HYDROLOGIC DATA FOR THE LARIMER-WELD REGIONAL WATER-MONITORING PROGRAM, COLORADO, 1975-82

By Steven R. Blakely and Jennie T. Steinheimer

U.S. GEOLOGICAL SURVEY

Open-File Report 84-139

Lakewood, Colorado
1984

UNITED STATES DEPARTMENT OF THE INTERIOR

WILLIAM P. CLARK, Secretary

U.S. GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information
write to:

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

For sale by:

Open-File Services Section
Western Distribution Branch
U.S. Geological Survey, MS 306
Box 25425, Federal Center
Denver, CO 80225
Telephone: (303) 234-5888

CONTENTS

ILLUSTRATION

TABLES

CONTENTS

METRIC CONVERSION FACTORS

Multiply	*By*	*To obtain*
acre	0.4047	hectare
acre-foot	1,233	cubic meter
cubic foot	.02832	cubic meter
cubic foot per second (ft^3/s)	.02832	cubic meter per second
degree Celsius (°C)	F=9/5°C+32	degree Fahrenheit
foot	0.3048	meter
inch	25.4	millimeter
mile	1.609	kilometer
square mile	2.590	square kilometer

HYDROLOGIC DATA FOR THE LARIMER-WELD REGIONAL WATER-MONITORING PROGRAM, COLORADO, 1975-82

By Steven R. Blakely and Jennie T. Steinheimer

ABSTRACT

Increased urbanization in Larimer and Weld Counties places greater demands on the water resources of those areas. A greater need for public water supply for drinking water and dilutant for treated sewage water is in direct competition with existing irrigation-water demand and increasing industrial-water requirements. The Larimer-Weld Regional Monitoring Program was begun in 1976 to provide information on the quality and quantity of the surface-water resources in the area; the data were tabulated beginning October 1, 1975. The program was designed to complement other water information-gathering efforts in the area.

Three sites on the Big Thompson River and five sites on the Cache La Poudre River were selected for a network of data-collection stations. Four previously established stations were added to complete an operating data-collection network under the Larimer-Weld Program: Horsetooth Reservoir, Joe Wright Creek above and below Joe Wright Reservoir, and Michigan River near Cameron Pass.

Continuous streamflow data and miscellaneous temperature and conductivity data only are available for one station on the Michigan River and two stations on Joe Wright Creek. Water-quality and continuous-streamflow data are available for one station on the Big Thompson River and two on the Cache La Poudre River. Water-quality and instantaneous-streamflow data only are available for two stations on the Big Thompson River and and three stations on the Cache La Poudre River, and water-quality and contents data are available for Horsetooth Reservoir.

Station description, location, and period of record are given for each station. A statistical summary of the water-quality data, including number of samples, maximum, and minimum for each station is tabulated. Mean and standard deviation and frequency of occurrence is given at the 95th, 75th, 50th, and 25th percentiles for constituents with 10 or more observations. Monthly water-quality data and daily mean streamflow data are tabulated for each stream-gaging station where data are available. The monthly contents data are presented for Horsetooth Reservoir. All data tabulated are from the period October 1, 1975, through September 30, 1982.

INTRODUCTION

On April 15, 1975, the Larimer-Weld Regional Council of Governments was designated an areawide water-quality planning agency, as a result of Public Law 92-500, section 208, which mandated that the appropriate local agencies would monitor the quality of their water resources for compliance with Federal water-quality criteria. Monies were allocated under this legislation for the local entities (State and county) to accomplish this objective. In addition, demands on area water resources were rapidly increasing from burgeoning urban development in the area. Little data were available about the predevelopment quality or quantity of water in area streams and reservoirs. Local planners, water users, and government officials required continuing information on the ambient quality and quantity of the region's water resources to make necessary planning decisions.

The U.S. Geological Survey in cooperation with the Larimer-Weld Regional Council of Governments designed and began a program to monitor the region's water resources in 1975. The program objectives were to collect hydrologic information on the Big Thompson, Cache La Poudre, and Michigan Rivers, Horsetooth Reservoir, and Joe Wright Creek, which were of importance to the water resources of Larimer and Weld Counties. The location of the monitoring program's study area in Colorado is shown in figure 1.

The Big Thompson River was and is important to the area as a public water supply and for irrigation, stock-water, and waste-water discharge. Numerous diversion structures and irrigation return-flow areas exist on this river; increased urban runoff and industrial growth in the area add to the growing demand on the river as it flows through Loveland. Therefore, water quality as well as quantity is monitored at three locations on the Big Thompson River.

The Cache La Poudre River has even greater demands placed upon its water than the Big Thompson River has. The Cache La Poudre River flows through Fort Collins and Greeley and serves as an irrigation-water supply, a dilutant and carrier for treated wastewater, a water supply for industrial operations, and eventually, a public water supply for downstream users. Five stations are operated on the Cache La Poudre River for water-quality and quantity data collection. Horsetooth Reservoir near Fort Collins is important as a supplemental supply for irrigation water in the Cache La Poudre River; it is monitored for water quality and volume of storage.

The Michigan River (near Cameron Pass) and Joe Wright Creek are important to Larimer and Weld Counties as sources of public water supply. Water from the Michigan River (in the North Platte River basin) is diverted to the Cache La Poudre River basin (in the South Platte River basin). This diversion is one of seven transmountain diversions which move water from the North Platte River basin to the Cache La Poudre River basin. These diversions are documented in Water Resources Data for Colorado (U.S. Geological Survey, Vol. 1, 1980, p. 182). Water quantity is monitored at two locations on Joe Wright Creek and at one location on the Michigan River.

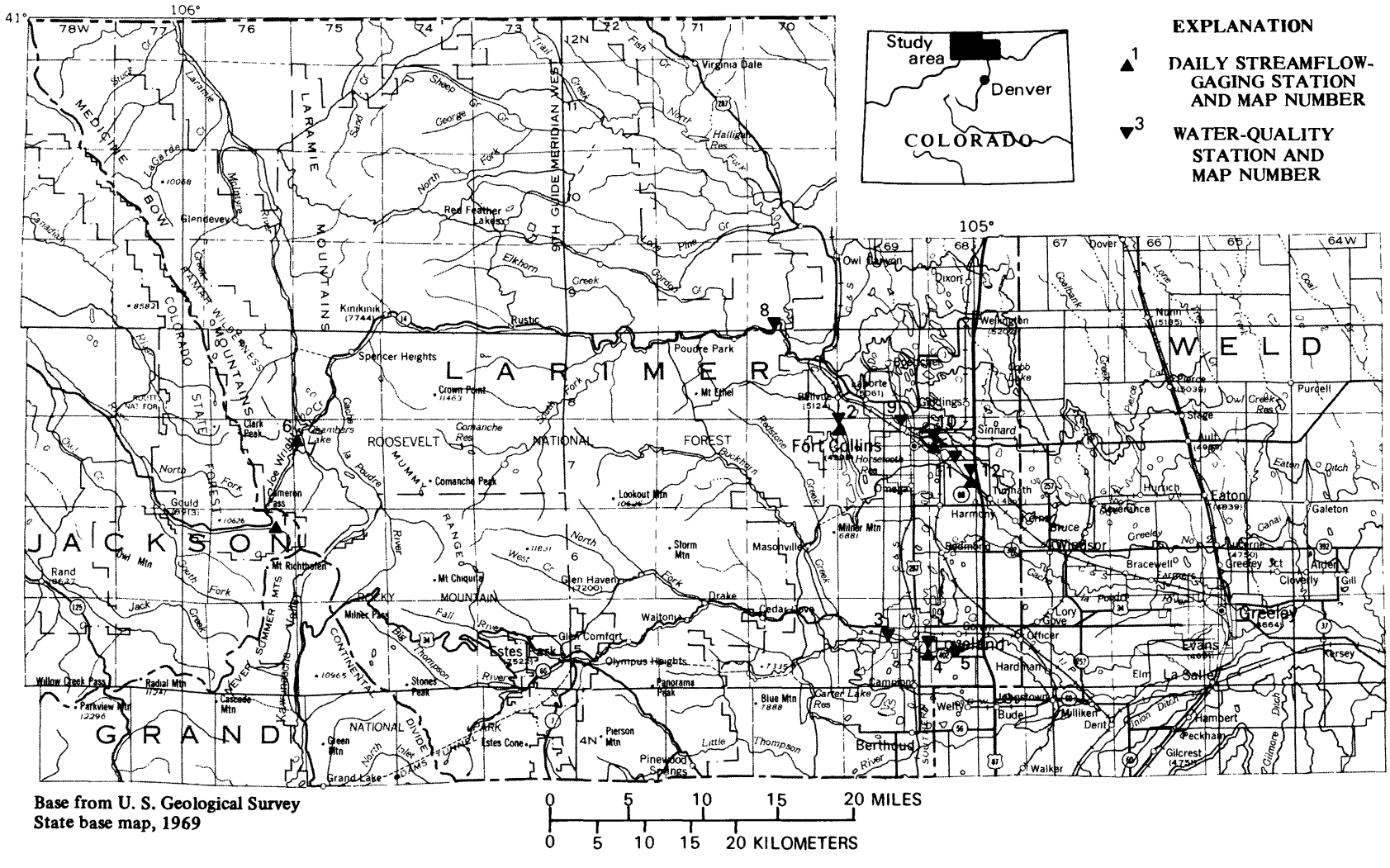

Figure 1. Location of study area and monitoring stations on the Big Thompson, Cache La Poudre, and Michigan Rivers, on Joe Wright Creek, and on Horsetooth Reservoir.

Five additional streamflow-gaging stations, one transmountain diversion on the Big Thompson River, and two streamflow-gaging stations on the Cache La Poudre River are not operated under the Larimer-Weld Program. These additional stations are operated by the U.S. Geological Survey under other programs or by the Colorado State Engineer (in the Department of Natural Resources). These stations and the Larimer-Weld program stations are shown in table 1, which lists the U.S. Geological Survey station number and name, latitude, longitude, drainage area, data type, period of record, and operator, from data supplied by the U.S. Geological Survey or the Colorado State Engineer. Locations of the Larimer-Weld monitoring stations on the Big Thompson, Cache La Poudre, and Michigan Rivers, on Joe Wright Creek, and on Horsetooth Reservoir are shown in figure 1 with the map numbers from table 1. Water-quality and surface-water data for the nonprogram stations shown in table 1 are available in the Water Resources Data for Colorado (U.S. Geological Survey, 1958-82).

Water-quality samples and streamflow measurements are collected monthly for all stations except Horsetooth Reservoir, which is sampled and monitored monthly from April through September only, each year, for water quality and contents. Stations with continuous streamflow monitors are visited monthly for water-quality samples with concurrent streamflow-quantity measurements. The maximum, minimum, and mean daily streamflow are calculated from this continuous record (of gage height) and are stored in and available from the U.S. Geological Survey computerized data base of water information (WATSTORE). Mean daily discharge only from this continuous record together with the extremes for the month and the year along with the water-quality data is published annually in the Colorado District basic-data report (U.S. Geological Survey, 1881-1982).

STATISTICAL SUMMARIES OF WATER-QUALITY DATA

Water-quality data tabulated in this report for the period October 1, 1975, through September 30, 1982, have been summarized. These summaries are presented as tables of statistics for each station in tables 2 through 13. There are considerable data in the file (primarily metals data) that have been determined to be less than the detection level and are indicated thus in the data tables. These were not included in the statistical reduction of the data; therefore, the actual number of samples for a given constituent may be considerably larger than that indicated in the statistical summary table.

The statistics include number of samples, maximum, minimum, mean, and standard deviation. For constituents with 10 or more measurements, the 95th, 75th, 50th (median), 25th, and 5th percentile values are given.

A statistical summary of streamflow data for stations mentioned in this report is beyond the scope of this report but is available in a report by Harold Petsch (1979). That report gives high- and low-flow statistics, as well as flow-duration tables for the continuous-recording stations in the Missouri, Arkansas, and Rio Grande basins through September 1, 1975. All of the stations discussed in this report are in the South Platte River basin, which is in the Missouri River basin.

Table 1.--*Index of water-quality and surface-water stations for the Larimer-Weld regional monitoring program and adjacent nonprogram stations in the Platte River basin*

[GS=U.S Geological Survey; SE=State Engineer; *=interrupted record]

Number shown in figure 1	U.S. Geological Survey station number	Station name	Latitude	Longitude	Drainage area, (square miles)	Period of record (month/year)		Station operator
						Water-quality data	Streamflow data[1]	
1	06614800	Michigan River near Cameron Pass------	40°29'46"	105°51'52"	1.53	--------	10/1973	GS
	06733000	Big Thompson River at Estes Park------	40°22'42"	105°30'48"	137.00	--------	10/1946	SE
	06734900	Olympus Tunnel at Lake Estes----------	40°22"30"	105°29'13"	--------	9/1970	--------	GS
	06735500	Big Thompson River near Estes Park----	40°22'35"	105°29'06"	155.00	--------	7/1930	SE
	06736700	Big Thompson River above Dille Tunnel, near Drake.	40°25'06"	105°14'36"	305.00	9/1970	--------	GS
2	06737500	Horsetooth Reservoir near Fort Collins	40°36'00"	105°10'06"	--------	9/1970	4/1951	GS
	06738000	Big Thompson River at mouth of canyon, near Drake.	40°25'18"	105°13'34"	305.00	--------	8/1887*	SE
3	06741480	Big Thompson River above Loveland-----	40°24'02"	105°07'20"	503.00	6/1979	--------	GS
4	06741510	Big Thompson River at Loveland--------	40°22'43"	105°03'38"	535.00	6/1979	7/1979	GS
5	06741520	Big Thompson River below Loveland-----	40°23'00"	105°01'45"	543.00	6/1979	--------	GS
	06744000	Big Thompson River at mouth, near La Salle.	40°21'00"	104°47'04"	830.00	8/1954*	4/1914*	SE
6	06746095	Joe Wright Creek above Joe Wright Reservoir.	40°32'24"	105°52'56"	3.01	--------	10/1978	GS
7	06746110	Joe Wright Creek below Joe Wright Reservoir.	40°33'43"	105°52'09"	6.90	--------	6/1978	GS
8	06749500	Cache la Poudre River near Fort Collins.	40°42'04"	105°14'27"	484.00	10/1979	--------	GS
	06752000	Cache la Poudre River at mouth of canyon, near Fort Collins.	40°39'52"	105°13'26"	1,056.00	6/1962*	6/1881*	SE
9	06752258	Cache la Poudre River at Shields Street, at Fort Collins.	40°36'11"	105°05'43"	1,119.00	10/1979	--------	GS
10	06752260	Cache la Poudre River at Fort Collins-	40°35'17"	105°04'08"	1,129.00	4/1975	4/1975	GS
11	06752270	Cache la Poudre River below Fort Collins.	40°34'01"	105°01'36"	1,240.00	1/1978	--------	GS
12	06752280	Cache la Poudre River above Boxelder Creek, near Timnath.	40°32'56"	105°00'28"	1,246.00	10/1979	10/1979	GS
	06752500	Cache la Poudre River near Greeley----	40°25'04"	104°38'22"	1,877.00	11/1951*	3/1903*	SE

[1]Continuous stage recorder.

SELECTED REFERENCES

Water-Quality Data (1954 through 1974)

U.S. Geological Survey, 1958, Compilation of recods of quality of surface waters of the United States, 1954--Parts 5 and 6, Hudson Bay and Upper Mississippi River basin, and Missouri River basin: U.S. Geological Survey Water-Supply Paper 1351, 238 p.

_____1959, Compilation of records of quality of surface waters of the United States, 1955--Parts 5 and 6, Hudson Bay and Upper Mississippi River basin, and Missouri River basin: U.S. Geological Survey Water-Supply Paper 1401, 305 p.

_____1960, Compilation of records of quality of surface waters of the United States, 1956--Parts 5 and 6, Hudson Bay and Upper Mississippi River basin, and Missouri River basin: U.S. Geological Survey Water-Supply Paper 1451, 349 p.

_____1961, Compilation of records of quality of surface waters of the United States, 1957--Parts 5 and 6, Hudson Bay and Upper Mississippi River basin, and Missouri River basin: U.S. Geological Survey Water-Supply Paper 1521, 383 p.

_____1962, Compilation of records of quality of surface waters of the United States, 1958--Parts 5 and 6, Hudson Bay and Upper Mississippi River basin, and Missouri River basin: U.S. Geological Survey Water-Supply Paper 1572, 365 p.

_____1963, Compilation of records of quality of surface waters of the United States, 1959--Parts 5 and 6, Hudson Bay and Upper Mississippi River basin, and Missouri River basin: U.S. Geological Survey Water-Supply Paper 1643, 247 p.

_____1964, Compilation of records of quality of surface waters of the United States, 1962--Parts 5 and 6, Hudson Bay and Upper Mississippi River basin, and Missouri River basin: U.S. Geological Survey Water-Supply Paper 1943, 413 p.

_____1966, Compilation of records of quality of surface waters of the United States, 1960--Parts 5 and 6, Hudson Bay and Upper Mississippi River basin, and Missouri River basin: U.S. Geological Survey Water-Supply Paper 1743, 278 p.

_____1966, Compilation of records of quality of surface waters of the United States, 1961--Parts 5 and 6, Hudson Bay and Upper Mississippi River basin, and Missouri River basin: U.S. Geological Survey Water-Supply Paper 1883, 315 p.

_____1966, Compilation of records of quality of surface waters of the United States, 1963--Parts 5 and 6, Hudson Bay and Upper Mississippi River basin, and Missouri River basin: U.S. Geological Survey Water-Supply Paper 1949, 411 p.

_____1969, Compilation of records of quality of surface waters of the United States, 1964--Parts 5 and 6, Hudson Bay and Upper Mississippi River basin, and Missouri River basin: U.S. Geological Survey Water-Supply Paper 1956, 462 p.

_____1970, Compilation of records of quality of surface waters of the United States, 1965--Parts 5 and 6, Hudson Bay and Upper Mississippi River basin, and Missouri River basin: U.S. Geological Survey Water-Supply Paper 1963, 548 p.

_____1971, Compilation of records of quality of surface waters of the United States, 1966--Parts 5 and 6, Hudson Bay and Upper Mississippi River basin, and Missouri River basin: U.S. Geological Survey Water-Supply Paper 1993, 666 p.

_____1971, Compilation of records of quality of surface waters of the United States, 1967--Parts 5 and 6, Hudson Bay and Upper Mississippi River basin, and Missouri River basin: U.S. Geological Survey Water-Supply Paper 2013, 585 p.

_____1973, Compilation of records of quality of surface waters of the United States, 1968--Parts 5 and 6, Hudson Bay and Upper Mississippi River basin, and Missouri River basin: U.S. Geological Survey Water-Supply Paper 2096, 394 p.

_____1974 (1975), Compilation of records of quality of surface waters of the United States, 1969--Parts 5 and 6, Hudson Bay and Upper Mississippi River basin, and Missouri River basin: U.S. Geological Survey Water-Supply Paper 2145, 441 p.

_____1971-75, Water Resources Data for Colorado, water years 1970-74--Part 2. Water-quality records: U.S. Geological Survey Water-Data Reports CO-71-2 to CO-74-2 (published annually); available from U.S. Department of Commerce, National Technical Information Service, Springfield, VA 22161.

Streamflow Data (1881 through 1974)

U.S. Geological Survey, 1958, Compilation of records of surface waters of the United States through September 1950--Part 6-8. Missouri River basin below Sioux City, Iowa: U.S. Geological Survey Water-Supply Paper 1310, 619 p.

_____1964, Compilation of records of surface waters of the United States, October 1950 to September 1960--Part 6-B. Missouri River Basin below Sioux City, Iowa: U.S. Geological Survey Water-Supply Paper 1730, 514 p.

_____1969, Surface water supply of the United States, water years 1961-1965--Part 6-3. Missouri River basin from Sioux City, Iowa, to Nebraska City, Nebraska: U.S. Geological Survey Water Supply Paper 1918, 751 p.

_____1973, Surface water supply of the United States, water years 1966-1970--Part 6-3. Missouri River basin from Sioux City, Iowa, to Nebraska City, Nebraska: U.S. Geological Survey Water Supply Paper 2118, 710 p.

_____1972-75, Water resources data for Colorado, water years 1971-74--Part 1. Surface water records: U.S. Geological Survey Water-Data Reports CO-71-1 to CO-74-1 (published annually); available from U.S. Department of Commerce, National Technical Information Service, Springfield, VA 22161.

Water-Quality and Streamflow Data (1975 through 1982)

_____1976-82, Water resources data for Colorado, water years 1975-81--Volume 1, Missour River basin, Arkansas River basin, Rio Grande basin: U.S. Geological Survey Water-Data Reports CO-76-1 to CO-81-1 (published annually); available from U.S. Department of Commerce, National Technical Information Service, Springfield, VA 22161.

_____1983, Water resources data for Colorado, water year 1982--Volume 1, Missouri River basin, Arkansas River basin, Rio Grande basin: U.S. Geological Survey Water-Data Report CO-82-1 (published annually); available from U.S. Department of Commerce, National Technical Information Service, Springfield, VA 22161.

Statistical Summary of Streamflow Data

Petsch, H. E., Jr., 1979, Streamflow statistical summaries for Colorado streams through September 30, 1975, Volume 1: Missouri River, Arkansas River, and Rio Grande basins: U.S. Geological Survey Open-File Report 79-681, 515 p.

ABBREVIATIONS LIST FOR TABLES 2-13, FOR DESCRIPTIONS OF LARIMER-WELD REGIONAL MONITORING PROGRAM STATIONS, AND FOR WATER-QUALITY AND SURFACE-WATER DATA

AC-FT	acre-foot
acre-ft/yr	acre-foot per year
CAL-YR	calendar year
CFS	cubic foot per second
CELLS/100 ML	cells per 100 milliliters
COLS./100 ML	colonies per 100 milliliters
DEG C	degree Celsius
E	east
ft	feet
ft^3/s	cubic foot per second
hm	hectometer
hm^3/yr	cubic hectometer per year
in.	inch
km	kilometer
km^2/yr	square kilometer per year
lat	latitude
long	longitude
m	meter
m^3/s	cubic meter per second
MAX	maximum
MIN	minimum
MM of HG	millimeter of mercury
MG/L	milligram per liter
mi	mile
mi^2	square mile
ML	milliliter
N	north
PCI/L	picocurie per liter
R	range
S	south
sec.	section
T	township
UG/L	microgram per liter
UMHOS	micromhos per centimeter at 25 degrees Celsius
W	west
WTR-YR	water year
YR	year

Table 2.--Statistical summary of water-quality data for station 06614800 Michigan River near Cameron Pass, 1978-1982

WATER-QUALITY CONSTITUENT	STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	95	75	MEDIAN 50	25	5
TEMPERATURE (DEG C)	59	13.50	0.00	4.03	4.24	12.00	7.00	1.50	1.00	0.00
SPECIFIC CONDUCTANCE (UMHOS)	36	60.00	23.00	41.92	10.24	60.00	50.00	40.50	34.00	24.70

Table 3.--Statistical summary of water-quality data for station 06737500 Horsetooth Reservoir near Fort Collins, 1976-1982

WATER-QUALITY CONSTITUENT	STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	95	75	MEDIAN 50	25	5
TEMPERATURE (DEG C)	575	24.00	2.00	10.30	5.15	21.00	13.00	8.50	6.50	4.00
TRANSPARENCY (SECCHI DISK) (IN)	25	133.00	8.00	66.15	28.38	127.90	84.20	60.00	49.00	14.60
SPECIFIC CONDUCTANCE (UMHOS)	93	125.00	60.00	79.17	12.49	110.00	90.00	76.00	70.00	65.00
OXYGEN, DISSOLVED (MG/L)	560	13.20	0.00	8.06	2.14	11.10	9.60	8.10	6.90	4.20
PH (UNITS)	93	8.80	6.10		0.46	8.03	7.60	7.40	7.00	6.47
PH LAB (UNITS)	16	8.20	6.80	7.73	0.35	8.20	7.90	7.85	7.60	6.80
NITROGEN, TOTAL (MG/L AS N)	2	1.10	1.00							
NITROGEN, ORGANIC TOTAL (MG/L AS N)	3	0.79	0.72							
NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	8	0.14	0.06							
NITROGEN, AMMONIA TOTAL (MG/L AS N)	56	3.60	0.00	0.10	0.48	0.15	0.04	0.02	0.01	0.00
NITROGEN, NITRITE DISSOLVED (MG/L AS N)	38	0.07	0.01	0.02	0.01	0.05	0.01	0.01	0.01	0.01
NITROGEN, NITRITE TOTAL (MG/L AS N)	1	0.22	0.22							
NITROGEN, NITRATE DISSOLVED (MG/L AS N)	78	2.30	0.05	0.19	0.25	0.29	0.19	0.15	0.13	0.08
NITROGEN, NITRATE TOTAL (MG/L AS N)	1	0.11	0.11							
NITROGEN,AMMONIA + ORGANIC TOTAL1	11	1.30	0.40	0.76	0.24	1.30	0.88	0.75	0.60	0.40
NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	3	0.25	0.11							
NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	81	2.30	0.06	0.20	0.24	0.30	0.21	0.15	0.13	0.08
PHOSPHORUS, TOTAL (MG/L AS P)	77	0.82	0.01	0.06	0.12	0.28	0.05	0.02	0.02	0.01
PHOSPHORUS, DISSOLVED (MG/L AS P)	10	0.14	0.02	0.04	0.04	0.14	0.04	0.03	0.02	0.02
HARDNESS (MG/L AS CACO3)	11	35.00	28.00	31.36	1.96	35.00	32.00	31.00	30.00	28.00
CALCIUM DISSOLVED (MG/L AS CA)	11	11.00	8.60	9.84	0.71	11.00	10.00	9.80	9.30	8.60
MAGNESIUM, DISSOLVED (MG/L AS MG)	11	1.80	1.60	1.66	0.08	1.80	1.70	1.60	1.60	1.60
SODIUM, DISSOLVED (MG/L AS NA)	11	5.80	2.20	3.00	0.99	5.80	3.10	2.80	2.50	2.20
SODIUM ADSORPTION RATIO	11	0.50	0.20	0.23	0.09	0.50	0.20	0.20	0.20	0.20
PERCENT SODIUM	11	30.00	13.00	16.64	4.65	30.00	17.00	16.00	14.00	13.00
POTASSIUM, DISSOLVED (MG/L AS K)	11	1.00	0.70	0.83	0.09	1.00	0.90	0.80	0.80	0.70
CHLORIDE, DISSOLVED (MG/L AS CL)	12	32.00	0.10	3.37	9.03	32.00	1.15	0.60	0.45	0.10
SULFATE DISSOLVED (MG/L AS SO4)	10	7.00	0.70	3.97	2.52	7.00	6.25	5.00	1.28	0.70
FLUORIDE, DISSOLVED (MG/L AS F)	11	0.50	0.10	0.19	0.11	0.50	0.20	0.20	0.10	0.10
SILICA, DISSOLVED (MG/L AS SIO2)	11	4.90	2.20	3.43	1.06	4.90	4.60	2.80	2.50	2.20
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	1	100.00	100.00							
CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	3	1.00	1.00							
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	7	10.00	2.00							
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	1	1.00	1.00							
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	11	9.00	5.00	7.27	1.49	9.00	9.00	7.00	6.00	5.00
IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	5	310.00	40.00							
IRON, TOTAL RECOVERABLE (UG/L AS FE)	6	650.00	80.00							
IRON, DISSOLVED (UG/L AS FE)	11	60.00	3.00	39.09	19.21	60.00	60.00	41.00	29.00	3.00

