.5	2	280	-	20	2	-	1	<3
6.6	330	230	25	.6	-	-	-	-	-	-	-	-
2.3	360	130	17	-	-	-	-	-	-	-	-	-
3.1	420	160	16	.4	2	130	1	<10	3	.0	0	<3

Table 12.--Nutrient analyses of

Site No: See plate 1.
Specific conductance: Field measurements.
pH: Field measurements.

Stream	Site No.	Date of sample	Specific conductance (µmhos/cm at 25°C)	pH (units)	Dissolved solids, sum of constituents	Nitrogen, $NO_2 + NO_3$ (as N) Dissolved	Nitrogen, $NO_2 + NO_3$ (as N) Total	Nitrogen, nitrate (as N) Dissolved	Nitrogen, nitrate (as N) Total
Gooseberry Creek	1	7-20-79	265	7.8	148	0.19	-	-	-
		7-30-80	210	-	95	.00	0.00	0.00	0.00
Fish Creek	2	7-18-79	335	8.3	191	.11	-	-	-
		11-15-79	360	-	202	.03	.03	.03	.03
		12-13-79	405	-	-	.17	.19	.16	.17
		2-21-80	425	-	-	.22	.28	.21	.27
		4-24-80	330	-	-	.32	.32	.29	.31
		5-28-80	330	-	189	.46	.46	.46	.46
		7-15-80	330	-	189	.05	.05	.04	.04
		8-20-80	330	-	192	.00	.00	.00	.00
		10- 8-80	300	-	-	-	-	-	-
Pondtown Creek	3	7-18-79	420	8.2	246	.10	-	-	-
		7-29-80	420	-	-	.00	.00	.00	.00
	4	7-18-79	415	8.3	244	.09	-	-	-
		11-15-79	550	-	347	.05	.05	.04	.00
		12-13-79	530	-	-	-	.06	-	.04
		2- 6-80	440	-	-	.11	.12	.11	.11
		4-24-80	320	-	190	.46	.46	.43	.46
		5- 7-80	305	-	177	.73	.73	.72	.73
		5-27-80	345	-	200	.52	.52	.51	.51
		7-15-80	425	-	251	.01	.05	.01	.04
		8-20-80	430	-	246	.00	.00	.00	.00
Mud Creek	5	7-17-79	295	8.2	159	.01	-	-	-
		7-30-80	330	-	190	.00	.00	.00	.00
		9- 5-80	405	-	233	.00	-	-	-
	8	9- 5-80	415	-	231	.00	-	-	-
	11	9- 5-80	580	-	346	.03	-	-	-
	13	9- 5-80	500	-	286	.00	-	-	-
	16	9- 5-80	530	-	301	.00	-	-	-
	18	7-17-79	465	8.1	262	.02	-	-	-
		7-30-80	460	-	236	.00	.00	.00	.00
	19	9- 5-80	530	-	306	.00	-	-	-
Eccles Canyon	20	7-17-79	455	8.2	258	.98	-	-	-
		7-29-80	430	-	236	1.1	1.0	1.1	1.1
	24	9- 5-80	550	-	271	.49	-	-	-
	26	9- 5-80	520	-	268	.00	-	-	-
	29	7-17-79	460	8.3	275	.02	-	-	-
		12-12-79	560	8.1	312	.14	-	.14	-
		3- 4-80	570	8.0	325	.16	-	.16	-
		4-23-80	460	-	280	.78	.78	.76	.76
		5- 8-80	315	-	180	1.2	1.2	1.2	1.2
		5-22-80	285	-	161	1.2	1.2	1.2	1.2
		6-26-80	365	8.6	209	.21	-	.20	-
		7-16-80	465	-	271	.20	.20	.19	.19
		8-18-80	490	-	283	.00	.01	.00	.01
Mud Creek	30	9- 5-80	495	-	280	.23	-	-	-
	31	9- 5-80	520	-	298	.13	-	-	-
	33	9- 5-80	510	-	286	.00	-	-	-
	34	3-17-79	570	8.1	354	.16	-	.15	-
	35	12- 9-78	620	8.3	357	.13	-	.12	-
		6-14-79	320	8.1	171	.27	-	.26	-
		9-13-79	530	8.5	314	.01	-	.00	-
	36	11-16-79	610	-	391	.05	.05	.04	.04
		12-12-79	650	8.1	388	.12	-	.12	-
		12-14-79	620	-	-	.14	.22	.13	.21
		2- 6-80	580	-	-	.15	.16	.14	.15
		3- 4-80	590	8.2	342	.13	-	.13	-
		4-23-80	455	-	-	.63	.63	.60	.62
		5-28-80	335	-	192	.66	.67	.66	.66
		6-26-80	340	8.4	190	.09	-	.08	-
		7-16-80	445	-	254	.06	.08	.05	.07
		8-18-80	500	-	279	.00	.00	.00	.00
		10-16-80	560	8.3	338	.00	-	-	-
Price River	37	11-15-79	300	-	160	.10	.11	.09	.10
		12-14-79	310	-	-	.17	.17	.16	.16
		2- 6-80	335	-	-	.15	.15	.14	.14
		4-23-80	315	-	184	.36	.36	.32	.32
		5-28-80	300	-	168	.15	.15	.14	.14
		7-15-80	315	-	180	.08	.09	.07	.08
		8-20-80	290	-	168	.00	.00	.00	.00

Milligrams per liter											
Nitrogen, nitrite (as N)		Nitrogen, ammonia plus organic (as N)		Nitrogen, ammonia (as N)		Nitrogen, organic (as N)		Phosphorus, (as P)		Phosphorus, orthophosphate (as P)	
Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
-	-	-	-	-	-	-	-	0.030	0.030	-	-
0.00	0.00	0.34	0.35	0.04	0.04	0.30	0.31	.010	.010	0.00	0.00
-	-	-	-	-	-	-	-	.010	-	-	-
.00	.00	.31	.32	.02	.02	.29	.30	.000	.000	.00	.00
.01	.02	1.1	1.2	.00	.06	1.1	1.1	.010	.010	.00	.01
.01	.01	.15	.29	.06	.06	.09	.23	.000	.010	.00	.00
.03	.03	.72	.80	.00	.08	.72	.72	.010	.050	.00	.00
.00	.00	.25	.62	.01	.01	.24	.61	.010	.050	.04	.04
.01	.01	.69	.70	.05	.06	.64	.64	.030	.120	.00	.02
.00	.00	.45	.46	.02	.03	.43	.43	.000	.010	.00	.01
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	.030	-	-	-
.00	.00	.30	.38	.03	.02	.27	.36	.010	.050	.00	.01
-	-	-	-	-	-	-	-	.020	-	-	-
.01	.01	.51	.51	.03	.03	.48	.48	.000	.020	.01	.01
-	.01	-	.97	-	.02	-	.95	-	.010	-	.01
.00	.01	.02	.13	.03	.03	.00	.10	.000	.000	.00	.00
.03	.03	.78	1.2	.06	.08	.72	1.1	.010	.210	.01	.01
.01	.01	.57	1.0	.01	.07	.56	.93	.030	.150	.03	.03
.01	.01	.63	.95	.04	.04	.59	.91	.020	.200	.05	.06
.00	.01	.52	.57	.05	.05	.47	.52	.040	.050	.02	.02
.00	.00	.44	.46	.06	.06	.38	.40	.010	.040	.00	.02
-	-	-	-	-	-	-	-	.030	-	-	-
.00	.00	.34	.59	.04	.03	.30	.56	.020	.030	.00	.01
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	.010	-	-	-
.00	.00	.21	.26	.03	.05	.18	.21	.010	.040	.00	.01
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	2.700	-	-	-
.00	.00	.91	1.8	.04	.04	.87	1.8	.010	.010	.01	.01
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	.010	-	-	-
.00	-	.27	.36	.04	-	.23	-	-	.010	.01	-
.00	-	.00	.35	.00	-	.00	-	-	.070	.01	-
.02	.02	1.0	3.2	.07	.07	.93	3.1	.050	1.600	.10	.33
.01	.01	1.2	1.3	.01	.03	1.2	1.3	.030	.400	.02	.05
.01	.02	2.2	20	.01	.07	2.2	20	.040	4.300	.04	.15
.01	-	.46	.64	.03	-	.43	-	-	.390	.01	-
.01	.01	.71	.96	.03	.03	.68	.93	.020	.040	.03	.03
.00	.00	.24	.33	.02	.03	.22	.30	.010	.020	.00	.01
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
.01	-	.15	.33	.00	-	.15	-	.020	.010	.00	-
.01	-	.18	.50	.00	-	.37	-	-	.110	.00	-
.01	-	.37	.62	.00	-	.60	-	-	.020	.01	-
.01	-	.60	.20	.01	-	.17	-	.020	.030	.00	-
.01	.01	1.2	1.2	.11	.11	1.1	1.1	.010	.010	.01	.01
.00	-	.43	.52	.06	-	.37	-	-	.010	.01	-
.01	.01	.90	1.0	.03	.03	.87	.97	.010	.040	.01	.03
.01	.01	.18	.26	.01	.03	.17	.23	.000	.030	.00	.00
.00	-	.62	.65	.00	-	.62	-	-	.050	.03	-
.03	.03	1.2	1.2	.08	.17	1.1	1.1	.020	.230	.03	.03
.00	.01	.27	.54	.03	.03	.24	.51	.030	.090	.03	.05
.01	-	.44	.91	.03	-	.41	-	-	.080	.03	-
.01	.01	.60	1.3	.01	.03	.59	1.3	.040	.050	.00	.01
.00	.00	.29	.29	.03	.03	.26	.26	.010	.020	.00	.01
-	-	.39	.65	-	.00	-	.65	.050	.270	-	-
.01	.01	.73	.80	.15	.22	.58	.58	.010	.010	.00	.01
.01	.01	1.3	1.3	.19	.19	1.1	1.1	.010	.030	.01	.01
.01	.02	2.0	2.1	.28	.39	1.7	1.7	.000	.010	.00	.01
.04	.04	.81	.84	.20	.22	.61	.62	.010	.030	.00	.01
.01	.01	.78	1.1	.09	.10	.69	1.0	.010	.030	.03	.04
.01	.01	.21	.90	.11	.11	.10	.79	.050	.050	.02	.02
.00	.00	.34	.58	.03	.15	.31	.43	.000	.030	.00	.01

Table 12.--Nutrient analyses of water

Stream	Site No.	Date of sample	Specific conductance (µmhos/cm at 25°C)	pH (units)	Dissolved solids, sum of constituents	Nitrogen, $NO_2 + NO_3$ (as N) Dissolved	Nitrogen, $NO_2 + NO_3$ (as N) Total	Nitrogen, nitrate (as N) Dissolved	Nitrogen, nitrate (as N) Total
Soldier Creek	38	9- 4-80	940	-	551	0.00	-	-	-
	39	9- 4-80	910	-	518	.00	-	-	-
	42	7-19-79	690	8.4	443	.09	-	-	-
		5- 8-80	470	-	270	.04	0.10	0.03	0.09
		7-31-80	720	-	425	.00	.00	.00	.00
		9- 4-80	820	-	492	.00	-	-	-
Pine Canyon	44	9- 4-80	500	-	268	.00	-	-	-
	46	9- 4-80	450	-	238	.00	-	-	-
	48	9- 4-80	520	-	291	.00	-	-	-
	51	7-19-79	520	8.4	333	.18	-	-	-
		5- 8-80	490	-	265	.16	.20	.16	.18
		7-31-80	530	-	312	.00	.00	.00	.00
	52	9- 4-80	580	-	321	-	-	-	-
Soldier Creek	54	9- 4-80	790	-	479	.00	-	-	-
	56	9- 4-80	770	-	480	.00	-	-	-
	57	7-19-79	670	8.7	612	.27	-	-	-
		7-31-80	670	-	420	.00	.00	.00	.00
		9- 4-80	790	-	489	.00	-	-	-
	59	11-17-78	990	8.4	628	.11	-	-	-
		8- 2-79	710	8.5	476	.00	-	.00	-
		11- 7-79	1,020	8.3	672	.03	-	.02	-
		5- 8-80	500	-	277	.15	.11	.14	.14
		5-20-80	590	8.5	359	.07	-	.07	-
		8-14-80	1,080	8.8	696	.00	-	.00	-
		9- 4-80	1,050	-	692	.00	-	-	-
		11-15-80	1,050	8.7	645	.06	-	-	-

from selected stream sites--Continued

Milligrams per liter											
Nitrogen, nitrite (as N)		Nitrogen, ammonia plus organic (as N)		Nitrogen, ammonia (as N)		Nitrogen, organic (as N)		Phosphorus, (as P)		Phosphorus, orthophosphate (as P)	
Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	0.010	-	-	-
0.01	0.01	0.77	1.0	0.00	0.26	0.77	0.77	.100	0.260	0.07	0.07
.00	.00	.46	.47	.03	.04	.43	.43	.000	.010	.00	.00
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	.010	-	-	-
.00	.02	.24	1.0	.01	.03	.23	.97	.040	.560	.03	.52
.00	.00	.30	.31	.03	.04	.27	.27	.000	.010	.00	.00
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	.010	-	-	-
.00	.00	.32	.33	.03	.04	.29	.29	.000	.010	.00	.00
-	-	-	-	-	-	-	-	-	-	-	-
.01	-	.30	.36	.00	-	.30	-	-	.060	.01	-
.00	-	.46	.56	.07	-	.39	-	-	.010	.00	-
.01	-	.27	.67	.00	-	.27	-	-	.030	.01	-
.01	.01	.89	.99	.04	.04	.85	.95	.080	.340	.04	.11
.00	-	.38	2.9	.01	-	.37	-	-	.250	.04	-
.00	-	.31	.39	.13	-	.18	-	-	.010	.00	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	.14	.39	-	.04	-	.35	.010	.090	-	-

Table 13.--Discharge, specific conductance, and temperature of water from selected stream sites

Site No.: See plate 1.
Time: Military.
Discharge: Instantaneous except for Price River (site 37), which is daily mean from October 25, 1979, to September 12, 1980.
Specific conductance: Field measurements.

Stream	Site No.	Date	Time	Discharge (ft^3/s)	Specific conductance (µmho/cm at 25°C)	Temperature (°C)
Fish Creek	2	10-25-79	1345	10	325	5.5
		6- 4-80	1200	549	315	7.5
		6- 6-80	1010	659	305	6.0
		6-17-80	1700	265	325	15.5
		6-25-80	1415	111	360	14.5
Pondtown Creek	4	5-18-79	--	33	400	6.0
		7-19-79	--	1.3	380	20.0
		9-19-79	--	.3	--	12.0
		10-24-79	--	1.3	450	8.0
		10-25-79	--	1.3	455	9.0
		5-13-80	2235	32	--	--
		5-14-80	1320	26	--	--
		5-20-80	1440	44	--	--
		5-20-80	2220	62	--	--
		5-22-80	2235	99	--	--
		5-28-80	1300	44	340	8.0
		6- 4-80	1415	50	335	10.5
		6- 6-80	1025	55	325	5.5
		6-11-80	1930	29	350	15.0
		6-17-80	--	15	380	15.5
		6-25-80	1235	9.3	405	12.5
		7-20-80	--	2.8	425	15.5
		7-29-80	1000	1.5	430	15.5
Eccles Canyon	29	5- 1-80	1445	46	445	4.5
		5-12-80	1740	7.2	--	--
		5-14-80	1515	7.2	--	--
		5-15-80	--	4.8	--	--
		5-27-80	1850	17	325	4.5
		5-28-80	1330	13	325	7.5
		6- 4-80	1010	23	290	4.5
		6- 4-80	1730	22	240	6.5
		6- 6-80	0935	26	265	4.0
		6-13-80	1215	32	275	6.5
		6-17-80	1545	24	295	11.0
		6-25-80	1720	11	295	14.0
		9-12-80	1215	1.8	505	8.5

Table 13.--Discharge, specific conductance, and temperature of water from selected stream sites--Continued

Stream	Site No.	Date	Time	Discharge (ft^3/s)	Specific conductance (μmho/cm at 25°C)	Temperature (°C)
Mud Creek	36	7-18-79	--	22	325	19.5
		10-25-79	1710	3.8	520	9.5
		12-14-79	0930	2.8	620	0.0
		5- 1-80	1330	30	410	6.0
		6- 4-80	0915	115	270	4.0
		6- 6-80	0950	135	260	4.5
		6-17-80	1610	79	290	12.5
		6-25-80	1700	46	325	16.0
Price River	37	5-18-79	--	2.1	400	8.0
		6-22-79	1000	1.3	320	14.5
		10-25-79	--	7.2	270	10.0
		12-14-79	--	6.0	310	4.0
		3-25-80	--	11	325	4.0
		6- 4-80	0950	645	295	9.5
		6- 5-80	0840	651	320	12.0
		6- 6-80	0840	682	320	11.0
		6- 6-80	0900	682	315	10.5
		6- 7-80	0820	694	320	10.0
		6- 8-80	0820	694	320	12.0
		6- 9-80	0915	682	325	10.0
		6-10-80	0825	682	325	12.0
		6-11-80	0820	669	325	12.0
		6-12-80	1225	651	325	14.0
		6-13-80	0815	639	325	14.0
		6-13-80	1425	639	310	12.0
		6-14-80	0740	603	325	11.0
		6-15-80	1030	574	325	15.0
		6-16-80	0945	538	330	12.0
		6-17-80	0845	491	325	14.0
		6-17-80	1250	491	310	13.0
		6-18-80	0835	395	330	14.0
		6-19-80	0815	374	330	16.0
		6-20-80	0800	279	330	14.0
		6-21-80	0815	271	330	14.0
		6-22-80	0810	257	330	14.0
		6-23-80	0735	225	325	15.0
		6-24-80	0840	215	330	15.0
		6-25-80	0820	201	330	16.0
		6-25-80	0845	201	320	12.5
		6-26-80	0815	192	330	15.0
		6-27-80	0820	186	330	15.0
		6-28-80	0815	185	335	14.0
		6-29-80	0810	203	335	17.0
		6-30-80	0825	195	330	17.0

Table 13.--Discharge, specific conductance, and temperature of water from selected stream sites--Continued

Stream	Site No.	Date	Time	Discharge (ft^3/s)	Specific conductance ($\mu mho/cm$ at 25^oC)	Temperature (^oC)
Price River--Continued	37	7- 1-80	0810	188	330	18.0
		7- 1-80	1125	188	325	13.5
		7- 2-80	0830	184	325	18.0
		7- 3-80	1530	177	320	18.0
		7- 4-80	0750	171	325	18.0
		7- 5-80	0945	174	335	14.0
		7- 6-80	0940	167	325	18.0
		7- 7-80	0700	166	325	19.0
		7- 8-80	0830	170	325	19.0
		7- 9-80	0815	171	325	18.0
		7-10-80	0740	172	330	17.0
		7-11-80	0815	175	335	15.0
		7-12-80	0815	179	330	17.0
		7-13-80	0810	171	335	16.0
		7-14-80	0820	162	330	16.0
		7-15-80	1135	181	315	18.0
		7-16-80	0815	193	305	17.0
		7-17-80	0710	199	325	17.0
		7-18-80	0710	204	280	16.0
		7-19-80	0710	202	325	17.0
		7-20-80	0815	201	325	17.0
		7-21-80	0735	198	320	17.0
		7-22-80	0715	206	320	17.0
		7-23-80	0715	205	280	18.0
		7-24-80	0710	205	315	15.0
		7-25-80	0740	205	290	15.0
		7-26-80	0700	201	320	15.0
		7-27-80	0735	190	320	14.0
		7-28-80	0715	195	320	15.0
		7-29-80	0715	193	320	15.0
		7-30-80	0700	187	315	15.0
		7-31-80	0720	186	315	15.0
		8- 1-80	0700	183	310	16.0
		8- 2-80	0700	181	315	16.0
		8- 3-80	0700	172	315	15.0
		8- 4-80	0710	169	315	17.0
		8- 5-80	0700	163	320	15.0
		8- 6-80	0710	157	310	17.0
		8- 7-80	0710	154	320	15.0
		8- 8-80	0710	152	315	17.0
		8- 9-80	0710	158	310	17.0

Table 13.--Discharge, specific conductance, and temperature of water from selected stream sites--Continued

Stream	Site No.	Date	Time	Discharge (ft^3/s)	Specific conductance (µmho/cm at 25°C)	Temperature (°C)
Price River--Continued	37	8-10-80	0710	161	315	17.0
		8-11-80	0700	161	310	17.0
		8-12-80	0710	176	305	16.0
		8-13-80	0710	184	305	16.0
		8-14-80	0700	189	305	17.0
		8-15-80	0710	194	305	17.0
		8-16-80	0705	193	305	15.0
		8-17-80	0715	188	305	15.0
		8-18-80	0745	185	305	15.0
		8-19-80	0735	185	305	15.0
		8-20-80	0740	182	305	14.0
		8-21-80	0745	171	305	14.0
		8-22-80	0745	168	310	17.0
		8-23-80	0735	165	305	17.0
		8-24-80	0735	159	300	17.0
		8-25-80	0735	157	300	17.0
		8-26-80	0735	143	290	15.0
		8-27-80	0800	127	305	15.0
		8-28-80	0740	117	300	15.0
		8-29-80	0815	117	300	15.0
		8-30-80	0710	116	295	15.0
		8-31-80	0735	110	300	14.0
		9-12-80	1800	44	285	15.0

Table 14.—Benthic-invertebrate analyses of selected stream sites

Organism: Listed by phylum, . class, . . order, . . . family, ... genus; Uid., unidentified.
Site: Shown on plate 1.

Organism	Site 1 — Gooseberry Creek			Site 2 — Fish Creek			Site 3 — Pondtown Creek			Site 4 — Pondtown Creek		
	7-20-79	9-17-79	7-30-80	7-18-79	9-19-79	7-29-80	7-18-79	9-19-79	7-29-80	7-18-79	9-19-79	7-29-80
Arthropoda												
. Insecta												
.. Ephemeroptera												
... Siphlonuridae												
.... *Ameletus* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Ameletus oregonensis*	–	–	–	–	–	–	–	4	–	–	1	–
.... *Siphlonurus* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Heptageniidae												
.... *Cinygmula* sp. A	–	–	–	–	–	–	–	–	–	–	–	–
.... *Cinygmula* sp. B	–	–	–	–	–	–	–	8	–	–	–	–
.... *Epeorus longimanus*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Heptagenia criddlei*	16	–	12	274	139	207	116	8	14	50	–	18
.... *Heptagenia elegantula*	–	–	–	–	5	–	–	–	–	–	–	–
... Baetidae												
.... *Baetis bicaudatus*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Baetis* sp. A	372	16	36	37	331	110	226	39	10	1,184	8	38
.... *Baetis* sp. B	–	–	–	–	–	–	–	122	–	–	6	–
... Leptophlebiidae												
.... *Paraleptophlebia debilis*	8	–	4	59	75	28	23	26	1	–	18	2
... Ephemerellidae												
.... *Ephemerella coloradensis*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Ephemerella dannella* sp. B	–	–	–	–	–	–	3	–	–	–	–	–
.... *Ephemerella doddsi*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Ephemerella grandis*	–	–	–	–	–	13	–	7	1	–	–	1
.... *Ephemerella inermis*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Ephemerella margarita*	–	–	–	43	–	2	–	–	–	–	–	–
.... *Ephemerella serratella* sp. A	–	–	–	2	8	7	2	–	1	–	–	–
.... *Ephemerella serratella* sp. B	–	–	–	–	–	–	–	–	–	–	–	–
... Tricorythidae												
.... *Tricorythodes minutus*	–	–	–	45	–	27	–	–	–	–	1	–
.. Odonata												
... Coenagrionidae												
.... *Argia emma*	–	–	–	–	–	–	–	–	–	–	–	–
.. Plecoptera												
... Nemouridae	–	–	–	–	–	–	–	–	–	–	–	–
.... *Amphinemoura* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Malenka* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Prostoia* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Zapada* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Capniidae												
.... *Paracapnia* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... Uid. sp.	–	–	–	–	1	–	–	27	2	–	1	1
... Leuctridae												
.... *Despaxia augusta*	–	–	–	–	–	–	–	–	–	–	–	–
... Pteronarcidae												
.... *Pteronarcella badia*	–	–	–	2	17	25	–	1	1	10	–	10
... Perlodidae												
.... *Cultus* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Isogenoides zionesis*	–	–	–	–	–	–	3	–	–	3	–	–
.... *Isoperla fulva*	–	–	–	–	–	4	–	–	1	–	–	–
.... *Isoperla* sp. B	–	–	–	–	7	–	–	–	–	–	–	–
.... *Isoperla* sp. C	–	–	–	–	–	–	–	–	–	–	3	–
.... *Megarcys* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... Uid. sp.	–	–	–	–	–	7	–	–	–	–	–	1
... Perlidae												
.... *Hesperoperla pacifica*	–	–	–	–	–	–	–	–	–	–	–	–
... Chloroperlidae												
.... *Alloperla* sp.	4	–	–	2	–	–	5	–	–	6	–	–
.... Uid. sp.	–	–	–	–	5	–	–	10	14	–	1	5
.. Hemiptera												
... Naucoridae												
.... *Ambrysus* sp.	–	–	–	1	–	–	–	–	–	–	–	–
... Corixidae												
.... *Cenocorixa* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Graptocorixa serrulata*	–	–	8	–	–	–	–	–	–	–	5	–
.. Coleoptera												
... Haliplidae												
.... *Brychius* sp.	–	4	1	–	–	–	1	5	–	–	1	–
... Dytiscidae												
.... *Agabus* sp. A	8	–	–	–	–	1	2	–	1	3	–	1
.... *Agabus* sp. B	–	–	–	–	–	–	–	–	–	–	–	–
.... *Hydroporus* or *Hygrotus* sp.	–	–	–	–	–	–	3	–	–	–	–	–
.... *Deronectes* sp.	–	–	–	–	–	–	–	–	–	–	3	–
.... *Oreodytes crassulus*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Oreodytes* sp.	–	–	–	–	–	–	–	–	1	–	–	–
.... *Oreodytes* or *Deronectes* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Hydrophilidae												
.... *Hydrobius* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Dryopidae												
.... *Helichus suteralis*	–	–	–	–	–	–	–	–	–	–	1	–
... Elmidae												
.... *Optioservus seriatus*	32	40	52	17	53	19	50	127	9	21	31	5
.. Megaloptera												
... Sialidae												
.... *Sialis* sp.	–	–	–	–	–	–	–	–	–	–	1	–

Table 14.—Benthic-invertebrate analyses of selected stream sites—Continued

Organism	Site 1 — Gooseberry Creek—Continued			Site 2 — Fish Creek—Continued			Site 3 — Pondtown Creek—Continued			Site 4 — Pondtown Creek—Continued		
	7-20-79	9-17-79	7-30-80	7-18-79	9-19-79	7-29-80	7-18-79	9-19-79	7-29-80	7-18-79	9-19-79	7-29-80
Arthropoda—Continued												
. Insecta—Continued												
.. Tricoptera												
... Rhyacophilidae												
.... *Rhyacophila acropedes*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Rhyacophila angelita*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Rhyacophila* sp. B	–	–	–	–	–	–	–	–	–	–	–	–
.... *Rhyacophila* sp. C	–	–	–	–	–	–	–	–	–	–	–	–
.... *Rhyacophila* sp. D	4	–	–	–	–	–	–	–	–	–	–	–
... Hydropsychidae												
.... *Arctopsyche grandis*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Arctopsyche* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Symphitopsyche* sp. A	12	–	–	6	118	9	–	1	1	46	2	2
... Hydroptilidae												
.... *Neotrichia* sp.	–	–	–	18	–	11	1	–	1	–	–	1
.... *Ochrotrichia* sp.	8	–	–	7	–	1	–	2	–	20	1	–
... Brachycentridae												
.... *Brachycentrus americanus*	–	4	–	2	–	2	–	–	–	–	–	–
.... *Micrasema* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Lepidostomatidae												
.... *Lepidostoma* sp.	–	–	–	1	17	–	–	–	–	–	–	–
... Leptoceridae												
.... *Oecetis* sp.	–	8	–	–	4	–	–	–	–	–	1	–
... Limnephilidae												
.... *Amphicosmoecus canax*	–	–	–	–	–	–	–	–	1	–	–	–
.... *Oicosmoecus atripes*	1	–	4	–	–	–	2	2	–	–	–	–
.... *Ecclisomyia* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Hesperophylax* sp.	–	4	–	–	2	–	–	17	–	–	6	1
.... *Limnephilus* sp. A	–	–	1	–	–	–	–	–	–	–	–	–
.... *Neothremma* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Oligophlebodes* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Onocosmoecus* sp.	–	–	–	–	–	–	2	–	–	–	–	–
.. Diptera												
... Tipulidae												
.... *Antocha* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Dicronota* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Erioptera* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Gonomyia* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Hesperoconopa* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Hexatoma* sp.	–	–	–	2	1	4	3	12	2	1	2	2
.... *Limnophila* sp.	–	–	–	–	1	–	–	9	–	–	9	–
.... *Limonia* sp.	–	–	–	–	–	–	–	1	–	–	–	–
.... *Ormosia* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Pedicia* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Tipula* sp. A	–	–	–	–	–	–	–	–	–	–	–	–
.... *Tipula* sp. B	–	–	–	–	–	1	–	–	–	–	–	–
... Psychodidae												
.... *Pericoma* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Dixidae												
.... *Dixa* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Simuliidae												
.... *Prosimulium onychodactylum*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Prosimulium* sp. A	3,768	–	–	–	–	–	–	–	–	–	–	–
.... *Prosimulium* sp. B	–	–	–	–	–	–	–	–	–	–	–	–
.... *Simulium argus*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Simulium aureum*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Simulium pugetense*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Simulium vittatum*	–	–	184	–	–	–	–	–	1	–	–	1
.... *Simulium* sp. A	–	–	–	–	–	–	–	–	–	–	–	–
.... *Simulium* sp. B	–	–	–	3	–	5	1	–	–	7	–	–
.... *Simulium* sp. C	–	–	–	–	–	–	3	–	–	116	1	–
.... *Simulium* sp. D	–	–	–	–	–	–	–	–	–	–	15	–
.... *Simulium* sp. E	–	–	–	–	9	–	–	–	–	–	–	–
.... *Simulium* sp. F	–	536	–	–	–	–	–	–	–	–	–	–
... Ptychopteridae												
.... *Ptycoptera* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Chironomidae												
.... *Ablabesmyia* sp. A	12	–	–	–	–	–	–	–	–	–	–	–
.... *Ablabesmyia* sp. B	–	4	–	–	–	–	–	–	–	–	–	–
.... *Brillia* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Cladotanytarsus* sp.	52	–	–	–	–	–	–	–	–	–	–	–
.... *Constempellina* sp. A	–	–	–	–	–	–	–	–	–	–	–	–
.... *Constempellina* sp. B	–	–	–	–	–	–	–	–	–	–	–	–
.... *Corynoneura* sp.	8	–	28	–	–	1	–	–	1	3	–	–
.... *Cricotopus* sp. A	–	344	–	–	–	–	–	–	–	–	–	–
.... *Cricotopus* sp. B	28	–	–	1	–	–	1	–	–	10	–	–
.... *Cricotopus* sp. C	1,712	24	–	–	–	–	–	–	–	–	–	–
.... *Demicryptochironomus* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Diamesa* sp.	64	–	4	–	–	–	–	–	–	–	–	–
.... *Dicrotendipes* sp.	4	16	16	–	–	–	–	–	–	–	–	–
.... *Eukiefferiella* sp. A	–	–	–	–	–	–	–	3	–	–	–	–
.... *Eukiefferiella* sp. B	76	–	44	–	1	3	6	–	4	19	–	1
.... *Eukiefferiella* sp. C	20	36	32	9	–	5	3	1	–	7	–	–
.... *Eukiefferiella* sp. D	356	40	120	–	–	–	–	–	1	2	–	–
.... *Eukiefferiella* sp. E	80	–	56	–	–	–	–	–	–	–	–	–
.... *Eukiefferiella* sp. F	–	–	–	–	–	–	–	–	–	–	–	–

Table 14.–Benthic-invertebrate analyses of selected stream sites–Continued

Organism	Site 1 – Gooseberry Creek– Continued			Site 2 – Fish Creek– Continued			Site 3 – Pondtown Creek– Continued			Site 4 – Pondtown Creek– Continued		
	7-20-79	9-17-79	7-30-80	7-18-79	9-19-79	7-29-80	7-18-79	9-19-79	7-29-80	7-18-79	9-19-79	7-29-80
Arthropoda–Continued												
. Insecta–Continued												
.. Diptera–Continued												
... Chironomidae–Continued												
.... *Heterotrissocladius changi*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Heterotrissocladius hirtapex*	–	–	0	–	1	2	16	2	1	–	–	3
.... *Heterotrissocladius oliveri*	24	–	–	–	–	–	6	–	–	20	–	–
.... *Micropsectra* sp. A	20	64	68	2	–	1	–	1	2	4	–	–
.... *Micropsectra* sp. B	–	60	12	–	–	–	–	1	1	–	–	–
.... *Microtendipes* sp.	–	–	–	3	–	–	–	2	–	2	36	–
.... *Odontomesa* sp.	–	–	–	–	–	–	5	3	–	2	–	–
.... *Orthocladius clarkei*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Orthocladius dorenus*	–	–	24	–	–	2	–	14	1	–	–	–
.... *Orthocladius obumbratus*	124	–	–	–	1	1	–	30	–	–	2	–
.... *Orthocladius* sp. A	–	4	–	–	–	2	–	9	1	–	–	–
.... *Orthocladius* sp. B	24	–	–	–	–	–	–	–	–	–	–	1
.... *Orthocladius* sp. C	–	–	–	–	–	1	–	–	–	–	–	–
.... *Orthocladius* sp. D	–	–	–	–	–	–	–	–	–	–	–	–
.... *Orthocladius* sp. E	–	–	748	–	–	–	–	–	–	–	–	–
.... *Paracladopelma nais*	–	–	–	–	–	–	–	–	1	–	–	–
.... *Pentaneura* sp.	–	–	–	–	–	3	–	–	–	–	–	–
.... *Phaenopsectra* sp.	548	–	88	1	–	2	1	–	–	–	–	1
.... *Polypedium* sp.	–	B	–	–	–	–	–	–	–	1	1	–
.... *Prodiamesa olivacea*	–	–	–	–	–	–	–	1	–	–	–	–
.... *Psectrocladius* sp. A	–	–	–	–	–	–	–	–	–	1	–	–
.... *Psectrocladius* sp. B	–	16	–	–	–	–	–	–	–	–	–	–
.... *Psectrotanypus* sp.	–	–	–	–	–	–	–	14	–	–	1	–
.... *Pseudodiamesa* sp. A	–	–	–	1	–	–	5	–	–	3	–	–
.... *Pseudodiamesa* sp. B	–	–	–	–	–	–	–	–	–	–	–	–
.... *Smittia* sp.	–	4	–	–	–	–	–	3	–	–	–	–
.... *Sympatthastia* sp.	–	–	–	5	–	1	–	–	–	–	–	–
.... *Synorthocladius* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Trichocladius* sp. A	12	4	12	–	1	–	11	1	2	13	1	1
.... *Trichocladius* sp. B	–	–	–	–	–	1	–	–	–	–	–	–
.... Uid. Diamesini	–	–	B	–	–	–	–	–	–	–	–	–
.... Uid. Tanypodine pupa	–	–	–	–	–	–	–	–	–	–	1	–
.... Uid. (Thienemannimyia Group)	–	4	–	29	8	18	10	4	–	16	32	1
.... *Zavrelimyia* sp. A	–	–	–	6	3	–	–	29B	–	–	231	–
.... *Zavrelimyia* sp. B	–	–	–	–	–	–	–	1	1	–	–	–
... Ceratopogonidae												
.... *Bezzia* sp.	4	4	B	2	4	3	17	41	–	3	23	1
.... *Dasyhelea* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Forcipomyia* sp. A	–	–	–	–	–	–	–	–	–	–	–	–
.... *Palpomyia tibialis*	–	–	–	–	–	–	–	–	–	–	–	–
... Stratiomyidae												
.... *Caloparyphus* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Euparyphus* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Rhagionidae												
.... *Atherix variegata*	1	–	–	–	3	–	–	–	–	–	–	–
... Dolichopodiae												
.... *Campsicnemus* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Dolichopus* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Empididae												
.... *Chelifera* sp.	–	–	–	1	–	–	9	2	1	–	–	1
.... *Wiedemannia* sp. A	–	–	4	–	–	–	–	–	–	–	–	–
.... *Wiedemannia* sp. B	–	–	–	–	–	–	–	–	–	–	–	–
... Canaceidae												
.... *Canaceoides* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Muscidae												
.... *Limnophora* sp.	24	4	4	–	–	–	–	–	–	–	–	–
... Tabanidae												
.... *Tabanus* sp.	–	–	–	–	–	–	–	–	–	–	10	–
Coelenterata												
. Anthozoa												
.. Hydroida												
... Hydridae												
.... *Hydra* sp.	3,136	184	4,988	–	–	–	–	–	–	–	–	–
Platyhelminthes												
. Turbellaria												
.. Tricladida												
... Planariidae												
.... *Polycelis coronata*	–	–	–	–	–	–	–	–	–	–	–	–
Nematoda												
. Enoplida												
.. Dorylaimida												
... Dorylaimidae												
.... *Alaimus* sp.	140	120	104	2	–	–	1	–	–	3	2	–
.... *Enoplocheilus* sp.	–	–	–	–	–	1	–	–	–	–	–	1
.... Uid. sp.	–	12	–	–	–	–	–	–	–	1	1	–
.. Enoplida												
... Uid.												
.... *Tobrilus* sp.	–	–	4	11	–	1	–	–	–	–	–	–