Table 3.--Statistical summary of water-quality data for station 06737500 Horsetooth Reservoir near Fort Collins, 1976-1982--Continued

WATER-QUALITY CONSTITUENT	STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	95	75	MEDIAN 50	25	5
LEAD, TOTAL RECOVERABLE (UG/L AS PB)	5	6.00	1.00							
MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	1	5.00	5.00							
MANGANESE, DISSOLVED (UG/L AS MN)	9	9.00	1.00							
MOLYBDENUM, TOTAL RECOVERABLE [2]	2	3.00	2.00							
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	4	4.00	1.00							
SILVER, TOTAL RECOVERABLE (UG/L AS AG)	1	1.00	1.00							
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	8	60.00	10.00							
ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	6	680.00	150.00							
ICE COVER (SEVERITY)	1	1.00	1.00							
COLIFORM, TOTAL	9	760.00	24.00							
PERTHANE TOTAL (UG/L)	1	0.00	0.00							
NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	1	0.00	0.00							
ALDRIN, TOTAL (UG/L)	1	0.00	0.00							
LINDANE TOTAL (UG/L)	1	0.00	0.00							
CHLORDANE, TOTAL (UG/L)	1	0.00	0.00							
DDD, TOTAL (UG/L)	1	0.00	0.00							
DDE, TOTAL (UG/L)	1	0.00	0.00							
DDT, TOTAL (UG/L)	1	0.00	0.00							
DIELDRIN TOTAL (UG/L)	1	0.00	0.00							
ENDOSULFAN, TOTAL (UG/L)	1	0.00	0.00							
ENDRIN, TOTAL (UG/L)	1	0.00	0.00							
ETHION, TOTAL (UG/L)	1	0.00	0.00							
TOXAPHENE, TOTAL (UG/L)	1	0.00	0.00							
HEPTACHLOR, TOTAL (UG/L)	1	0.00	0.00							
HEPTACHLOR EPOXIDE TOTAL (UG/L)	1	0.00	0.00							
METHOXYCHLOR, TOTAL (UG/L)	1	0.00	0.00							
PCB, TOTAL (UG/L)	1	0.00	0.00							
MALATHION, TOTAL (UG/L)	1	0.00	0.00							
PARATHION, TOTAL (UG/L)	1	0.00	0.00							
DIAZINON, TOTAL (UG/L)	1	0.00	0.00							
METHYL PARATHION, TOTAL (UG/L)	1	0.00	0.00							
2,4-D, TOTAL (UG/L)	2	0.04	0.02							
2,4,5-T TOTAL (UG/L)	1	0.00	0.00							
MIREX, TOTAL (UG/L)	1	0.00	0.00							
SILVEX, TOTAL (UG/L)	1	0.00	0.00							
TOTAL TRITHION (UG/L)	1	0.00	0.00							
METHYL TRITHION, TOTAL (UG/L)	1	0.00	0.00							
PHYTOPLANKTON, TOTAL (CELLS PER ML)	78	11000.00	0.00	663.55	1749.47	3109.97	602.50	115.00	13.75	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED	82	76.00	38.00	51.54	8.84	71.70	55.00	50.00	45.00	39.15
SOLIDS, SUM OF CONSTITUENTS, DISSOLVED [4]	9	53.00	35.00							
SOLIDS, DISSOLVED (TONS PER AC-FT)	88	0.10	0.05	0.07	0.01	0.10	0.07	0.07	0.06	0.05
PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	2	0.03	0.02							
NITROGEN, TOTAL (MG/L AS NO3)	2	5.00	4.60							
MERCURY TOTAL RECOVERABLE (UG/L AS HG)	3	0.20	0.10							
POTASSIUM 40 DISSOLVED (PCI/L AS K40)	4	0.70	0.50							
2, 4-DP TOTAL (UG/L)	1	0.00	0.00							
ALGAL GROWTH POTENTIAL, BOTTLE TEST [4]	59	9.40	0.00	1.37	1.71	6.00	1.70	0.60	0.40	0.30
SPECIFIC CONDUCTANCE LAB (UMHOS)	17	163.00	67.00	81.59	21.34	163.00	79.50	77.00	75.50	67.00
ALKALINITY LAB (MG/L AS CACO3)	10	40.00	13.00	32.40	5.78	40.00	35.50	33.50	30.75	19.00
HARDNESS NONCARBONATE (MG/L AS CACO3)	10	11.00	0.00	1.60	3.44	11.00	1.50	0.00	0.00	0.00

[1] MG/L AS NITROGEN.
[2] UG/L AS MOLYBDENUM.
[3] COLS. PER 100 ML, MEMBRANE FILTERED, M-ENDO MEDIUM, IMMEDIATE.
[4] MG/L.

Table 4.--Statistical summary of water-quality data for station 06741480 Big Thompson River above Loveland, 1976-1982

WATER-QUALITY CONSTITUENT	STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	95	75	MEDIAN 50	25	5
TEMPERATURE (DEG C)	40	22.50	0.00	10.79	7.09	21.92	17.00	10.75	4.63	0.05
STREAMFLOW, INSTANTANEOUS (CFS)	40	1850.00	1.00	158.72	355.00	1319.80	153.00	43.70	6.53	1.02
SPECIFIC CONDUCTANCE (UMHOS)	40	1600.00	68.00	639.92	476.06	1477.00	1009.25	421.00	236.50	105.75
OXYGEN, DISSOLVED (MG/L)	39	13.50	7.40	9.62	1.61	12.40	10.60	9.40	8.20	7.40
PH (UNITS)	40	8.80	7.10		0.35	8.70	8.10	7.85	7.70	7.31
PH LAB (UNITS)	24	8.60	7.50	7.98	0.26	8.58	8.10	8.00	7.80	7.55
CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	1	2.10	2.10							
ALKALINITY FIELD (MG/L AS CACO3)	17	170.00	16.00	87.29	50.45	170.00	130.00	86.00	37.50	16.00
NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	1	0.50	0.50							
NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	35	0.41	0.01	0.11	0.08	0.28	0.14	0.10	0.06	0.01
NITROGEN, NITRITE DISSOLVED (MG/L AS N)	28	0.05	0.01	0.02	0.01	0.05	0.02	0.01	0.01	0.01
NITROGEN, NITRATE DISSOLVED (MG/L AS N)	31	6.80	0.09	1.20	1.43	5.00	1.60	0.65	0.31	0.11
NITROGEN,AMMONIA + ORGANIC DISSOLVED[1]	1	0.60	0.60							
NITROGEN,AMMONIA + ORGANIC TOTAL[1]	39	13.00	0.10	1.25	2.07	4.80	1.10	0.86	0.51	0.32
NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	39	6.80	0.10	1.11	1.31	3.80	1.60	0.65	0.32	0.11
PHOSPHORUS, DISSOLVED (MG/L AS P)	37	0.57	0.00	0.04	0.09	0.17	0.04	0.02	0.01	0.01
PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	5	0.03	0.01							
HARDNESS (MG/L AS CACO3)	40	830.00	23.00	305.47	250.62	759.50	525.00	190.00	85.75	34.85
HARDNESS, NONCARBONATE (MG/L CACO3)	20	650.00	2.00	162.20	155.60	637.00	240.00	125.00	55.25	2.80
CALCIUM DISSOLVED (MG/L AS CA)	40	230.00	6.70	87.57	71.04	219.50	150.00	56.50	25.00	10.25
MAGNESIUM, DISSOLVED (MG/L AS MG)	40	61.00	1.50	21.08	17.92	57.65	34.50	13.50	5.60	2.34
SODIUM, DISSOLVED (MG/L AS NA)	40	48.00	3.30	17.12	13.30	45.70	24.50	11.00	6.70	3.41
SODIUM ADSORPTION RATIO	40	0.80	0.20	0.42	0.16	0.70	0.50	0.40	0.30	0.20
PERCENT SODIUM	40	31.00	8.00	12.27	3.78	19.85	13.00	12.00	10.25	8.05
SODIUM+ POTASSIUM DISSOLVED (MG/L AS NA)	10	19.00	4.00	12.91	5.43	19.00	18.25	13.00	9.53	4.00
POTASSIUM, DISSOLVED (MG/L AS K)	40	4.00	0.60	1.90	0.98	3.90	2.53	1.85	1.00	0.70
CHLORIDE, DISSOLVED (MG/L AS CL)	40	25.00	1.00	6.70	5.85	20.75	9.10	4.30	2.08	1.11
SULFATE DISSOLVED (MG/L AS SO4)	40	670.00	10.00	226.30	213.38	648.00	412.50	115.00	45.75	16.25
FLUORIDE, DISSOLVED (MG/L AS F)	39	0.50	0.10	0.31	0.10	0.50	0.40	0.30	0.20	0.20
SILICA, DISSOLVED (MG/L AS SIO2)	40	15.00	3.40	7.37	2.54	13.80	9.08	7.15	5.23	3.92
ARSENIC TOTAL (UG/L AS AS)	9	2.00	1.00							
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	6	200.00	100.00							
CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	2	6.00	1.00							
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	27	30.00	2.00	6.85	5.72	24.40	8.00	6.00	4.00	2.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	4	5.00	1.00							
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	31	32.00	2.00	9.00	6.99	29.00	10.00	7.00	5.00	2.00
IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	10	3600.00	50.00	1115.00	1317.36	3600.00	2100.00	475.00	212.50	50.00
IRON, TOTAL RECOVERABLE (UG/L AS FE)	11	3700.00	60.00	1172.73	1281.23	3700.00	1700.00	590.00	250.00	60.00
IRON, DISSOLVED (UG/L AS FE)	37	110.00	14.00	36.92	23.33	101.00	40.00	30.00	20.00	17.60
LEAD, TOTAL RECOVERABLE (UG/L AS PB)	27	64.00	1.00	8.85	12.68	49.20	8.00	5.00	3.00	1.40
MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	8	90.00	3.00							
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN	11	520.00	20.00	98.18	143.03	520.00	100.00	50.00	30.00	20.00
MANGANESE, DISSOLVED (UG/L AS MN)	37	530.00	4.00	80.41	116.38	359.00	130.00	27.00	8.00	5.80
MOLYBDENUM, TOTAL RECOVERABLE[2]	11	6.00	1.00	3.09	1.45	6.00	4.00	3.00	2.00	1.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	9	8.00	2.00							
SILVER, TOTAL RECOVERABLE (UG/L AS AG)	1	3.00	3.00							
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	28	380.00	10.00	46.43	69.35	263.00	40.00	30.00	20.00	10.00
ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	22	8100.00	0.00	703.64	1711.28	7139.94	542.50	170.00	80.00	9.00
SELENIUM, TOTAL (UG/L AS SE)	11	120.00	1.00	17.36	35.16	120.00	15.00	3.00	1.00	1.00
COLIFORM, FECAL	4	220.00	33.00							
SOLIDS, SUM OF CONSTITUENTS, DISSOLVED[4]	40	1190.00	45.00	435.38	362.08	1099.50	719.25	257.50	128.75	53.25
SOLIDS, DISSOLVED (TONS PER DAY)	40	445.00	2.94	48.26	73.27	162.49	59.10	26.95	10.68	3.21
SOLIDS, DISSOLVED (TONS PER AC-FT)	40	1.62	0.06	0.56	0.47	1.48	0.82	0.34	0.16	0.07
MERCURY TOTAL RECOVERABLE (UG/L AS HG)	3	0.20	0.10							
POTASSIUM 40 DISSOLVED (PCI/L AS K40)	7	2.80	0.70							
SPECIFIC CONDUCTANCE LAB (UMHOS)	24	1570.00	131.00	749.04	516.80	1525.00	1297.50	783.00	205.75	131.00
ALKALINITY LAB (MG/L AS CACO3)	24	180.00	29.00	103.75	55.07	180.00	157.50	110.50	51.75	30.75
HARDNESS NONCARBONATE (MG/L AS CACO3)	19	600.00	18.00	245.21	241.62	600.00	500.00	94.00	32.00	18.00

[1]MG/L AS NITROGEN.
[2]UG/L AS MOLYBDENUM.
[3]COLS. PER 100 ML, 0.7-MICROMETER MEMBRANE FILTER.
[4]MG/L.

Table 5.--Statistical summary of water-quality data for station 06741510 Big Thompson River at Loveland, 1976-1982

WATER-QUALITY CONSTITUENT	STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	95	75	MEDIAN 50	25	5
TEMPERATURE (DEG C)	40	26.00	0.00	12.31	7.46	23.45	19.25	12.25	5.25	1.05
STREAMFLOW, INSTANTANEOUS (CFS)	40	1850.00	1.40	136.42	351.66	1312.60	110.00	35.50	6.28	1.66
SPECIFIC CONDUCTANCE (UMHOS)	40	1900.00	80.00	844.25	538.15	1747.50	1347.50	787.50	395.00	162.00
OXYGEN, DISSOLVED (MG/L)	39	16.00	7.80	10.82	2.15	14.90	12.00	10.60	9.00	7.80
PH (UNITS)	40	8.70	7.00		0.34	8.70	8.38	8.20	8.03	7.51
PH LAB (UNITS)	24	8.80	7.50	8.13	0.31	8.75	8.35	8.05	7.93	7.55
CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	1	1.10	1.10							
ALKALINITY FIELD (MG/L AS CACO3)	16	180.00	13.00	97.94	54.67	180.00	147.50	92.00	50.75	13.00
NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	1	1.80	1.80							
NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	36	8.20	0.01	0.36	1.35	1.57	0.19	0.12	0.06	0.01
NITROGEN, NITRITE DISSOLVED (MG/L AS N)	26	0.05	0.01	0.02	0.01	0.05	0.02	0.02	0.01	0.01
NITROGEN, NITRATE DISSOLVED (MG/L AS N)	30	2.00	0.15	0.71	0.51	2.00	0.79	0.63	0.35	0.15
NITROGEN,AMMONIA + ORGANIC DISSOLVED[1]	1	10.00	10.00							
NITROGEN,AMMONIA + ORGANIC TOTAL[1]	39	3.40	0.05	0.92	0.62	2.60	1.10	0.82	0.53	0.30
NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	39	2.00	0.15	0.70	0.48	2.00	0.81	0.63	0.33	0.15
PHOSPHORUS, DISSOLVED (MG/L AS P)	33	0.10	0.01	0.04	0.03	0.09	0.06	0.03	0.02	0.01
PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	9	1.60	0.01							
HARDNESS (MG/L AS CACO3)	40	840.00	28.00	377.17	255.83	779.50	655.00	355.00	152.50	64.25
HARDNESS, NONCARBONATE (MG/L CACO3)	21	660.00	15.00	231.33	176.09	646.00	290.00	220.00	91.50	16.00
CALCIUM DISSOLVED (MG/L AS CA)	40	192.00	7.80	95.55	62.12	189.50	170.00	93.00	40.00	18.00
MAGNESIUM, DISSOLVED (MG/L AS MG)	40	96.00	2.00	33.68	25.29	80.60	58.50	27.00	13.25	4.61
SODIUM, DISSOLVED (MG/L AS NA)	40	110.00	4.60	37.06	29.38	108.75	63.00	28.00	13.50	5.10
SODIUM ADSORPTION RATIO	40	1.70	0.30	0.79	0.39	1.70	1.08	0.70	0.50	0.31
PERCENT SODIUM	40	30.00	13.00	17.82	3.99	25.95	20.00	17.00	14.25	13.00
SODIUM+ POTASSIUM DISSOLVED (MG/L AS NA)	10	51.00	10.00	29.40	12.27	51.00	38.00	31.00	17.75	10.00
POTASSIUM, DISSOLVED (MG/L AS K)	40	8.00	0.70	2.64	1.51	5.28	3.45	2.65	1.33	0.81
CHLORIDE, DISSOLVED (MG/L AS CL)	40	26.00	1.50	9.29	6.86	22.90	14.75	7.20	3.60	1.63
SULFATE DISSOLVED (MG/L AS SO4)	40	870.00	16.00	313.57	237.61	708.50	542.50	255.00	120.00	28.65
FLUORIDE, DISSOLVED (MG/L AS F)	39	0.50	0.10	0.34	0.11	0.50	0.40	0.40	0.20	0.10
SILICA, DISSOLVED (MG/L AS SIO2)	40	14.00	3.60	6.47	2.26	12.80	7.75	5.80	4.80	3.82
ARSENIC TOTAL (UG/L AS AS)	9	4.00	1.00							
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	5	300.00	100.00							
CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	4	5.00	1.00							
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	29	20.00	2.00	6.69	4.91	19.00	10.00	5.00	3.00	2.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	6	5.00	2.00							
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	35	25.00	2.00	6.74	4.77	20.20	7.00	5.00	4.00	2.00
IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	11	7000.00	40.00	1599.09	2428.71	7000.00	1500.00	710.00	150.00	40.00
IRON, TOTAL RECOVERABLE (UG/L AS FE)	11	7100.00	50.00	1633.64	2459.46	7100.00	1500.00	740.00	180.00	50.00
IRON, DISSOLVED (UG/L AS FE)	33	150.00	13.00	39.52	28.00	115.00	45.50	30.00	20.00	13.70
LEAD, TOTAL RECOVERABLE (UG/L AS PB)	32	140.00	1.00	12.00	25.21	75.65	12.75	4.00	3.00	1.00
MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	9	290.00	10.00							
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN	11	320.00	40.00	97.27	85.33	320.00	140.00	50.00	40.00	40.00
MANGANESE, DISSOLVED (UG/L AS MN)	36	160.00	6.00	45.14	38.10	134.50	60.00	32.50	20.00	6.85
MOLYBDENUM, TOTAL RECOVERABLE[2]	11	5.00	1.00	2.64	1.29	5.00	4.00	2.00	2.00	1.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	10	7.00	1.00	3.80	2.04	7.00	5.50	3.50	2.00	1.00
SILVER, TOTAL RECOVERABLE (UG/L AS AG)	2	19.00	3.00							
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	25	140.00	10.00	34.40	25.34	116.00	40.00	30.00	20.00	10.00
ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	29	7600.00	20.00	631.17	1430.88	4799.91	530.00	170.00	70.00	40.00
SELENIUM, DISSOLVED (UG/L AS SE)	1	20.00	20.00							
SELENIUM, TOTAL (UG/L AS SE)	11	21.00	1.00	7.09	7.30	21.00	12.00	4.00	2.00	1.00
COLIFORM, FECAL	2	260.00	220.00							
SOLIDS, SUM OF CONSTITUENTS, DISSOLVED[4]	40	1390.00	48.00	574.52	396.18	1218.50	970.75	527.50	232.25	102.05
SOLIDS, DISSOLVED (TONS PER DAY)	40	514.00	4.07	60.15	83.11	175.65	73.83	43.20	15.83	4.82
SOLIDS, DISSOLVED (TONS PER AC-FT)	40	1.89	0.07	0.78	0.54	1.66	1.32	0.72	0.32	0.14
MERCURY TOTAL RECOVERABLE (UG/L AS HG)	2	0.40	0.10							
POTASSIUM 40 DISSOLVED (PCI/L AS K40)	7	3.60	0.80							
SPECIFIC CONDUCTANCE LAB (UMHOS)	24	1640.00	166.00	939.88	535.39	1622.50	1450.00	1048.50	379.25	177.50
ALKALINITY LAB (MG/L AS CACO3)	24	230.00	40.00	135.54	66.44	222.50	197.50	160.00	58.00	41.25
HARDNESS NONCARBONATE (MG/L AS CACO3)	18	600.00	29.00	275.22	218.70	600.00	500.00	155.00	88.25	29.00

[1]MG/L AS NITROGEN.
[2]UG/L AS MOLYBDENUM.
[3]COLS. PER 100 ML, 0.7-MICROMETER MEMBRANE FILTER.
[4]MG/L.

Table 6.--Statistical summary of water-quality data for station
06741520 Big Thompson River below Loveland, 1976-1982

WATER-QUALITY CONSTITUENT	STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	95	75	MEDIAN 50	25	5
TEMPERATURE (DEG C)	40	26.00	2.00	13.51	6.85	25.47	18.50	13.00	8.00	2.53
STREAMFLOW, INSTANTANEOUS (CFS)	40	1850.00	6.90	143.85	349.86	1313.00	112.75	44.20	17.00	10.05
SPECIFIC CONDUCTANCE (UMHOS)	40	1850.00	110.00	909.25	453.59	1648.50	1315.00	925.00	540.00	199.25
OXYGEN, DISSOLVED (MG/L)	39	13.40	6.70	9.87	1.83	13.10	11.00	10.00	8.20	6.90
PH (UNITS)	40	8.70	7.30		0.34	8.70	8.30	8.00	7.83	7.60
PH LAB (UNITS)	24	8.70	6.60	8.06	0.43	8.68	8.30	8.05	7.93	6.85
CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	1	1.20	1.20							
ALKALINITY FIELD (MG/L AS CACO3)	17	200.00	37.00	114.06	49.32	200.00	150.00	110.00	69.00	37.00
NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	1	1.10	1.10							
NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	38	5.30	0.04	1.22	1.34	4.63	1.75	0.61	0.26	0.09
NITROGEN, NITRITE DISSOLVED (MG/L AS N)	40	0.31	0.01	0.13	0.10	0.31	0.20	0.12	0.05	0.01
NITROGEN, NITRATE DISSOLVED (MG/L AS N)	40	4.60	0.24	1.43	1.05	4.15	2.13	1.10	0.60	0.25
NITROGEN,AMMONIA + ORGANIC DISSOLVED[1]	1	1.30	1.30							
NITROGEN,AMMONIA + ORGANIC TOTAL[1]	39	8.70	0.10	2.45	2.03	7.60	3.20	1.70	0.98	0.72
NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	40	4.90	0.25	1.56	1.13	4.45	2.25	1.25	0.64	0.27
PHOSPHORUS, TOTAL (MG/L AS P)	1	0.36	0.36							
PHOSPHORUS, DISSOLVED (MG/L AS P)	39	7.30	0.02	1.36	1.51	4.90	1.90	0.84	0.28	0.04
PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	9	6.10	0.11							
HARDNESS (MG/L AS CACO3)	40	790.00	42.00	348.92	176.89	628.00	490.00	385.00	202.50	73.95
HARDNESS, NONCARBONATE (MG/L CACO3)	21	590.00	0.00	217.00	134.03	569.00	285.00	230.00	120.00	3.40
CALCIUM DISSOLVED (MG/L AS CA)	40	170.00	12.00	82.42	39.32	132.85	111.50	95.00	48.25	20.20
MAGNESIUM, DISSOLVED (MG/L AS MG)	40	89.00	3.00	34.61	19.61	73.40	48.75	34.50	19.25	5.68
SODIUM, DISSOLVED (MG/L AS NA)	40	140.00	8.00	56.83	36.41	129.50	88.00	50.00	26.25	9.29
SODIUM ADSORPTION RATIO	40	2.70	0.50	1.30	0.59	2.49	1.68	1.20	0.80	0.50
PERCENT SODIUM	40	36.00	18.00	25.47	4.83	34.95	29.00	25.00	21.00	19.00
SODIUM+ POTASSIUM DISSOLVED (MG/L AS NA)	10	78.00	17.00	49.60	19.40	78.00	65.00	52.50	32.00	17.00
POTASSIUM, DISSOLVED (MG/L AS K)	40	8.50	0.80	4.33	2.34	8.00	6.35	4.15	2.05	1.31
CHLORIDE, DISSOLVED (MG/L AS CL)	40	32.00	1.90	15.93	9.87	32.00	26.50	14.50	6.40	3.14
SULFATE DISSOLVED (MG/L AS SO4)	40	760.00	23.00	315.60	181.10	693.00	462.50	320.00	170.00	38.45
FLUORIDE, DISSOLVED (MG/L AS F)	40	1.40	0.00	0.62	0.33	1.19	0.90	0.55	0.33	0.20
SILICA, DISSOLVED (MG/L AS SIO2)	40	14.00	4.00	6.93	2.10	11.90	8.10	6.75	5.43	4.32
ARSENIC TOTAL (UG/L AS AS)	11	2.00	1.00	1.18	0.40	2.00	1.00	1.00	1.00	1.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	5	300.00	100.00							
CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	1	6.00	6.00							
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	27	20.00	1.00	6.04	4.05	16.80	9.00	5.00	3.00	1.40
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	5	5.00	2.00							
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	38	17.00	2.00	7.24	3.77	15.10	8.00	6.50	4.75	2.95
IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	12	7900.00	150.00	1693.33	2333.40	7900.00	2425.00	670.00	277.50	150.00
IRON, TOTAL RECOVERABLE (UG/L AS FE)	12	8000.00	180.00	1724.17	2359.35	8000.00	2425.00	695.00	302.50	180.00
IRON, DISSOLVED (UG/L AS FE)	32	100.00	19.00	35.41	21.92	100.00	31.50	30.00	20.25	19.00
LEAD, TOTAL RECOVERABLE (UG/L AS PB)	33	46.00	2.00	6.82	7.99	25.70	8.00	4.00	3.00	2.00
MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	11	160.00	7.00	47.00	44.33	160.00	60.00	30.00	20.00	7.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN	12	170.00	40.00	79.17	39.65	170.00	100.00	65.00	50.00	40.00
MANGANESE, DISSOLVED (UG/L AS MN)	38	170.00	9.00	50.68	37.29	132.00	68.00	40.00	20.00	9.95
MOLYBDENUM, TOTAL RECOVERABLE[2]	12	7.00	1.00	3.25	1.86	7.00	4.50	3.00	2.00	1.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	11	24.00	2.00	7.00	6.10	24.00	8.00	5.00	4.00	2.00
SILVER, TOTAL RECOVERABLE (UG/L AS AG)	2	1.00	1.00							
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	33	60.00	10.00	28.79	10.23	53.00	30.00	30.00	20.00	17.00
ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	28	2000.00	60.00	454.64	502.83	2000.00	520.00	300.00	160.00	60.00
SELENIUM, TOTAL (UG/L AS SE)	11	10.00	2.00	5.09	2.98	10.00	9.00	4.00	3.00	2.00
COLIFORM, FECAL	2	2800.00	1900.00							
SOLIDS, SUM OF CONSTITUENTS, DISSOLVED[4]	40	1300.00	91.00	597.70	316.05	1200.50	879.50	632.50	329.00	118.65
SOLIDS, DISSOLVED (TONS PER DAY)	40	584.00	17.20	92.80	99.47	329.50	105.50	62.20	36.35	22.98
SOLIDS, DISSOLVED (TONS PER AC-FT)	40	1.77	0.12	0.81	0.43	1.64	1.19	0.86	0.45	0.16
MERCURY TOTAL RECOVERABLE (UG/L AS HG)	1	0.10	0.10							
POTASSIUM 40 DISSOLVED (PCI/L AS K40)	8	6.30	1.30							
SPECIFIC CONDUCTANCE LAB (UMHOS)	24	1620.00	238.00	980.92	426.65	1580.00	1360.00	1090.00	518.50	262.75
ALKALINITY LAB (MG/L AS CACO3)	23	200.00	41.00	127.61	51.22	198.00	180.00	140.00	73.00	42.60
ALKALINITY LAB (MG/L AS CACO3)	2	190.00	140.00							
HARDNESS NONCARBONATE (MG/L AS CACO3)	19	450.00	43.00	238.53	127.06	450.00	350.00	220.00	130.00	43.00

[1]MG/L AS NITROGEN.
[2]UG/L AS MOLYBDENUM.
[3]COLS. PER 100 ML, 0.7-MICROMETER MEMBRANE FILTER.
[4]MG/L.