Table 14.—Benthic-invertebrate analyses of selected stream sites—Continued

Organism	Site 1 — Gooseberry Creek—Continued			Site 2 — Fish Creek—Continued			Site 3 — Pondtown Creek—Continued			Site 4 — Pondtown Creek—Continued		
	7-20-79	9-17-79	7-30-80	7-18-79	9-19-79	7-29-80	7-18-79	9-19-79	7-29-80	7-18-79	9-19-79	7-29-80
Annelida												
. Oligochaeta												
.. Haplotaxida												
... Haplotaxidae												
.... *Haplotaxis gordioides*	–	–	–	–	–	–	–	–	–	–	–	–
... Tubificidae												
.... *Limnodrilus hoffmeisteri*	80	–	–	2	–	–	–	–	–	–	–	–
.... *Rhyacodrilus* sp.	8	–	–	8	5	19	–	81	1	326	40	–
.... Uid. sp.	–	–	–	–	1	–	–	–	–	–	–	–
... Naididae												
.... *Chaetogaster diastrophus*	–	32	–	–	–	–	–	–	–	–	–	–
.... *Nais elingus*	–	–	76	–	–	–	–	–	–	–	–	–
.... *Nais pseudobtusa*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Nais simplex*	272	336	–	–	–	–	–	–	–	–	–	–
.... *Orthidonais serpentina*	456	64	8	–	–	–	–	–	–	–	–	–
... Enchytraeidae												
.... *Enchytraes* sp.	–	8	4	–	–	2	–	5	1	–	–	–
... Lumbricidae												
.... *Eisenella* sp.	–	–	–	–	–	–	–	1	–	–	1	–
... Megascolecidae												
.... Uid. sp.	–	–	–	–	–	–	–	–	–	–	–	–
. Hiruninea												
.. Pharyngobdellida												
... Erpodellidae												
.... *Dina parva*	16	68	88	–	–	–	–	–	–	–	–	1
.... *Erpobdella punctata*	12	8	4	–	–	–	–	–	–	–	–	–
.. Rhynchobdellida												
... Glossiphoniidae												
.... *Glossiphonia complanata*	32	64	20	–	–	–	–	–	–	–	–	–
.... *Helobdella stagnalis*	8	12	24	–	–	–	–	–	–	–	–	–
Arthropoda												
. Crustacea												
.. Diplostraca												
... Daphnidae												
.... *Daphnia* sp. A	2,208	–	–	2	–	–	–	–	–	–	–	–
.... *Daphnia* sp. B	–	–	28	–	–	–	–	–	–	–	–	–
.. Podocopoda												
... Cypridae												
.... *Eucypris* sp.	–	–	–	–	–	–	–	5	–	–	–	–
.... *Prionocypris longiforma*	–	–	–	–	–	–	–	–	–	–	–	–
.. Amphipoda												
... Talitridae												
.... *Hyalella azteca*	84	28	16	–	–	–	–	–	–	–	–	–
.. Copepoda												
... Cyclopidae												
.... *Mesocyclops* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... Uid. sp.	92	–	–	–	–	–	–	–	–	–	–	–
... Canthocamptidae												
.... *Attheyella* sp.	–	4	–	–	–	–	–	–	–	–	–	–
. Arachnoidea												
.. Acari												
... Hydryphantidae												
.... *Wandesia* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Hygrobatidae												
.... *Atractides* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Lebertiidae												
.... *Lebertia* sp.	–	–	–	–	–	–	–	–	–	–	–	1
... Mideidae												
.... *Mideopsis* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Sperchonidae												
.... *Sperchon* sp.	–	–	–	4	4	–	3	–	–	9	–	–
... Limnesiidae												
.... *Tyrrellia* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Unionicolidae												
.... Uid. sp.	–	–	–	–	–	–	–	–	–	–	–	–
Mollusca												
. Gastropoda												
.. Basommatophora												
... Lymnaeidae												
.... *Lymnaea* sp.	8	24	–	1	–	–	–	–	–	–	3	–
... Physidae												
.... *Physa* sp.	36	72	12	3	3	–	–	–	–	–	10	–
... Planorbidae												
.... *Gyraulus* sp.	12	44	8	–	–	–	–	–	–	–	–	–
.. Mesogastropoda												
... Valvatidae												
.... *Valvata* sp.	–	4	–	–	–	–	–	–	–	–	–	–
. Pelecypoda												
.. Heterodonta												
... Sphaeriidae												
.... *Pisidium lilljeborgi*	4	–	4	3	8	1	–	5	–	2	10	1
Porifera												
. Spongillinae(?)												
.. Haplosclerina												
... Spongillidae												
.... Uid. sp.	1	1	–	–	–	–	–	–	–	–	–	–

Table 14.—Benthic-invertebrate analyses of selected stream sites—Continued

Organism	Site 5 — Mud Creek				Site 18 — Mud Creek				Site 20 — Eccles Canyon			
	7-17-79	9-20-79	7-30-80	10-16-80	7-17-79	9-20-79	7-30-80	10-16-80	7-17-79	9-20-79	7-29-80	10-16-80
Arthropoda												
. Insecta												
.. Ephemeroptera												
... Siphlonuridae												
.... *Ameletus* sp.	–	182	–	5	–	–	–	–	2	4	–	–
.... *Ameletus oregonensis*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Siphlonurus* sp.	4	–	–	–	–	–	–	–	–	–	–	–
... Heptageniidae												
.... *Cinygmula* sp. A	163	–	–	–	4	–	–	–	369	–	–	–
.... *Cinygmula* sp. B	–	282	8	178	–	–	4	–	–	748	367	273
.... *Epeorus longimenus*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Heptagenia criddlei*	–	3	–	–	13	–	–	1	–	–	–	–
.... *Heptagenia elegantula*	–	–	–	–	–	–	–	–	–	–	–	–
... *Baetidae*												
.... *Baetis bicaudatus*	–	–	–	–	–	–	–	–	–	–	201	–
.... *Baetis* sp. A	978	49	62	19	1,887	265	498	14	792	28	–	82
.... *Baetis* sp. B	–	–	–	–	–	–	–	–	–	–	23	–
... Leptophlebiidae												
.... *Paraleptophlebia debilis*	–	2	–	–	–	3	–	–	1	–	–	–
... Ephemerellidae												
.... *Ephemerella coloradensis*	132	–	1	–	–	–	–	–	37	8	36	–
.... *Ephemerella dannella* sp. B	–	–	–	–	7	–	–	–	–	–	–	–
.... *Ephemerella doddsi*	13	790	–	2	–	1	–	–	–	524	–	–
.... *Ephemerella grandis*	–	–	–	–	–	4	6	1	–	–	–	–
.... *Ephemerella inermis*	–	–	–	–	91	–	3	–	–	–	–	–
.... *Ephemerella margarita*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Ephemerella serratella* sp. A	–	–	–	100	–	–	–	–	–	–	–	3
.... *Ephemerella serratella* sp. B	–	6	–	–	–	–	–	–	–	–	–	–
... Tricorythidae												
.... *Tricorythodes minutus*	–	–	–	–	–	–	–	–	–	–	–	–
.. Odonata												
... Coenagrionidae												
.... *Argia emma*	–	–	–	–	–	–	–	–	–	–	–	–
.. Plecoptera												
... Nemouridae	–	–	–	–	1	1	–	–	–	–	–	–
.... *Amphinemoura* sp.	–	–	–	–	–	–	–	–	–	64	–	–
.... *Malenka* sp.	11	–	–	1	–	–	1	–	173	–	5	28
.... *Prostoia* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Zapada* sp.	71	12	–	3	–	–	–	1	351	220	57	4
... Capniidae												
.... *Paracapnia* sp.	–	–	–	5	–	–	–	–	–	–	–	93
.... Uid. sp.	1	21	–	–	–	11	1	1	–	28	3	–
... Leuctridae												
.... *Despaxia augusta*	–	–	–	–	–	–	–	–	13	148	8	1
... Pteronarcidae												
.... *Pteronarcella badia*	–	–	–	–	–	–	1	1	–	–	–	–
... Perlodidae												
.... *Cultus* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Isogenoides zionesis*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Isoperla fulva*	–	2	1	–	2	–	1	–	16	–	10	–
.... *Isoperla* sp. B	–	–	–	–	–	–	–	–	2	–	–	–
.... *Isoperla* sp. C	–	–	–	–	–	–	–	–	–	–	–	–
.... *Megarcys* sp.	33	2	–	2	–	–	–	–	–	16	–	1
.... Uid. sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Perlidae												
.... *Hesperoperla pacifica*	–	–	–	–	–	–	–	–	–	–	–	–
... Chloroperlidae												
.... *Alloperla* sp.	1	–	–	–	–	–	–	–	18	–	–	–
.... Uid. sp.	–	4	–	7	–	–	–	–	–	28	11	6
.. Hemiptera												
... Naucoridae												
.... *Ambrysus* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Corixidae												
.... *Cenocorixa* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Greptocorixa serrulata*	–	–	–	–	–	–	–	–	–	–	–	–
.. Coleoptera												
... Haliplidae												
.... *Brychius* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Dytiscidae												
.... *Agabus* sp. A	–	–	–	–	2	–	–	–	–	–	–	–
.... *Agabus* sp. B	–	–	–	–	1	–	–	–	–	–	–	–
.... *Hydroporus* or *Hygrotus* sp.	–	–	–	–	1	–	–	–	–	–	–	–
.... *Deronectes* sp.	–	–	–	–	–	1	–	–	–	–	–	–
.... *Oreodytes crassulus*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Oreodytes* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Oreodytes* or *Deronectes* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Hydrophilidae												
.... *Hydrobius* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Dryopidae												
.... *Helichus suteralis*	–	–	–	–	–	–	–	–	–	–	–	–
... Elmidae												
.... *Optioservus seriatus*	1	2	1	–	49	36	2	1	13	36	7	1
.. Megaloptera												
... Sialidae												
.... *Sialis* sp.	–	–	–	–	–	–	–	–	–	–	–	–

Table 14.—Benthic-invertebrate analyses of selected stream sites—Continued

Organism	Site 5 — Mud Creek—Continued				Site 18 — Mud Creek—Continued				Site 20 — Eccles Canyon—Continued			
	7-17-79	9-20-79	7-30-80	10-16-80	7-17-79	9-20-79	7-30-80	10-16-80	7-17-79	9-20-79	7-29-80	10-16-80
Arthropoda—Continued												
. Insecta—Continued												
. . Tricoptera												
. . . Rhyacophilidae												
. . . . *Rhyacophila acropedes*	–	–	–	–	–	–	–	–	5	–	6	1
. . . . *Rhyacophila angelita*	32	–	1	–	–	–	–	–	1	–	1	–
. . . . *Rhyacophila* sp. B	–	–	–	–	–	1	–	–	–	–	–	–
. . . . *Rhyacophila* sp. C	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Rhyacophila* sp. D	1	–	1	–	–	–	–	–	110	112	73	16
. . . Hydropsychidae												
. . . . *Arctopsyche grandis*	–	–	–	–	–	–	–	1	–	–	–	1
. . . . *Arctopsyche* sp.	–	–	–	–	–	2	–	–	37	60	9	–
. . . . *Symphitopsyche* sp. A	2	4	–	–	7	129	2	3	–	–	–	1
. . . Hydroptilidae												
. . . . *Neotrichia* sp.	–	–	–	–	–	–	1	–	–	–	–	–
. . . . *Ochrotrichia* sp.	–	–	–	–	56	6	1	–	1	–	–	–
. . . Brachycentridae												
. . . . *Brachycentrus americanus*	–	2	–	–	4	20	1	1	–	–	–	–
. . . . *Micrasema* sp.	–	–	–	–	–	–	–	–	–	–	–	–
. . . Lepidostomatidae												
. . . . *Lepidostoma* sp.	–	–	–	–	–	–	–	–	–	–	–	–
. . . Leptoceridae												
. . . . *Oecetis* sp.	–	–	–	–	–	–	–	–	–	–	–	–
. . . Limnephilidae												
. . . . *Amphicosmoecus canax*	3	–	–	–	2	–	–	–	–	–	–	–
. . . . *Dicosmoecus atripes*	4	–	–	1	1	–	–	–	1	–	–	–
. . . . *Ecclisomyia* sp.	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Hesperophylax* sp.	1	12	–	1	30	3	–	1	–	24	–	–
. . . . *Limnephilus* sp. A	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Neothremma* sp.	–	–	–	1	–	–	–	–	214	264	230	4
. . . . *Oligophlebodes* sp.	–	5	–	18	–	–	–	–	–	124	–	1
. . . . *Onocosmoecus* sp.	–	–	–	–	–	–	–	–	–	–	–	–
. . Diptera												
. . . Tipulidae												
. . . . *Antocha* sp.	–	1	–	–	B	53	–	2	–	–	–	–
. . . . *Dicronota* sp.	5	5	1	4	–	5	–	1	3	BB	–	5
. . . . *Erioptera* sp.	1	–	–	–	–	–	–	–	–	–	–	–
. . . . *Gonomyia* sp.	–	–	–	–	–	–	–	–	–	–	1	–
. . . . *Hesperoconopa* sp.	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Hexatoma* sp.	–	–	–	–	9	6	4	1	8	–	–	–
. . . . *Limnophila* sp.	–	–	–	–	–	–	–	1	5	12	1	–
. . . . *Limonia* sp.	–	1	–	–	–	–	–	–	–	–	–	–
. . . . *Ormosia* sp.	–	–	–	–	–	–	–	–	7	–	–	–
. . . . Pedicia sp.	–	–	–	–	–	–	–	–	–	–	1	–
. . . . *Tipula* sp. A	1	–	–	–	2	–	–	–	1	12	–	–
. . . . *Tipula* sp. B	2	–	–	–	–	–	–	–	1	–	1	–
. . . Psychodidae												
. . . . *Pericoma* sp.	–	182	–	4	–	1	–	–	–	–	–	–
. . . Dixidae												
. . . . *Oixa* sp.	–	–	–	–	–	–	–	–	2	4	–	–
. . . Simuliidae												
. . . . *Prosimulium onychodactylum*	–	–	–	–	–	–	–	–	–	–	1	–
. . . . *Prosimulium* sp. A	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Prosimulium* sp. B	–	–	–	–	–	–	–	–	6	–	–	–
. . . . *Simulium argus*	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Simulium aureum*	–	–	–	–	–	–	–	–	–	–	–	2
. . . . *Simulium pugetense*	–	–	–	–	–	–	–	–	–	–	1	–
. . . . *Simulium vittatum*	–	–	–	–	–	–	1	–	–	–	–	–
. . . . *Simulium* sp. A	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Simulium* sp. B	–	–	–	–	25	–	6	–	–	–	–	–
. . . . *Simulium* sp. C	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Simulium* sp. D	7	–	–	–	–	–	–	–	–	–	–	–
. . . . *Simulium* sp. E	–	–	–	–	–	2	–	–	–	–	–	–
. . . . *Simulium* sp. F	–	–	–	–	–	–	–	–	–	–	–	–
. . . Ptychopteridae												
. . . . *Ptycoptera* sp.	–	–	–	–	–	–	1	–	–	–	–	–
. . . Chironomidae												
. . . . *Ablabesmyia* sp. A	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Ablabesmyia* sp. B	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Brillia* sp.	3	1	–	–	–	–	–	–	–	16	–	1
. . . . *Cladotanytarsus* sp.	–	–	–	–	5	–	–	–	–	–	–	–
. . . . *Constempellina* sp. A	–	–	–	–	–	–	–	–	–	24	–	5
. . . . *Constempellina* sp. B	–	–	1	–	–	–	–	–	232	–	37	–
. . . . *Corynoneura* sp.	4	–	–	–	2	1	1	–	34	12	28	1
. . . . *Cricotopus* sp. A	–	5	–	–	–	–	–	–	–	–	15	1
. . . . *Cricotopus* sp. B	–	–	–	–	3	–	–	–	2	–	–	–
. . . . *Cricotopus* sp. C	5	–	–	–	14	4	–	–	–	–	–	–
. . . . *Oemicryptochironomus* sp.	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Oiamesa* sp.	16	1	–	–	5	4	–	2	–	–	143	–
. . . . *Oicrotendipes* sp.	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Eukiefferiella* sp. A	–	–	–	–	16	1	1	–	–	–	–	–
. . . . *Eukiefferiella* sp. B	30	–	–	–	35	3	26	–	72	9	20	1
. . . . *Eukiefferiella* sp. C	5	1	–	–	–	–	1	–	16	–	10	–
. . . . *Eukiefferiella* sp. D	–	–	1	–	35	–	16	–	1	–	–	–
. . . . *Eukiefferiella* sp. E	–	–	–	–	1	–	–	–	–	–	–	–
. . . . *Eukiefferiella* sp. F	–	1	–	–	–	5	–	1	–	–	–	–

Table 14.—Benthic-invertebrate analyses of selected stream sites—Continued

Organism	Site 5 — Mud Creek—Continued				Site 18 — Mud Creek—Continued				Site 20 — Eccles Canyon—Continued			
	7-17-79	9-20-79	7-30-80	10-16-80	7-17-79	9-20-79	7-30-80	10-16-80	7-17-79	9-20-79	7-29-80	10-16-80
Arthropoda—Continued												
. Insecta--Continued												
. . Diptera—Continued												
. . . Chironomidae—Continued												
. . . . *Heterotrissocladius changi*	–	5	–	–	–	–	–	–	–	–	–	–
. . . . *Heterotrissocladius hirtapex*	238	–	1	3	18	–	2	1	–	–	–	83
. . . . *Heterotrissocladius oliveri*	–	25	2	–	1	–	–	–	37	144	4	–
. . . . *Micropsectra* sp. A	36	26	–	–	3	9	1	–	8	76	–	4
. . . . *Micropsectra* sp. B	–	3	–	–	–	1	–	–	–	–	4	–
. . . . *Microtendipes* sp.	–	–	–	–	1	–	–	–	–	–	–	–
. . . . *Odontomesa* sp.	–	–	–	–	6	–	1	–	–	–	–	–
. . . . *Orthocladius clarkei*	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Orthocladius dorenus*	–	–	2	–	36	2	18	15	–	–	–	–
. . . . *Orthocledius obumbratus*	96	–	–	–	129	52	2	–	70	–	–	–
. . . . *Orthocladius* sp. A	1,147	–	12	1	185	1	11	18	5	–	272	–
. . . . *Orthocladius* sp. B	75	–	1	–	128	1	–	2	3	–	34	–
. . . . *Orthocledius* sp. C	380	4	–	–	–	7	–	–	–	24	46	–
. . . . *Orthocladius* sp. D	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Orthocledius* sp. E	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Paracladopelma nais*	–	1	–	–	3	–	1	–	–	–	–	–
. . . . *Pentaneura* sp.	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Phaenopsectra* sp.	–	–	–	–	4	–	–	–	1	4	–	–
. . . . *Polypedium* sp.	8	3	–	–	–	–	–	–	–	–	–	–
. . . . *Prodiamesa olivacea*	15	3	–	–	–	–	–	–	–	–	–	–
. . . . *Psectrocladius* sp. A	4	–	–	–	2	–	–	–	–	–	–	–
. . . . *Psectrocladius* sp. B	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Psectrotanypus* sp.	5	177	–	2	–	1	–	1	1	52	–	1
. . . . *Pseudodiamesa* sp. A	–	–	–	1	67	2	10	1	–	–	–	–
. . . . *Pseudodiamesa* sp. B	7	1	–	–	1	–	–	2	–	–	5	1
. . . . *Smittia* sp.	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Sympotthastia* sp.	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Synorthocladius* sp.	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Trichocladius* sp. A	10	–	–	–	21	3	2	1	72	8	41	1
. . . . *Trichocledius* sp. B	39	–	1	–	–	–	–	–	14	8	13	–
. . . . Uid. Diamesini	–	–	–	–	–	–	–	–	–	–	–	–
. . . . Uid. Tanypodine pupa	–	–	–	–	–	–	–	–	–	–	–	–
. . . . Uid. (Thienemannimyia Group)	–	1	–	–	15	13	–	–	–	–	1	–
. . . . *Zavrelimyia* sp. A	–	–	–	–	1	–	–	–	6	28	4	–
. . . . *Zavrelimyie* sp. B	–	5	–	–	–	–	–	–	–	–	–	1
. . . Ceratopogonidae												
. . . . *Bezzia* sp.	2	–	–	–	5	3	1	–	28	92	10	6
. . . . *Dasyhelea* sp.	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Forcipomyia* sp. A	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Palpomyia tibialis*	–	–	–	–	–	–	–	–	–	4	1	–
. . . Stratiomyidae												
. . . . *Caloparyphus* sp.	–	–	–	–	–	–	–	–	–	–	–	–
. . . . *Euparyphus* sp.	1	1	–	–	–	2	–	1	8	4	3	–
. . . Rhagionidae												
. . . . *Atherix variegata*	–	–	–	–	–	–	–	–	–	–	–	–
. . . Dolichopodiae												
. . . . *Campsicnemus* sp.	1	–	–	–	–	–	–	–	–	–	–	–
. . . . *Dolichopus* sp.	–	–	–	–	–	–	–	–	–	–	–	–
. . . Empididae												
. . . . *Chelifere* sp.	56	6	1	–	10	2	3	–	18	–	1	1
. . . . *Wiedemannia* sp. A	1	–	–	–	–	–	–	–	16	12	–	–
. . . . *Wiedemannia* sp. B	–	–	–	–	–	–	–	–	–	–	3	1
. . . Canaceidae												
. . . . *Canaceoides* sp.	–	–	–	–	1	–	–	–	–	–	–	–
. . . Muscidae												
. . . . *Limnophora* sp.	–	14	–	1	1	–	1	–	–	–	–	–
. . . Tabanidae												
. . . . *Tabanus* sp.	–	–	–	–	–	–	–	–	–	–	–	–
Coelenterata												
. Anthozoa												
. . Hydroida												
. . . Hydridae												
. . . . *Hydra* sp.	–	11	–	–	–	3	–	–	2	–	–	–
Platyhelminthes												
. Turbellaria												
. Tricladida												
. . . Planariidae												
. . . . *Polycelis coronata*	8	1	1	1	–	–	–	–	565	444	122	7
Nematoda												
. Enoplida												
. . Dorylaimida												
. . . Dorylaimidae												
. . . . *Alaimus* sp.	1	–	–	–	13	3	–	–	8	–	–	–
. . . . *Enoplocheilus* sp.	–	–	–	–	–	–	2	–	–	–	8	–
. . . . Uid. sp.	–	–	–	–	1	–	–	–	27	4	4	–
. . Enoplida												
. . . Uid.												
. . . . *Tobrilus* sp.	2	–	–	–	–	–	–	–	–	–	–	–

Table 14.—Benthic-invertebrate analyses of selected stream sites—Continued

Organism	Site 5 — Mud Creek—Continued				Site 18 — Mud Creek—Continued				Site 20 — Eccles Canyon—Continued			
	7-17-79	9-20-79	7-30-80	10-16-80	7-17-79	9-20-79	7-30-80	10-16-80	7-17-79	9-20-79	7-29-80	10-16-80
Annelida												
. Oligochaeta												
.. Haplotaxida												
... Haplotaxidae												
.... *Haplotaxis gordioides*	–	–	–	–	–	–	–	–	–	–	–	1
... Tubificidae												
.... *Limnodrilus hoffmaisteri*	–	–	–	–	–	–	–	–	12	–	–	–
.... *Rhyacodrilus* sp.	1	–	–	–	1	3	1	1	118	16	7	1
.... Uid. sp.	–	–	–	–	–	–	–	–	4	–	–	–
... Naididae												
.... *Chaetogaster diastrophus*	–	2	–	–	–	1	–	–	–	–	–	–
.... *Nais elingus*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Nais pseudobtusa*	3	–	–	–	–	–	–	–	–	–	–	–
.... *Nais simplex*	–	36	–	–	–	19	–	–	–	–	–	–
.... *Orthidonais serpentina*	–	1	–	–	–	1	–	–	–	–	–	–
... Enchytraeidae												
.... *Enchytraes* sp.	242	59	1	1	4	–	–	–	134	–	16	1
... Lumbricidae												
.... *Eisenella* sp.	2	–	–	1	–	–	–	–	–	–	–	–
... Megascolecidae												
.... Uid. sp.	–	–	–	–	–	–	–	–	–	–	4	–
. Hiruninea												
.. Pharyngobdellida												
... Erpodellidae												
.... *Dina parva*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Erpobdella punctata*	–	–	–	–	–	–	–	–	–	–	–	–
.. Rhynchobdellida												
... Glossiphoniidae												
.... *Glossiphonia complanata*	–	–	–	–	–	–	–	–	–	–	–	–
.... *Helobdella stagnalis*	–	–	–	–	–	–	–	–	–	–	–	–
Arthropoda												
. Crustacea												
.. Diplostraca												
... Daphnidae												
.... *Daphnia* sp. A	1	–	–	–	–	–	–	–	2	–	–	–
.... *Daphnia* sp. B	–	–	–	–	–	–	–	–	–	–	–	–
.. Podocopoda												
... Cypridae												
.... *Eucypris* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.... *Prionocypris longiforma*	–	39	–	1	–	–	–	–	2	40	–	–
.. Amphipoda												
... Talitridae												
.... *Hyalella azteca*	–	–	–	–	–	–	–	–	–	–	–	–
.. Copepoda												
... Cyclopidae												
.... *Mesocyclops* sp.	–	1	–	–	–	–	–	–	–	–	–	–
.... Uid. sp.	2	–	–	–	–	–	–	–	–	–	–	–
... Canthocamptidae												
.... *Attheyella* sp.	–	–	–	–	–	–	–	–	–	–	–	–
. Arachnoidea												
.. Acari												
... Hydryphantidae												
.... *Wandesia* sp.	–	–	–	–	–	–	–	–	–	–	2	–
... Hygrobatidae												
.... *Atractides* sp.	–	–	–	–	–	7	–	–	–	8	2	1
... Lebertiidae												
.... *Lebertia* sp.	–	1	–	–	–	–	1	–	7	8	7	1
... Mideidae												
.... *Mideopsis* sp.	–	–	–	–	–	–	–	–	2	–	–	–
... Sperchonidae												
.... *Sperchon* sp.	2	2	–	–	16	7	1	–	62	72	9	–
... Limnesiidae												
.... *Tyrrellia* sp.	–	–	–	–	–	–	–	–	–	4	–	–
... Unionicolidae												
.... Uid. sp.	–	–	–	–	–	–	–	–	–	–	–	–
Mollusca												
. Gastropoda												
.. Basommatophora												
... Lymnaeidae												
.... *Lymnaea* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Physidae												
.... *Physa* sp.	–	–	–	–	–	–	–	–	–	–	–	–
... Planorbidae												
.... *Gyraulus* sp.	–	–	–	–	–	–	–	–	–	–	–	–
.. Mesogastropoda												
... Valvatidae												
.... *Valvata* sp.	–	–	–	–	–	–	–	–	–	–	–	–
. Pelecypoda												
.. Heterodonta												
... Sphaeriidae												
.... *Pisidium lilljeborgi*	–	–	–	–	–	–	–	–	85	228	4	3
Porifera												
. Spongillinae(?)												
.. Haplosclerina												
... Spongillidae												
.... Uid. sp.	–	–	–	–	–	–	–	–	–	–	–	–

Table 14.—Benthic-invertebrate analyses of selected stream sites—Continued

Organism	Site 29 — Eccles Canyon				Site 34 — Mud Creek				Site 42 — Soldier Creek		
	7-17-79	9-29-79	7-29-80	10-16-80	7-17-79	9-20-79	7-30-80	10-16-80	7-19-79	9-18-79	7-31-80
Arthropoda											
. Insecta											
.. Ephemeroptera											
... Siphlonuridae											
.... *Ameletus* sp.	–	–	–	–	–	–	–	–	–	–	–
.... *Ameletus oregonensis*	–	–	–	–	–	–	–	–	–	–	–
.... *Siphlonurus* sp.	–	–	–	–	–	–	–	–	–	–	–
... Heptageniidae											
.... *Cinygmula* sp. A	102	–	–	–	–	–	–	–	–	–	–
.... *Cinygmula* sp. B	–	19	16	–	–	4	–	3	–	–	–
... *Epeorus longimanus*	4	–	1	–	1	–	3	–	–	–	–
.... *Heptagenia criddlei*	–	–	–	–	64	–	21	–	4	–	–
.... *Heptagenia elegantula*	–	–	–	–	–	–	–	1	–	–	–
... Baetidae											
.... *Baetis bicaudatus*	–	–	–	–	–	–	–	–	–	–	–
.... *Baetis* sp. A	1,164	4	78	198	577	60	494	5	172	1,062	1,988
.... *Baetis* sp. B	–	–	–	–	–	–	–	–	–	1	–
... Leptophlebiidae											
.... *Paraleptophlebia debilis*	–	–	–	–	–	–	–	1	–	–	–
... Ephemerellidae											
.... *Ephemerella coloradensis*	2	–	–	–	–	–	9	–	–	–	–
.... *Ephemerella dannella* sp. B	–	–	–	–	11	–	–	–	–	–	–
.... *Ephemerella doddsi*	–	23	–	1	–	–	–	–	–	–	–
.... *Ephemerella grandis*	27	1	10	4	–	32	–	3	–	–	–
.... *Ephemerella inermis*	–	–	–	–	1	–	2	–	–	–	–
.... *Ephemerella margarita*	–	–	–	–	1	–	–	–	–	–	–
.... *Ephemerella serratella* sp. A	1	–	–	2	–	–	2	–	–	–	–
.... *Ephemerella serratella* sp. B	–	–	–	–	–	24	–	41	–	–	–
... Tricorythidae											
.... *Tricorythodes minutus*	–	–	1	–	1	–	–	–	–	–	–
.. Odonata											
... Coenagrionidae											
.... *Argia emma*	–	–	–	–	–	–	–	–	–	1	–
.. Plecoptera											
... Nemouridae	–	–	–	–	–	–	–	–	–	–	–
.... *Amphinemoura* sp.	–	–	–	–	–	–	–	–	–	–	–
.... *Malenka* sp.	–	–	–	4	–	–	1	1	–	–	–
.... *Prostoia* sp.	–	–	–	11	–	–	–	1	–	–	–
.... *Zapada* sp.	19	36	–	4	–	–	–	–	–	–	–
... Capniidae											
.... *Paracapnia* sp.	–	–	–	3	–	–	–	–	–	–	–
.... Uid. sp.	1	13	–	1	4	1	2	8	8	12	–
... Leuctridae											
.... *Despaxia augusta*	–	–	–	–	–	–	–	–	–	–	–
... Pteronarcidae											
.... *Pteronarcella badia*	–	–	–	–	2	–	–	–	–	–	–
... Perlodidae											
.... *Cultus* sp.	–	–	–	1	–	–	–	1	–	–	–
.... *Isogenoides zionesis*	12	–	–	–	–	–	–	–	–	–	–
.... *Isoperla fulva*	1	–	3	–	–	–	2	–	–	–	–
.... *Isoperla* sp. B	–	–	–	–	–	–	–	2	–	–	–
.... *Isoperla* sp. C	–	–	–	–	–	–	–	–	–	–	–
.... *Megarcys* sp.	–	–	–	1	–	–	–	–	–	–	–
.... Uid. sp.	–	–	–	–	–	4	3	–	–	1	–
... Perlidae											
.... *Hesperoperla pacifica*	1	–	–	–	–	–	–	–	–	–	–
... Chloroperlidae											
.... *Alloperla* sp.	1	–	–	–	–	–	–	–	–	–	–
.... Uid. sp.	–	–	–	–	–	–	–	–	–	–	–
.. Hemiptera											
... Naucoridae											
.... *Ambrysus* sp.	–	–	–	–	–	–	–	–	–	–	–
... Corixidae											
.... *Cenocorixa* sp.	–	–	–	–	–	4	–	1	–	–	–
.... *Graptocorixa serrulata*	–	–	–	–	–	–	–	–	–	–	–
.. Coleoptera											
... Haliplidae											
.... *Brychius* sp.	–	–	–	–	–	–	–	–	–	–	–
... Dytiscidae											
.... *Agabus* sp. A	–	–	–	–	2	–	2	–	32	–	8
... *Agabus* sp. B	–	–	–	–	–	–	–	–	–	–	–
.... *Hydroporus* or *Hygrotus* sp.	2	–	–	–	–	–	–	–	48	–	–
.... *Deronectes* sp.	–	–	–	–	–	–	–	–	–	–	–
.... *Oreodytes crassulus*	–	–	–	–	–	–	–	1	–	–	–
.... *Oreodytes* sp.	–	–	–	–	10	4	1	–	–	–	–
.... *Oreodytes* or *Deronectes* sp.	–	–	–	–	–	–	–	–	–	–	–
... Hydrophilidae											
.... *Hydrobius* sp.	1	–	–	–	–	–	1	–	–	–	–
... Dryopidae											
.... *Helichus suteralis*	–	–	–	–	–	–	–	–	–	–	–
... Elmidae											
.... *Optioservus seriatus*	3	2	–	1	299	672	70	30	–	1	–
.. Megaloptera											
... Sialidae											
.... *Sialis* sp.	–	–	–	–	–	–	–	–	–	–	–

Table 14.–Benthic-invertebrate analyses of selected stream sites–Continued

Organism	Site 29 – Eccles Canyon–Continued				Site 34 – Mud Creek–Continued				Site 42 – Soldier Creek–Continued		
	7-17-79	9-29-79	7-29-80	10-16-80	7-17-79	9-20-79	7-30-80	10-16-80	7-19-79	9-18-79	7-31-80
Arthropoda–Continued											
. Insecta–Continued											
. . Tricoptera											
. . . Rhyacophilidae											
. . . . *Rhyacophila acropedas*	4	–	5	6	–	–	–	–	–	–	–
. . . . *Rhyacophila angelita*	6	–	3	–	–	–	–	–	–	–	–
. . . . *Rhyacophila* sp. B	–	–	–	–	–	–	–	–	–	–	–
. . . . *Rhyacophila* sp. C	1	–	–	–	–	–	–	–	–	–	–
. . . . *Rhyacophila* sp. D	1	10	5	1	–	–	2	–	–	–	–
. . . Hydropsychidae											
. . . . *Arctopsyche grandis*	–	–	–	1	–	–	–	–	–	–	–
. . . . *Arctopsyche* sp.	–	–	–	–	–	–	–	–	–	–	–
. . . . *Symphitopsyche* sp. A	1	11	–	5	13	124	37	24	8	221	308
. . . Hydroptilidae											
. . . . *Neotrichia* sp.	–	–	–	–	–	–	–	–	–	–	–
. . . . *Ochrotrichia* sp.	2	2	6	–	56	8	6	–	–	1	–
. . . Brachycentridae											
. . . . *Brachycentrus americanus*	1	37	2	2	10	36	24	12	–	–	–
. . . . *Micrasema* sp.	–	–	–	3	–	–	–	–	–	–	–
. . . Lepidostomatidae											
. . . . *Lepidostoma* sp.	–	–	–	–	–	–	–	–	–	–	–
. . . Leptoceridae											
. . . . *Oecetis* sp.	–	–	–	–	–	–	–	–	–	–	–
. . . Limnephilidae											
. . . . *Amphicosmoecus canax*	1	–	–	–	2	–	–	–	–	–	–
. . . . *Dicosmoecus atripes*	1	–	1	–	1	–	–	–	–	–	–
. . . . *Ecclisomyia* sp.	1	–	–	–	–	–	–	–	–	–	–
. . . . *Hesperophylax* sp.	–	15	–	1	–	–	–	3	–	3	–
. . . . *Limnephilus* sp. A	–	–	–	–	–	–	–	–	–	–	–
. . . . *Neothramma* sp.	–	1	–	–	–	4	–	–	–	–	–
. . . . *Oligophlebodes* sp.	–	1	–	–	–	–	–	–	–	–	–
. . . . *Onocosmoecus* sp.	–	–	–	–	–	–	–	–	–	–	–
. . Diptera											
. . . Tipulidae											
. . . . *Antocha* sp.	–	–	–	1	–	–	–	–	–	–	–
. . . . *Dicranota* sp.	–	1	–	1	–	–	–	1	–	–	–
. . . . *Erioptera* sp.	–	–	–	–	–	–	–	–	–	2	–
. . . . *Gonomyia* sp.	–	–	–	–	–	–	–	–	–	–	–
. . . . *Hesperoconopa* sp.	1	–	–	–	–	–	–	–	–	–	–
. . . . *Hexatoma* sp.	1	–	–	–	16	36	4	3	–	–	–
. . . . *Limnophila* sp.	1	2	–	–	–	20	–	5	–	–	–
. . . . *Limonia* sp.	–	–	–	–	–	–	–	–	–	–	–
. . . . *Ormosia* sp.	–	–	–	–	–	–	–	–	–	–	–
. . . . *Padicia* sp.	–	–	–	–	–	–	–	–	–	–	–
. . . . *Tipula* sp. A	–	–	–	1	3	–	2	–	–	–	–
. . . . *Tipula* sp. B	–	–	–	–	–	–	1	–	–	–	–
. . . Psychodidae											
. . . . *Pericoma* sp.	–	–	–	–	–	–	–	–	–	–	–
. . . Dixidae											
. . . . *Dixa* sp.	–	–	–	–	–	–	–	–	–	–	–
. . . Simuliidae											
. . . . *Prosimulium onychodactylum*	–	–	–	–	–	–	–	–	–	–	–
. . . . *Prosimulium* sp. A	–	–	–	–	–	–	–	–	–	–	–
. . . . *Prosimulium* sp. B	1	–	–	–	–	–	–	–	–	–	–
. . . . *Simulium argus*	–	–	–	–	–	–	–	–	–	–	540
. . . . *Simulium aureum*	–	–	–	–	–	–	–	–	–	–	–
. . . . *Simulium pugetanse*	–	–	–	–	–	–	–	–	–	–	–
. . . . *Simulium vittatum*	–	–	–	–	–	–	–	–	–	–	–
. . . . *Simulium* sp. A	–	–	–	–	154	–	–	–	4	–	–
. . . . *Simulium* sp. B	20	–	–	–	2	–	306	–	4	–	1
. . . . *Simulium* sp. C	–	–	–	–	–	–	–	–	–	–	–
. . . . *Simulium* sp. D	–	–	–	–	472	8	–	–	–	–	–
. . . . *Simulium* sp. E	–	–	–	–	–	52	–	–	–	9	–
. . . . *Simulium* sp. F	–	–	–	–	–	–	–	–	–	–	–
. . . Ptychopteridae											
. . . . *Ptycoptera* sp.	–	–	–	–	–	–	–	–	–	–	–
. . . Chironomidae											
. . . . *Ablabesmyia* sp. A	–	–	–	–	–	–	–	–	–	–	–
. . . . *Ablabesmyia* sp. B	–	–	–	–	–	–	–	–	–	–	–
. . . . *Brillia* sp.	1	–	1	1	–	–	–	–	–	–	–
. . . . *Cladotanytarsus* sp.	–	–	–	–	–	–	–	–	–	–	–
. . . . *Constempellina* sp. A	–	2	–	–	–	–	–	–	–	–	–
. . . . *Constempellina* sp. B	3	–	–	–	–	–	–	–	–	–	–
. . . . *Corynoneura* sp.	3	–	–	–	11	4	–	–	–	9	–
. . . . *Cricotopus* sp. A	–	–	–	–	41	12	–	–	–	–	–
. . . . *Cricotopus* sp. B	6	–	–	–	–	–	–	–	–	–	–
. . . . *Cricotopus* sp. C	26	–	–	3	31	–	3	3	–	–	–
. . . . *Demicryptochironomus* sp.	–	–	–	–	–	–	–	–	–	–	–
. . . . *Diamesa* sp.	1	423	8	–	–	–	–	–	–	–	–
. . . . *Dicrotendipes* sp.	–	–	–	–	–	–	–	–	–	–	–
. . . . *Eukiefferiella* sp. A	5	–	–	–	19	8	–	–	–	–	–
. . . . *Eukiefferiella* sp. B	11	–	78	1	562	8	65	1	–	2	–
. . . . *Eukiefferiella* sp. C	–	–	–	–	40	12	1	–	–	–	–
. . . . *Eukiefferiella* sp. D	16	–	–	–	–	20	–	–	–	–	–
. . . . *Eukiefferiella* sp. E	–	–	–	–	–	–	–	–	–	–	–
. . . . *Eukiefferiella* sp. F	–	–	–	–	–	–	–	–	–	–	–