Table 7.--Statistical summary of water-quality data for station 06746095 Joe Wright Creek above Joe Wright Reservoir, 1978-1982

WATER-QUALITY CONSTITUENT	STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	95	75	MEDIAN 50	25	5
TEMPERATURE (DEG C)	39	12.00	0.00	3.46	4.42	12.00	8.00	0.50	0.00	0.00
SPECIFIC CONDUCTANCE (UMHOS)	34	90.00	22.00	54.21	18.40	86.25	70.00	55.00	38.00	26.50

Table 8.--Statistical summary of water-quality data for station
06746110 Joe Wright Creek below Joe Wright Reservoir, 1978-1982

WATER-QUALITY CONSTITUENT	STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	95	75	MEDIAN 50	25	5
TEMPERATURE (DEG C)	38	13.00	0.00	3.38	3.53	10.15	6.13	2.25	0.00	0.00
SPECIFIC CONDUCTANCE (UMHOS)	33	75.00	34.00	48.15	10.57	71.50	53.50	45.00	40.00	34.70

Table 9.--Statistical summary of water-quality data for station 06749500 Cache La Poudre River near Fort Collins, 1976-1982

WATER-QUALITY CONSTITUENT	STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	95	75	MEDIAN 50	25	5
TEMPERATURE (DEG C)	37	17.50	0.00	7.68	6.11	17.50	12.50	8.00	1.00	0.00
STREAMFLOW, INSTANTANEOUS (CFS)	36	1870.00	13.00	242.30	422.14	1402.50	270.75	38.05	22.00	14.11
SPECIFIC CONDUCTANCE (MICROMHOS)	1	70.00	70.00							
SPECIFIC CONDUCTANCE (UMHOS)	33	130.00	34.00	75.42	28.11	130.00	89.00	77.00	46.50	34.70
OXYGEN, DISSOLVED (MG/L)	36	13.80	7.70	9.77	1.55	12.18	11.53	9.55	8.33	7.79
PH (UNITS)	34	8.30	6.60		0.38	8.23	7.70	7.45	7.20	6.90
PH LAB (UNITS)	24	8.40	7.10	7.71	0.34	8.40	7.80	7.70	7.53	7.13
ALKALINITY FIELD (MG/L AS CACO3)	13	44.00	13.00	29.54	10.56	44.00	37.50	32.00	17.50	13.00
NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	26	0.15	0.01	0.06	0.05	0.15	0.11	0.05	0.02	0.01
NITROGEN, NITRITE DISSOLVED (MG/L AS N)	9	0.01	0.01							
NITROGEN, NITRATE DISSOLVED (MG/L AS N)	19	0.18	0.01	0.09	0.05	0.18	0.13	0.10	0.05	0.01
NITROGEN,AMMONIA + ORGANIC DISSOLVED[1]	1	0.70	0.70							
NITROGEN,AMMONIA + ORGANIC TOTAL[1]	35	2.10	0.04	0.65	0.47	1.86	0.91	0.51	0.31	0.18
NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	23	0.19	0.00	0.09	0.06	0.19	0.13	0.08	0.04	0.00
PHOSPHORUS, DISSOLVED (MG/L AS P)	29	0.07	0.00	0.02	0.02	0.06	0.03	0.02	0.01	0.00
PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	1	0.01	0.01							
HARDNESS (MG/L AS CACO3)	36	44.00	11.00	27.31	10.29	44.00	36.50	28.00	18.00	11.00
HARDNESS, NONCARBONATE (MG/L CACO3)	17	8.00	0.00	1.12	2.62	8.00	1.00	0.00	0.00	0.00
CALCIUM DISSOLVED (MG/L AS CA)	36	12.00	3.20	7.60	2.74	12.00	9.93	7.65	5.15	3.29
MAGNESIUM, DISSOLVED (MG/L AS MG)	36	3.30	0.70	2.02	0.84	3.30	2.90	2.15	1.22	0.70
SODIUM, DISSOLVED (MG/L AS NA)	36	6.20	1.30	3.61	1.38	5.95	4.78	3.90	2.13	1.72
SODIUM ADSORPTION RATIO	36	0.40	0.20	0.29	0.07	0.40	0.30	0.30	0.20	0.20
PERCENT SODIUM	36	30.00	17.00	22.03	2.99	30.00	23.00	22.00	20.25	17.85
SODIUM+ POTASSIUM DISSOLVED (MG/L AS NA)	5	6.00	4.60							
POTASSIUM, DISSOLVED (MG/L AS K)	36	1.30	0.50	0.89	0.20	1.21	1.00	0.90	0.80	0.50
CHLORIDE, DISSOLVED (MG/L AS CL)	36	2.60	0.30	1.31	0.65	2.43	1.88	1.35	0.73	0.30
SULFATE DISSOLVED (MG/L AS SO4)	30	12.00	0.70	5.27	3.02	10.40	7.43	4.00	1.90	0.76
FLUORIDE, DISSOLVED (MG/L AS F)	36	0.50	0.10	0.21	0.09	0.33	0.30	0.20	0.20	0.10
SILICA, DISSOLVED (MG/L AS SIO2)	36	15.00	6.80	9.87	2.08	14.15	11.00	10.00	8.13	7.06
ARSENIC TOTAL (UG/L AS AS)	11	2.00	1.00	1.36	0.50	2.00	2.00	1.00	1.00	1.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	6	400.00	100.00							
CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	1	3.00	3.00							
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	16	40.00	1.00	8.81	11.26	40.00	7.75	4.00	3.00	1.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	6	4.00	1.00							
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	32	24.00	2.00	5.38	4.63	17.50	7.75	3.00	2.00	2.00
IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	16	5300.00	20.00	588.13	1314.08	5300.00	455.00	115.00	72.50	20.00
IRON, TOTAL RECOVERABLE (UG/L AS FE)	20	5300.00	30.00	533.50	1189.20	5124.99	472.50	135.10	72.50	30.50
IRON, DISSOLVED (UG/L AS FE)	34	170.00	9.00	56.18	36.50	132.50	80.25	46.00	30.00	11.25
LEAD, TOTAL RECOVERABLE (UG/L AS PB)	28	250.00	1.00	13.04	46.49	149.65	5.00	3.00	2.00	1.00
MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	12	120.00	3.00	21.58	32.58	120.00	20.00	8.50	7.00	3.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN	8	120.00	4.00							

Table 9.--Statistical summary of water-quality data for station
06749500 Cache La Poudre River near Fort Collins, 1976-1982--Continued

WATER-QUALITY CONSTITUENT	STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	95	75	MEDIAN 50	25	5
MANGANESE, DISSOLVED (UG/L AS MN)	28	7.00	1.00	2.68	1.19	5.65	3.00	2.00	2.00	1.00
MOLYBDENUM, TOTAL RECOVERABLE[2]	10	10.00	1.00	2.40	2.76	10.00	2.25	1.50	1.00	1.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	14	10.00	2.00	4.71	2.64	10.00	6.00	4.50	2.00	2.00
SILVER, TOTAL RECOVERABLE (UG/L AS AG)	1	7.00	7.00							
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	21	80.00	10.00	24.76	18.61	77.00	30.00	20.00	10.00	10.00
ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	17	770.00	0.00	142.94	179.09	770.00	175.00	90.00	40.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	1	1.00	1.00							
PERTHANE TOTAL (UG/L)	4	0.00	0.00							
NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	4	0.00	0.00							
ALDRIN, TOTAL (UG/L)	4	0.00	0.00							
LINDANE TOTAL (UG/L)	4	0.00	0.00							
CHLORDANE, TOTAL (UG/L)	4	0.00	0.00							
DDD, TOTAL (UG/L)	4	0.00	0.00							
DDE, TOTAL (UG/L)	4	0.00	0.00							
DDT, TOTAL (UG/L)	4	0.00	0.00							
DIELDRIN TOTAL (UG/L)	4	0.00	0.00							
ENDOSULFAN, TOTAL (UG/L)	4	0.00	0.00							
ENDRIN, TOTAL (UG/L)	4	0.00	0.00							
ETHION, TOTAL (UG/L)	4	0.00	0.00							
TOXAPHENE, TOTAL (UG/L)	4	0.00	0.00							
HEPTACHLOR, TOTAL (UG/L)	4	0.00	0.00							
HEPTACHLOR EPOXIDE TOTAL (UG/L)	4	0.00	0.00							
METHOXYCHLOR, TOTAL (UG/L)	4	0.00	0.00							
PCB, TOTAL (UG/L)	4	0.00	0.00							
MALATHION, TOTAL (UG/L)	4	0.00	0.00							
PARATHION, TOTAL (UG/L)	4	0.00	0.00							
DIAZINON, TOTAL (UG/L)	4	0.00	0.00							
METHYL PARATHION, TOTAL (UG/L)	4	0.00	0.00							
2,4-D, TOTAL (UG/L)	3	0.00	0.00							
2,4,5-T TOTAL (UG/L)	4	0.00	0.00							
MIREX, TOTAL (UG/L)	4	0.00	0.00							
SILVEX, TOTAL (UG/L)	4	0.00	0.00							
TOTAL TRITHION (UG/L)	4	0.00	0.00							
METHYL TRITHION, TOTAL (UG/L)	4	0.00	0.00							
SOLIDS, SUM OF CONSTITUENTS, DISSOLVED[3]	30	75.00	24.00	51.03	14.44	73.35	63.25	51.50	40.75	24.55
SOLIDS, DISSOLVED (TONS PER DAY)	29	168.00	1.84	17.60	32.81	115.45	17.25	5.44	3.19	1.85
SOLIDS, DISSOLVED (TONS PER AC-FT)	30	0.11	0.03	0.07	0.02	0.10	0.08	0.07	0.05	0.03
MERCURY TOTAL RECOVERABLE (UG/L AS HG)	5	0.40	0.10							
POTASSIUM 40 DISSOLVED (PCI/L AS K40)	7	0.80	0.40							
2, 4-DP TOTAL (UG/L)	2	0.00	0.00							
SPECIFIC CONDUCTANCE LAB (UMHOS)	24	115.00	33.00	68.37	25.16	114.00	86.75	64.00	47.25	34.00
ALKALINITY LAB (MG/L AS CACO3)	24	43.00	13.00	28.42	9.85	43.00	36.00	30.50	18.25	13.25
HARDNESS NONCARBONATE (MG/L AS CACO3)	19	6.00	0.00	0.74	1.82	6.00	0.00	0.00	0.00	0.00

[1]MG/L AS NITROGEN.
[2]UG/L AS MOLYBDENUM.
[3]MG/L.

Table 10.--Statistical summary of water-quality data for station
06752258 Cache La Poudre River at Shields Street at Fort Collins, 1976-1982

WATER-QUALITY CONSTITUENT	STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	95	75	MEDIAN 50	25	5
TEMPERATURE (DEG C)	37	18.50	0.50	10.61	4.96	18.05	14.50	10.50	6.50	2.30
STREAMFLOW, INSTANTANEOUS (CFS)	36	2440.00	1.80	171.79	464.60	1531.49	91.75	34.00	4.15	1.80
SPECIFIC CONDUCTANCE (UMHOS)	37	596.00	58.30	303.76	168.79	536.60	480.00	265.00	160.00	60.70
OXYGEN, DISSOLVED (MG/L)	36	12.40	5.50	9.80	1.34	12.06	10.68	9.80	9.05	7.63
PH (UNITS)	37	9.00	6.80		0.46	8.91	8.10	7.90	7.70	7.07
PH LAB (UNITS)	25	8.80	7.30	8.02	0.30	8.71	8.20	8.00	7.90	7.39
ALKALINITY FIELD (MG/L AS CACO3)	13	140.00	22.00	85.38	38.22	140.00	120.00	84.00	50.00	22.00
NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	1	0.46	0.46							
NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	31	0.23	0.01	0.08	0.05	0.20	0.10	0.08	0.04	0.02
NITROGEN, NITRITE DISSOLVED (MG/L AS N)	18	0.07	0.01	0.02	0.01	0.07	0.02	0.01	0.01	0.01
NITROGEN, NITRITE TOTAL (MG/L AS N)	1	0.01	0.01							
NITROGEN, NITRATE DISSOLVED (MG/L AS N)	25	1.90	0.08	0.58	0.55	1.84	0.78	0.33	0.18	0.08
NITROGEN,AMMONIA + ORGANIC DISSOLVED[1]	1	0.60	0.60							
NITROGEN,AMMONIA + ORGANIC TOTAL[1]	36	3.20	0.00	0.74	0.52	1.75	0.87	0.65	0.52	0.00
NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	33	1.90	0.10	0.62	0.52	1.76	0.97	0.41	0.20	0.10
PHOSPHORUS, DISSOLVED (MG/L AS P)	31	0.05	0.01	0.02	0.01	0.05	0.03	0.02	0.01	0.01
PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	1	0.01	0.01							
HARDNESS (MG/L AS CACO3)	36	270.00	22.00	138.42	83.37	253.00	220.00	120.00	59.00	22.00
HARDNESS, NONCARBONATE (MG/L CACO3)	17	62.00	0.00	36.88	22.08	62.00	51.00	33.00	7.50	0.00
CALCIUM DISSOLVED (MG/L AS CA)	36	77.00	6.40	38.59	23.20	71.05	62.75	36.00	17.00	6.57
MAGNESIUM, DISSOLVED (MG/L AS MG)	36	19.00	1.40	9.46	6.16	19.00	16.00	7.50	4.03	1.49
SODIUM, DISSOLVED (MG/L AS NA)	36	20.00	1.90	9.08	4.87	18.30	13.75	8.75	5.00	2.16
SODIUM ADSORPTION RATIO	36	0.50	0.20	0.34	0.09	0.50	0.40	0.30	0.30	0.20
PERCENT SODIUM	36	22.00	11.00	13.89	2.57	18.60	15.00	14.00	12.00	11.00
SODIUM+ POTASSIUM DISSOLVED (MG/L AS NA)	5	13.00	11.00							
POTASSIUM, DISSOLVED (MG/L AS K)	36	2.20	0.70	1.47	0.40	2.11	1.82	1.50	1.20	0.70
CHLORIDE, DISSOLVED (MG/L AS CL)	36	7.50	0.70	3.83	2.09	7.33	5.60	3.60	2.23	0.79
SULFATE DISSOLVED (MG/L AS SO4)	35	91.00	2.30	41.51	27.04	81.40	69.00	46.00	16.00	2.54
FLUORIDE, DISSOLVED (MG/L AS F)	37	0.70	0.10	0.39	0.16	0.61	0.50	0.40	0.25	0.10
SILICA, DISSOLVED (MG/L AS SIO2)	37	15.00	5.60	8.99	2.13	14.10	10.00	9.00	7.25	6.05
ARSENIC TOTAL (UG/L AS AS)	11	3.00	0.00	1.27	0.79	3.00	2.00	1.00	1.00	0.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	4	300.00	100.00							
CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	5	5.00	1.00							
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	22	20.00	2.00	7.36	5.25	20.00	10.25	5.50	3.75	2.15
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	6	3.00	1.00							
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	33	18.00	1.00	6.52	4.86	18.00	9.00	4.00	3.00	1.70
IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	11	12000.00	40.00	1259.09	3562.25	12000.00	430.00	130.00	120.00	40.00
IRON, TOTAL RECOVERABLE (UG/L AS FE)	12	12000.00	60.00	1211.67	3401.42	12000.00	427.50	180.00	142.50	60.00
IRON, DISSOLVED (UG/L AS FE)	29	110.00	12.00	43.59	26.78	100.00	69.00	34.00	21.00	14.00
LEAD, TOTAL RECOVERABLE (UG/L AS PB)	28	110.00	1.00	8.79	20.33	70.40	8.00	3.00	2.00	1.00
MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	8	290.00	0.00							

Table 18.--Statistical summary of water-quality data for station 06752258 Cache La Poudre River at Shields Street at Fort Collins, 1976-1982--Continued

WATER-QUALITY CONSTITUENT	STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	95	75	MEDIAN 50	25	5
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN	11	290.00	10.00	49.09	80.43	290.00	30.00	30.00	20.00	10.00
MANGANESE, DISSOLVED (UG/L AS MN)	33	40.00	4.00	12.27	8.33	30.20	20.00	9.00	5.00	4.00
MOLYBDENUM, TOTAL RECOVERABLE[2]	8	10.00	1.00							
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	9	15.00	1.00							
SILVER, TOTAL RECOVERABLE (UG/L AS AG)	2	21.00	1.00							
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	22	140.00	10.00	29.09	31.15	131.00	32.50	20.00	10.00	10.00
ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	27	1000.00	30.00	237.04	223.00	856.00	230.00	160.00	110.00	38.00
SELENIUM, TOTAL (UG/L AS SE)	6	1.00	1.00							
PERTHANE TOTAL (UG/L)	4	0.00	0.00							
NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	4	0.00	0.00							
ALDRIN, TOTAL (UG/L)	4	0.00	0.00							
LINDANE TOTAL (UG/L)	4	0.00	0.00							
CHLORDANE, TOTAL (UG/L)	4	0.00	0.00							
DDD, TOTAL (UG/L)	4	0.00	0.00							
DDE, TOTAL (UG/L)	4	0.00	0.00							
DDT, TOTAL (UG/L)	4	0.00	0.00							
DIELDRIN TOTAL (UG/L)	4	0.00	0.00							
ENDOSULFAN, TOTAL (UG/L)	5	0.01	0.00							
ENDRIN, TOTAL (UG/L)	4	0.00	0.00							
ETHION, TOTAL (UG/L)	4	0.00	0.00							
TOXAPHENE, TOTAL (UG/L)	4	0.00	0.00							
HEPTACHLOR, TOTAL (UG/L)	4	0.00	0.00							
HEPTACHLOR EPOXIDE TOTAL (UG/L)	4	0.00	0.00							
METHOXYCHLOR, TOTAL (UG/L)	4	0.00	0.00							
PCB, TOTAL (UG/L)	4	0.00	0.00							
MALATHION, TOTAL (UG/L)	4	0.00	0.00							
PARATHION, TOTAL (UG/L)	4	0.00	0.00							
DIAZINON, TOTAL (UG/L)	4	0.00	0.00							
METHYL PARATHION, TOTAL (UG/L)	4	0.00	0.00							
2,4-D, TOTAL (UG/L)	5	0.02	0.00							
2,4,5-T TOTAL (UG/L)	4	0.00	0.00							
MIREX, TOTAL (UG/L)	4	0.00	0.00							
SILVEX, TOTAL (UG/L)	4	0.00	0.00							
TOTAL TRITHION (UG/L)	4	0.00	0.00							
METHYL TRITHION, TOTAL (UG/L)	4	0.00	0.00							
SOLIDS, SUM OF CONSTITUENTS, DISSOLVED[3]	36	344.00	37.00	178.42	102.16	325.30	280.00	161.00	87.75	37.85
SOLIDS, DISSOLVED (TONS PER DAY)	35	573.00	1.33	39.11	108.40	381.00	23.80	12.50	3.30	1.37
SOLIDS, DISSOLVED (TONS PER AC-FT)	36	0.47	0.05	0.24	0.13	0.44	0.37	0.22	0.12	0.05
MERCURY TOTAL RECOVERABLE (UG/L AS HG)	3	0.20	0.10							
POTASSIUM 40 DISSOLVED (PCI/L AS K40)	7	1.30	0.70							
2, 4-DP TOTAL (UG/L)	2	0.00	0.00							
SPECIFIC CONDUCTANCE LAB (UMHOS)	25	566.00	57.00	315.44	184.19	557.30	511.50	241.00	160.00	62.40
ALKALINITY LAB (MG/L AS CACO3)	24	210.00	23.00	116.37	69.30	210.00	187.50	94.00	56.00	24.00
ALKALINITY LAB (MG/L AS CACO3)	1	210.00	210.00							
HARDNESS NONCARBONATE (MG/L AS CACO3)	18	93.00	0.00	27.00	28.88	93.00	44.50	12.00	4.00	0.00

[1]MG/L AS NITROGEN.
[2]UG/L AS MOLYBDENUM.
[3]MG/L.

Table 11.--Statistical summary of water-quality data for station 06752260 Cache La Poudre River at Fort Collins, 1976-1982

WATER-QUALITY CONSTITUENT	STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	95	75	MEDIAN 50	25	5
TEMPERATURE (DEG C)	93	21.00	0.00	10.38	6.03	19.50	16.00	11.00	5.00	1.00
STREAMFLOW, INSTANTANEOUS (CFS)	83	2490.00	1.50	111.92	356.60	638.40	54.00	6.98	3.30	1.86
SPECIFIC CONDUCTANCE (UMHOS)	83	776.00	45.00	434.73	226.50	728.00	640.00	490.00	210.00	72.80
OXYGEN, DISSOLVED (MG/L)	249	15.30	0.00	9.79	2.05	13.00	11.10	9.80	8.40	6.80
PH (UNITS)	80	8.70	6.40		0.46	8.40	8.10	7.90	7.60	6.80
PH LAB (UNITS)	24	8.50	7.50	8.05	0.24	8.48	8.20	8.00	7.90	7.55
CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	35	88.00	0.50	14.27	19.51	65.60	17.00	5.60	3.10	0.90
ALKALINITY FIELD (MG/L AS CACO3)	58	245.00	16.00	141.65	74.54	232.40	210.00	155.00	69.00	19.80
BICARBONATE FET-FLD (MG/L AS HCO3)	36	299.00	20.00	197.97	91.99	291.35	265.25	240.00	95.25	37.85
CARBONATE FET-FLD (MG/L AS CO3)	38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NITROGEN DISSOLVED (MG/L AS N)	8	1.90	0.40							
NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	46	0.83	0.00	0.32	0.17	0.72	0.42	0.31	0.18	0.09
NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	63	0.30	0.01	0.06	0.06	0.19	0.08	0.04	0.02	0.01
NITROGEN, NITRITE DISSOLVED (MG/L AS N)	21	0.03	0.01	0.02	0.01	0.03	0.02	0.02	0.01	0.01
NITROGEN, NITRITE TOTAL (MG/L AS N)	1	0.01	0.01		.					
NITROGEN, NITRATE DISSOLVED (MG/L AS N)	25	1.80	0.12	0.71	0.49	1.77	0.94	0.52	0.38	0.13
NITROGEN,AMMONIA + ORGANIC DISSOLVED[1]	48	0.85	0.05	0.35	0.18	0.75	0.46	0.35	0.19	0.10
NITROGEN,AMMONIA + ORGANIC TOTAL[1]	35	1.60	0.01	0.77	0.29	1.36	0.91	0.77	0.61	0.28
NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	81	1.80	0.06	0.67	0.45	1.59	0.97	0.58	0.27	0.09
PHOSPHORUS, TOTAL (MG/L AS P)	42	1.30	0.01	0.09	0.25	0.89	0.04	0.02	0.02	0.01
PHOSPHORUS, DISSOLVED (MG/L AS P)	43	1.10	0.01	0.05	0.16	0.08	0.04	0.02	0.01	0.01
PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	29	0.85	0.01	0.05	0.16	0.45	0.03	0.01	0.01	0.01
HARDNESS (MG/L AS CACO3)	83	350.00	18.00	189.53	102.40	318.00	280.00	210.00	89.00	26.80
HARDNESS, NONCARBONATE (MG/L CACO3)	62	110.00	1.00	48.76	28.99	93.40	70.00	55.50	17.00	5.15
CALCIUM DISSOLVED (MG/L AS CA)	83	94.00	5.30	51.59	26.90	84.80	75.00	61.00	25.00	7.92
MAGNESIUM, DISSOLVED (MG/L AS MG)	83	27.00	1.20	14.72	8.51	26.00	23.00	17.00	5.70	1.74
SODIUM, DISSOLVED (MG/L AS NA)	83	47.00	2.00	17.49	10.48	33.60	25.00	20.00	7.40	2.60
SODIUM ADSORPTION RATIO	83	1.20	0.20	0.53	0.21	0.80	0.70	0.60	0.30	0.20
PERCENT SODIUM	83	27.00	11.00	16.40	2.77	20.80	18.00	16.00	15.00	12.00
SODIUM+ POTASSIUM DISSOLVED (MG/L AS NA)	9	28.00	3.50							
POTASSIUM, DISSOLVED (MG/L AS K)	83	4.00	0.70	2.47	0.99	3.70	3.30	2.80	1.60	0.82
CHLORIDE, DISSOLVED (MG/L AS CL)	83	51.00	0.70	9.54	7.58	20.80	13.00	8.80	2.90	1.12
SULFATE DISSOLVED (MG/L AS SO4)	83	150.00	4.70	69.48	41.79	138.00	100.00	80.00	26.00	7.02
FLUORIDE, DISSOLVED (MG/L AS F)	83	0.80	0.10	0.41	0.15	0.60	0.50	0.40	0.30	0.20
SILICA, DISSOLVED (MG/L AS SIO2)	83	15.00	4.70	8.57	2.07	12.00	9.90	8.30	7.20	5.70
ARSENIC TOTAL (UG/L AS AS)	9	3.00	1.00							
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	4	300.00	100.00							
BORON, DISSOLVED (UG/L AS B)	1	140.00	140.00							
CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	4	3.00	1.00							

Table 11.--Statistical summary of water-quality data for station 06752260 Cache La Poudre River at Fort Collins, 1976-1982--Continued

WATER-QUALITY CONSTITUENT	STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	95	75	MEDIAN 50	25	5
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	23	15.00	1.00	5.35	3.89	15.00	7.00	4.00	2.00	1.20
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	3	4.00	2.00							
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	33	26.00	2.00	6.61	5.14	20.40	8.50	5.00	3.00	2.00
IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	11	9300.00	60.00	1056.36	2737.24	9300.00	440.00	230.00	130.00	60.00
IRON, TOTAL RECOVERABLE (UG/L AS FE)	11	9400.00	130.00	1112.73	2751.75	9400.00	500.00	270.00	170.00	130.00
IRON, DISSOLVED (UG/L AS FE)	81	160.00	20.00	57.41	29.43	119.00	70.00	56.00	30.00	20.00
LEAD, TOTAL RECOVERABLE (UG/L AS PB)	29	120.00	1.00	8.76	21.70	68.00	6.50	4.00	2.00	1.00
MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	8	220.00	1.00							
MANGANESE, TOTAL RECOVERABLE[2]	11	220.00	20.00	53.64	57.14	220.00	50.00	40.00	20.00	20.00
MANGANESE, DISSOLVED (UG/L AS MN)	74	140.00	4.00	40.18	26.75	90.00	60.00	37.00	20.00	5.00
MOLYBDENUM, TOTAL RECOVERABLE[3]	7	5.00	1.00							
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	11	12.00	2.00	4.27	3.55	12.00	6.00	3.00	2.00	2.00
SILVER, TOTAL RECOVERABLE (UG/L AS AG)	1	2.00	2.00							
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	25	70.00	10.00	25.60	16.85	70.00	30.00	20.00	15.00	10.00
ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	27	850.00	10.00	231.48	207.69	786.00	320.00	160.00	80.00	14.00
SELENIUM, TOTAL (UG/L AS SE)	6	1.00	1.00							
PERTHANE TOTAL (UG/L)	5	0.00	0.00							
NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	5	0.00	0.00							
ALDRIN, TOTAL (UG/L)	5	0.00	0.00							
LINDANE TOTAL (UG/L)	5	0.00	0.00							
CHLORDANE, TOTAL (UG/L)	5	0.00	0.00							
DDD, TOTAL (UG/L)	5	0.00	0.00							
DDE, TOTAL (UG/L)	5	0.00	0.00							
DDT, TOTAL (UG/L)	5	0.00	0.00							
DIELDRIN TOTAL (UG/L)	5	0.00	0.00							
ENDOSULFAN, TOTAL (UG/L)	5	0.00	0.00							
ENDRIN, TOTAL (UG/L)	5	0.00	0.00							
ETHION, TOTAL (UG/L)	5	0.00	0.00							
TOXAPHENE, TOTAL (UG/L)	5	0.00	0.00							
HEPTACHLOR, TOTAL (UG/L)	5	0.00	0.00							
HEPTACHLOR EPOXIDE TOTAL (UG/L)	5	0.00	0.00							
METHOXYCHLOR, TOTAL (UG/L)	6	0.12	0.00							
PCB, TOTAL (UG/L)	5	0.00	0.00							
MALATHION, TOTAL (UG/L)	6	0.03	0.00							
PARATHION, TOTAL (UG/L)	5	0.00	0.00							
DIAZINON, TOTAL (UG/L)	6	0.03	0.00							
METHYL PARATHION, TOTAL (UG/L)	5	0.00	0.00							
2,4-D, TOTAL (UG/L)	7	0.16	0.01							
2,4,5-T TOTAL (UG/L)	5	0.00	0.00							
MIREX, TOTAL (UG/L)	5	0.00	0.00							
SILVEX, TOTAL (UG/L)	6	0.01	0.00							
TOTAL TRITHION (UG/L)	5	0.00	0.00							
METHYL TRITHION, TOTAL (UG/L)	5	0.00	0.00							
SOLIDS, SUM OF CONSTITUENTS, DISSOLVED[4]	81	483.00	33.00	260.74	140.66	449.70	386.50	291.00	118.50	42.90
SOLIDS, DISSOLVED (TONS PER DAY)	81	578.00	1.26	25.89	73.55	79.62	20.10	5.87	3.44	1.75
SOLIDS, DISSOLVED (TONS PER AC-FT)	81	0.66	0.04	0.35	0.19	0.61	0.53	0.40	0.16	0.06
MERCURY TOTAL RECOVERABLE (UG/L AS HG)	3	0.20	0.00							
POTASSIUM 40 DISSOLVED (PCI/L AS K40)	7	2.80	0.80							
2, 4-DP TOTAL (UG/L)	2	0.00	0.00							
SPECIFIC CONDUCTANCE LAB (UMHOS)	24	785.00	63.00	413.42	243.02	778.00	640.00	388.00	198.25	70.00
ALKALINITY LAB (MG/L AS CACO3)	24	240.00	24.00	134.00	74.26	240.00	207.50	130.00	61.00	26.00
ALKALINITY LAB (MG/L AS CACO3)	1	240.00	240.00							
HARDNESS NONCARBONATE (MG/L AS CACO3)	18	110.00	0.00	40.33	35.53	110.00	77.50	24.50	12.50	0.00

[1]MG/L AS NITROGEN.
[2]UG/L AS MANGANESE.
[3]UG/L AS MOLYBDENUM.
[4]MG/L.