Table 14.—Benthic-invertebrate analyses of selected stream sites—Continued

Organism	Site 29 – Eccles Canyon—Continued				Site 34 – Mud Creek—Continued				Site 42 – Soldier Creek—Continued		
	7-17-79	9-29-79	7-29-80	10-16-80	7-17-79	9-20-79	7-30-80	10-16-80	7-19-79	9-18-79	7-31-80
Arthropoda—Continued											
. Insecta—Continued											
. . Diptera—Continued											
. . . Chironomidae—Continued											
. . . . *Heterotrissocladius changi*	–	–	–	–	–	–	–	1	–	–	–
. . . . *Heterotrissocladius hirtapex*	–	3	4	–	306	16	74	1	20	11	4
. . . . *Heterotrissocladius oliveri*	13	2	3	–	–	–	2	–	–	2	–
. . . . *Micropsectra* sp. A	21	2	23	–	9	8	3	–	64	1	–
. . . . *Micropsectra* sp. B	–	2	–	–	–	8	–	1	–	–	–
. . . . *Microtendipes* sp.	–	–	–	–	5	–	–	–	–	–	–
. . . . *Odontomesa* sp.	–	–	–	–	–	–	14	1	–	–	–
. . . . *Orthocladius clarkei*	–	9	–	–	–	–	–	–	–	–	–
. . . . *Orthocladius dorenus*	–	17	91	1	46	40	8	1	–	–	–
. . . . *Orthocladius obumbratus*	217	1	–	–	176	652	–	17	–	–	–
. . . . *Orthocladius* sp. A	143	85	47	–	70	300	-	2	–	–	–
. . . . *Orthocladius* sp. B	33	171	–	2	509	–	6	–	–	–	–
. . . . *Orthocladius* sp. C	12	–	6	–	–	–	–	–	–	–	–
. . . . *Orthocladius* sp. D	–	–	–	–	–	–	–	–	–	–	–
. . . . *Orthocladius* sp. E	–	–	–	–	–	–	–	–	–	–	–
. . . . *Paracladopelma nais*	–	–	–	–	–	–	1	–	8	–	–
. . . . *Pentaneura* sp.	–	–	–	–	–	–	–	–	–	–	4
. . . . *Phaenopsectra* sp.	–	–	2	–	44	24	–	1	48	3	8
. . . . *Polypedium* sp.	1	–	–	–	1	–	1	–	–	–	–
. . . . *Prodiamesa olivacea*	–	–	–	–	–	–	–	–	–	–	–
. . . . *Psectrocladius* sp. A	–	–	–	–	3	4	–	–	–	–	–
. . . . *Psectrocladius* sp. B	–	–	–	–	–	–	1	–	–	–	–
. . . . *Psec*. *otanypus* sp.	–	3	–	1	–	–	1	1	4	–	–
. . . . *Pseudodiamesa* sp. A	13	4	14	1	17	4	5	–	–	–	–
. . . . *Pseudodiamesa* sp. B	1	2	–	2	–	–	–	–	–	-	–
. . . . *Smittia* sp.	–	–	–	–	34	–	–	1	–	–	–
. . . . *Sympotthastia* sp.	–	–	–	–	–	–	–	–	–	–	–
. . . . *Synorthocladius* sp.	–	–	–	1	–	–	–	–	–	–	–
. . . . *Trichocladius* sp. A	9	2	6	–	177	44	59	3	4	39	–
. . . . *Trichocladius* sp. B	4	4	–	–	–	–	–	–	–	–	–
. . . . Uid. Diamesini	–	–	–	–	–	–	–	–	–	–	–
. . . . Uid. Tanypodine pupa	–	–	–	–	–	–	–	–	–	–	–
. . . . Uid. (Thienemannimyia Group)	–	4	–	1	38	232	12	22	108	8	80
. . . . *Zavrelimyia* sp. A	2	–	–	–	–	–	–	–	–	4	–
. . . . *Zavrelimyia* sp. B	–	–	–	–	–	–	–	–	–	–	–
. . . Ceratopogonidae											
. . . . *Bezzia* sp.	6	5	7	2	16	44	1	4	–	–	–
. . . . *Dasyhelea* sp.	–	–	–	–	–	–	–	–	–	–	–
. . . . *Forcipomyia* sp. A	–	–	–	–	1	–	–	–	–	–	–
. . . . *Palpomyia tibialis*	–	–	–	–	–	–	–	–	–	–	–
. . . Stratiomyidae											
. . . . *Caloparyphus* sp.	–	–	–	–	–	–	1	–	–	–	–
. . . . *Euparyphus* sp.	1	1	1	2	–	4	–	–	–	1	–
. . . Rhagionidae											
. . . . *Atherix variegata*	–	–	–	–	–	–	–	–	–	–	–
. . . Dolichopodiae											
. . . . *Campsicnemus* sp.	–	–	–	–	–	–	–	–	–	–	–
. . . . *Dolichopus* sp.	–	–	–	–	–	–	–	–	–	–	–
. . . Empididae											
. . . . *Chelifera* sp.	77	10	12	1	10	4	5	2	8	1	12
. . . . *Wiedemannia* sp. A	1	3	–	–	–	–	–	–	–	–	–
. . . . *Wiedemannia* sp. B	–	–	–	1	–	–	–	1	–	–	–
. . . Canaceidae											
. . . . *Canaceoides* sp.	–	–	–	–	–	–	–	–	–	–	–
. . . Muscidae											
. . . . *Limnophora* sp.	–	4	3	–	1	4	–	–	–	–	–
. . . Tabanidae											
. . . . *Tabanus* sp.	–	–	–	–	–	–	–	1	–	1	–
Coelenterata											
. Anthozoa											
. . Hydroida											
. . . Hydridae											
. . . . *Hydra* sp.	–	–	21	–	–	4	–	–	–	–	–
Platyhelminthes											
. Turbellaria											
. . Tricladida											
. . . Planariidae											
. . . . *Polycelis coronata*	2	5	–	1	–	–	–	–	–	–	–
Nematoda											
. Enoplida											
. . Dorylaimida											
. . . Dorylaimidae											
. . . . *Alaimus* sp.	1	–	–	–	4	4	–	–	–	–	–
. . . . *Enoplocheilus* sp.	–	–	–	–	–	–	–	–	–	–	–
. . . . Uid. sp.	2	1	–	–	–	–	1	–	–	–	–
. . Enoplida											
. . . Uid.											
. . . . *Tobrilus* sp.	–	–	–	–	–	4	–	–	–	–	–

Table 14.—Benthic-invertebrate analyses of selected stream sites—Continued

Organism	Site 29 — Eccles Canyon—Continued				Site 34 — Mud Creek—Continued				Site 42 — Soldier Creek—Continued		
	7-17-79	9-29-79	7-29-80	10-16-80	7-17-79	9-20-79	7-30-80	10-16-80	7-19-79	9-18-79	7-31-80
Annelida											
. Oligochaeta											
.. Haplotaxida											
... Haplotaxidae											
.... *Haplotaxis gordioides*	–	–	–	–	–	–	–	–	–	–	–
... Tubificidae											
.... *Limnodrilus hoffmeisteri*	2	–	–	–	–	–	–	–	–	–	–
.... *Rhyacodrilus* sp.	10	6	–	1	134	60	–	5	–	1	–
.... Uid. sp.	–	–	–	–	–	–	–	–	–	6	12
... Naididae											
.... *Chaetogaster diastrophus*	–	–	–	–	–	–	–	–	–	–	–
.... *Nais elingus*	–	–	–	–	–	–	–	–	–	–	–
.... *Nais pseudobtusa*	–	–	–	–	6	–	–	–	–	–	–
.... *Nais simplex*	–	–	–	1	–	56	–	5	–	–	–
.... *Orthidonais serpentina*	–	–	–	–	–	–	–	–	–	–	–
... Enchytraeidae											
.... *Enchytraes* sp.	12	2	–	3	3	–	–	–	4	2	8
... Lumbricidae											
.... *Eisenella* sp.	–	–	–	1	–	–	–	–	–	1	4
... Megascolecidae											
.... Uid. sp.	–	–	–	–	–	–	–	–	–	–	–
. Hiruninea											
.. Pharyngobdellida											
... Erpodellidae											
.... *Dina parva*	–	–	–	–	–	–	–	–	–	–	–
.... *Erpobdella punctata*	–	–	–	–	–	–	–	–	–	–	–
.. Rhynchobdellida											
... Glossiphoniidae											
.... *Glossiphonia complanata*	–	–	–	–	–	–	–	–	–	–	–
.... *Helobdella stagnalis*	–	–	–	–	–	–	–	–	–	–	–
Arthropoda											
. Crustacea											
.. Diplostraca											
... Daphnidae											
.... *Daphnia* sp. A	–	–	–	–	–	–	–	–	–	–	–
.... *Daphnia* sp. B	–	–	–	–	–	–	–	–	–	–	–
. Podocopoda											
... Cypridae											
.... *Eucypris* sp.	–	–	–	–	–	4	–	–	–	1	–
.... *Prionocypris longiforma*	–	1	–	–	2	–	–	–	–	–	–
.. Amphipoda											
... Talitridae											
.... *Hyalella azteca*	–	–	–	–	–	–	–	–	–	–	–
.. Copepoda											
... Cyclopidae											
.... *Mesocyclops* sp.	–	–	–	–	–	–	–	1	–	–	–
.... Uid. sp.	–	–	–	–	–	–	–	–	–	–	–
... Canthocamptidae											
.... *Attheyella* sp.	–	1	–	–	–	–	–	–	–	–	–
. Arachnoidea											
.. Acari											
... Hydryphantidae											
.... *Wandesia* sp.	–	–	1	–	–	–	–	–	–	–	–
... Hygrobatidae											
.... *Atractides* sp.	–	–	–	–	–	–	–	–	–	–	–
... Lebertiidae											
.... *Lebertia* sp.	–	7	–	–	–	–	–	–	–	–	–
... Mideidae											
.... *Mideopsis* sp.	–	–	–	–	–	–	–	–	–	–	–
... Sperchonidae											
.... *Sperchon* sp.	12	2	–	–	24	4	–	1	–	4	4
... Limnesiidae											
.... *Tyrrellia* sp.	–	–	–	–	–	–	–	–	–	–	–
... Unionicolidae											
.... Uid. sp.	–	–	2	–	–	–	–	–	–	–	–
Mollusca											
. Gastropoda											
.. Basommatophora											
... Lymnaeidae											
.... *Lymnaea* sp.	–	–	–	–	3	12	–	3	–	–	–
... Physidae											
.... *Physa* sp.	–	–	–	–	–	20	–	2	–	–	–
... Planorbidae											
.... *Gyraulus* sp.	–	–	–	–	1	–	–	–	–	–	–
.. Mesogastropoda											
... Valvatidae											
.... *Valvata* sp.	–	–	–	–	–	–	–	–	–	–	–
. Pelecypoda											
.. Heterodonta											
... Sphaeriidae											
.... *Pisidium lilljeborgi*	1	–	–	–	–	–	–	–	–	–	–
Porifera											
. Spongillinae(?)											
.. Haplosclerina											
... Spongillidae											
.... Uid. sp.	–	–	–	–	–	–	–	–	–	–	–

Table 14.—Benthic-invertebrate analyses of selected stream sites—Continued

Organism	Site 51 — Pine Canyon			Site 57 — Soldier Creek			Site 59 — Soldier Creek		
	7-19-79	9-18-79	7-31-80	7-19-79	9-18-79	7-31-80	7-19-79	9-18-79	7-31-80
Arthropoda									
. Insecta									
. . Ephemeroptera									
. . . Siphlonuridae									
. . . . *Ameletus* sp.	–	–	–	–	–	–	–	–	–
. . . . *Ameletus oregonensis*	–	–	1	–	–	–	–	–	–
. . . . *Siphlonurus* sp.	–	–	–	–	–	–	–	–	–
. . . Heptageniidae									
. . . . *Cinygmula* sp. A	–	–	–	–	–	–	–	–	–
. . . . *Cinygmula* sp. B	–	–	–	–	1	–	–	–	–
. . . . *Epeorus longimanus*	–	–	–	–	–	–	–	–	–
. . . . *Heptagenia criddlei*	3	–	26	–	–	2	–	1	14
. . . . *Heptagenia elegantula*	–	–	–	–	–	–	–	–	–
. . . Baetidae									
. . . . *Baetis bicaudatus*	–	–	–	–	–	–	–	–	–
. . . . *Baetis* sp. A	301	788	708	1,045	252	62	810	723	177
. . . . *Baetis* sp. B	–	–	–	–	–	–	–	–	–
. . . Leptophlebiidae									
. . . . *Paraleptophlebia debilis*	–	–	–	–	–	–	–	–	–
. . . Ephemerellidae									
. . . . *Ephemerella coloradensis*	–	–	–	–	–	–	–	–	–
. . . . *Ephemerella dannella* sp. B	–	–	–	–	–	–	–	–	–
. . . . *Ephemerella doddsi*	–	–	–	–	–	–	–	–	–
. . . . *Ephemerella grandis*	–	–	–	–	–	–	–	–	–
. . . . *Ephemerella inermis*	–	–	–	–	–	–	–	–	–
. . . . *Ephemerella margarita*	–	–	–	–	–	–	–	–	–
. . . . *Ephemerella serratella* sp. A	–	–	–	–	–	–	–	–	–
. . . . *Ephemerella serratella* sp. B	–	1	–	–	–	–	–	–	–
. . . Tricorythidae									
. . . . *Tricorythodes minutus*	–	–	–	–	–	–	–	–	–
. . Odonata									
. . . Coenagrionidae									
. . . . *Argia emma*	–	–	–	–	–	–	–	–	–
. . Plecoptera									
. . . Nemouridae	–	–	–	–	–	–	–	–	–
. . . . *Amphinemoura* sp.	–	–	–	–	–	–	–	–	–
. . . . *Malenka* sp.	–	–	4	–	–	–	8	–	1
. . . . *Prostoia* sp.	–	–	–	–	–	–	–	–	–
. . . . *Zapada* sp.	–	–	–	–	–	–	–	7	–
. . . Capniidae									
. . . . *Paracapnia* sp.	–	–	–	–	–	–	–	–	–
. . . . Uid. sp.	16	38	14	1	3	1	1	6	4
. . . Leuctridae									
. . . . *Despexia augusta*	–	1	–	–	–	–	–	–	–
. . . Pteronarcidae									
. . . . *Pteronarcella badia*	–	–	–	–	–	–	–	–	–
. . . Perlodidae									
. . . . *Cultus* sp.	–	–	–	–	–	–	–	–	–
. . . . *Isogenoides zionesis*	–	–	–	–	–	–	–	–	–
. . . . *Isoperla fulva*	–	–	20	–	–	–	–	–	–
. . . . *Isoperla* sp. B	–	–	–	–	–	–	–	–	–
. . . . *Isoperla* sp. C	–	–	–	–	–	–	–	–	–
. . . . *Megarcys* sp.	–	–	–	–	–	–	–	–	–
. . . . Uid. sp.	–	6	–	–	–	–	–	–	1
. . . Perlidae									
. . . . *Hesperoperla pacifica*	–	–	–	–	–	–	–	–	–
. . . Chloroperlidae									
. . . . *Alloperla* sp.	–	–	–	–	–	–	–	–	–
. . . . Uid. sp.	–	–	–	–	–	–	–	–	–
. . Hemiptera									
. . . Naucoridae									
. . . . *Ambrysus* sp.	–	–	–	–	–	–	–	–	–
. . . Corixidae									
. . . . *Cenocorixa* sp.	–	–	–	–	–	–	–	–	–
. . . . *Graptocorixa serrulata*	–	–	–	–	–	–	–	–	–
. . Coleoptera									
. . . Haliplidae									
. . . . *Brychius* sp.	–	–	–	–	–	–	–	–	–
. . . Dytiscidae									
. . . . *Agabus* sp. A	3	1	5	7	–	2	8	–	15
. . . . *Agabus* sp. B	–	–	–	–	–	–	–	–	–
. . . . *Hydroporus* or *Hygrotus* sp.	–	–	1	4	–	–	4	–	–
. . . . *Deronectes* sp.	–	–	–	–	–	–	1	–	–
. . . . *Oreodytes crassulus*	–	–	–	–	–	–	–	–	–
. . . . *Oreodytes* sp.	–	–	–	–	–	–	–	–	–
. . . . *Oreodytes* or *Deronectes* sp.	–	–	–	–	–	–	–	–	3
. . . Hydrophilidae									
. . . . *Hydrobius* sp.	–	–	–	–	–	–	–	–	–
. . . Dryopidae									
. . . . *Helichus suterelis*	–	–	–	–	–	–	–	–	–
. . . Elmidae									
. . . . *Optioservus seriatus*	–	32	–	–	9	–	–	2	1
. . Megaloptera									
. . . Sialidae									
. . . . *Sialis* sp.	–	–	–	–	–	–	–	–	–

Table 14.–Benthic-invertebrate analyses of selected stream sites–Continued

Organism	Site 51 – Pine Canyon–Continued			Site 57 – Soldier Creek–Continued			Site 59 – Soldier Creek–Continued		
	7-19-79	9-18-79	7-31-80	7-19-79	9-18-79	7-31-80	7-19-79	9-18-79	7-31-80
Arthropoda–Continued									
. Insecta–Continued									
.. Tricoptera									
... Rhyacophilidae									
.... *Rhyacophila acropedes*	–	–	–	–	–	–	–	–	–
.... *Rhyacophila angelita*	–	–	–	–	–	–	–	–	–
.... *Rhyacophila* sp. B	–	–	–	–	–	–	–	–	–
.... *Rhyacophila* sp. C	–	–	–	–	–	–	–	–	–
.... *Rhyacophila* sp. D	–	–	–	–	–	–	–	–	–
... Hydropsychidae									
.... *Arctopsyche grandis*	–	–	–	–	–	–	–	–	–
.... *Arctopsyche* sp.	–	–	–	–	–	–	–	–	–
.... *Symphitopsyche* sp. A	–	61	15	5	11	5	23	17	15
... Hydroptilidae									
.... *Neotrichia* sp.	–	–	–	–	–	–	–	–	–
.... *Ochrotrichia* sp.	–	–	–	–	–	–	1	1	1
... Brachycentridae									
.... *Brachycentrus americanus*	–	–	–	–	–	–	–	4	–
.... *Micrasema* sp.	–	–	–	–	–	–	–	–	–
... Lepidostomatidae									
.... *Lepidostoma* sp.	–	–	–	–	–	–	–	–	–
... Leptoceridae									
.... *Oecetis* sp.	–	–	–	–	–	–	–	–	–
... Limnephilidae									
.... *Amphicosmoecus canax*	–	–	–	–	–	–	–	–	–
.... *Dicosmoecus atripes*	–	–	–	–	–	–	–	–	–
.... *Ecclisomyia* sp.	–	–	–	–	–	–	–	–	–
.... *Hesperophylax* sp.	–	1	2	–	–	–	–	–	–
.... *Limnephilus* sp. A	–	–	–	–	–	–	–	–	–
.... *Neothremma* sp.	–	–	–	–	–	–	–	–	1
.... *Oligophlebodes* sp.	–	–	–	–	–	–	–	–	–
.... *Onocosmoecus* sp.	–	–	–	–	–	–	–	–	–
.. Diptera									
... Tipulidae									
.... *Antocha* sp.	–	–	–	–	–	–	–	–	–
.... *Dicranota* sp.	–	–	3	–	–	–	–	–	–
.... *Erioptera* sp.	–	–	–	–	–	–	2	–	–
.... *Gonomyia* sp.	–	–	–	–	–	–	–	–	–
.... *Hesperoconopa* sp.	–	–	–	–	–	–	–	–	–
.... *Hexatoma* sp.	–	–	–	–	–	–	–	–	–
.... *Limnophila* sp.	–	–	–	–	–	–	–	–	–
.... *Limonia* sp.	–	–	–	–	–	–	–	–	–
.... *Ormosia* sp.	–	–	–	–	–	–	–	–	–
.... *Pedicia* sp.	–	–	–	–	–	–	–	–	–
.... *Tipula* sp. A	–	–	1	–	–	–	–	–	1
.... *Tipula* sp. B	–	–	–	–	–	–	–	–	–
... Psychodidae									
.... *Pericoma* sp.	–	–	–	–	–	–	–	–	–
... Dixidae									
.... *Dixa* sp.	–	–	–	–	–	–	–	–	–
... Simuliidae									
.... *Prosimulium onychodactylum*	–	–	–	–	–	–	–	–	–
.... *Prosimulium* sp. A	–	–	–	–	–	–	–	–	–
.... *Prosimulium* sp. B	–	–	–	–	–	–	–	–	–
.... *Simulium argus*	–	–	–	–	–	14	–	–	5
.... *Simulium aureum*	–	–	–	–	–	–	–	–	–
.... *Simulium pugetense*	–	–	–	–	–	–	–	–	–
.... *Simulium vittatum*	–	–	–	–	–	17	–	–	1
.... *Simulium* sp. A	–	2	–	–	–	–	–	–	–
.... *Simulium* sp. B	15	–	–	27	–	–	6	–	–
.... *Simulium* sp. C	–	–	–	–	–	–	–	–	–
.... *Simulium* sp. D	–	–	–	–	–	–	–	–	–
.... *Simulium* sp. E	–	38	–	–	1	–	–	–	–
.... *Simulium* sp. F	–	–	–	–	–	–	–	–	–
... Ptychopteridae									
.... *Ptycoptera* sp.	–	–	–	–	–	–	–	–	–
... Chironomidae									
.... *Ablabesmyia* sp. A	–	–	–	–	–	–	–	–	–
.... *Ablabesmyia* sp. B	–	–	–	–	–	–	–	–	–
.... *Brillia* sp.	–	–	–	–	–	–	2	–	–
.... *Cladotanytarsus* sp.	–	–	–	–	–	–	–	–	–
.... *Constempellina* sp. A	–	–	–	–	–	–	–	–	–
.... *Constempellina* sp. B	–	–	–	–	–	–	–	–	1
.... *Corynoneura* sp.	6	–	9	1	–	–	–	–	1
.... *Cricotopus* sp. A	–	–	–	–	–	–	–	–	–
.... *Cricotopus* sp. B	–	–	4	1	–	6	–	–	6
.... *Cricotopus* sp. C	1	–	2	–	–	–	1	–	–
.... *Demicryptochironomus* sp.	–	–	–	–	–	–	–	–	–
.... *Diamesa* sp.	–	–	1	–	–	–	1	1	–
.... *Oicrotendipes* sp.	–	–	–	–	–	–	–	–	–
.... *Eukiefferiella* sp. A	–	–	–	1	–	–	–	–	–
.... *Eukiefferiella* sp. B	7	–	2	1	–	–	4	–	–
.... *Eukiefferiella* sp. C	–	1	–	–	1	–	–	–	–
.... *Eukiefferiella* sp. D	–	1	–	–	1	–	–	–	–
.... *Eukiefferiella* sp. E	–	–	–	–	–	–	–	–	–
.... *Eukiefferiella* sp. F	–	–	–	–	–	–	–	–	–

Table 14.—Benthic-invertebrate analyses of selected stream sites—Continued

Organism	Site 51 — Pine Canyon—Continued			Site 57 — Soldier Creek—Continued			Site 59 — Soldier Creek—Continued		
	7-19-79	9-18-79	7-31-80	7-19-79	9-18-79	7-31-80	7-19-79	9-18-79	7-31-80
Arthropoda—Continued									
. Insecta—Continued									
.. Diptera—Continued									
... Chironomidae—Continued									
.... *Heterotrissocladius changi*	–	–	–	–	–	–	–	–	–
.... *Heterotrissocladius hirtapex*	–	4	17	1	3	1	44	7	7
.... *Heterotrissocladius oliveri*	3	–	8	–	–	–	–	2	–
.... *Micropsectra* sp. A	2	–	6	9	–	–	38	–	5
.... *Micropsectra* sp. B	–	–	–	–	–	–	–	2	–
.... *Microtendipes* sp.	–	–	–	–	–	–	29	1	–
.... *Odontomesa* sp.	–	–	–	–	–	–	1	–	–
.... *Orthocladius clarkei*	–	–	–	–	–	–	–	–	–
.... *Orthocladius dorenus*	–	–	–	–	–	–	–	7	–
.... *Orthocladius obumbratus*	–	2	–	4	4	1	16	1	1
.... *Orthocladius* sp. A	–	3	–	1	–	1	–	3	–
.... *Orthocladius* sp. B	–	–	3	–	1	–	1	3	–
.... *Orthocladius* sp. C	–	–	–	–	–	–	1	–	–
.... *Orthocladius* sp. D	–	–	–	–	–	–	–	–	2
.... *Orthocladius* sp. E	–	–	–	–	–	–	–	–	–
.... *Paracladopelma nais*	6	–	5	7	–	–	18	–	–
.... *Pentaneura* sp.	–	–	–	–	–	–	–	–	–
.... *Phaenopsectra* sp.	2	3	1	15	–	–	31	–	–
.... *Polypedium* sp.	–	–	–	–	–	–	–	2	–
.... *Prodiamesa olivacea*	–	–	–	–	–	–	–	–	–
.... *Psectrocladius* sp. A	–	–	1	–	–	–	–	–	1
... *Psectrocladius* sp. B	–	–	–	–	–	–	–	–	–
.... *Psectrotanypus* sp.	–	–	–	2	–	–	2	1	–
.... *Pseudodiamesa* sp. A	16	7	2	–	–	–	1	–	–
.... *Pseudodiamesa* sp. B	–	–	–	–	–	–	–	1	–
.... *Smittia* sp.	–	–	–	–	–	–	–	–	–
.... *Sympotthastia* sp.	–	–	–	–	–	–	–	–	–
.... *Synorthocladius* sp.	–	–	–	–	–	–	–	–	–
.... *Trichocladius* sp. A	3	3	3	6	5	–	7	1	1
.... *Trichocladius* sp. B	–	–	–	–	–	–	–	–	1
.... Uid. Diamesini	–	–	–	–	–	–	–	–	–
.... Uid. Tanypodine pupa	–	–	–	–	–	–	–	–	–
.... Uid. (Thienemannimyia Group)	2	5	59	6	2	1	1	3	17
.... *Zavrelimyia* sp. A	–	–	–	1	1	–	2	–	–
.... *Zavrelimyia* sp. B	–	–	–	–	–	–	–	–	–
... Ceratopogonidae									
.... *Bezzia* sp.	–	–	3	–	–	–	–	1	1
.... *Dasyhelea* sp.	–	–	–	6	–	–	3	–	–
.... *Forcipomyia* sp. A	–	–	–	–	–	–	–	2	–
.... *Palpomyia tibialis*	–	–	–	–	–	–	–	–	–
... Stratiomyidae									
.... *Caloparyphus* sp.	–	–	–	–	–	–	–	–	–
.... *Euparyphus* sp.	–	–	–	–	–	–	–	–	–
... Rhagionidae									
.... *Atherix variegata*	–	–	–	–	–	–	–	–	–
... Dolichopodiae									
.... *Campsicnemus* sp.	–	–	–	–	–	–	–	–	–
.... *Dolichopus* sp.	–	–	–	–	–	–	1	–	–
... Empididae									
.... *Chelifera* sp.	30	–	24	13	–	1	21	–	2
.... *Wiedemannia* sp. A	–	–	–	–	–	–	–	–	–
.... *Wiedemannia* sp. B	–	–	–	–	–	–	–	–	–
... Canaceidae									
.... *Canaceoides* sp.	–	–	–	–	–	–	–	–	–
... Muscidae									
.... *Limnophora* sp.	–	–	–	1	–	–	4	–	–
... Tabanidae									
.... *Tabanus* sp.	–	–	–	–	–	–	–	–	–
Coelenterata									
. Anthozoa									
.. Hydroida									
... Hydridae									
.... *Hydra* sp.	–	–	–	–	–	–	–	–	–
Platyhelminthes									
. Turbellaria									
.. Tricladida									
... Planariidae									
.... *Polycelis coronata*	–	–	–	–	–	–	–	–	–
Nematoda									
. Enoplida									
.. Dorylaimida									
... Dorylaimidae									
.... *Alaimus* sp.	–	–	–	–	–	–	5	–	–
.... *Enoplocheilus* sp.	–	–	–	–	–	–	–	–	–
.... Uid. sp.	1	–	1	–	–	–	2	–	–
.. Enoplida									
... Uid.									
.... *Tobrilus* sp.	–	–	–	–	–	–	–	–	–

Table 14.—Benthic-invertebrate analyses of selected stream sites—Continued

Organism	Site 51 — Pine Canyon—Continued			Site 57 — Soldier Creek—Continued			Site 59 — Soldier Creek—Continued		
	7-19-79	9-18-79	7-31-80	7-19-79	9-18-79	7-31-80	7-19-79	9-18-79	7-31-80
Annelida									
. Oligochaeta									
.. Haplotaxida									
... Haplotaxidae									
.... *Haplotaxis gordioides*	–	–	–	–	–	–	–	–	–
... Tubificidae									
.... *Limnodrilus hoffmeisteri*	–	–	–	–	–	–	–	–	–
.... *Rhyacodrilus* sp.	–	5	–	–	–	–	–	–	–
.... Uid. sp.	–	1	–	–	–	–	–	2	–
... Naididae									
.... *Chaetogaster diastrophus*	–	–	–	–	–	–	–	–	–
.... *Nais elingus*	–	–	–	–	–	–	–	–	–
.... *Nais pseudobtusa*	–	–	–	–	–	–	–	–	–
.... *Nais simplex*	–	2	–	–	–	–	–	–	–
.... *Orthidonais serpentina*	–	–	–	–	–	–	–	–	–
... Enchytraeidae									
.... *Enchytraeus* sp.	11	4	6	9	–	–	12	–	2
... Lumbricidae									
.... *Eisenella* sp.	–	–	1	–	–	–	–	–	–
... Megascolecidae									
.... Uid. sp.	–	–	–	–	–	–	–	–	–
. Hiruninea									
.. Pharyngobdellida									
... Erpodellidae									
.... *Oina parva*	–	–	–	–	–	–	–	–	–
.... *Erpobdella punctata*	–	–	–	–	–	–	–	–	–
.. Rhynchobdellida									
... Glossiphoniidae									
.... *Glossiphonia complanata*	–	–	–	–	–	–	–	–	–
.... *Helobdella stagnalis*	–	–	–	–	–	–	–	–	–
Arthropoda									
. Crustacea									
.. Diplostraca									
... Daphnidae									
.... *Daphnia* sp. A	5	–	–	–	–	–	–	–	–
.... *Daphnia* sp. B	–	–	–	–	–	–	–	–	–
.. Podocopoda									
... Cypridae									
.... *Eucypris* sp.	–	–	–	–	–	–	–	–	–
.... *Prionocypris longiforma*	–	–	–	–	–	–	–	–	–
.. Amphipoda									
... Talitridae									
.... *Hyalella azteca*	–	–	–	–	–	–	–	–	–
.. Copepoda									
... Cyclopidae									
.... *Mesocyclops* sp.	–	1	–	–	–	–	–	–	–
.... Uid. sp.	1	–	–	–	–	–	–	–	–
... Canthocamptidae									
.... *Attheyella* sp.	–	–	–	–	–	–	–	–	–
. Arachnoidea									
.. Acari									
... Hydryphantidae									
.... *Wandesia* sp.	–	–	–	–	–	–	–	–	–
... Hygrobatidae									
.... *Atractides* sp.	–	–	–	–	–	–	–	–	–
... Lebertiidae									
.... *Lebertia* sp.	–	–	–	–	–	–	–	–	1
... Mideidae									
.... *Mideopsis* sp.	–	–	–	–	–	–	–	–	–
... Sperchonidae									
.... *Sperchon* sp.	3	1	–	–	–	–	–	–	–
... Limnesiidae									
.... *Tyrrellia* sp.	–	–	–	–	–	–	–	–	–
... Unionicolidae									
.... Uid. sp.	–	–	–	–	–	–	–	–	–
Mollusca									
. Gastropoda									
.. Basommatophora									
... Lymnaeidae									
.... *Lymnaea* sp.	–	–	–	–	–	–	–	–	–
... Physidae									
.... *Physa* sp.	–	–	–	–	–	–	–	–	–
... Planorbidae									
.... *Gyraulus* sp.	–	–	–	–	–	–	–	–	–
.. Mesogastropoda									
... Valvatidae									
.... *Valvata* sp.	–	–	–	–	–	–	–	–	–
. Pelecypoda									
.. Heterodonta									
... Sphaeriidae									
.... *Pisidium lilljeborgi*	–	–	–	–	–	–	–	–	–
Porifera									
. Spongillinae(?)									
.. Haplosclerina									
... Spongillidae									
.... Uid. sp.	–	–	–	–	–	–	–	–	–

Table 15.--Mineralogic analyses of streambed samples

Site No: See plate 1.
Visual estimates: tr, trace.