Table 12.--Statistical summary of water-quality data for station 06752270 Cache La Poudre River below Fort Collins, 1976-1982

WATER-QUALITY CONSTITUENT	STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	95	75	MEDIAN 50	25	5
TEMPERATURE (DEG C)	59	24.00	1.50	11.86	6.06	23.00	16.00	12.00	6.00	2.50
STREAMFLOW, INSTANTANEOUS (CFS)	45	2750.00	4.60	166.19	522.70	1767.30	72.25	28.00	8.67	5.05
SPECIFIC CONDUCTANCE (UMHOS)	59	873.00	80.00	581.24	226.53	810.00	760.00	665.00	423.00	110.00
OXYGEN, DISSOLVED (MG/L)	187	16.00	4.20	10.31	2.92	14.72	12.20	10.70	9.00	4.30
PH (UNITS)	54	9.00	7.40		0.36	8.83	8.50	8.20	8.00	7.60
PH LAB (UNITS)	24	9.00	7.90	8.35	0.29	8.95	8.58	8.35	8.10	7.90
CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	12	3.90	0.40	1.86	0.95	3.90	2.45	1.70	1.15	0.40
ALKALINITY FIELD (MG/L AS CACO3)	34	250.00	22.00	149.65	76.04	250.00	212.50	160.00	72.50	24.25
BICARBONATE FET-FLD (MG/L AS HCO3)	12	310.00	27.00	204.08	107.51	310.00	285.00	255.00	75.50	27.00
CARBONATE FET-FLD (MG/L AS CO3)	12	5.00	0.00	0.42	1.44	5.00	0.00	0.00	0.00	0.00
NITROGEN DISSOLVED (MG/L AS N)	8	3.60	0.34							
NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	23	0.75	0.01	0.42	0.22	0.75	0.58	0.39	0.23	0.02
NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	52	3.80	0.01	0.38	0.69	1.98	0.37	0.12	0.03	0.01
NITROGEN, NITRITE DISSOLVED (MG/L AS N)	32	0.24	0.00	0.07	0.06	0.22	0.10	0.05	0.02	0.01
NITROGEN, NITRITE TOTAL (MG/L AS N)	2	0.06	0.00							
NITROGEN, NITRATE DISSOLVED (MG/L AS N)	33	4.40	0.00	2.18	1.24	4.12	3.25	2.10	1.15	0.13
NITROGEN,AMMONIA + ORGANIC DISSOLVED[1]	23	4.30	0.11	0.72	0.85	3.76	0.80	0.56	0.33	0.12
NITROGEN,AMMONIA + ORGANIC TOTAL[1]	36	4.60	0.08	1.34	0.79	3.92	1.55	1.10	0.97	0.61
NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	57	13.00	0.00	2.19	1.90	4.13	3.05	2.20	0.87	0.18
PHOSPHORUS, TOTAL (MG/L AS P)	20	1.50	0.02	0.31	0.37	1.47	0.31	0.21	0.09	0.02
PHOSPHORUS, DISSOLVED (MG/L AS P)	46	1.10	0.01	0.25	0.27	0.88	0.38	0.13	0.05	0.01
PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	17	0.97	0.01	0.19	0.26	0.97	0.25	0.10	0.03	0.01
HARDNESS (MG/L AS CACO3)	57	380.00	28.00	235.21	104.43	361.00	325.00	260.00	155.00	35.30
HARDNESS, NONCARBONATE (MG/L CACO3)	38	230.00	0.00	79.18	44.82	135.00	100.00	80.50	52.00	6.65
CALCIUM DISSOLVED (MG/L AS CA)	57	100.00	8.30	61.47	26.55	94.60	84.00	69.00	40.50	9.87
MAGNESIUM, DISSOLVED (MG/L AS MG)	57	37.00	1.40	19.75	9.40	31.00	27.00	22.00	12.50	2.55
SODIUM, DISSOLVED (MG/L AS NA)	57	64.00	4.50	31.39	15.22	59.20	39.50	32.00	22.50	5.54
SODIUM ADSORPTION RATIO	57	1.80	0.30	0.90	0.37	1.70	1.10	0.80	0.70	0.39
PERCENT SODIUM	57	38.00	15.00	23.21	6.70	37.00	28.00	22.00	17.00	15.00
SODIUM+ POTASSIUM DISSOLVED (MG/L AS NA)	9	69.00	6.70							
POTASSIUM, DISSOLVED (MG/L AS K)	57	7.20	0.80	2.90	1.30	5.23	3.85	2.70	1.90	0.90
CHLORIDE, DISSOLVED (MG/L AS CL)	57	70.00	1.90	23.10	15.70	63.10	28.50	19.00	12.50	2.84
SULFATE DISSOLVED (MG/L AS SO4)	57	320.00	8.60	102.43	52.04	162.00	130.00	110.00	81.50	11.90
FLUORIDE, DISSOLVED (MG/L AS F)	57	0.90	0.00	0.54	0.21	0.80	0.70	0.60	0.40	0.10
SILICA, DISSOLVED (MG/L AS SIO2)	57	15.00	5.60	9.67	2.30	14.00	11.50	8.90	8.05	6.40
ARSENIC TOTAL (UG/L AS AS)	11	3.00	1.00	1.36	0.67	3.00	2.00	1.00	1.00	1.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	6	200.00	100.00							
BORON, DISSOLVED (UG/L AS B)	1	100.00	100.00							
CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	7	3.00	1.00							
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	22	48.00	2.00	6.50	9.44	42.15	5.50	4.50	3.00	2.00

Table 12.--Statistical summary of water-quality data for station 06752270 Cache La Poudre River below Fort Collins, 1976-1982--Continued

WATER-QUALITY CONSTITUENT	STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	95	75	MEDIAN 50	25	5
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	4	3.00	1.00							
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	34	31.00	2.00	6.00	5.09	16.00	7.25	4.00	3.00	2.00
IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	9	5900.00	100.00							
IRON, TOTAL RECOVERABLE (UG/L AS FE)	11	6000.00	110.00	998.18	1804.48	6000.00	540.00	300.00	170.00	110.00
IRON, DISSOLVED (UG/L AS FE)	46	140.00	12.00	44.78	28.67	109.50	60.00	40.00	20.00	13.40
LEAD, TOTAL RECOVERABLE (UG/L AS PB)	33	73.00	1.00	8.91	14.52	59.00	8.00	5.00	3.00	1.00
MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	8	150.00	9.00							
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN	11	150.00	20.00	49.09	40.11	150.00	60.00	30.00	20.00	20.00
MANGANESE, DISSOLVED (UG/L AS MN)	48	120.00	4.00	32.77	27.33	111.00	40.00	28.50	13.50	4.90
MOLYBDENUM, TOTAL RECOVERABLE[2]	9	6.00	1.00							
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	11	12.00	0.00	5.18	3.49	12.00	6.00	4.00	3.00	0.00
SILVER, TOTAL RECOVERABLE (UG/L AS AG)	1	1.00	1.00							
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	26	300.00	10.00	36.15	55.79	216.00	32.50	20.00	20.00	10.00
ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	27	550.00	10.00	208.89	126.68	502.00	290.00	170.00	130.00	26.00
SELENIUM, TOTAL (UG/L AS SE)	11	5.00	1.00	2.09	1.51	5.00	4.00	1.00	1.00	1.00
PERTHANE TOTAL (UG/L)	4	0.00	0.00							
NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	4	0.00	0.00							
ALDRIN, TOTAL (UG/L)	4	0.00	0.00							
LINDANE TOTAL (UG/L)	4	0.00	0.00							
CHLORDANE, TOTAL (UG/L)	4	0.00	0.00							
DDD, TOTAL (UG/L)	4	0.00	0.00							
DDE, TOTAL (UG/L)	4	0.00	0.00							
DDT, TOTAL (UG/L)	4	0.00	0.00							
DIELDRIN TOTAL (UG/L)	4	0.00	0.00							
ENDOSULFAN, TOTAL (UG/L)	4	0.00	0.00							
ENDRIN, TOTAL (UG/L)	4	0.00	0.00							
ETHION, TOTAL (UG/L)	4	0.00	0.00							
TOXAPHENE, TOTAL (UG/L)	4	0.00	0.00							
HEPTACHLOR, TOTAL (UG/L)	4	0.00	0.00							
HEPTACHLOR EPOXIDE TOTAL (UG/L)	4	0.00	0.00							
METHOXYCHLOR, TOTAL (UG/L)	4	0.00	0.00							
PCB, TOTAL (UG/L)	4	0.10	0.00							
MALATHION, TOTAL (UG/L)	5	0.01	0.00							
PARATHION, TOTAL (UG/L)	4	0.00	0.00							
DIAZINON, TOTAL (UG/L)	6	0.04	0.01							
METHYL PARATHION, TOTAL (UG/L)	4	0.00	0.00							
2,4-D, TOTAL (UG/L)	5	0.13	0.01							
2,4,5-T TOTAL (UG/L)	4	0.00	0.00							
MIREX, TOTAL (UG/L)	4	0.00	0.00							
SILVEX, TOTAL (UG/L)	4	0.01	0.00							
TOTAL TRITHION (UG/L)	4	0.00	0.00							
METHYL TRITHION, TOTAL (UG/L)	4	0.00	0.00							
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED[3]	1	250.00	250.00							
SOLIDS, SUM OF CONSTITUENTS, DISSOLVED[3]	57	580.00	54.00	355.39	145.90	516.10	465.00	414.00	246.50	57.80
SOLIDS, DISSOLVED (TONS PER DAY)	57	698.00	5.15	56.63	119.93	319.90	50.10	28.60	10.95	6.27
SOLIDS, DISSOLVED (TONS PER AC-FT)	57	0.79	0.07	0.48	0.20	0.69	0.63	0.56	0.34	0.08
MERCURY TOTAL RECOVERABLE (UG/L AS HG)	4	0.20	0.10							
POTASSIUM 40 DISSOLVED (PCI/L AS K40)	7	2.50	1.60							
2, 4-DP TOTAL (UG/L)	2	0.00	0.00							
SPECIFIC CONDUCTANCE LAB (UMHOS)	24	840.00	124.00	616.62	194.66	839.75	756.75	671.00	490.25	145.00
ALKALINITY LAB (MG/L AS CACO3)	24	260.00	37.00	173.75	65.86	260.00	220.00	200.00	121.00	42.25
ALKALINITY LAB (MG/L AS CACO3)	1	260.00	260.00							
HARDNESS NONCARBONATE (MG/L AS CACO3)	19	120.00	9.00	70.21	30.49	120.00	94.00	75.00	54.00	9.00

[1]MG/L AS NITROGEN.
[2]UG/L AS MOLYBDENUM.
[3]MG/L.

Table 13.--Statistical summary of water-quality data for station 06752280 Cache La Poudre River above Box Elder Creek near Timnath, 1976-1982

WATER-QUALITY CONSTITUENT	STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	95	75	MEDIAN 50	25	5
TEMPERATURE (DEG C)	36	28.00	1.00	13.15	7.55	28.00	17.63	13.00	6.25	1.43
STREAMFLOW, INSTANTANEOUS (CFS)	36	2800.00	3.90	135.11	478.38	1037.94	46.90	8.20	5.53	4.16
SPECIFIC CONDUCTANCE (UMHOS)	36	2800.00	115.00	1503.28	731.47	2545.00	2117.50	1735.00	906.00	159.20
OXYGEN, DISSOLVED (MG/L)	62	15.70	6.70	9.85	2.35	13.86	11.08	9.55	7.88	6.71
PH (UNITS)	33	8.50	7.40		0.29	8.43	8.30	8.10	7.80	7.40
PH LAB (UNITS)	24	8.50	7.00	8.03	0.31	8.48	8.20	8.10	7.90	7.15
ALKALINITY FIELD (MG/L AS CACO3)	16	260.00	28.00	163.62	66.93	260.00	217.50	175.00	120.00	28.00
NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	33	3.70	0.03	0.43	0.80	3.07	0.31	0.15	0.09	0.04
NITROGEN, NITRITE DISSOLVED (MG/L AS N)	31	0.35	0.01	0.07	0.08	0.30	0.08	0.04	0.03	0.01
NITROGEN, NITRITE TOTAL (MG/L AS N)	1	0.04	0.04							
NITROGEN, NITRATE DISSOLVED (MG/L AS N)	31	9.20	0.22	2.81	1.82	7.88	3.40	2.60	1.60	0.38
NITROGEN,AMMONIA + ORGANIC TOTAL[1]	36	4.80	0.58	1.50	0.79	3.35	1.75	1.30	1.03	0.69
NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	35	9.40	0.00	2.72	1.87	7.72	3.40	2.40	1.60	0.18
PHOSPHORUS, DISSOLVED (MG/L AS P)	35	2.60	0.01	0.33	0.67	2.44	0.21	0.05	0.03	0.01
PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	2	0.07	0.04							
HARDNESS (MG/L AS CACO3)	36	1300.00	35.00	712.86	383.84	1130.00	1100.00	870.00	365.00	54.55
HARDNESS, NONCARBONATE (MG/L CACO3)	17	1100.00	7.00	411.06	356.49	1100.00	790.00	230.00	109.50	7.00
CALCIUM DISSOLVED (MG/L AS CA)	36	320.00	9.80	181.44	96.44	294.50	270.00	220.00	95.75	15.07
MAGNESIUM, DISSOLVED (MG/L AS MG)	36	120.00	2.50	63.47	35.21	103.00	95.50	76.50	31.25	4.12
SODIUM, DISSOLVED (MG/L AS NA)	36	138.00	5.40	76.53	36.62	130.00	110.00	89.50	52.25	6.59
SODIUM ADSORPTION RATIO	36	1.70	0.40	1.24	0.35	1.61	1.50	1.35	1.20	0.40
PERCENT SODIUM	36	34.00	15.00	19.92	3.74	28.90	20.75	18.50	18.00	15.85
SODIUM+ POTASSIUM DISSOLVED (MG/L AS NA)	5	140.00	49.00							
POTASSIUM, DISSOLVED (MG/L AS K)	36	8.90	0.90	5.07	1.84	7.54	6.00	5.55	4.45	0.99
CHLORIDE, DISSOLVED (MG/L AS CL)	36	65.00	2.80	27.67	12.32	51.40	33.75	27.50	22.25	2.97
SULFATE DISSOLVED (MG/L AS SO4)	36	1200.00	13.00	638.67	396.22	1115.00	987.50	810.00	225.00	29.15
FLUORIDE, DISSOLVED (MG/L AS F)	36	1.30	0.10	0.86	0.29	1.21	1.10	0.90	0.70	0.18
SILICA, DISSOLVED (MG/L AS SIO2)	36	26.00	4.90	10.27	3.42	16.65	11.75	9.75	8.70	6.18
ARSENIC TOTAL (UG/L AS AS)	11	2.00	1.00	1.27	0.47	2.00	2.00	1.00	1.00	1.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	4	200.00	100.00							
CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	3	3.00	1.00							
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	23	10.00	2.00	5.43	2.39	10.00	7.00	5.00	4.00	2.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	5	18.00	1.00							
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	33	12.00	2.00	5.15	2.18	9.20	7.00	4.00	4.00	2.00
IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	11	3100.00	130.00	651.82	869.26	3100.00	460.00	360.00	260.00	130.00
IRON, TOTAL RECOVERABLE (UG/L AS FE)	11	3200.00	150.00	698.18	892.72	3200.00	480.00	380.00	320.00	150.00
IRON, DISSOLVED (UG/L AS FE)	31	100.00	11.00	47.39	26.90	100.00	60.00	50.00	22.00	11.00
LEAD, TOTAL RECOVERABLE (UG/L AS PB)	31	25.00	1.00	5.45	4.77	18.40	7.00	4.00	2.00	1.00
MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	9	90.00	20.00							
MANGANESE, TOTAL RECOVERABLE[2]	11	220.00	30.00	112.73	56.23	220.00	160.00	110.00	60.00	30.00
MANGANESE, DISSOLVED (UG/L AS MN)	35	210.00	6.00	56.26	43.27	162.00	70.00	50.00	28.00	7.60

Table 13.--Statistical summary of water-quality data for station 06752280 Cache La Poudre River above Box Elder Creek near Timnath, 1976-1982--Continued

WATER-QUALITY CONSTITUENT	STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	95	75	MEDIAN 50	25	5
MOLYBDENUM, TOTAL RECOVERABLE [3]	10	10.00	1.00	5.60	2.91	10.00	8.25	5.00	3.50	1.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	11	19.00	1.00	5.36	5.03	19.00	6.00	4.00	2.00	1.00
SILVER, TOTAL RECOVERABLE (UG/L AS AG)	3	1.00	1.00							
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	27	60.00	10.00	27.41	13.75	60.00	30.00	20.00	20.00	10.00
ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	27	2000.00	40.00	338.15	389.66	1535.99	330.00	210.00	140.00	48.00
SELENIUM, TOTAL (UG/L AS SE)	11	16.00	1.00	8.82	5.19	16.00	12.00	10.00	4.00	1.00
PERTHANE TOTAL (UG/L)	5	0.00	0.00							
NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	5	0.00	0.00							
ALDRIN, TOTAL (UG/L)	5	0.00	0.00							
LINDANE TOTAL (UG/L)	5	0.05	0.00							
CHLORDANE, TOTAL (UG/L)	5	0.00	0.00							
DDD, TOTAL (UG/L)	5	0.00	0.00							
DDE, TOTAL (UG/L)	5	0.00	0.00							
DDT, TOTAL (UG/L)	5	0.00	0.00							
DIELDRIN TOTAL (UG/L)	5	0.00	0.00							
ENDOSULFAN, TOTAL (UG/L)	5	0.00	0.00							
ENDRIN, TOTAL (UG/L)	5	0.00	0.00							
ETHION, TOTAL (UG/L)	5	0.00	0.00							
TOXAPHENE, TOTAL (UG/L)	5	0.00	0.00							
HEPTACHLOR, TOTAL (UG/L)	5	0.00	0.00							
HEPTACHLOR EPOXIDE TOTAL (UG/L)	5	0.00	0.00							
METHOXYCHLOR, TOTAL (UG/L)	5	0.00	0.00							
PCB, TOTAL (UG/L)	5	0.00	0.00							
MALATHION, TOTAL (UG/L)	6	0.01	0.00							
PARATHION, TOTAL (UG/L)	5	0.00	0.00							
DIAZINON, TOTAL (UG/L)	7	0.03	0.00							
METHYL PARATHION, TOTAL (UG/L)	5	0.00	0.00							
2,4-D, TOTAL (UG/L)	7	0.58	0.00							
2,4,5-T TOTAL (UG/L)	5	0.00	0.00							
MIREX, TOTAL (UG/L)	5	0.00	0.00							
SILVEX, TOTAL (UG/L)	5	0.00	0.00							
TOTAL TRITHION (UG/L)	5	0.00	0.00							
METHYL TRITHION, TOTAL (UG/L)	5	0.00	0.00							
SOLIDS, SUM OF CONSTITUENTS, DISSOLVED [4]	36	1970.00	61.00	1114.42	593.80	1842.50	1630.00	1335.00	575.75	90.75
SOLIDS, DISSOLVED (TONS PER DAY)	36	922.00	14.70	72.94	153.46	378.00	60.92	33.30	22.60	17.25
SOLIDS, DISSOLVED (TONS PER AC-FT)	36	2.68	0.08	1.50	0.80	2.51	2.22	1.79	0.78	0.12
MERCURY TOTAL RECOVERABLE (UG/L AS HG)	2	0.10	0.10							
POTASSIUM 40 DISSOLVED (PCI/L AS K40)	7	6.60	3.50							
2, 4-DP TOTAL (UG/L)	2	0.00	0.00							
SPECIFIC CONDUCTANCE LAB (UMHOS)	24	2160.00	165.00	1615.29	582.73	2157.50	2057.50	1915.00	1117.50	236.00
ALKALINITY LAB (MG/L AS CACO3)	24	260.00	37.00	171.46	50.77	255.00	200.00	175.00	160.00	48.25
ALKALINITY LAB (MG/L AS CACO3)	1	220.00	220.00							
HARDNESS NONCARBONATE (MG/L AS CACO3)	19	960.00	21.00	677.53	308.39	960.00	890.00	790.00	460.00	21.00

[1] MG/L AS NITROGEN.
[2] UG/L AS MANGANESE.
[3] UG/L AS MOLYBDENUM.
[4] MG/L.

DESCRIPTIONS OF LARIMER-WELD REGIONAL MONITORING PROGRAM STATIONS AND WATER-QUALITY AND SURFACE-WATER DATA

Station descriptions, including station names, U.S. Geological Survey station numbers, locations by county, township, section, and range, and by latitude-longitude are given in the next section for each monitoring station in the Larimer-Weld Regional Monitoring Program. Drainage area, period of record, gage type, remarks, and extremes (for daily discharge) are given also. Water-quality and discharge data for each water year, beginning October 1, 1975, through September 30, 1982, for a station are tabled immediately after that station description.

LOCATION.--Lat 40°29'46", long 105°51'52", in S½ sec.12, T.6 N., R.76 W. (unsurveyed), Jackson County, Hydrologic Unit 10180001, on right bank 500 ft (152 m) upstream from Michigan ditch, 2.2 mi (3.5 km) southeast of Cameron Pass, 8 mi (13 km) east of Gould, and 27 mi (43 km) southeast of Walden.

DRAINAGE AREA.--1.53 mi^2 (3.96 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 10,390 ft (3,167 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained.