Stream	Site No.	Date	Particle-size diameter (mm)	Mineral composition (Percent by weight)														Visual estimates (Percent by volume)		
				Quartz	Potassium feldspar	Plagioclase feldspar	Calcite	Dolomite	Ankerite	Rhodochrosite	Goethite	Chlorite	Kaolinite	Illite	Montmorillonite	Mixed clay layer	Total	Organic	Pyrite	Coal
Gooseberry Creek	1	7-19-79	<0.476	37	2	3	24	5	3	4	0.1	0.4	2	7	0.4	0.1	88	0	0	tr
			<.062	37	4	4	12	4	0	3	2	----------		16	----------		82	--	--	--
			<.002	--	--	--	--	--	--	--	--	4	19	72	4	1	--	--	--	--
Fish Creek	2	7-18-79	<.476	69	2	0	11	0	0	1	0	0	3	0	0	3	89	0	0	0
			<.062	37	2	0	27	<.5	0	6	0	----------		2	----------		76	--	--	--
			<.002	--	--	--	--	--	--	--	--	0	52	0	0	48	--	--	--	--
Pondtown Creek	3	7-18-79	<.476	74	4	.2	2	0	0	0	2	0	4	4	0	.9	91	0	0	0
			<.062	72	8	2	4	<.5	0	0	2	----------		9	----------		97	--	--	--
			<.002	--	--	--	--	--	--	--	--	0	44	46	0	10	--	--	--	--
	4	7-18-79	<.476	71	2	.1	4	0	1	.1	3	0	4	4	0	2	91	tr	0	tr
			<.062	61	7	1	9	<.5	<.5	1	2	----------		8	----------		89	--	--	--
			<.002	--	--	--	--	--	--	--	--	0	43	40	0	17	--	--	--	--
Mud Creek	5	7-17-79	<.476	75	4	.1	4	1	.3	0	2	0	3	3	0	2	94	0	0	.5
			<.062	77	8	1	1	1	1	<.5	0	----------		10	----------		99	--	--	--
			<.002	--	--	--	--	--	--	--	--	0	37	33	0	30	--	--	--	--
	18	7-17-79	<.476	72	6	2	2	1	.1	1	3	0	3	4	0	2	96	0	0	3
			<.062	69	11	2	3	1	1	0	<.5	----------		8	----------		95	--	--	--
			<.002	--	--	--	--	--	--	--	--	0	35	42	0	23	--	--	--	--
Eccles Canyon	20	7-17-79	<.476	60	3	.1	10	.9	.9	.9	3	0	5	2	0	.9	87	tr	0	tr
			<.062	69	7	1	6	<.5	<.5	<.5	0	----------		8	----------		91	--	--	--
			<.002	--	--	--	--	--	--	--	--	0	58	30	0	12	--	--	--	--
	29	7-17-79	<.476	67	3	1	4	1	.9	0	3	0	4	2	0	2	88	0	0	3
			<.062	79	7	1	5	4	<.5	0	0	----------		8	----------		104	--	--	--
			<.002	--	--	--	--	--	--	--	--	0	49	31	0	20	--	--	--	--
Mud Creek	34	7-17-79	<.476	67	2	2	4	1	.1	2	5	0	4	3	0	1	91	0	0	2
			<.062	62	5	1	7	1	1	1	0	----------		9	----------		87	--	--	--
			<.002	--	--	--	--	--	--	--	--	0	46	37	0	17	--	--	--	--
Soldier Creek	42	7-19-79	<.476	30	3	6	24	3	2	4	2	.8	.6	3	.8	3	82	0	0	0
			<.062	40	6	11	8	6	0	1	1	----------		14	----------		87	--	--	--
			<.002	--	--	--	--	--	--	--	--	9	7	39	10	35	--	--	--	--
Pine Canyon	51	7-19-79	<.476	38	2	1	25	4	3	3	2	.5	2	6	.7	2	89	tr	0	0
			<.062	46	4	3	11	6	1	2	1	----------		12	----------		88	--	--	--
			<.002	--	--	--	--	--	--	--	--	5	17	50	6	22	--	--	--	--
Soldier Creek	57	7-19-79	<.476	44	3	5	18	4	2	3	0	.6	1	4	.7	3	88	0	tr	0
			<.062	42	4	6	12	6	<.5	3	0	----------		12	----------		85	--	--	--
			<.002	--	--	--	--	--	--	--	--	7	14	37	8	35	--	--	--	--
	59	7-19-79	<.476	38	6	10	12	6	2	4	.3	.4	1	7	1	4	92	tr	0	0
			<.062	30	5	11	6	5	1	3	1	----------		26	----------		85	--	--	--
			<.002	--	--	--	--	--	--	--	--	3	10	52	7	28	--	--	--	--

Table 16.--Laboratory analyses of suspended-sediment samples collected from Soldier Creek (site 59) during storm runoff, July 19-20, 1979

[See plate 1 for location of site]

Time: Military.

Time	Discharge (ft^3/s)	Mineral composition (percent by weight)															Concentration of suspended sediment (mg/L)
		Quartz	Potassium feldspar	Plagioclase feldspar	Calcite	Dolomite	Ankerite	Rhodochrosite	Goethite	Chlorite	Kaolinite	Illite	Montmorillonite	Mixed layer clay	Total	
		All grain sizes															
1745	16.8	33	3	5	10	5	1	0	2	2	4	6	3	9	83	7,140
1800	11.2	28	4	5	11	5	1	3	2	1	3	5	3	7	78	9,350
1815	8.3	30	3	6	10	4	1	3	2	2	2	6	2	7	78	8,390
1830	6.9	29	2	2	13	2	1	2	2	1	4	10	2	11	81	20,100
1845	12.4	33	1	2	13	2	1	4	0	1	4	13	2	12	91	37,600
0845	2.2	19	2	3	9	2	1	4	3	----------		36	----------		79	1,280
		Portion of sample with grain-size diameter less than 0.002 millimeter															
1745	16.8	--	--	--	--	--	--	--	--	7	15	26	14	39	101	7,140
1800	11.2	--	--	--	--	--	--	--	--	6	15	27	14	38	100	9,350
1815	8.3	--	--	--	--	--	--	--	--	9	11	34	10	37	101	8,390
1830	6.9	--	--	--	--	--	--	--	--	4	14	36	7	40	101	20,100
1845	12.4	--	--	--	--	--	--	--	--	3	12	41	7	37	100	37,600
0845	2.2	--	--	--	--	--	--	--	--	----- Insufficient sample -----						1,280

Table 17.--Particle-size analyses of streambed samples

[Composite of three samples collected at regularly spaced intervals across streams and at sites coincident with benthic-invertebrate sampling sites (table 14).]

Stream	Site No. (see pl. 1)	Date	Percent by weight less than 0.062 mm diameter
Gooseberry Creek	1	7-20-79	2
Fish Creek	2	7-18-79	5
		7-29-80	1
Pondtown Creek	3	7-18-79	4
		7-29-80	1
	4	7-18-79	2
		7-29-80	2
Mud Creek	5	7-17-79	10
		7-30-80	1
	18	7-17-79	8
		7-30-80	1
Eccles Canyon	20	7-17-79	3
		7-29-80	2
	29	7-17-79	3
		7-29-80	1
Mud Creek	34	7-17-79	3
		7-30-80	1
Soldier Creek	42	7-19-79	3
		7-31-80	8
Pine Canyon	51	7-19-79	8
		7-31-80	1
Soldier Creek	57	7-19-79	2
		7-31-80	0
	59	7-19-79	26
		7-31-80	3

Table 18.—Chemical analyses of major ions and trace metals
[Specific conductance, pH, Carbonate,

Site No See figure 2
Time: Military

Site No.	Date of sample	Time	Sampling depth (ft)	Dissolved solids, sum of constituents (mg/L)	Specific conductance (mhos/cm at 25°C)	pH (units)	Milligrams						
							Dissolved silica (as SiO_2)	Dissolved calcium (as Ca)	Dissolved magnesium (as Mg)	Dissolved sodium (as Na)	Dissolved potessium (as K)	Carbonate (as CO_3)	Bicarbonate (as HCO_3)
M-5	9-28-79	1200	1	172	280	9.0	2.0	40	14	3.5	1.1	20	150
		1220	32	163	280	8.5	2.1	38	13	3.3	1 1	8	160
	8-28-80	1100	1	164	280	8.7	.6	42	11	2.9	.8	0	185
		1140	28	164	285	8.4	.9	43	11	2.8	.8	0	190
		1200	36.5	178	300	7.6	6.2	47	11	2.9	1.0	0	205
M-20	9-28-79	1015	1	175	280	8 8	2.2	37	14	3.3	1 1	24	150
		1035	29	169	290	8.7	2.2	40	14	3.3	1.1	16	150
M-30	9-27-79	1030	1	171	285	8.7	2.3	38	13	3.3	1 1	16	160
		1045	28	168	290	8.6	2.3	39	13	3 3	1.1	12	160
	8-28-80	0840	1	159	290	8.6	1.2	44	11	2.9	.8	0	180
		0920	28	166	290	8 5	1.4	43	11	2.8	.8	0	180
		0930	31	158	300	7 9	2.6	44	11	2.9	.8	0	185
L-40	9-27-79	1130	1	166	280	8.4	2.2	38	13	3.3	1.1	16	150
		1140	17	169	280	8 4	2.4	38	13	3.3	1.0	16	150
M-40	9-27-79	1100	1	167	285	8.8	2.3	38	14	3.3	1.1	16	150
		1115	24	167	290	8.7	2.5	38	13	3.3	1.1	12	160
L-60	9-27-79	1600	1	168	280	8.5	2.4	38	14	3.3	1.1	12	160
L-65	10- 3-79	1050	4	–	–	–	–	–	–	–	–	–	–
M-65	10- 3-79	1100	1	165	235	9 3	.8	21	13	3.3	1.1	–	–
	8-28-80	1500	1	165	280	8.7	.5	42	12	3.0	.9	0	200
		1525	13	183	–	8.1	1.7	44	13	3 4	1 0	0	200
L-90	9-27-79	1630	1	157	260	8.8	2.4	35	13	3.3	1.0	16	140
		1635	10	165	280	8.6	2.4	37	13	3.3	1.1	16	150

in water from selected sites in Scofield Reservoir
and Bicarbonate are field measurements.]

per liter			Micrograms per liter									
Dissolved sulfate (as SO_4)	Dissolved chloride (as Cl)	Dissolved fluoride (as F)	Dissolved arsenic (as As)	Dissolved boron (as B)	Dissolved cadmium (as Cd)	Dissolved chromium (as Cr)	Dissolved copper (as Cu)	Dissolved iron (as Fe)	Dissolved lead (as Pb)	Dissolved manganese (as Mn)	Dissolved selenium (as Se)	Dissolved zinc (as Zn)
13	4.1	0.1	3	30	1	0	10	10	10	50	0	3
14	4.1	.1	2	30	1	0	10	10	10	50	0	4
12	3.9	.1	2	40	1	0	10	10	–	10	0	20
11	3 8	.1	2	40	1	10	10	10	–	60	0	3
8.9	4.0	1	2	30	1	0	10	60	10	750	0	3
15	4 4	1	2	30	1	0	10	10	10	40	0	3
14	4.2	.1	3	30	1	0	10	20	10	50	0	6
14	4 1	.1	2	30	1	0	10	40	10	50	0	6
14	4.1	.1	2	30	1	0	10	20	10	40	0	10
11	3.9	.1	2	30	1	0	10	10	10	70	0	3
13	4.0	.1	2	60	1	0	10	10	–	90	0	4
3.9	1.8	.1	2	4	1	0	10	10	10	220	0	3
14	4.1	.1	2	30	1	0	10	10	10	40	0	3
14	7.3	.1	2	30	1	0	10	30	10	50	0	6
14	4 0	.1	3	30	1	0	10	10	14	40	0	3
14	4.1	.1	2	30	1	0	10	20	10	40	0	7
14	4.1	.1	2	30	1	0	10	10	10	50	0	5
–	–	–	–	–	–	–	–	–	–	–	–	–
13	4.1	.1	2	30	2	0	10	40	11	8	0	5
12	4.2	.1	2	30	1	0	10	10	10	9	0	3
24	5.7	.1	2	30	1	0	10	10	10	70	0	3
13	4 1	1	2	30	1	0	10	10	10	20	0	3
14	4 2	1	2	30	1	0	10	10	10	40	0	4

Table 19.--Nutrient analyses of water from

Site No.: See figure 2.
Time: Military.

Site No.	Date of sample	Time	Sampling depth (ft)	Nitrogen, $NO_2 + NO_3$ (as N) Dissolved	Nitrogen, $NO_2 + NO_3$ (as N) Total	Nitrogen, nitrate (as N) Dissolved	Nitrogen, nitrate (as N) Total	Nitrogen, nitrite (as N) Dissolved	Nitrogen, nitrite (as N) Total
M- 5	9-28-79	1200	1	0.00	0.02	0.00	0.00	0.00	0.02
	9-28-79	1220	32	.00	.06	.00	.00	.00	.06
	8-28-80	1100	1	.00	.00	.00	.00	.00	.00
	8-28-80	1140	28	.00	.00	.00	.00	.00	.00
	8-28-80	1200	36.5	.00	.00	.00	.00	.00	.00
M-20	9-28-79	1015	1	.01	.08	.00	.06	.01	.02
	9-28-79	1035	29	.01	.02	.00	.00	.01	.02
M-30	9-27-79	1030	1	.00	.02	.00	.00	.00	.02
	9-27-79	1045	28	.01	.03	.00	.02	.01	.01
	8-28-80	0840	1	.00	.00	.00	.00	.00	.00
	8-28-80	0920	28	.00	.00	.00	.00	.00	.00
	8-28-80	0930	31	.00	.00	.00	.00	.00	.00
L-40	9-27-79	1130	1	.01	.02	.00	.01	.01	.01
	9-27-79	1140	17	.01	.02	.00	.00	.01	.02
R-40	9-27-79	1100	1	.01	.02	.00	.00	.01	.02
	9-27-79	1115	24	.01	.15	.00	.13	.01	.02
L-60	9-27-79	1600	1	.03	.04	.02	.02	.01	.02
L-65	10- 3-79	1050	4	-	-	-	-	-	-
M-65	10- 3-79	1100	1	.01	.02	.00	.00	.01	.02
	8-28-80	1500	1	.00	.00	.00	.00	.00	.00
	8-28-80	1525	13	.00	.00	.00	.00	.00	.00
L-90	9-27-79	1630	1	.01	.02	.00	.00	.01	.02
	9-27-79	1635	10	.01	.05	.00	.01	.01	.04

selected sites in Scofield Reservoir

Milligrams per liter									
Nitrogen, ammonia plus organic (as N)		Nitrogen, ammonia (as N)		Nitrogen, organic (as N)		Phosphorus, (as P)		Phosphorus, orthophosphate (as P)	
Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
0.82	1.7	0.01	0.92	0.81	0.81	0.010	0.040	0.00	0.02
.54	.83	.10	.16	.44	.67	.000	.010	.00	.00
.53	.53	.05	.05	.48	.49	.000	.030	.00	.00
.56	.56	.06	.06	.50	.50	.010	.040	.00	.00
1.1	1.1	.47	.47	.63	.63	.120	.180	.12	.12
.49	2.0	.03	1.4	.46	.60	.010	.060	.01	.08
.52	.95	.03	.27	.49	.68	.010	.030	.00	.00
.48	1.7	.01	.97	.47	.73	.010	.050	.00	.04
.47	2.1	.04	.26	.43	1.8	.010	.030	.00	.03
.64	.76	.07	.07	.57	.70	.010	.040	.00	.00
.56	.82	.09	.09	.47	.75	.010	.050	.00	.00
.69	.96	.17	.18	.52	.78	.030	.110	.00	.04
.73	1.5	.09	.51	.64	.99	.010	.020	.01	.01
.53	.85	.06	.22	.47	.63	.010	.020	.00	.01
.55	1.1	.03	.58	.52	.52	.010	.040	.00	.03
.60	.72	.03	.03	.57	.69	.010	.030	.00	.00
.78	.93	.09	.37	.69	.69	.010	.030	.00	.01
-	-	-	-	-	-	-	-	-	-
.78	1.2	.01	.13	.77	1.1	.010	.030	.01	.01
.43	4.0	.05	.05	.38	4.0	.010	.030	.00	.00
.54	.90	.06	.06	.48	.85	.020	.040	.00	.00
.43	.91	.01	.35	.42	.56	.000	.030	.00	.02
.55	1.0	.03	.28	.52	.72	.000	.020	.00	.01

Table 20.--Field measurements of chemical and physical data of water in Scofield Reservoir

[Sites shown in figure 2]

Time: Military.
Specific conductance: Field values except L, laboratory determination; E, estimated from dissolved solids, sum of constituents.

Time	Sampling depth (ft)	Temperature (°C)	Specific conductance (µmho/cm at 25°C)	Dissolved oxygen (mg/L)	pH (units)
		SITE M-5			
		September 28, 1979			
1200	1	15.0	280L	11.5	-
1205	10	14.5	-	11.6	-
1210	20	14.5	-	10.3	-
1215	30	14.0	275	8.8	-
1220	32	14.0	280	9.1	8.5
		October 2, 1979			
1130	1	14.0	280	10.6	8.8
1135	10	14.0	285	11.2	8.8
1140	20	14.0	285	10.2	8.8
1145	30	14.0	285	10.2	8.7
		August 27, 1980			
1330	1	17.0	275	9.0	8.7
1335	10	16.5	280	7.8	8.6
1340	20	16.0	280	7.2	8.5
1345	25	16.0	285	6.8	8.4
1350	28	16.0	290	5.2	8.2
1355	30	16.0	295	2.6	7.9
1400	36	15.0	305	.02	7.7
		August 28, 1980			
1100	1	17.0	275	9.1	8.7
1110	10	16.0	280	7.2	8.6
1120	20	16.0	280	6.9	8.6
1130	25	16.0	280	6.5	8.6
1140	28	16.0	285	5.8	8.4
1150	30	16.0	285	5.2	8.3
1200	36.5	15.0	300	.20	7.6
		SITE M-20			
		September 28, 1979			
1015	1	14.0	280	9.7	-
1020	5	14.0	280E	9.4	-
1025	10	14.0	285E	8.9	-
1030	20	14.0	285E	8.7	-
1035	29	13.5	290L	8.6	-
		August 27, 1980			
0925	1	16.0	285	8.5	8.8
0930	10	16.0	275	7.8	8.8
0935	20	16.0	275	7.6	8.7
0940	25	16.0	285	6.8	8.6
0945	28	16.0	285	5.2	8.4
0950	30	15.5	290	3.5	8.1
0955	34	15.5	290	1.0	7.9
		SITE L-30			
		September 27, 1979			
1400	1	14.0	265	10.1	8.7
1405	10	14.0	270	10.2	-
1410	15	14.0	275	9.4	8.6
1415	20	13.5	265	9.0	-
1420	27	13.5	290	8.8	8.4
		August 27, 1980			
1635	1	17.0	285	10.2	8.8
1640	10	16.5	290	8.7	8.6
1642	20	16.0	295	7.0	8.4
1648	25	16.0	300	5.3	8.2
1652	28	16.0	300	3.5	8.0
1655	31	16.0	300	3.0	7.9
		SITE M-30			
		September 27, 1979			
1030	1	14.0	285L	8.7	-
1035	10	14.0	285E	8.5	8.7
1040	20	13.5	285E	8.1	8.6
1045	28	13.5	290L	8.1	-
		August 27, 1980			
1035	1	17.0	275	9.2	8.9
1040	10	16.0	290	8.4	8.8
1045	20	16.0	290	7.4	8.7
1050	25	16.0	290	6.9	8.7
1055	28	16.0	290	5.3	8.3
1100	31	15.5	305	.40	7.8
		August 28, 1980			
0840	1	16.0	285	6.7	8.6
0850	10	16.0	285	6.3	8.6
0900	20	16.0	290	6.3	8.5
0910	25	16.0	290	6.1	8.5
0920	28	16.0	290	5.9	8.5
0930	30	16.0	295	1.4	7.9
		SITE R-30			
		September 27, 1979			
1000	1	14.0	280	8.8	8.5
1005	10	13.5	285	8.5	-
1010	20	13.5	285	8.2	-
1015	30	13.5	285	8.1	8.4
		August 27, 1980			
1005	1	16.5	275	8.7	8.8
1008	10	16.0	280	8.2	8.8
1012	20	16.0	280	7.7	8.8
1015	25	16.0	280	6.9	8.7
1020	28	15.5	290	5.3	8.4
1025	30	15.5	290	4.2	8.2
1030	34	15.5	305	1.5	7.9
		SITE L-40			
		September 27, 1979			
1130	1	15.0	280	9.3	8.4
1135	10	14.0	280	8.8	-
1140	17	13.5	280	8.5	8.4
		August 27, 1980			
1800	1	17.0	275	9.8	8.7
1805	10	17.0	275	8.2	8.7
1810	20	16.5	285	7.9	8.6
1815	25	16.0	280	7.1	8.5
1820	27	16.0	280	5.6	8.3
		SITE R-40			
		September 27, 1979			
1100	1	15.0	285L	9.4	-
1105	10	14.0	285E	8.7	-
1110	20	13.5	285L	8.4	-
1115	24	13.5	285L	8.4	-
		October 2, 1979			
1055	1	14.0	285	9.6	8.9
1100	10	13.0	285	9.0	8.8
1105	20	13.0	285	7.2	8.6
1110	24	13.0	290	6.7	8.6
		August 27, 1980			
1700	1	17.0	275	9.3	8.7