AVERAGE DISCHARGE.--9 years, 2.81 ft^3/s) (0.080 m^3/s), 2,040 acre-ft/yr (2.51 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44 ft^3/s (1.25 m^3/s) June 18, 1974, gage height, 3.53 ft (1.067 m); minimum daily, 0.12 ft^3/s (0.003 m^3/s) Jan. 12, 13, 1979.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.33	.33	.26	.25	.29	.30	.34	11	14	4.1	1.4
2	.30	.33	.33	.25	.25	.29	.30	.38	14	12	5.7	1.3
3	.30	.33	.33	.25	.25	.29	.30	.48	15	13	5.2	1.2
4	.33	.35	.37	.29	.25	.29	.30	.58	17	12	4.2	1.1
5	.36	.33	.37	.29	.25	.29	.30	.61	19	12	3.4	1.1
6	.33	.33	.37	.29	.25	.29	.30	.63	17	11	3.0	1.1
7	.33	.33	.37	.29	.26	.29	.30	.59	17	10	2.7	1.3
8	.29	.33	.37	.29	.28	.29	.31	.57	18	10	2.9	1.3
9	.32	.33	.36	.29	.29	.29	.33	.57	19	10	4.1	1.2
10	.36	.33	.33	.29	.29	.29	.33	.63	18	9.4	3.2	1.2
11	.38	.33	.33	.29	.29	.29	.34	.98	17	9.4	3.0	1.2
12	.36	.32	.33	.29	.29	.29	.36	1.0	15	9.7	2.7	1.2
13	.33	.30	.33	.29	.29	.29	.37	.85	13	9.1	2.9	1.1
14	.33	.29	.33	.29	.29	.29	.35	1.4	10	7.8	2.8	1.3
15	.33	.29	.33	.29	.29	.29	.30	1.8	9.5	7.0	2.4	1.5
16	.33	.29	.32	.29	.29	.29	.30	1.4	10	6.6	2.2	1.5
17	.32	.29	.32	.29	.29	.29	.30	1.9	8.9	6.2	2.1	1.3
18	.33	.29	.33	.29	.29	.29	.30	2.6	7.0	6.8	1.9	1.2
19	.32	.29	.32	.29	.29	.29	.30	3.0	7.1	8.3	1.7	1.3
20	.30	.29	.29	.29	.29	.29	.30	3.3	8.5	6.8	1.7	1.2
21	.30	.28	.29	.28	.29	.29	.30	4.5	12	6.1	1.6	1.2
22	.30	.28	.29	.26	.29	.29	.30	4.3	15	5.4	1.6	1.4
23	.31	.26	.29	.25	.29	.31	.30	3.1	14	5.0	1.6	1.4
24	.31	.27	.29	.25	.29	.29	.30	2.8	11	4.8	1.6	1.5
25	.32	.29	.29	.25	.29	.30	.30	2.8	11	4.6	1.5	1.5
26	.37	.29	.29	.22	.29	.30	.30	3.3	11	4.7	1.6	1.4
27	.37	.29	.27	.24	.29	.30	.30	4.8	13	4.9	1.9	1.3
28	.34	.30	.28	.25	.29	.30	.30	5.8	14	4.1	1.6	1.2
29	.33	.31	.29	.25	.29	.30	.31	6.4	13	3.5	1.4	1.2
30	.33	.31	.29	.25	---	.30	.34	6.6	13	3.3	1.3	1.1
31	.33	---	.28	.25	---	.30	---	7.8	---	3.3	1.3	---
TOTAL	10.16	9.18	9.91	8.44	8.13	9.08	9.34	75.81	398.0	240.8	78.9	38.2
MEAN	.33	.31	.32	.27	.28	.29	.31	2.45	13.3	7.77	2.55	1.27
MAX	.38	.35	.37	.29	.29	.31	.37	7.8	19	14	5.7	1.5
MIN	.29	.26	.27	.22	.25	.29	.30	.34	7.0	3.3	1.3	1.1
AC-FT	20	18	20	17	16	18	19	150	789	478	156	76

CAL YR 1975 TOTAL 998.07 MEAN 2.73 MAX 27 MIN .25 AC-FT 1980
WTR YR 1976 TOTAL 895.95 MEAN 2.45 MAX 19 MIN .22 AC-FT 1780

EXTREMES FOR 1976 WATER YEAR.--Maximum discharge, 24 ft^3/s (0.68 m^3/s) June 5, gage height, 3.15 ft (0.96 m), no peak above base of 35 ft^3/s (1.0 m^3/s); minimum daily, 0.22 ft^3/s (0.006 m^3/s) Jan. 26.

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TEMPERATURE (DEG C)
OCT	
04...	4.0
NOV	
01...	4.0
DEC	
02...	1.0
FEB	
02...	.5
MAR	
21...	.0
MAY	
05...	.5
23...	1.0
JUN	
09...	3.0
14...	5.0
JUL	
18...	11.0
AUG	
30...	9.0

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)
OCT		
17...	5.5	<50
DEC		
09...	.0	--
FEB		
03...	1.0	--
MAR		
22...	1.5	40
MAY		
11...	1.5	40
JUN		
08...	1.5	40
21...	1.5	32
JUL		
06...	6.0	30
26...	12.5	33
AUG		
17...	11.5	--

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	.57	.37	.25	.15	.18	.16	1.0	8.0	4.7	1.6	2.0
2	1.0	.54	.39	.22	.15	.18	.16	1.3	6.5	4.4	1.6	1.8
3	1.1	.53	.38	.22	.14	.18	.16	1.1	8.0	4.2	1.4	2.8
4	1.0	.52	.37	.22	.14	.18	.16	.96	9.5	4.2	1.4	3.2
5	1.0	.50	.37	.22	.14	.18	.18	.82	10	6.7	3.9	2.5
6	.89	.50	.40	.22	.14	.18	.18	1.5	10	6.8	3.7	2.2
7	1.2	.50	.39	.22	.16	.20	.16	2.5	10	4.7	2.8	2.2
8	1.1	.45	.41	.20	.16	.20	.16	3.5	15	3.7	2.5	2.0
9	1.2	.45	.36	.20	.16	.20	.16	4.5	22	3.1	2.0	1.8
10	1.1	.45	.33	.20	.16	.18	.18	5.4	23	2.7	1.8	1.6
11	1.1	.40	.33	.20	.16	.18	.18	4.5	19	2.4	1.6	1.6
12	1.0	.40	.33	.20	.16	.22	.18	3.2	17	2.1	1.4	2.0
13	.95	.40	.33	.20	.16	.22	.16	5.0	17	2.1	1.3	2.2
14	.88	.41	.33	.20	.14	.20	.16	3.5	17	1.9	1.2	1.8
15	.84	.41	.33	.18	.14	.20	.16	2.3	15	1.8	1.3	1.8
16	.79	.40	.31	.18	.14	.18	.16	2.2	14	1.8	1.3	1.8
17	.73	.41	.29	.18	.16	.20	.16	2.1	14	1.7	1.6	1.4
18	.70	.41	.29	.20	.16	.20	.16	2.0	14	2.0	1.8	1.3
19	.70	.39	.29	.18	.16	.20	.14	1.8	12	3.0	3.7	1.2
20	.70	.37	.29	.18	.16	.22	.14	1.6	11	2.8	3.6	1.2
21	.73	.37	.25	.18	.16	.22	.14	1.5	9.4	3.2	2.9	1.2
22	.72	.37	.25	.18	.16	.22	.14	2.0	7.9	3.7	2.5	1.1
23	.66	.37	.25	.18	.16	.22	.16	3.3	7.3	3.6	2.0	1.2
24	.64	.37	.25	.18	.16	.20	.22	3.5	7.1	5.4	1.8	1.4
25	.64	.37	.25	.18	.16	.18	.29	3.5	6.8	6.2	2.2	1.6
26	.63	.34	.25	.18	.18	.18	.29	3.0	6.8	4.2	1.8	1.4
27	.62	.35	.25	.16	.18	.18	.41	2.5	6.8	3.2	2.6	1.1
28	.60	.35	.25	.16	.18	.18	.41	2.0	6.4	2.6	2.9	1.1
29	.60	.33	.25	.16	---	.18	.53	2.2	5.9	2.2	2.4	1.1
30	.59	.35	.22	.16	---	.18	.72	4.0	5.2	2.0	2.2	1.1
31	.58	---	.22	.16	---	.16	---	6.0	---	1.8	2.2	---
TOTAL	26.09	12.58	9.58	5.95	4.38	5.98	6.57	84.28	341.6	104.9	67.0	50.7
MEAN	.84	.42	.31	.19	.16	.19	.22	2.72	11.4	3.38	2.16	1.69
MAX	1.2	.57	.41	.25	.18	.22	.72	6.0	23	6.8	3.9	3.2
MIN	.58	.33	.22	.16	.14	.16	.14	.82	5.2	1.7	1.2	1.1
AC-FT	52	25	19	12	8.7	12	13	167	678	208	133	101

CAL YR 1976 TOTAL 914.95 MEAN 2.50 MAX 19 MIN .22 AC-FT 1810
WTR YR 1977 TOTAL 719.61 MEAN 1.97 MAX 23 MIN .14 AC-FT 1430

NOTE.--NO GAGE-HEIGHT RECORD MAY 1 TO JUNE 9.

EXTREMES FOR 1977 WATER YEAR.--Maximum discharge, 32 ft^3/s (0.91 m^3/s) June 9, gage height, 3.32 ft (1.012m), no peak above base of 35 ft^3/s (0.99 m^3/s); minimum daily, 0.14 ft^3/s (0.004 m^3/s) Feb. 3-6, 14-16, Apr. 19-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	.87	.65	.49	.25	.30	.37	.53	3.7	21	4.1	.97
2	.93	.90	.73	.49	.25	.33	.37	.51	4.8	20	3.8	.91
3	.93	.86	.78	.49	.30	.37	.37	.53	4.9	19	3.4	.89
4	.86	.83	.96	.45	.22	.41	.37	.53	5.3	17	3.3	.83
5	1.0	.79	.88	.45	.20	.40	.33	.49	4.9	16	3.0	.82
6	1.3	.79	.93	.45	.20	.37	.33	.53	5.8	14	2.8	.78
7	1.2	.76	.95	.41	.22	.37	.34	.53	11	14	2.7	.77
8	1.3	.70	.97	.41	.20	.37	.35	.53	9.8	14	2.6	.75
9	1.3	.60	.89	.41	.20	.37	.35	.57	12	13	2.5	.72
10	1.1	.50	.83	.40	.20	.34	.29	.62	18	12	2.3	.76
11	1.1	.50	.77	.37	.20	.37	.30	.73	20	13	2.2	.95
12	1.1	.54	.70	.37	.20	.37	.29	.60	21	15	2.1	.93
13	1.1	.57	.65	.37	.20	.37	.29	.62	23	13	2.1	.83
14	1.1	.55	.63	.39	.20	.37	.29	.93	25	12	2.6	.77
15	1.1	.53	.61	.37	.22	.37	.29	1.7	27	11	3.0	.71
16	1.1	.53	.61	.38	.22	.38	.33	2.7	26	11	2.3	.65
17	1.0	.53	.60	.41	.22	.41	.33	3.4	24	13	1.9	.72
18	.90	.53	.59	.40	.22	.39	.33	2.3	23	11	1.9	.76
19	.90	.52	.61	.37	.20	.41	.33	2.0	22	9.4	1.7	.75
20	.87	.56	.60	.37	.20	.41	.33	1.7	22	9.0	1.5	.91
21	.91	.57	.57	.32	.22	.40	.33	1.9	24	8.6	1.4	.88
22	.90	.57	.55	.29	.22	.37	.33	2.2	24	7.6	1.4	.86
23	.94	.57	.53	.29	.25	.37	.32	2.9	26	6.9	1.3	.84
24	.89	.61	.50	.28	.25	.37	.33	4.0	29	6.4	1.3	.80
25	.88	.61	.55	.25	.22	.37	.35	4.8	34	6.0	1.3	.76
26	.86	.61	.57	.24	.22	.37	.42	5.0	29	5.9	1.3	.74
27	.83	.61	.54	.26	.25	.37	.55	5.1	30	5.6	1.2	.72
28	.80	.62	.53	.29	.27	.38	.53	3.7	28	5.1	1.1	.68
29	.79	.64	.49	.29	---	.34	.53	3.3	28	5.8	1.0	.66
30	.82	.64	.49	.29	---	.36	.53	4.1	26	4.9	1.0	.62
31	.79	---	.49	.28	---	.37	---	4.0	---	4.4	.99	---
TOTAL	30.60	19.01	20.75	11.33	6.22	11.55	10.80	63.05	591.2	344.6	65.09	23.74
MEAN	.99	.63	.67	.37	.22	.37	.36	2.03	19.7	11.1	2.10	.79
MAX	1.3	.90	.97	.49	.30	.41	.55	5.1	34	21	4.1	.97
MIN	.79	.50	.49	.24	.20	.30	.29	.49	3.7	4.4	.99	.62
AC-FT	61	38	41	22	12	23	21	125	1170	684	129	47

CAL YR 1977 TOTAL 741.72 MEAN 2.03 MAX 23 MIN .14 AC-FT 1470
WTR YR 1978 TOTAL 1197.94 MEAN 3.28 MAX 34 MIN .20 AC-FT 2380

EXTREMES FOR 1978 WATER YEAR.--Maximum discharge, 43 ft /s (1.22 m^3/s) at 1830 June 27, gage height, 3.44 ft (1.049 m), only peak above base of 35 ft^3/s (0.99 m /s); minimum daily, 0.20 ft^3/s (0.006 m^3/s) Feb. 5, 6, 8-14, 19, 20.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)
OCT		
06...	7.0	52
26...	3.5	--
DEC		
12...	1.0	60
JAN		
03...	1.0	55
MAR		
01...	1.5	--
MAY		
08...	1.5	55
JUN		
07...	.5	--
14...	.5	23
JUL		
20...	5.0	29
25...	12.0	26
SEP		
06...	4.5	47

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)
OCT			
18...	1450	7.0	50
DEC			
06...	1515	.0	--
JAN			
17...	1200	.0	--
FEB			
27...	1310	.5	49
APR			
10...	1755	.0	45
MAY			
22...	1405	.5	--
JUN			
17...	1600	2.0	--
JUL			
17...	1030	10.0	32
AUG			
20...	1400	12.0	35

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)
OCT			
09...	1440	9.5	44
NOV			
12...	1445	3.0	50
JAN			
29...	1245	1.5	50
FEB			
25...	1320	1.5	45
APR			
09...	1355	1.5	52
MAY			
07...	1555	1.5	48
JUN			
04...	1410	1.0	34
JUL			
08...	1300	11.0	41
AUG			
12...	1255	12.0	35

06614800 MICHIGAN RIVER NEAR CAMERON PASS

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.62	.30	.21	.24	.22	.25	.20	.37	7.8	23	4.2	3.4
2	.58	.30	.22	.24	.22	.22	.20	.32	8.0	21	3.8	3.1
3	.56	.25	.23	.24	.22	.23	.20	.29	9.1	19	3.4	2.7
4	.52	.25	.21	.24	.22	.23	.20	.30	8.8	19	3.1	2.4
5	.50	.25	.26	.23	.22	.23	.18	.35	10	15	2.9	2.1
6	.50	.22	.28	.22	.20	.23	.19	.44	12	15	2.8	1.9
7	.47	.20	.27	.17	.20	.24	.19	.49	16	14	3.2	1.7
8	.46	.18	.25	.16	.22	.20	.19	.43	12	14	3.5	1.5
9	.44	.18	.25	.15	.20	.20	.20	.41	9.0	13	3.4	1.3
10	.43	.18	.23	.14	.20	.20	.20	.33	7.8	12	4.9	1.3
11	.41	.18	.22	.14	.20	.21	.20	.33	8.5	12	3.8	1.3
12	.39	.18	.22	.12	.20	.20	.20	.27	11	11	3.3	1.2
13	.35	.18	.22	.12	.20	.20	.20	.26	15	11	4.5	1.1
14	.35	.18	.22	.14	.22	.20	.20	.32	19	11	5.8	1.0
15	.35	.18	.25	.14	.22	.20	.22	.57	23	10	5.5	.85
16	.34	.19	.23	.15	.22	.20	.28	.90	24	10	6.1	.77
17	.30	.20	.22	.17	.24	.20	.34	1.2	24	10	6.6	.63
18	.31	.20	.22	.18	.25	.20	.34	1.5	23	9.7	8.2	.55
19	.32	.20	.22	.18	.25	.20	.37	2.0	18	8.9	10	.51
20	.33	.18	.24	.20	.29	.20	.37	2.5	16	8.8	9.8	.77
21	.33	.17	.29	.20	.29	.20	.37	3.0	17	9.1	8.6	.73
22	.50	.18	.29	.20	.29	.18	.35	3.4	18	8.5	7.7	.57
23	.45	.19	.29	.21	.25	.18	.37	4.5	18	7.9	7.2	.50
24	.40	.20	.28	.22	.25	.20	.39	5.3	20	9.2	6.8	.52
25	.45	.18	.28	.22	.25	.19	.41	5.5	22	6.9	6.3	.51
26	.40	.17	.28	.23	.29	.19	.39	7.0	23	6.0	5.8	.57
27	.40	.17	.26	.22	.29	.20	.37	7.6	26	5.9	5.3	.54
28	.35	.18	.26	.22	.29	.20	.37	11	28	6.0	4.8	.46
29	.35	.18	.26	.22	---	.20	.37	13	28	5.4	4.4	.42
30	.35	.18	.26	.22	---	.20	.37	11	24	4.9	4.2	.39
31	.30	---	.24	.20	---	.20	---	8.9	---	4.6	3.8	---
TOTAL	12.81	5.98	7.66	5.93	6.61	6.38	8.43	93.78	506.0	341.8	163.7	35.29
MEAN	.41	.20	.25	.19	.24	.21	.28	3.03	16.9	11.0	5.28	1.18
MAX	.62	.30	.29	.24	.29	.25	.41	13	28	23	10	3.4
MIN	.30	.17	.21	.12	.20	.18	.18	.26	7.8	4.6	2.8	.39
AC-FT	25	12	15	12	13	13	17	186	1000	678	325	70

CAL YR 1978 TOTAL 1154.03 MEAN 3.16 MAX 34 MIN .17 AC-FT 2290
WTR YR 1979 TOTAL 1194.37 MEAN 3.27 MAX 28 MIN .12 AC-FT 2370

EXTREMES FOR 1979 WATER YEAR.--Maximum discharge, 38 ft^3/s (1.08 m^3/s) at 1915 June 28, gage height, 3.44 ft (1.049 m), only peak above base of 35 ft^3/s (0.99 m^3/s); minimum daily, 0.12 ft^3/s (0.003 m^3/s) Jan. 12, 13.

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	.40	.21	.41	.22	.49	.37	.29	.49	7.0	14	3.3	1.1
2	.36	.23	.43	.22	.49	.37	.25	.45	8.0	13	2.9	1.0
3	.33	.24	.45	.22	.49	.37	.25	.45	9.0	12	2.6	.96
4	.30	.23	.45	.22	.49	.37	.25	.45	10	11	2.4	.89
5	.33	.25	.45	.22	.45	.37	.25	.45	12	15	2.2	.86
6	.33	.25	.45	.22	.45	.37	.25	.49	15	13	2.1	.83
7	.32	.25	.41	.22	.45	.37	.25	.49	17	12	2.0	.79
8	.29	.25	.41	.22	.45	.37	.25	.49	16	11	1.9	1.2
9	.33	.25	.41	.22	.45	.33	.25	.53	17	10	1.8	1.4
10	.30	.25	.41	.22	.45	.33	.25	.53	18	9.0	1.7	1.3
11	.29	.25	.41	.22	.45	.33	.29	.53	19	8.0	1.6	1.3
12	.28	.33	.41	.19	.45	.33	.29	.49	21	7.0	1.5	1.7
13	.31	.33	.41	.27	.45	.33	.29	.49	23	6.4	1.4	1.6
14	.31	.33	.41	.33	.45	.33	.29	.49	25	6.0	1.3	1.4
15	.29	.33	.37	.33	.45	.33	.29	.49	24	5.6	2.3	1.2
16	.31	.33	.37	.33	.45	.33	.29	.49	23	5.4	2.1	1.2
17	.40	.33	.37	.40	.41	.33	.29	.49	22	5.2	1.9	1.1
18	.36	.33	.37	.45	.37	.33	.29	.49	22	4.9	1.6	1.0
19	.29	.33	.37	.45	.37	.33	.33	.49	21	4.7	1.4	.97
20	.30	.33	.33	.45	.37	.33	.37	.53	21	4.6	1.3	1.4
21	.31	.33	.33	.45	.37	.33	.33	.86	21	4.5	1.0	1.3
22	.37	.37	.33	.45	.37	.33	.37	2.0	23	4.3	.95	1.2
23	.36	.37	.33	.45	.37	.33	.37	2.5	25	4.2	.91	1.1
24	.35	.33	.33	.45	.37	.33	.37	2.7	27	4.5	1.0	1.0
25	.35	.33	.33	.45	.37	.33	.37	3.0	28	4.8	1.4	1.0
26	.34	.37	.33	.45	.37	.33	.37	3.5	27	4.3	1.8	.95
27	.32	.41	.33	.41	.37	.33	.37	4.0	26	3.7	1.5	.91
28	.31	.45	.29	.41	.37	.33	.37	4.5	18	3.2	1.4	.86
29	.33	.45	.24	.44	.37	.33	.45	5.0	16	3.0	1.2	.80
30	.25	.41	.22	.49	---	.33	.49	5.4	15	3.5	1.2	.75
31	.19	---	.22	.49	---	.29	---	6.0	---	4.0	1.2	---
TOTAL	9.91	9.45	11.38	10.56	12.21	10.51	9.42	49.26	576.0	221.8	52.86	33.07
MEAN	.32	.32	.37	.34	.42	.34	.31	1.59	19.2	7.15	1.71	1.10
MAX	.40	.45	.45	.49	.49	.37	.49	6.0	28	15	3.3	1.7
MIN	.19	.21	.22	.19	.37	.29	.25	.45	7.0	3.0	.91	.75
AC-FT	20	19	23	21	24	21	19	98	1140	440	105	66

CAL YR 1979 TOTAL 1198.66 MEAN 3.28 MAX 28 MIN .12 AC-FT 2380
WTR YR 1980 TOTAL 1006.43 MEAN 2.75 MAX 28 MIN .19 AC-FT 2000

NOTE.--NO GAGE-HEIGHT RECORD JUNE 22 TO AUG. 20.

EXTREMES FOR 1980 WATER YEAR.--Maximum discharge, not determined; minimum daily, 0.19 ft^3/s (0.005 m^3/s) Oct. 31, Jan. 12.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.67	.45	.33	.16	.25	.16	.20	2.5	16	5.7	2.4	1.2
2	.63	.45	.33	.16	.23	.16	.20	2.8	17	8.1	2.3	1.5
3	.66	.45	.33	.16	.23	.16	.20	3.3	18	10	2.2	1.8
4	.62	.41	.30	.16	.23	.16	.20	2.8	20	9.9	2.2	1.4
5	.60	.41	.29	.18	.22	.16	.20	2.7	21	10	2.0	1.5
6	.58	.41	.29	.18	.22	.16	.20	2.4	23	8.4	1.9	1.8
7	.57	.41	.29	.19	.22	.16	.20	2.2	26	7.4	2.0	1.6
8	.55	.41	.29	.20	.22	.16	.20	2.2	23	7.2	1.9	1.7
9	.52	.41	.29	.20	.21	.16	.20	2.1	17	6.9	2.2	1.9
10	.46	.37	.33	.20	.20	.16	.21	2.2	16	6.2	2.0	2.0
11	.45	.41	.32	.20	.22	.16	.20	2.1	14	5.4	2.0	2.0
12	.44	.37	.28	.20	.22	.16	.20	2.1	12	5.4	2.0	1.8
13	.46	.39	.30	.24	.22	.16	.20	2.1	11	5.5	2.1	1.8
14	.50	.41	.29	.24	.22	.16	.20	2.2	8.2	5.1	1.9	1.8
15	.61	.41	.26	.21	.19	.16	.18	2.4	6.5	4.3	2.7	1.7
16	.58	.45	.25	.20	.19	.16	.20	2.4	5.7	3.9	2.8	1.6
17	.60	.45	.24	.19	.18	.16	.22	2.4	5.6	3.7	2.4	1.5
18	.61	.45	.22	.18	.18	.16	.22	2.3	5.1	3.4	2.2	1.4
19	.59	.41	.24	.18	.18	.18	.29	2.5	5.3	3.6	2.0	1.3
20	.75	.42	.22	.18	.18	.18	.28	2.9	6.2	3.1	1.9	1.2
21	.72	.41	.22	.20	.18	.18	.22	3.1	7.1	2.9	1.7	1.3
22	.66	.37	.23	.20	.16	.18	.22	3.2	7.1	2.7	1.7	1.2
23	.61	.35	.23	.20	.16	.18	.21	3.2	6.5	2.5	1.6	1.2
24	.58	.33	.23	.20	.17	.18	.31	3.6	6.5	2.6	1.7	1.2
25	.54	.33	.23	.20	.16	.19	.59	4.2	6.2	2.7	1.8	1.1
26	.52	.33	.19	.20	.16	.20	1.1	5.9	6.3	3.2	1.6	1.2
27	.49	.37	.16	.22	.16	.20	1.2	7.2	7.1	3.5	1.4	1.1
28	.48	.33	.15	.22	.16	.20	1.3	8.5	8.8	3.0	1.3	.96
29	.47	.33	.14	.23	---	.19	1.7	9.6	6.5	2.7	1.3	.84
30	.46	.33	.16	.25	---	.18	2.2	12	5.4	2.6	1.3	.79
31	.44	---	.16	.25	---	.19	---	15	---	2.7	1.3	---
TOTAL	17.42	11.83	7.79	6.18	5.52	5.31	13.25	124.1	344.1	154.3	59.8	43.39
MEAN	.56	.39	.25	.20	.20	.17	.44	4.00	11.5	4.98	1.93	1.45
MAX	.75	.45	.33	.25	.25	.20	2.2	15	26	10	2.8	2.0
MIN	.44	.33	.14	.16	.16	.16	.18	2.1	5.1	2.5	1.3	.79
AC-FT	35	23	15	12	11	11	26	246	683	306	119	86

CAL YR 1980 TOTAL 1012.73 MEAN 2.77 MAX 28 MIN .14 AC-FT 2010
WTR YR 1981 TOTAL 792.99 MEAN 2.17 MAX 26 MIN .14 AC-FT 1570

EXTREMES FOR 1981 WATER YEAR.--Maximum discharge, 37 ft^3/s (1.05 m^3/s) at 1445 June 6, gage height, 350 ft (1.067 m); minimum daily, 0.14 ft^3/s (0.004 m^3/s) Dec. 29.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)
OCT			
07...	1545	9.0	35
APR			
07...	1030	1.0	58
MAY			
11...	1145	1.0	60
27...	1400	1.0	50
JUN			
16...	1715	.5	40
24...	1800	1.0	25
JUL			
14...	1700	5.0	35
AUG			
05...	1415	13.5	--
SEP			
01...	1315	12.0	34

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.79	.61	.49	.53	.45	.20	.22	.25	3.2	27	6.1	1.4
2	.74	.61	.49	.57	.45	.20	.22	.55	3.2	26	6.3	1.3
3	.76	.61	.49	.57	.45	.20	.22	1.0	2.7	25	6.7	1.3
4	.85	.61	.49	.57	.45	.18	.22	1.2	2.9	24	5.9	1.2
5	.82	.57	.49	.57	.41	.18	.22	.91	4.5	22	5.1	1.5
6	.86	.57	.49	.57	.37	.18	.22	.72	5.0	19	4.8	1.6
7	.82	.57	.49	.57	.37	.20	.24	.63	5.6	17	4.7	1.5
8	.83	.57	.49	.57	.37	.20	.25	.57	6.4	16	4.5	2.1
9	.82	.56	.49	.57	.33	.20	.25	.54	7.1	18	5.2	2.0
10	.79	.54	.49	.57	.33	.22	.25	.60	8.4	17	4.4	1.8
11	.72	.53	.49	.57	.33	.22	.22	.58	9.2	17	3.9	1.8
12	.86	.49	.49	.57	.33	.22	.22	.57	11	17	3.5	2.0
13	.93	.49	.49	.57	.29	.23	.22	.57	11	17	3.7	2.1
14	.86	.49	.49	.57	.29	.25	.22	.57	12	17	4.2	2.2
15	.79	.49	.49	.57	.29	.25	.22	.57	13	15	3.7	2.6
16	.72	.49	.49	.57	.29	.25	.25	.57	14	14	3.2	2.8
17	.72	.49	.49	.57	.25	.25	.25	.59	19	14	3.1	2.9
18	.79	.49	.49	.57	.25	.22	.22	.69	21	13	2.9	2.7
19	.79	.49	.49	.57	.25	.22	.22	.89	20	12	2.7	2.7
20	.72	.49	.49	.57	.25	.23	.22	.94	19	11	2.7	2.7
21	.65	.49	.53	.57	.22	.25	.22	.91	19	11	2.6	2.5
22	.65	.49	.53	.57	.22	.25	.20	1.4	19	11	2.4	2.4
23	.61	.49	.53	.57	.22	.25	.20	1.7	22	11	2.2	3.0
24	.61	.49	.53	.61	.20	.25	.20	1.6	24	10	2.1	2.8
25	.61	.49	.53	.61	.20	.24	.18	1.3	24	9.5	2.0	3.2
26	.61	.49	.53	.61	.20	.22	.18	1.3	23	8.9	1.8	4.0
27	.61	.49	.53	.57	.20	.22	.18	1.8	24	8.1	1.8	3.6
28	.61	.49	.53	.57	.20	.25	.18	2.7	25	8.1	1.9	3.6
29	.61	.49	.53	.49	---	.25	.18	3.1	26	7.6	1.8	3.5
30	.61	.49	.53	.49	---	.25	.19	2.8	26	6.7	1.7	3.4
31	.61	---	.53	.45	---	.25	---	2.6	---	6.4	1.6	---
TOTAL	22.77	15.66	15.63	17.47	8.46	6.98	6.48	34.72	430.2	456.3	109.2	72.2
MEAN	.73	.52	.50	.56	.30	.23	.22	1.12	14.3	14.7	3.52	2.41
MAX	.93	.61	.53	.61	.45	.25	.25	3.1	26	27	6.7	4.0
MIN	.61	.49	.49	.45	.20	.18	.18	.25	2.7	6.4	1.6	1.2
AC-FT	45	31	31	35	17	14	13	69	853	905	217	143

CAL YR 1981 TOTAL 810.01 MEAN 2.22 MAX 26 MIN .16 AC-FT 1610
WTR YR 1982 TOTAL 1196.07 MEAN 3.28 MAX 27 MIN .18 AC-FT 2370

EXTREMES FOR 1982 WATER YEAR.--Maximum discharge, 31 ft^3/s (0.88 m^3/s) at 1700 July 1, gage height, 3.10 ft (0.945 m); minimum daily, 0.18 ft^3/s (0.005 m^3/s) Mar. 4-6, Apr. 25-29.