Table 20.--Field measurements of chemical and physical data of water in Scofield Reservoir--Continued

Time	Sampling depth (ft)	Temperature (°C)	Specific conductance (µmho/cm at 25°C)	Dissolved oxygen (mg/L)	pH (units)
		SITE R-40--Continued			
		August 27, 1980--Continued			
1705	10	16.5	285	8.7	8.7
1710	20	16.5	285	8.8	8.7
1715	25	16.5	285	8.8	8.7
1720	28	16.5	285	7.0	8.5
1725	30	16.0	290	.08	7.8
		SITE L-50			
		September 27, 1979			
1230	1	14.5	280	9.2	8.5
1245	10	13.5	280	9.4	-
1300	17	13.5	280	8.7	8.3
		August 27, 1980			
1910	1	16.5	285	9.2	8.7
1915	10	16.5	285	8.4	8.7
1920	20	16.5	280	7.4	8.6
1925	22	16.5	285	7.5	8.6
		SITE R-50			
		September 27, 1979			
1200	1	13.0	285	9.6	-
1205	10	13.0	280	8.6	-
1210	18	13.0	285	8.5	-
		October 1, 1979			
1530	1	14.5	275	10.2	8.9
1535	10	13.0	275	10.9	8.8
1540	17	13.0	275	9.1	8.6
		August 27, 1980			
1930	1	17.0	275	8.6	8.7
1935	10	17.0	275	9.0	8.7
1938	20	16.5	285	7.6	8.7
1940	23	16.0	285	5.5	8.4
		SITE M-55			
		October 1, 1979			
1450	1	15.0	275	10.0	8.9
1455	10	13.0	275	9.4	8.7
1500	13	13.0	275	10.0	8.7
		SITE L-60			
		September 27, 1979			
1600	1	14.5	280	9.5	8.5
1605	8	14.0	280	10.1	8.4
		August 27, 1980			
1945	1	16.5	280	8.1	8.7
1948	5	16.0	275	8.0	8.7
1950	10	16.0	280	7.6	8.6
1955	12.5	16.0	280	7.7	8.6
		SITE M-60			
		October 1, 1979			
1400	1	14.0	290	9.2	8.7
1405	10	13.0	285	9.8	8.7
		SITE R-60			
		September 27, 1979			
1330	1	14.0	280	9.5	-
1335	10	14.0	280	9.5	-
1340	12	14.0	285	9.4	-

Time	Sampling depth (ft)	Temperature (°C)	Specific conductance (µmho/cm at 25°C)	Dissolved oxygen (mg/L)	pH (units)
		SITE R-60--Continued			
		August 27, 1980			
2000	1	16.5	280	10.0	8.8
2005	5	16.5	280	9.6	8.8
2010	10	16.5	280	9.6	8.8
2015	15	16.5	280	8.6	8.8
2020	17	16.5	280	7.8	8.8
		SITE M-65			
		October 1, 1979			
1430	2	15.0	245	10.2	8.9
		October 3, 1979			
1100	1	12.5	235	12.6	9.3
1105	4	12.0	230	13.4	9.3
		August 28, 1980			
1500	1	16.0	280	8.7	8.7
1510	5	16.0	280	7.8	8.6
1520	10	15.0	300	6.2	8.2
1525	13	-	-	-	8.1
		SITE L-90			
		September 27, 1979			
1630	1	14.0	260	10.2	8.8
1635	10	13.0	280	10.6	8.6
		August 27, 1980			
1835	1	17.0	290	9.2	8.8
1840	11.5	16.0	300	7.0	8.6
		SITE R-90			
		September 27, 1979			
1615	1	14.0	280	9.6	8.7
1620	6.5	14.0	280	10.3	8.6
		October 2, 1979			
1025	1	13.5	285	10.3	8.9
1030	9	12.0	275	10.2	8.8
		SITE M-110			
		September 28, 1979			
1055	1	14.5	260	9.6	8.7
1100	10	14.0	265	9.4	-
1105	20	14.0	260	9.1	-
1110	30	14.0	265	7.3	-
1115	32	14.0	280	7.3	8.5
		August 27, 1980			
1530	1	17.0	265	9.2	8.7
1535	10	17.0	265	8.8	8.7
1540	20	17.0	260	8.8	8.6
1545	25	16.5	275	5.6	8.2
1550	28	16.0	280	3.0	7.9
1555	30	16.0	285	2.2	7.8
1600	35	15.0	300	.20	7.6
1605	38.5	15.0	300	.20	7.6
		SITE M-120			
		September 28, 1979			
1130	1	14.0	275	10.2	8.5
1135	10	13.0	275	9.8	-
1140	15.5	13.0	265	9.8	8.6
		August 27, 1980			
1450	1	17.0	270	9.6	8.7
1455	10	17.0	270	9.2	8.7
1600	17.5	17.0	270	8.0	8.6

Table 21.--Daily precipitation at selected sites

[Sites shown on plate 1]

Site 0.1

LOCATION.--Lat 39°38'42", long 111°18'59", in NW¼NE¼SW¼ sec.36, T.13 S., R.5 E., Carbon County.

ALTITUDE OF LAND SURFACE.--8,900 ft interpolated from topographic map.

REMARKS.--Dash (--), no precipitation recorded, no entry indicates gage inoperative.

PRECIPITATION, IN INCHES, OCTOBER 1979 TO SEPTEMBER 1980

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		--		--	0.13	--	--					--
2		0.13		--	--	--	--					--
3		.13		--	--	--	--					--
4		--		--	--	--	--					--
5		--		--	.26	--	--					--
6		--		--	--	0.13	--					--
7		--		--	--	.13	--					0.64
8		--		0.26	--	--	--					1.02
9		--		.51	--	.26	--					.51
10		--		.89	--	--	--					.26
11		--		.64	--	--	--					.13
12		--		1.66	--	--	--					.26
13		--		.51	.13	--	--					--
14		--		1.15	.38	--	--					--
15		--		.26	.64	--	--					--
16		--	--	.13	.38	--	--					--
17			--	.38	.13	--						--
18			--	.13	.64	--						--
19			--	.13	.13	--						--
20			--	--	.77	--						--
21			--	--	.26	--					--	--
22			--	.13	.38	--					0.13	--
23			--	--	.26	--					--	--
24			--	.26	--	--	--				.13	--
25				--	.13	--	--				.13	--
26			--	--	--	--	0.77				--	--
27			--	--	.26	--	3.32				.13	--
28			--	.13	--	--	.64				--	--
29	0.26		0.13	1.66	--	--	.51				--	--
30	.89		--	.13		--					--	--
31	--		.13	.26		--					--	

Table 21.--Daily precipitation at selected sites--Continued

Site 0.2

LOCATION.--Lat 39°48'01", long 111°12'41", in SE¼SE¼SE¼ sec.2, T.12 S., R.6 E., Carbon County.

ALTITUDE OF LAND SURFACE.--7,810 ft interpolated from topographic map.

REMARKS.--Dash (--), no precipitation recorded, no entry indicates gage inoperative.

PRECIPITATION, IN INCHES, OCTOBER 1979 TO SEPTEMBER 1980

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			0.51	--	--	--			--			--
2		--	--	--	--	--			--			--
3	--	--	--	--	--	0.26			--			--
4	--	0.13	--	--	--	.38			0.13			--
5	--	--	.38	--	--	.13			--			--
6	--	--	.13	--	--	.89			--			--
7	--	--	.13	--	--	.26			--			0.26
8	--	--	--	--	--	--			--			.89
9	--	--	--	0.01	--	.13			--			.26
10	--	--	--	.52	--	--			--			.13
11	--		--	.10	--	.13			--			.13
12	--		--	1.17	--	.26			--			--
13	--		--	.8	--	.13		--	--			.13
14	--		--	.55	.13	--		--	--			--
15	--		--	.1	.38	.13		0.13	--			--
16	--	--	--	.56	--	--		--	--			--
17	--	--	--	.12	--	--		--	--			--
18	--	.26	--	.01	1.15	--		.13	--			--
19	0.13	1.40	--	--	.38	--		--	--		--	--
20	1.53	.89	--	--	.13	--		--	--		--	--
21	--	.26	--	--	.64	--		--	--		--	--
22	--	--	--	--	.13	--		--	--		--	--
23	--	.26	--	--	.38	--		.26	--		--	--
24	--	.26	--	--	--	--		--	--		--	--
25	--	.64	--	.03	--	--		--			0.26	--
26	--	3.70	--	--	.13	--		--			.13	--
27		.38	--	--	.13	--		--			--	--
28		.26	--	--	--			--			--	--
29		6.25	--	1.25	--			--			--	--
30		--	--	--				.13			--	--
31			--	--				--			--	

Table 21.--Daily precipitation at selected sites--Continued

Site 0.3

LOCATION.--Lat 39°38'40", long 111°09'17", in NE¼NE¼SE¼ sec.32, T.13 S., R.7 E., Carbon County, in Clear Creek.

ALTITUDE OF LAND SURFACE.--8,370 ft interpolated from topographic map.

REMARKS.--Dash (--), no precipitation recorded, no entry indicates gage inoperative.

PRECIPITATION, IN INCHES, OCTOBER 1979 TO SEPTEMBER 1980

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	--	0.13	--		--	--	--	0.37	0.15	--	--	--
2	--	--	--	--	--	0.02	--	--	--	--	--	--
3	--	--	--	--	--	.58	0.27	--	--	--	--	--
4	--	.04	--	--	--	.25	--	.07	--	--	--	--
5	--	--	--	--	--	.38	.15	.37	--		--	--
6	--	--	--	0.03	--	.90	.17	.12	--		--	0.05
7	--	.03	0.05	.03	0.10	.58	.12	.30	--	0.07	--	.57
8	--	--	--	.65	--	--	--	.02	--	--	--	.17
9	--	--	--	.12	--	--	--	.21	--	--	--	.33
10	--	--	.08	1.10	--	.05	--	.25	--	--	--	.63
11	--	.05	--	.18	--	--	.10	.45	--	--	--	.13
12	--	--	--		--	--	--	.40	--	--	--	--
13	--	--	--		.04	--	--	--	--	--	0.05	--
14	--	--	--		.28	--	--		--	--	.25	--
15	0.03	--	--		.3	--	--		--	--	--	--
16	--	--	--		.03	--	--		--	--	--	--
17	.27	.03	--		.26	--	--		--	--	--	--
18	--	.62	--		1.67	--	--		--	--	--	--
19	.57	.18	--		.88	--	--	--	--	--	--	.07
20	.93	.25	--		.6	--	--	--	--	--	--	.02
21	.02	.02	--		.35	--	--	--	--	--	--	.02
22	--	--	.15	--	.62	--	.13	--	--	--	--	
23	--	.16		--	.25	--	.27	.09	--	.05	.42	
24	--	.43		--	.02	--	.03	.08	--	--	--	
25	--	.18		--	--	--	--	.10	--	--	.17	
26	--	.98		--	--	--	--	--	--	--	--	
27	--	--		.15	.02	.12	--	--	--	--	--	
28	.03	--		.42	.17	.10	--	--	.02	--	--	
29	.03	--		1.00	.05	--	.37	.12	.02	--	--	
30	--	--		.07		.23	.10	--	.27	.03	--	
31	.03			--		.05		--		--	.03	

Table 21.--Daily precipitation at selected sites--Continued

Site 0.4

LOCATION.--Lat 39°40'55", long 111°10'08", in NE¼NW¼NE¼ sec.19, T.13 S., R.7 E., Carbon County.

ALTITUDE OF LAND SURFACE.--8,220 ft interpolated from topographic map.

REMARKS.--Dash (--), no precipitation recorded, no entry indicates gage inoperative.

PRECIPITATION, IN INCHES, OCTOBER 1979 TO SEPTEMBER 1980

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	--	0.2	--	--	--	--	--	0.3	0.1	--	--	--
2	--	--	--	0.1	--	--	--	--	--	0.1	--	--
3	--	--	--	--	--	0.5	0.2	--	--	--	--	--
4	--	--	--	--	--	.5	--	.1	--	--	--	--
5	--	--	--	--	--	.4	.1	.5	--	--	--	--
6	--	--	--	--	--	1.2	.2	.1	--	--	--	--
7	--	.1	--	--	0.2	.5	.1	.2	--	.1	--	0.6
8	--	--	--	.7	--	--	--	--	--	.1	--	.4
9	--	--	--	.4	--	--	--	.3	--	--	--	.3
10	--	--	0.1	1.3	--	--	--	.5	--	--	--	.4
11	--	--	--	.2	--	.4	.2	.5	--	--	--	--
12	--	--	--	1.1	--	.5	--	.5	--	--	--	--
13	--	--	--	.4	--	--	--	--	--	--	0.1	--
14	--	--	--	.8	.5	--	--	--	--	--	--	--
15	--	--	--	.1	.4	--	--	.1	--	--	.1	--
16	--	--	--	--	--	--	--	.4	--	--	--	.1
17	0.1	.1	--	.2	.3	--	--	.1	--	--	--	--
18	--	1.0	--	.2	1.5	--	--	--	--	--	--	--
19	.8	.3	--	.2	.6	--	--	--	--	--	--	--
20	.9	.3	--	--	.7	--	--	--	--	--	--	--
21	.1	--	.1	--	.4	.2	--	--	--	--	--	--
22	--	--	.1	--	.3	--	--	--	--	--	.1	--
23	--	.2	--	--	.4	--	.3	--	--	.1	.1	--
24	--	.6	.1	--	.8	.2	--	.1	--	--	.1	--
25	--	.1	--	--	.1	.2	--	.1	--	--	.2	--
26	--	.9	--	--	--	--	--	.1	--	--	--	--
27	--	--	--	.1		.1	--	--	--	--	--	--
28	--	--	--	.4	.4	.2	.1	--	--	--	--	--
29	--	--	--	1.0	--	--	.4	.1	--	--	--	--
30	--	--	--	.1		.1	.2	--	--	--	--	--
31	--		--	--		.2		--		--	--	

Table 21.--Daily precipitation at selected sites--Continued

Site 0.5

LOCATION.--Lat 39°43'14", long 111°11'35", in NW¼SE¼NE¼ sec.1, T.13 S., R.6 E., Carbon County.

ALTITUDE OF LAND SURFACE.--8,050 ft interpolated from topographic map.

REMARKS.--Dash (--), no precipitation recorded, no entry indicates gage inoperative.

PRECIPITATION, IN INCHES, OCTOBER 1979 TO SEPTEMBER 1980

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		--	--	0.13	--			0.13	--	--		--
2		--	0.13	--	--			--	--	--		--
3	--	--	.13	--	--			--	--	--		--
4	--	--	.13	--	--			--	--	--		--
5	--	--	--	.13	--			.26	--	--		--
6	--	--	--	--	--			.26	--	--		0.13
7	--	--	--	--	--				--	0.13		.13
8	--	--	--	.13	--			.39	--	.13		.51
9	--	--	--	.26	--			--	--	--		.13
10	--	--	.13	1.02	--			.57	--	--		.13
11	--	--	.13	.13	--			.52	--	--		.13
12	--	--	--	1.28	--			.39	--	--		--
13	--	--	--	.51	--			.13	--	--		--
14	--	--	--	.77	0.26			.13	--	--		--
15	--	--	.13	--	.26			.13	--	--		--
16	--	--	--	--	.13			.13	--	--		--
17	--	--	--	.26	--			.13	--	--		--
18	--	0.26	--	.13	1.28			.13	--	--		--
19	0.13	.26	--	.13	.77			--	--	--	--	--
20	.77	.51	--	--	.26			--	--	--	--	--
21	.26	--	--	--	.51			--	--	--	--	--
22	.13	--	.13	--	.38			--	--	--	--	--
23	--	--	--	--	.38			--	--	--	0.13	--
24	--	.26	--	.13	.13		--	--	--	.26	.26	--
25	--	.26	--	--	--		--	--	--		--	--
26	--	.51	--	--	.51		--	.13	--		--	--
27	--	--	--	--			--	--	--		.13	--
28	--	--	--	.26			--	--	--		--	--
29	--	--	--	.89			0.26	--	--		--	--
30	--	--	--	--			.26	--	--		--	--
31	--		--	.26				--			--	

Table 22.--Solar radiation, in langleys per day, at Clear Creek (site 0.3), February-June 1980

Site shown on plate 1

Day	February	March	April	May	June
1	248	689	323[1]	320[1]	710
2	218	282	308[1]	320[1]	427
3	246	48	863	510	660
4	275	53	533	451	711
5	258	349	240	117	801
6	175	120	563	340	764
7	100	200	532	629	811
8	305	360	682	570	947
9	301	278	242	301	665
10	311	509	575	196	--
11	303	273	612	189	--
12	277	73	728	438	--
13	297	449	515	413	--
14	75	373	735	328	--
15	19	457	640	440	--
16	225	340	545	258	--
17	259	630	571	412	--
18	4	481	834	655	--
19	242	537	702	704	--
20	26	494	647	906	--
21	19	262	331	700	--
22	273	176	331	626	--
23	180	421	406	450	--
24	276	344	598	547	--
25	400	371	603	592	--
26	360	553	551	709	--
27	408	262	556	720	--
28	253	376	649	705	--
29	9	314	216	665	--
30	--	170	327[1]	597	--
31	--	307[1]	--	704	--

[1]estimated

GPO 837-712