WATER-CONTENTS RECORDS

PERIOD OF RECORD.--April 1951 to current year.
Elevation and Contents: March 1951 to September 1981.

GAGE.--Nonrecording gage read at irregular intervals from 1 to 10 days. Datum of gage is National Geodetic vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations NGVD.

REMARKS.--Reservoir is formed by earth and rockfill dike and dams closing openings in subsequent valleys between hogbacks; dams completed July 21, 1949; storage began Jan. 10, 1951. Dead storage pools filled April 18, 1951; dead storage 8,270 acre-ft. Usable capacity, 143,500 acre-ft (177 hm^3) above elevations 5,320 ft (1,621.5 m), invert of channel from Spring Canyon Dam, 5,310 ft (1,618.5 m), invert of channel from Dixon Canyon Dam, 5,270 ft (1,606.3 m), trashrack sill of outlet at Soldier Canyon Dam, and below maximum water-surface elevation, 5,430 ft (1,655.1 m), 6 ft (1.8 m) below crest of Satanka Dike. Figures given represent usable contents. Water is diverted from the Colorado River basin through Alva B. Adams tunnel for supplemental irrigation supply to the Cache la Poudre River basin as part of the Colorado-Big Thompson project.

COOPERATION.--Records furnished by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 141,600 acre-ft (175 hm^3) July 2, 1970, elevation, 5,429.02 ft (1,654.765 m); minimum observed 9 acre-ft (11,100 m^3) Nov. 16-30, 1977, elevation, 5,270.25 ft (1,606.372 m).

MONTH-END ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	5,383.90	69,700	-
Oct. 31	5,376.70	60,460	-9,240
Nov. 30	5,384.25	70,170	+9,710
Dec. 31	5,391.20	79,680	+9,510
CAL YR 1975	-	-	+14,410
Jan. 31	5,399.00	91,030	+11,350
Feb. 29	5,411.50	110,700	+19,670
Mar. 31	5,417.50	120,900	+10,200
Apr. 30	5,420.70	126,500	+5,600
May 31	5,422.70	130,000	+3,500
June 30	5,414.90	116,400	-13,600
July 31	5,391.00	79,390	-37,010
Aug. 31	5,360.10	41,440	-37,950
Sept.30	5,347.40	29,050	-12,390
WTR YR 1976	-		-40,650

EXTREMES FOR 1976 WATER YEAR.--Maximum contents observed, 131,300 acre-ft (162 (hm^3) May 24, elevation, 5,423.40 ft (1,653.052 m); minimum observed, 28,330 acre-ft (34.9 hm^3) Sept. 27, elevation, 5,3446.60 ft (1,629.644 m).

LOCATION.--Lat 40°36'00", long 105°10'06", in NW¼SW¼ sec. 6, T. 7 N., R. 69 W., Larimer County, Hydrologic Unit 10190007, on right bank near abutment of Horsetooth Dam on tributaries to Cache La Poudre River, 4.8 mi (7.7 km) west of city hall in Fort Collins. Water-quality sampling site in middle of reservoir at Soldier Canyon Dam.

WATER-QUALITY DATA

PERIOD OF RECORD.--October 1968 to current year.
Biological data and phytoplankton analysis: October 1975 to September 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT									
18...	1330	2.00	79	7.2	15.0	7.8	K1	<1	55
18...	1335	70.0	76	7.1	12.0	7.1	<1	<1	53
18...	1340	100	73	7.1	7.0	5.4	K1	<1	50
MAR									
22...	1245	2.00	110	6.6	2.5	10.3	<1	<1	46
22...	1250	60.0	83	6.5	2.0	10.6	<1	<1	47
22...	1255	120	80	6.8	2.0	10.6	<1	<1	45
APR									
10...	1330	2.00	75	6.4	5.5	10.7	<1	<1	45
10...	1335	50.0	73	6.6	4.5	10.7	<1	<1	42
10...	1340	125	70	6.8	4.0	10.7	<1	<1	45
MAY									
06...	1315	2.00	65	6.8	7.0	10.2	<1	<1	44
06...	1320	40.0	68	6.8	7.0	10.1	<1	<1	44
06...	1325	110	60	6.8	5.0	10.2	<1	<1	47
JUN									
29...	1345	2.00	80	7.6	21.0	7.4	<1	<1	38
29...	1350	30.0	75	7.7	12.0	7.6	<1	<1	40
29...	1355	100	80	7.6	7.0	8.1	<1	<1	40
JUL									
13...	1300	2.00	72	6.6	20.5	7.2	K1	<1	55
13...	1305	40.0	69	6.9	13.0	7.8	K1	<1	55
13...	1310	100	69	6.9	8.0	8.1	<1	<1	55
AUG									
12...	1315	2.00	72	6.8	21.0	7.2	<1	<1	57
12...	1320	30.0	70	6.7	18.0	6.4	K15	B5	63
12...	1325	90.0	71	7.0	9.5	7.2	--	K3	58
SEP									
15...	1400	2.00	90	7.0	21.0	6.4	K2	<1	63

DATE	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)
OCT								
18...	.07	.08	<.010	.08	.050	.150	--	0
18...	.07	.06	.010	.07	.030	.030	--	--
18...	.07	.12	<.010	.12	.030	.030	--	--
MAR								
22...	.06	.15	<.010	.15	<.010	.580	--	1100
22...	.06	.15	<.010	.15	<.010	.060	--	890
22...	.06	.15	<.010	.15	<.010	.190	--	950
APR								
10...	.06	.14	<.010	.14	.040	.110	--	9600
10...	.06	.14	<.010	.14	.040	.070	--	1200
10...	.06	.15	<.010	.15	.030	.040	--	1700
MAY								
06...	.06	.14	<.010	.14	3.60	.370	--	230
06...	.06	.15	<.010	.15	<.010	.270	--	140
06...	.06	.15	<.010	.15	.030	.040	--	560
JUN								
29...	.05	.09	<.010	.09	.020	.010	--	0
29...	.05	.11	<.010	.11	<.010	.010	--	30
29...	.05	.13	<.010	.13	<.010	.020	--	0
JUL								
13...	.07	.12	<.010	.12	.020	.050	.6	0
13...	.07	.14	<.010	.14	.020	.010	.4	0
13...	.07	.16	<.010	.16	.020	.020	.5	3
AUG								
12...	.08	.13	<.010	.13	<.010	.090	.3	0
12...	.09	.13	<.010	.13	.010	.020	.2	0
12...	.08	.16	<.010	.16	<.010	.020	.3	0
SEP								
15...	.09	.19	.030	.22	<.010	.110	.4	82

K BASED ON NON-IDEAL COLONY COUNT.

PHYTOPLANKTON ANALYSES, OCTOBER 1975 TO SEPTEMBER 1976

DATE	OCT 18,75	MAR 22,76	MAR 22,76	MAR 22,76	APR 10,76
TIME	1330	1245	1250	1255	1330
TOTAL CELLS/ML	0	1100	890	950	9600
DIVERSITY: DIVISION	0.0	0.0	0.0	0.0	0.1
.CLASS	0.0	0.0	0.0	0.0	0.1
..ORDER	0.0	0.0	0.0	0.0	0.1
...FAMILY	0.0	0.0	0.0	0.0	0.1
....GENUS	0.0	0.0	0.0	0.0	0.3

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
BACILLARIOPHYTA (DIATOMS)										
.BACILLARIOPHYCEAE										
..ACHNANTHALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	--	-	--	-	--	-
..BACILLARIALES										
...NITZSCHIACEAE										
....NITZSCHIA	--	-	--	-	*	0	*	0	--	-
..EUPODISCALES										
...COSCINODISCACEAE										
....CYCLOTELLA	--	-	1100#	100	890#	100	950#	100	9200#	96
....MELOSIRA	*	0	*	0	*	0	*	0	180	2
..FRAGILARIALES										
...FRAGILARIACEAE										
....ASTERIONELLA	--	-	*	0	*	0	--	-	--	-
..NAVICULALES										
...NAVICULACEAE										
....PINNULARIA	--	-	--	-	--	-	--	-	--	-
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHLOROCOCCACEAE										
....SCHROEDERIA	--	-	--	-	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	--	-	--	-	--	-	180	2
CHRYSOPHYTA										
.CHRYSOPHYCEAE										
..OCHROMONADALES										
...DINOBRYACEAE										
....DINOBRYON	--	-	--	-	--	-	*	0	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS

PHYTOPLANKTON ANALYSES, OCTOBER 1975 TO SEPTEMBER 1976

DATE	APR 10,76	APR 10,76	MAY 6,76	MAY 6,76	MAY 6,76
TIME	1335	1340	1315	1320	1325
TOTAL CELLS/ML	1200	1700	230	140	560
DIVERSITY: DIVISION	0.0	0.0	0.0	0.0	0.0
.CLASS	0.0	0.0	0.0	0.0	0.0
..ORDER	0.0	0.0	0.0	0.0	0.6
...FAMILY	0.0	0.0	0.0	0.0	0.6
....GENUS	0.0	0.0	0.0	0.0	1.5

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
BACILLARIOPHYTA (DIATOMS)										
.BACILLARIOPHYCEAE										
..ACHNANTHALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	--	-	--	-	87#	15
..BACILLARIALES										
...NITZSCHIACEAE										
....NITZSCHIA	--	-	--	-	--	-	--	-	--	-
..EUPODISCALES										
...COSCINODISCACEAE										
....CYCLOTELLA	1200#	100	1700#	100	230#	100	140#	100	260#	46
....MELOSIRA	--	-	*	0	--	-	--	-	220#	38
..FRAGILARIALES										
...FRAGILARIACEAE										
....ASTERIONELLA	*	0	--	-	--	-	--	-	--	-
..NAVICULALES										
...NAVICULACEAE										
....PINNULARIA	--	-	--	-	--	-	--	-	--	-
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHLOROCOCCACEAE										
....SCHROEDERIA	--	-	--	-	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
.CHRYSOPHYCEAE										
..OCHROMONADALES										
...DINOBRYACEAE										
....DINOBRYON	*	0	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

PHYTOPLANKTON ANALYSES, OCTOBER 1975 TO SEPTEMBER 1976

DATE	JUN 29,76	JUN 29,76	JUN 29,76	JUL 13,76	JUL 13,76
TIME	1345	1350	1355	1300	1305
TOTAL CELLS/ML	0	30	0	0	0
DIVERSITY: DIVISION	0.0	0.6	0.0	0.0	0.0
.CLASS	0.0	0.6	0.0	0.0	0.0
..ORDER	0.0	0.6	0.0	0.0	0.0
...FAMILY	0.0	0.6	0.0	0.0	0.0
....GENUS	0.0	0.6	0.0	0.0	0.0

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
BACILLARIOPHYTA (DIATOMS)										
.BACILLARIOPHYCEAE										
..ACHNANTHALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	--	-	--	-	--	-
..BACILLARIALES										
...NITZSCHIACEAE										
....NITZSCHIA	--	-	--	-	--	-	--	-	--	-
..EUPODISCALES										
...COSCINODISCACEAE										
....CYCLOTELLA	--	-	5#	15	--	-	--	-	--	-
....MELOSIRA	--	-	--	-	--	-	--	-	--	-
..FRAGILARIALES										
...FRAGILARIACEAE										
....ASTERIONELLA	--	-	--	-	--	-	--	-	--	-
..NAVICULALES										
...NAVICULACEAE										
....PINNULARIA	--	-	--	-	--	-	--	-	--	-
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHLOROCOCCACEAE										
....SCHROEDERIA	--	-	--	-	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
.CHRYSOPHYCEAE										
..OCHROMONADALES										
...DINOBRYACEAE										
....DINOBRYON	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	25#	85	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS

PHYTOPLANKTON ANALYSES, OCTOBER 1975 TO SEPTEMBER 1976

DATE	JUL 13,76	AUG 12,76	AUG 12,76	AUG 12,76	SEP 15,76
TIME	1310	1315	1320	1325	1400
TOTAL CELLS/ML	3	0	0	0	82
DIVERSITY: DIVISION	0.0	0.0	0.0	0.0	0.9
.CLASS	0.0	0.0	0.0	0.0	0.9
..ORDER	0.0	0.0	0.0	0.0	1.2
...FAMILY	0.0	0.0	0.0	0.0	1.6
....GENUS	0.0	0.0	0.0	0.0	1.6

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
BACILLARIOPHYTA (DIATOMS)										
.BACILLARIOPHYCEAE										
..ACHNANTHALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	--	-	--	-	--	-
..BACILLARIALES										
...NITZSCHIACEAE										
....NITZSCHIA	--	-	--	-	--	-	--	-	--	-
..EUPODISCALES										
...COSCINODISCACEAE										
....CYCLOTELLA	--	-	--	-	--	-	--	-	48#	59
....MELOSIRA	--	-	--	-	--	-	--	-	--	-
..FRAGILARIALES										
...FRAGILARIACEAE										
....ASTERIONELLA	--	-	--	-	--	-	--	-	--	-
..NAVICULALES										
...NAVICULACEAE										
....PINNULARIA	--	-	--	-	--	-	--	-	5	6
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHLOROCOCCACEAE										
....SCHROEDERIA	--	-	--	-	--	-	--	-	14#	18
...OOCYSTACEAE										
....ANKISTRODESMUS	3	#100	--	-	--	-	--	-	14#	18
CHRYSOPHYTA										
.CHRYSOPHYCEAE										
..OCHROMONADALES										
...DINOBRYACEAE										
....DINOBRYON	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SAMPLING DEPTH (FEET)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)
OCT				
02...	0745	2.00	15.0	6.5
NOV				
06...	1030	2.00	7.0	8.1
18...	1325	40.0	3.0	.0
18...	1330	70.0	3.0	.0
DEC				
18...	1320	2.00	2.0	.0
18...	1325	40.0	3.0	--
18...	1330	70.0	3.0	--
APR				
22...	1315	2.00	6.0	10.7
22...	1316	5.00	6.0	10.8
22...	1317	10.0	6.0	10.7
22...	1318	20.0	6.0	10.6
22...	1319	25.0	5.5	10.6
22...	1320	30.0	5.0	10.8
22...	1321	40.0	5.0	10.8
22...	1322	50.0	4.5	10.7
22...	1323	60.0	4.5	10.7
22...	1324	70.0	4.0	10.7
22...	1325	75.0	4.0	10.7
22...	1326	80.0	4.0	10.6
22...	1327	90.0	4.0	10.6
22...	1328	100.0	4.0	10.8
22...	1329	110	4.0	10.0
MAY				
20...	1035	2.00	12.0	8.8
20...	1036	5.00	12.0	8.8
20...	1037	10.0	11.5	8.6
20...	1038	20.0	10.0	9.0
20...	1039	25.0	9.0	9.3
20...	1040	30.0	7.5	9.4
20...	1041	40.0	6.5	9.6
20...	1042	50.0	6.5	9.7
20...	1043	60.0	6.0	9.7
20...	1044	70.0	6.0	9.7
20...	1045	75.0	6.0	9.8
20...	1046	80.0	6.0	9.8
20...	1047	90.0	5.5	9.8
20...	1048	100.0	5.0	9.7
20...	1049	110	5.0	9.7
20...	1050	120	5.0	9.6
JUN				
09...	1345	2.00	21.0	7.6
09...	1346	5.00	19.5	7.6
09...	1347	10.0	18.5	7.6
09...	1348	20.0	15.0	7.9
09...	1349	25.0	13.0	8.1
09...	1350	30.0	12.5	8.2
09...	1351	40.0	11.0	8.4
09...	1352	50.0	10.0	8.6
09...	1353	60.0	8.5	8.8
09...	1354	70.0	8.0	8.9
09...	1355	75.0	8.0	8.9
09...	1356	80.0	8.0	8.9
09...	1357	90.0	7.0	8.9
09...	1358	100.0	6.0	8.8
JUL				
14...	1130	2.00	22.0	7.0
AUG				
31...	1030	1.00	19.5	7.1
SEP				
28...	1245	1.00	15.0	9.6

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT									
02...	0745	2.00	100	6.1	15.0	6.5	K30	K11	74
NOV									
06...	1030	2.00	125	6.4	7.0	8.1	K7	<1	70
18...	1325	40.0	65	7.3	3.0	.0	<1	<1	52
18...	1330	70.0	70	7.6	3.0	.0	<1	<1	53
DEC									
18...	1320	2.00	70	7.0	2.0	.0	<1	<1	50
18...	1325	40.0	65	7.3	3.0	--	<1	<1	--
18...	1330	70.0	70	7.6	3.0	--	<1	<1	--
APR									
22...	1315	2.00	80	7.2	6.0	10.7	<1	<1	58
22...	1322	50.0	75	7.2	4.5	10.7	<1	<1	61
22...	1328	100.0	75	7.2	4.0	10.8	<1	<1	52
MAY									
20...	1035	2.00	80	7.6	12.0	8.8	K4	<1	52
20...	1040	30.0	75	6.9	7.5	9.4	K2	<1	48
20...	1050	120	80	6.8	5.0	9.6	<1	<1	51
JUN									
09...	1345	2.00	110	6.7	21.0	7.6	K2	<1	--
09...	1352	50.0	80	7.2	10.0	8.6	K7	K1	--
09...	1358	100.0	80	7.2	6.0	8.8	K7	<1	48
JUL									
14...	1130	2.00	80	6.3	22.0	7.0	--	--	45
AUG									
31...	1030	1.00	80	7.5	19.5	7.1	K20	K1	57
SEP									
28...	1245	1.00	120	7.8	15.0	9.6	K18	K1	55

DATE	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)
OCT								
02...	.10	.19	<.010	.19	<.010	.030	.3	140
NOV								
06...	.10	.27	<.010	.27	<.010	.040	6.4	230
18...	.07	.13	<.010	.13	--	.020	.3	720
18...	.07	.13	<.010	.13	--	.020	.3	370
DEC								
18...	.07	.28	<.010	.28	--	.030	.5	690
18...	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--
APR								
22...	.08	.16	.010	.17	.010	.020	.7	1100
22...	.08	.14	.010	.15	.010	.030	.5	1100
22...	.07	.14	.010	.15	.010	.040	.6	1100
MAY								
20...	.07	.21	.010	.22	<.010	.020	2.7	66
20...	.07	.19	.010	.20	<.010	.010	.0	30
20...	.07	.31	.010	.32	<.010	.010	2.9	160
JUN								
09...	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--
09...	.07	.22	<.010	.22	<.010	.010	1.9	9
JUL								
14...	.06	.10	<.010	.10	.010	.020	.3	56
AUG								
31...	.08	.15	.050	.20	--	.050	1.1	400
SEP								
28...	.07	.23	.010	.24	.010	.060	.6	840

K BASED ON NON-IDEAL COLONY COUNT.

PHYTOPLANKTON ANALYSES, OCTOBER 1976 TO SEPTEMBER 1977

DATE	OCT 2,76		NOV 6,76		NOV 18,76		NOV 18,76		DEC 18,76		APR 22,77	
TIME	0745		0900		1325		1330		1320		1315	
TOTAL CELLS/ML	140		230		720		370		690		1100	
DIVERSITY: DIVISION	0.7		0.3		0.8		1.0		1.0		0.0	
.CLASS	0.7		0.3		0.8		1.0		1.0		0.0	
..ORDER	1.8		1.3		1.1		1.7		1.1		0.1	
...FAMILY	1.8		1.3		1.3		1.8		1.3		0.1	
....GENUS	2.0		2.0		1.8		2.2		1.8		0.1	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
BACILLARIOPHYTA (DIATOMS)												
.BACILLARIOPHYCEAE												
..BACILLARIALES												
...NITZSCHIACEAE												
....NITZSCHIA	67#	46	13	6	--	-	24	7	--	-	--	-
..EPITHEMIALES												
...EPITHEMIACEAE												
....EPITHEMIA	--	-	--	-	--	-	2	1	--	-	--	-
..EUPODISCALES												
...COSCINODISCACEAE												
....CYCLOTELLA	26#	18	100#	44	470#	66	29	8	370#	54	1100#	99
....MELOSIRA	10	7	72#	31	72	10	170#	47	88	13	--	-
..FRAGILARIALES												
...FRAGILARIACEAE												
....ASTERIONELLA	--	-	--	-	11	2	2	1	*	0	--	-
....DIATOMA	--	-	--	-	--	-	2	1	--	-	--	-
....FRAGILARIA	--	-	21	9	--	-	2	1	--	-	--	-
....SYNEDRA	--	-	--	-	22	3	--	-	--	-	--	-
..NAVICULALES												
...CYMBELLACEAE												
....CYMBELLA	--	-	--	-	--	-	2	1	--	-	--	-
...GOMPHONEMACEAE												
....GOMPHONEMA	--	-	--	-	--	-	2	1	--	-	--	-
...NAVICULACEAE												
....CALONEIS	--	-	--	-	--	-	2	1	--	-	--	-
....DIPLONEIS	--	-	--	-	--	-	--	-	--	-	--	-
....NAVICULA	15	11	8	4	6	1	12	3	5	1	6	1
....PINNULARIA	--	-	--	-	--	-	2	1	--	-	--	-
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...CHLOROCOCCACEAE												
....SCHROEDERIA	26#	18	--	-	--	-	--	-	--	-	--	-
...MICRACTINIACEAE												
....MICRACTINIUM	--	-	--	-	22	3	--	-	5	1	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	--	-	13	6	78	11	110#	29	170#	25	--	-
....OOCYSTIS	--	-	--	-	--	-	--	-	--	-	--	-
...SCENEDESMACEAE												
....SCENEDESMUS	--	-	--	-	22	3	--	-	39	6	--	-
..TETRASPORALES												

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

PHYTOPLANKTON ANALYSES, OCTOBER 1976 TO SEPTEMBER 1977

DATE	OCT 2,76	NOV 6,76	NOV 18,76	NOV 18,76	DEC 18,76	APR 22,77
TIME	0745	0900	1325	1330	1320	1315
TOTAL CELLS/ML	140	230	720	370	690	1100
DIVERSITY: DIVISION	0.7	0.3	0.8	1.0	1.0	0.0
.CLASS	0.7	0.3	0.8	1.0	1.0	0.0
..ORDER	1.8	1.3	1.1	1.7	1.1	0.1
...FAMILY	1.8	1.3	1.3	1.8	1.3	0.1
....GENUS	2.0	2.0	1.8	2.2	1.8	0.1

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
...GLOEOCYSTACEAE												
....GLOEOCYSTIS	--	-	--	-	--	-	--	-	--	-	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	--	-	--	-
..ZYGNEMATALES												
...DESMIDIACEAE												
....COSMARIUM	--	-	--	-	--	-	--	-	--	-	--	-
CHRYSOPHYTA												
.CHRYSOPHYCEAE												
..OCHROMONADALES												
...DINOBRYACEAE												
....DINOBRYON	--	-	--	-	--	-	2	1	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONADALES												
...CRYPTOCHRYSIDACEAE												
....CHROOMONAS	--	-	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....AGMENELLUM	--	-	--	-	--	-	--	-	--	-	--	-
....ANACYSTIS	--	-	--	-	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....TRACHELOMONAS	--	-	--	-	--	-	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)												
.DINOPHYCEAE												
..DINOKONTAE												
...GLENODINIACEAE												
....GLENODINIUM	--	-	--	-	11	2	--	-	10	1	6	1
...GYMNODINIACEAE												
....GYMNODINIUM	--	-	--	-	--	-	2	1	--	-	--	-
...PERIDINIACEAE												
....PERIDINIUM	--	-	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS

PHYTOPLANKTON ANALYSES, OCTOBER 1976 TO SEPTEMBER 1977

DATE	APR 22,77		APR 22,77		MAY 20,77		MAY 20,77		MAY 20,77		JUN 9,77	
TIME	1320		1325		1030		1040		1050		1350	
TOTAL CELLS/ML	1100		1100		160		30		66		290	
DIVERSITY: DIVISION	0.1		0.2		0.3		0.4		0.6		1.0	
.CLASS	0.1		0.2		0.3		0.4		0.6		1.0	
..ORDER	0.2		0.2		0.6		0.4		0.8		1.0	
...FAMILY	0.2		0.3		0.6		0.4		0.8		1.0	
....GENUS	0.2		0.4		0.6		0.4		0.8		1.0	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
BACILLARIOPHYTA (DIATOMS)												
.BACILLARIOPHYCEAE												
..BACILLARIALES												
...NITZSCHIACEAE												
....NITZSCHIA	--	-	--	-	3	2	--	-	3	5	--	-
..EPITHEMIALES												
...EPITHEMIACEAE												
....EPITHEMIA	--	-	--	-	--	-	--	-	--	-	--	-
..EUPODISCALES												
...COSCINODISCACEAE												
....CYCLOTELLA	1100#	98	1000#	94	150#	90	28#	91	3	5	--	-
....MELOSIRA	--	-	26	2	--	-	--	-	--	-	--	-
..FRAGILARIALES												
...FRAGILARIACEAE												
....ASTERIONELLA	--	-	--	-	--	-	--	-	--	-	--	-
....DIATOMA	--	-	--	-	3	2	--	-	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	--	-	--	-	--	-	--	-
..NAVICULALES												
...CYMBELLACEAE												
....CYMBELLA	--	-	--	-	--	-	--	-	--	-	--	-
...GOMPHONEMACEAE												
....GOMPHONEMA	--	-	6	1	--	-	--	-	3	5	--	-
...NAVICULACEAE												
....CALONEIS	--	-	--	-	--	-	--	-	--	-	--	-
....DIPLONEIS	6	1	--	-	--	-	--	-	--	-	--	-
....NAVICULA	--	-	--	-	--	-	--	-	--	-	--	-
....PINNULARIA	--	-	--	-	--	-	--	-	--	-	--	-
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...CHLOROCOCCACEAE												
....SCHROEDERIA	--	-	--	-	--	-	--	-	--	-	--	-
...MICRACTINIACEAE												
....MICRACTINIUM	--	-	26	2	--	-	--	-	--	-	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	17	2	6	1	--	-	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	--	-	--	-	--	-
...SCENEDESMACEAE												
....SCENEDESMUS	--	-	--	-	--	-	--	-	--	-	--	-
..TETRASPORALES												
...GLOEOCYSTACEAE												
....GLOEOCYSTIS	--	-	--	-	--	-	--	-	--	-	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	--	-	--	-
..ZYGNEMATALES												
...DESMIDIACEAE												
....COSMARIUM	--	-	--	-	--	-	--	-	--	-	--	-
CHRYSOPHYTA												
.CHRYSOPHYCEAE												
..OCHROMONADALES												
...DINOBRYACEAE												
....DINOBRYON	--	-	--	-	11	7	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS

PHYTOPLANKTON ANALYSES, OCTOBER 1976 TO SEPTEMBER 1977

DATE	APR 22,77	APR 22,77	MAY 20,77	MAY 20,77	MAY 20,77	JUN 9,77
TIME	1320	1325	1030	1040	1050	1350
TOTAL CELLS/ML	1100	1100	160	30	66	290
DIVERSITY: DIVISION	0.1	0.2	0.3	0.4	0.6	1.0
.CLASS	0.1	0.2	0.3	0.4	0.6	1.0
..ORDER	0.2	0.2	0.6	0.4	0.8	1.0
...FAMILY	0.2	0.3	0.6	0.4	0.8	1.0
....GENUS	0.2	0.4	0.6	0.4	0.8	1.0

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONADALES												
...CRYPTOCHRYSIDACEAE												
....CHROOMONAS	--	-	--	-	--	-	--	-	57#	86	110#	40
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....AGMENELLUM	--	-	--	-	--	-	--	-	--	-	--	-
....ANACYSTIS	--	-	--	-	--	-	--	-	--	-	170#	59
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....TRACHELOMONAS	--	-	--	-	--	-	--	-	--	-	2	1
PYRRHOPHYTA (FIRE ALGAE)												
.DINOPHYCEAE												
..DINOKONTAE												
...GLENODINIACEAE												
....GLENODINIUM	--	-	--	-	--	-	--	-	--	-	--	-
...GYMNODINIACEAE												
....GYMNODINIUM	--	-	--	-	--	-	--	-	--	-	--	-
...PERIDINIACEAE												
....PERIDINIUM	--	-	--	-	--	-	3	9	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS

PHYTOPLANKTON ANALYSES, OCTOBER 1976 TO SEPTEMBER 1977

DATE	JUN 9,77		JUN 9,77		JUL 14,77		AUG 31,77		SEP 28,77	
TIME	1355		1400		1130		1030		1245	
TOTAL CELLS/ML	39		9		56		400		840	
DIVERSITY: DIVISION	1.8		1.6		0.9		1.7		0.3	
.CLASS	1.8		1.6		0.9		1.7		0.3	
..ORDER	2.5		1.6		1.9		2.0		0.3	
...FAMILY	2.5		1.6		1.9		2.0		0.3	
....GENUS	2.8		1.6		1.9		2.0		0.3	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
BACILLARIOPHYTA (DIATOMS)										
.BACILLARIOPHYCEAE										
..BACILLARIALES										
...NITZSCHIACEAE										
....NITZSCHIA	--	-	*	0	--	-	11	3	--	-
..EPITHEMIALES										
...EPITHEMIACEAE										
....EPITHEMIA	--	-	--	-	--	-	--	-	--	-
..EUPODISCALES										
...COSCINODISCACEAE										
....CYCLOTELLA	2	6	--	-	5	8	--	-	--	-
....MELOSIRA	10#	25	*	0	--	-	--	-	--	-
..FRAGILARIALES										
...FRAGILARIACEAE										
....ASTERIONELLA	--	-	--	-	--	-	--	-	--	-
....DIATOMA	--	-	--	-	--	-	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-	--	-	--	-
....SYNEDRA	2	6	--	-	14#	25	--	-	--	-
..NAVICULALES										
...CYMBELLACEAE										
....CYMBELLA	--	-	--	-	--	-	--	-	--	-
...GOMPHONEMACEAE										
....GOMPHONEMA	--	-	--	-	--	-	--	-	--	-
...NAVICULACEAE										
....CALONEIS	--	-	--	-	--	-	--	-	--	-
....DIPLONEIS	--	-	--	-	--	-	--	-	--	-
....NAVICULA	2	6	3#	33	--	-	6	1	--	-
....PINNULARIA	--	-	--	-	--	-	--	-	--	-
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHLOROCOCCACEAE										
....SCHROEDERIA	--	-	--	-	--	-	23	6	--	-
...MICRACTINIACEAE										
....MICRACTINIUM	--	-	--	-	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	--	-	--	-	6	1	--	-
....OOCYSTIS	--	-	--	-	28#	50	--	-	--	-
...SCENEDESMACEAE										
....SCENEDESMUS	10#	25	--	-	--	-	--	-	--	-
..TETRASPORALES										
...GLOEOCYSTACEAE										
....GLOEOCYSTIS	2	6	--	-	--	-	--	-	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	3#	33	5	8	110#	27	--	-
..ZYGNEMATALES										
...DESMIDIACEAE										
....COSMARIUM	--	-	--	-	5	8	--	-	--	-
CHRYSOPHYTA										
.CHRYSOPHYCEAE										
..OCHROMONADALES										
...DINOBRYACEAE										
....DINOBRYON	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

PHYTOPLANKTON ANALYSES, OCTOBER 1976 TO SEPTEMBER 1977

DATE	JUN 9,77	JUN 9,77	JUL 14,77	AUG 31,77	SEP 28,77
TIME	1355	1400	1130	1030	1245
TOTAL CELLS/ML	39	9	56	400	840
DIVERSITY: DIVISION	1.8	1.6	0.9	1.7	0.3
.CLASS	1.8	1.6	0.9	1.7	0.3
..ORDER	2.5	1.6	1.9	2.0	0.3
...FAMILY	2.5	1.6	1.9	2.0	0.3
....GENUS	2.8	1.6	1.9	2.0	0.3

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	5	13	3#	33	--	-	63#	16	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....AGMENELLUM	--	-	--	-	--	-	180#	46	--	-
....ANACYSTIS	5	13	--	-	--	-	--	-	780#	94
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....TRACHELOMONAS	--	-	--	-	--	-	--	-	52	6
PYRRHOPHYTA (FIRE ALGAE)										
.DINOPHYCEAE										
..DINOKONTAE										
...GLENODINIACEAE										
....GLENODINIUM	--	-	--	-	--	-	--	-	--	-
...GYMNODINIACEAE										
....GYMNODINIUM	--	-	--	-	--	-	--	-	--	-
...PERIDINIACEAE										
....PERIDINIUM	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

MONTH-END ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	5,347.40	29,050	
Oct. 31	5,330.10	15,310	-13,740
Nov. 30	5,351.80	33,140	+17,830
Dec. 31	5,373.90	57,020	+23,880
CAL YR 1976	-	-	-22,660
Jan. 31	5,384.70	70,770	+13,750
Feb. 28	5,390.65	78,900	+8,130
Mar. 31	5,398.65	90,500	+11,600
Apr. 30	5,404.15	98,920	+8,420
May 31	5,395.00	85,120	-13,800
June 30	5,379.10	63,480	-21,640
July 31	5,360.90	42,280	-21,200
Aug. 31	5,331.90	16,580	-25,700
Sept.30	5,295.60	2,050	-14,530
WTR YR 1977	-	-	-27,000

EXTREMES FOR 1977 WATER YEAR.--Maximum contents observed, 99,080 acre-ft (122 hm^3) May 6, elevation, 5,404.25 ft (1,647.215 m); minimum observed, 2,050 acre-ft (2.53 hm^3) Sept. 30, elevation, 5,295.60 ft (1,614.099 m).

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SAMPLING DEPTH (FEET)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)
OCT				
19...	0930	1.00	--	--
APR				
27...	1030	2.00	10.0	10.6
27...	1031	5.00	9.0	10.3
27...	1032	10.0	8.5	10.2
27...	1033	20.0	8.0	10.2
27...	1034	25.0	8.0	10.8
27...	1035	30.0	8.0	10.8
27...	1036	40.0	7.5	10.6
27...	1037	50.0	7.0	10.5
27...	1038	60.0	7.0	10.4
27...	1039	70.0	7.0	10.2
27...	1040	75.0	7.0	10.1
27...	1041	80.0	7.0	10.0
27...	1042	90.0	7.0	9.8
27...	1043	100	7.0	9.6
27...	1044	110	7.0	9.4
MAY				
15...	1001	--	9.5	--
15...	1015	--	--	7.8
31...	1145	2.00	13.0	8.4
31...	1146	5.00	13.0	8.3
31...	1147	10.0	12.5	8.4
31...	1148	20.0	12.0	8.2
31...	1149	25.0	11.5	8.2
31...	1150	30.0	10.0	8.7
31...	1151	40.0	9.0	8.7
31...	1152	50.0	8.5	8.7
31...	1153	60.0	8.0	8.6
31...	1154	70.0	8.0	8.6
31...	1155	75.0	7.0	8.7
31...	1156	80.0	7.0	8.5
31...	1157	90.0	7.0	8.6
31...	1158	100	7.0	8.6
31...	1159	110	7.0	8.4
JUN				
22...	1330	2.00	19.0	8.6
22...	1331	5.00	18.0	8.4
22...	1332	10.0	17.0	8.2
22...	1333	20.0	15.5	8.0
22...	1334	25.0	13.5	8.4
22...	1335	30.0	12.0	8.6
22...	1336	40.0	10.5	8.4
22...	1337	50.0	10.0	8.6
22...	1338	60.0	9.0	8.0
22...	1339	70.0	9.0	8.0
22...	1340	75.0	8.5	8.4
22...	1341	80.0	8.0	8.0
22...	1342	90.0	8.0	7.8
22...	1343	100	8.0	7.8
22...	1344	110	8.0	7.6
22...	1345	120	7.5	7.6
JUL				
28...	0815	2.00	22.5	6.5
28...	0816	5.00	22.5	6.5
28...	0817	10.0	22.5	6.6
28...	0818	20.0	20.0	6.0
28...	0819	25.0	18.5	5.8
28...	0820	30.0	16.0	5.6
28...	0821	40.0	13.0	6.0
28...	0822	50.0	12.0	6.3
28...	0823	60.0	11.0	6.3
28...	0824	70.0	10.5	6.4
28...	0825	75.0	10.0	6.4
28...	0826	80.0	10.0	6.0
SEP				
26...	1445	2.00	17.0	6.8
26...	1446	5.00	17.0	6.8
26...	1447	10.0	17.0	6.6
26...	1448	20.0	16.0	6.4
26...	1449	25.0	16.0	6.4
26...	1450	30.0	16.0	5.9
26...	1451	40.0	16.0	6.2
26...	1452	50.0	16.0	5.9
26...	1453	60.0	15.5	5.8
26...	1454	70.0	15.0	5.8
26...	1455	75.0	11.0	3.2
26...	1456	80.0	15.0	5.5
26...	1457	90.0	12.5	3.6
26...	1458	100	11.0	3.2

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT									
19...	0930	1.00	120	7.7	--	--	24	<1	70
APR									
27...	1030	2.00	80	7.5	10.0	10.6	<1	<1	67
27...	1036	40.0	80	7.3	7.5	10.6	<1	<1	52
27...	1043	100	80	7.6	7.0	9.6	<1	<1	52
MAY									
31...	1145	2.00	80	6.8	13.0	8.4	K7	K1	47
31...	1152	50.0	80	7.0	8.5	8.7	K16	K1	50
31...	1158	100	80	7.2	7.0	8.6	K10	<1	45
JUN									
22...	1330	2.00	70	7.6	19.0	8.6	26	<1	45
22...	1337	50.0	60	7.6	10.0	8.6	K13	<1	45
22...	1345	120	75	7.5	7.5	7.6	K10	<1	39
JUL									
28...	0815	2.00	75	7.6	22.5	6.5	K700	K1	42
28...	0820	30.0	70	7.4	16.0	5.6	36	K5	39
28...	0826	80.0	70	7.4	10.0	6.0	87	K1	41
SEP									
26...	1445	2.00	70	7.6	17.0	6.8	K10	K1	44
26...	1450	50.0	70	7.6	16.0	5.9	--	--	--
26...	1452	50.0	70	7.6	16.0	5.9	K14	K2	38
26...	1455	75.0	75	7.2	11.0	3.2	--	--	--
26...	1458	100	75	7.2	11.0	3.2	760	<1	44

DATE	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)
OCT								
19...	.10	.27	.020	.29	--	.070	--	840
APR								
27...	.09	.09	.030	.12	.030	.020	.6	670
27...	.07	.38	.050	.43	.030	.020	.6	1400
27...	.07	.13	.070	.20	.030	.080	.6	68
MAY								
31...	.06	.13	.010	.14	<.010	<.010	.7	110
31...	.07	.24	.010	.25	.010	.010	1.2	200
31...	.06	.17	<.010	.17	<.010	.010	1.3	45
JUN								
22...	.06	.11	.010	.12	.060	.010	.9	110
22...	.06	.07	.010	.08	.010	.010	1.7	0
22...	.05	.18	.010	.19	.080	.020	1.6	0
JUL								
28...	.06	.13	.010	.14	<.010	.010	.6	29
28...	.05	.21	.010	.22	<.010	.010	.9	0
28...	.06	.21	.010	.22	<.010	.010	2.7	0
SEP								
26...	.06	.15	.010	.16	.010	.020	.5	220
26...	--	--	--	--	--	--	--	15
26...	.05	.14	.010	.15	.020	.020	1.7	--
26...	--	--	--	--	--	--	--	0
26...	.06	.29	.010	.30	.010	.030	9.4	--

K BASED ON NON-IDEAL COLONY COUNT.

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO SEPTEMBER 1978

DATE	OCT 19,77	APR 27,78	APR 27,78	APR 27,78	MAY 31,78	MAY 31,78
TIME	0930	1100	1105	1110	1205	1210
TOTAL CELLS/ML	840	670	1400	68	110	200
DIVERSITY: DIVISION	2.0	1.7	1.4	0.0	0.7	0.0
.CLASS	2.0	1.7	1.4	0.0	0.7	0.0
..ORDER	2.0	2.2	1.7	0.0	0.7	0.0
...FAMILY	2.1	2.5	1.8	0.0	0.7	0.0
....GENUS	2.3	2.6	2.1	0.0	0.7	0.0

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
BACILLARIOPHYTA (DIATOMS)												
.BACILLARIOPHYCEAE												
..BACILLARIALES												
...NITZSCHIACEAE												
....NITZSCHIA	--	-	--	-	48	3	--	-	--	-	--	-
..EUPODISCALES												
...COSCINODISCACEAE												
....CYCLOTELLA	30	4	72	11	750#	53	68#	100	--	-	--	-
....MELOSIRA	150#	18	--	-	--	-	--	-	--	-	--	-
....STEPHANODISCUS	--	-	--	-	48	3	--	-	--	-	--	-
..FRAGILARIALES												
...FRAGILARIACEAE												
....FRAGILARIA	--	-	29	4	--	-	--	-	--	-	--	-
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...CHLOROCOCCACEAE												
....SCHROEDERIA	210#	25	--	-	--	-	--	-	--	-	--	-
...DICTYOSPHAERIACEAE												
....DICTYOSPHAERIUM	--	-	230#	34	--	-	--	-	--	-	--	-
...MICRACTINIACEAE												
....GOLENKINIA	--	-	--	-	--	-	--	-	--	-	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	10	1	43	6	12	1	--	-	22#	20	--	-
....KIRCHNERIELLA	--	-	--	-	12	1	--	-	--	-	--	-
....OOCYSTIS	20	2	--	-	--	-	--	-	--	-	--	-
....SELENASTRUM	--	-	14	2	--	-	--	-	--	-	--	-
...SCENEDESMACEAE												
....SCENEDESMUS	--	-	--	-	73	5	--	-	--	-	--	-
..TETRASPORALES												
...GLOEOCYSTACEAE												
....GLOEOCYSTIS	--	-	57	9	--	-	--	-	--	-	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CARTERIA	--	-	--	-	73	5	--	-	--	-	--	-
....CHLAMYDOMONAS	--	-	*	0	36	3	--	-	--	-	--	-
CHRYSOPHYTA												
.CHRYSOPHYCEAE												
..OCHROMONADALES												
...OCHROMONADACEAE												
....OCHROMONAS	--	-	72	11	12	1	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO SEPTEMBER 1978

DATE	OCT 19,77	APR 27,78	APR 27,78	APR 27,78	MAY 31,78	MAY 31,78
TIME	0930	1100	1105	1110	1205	1210
TOTAL CELLS/ML	840	670	1400	68	110	200
DIVERSITY: DIVISION	2.0	1.7	1.4	0.0	0.7	0.0
.CLASS	2.0	1.7	1.4	0.0	0.7	0.0
..ORDER	2.0	2.2	1.7	0.0	0.7	0.0
...FAMILY	2.1	2.5	1.8	0.0	0.7	0.0
....GENUS	2.3	2.6	2.1	0.0	0.7	0.0

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONADALES												
...CRYPTOCHRYSIDACEAE												
....CHROOMONAS	--	-	--	-	--	-	--	-	--	-	--	-
...CRYPTOMONADACEAE												
....CRYPTOMONAS	170#	20	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	260#	31	160#	23	360#	25	--	-	89#	80	200#	100
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....EUGLENA	--	-	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO SEPTEMBER 1978

DATE	MAY 31,78	JUN 22,78	JUN 22,78	JUN 22,78	JUL 28,78
TIME	1215	1355	1400	1405	0930
TOTAL CELLS/ML	45	110	0	0	29
DIVERSITY: DIVISION	1.0	0.7	0.0	0.0	0.0
.CLASS	1.0	0.7	0.0	0.0	0.0
..ORDER	1.0	0.7	0.0	0.0	0.0
...FAMILY	1.0	0.7	0.0	0.0	0.0
....GENUS	1.0	0.7	0.0	0.0	0.0

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
BACILLARIOPHYTA (DIATOMS)										
.BACILLARIOPHYCEAE										
..BACILLARIALES										
...NITZSCHIACEAE										
....NITZSCHIA	--	-	--	-	--	-	--	-	--	-
..EUPODISCALES										
...COSCINODISCACEAE										
....CYCLOTELLA	22#	50	--	-	--	-	--	-	--	-
....MELOSIRA	--	-	--	-	--	-	--	-	--	-
....STEPHANODISCUS	--	-	--	-	--	-	--	-	--	-
..FRAGILARIALES										
...FRAGILARIACEAE										
....FRAGILARIA	--	-	--	-	--	-	--	-	--	-
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHLOROCOCCACEAE										
....SCHROEDERIA	--	-	--	-	--	-	--	-	--	-
...DICTYOSPHAERIACEAE										
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-	--	-
...MICRACTINIACEAE										
....GOLENKINIA	22#	50	--	-	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	22#	20	--	-	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	--	-	--	-	29#	100
....OOCYSTIS	--	-	--	-	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	--	-	--	-	--	-
...SCENEDESMACEAE										
....SCENEDESMUS	--	-	--	-	--	-	--	-	--	-
..TETRASPORALES										
...GLOEOCYSTACEAE										
....GLOEOCYSTIS	--	-	--	-	--	-	--	-	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CARTERIA	--	-	--	-	--	-	--	-	--	-
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO SEPTEMBER 1978

DATE	MAY 31,78	JUN 22,78	JUN 22,78	JUN 22,78	JUL 28,78
TIME	1215	1355	1400	1405	0930
TOTAL CELLS/ML	45	110	0	0	29
DIVERSITY: DIVISION	1.0	0.7	0.0	0.0	0.0
.CLASS	1.0	0.7	0.0	0.0	0.0
..ORDER	1.0	0.7	0.0	0.0	0.0
...FAMILY	1.0	0.7	0.0	0.0	0.0
....GENUS	1.0	0.7	0.0	0.0	0.0

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHRYSOPHYTA										
.CHRYSOPHYCEAE										
..OCHROMONADALES										
...OCHROMONADACEAE										
....OCHROMONAS	--	-	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	89#	80	--	-	--	-	--	-
...CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....EUGLENA	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO SEPTEMBER 1978

DATE	JUL 28,78	JUL 28,78	SEP 26,78	SEP 26,78	SEP 26,78
TIME	0935	0940	1445	1450	1455
TOTAL CELLS/ML	0	0	220	15	0
DIVERSITY: DIVISION	0.0	0.0	1.5	0.0	0.0
.CLASS	0.0	0.0	1.5	0.0	0.0
..ORDER	0.0	0.0	1.5	0.0	0.0
...FAMILY	0.0	0.0	2.1	0.0	0.0
....GENUS	0.0	0.0	2.1	0.0	0.0

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
BACILLARIOPHYTA (DIATOMS)										
.BACILLARIOPHYCEAE										
..BACILLARIALES										
...NITZSCHIACEAE										
....NITZSCHIA	--	-	--	-	--	-	--	-	--	-
..EUPODISCALES										
...COSCINODISCACEAE										
....CYCLOTELLA	--	-	--	-	--	-	--	-	--	-
....MELOSIRA	--	-	--	-	--	-	--	-	--	-
....STEPHANODISCUS	--	-	--	-	--	-	--	-	--	-
..FRAGILARIALES										
...FRAGILARIACEAE										
....FRAGILARIA	--	-	--	-	--	-	--	-	--	-
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHLOROCOCCACEAE										
....SCHROEDERIA	--	-	--	-	14	7	15#	100	--	-
...DICTYOSPHAERIACEAE										
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-	--	-
...MICRACTINIACEAE										
....GOLENKINIA	--	-	--	-	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	--	-	--	-	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	--	-	--	-	--	-
...SCENEDESMACEAE										
....SCENEDESMUS	--	-	--	-	--	-	--	-	--	-
..TETRASPORALES										
...GLOEOCYSTACEAE										
....GLOEOCYSTIS	--	-	--	-	--	-	--	-	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CARTERIA	--	-	--	-	--	-	--	-	--	-
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
.CHRYSOPHYCEAE										
..OCHROMONADALES										
...OCHROMONADACEAE										
....OCHROMONAS	--	-	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	--	-	58#	27	--	-	--	-
...CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	--	-	72#	33	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	--	-	58#	27	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....EUGLENA	--	-	--	-	14	7	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

MONTH-END ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	5,295.60	2,050	-
Oct. 31	5,270.70	26	-2,020
Nov. 30	5,270.25	9	-20
Dec. 31	5,323.91	11,210	+11,200
CAL YR 1977	-	-	-45,810
Jan. 31	5,347.00	28,690	+17,480
Feb. 28	5,356.71	37,950	+9,260
Mar. 31	5,367.92	49,990	+12,040
Apr. 30	5,375.59	59,080	+9,090
May 31	5,389.42	77,190	+18,110
June 30	5,396.46	87,250	+10,060
July 31	5,382.43	67,770	-19,480
Aug. 31	5,365.92	47,740	-20,030
Sept.30	5,371.15	53,730	+5,990
WTR YR 1978	-	-	+51,680

EXTREMES FOR 1978 WATER YEAR.--Maximum contents observed, 88,340 acre-ft (109 hm^3) June 19, elevation, 5,397.20 ft (1,645.067 m); minimum observed, 9 acre-ft (11,100 m^3) Nov. 16-30, elevation, 5,270.25 ft (1,606.372 m).

06737500 - HORSETOOTH RESERVOIR NEAR FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLING DEPTH (FEET)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)
OCT				
25...	0950	2.00	12.5	7.1
25...	0951	5.00	12.5	7.0
25...	0952	10.0	12.5	6.9
25...	0953	20.0	12.5	6.9
25...	0954	25.0	12.5	7.0
25...	0955	30.0	12.5	7.0
25...	0956	40.0	12.5	6.9
25...	0957	50.0	12.5	7.0
25...	0958	60.0	12.5	6.8
25...	0959	70.0	12.5	6.8
25...	1000	75.0	12.5	6.8
25...	1001	80.0	12.5	6.7
25...	1002	90.0	12.5	6.7
25...	1003	100	12.5	6.7
NOV				
21...	1445	2.00	8.0	8.2
21...	1446	5.00	8.0	8.2
21...	1447	10.0	8.0	8.2
21...	1448	20.0	8.0	8.2
21...	1449	25.0	8.0	8.2
21...	1450	30.0	8.0	8.2
21...	1451	40.0	8.0	8.2
21...	1452	50.0	8.0	8.2
21...	1453	60.0	8.0	8.2
21...	1454	70.0	8.0	8.2
21...	1455	75.0	8.0	8.1
21...	1456	80.0	8.0	8.2
21...	1457	90.0	8.0	8.2
21...	1458	100	8.0	8.2
21...	1459	110	7.5	8.2
APR				
16...	1350	.10	6.5	11.8
16...	1351	5.00	6.5	11.8
16...	1352	10.0	6.0	11.6
16...	1353	20.0	5.5	11.4
16...	1354	25.0	5.0	11.4
16...	1355	30.0	5.0	11.1
16...	1356	40.0	4.5	11.0
16...	1357	50.0	4.0	11.0
16...	1358	60.0	4.0	11.0
16...	1359	70.0	4.0	10.8
APR				
16...	1400	75.0	4.0	10.8
16...	1401	80.0	4.0	10.8
16...	1402	90.0	4.0	10.8
16...	1403	100	4.0	10.8
16...	1404	110	4.0	10.8
MAY				
15...	1000	.10	10.5	9.0
15...	1001	5.00	9.5	9.1
15...	1002	10.0	8.0	9.2
15...	1003	20.0	7.0	9.0
15...	1004	25.0	6.5	9.2
15...	1005	30.0	6.5	9.2
15...	1006	40.0	6.5	9.4
15...	1007	50.0	6.0	9.4
15...	1008	60.0	5.5	9.4
15...	1009	70.0	5.0	9.7
15...	1010	75.0	5.0	9.6
15...	1011	80.0	5.0	9.7
15...	1012	90.0	5.0	9.4
15...	1013	100	5.0	9.6
15...	1014	110	4.5	9.6
15...	1015	120	4.5	7.5
JUN				
25...	1050	.10	18.5	7.6
25...	1051	5.00	16.5	7.4
25...	1052	10.0	14.5	7.3
25...	1053	20.0	12.5	7.7
25...	1054	25.0	11.5	7.7
25...	1055	30.0	10.5	7.9
25...	1056	40.0	9.0	8.3
25...	1057	50.0	7.0	8.6
25...	1058	60.0	6.0	8.8
25...	1059	70.0	5.5	8.8
25...	1100	75.0	5.5	8.8
25...	1101	80.0	5.5	8.8
25...	1102	90.0	5.5	8.8
25...	1103	100	5.0	8.8
25...	1104	110	5.0	8.7
25...	1105	120	5.0	8.7
JUL				
31...	1048	.10	22.0	6.3
31...	1049	5.00	19.5	6.8

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLING DEPTH (FEET)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)
JUL				
31...	1050	10.0	19.5	6.8
31...	1051	20.0	17.5	5.9
31...	1052	25.0	16.0	5.7
31...	1053	30.0	13.5	5.9
31...	1054	40.0	9.5	7.2
31...	1055	50.0	7.5	7.9
31...	1056	60.0	6.0	8.2
31...	1057	70.0	5.5	8.2
31...	1058	75.0	5.5	8.1
31...	1059	80.0	5.5	8.1
31...	1100	90.0	5.5	8.2
31...	1101	100	5.0	8.3
31...	1102	110	4.5	8.0
31...	1103	120	4.5	7.8
AUG				
20...	1350	.10	19.0	7.0
20...	1351	5.00	19.0	7.0
20...	1352	10.0	19.0	6.9
20...	1353	20.0	19.0	6.9
20...	1354	25.0	17.5	5.6
20...	1355	30.0	16.5	5.3
20...	1356	40.0	10.5	7.1
20...	1357	50.0	9.0	7.6
20...	1358	60.0	8.5	7.7
20...	1359	70.0	8.0	7.7
20...	1400	75.0	8.0	7.7
20...	1401	80.0	8.0	7.8
20...	1402	90.0	7.5	7.8
20...	1403	100	7.5	7.8
20...	1404	110	7.0	1.0
SEP				
26...	1015	.10	18.0	7.3
26...	1016	5.00	17.0	7.3
26...	1017	10.0	17.0	7.3
26...	1018	20.0	17.0	7.3
26...	1019	25.0	16.0	6.8
26...	1020	30.0	16.0	6.6
26...	1021	40.0	13.0	6.2
26...	1022	50.0	10.0	6.2
26...	1023	60.0	9.0	6.8
26...	1024	70.0	8.0	7.1
26...	1025	75.0	8.0	7.2
26...	1026	80.0	8.0	7.2
26...	1027	90.0	8.0	7.2
26...	1028	100	7.5	7.2
26...	1029	110	7.0	7.0

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TRANSPARENCY (SECCHI DISK) (IN)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT										
25...	0950	2.00	70	7.6	12.5	--	7.1	160	<1	--
25...	0958	60.0	65	7.6	12.5	--	6.8	180	<1	--
25...	1003	100	65	7.6	12.5	--	6.7	150	<1	--
NOV										
21...	1445	2.00	70	7.6	8.0	72.0	8.2	61	<1	--
APR										
16...	1350	.10	70	8.1	6.5	82.0	11.8	--	<1	<1
MAY										
15...	1000	.10	70	7.6	10.5	100	9.0	--	<1	<1
JUN										
25...	1050	.10	75	7.6	18.5	86.4	7.6	--	<1	<1
JUL										
31...	1048	.10	80	7.7	22.0	50.4	6.3	--	<1	<1
AUG										
20...	1350	.10	78	7.4	19.0	39.0	7.0	--	K3	--
SEP										
26...	1015	.10	80	7.4	18.0	--	7.3	K7	K1	--

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)
OCT									
25...	48	.07	.17	<.010	.17	.010	.020	3.0	14
25...	47	.06	.17	<.010	.17	.010	.010	3.2	14
25...	47	.06	.17	<.010	.17	.010	.020	3.2	29
NOV									
21...	55	.07	.18	<.010	.18	.010	.030	4.6	0
APR									
16...	45	.06	.11	.010	.12	.010	.010	.3	1700
MAY									
15...	40	.05	.13	<.010	.13	.020	.020	.3	450
JUN									
25...	54	.07	.09	.010	.10	.020	<.010	.4	13
JUL									
31...	54	.07	.12	<.010	.12	.010	.020	--	0
AUG									
20...	59	.08	.14	.010	.15	.020	.010	.4	320
SEP									
26...	57	.08	.12	.010	.13	.030	<.010	.5	580

K BASED ON NON-IDEAL COLONY COUNT.

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	OCT 25,78	OCT 25,78	OCT 25,78	NOV 21,78	APR 16,79
TIME	0950	0955	1000	1445	1350
TOTAL CELLS/ML	14	14	29	0	1700
DIVERSITY: DIVISION	0.0	0.0	0.0	0.0	1.2
.CLASS	0.0	0.0	0.0	0.0	1.2
..ORDER	0.0	0.0	0.0	0.0	1.3
...FAMILY	0.0	0.0	0.0	0.0	1.3
....GENUS	0.0	0.0	0.0	0.0	1.3

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
BACILLARIOPHYTA (DIATOMS)										
.BACILLARIOPHYCEAE										
..BACILLARIALES										
...NITZSCHIACEAE										
....NITZSCHIA	--	-	--	-	--	-	--	-	--	-
..EUPODISCALES										
...COSCINODISCACEAE										
....CYCLOTELLA	--	-	--	-	--	-	--	-	1100#	63
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHLOROCOCCACEAE										
....SCHROEDERIA	14#	100	14#	100	29#	100	--	-	--	-
...MICRACTINIACEAE										
....GOLENKINIA	--	-	--	-	--	-	--	-	22	1
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	510#	29
...VOLVOCACEAE										
....PANDORINA	--	-	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
.CHRYSOPHYCEAE										
..OCHROMONADALES										
...OCHROMONADACEAE										
....OCHROMONAS	--	-	--	-	--	-	--	-	22	1
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROCOCCALES										
...CHROOCOCCACEAE										
....AGMENELLUM	--	-	--	-	--	-	--	-	--	-
....ANACYSTIS	--	-	--	-	--	-	--	-	88	5
..NOSTOCALES										
...HAMMATOIDEACEAE										
....RAPHIDIOPSIS	--	-	--	-	--	-	--	-	--	-
..OSCILLATORIALES										
...OSCILLATORIACEAE										
....OSCILLATORIA	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	MAY 15,79	JUN 25,79	JUL 31,79	AUG 20,79	SEP 26,79
TIME	1000	1050	1048	1350	1015
TOTAL CELLS/ML	450	13	0	320	580
DIVERSITY: DIVISION	0.4	0.0	0.0	0.0	0.8
.CLASS	0.4	0.0	0.0	0.0	0.8
..ORDER	0.4	0.0	0.0	0.9	0.9
...FAMILY	0.4	0.0	0.0	0.9	0.9
....GENUS	0.4	0.0	0.0	0.9	1.4

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
BACILLARIOPHYTA (DIATOMS)										
.BACILLARIOPHYCEAE										
..BACILLARIALES										
...NITZSCHIACEAE										
....NITZSCHIA	--	-	--	-	--	-	--	-	13	2
..EUPODISCALES										
...COSCINODISCACEAE										
....CYCLOTELLA	--	-	--	-	--	-	--	-	26	4
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHLOROCOCCACEAE										
....SCHROEDERIA	--	-	13#	100	--	-	--	-	13	2
...MICRACTINIACEAE										
....GOLENKINIA	--	-	--	-	--	-	--	-	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	39	7
...VOLVOCACEAE										
....PANDORINA	410#	91	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
.CHRYSOPHYCEAE										
..OCHROMONADALES										
...OCHROMONADACEAE										
....OCHROMONAS	--	-	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	39	9	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....AGMENELLUM	--	-	--	-	--	-	--	-	410#	71
....ANACYSTIS	--	-	--	-	--	-	--	-	77	13
..NOSTOCALES										
...HAMMATOIDEACEAE										
....RAPHIDIOPSIS	--	-	--	-	--	-	120#	36	--	-
..OSCILLATORIALES										
...OSCILLATORIACEAE										
....OSCILLATORIA	--	-	--	-	--	-	210#	64	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

MONTH-END ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	5,371.15	53,730	-
Oct. 31	5,369.42	51,710	-2,020
Nov. 30	5,372.08	54,830	+3,120
Dec. 31	5,378.42	62,610	+7,780
CAL YR 1978	-	-	+51,400
Jan. 31	5,387.50	74,540	+11,930
Feb. 28	5,394.38	84,220	+9,680
Mar. 31	5,407.90	104,900	+20,680
Apr. 30	5,413.28	113,700	+8,800
May 31	5,423.72	131,900	+18,200
June 30	5,428.72	140,100	+8,200
July 31	5,415.00	116,600	-23,500
Aug. 31	5,404.70	99,780	-16,820
Sept.30	5,401.80	95,280	-4,500
WTR YR 1979		-	+41,550

EXTREMES FOR 1979 WATER YEAR.--Maximum contents observed, 140,400 acre-ft (173 hm^3) June 22, elevation, 5,428.38 ft (1,654.570 m); minimum observed, 51,370 acre-ft (63.3 hm^3) Nov. 17, 18, elevation, 5,369.12 ft (1,636.508 m)

06737500 - HORSETOOTH RESERVOIR NEAR FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLING DEPTH (FEET)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)
OCT				
10...	1035	.10	15.5	8.2
10...	1036	5.00	15.5	8.2
10...	1037	10.0	15.5	8.2
10...	1038	20.0	15.5	8.3
10...	1039	25.0	15.5	8.2
10...	1040	30.0	15.5	8.2
10...	1041	40.0	14.5	7.3
10...	1042	50.0	12.0	6.9
10...	1043	60.0	10.0	7.1
10...	1044	70.0	9.5	7.2
10...	1045	75.0	9.5	7.4
10...	1046	80.0	9.0	7.5
10...	1047	90.0	8.5	7.6
10...	1048	100	8.5	7.5
10...	1049	110	8.0	7.3
10...	1050	120	8.0	6.0
APR				
22...	1130	.10	10.0	11.6
22...	1131	5.00	10.0	11.8
22...	1132	10.0	9.0	11.8
22...	1133	20.0	7.0	10.6
22...	1134	25.0	6.0	10.5
22...	1135	30.0	5.0	10.4
22...	1136	40.0	5.0	10.4
22...	1137	50.0	5.0	10.4
22...	1138	60.0	4.5	10.4
22...	1139	70.0	4.5	10.4
22...	1140	75.0	4.0	10.4
22...	1141	80.0	4.0	10.4
22...	1142	90.0	4.0	10.4
22...	1143	100	4.0	10.4
22...	1144	110	4.0	10.4
22...	1145	120	4.0	10.4
22...	1146	125	4.0	10.4
MAY				
20...	1420	.10	12.0	8.9
20...	1421	5.00	11.0	9.2
20...	1422	10.0	10.0	9.4
20...	1423	20.0	9.0	9.7
20...	1424	25.0	8.0	9.8
20...	1425	30.0	8.0	10.1

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLING DEPTH (FEET)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)
MAY				
20...	1426	40.0	6.0	10.5
20...	1427	50.0	5.5	11.0
20...	1428	60.0	5.0	11.2
20...	1429	70.0	5.0	11.0
20...	1430	75.0	5.0	11.2
20...	1431	80.0	5.0	11.1
20...	1432	90.0	5.0	11.3
20...	1433	100	5.0	10.6
20...	1434	110	5.0	11.0
20...	1435	120	4.5	10.5
20...	1436	125	4.0	10.6
JUN				
24...	1130	.10	21.0	7.2
24...	1131	5.00	20.0	7.3
24...	1132	10.0	20.0	7.3
24...	1133	20.0	16.5	7.3
24...	1134	25.0	14.0	7.7
24...	1135	30.0	11.5	8.2
24...	1136	40.0	9.0	8.8
24...	1137	50.0	7.5	9.0
24...	1138	60.0	7.0	9.3
24...	1139	70.0	7.0	8.8
24...	1140	75.0	7.5	8.8
24...	1141	80.0	7.0	9.0
24...	1142	90.0	7.0	9.0
24...	1143	100	6.5	9.0
24...	1144	110	6.0	9.0
24...	1145	120	6.0	7.2
JUL				
30...	1100	.10	22.0	6.4
30...	1101	5.00	22.0	6.4
30...	1102	10.0	22.0	6.4
30...	1103	20.0	22.0	6.2
30...	1104	25.0	22.0	6.4
30...	1105	30.0	17.0	5.4
30...	1106	40.0	13.0	6.6
30...	1107	50.0	11.0	6.3
30...	1108	60.0	9.0	7.6
30...	1109	70.0	8.0	7.4
30...	1110	75.0	8.0	7.4
30...	1111	80.0	8.0	6.4
30...	1112	90.0	8.0	6.0
AUG				
14...	1100	.10	22.5	6.6
SEP				
30...	1045	.10	18.0	6.8
30...	1046	5.00	17.0	7.0
30...	1047	10.0	17.0	7.0
30...	1048	20.0	16.5	6.5
30...	1049	25.0	16.5	6.7
30...	1050	30.0	16.0	6.6
30...	1051	40.0	16.0	6.6
30...	1052	50.0	15.5	6.1
30...	1053	60.0	13.0	5.7
30...	1054	70.0	11.0	6.1
30...	1055	75.0	10.5	6.0
30...	1056	80.0	10.0	6.1
30...	1057	90.0	9.0	6.2

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TRANSPARENCY (SECCHI DISK) (IN)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT											
10...	1035	.10	84	7.6	15.5	62.4	8.2	--	--	--	48
APR											
22...	1130	.10	95	8.8	10.0	48.0	11.6	K1	<1	--	72
MAY											
20...	1420	.10	95	8.0	12.0	52.8	8.9	<1	<1	--	57
JUN											
24...	1130	.10	105	7.4	21.0	79.2	7.2	<1	<1	--	60
JUL											
30...	1100	.10	95	7.7	22.0	8.0	6.4	--	K1	K2	69
AUG											
14...	1100	.10	107	7.7	22.5	42.0	6.6	<1	<1	--	50
SEP											
30...	1045	.10	95	7.3	18.0	64.0	6.8	<1	<1	--	74

DATE	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)
OCT										
10...	.07	.12	--	.010	.13	.020	--	<.010	--	--
APR										
22...	.10	.15	--	.010	.16	.000	<.010	.050	2.6	5200
MAY										
20...	.09	.22	--	.010	.23	.060	--	.020	1.3	51
JUN										
24...	.08	.17	--	.010	.18	.060	--	.820	.5	39
JUL										
30...	.09	.28	--	.010	.29	.000	<.010	.030	2.0	13
AUG										
14...	.07	.23	.220	<.010	.23	.000	<.010	.030	1.4	120
SEP										
30...	.10	.21	--	<.010	.21	.000	<.010	.030	.4	100

K BASED ON NON-IDEAL COLONY COUNT.

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	APR 22,80	MAY 20,80	JUN 24,80	JUL 30,80	AUG 14,80	SEP 30,80
TIME	1130	1420	1130	1100	1100	1045
TOTAL CELLS/ML	5200	51	39	13	120	100
DIVERSITY: DIVISION	0.5	0.0	0.0	0.0	1.8	0.8
.CLASS	0.5	0.0	0.0	0.0	1.8	0.8
..ORDER	1.1	0.0	0.0	0.0	2.1	1.1
...FAMILY	1.1	0.0	0.9	0.0	2.1	1.5
....GENUS	1.5	1.0	0.9	0.0	2.1	1.5

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
BACILLARIOPHYTA (DIATOMS)												
.BACILLARIOPHYCEAE												
..EUPODISCALES												
...COSCINODISCACEAE												
....CYCLOTELLA	--	-	26#	50	--	-	13#	100	--	-	--	-
....MELOSIRA	470	9	26#	50	--	-	--	-	--	-	--	-
....STEPHANODISCUS	3600#	69	--	-	--	-	--	-	--	-	--	-
..FRAGILARIALES												
...FRAGILARIACEAE												
....ASTERIONELLA	570	11	--	-	--	-	--	-	51#	44	--	-
....DIATOMA	67	1	--	-	--	-	--	-	--	-	--	-
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...CHLOROCOCCACEAE												
....SCHROEDERIA	--	-	--	-	26#	67	--	-	--	-	--	-
...DICTYOSPHAERIACEAE												
....DICTYOSPHAERIUM	270	5	--	-	--	-	--	-	--	-	13	13
...OOCYSTACEAE												
....CHLORELLA	--	-	--	-	13#	33	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	--	-	13	11	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	230	4	--	-	--	-	--	-	13	11	13	13
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONADALES												
...CRYPTOCHRYSIDACEAE												
....CHROOMONAS	--	-	--	-	--	-	--	-	13	11	64#	63
...CRYPTOMONADACEAE												
....CRYPTOMONAS	--	-	--	-	--	-	--	-	--	-	13	13
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	--	-	--	-	--	-	--	-	26#	22	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

MONTH-END ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	5,401.80	95,280	-
Oct. 31	5,401.28	94,480	-800
Nov. 30	5,402.28	96,020	+1,540
Dec. 31	5,406.10	102,000	+5,980
CAL YR 1979	-	-	+39,390
Jan. 31	5,409.58	107,600	+5,600
Feb. 29	5,413.49	114,100	+6,500
Mar. 31	5,420.90	126,800	+12,700
Apr. 30	5,425.48	135,100	+8,300
May 31	5,427.79	139,300	+4,200
June 30	5,426.52	137,000	-2,300
July 31	5,411.20	110,300	-26,700
Aug. 31	5,393.88	83,500	-26,800
Sept.30	5,387.68	74,790	-8,710
WTR YR 1980	-	-	-20,490

EXTREMES FOR 1980 WATER YEAR.--Maximum contents observed, 141,300 acre-ft (174 hm^3) May 21, elevation, 5,428.82 ft (1,654.704 m); minimum observed, 74,790 acre-ft (92.2 hm^3) Sept. 25, 26, 30, elevation, 5,387.68 ft (1,642.165 m).

06737500 - HORSETOOTH RESERVOIR NEAR FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SAMPLING DEPTH (FEET)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)
APR				
09...	1205	.10	7.0	10.4
09...	1206	2.00	6.0	11.1
09...	1207	5.00	6.0	11.4
09...	1208	10.0	6.0	11.6
09...	1209	20.0	5.5	12.6
09...	1210	25.0	5.5	12.9
09...	1211	30.0	5.5	13.0
09...	1212	40.0	5.5	13.2
09...	1213	50.0	5.5	12.2
09...	1214	60.0	5.0	11.8
09...	1215	70.0	5.0	11.6
09...	1216	75.0	5.0	11.4
09...	1217	80.0	5.0	11.4
09...	1218	90.0	5.0	11.2
09...	1219	100	5.0	10.9
09...	1220	110	5.0	10.7
MAY				
14...	1045	.10	11.0	9.4
14...	1046	5.00	11.0	9.9
14...	1047	10.0	11.0	10.2
14...	1048	20.0	11.0	10.6
14...	1049	25.0	11.0	10.6
14...	1050	30.0	11.0	10.8
14...	1051	40.0	11.0	11.0
14...	1052	50.0	10.0	11.2
14...	1053	60.0	8.5	7.6
14...	1054	70.0	7.5	7.0
14...	1055	75.0	7.0	6.6
14...	1056	80.0	7.0	6.4
14...	1057	90.0	6.5	5.8
14...	1058	100	6.5	5.2
14...	1059	110	6.5	4.3
14...	1100	120	6.0	4.0
14...	1101	125	6.0	3.8
14...	1102	130	6.0	3.5
JUN				
04...	1150	.10	16.0	8.5
04...	1151	5.00	16.0	8.6
04...	1152	10.0	16.0	9.2
04...	1153	20.0	13.5	11.4
04...	1154	25.0	13.0	11.7

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SAMPLING DEPTH (FEET)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)
JUN				
04...	1155	30.0	12.0	11.7
04...	1156	40.0	10.5	9.5
04...	1157	50.0	9.5	7.4
04...	1158	60.0	8.0	6.4
04...	1159	70.0	7.5	5.5
JUL				
09...	1040	.10	21.0	7.2
09...	1045	.10	21.0	7.2
09...	1046	5.00	20.5	7.4
09...	1047	10.0	20.0	7.1
09...	1048	20.0	19.5	3.4
09...	1049	25.0	17.0	3.0
09...	1050	30.0	15.0	2.4
09...	1051	40.0	11.0	2.3
09...	1052	50.0	10.0	2.1
09...	1053	60.0	9.0	2.1
09...	1054	70.0	9.0	2.0
09...	1055	75.0	8.5	1.9
09...	1056	80.0	8.5	1.8
09...	1057	90.0	8.0	1.7
09...	1058	100	8.0	1.6
09...	1059	110	7.5	1.6
09...	1100	120	7.0	1.6
AUG				
05...	1055	.10	24.0	6.8
05...	1100	.10	24.0	6.8
05...	1101	5.00	23.0	6.8
05...	1102	10.0	22.0	6.6
05...	1103	20.0	21.0	6.3
05...	1104	25.0	21.0	6.1
05...	1105	30.0	20.0	6.0
05...	1106	40.0	19.0	5.7
05...	1107	50.0	17.0	5.6
05...	1108	60.0	14.0	5.9
05...	1109	70.0	12.0	6.0
05...	1110	75.0	11.0	5.8
05...	1111	80.0	10.5	5.5
05...	1112	90.0	9.5	5.0
05...	1113	100	9.0	4.2
05...	1114	110	8.0	3.2
05...	1115	120	8.0	2.7
05...	1116	125	7.5	2.6
05...	1117	130	7.5	2.4
SEP				
10...	1025	.10	20.0	7.7
10...	1030	.10	20.0	7.7
10...	1031	5.00	19.5	7.3
10...	1032	10.0	19.5	6.8
10...	1033	20.0	19.0	--
10...	1034	25.0	19.0	--
10...	1035	30.0	19.0	--
10...	1036	40.0	19.0	--
10...	1037	50.0	18.5	--
10...	1038	60.0	18.0	--
10...	1039	70.0	17.0	--
10...	1040	75.0	15.5	--
10...	1041	80.0	15.0	--
10...	1042	90.0	13.0	--
10...	1043	100	11.5	--
10...	1044	110	10.5	--
10...	1045	120	10.0	--

06737500 - HORSETOOTH RESERVOIR NEAR FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	SPECIFIC CONDUCTANCE LAB (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TRANSPARENCY (SECCHI DISK) (IN)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
APR										
09...	1205	.10	80	81	8.3	7.0	60.6	10.4	<1	<1
MAY										
14...	1045	.10	85	77	8.1	11.0	108	9.4	<1	<1
JUN										
04...	1150	.10	83	79	7.8	16.0	133	8.5	<1	<1
JUL										
09...	1040	.10	84	79	7.7	21.0	60.0	7.2	<1	<1
AUG										
05...	1055	.10	86	81	7.5	24.0	30.0	6.8	K2	<1
SEP										
10...	1025	.10	80	79	7.3	20.0	53.0	7.7	K1	<1

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR										
09...	32	10	1.8	2.9	.2	.9	33	1.3	.6	.2
MAY										
14...	32	10	1.7	3.0	.2	.7	34	1.2	.7	.1
JUN										
04...	34	11	1.7	3.3	.3	.8	33	1.5	.6	.2
JUL										
09...	35	11	1.8	3.1	.2	.7	34	.7	.3	.1
AUG										
05...	32	10	1.6	2.5	.2	.8	40	<1.0	.4	.5
SEP										
10...	--	--	--	--	--	--	--	--	--	--

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
APR										
09...	4.9	--	44	.06	--	.23	--	.030	--	.26
MAY										
14...	4.6	--	53	.07	--	2.30	--	.010	.15	2.3
JUN										
04...	4.7	52	45	.07	--	.20	--	<.010	--	.20
JUL										
09...	4.3	52	43	.07	--	.19	--	<.010	--	.16
AUG										
05...	4.0	48	--	.07	--	.19	--	.020	.25	.21
SEP										
10...	--	49	--	.07	.11	.05	<.010	.010	.11	.06

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)
APR										
09...	--	.080	--	.57	--	.020	.020	--	.5	3000
MAY										
14...	.160	.060	.72	.88	1.0	.160	.140	--	.7	39
JUN										
04...	--	<.010	--	.75	--	.020	.020	--	--	550
JUL										
09...	.090	.090	.79	.88	--	.040	.030	--	--	130
AUG										
05...	.150	.140	.72	.87	1.1	.040	.020	--	.3	43
SEP										
10...	.080	--	--	--	--	.030	--	.020	.4	--

K BASED ON NON-IDEAL COLONY COUNT.

06737500 - HORSETOOTH RESERVOIR NEAR FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
APR										
09...	1205	190	--	--	<1	2	--	9	--	60
MAY										
14...	1045	--	<1	<100	<1	<1	<1	9	260	60
JUN										
04...	1150	160	--	--	<1	2	--	9	--	60
JUL										
09...	1040	--	<1	<100	<2	<20	<1	9	210	30
AUG										
05...	1055	680	--	--	<2	5	--	7	650	15

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	POTASSIUM 40 DISSOLVED (PCI/L AS K40)
APR										
09...	<1	--	9	--	--	--	--	<1	60	.70
MAY										
14...	<2	<10	4	<.1	<1	4	<1	<1	40	.50
JUN										
04...	<2	--	4	--	--	--	--	<1	<20	.60
JUL										
09...	6	<10	5	<.1	2	<2	<1	<1	<20	.50
AUG										
05...	5	--	5	--	--	--	--	<1	20	--

DATE	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)	ENDOSULFAN, TOTAL (UG/L)
MAY										
14...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)	METHYL TRITHION, TOTAL (UG/L)
MAY									
14...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	MIREX, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	PERTHANE TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
MAY									
14...	.00	.00	.00	0	.00	.02	.00	.00	.00

PHYTOPLANKTON ANALYSES, OCTOBER 1980 TO SEPTEMBER 1981

DATE	APR 9,81		MAY 14,81		JUN 4,81		JUL 9,81		AUG 5,81		SEP 10,81	
TIME	1205		1045		1150		1045		1100		1030	
TOTAL CELLS/ML	3000		39		550		130		43		14	
DIVERSITY: DIVISION	1.1		0.9		0.7		1.5		0.0		0.0	
.CLASS	1.1		0.9		0.7		1.5		0.0		0.0	
..ORDER	1.2		0.9		0.8		1.5		0.0		0.0	
...FAMILY	1.3		0.9		0.9		1.7		0.9		0.0	
....GENUS	1.4		0.9		0.9		1.7		0.9		0.0	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
BACILLARIOPHYTA (DIATOMS)												
.BACILLARIOPHYCEAE												
..EUPODISCALES												
...COSCINODISCACEAE												
....CYCLOTELLA	--	-	--	-	--	-	52#	40	--	-	--	-
....STEPHANODISCUS	2200#	74	--	-	--	-	--	-	--	-	--	-
..FRAGILARIALES												
...FRAGILARIACEAE												
....FRAGILARIA	--	-	--	-	--	-	--	-	--	-	14#	100
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...CHLOROCOCCACEAE												
....SCHROEDERIA	--	-	--	-	--	-	13	10	--	-	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	92	3	--	-	--	-	--	-	14#	33	--	-
....OOCYSTIS	--	-	--	-	--	-	13	10	--	-	--	-
....SELENASTRUM	--	-	--	-	26	5	--	-	--	-	--	-
...SCENEDESMACEAE												
....COELASTRUM	230	8	--	-	--	-	--	-	--	-	--	-
....SCENEDESMUS	46	2	--	-	64	12	--	-	29#	67	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	23	1	13#	33	13	2	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	46	2	26#	67	450#	81	--	-	--	-	--	-
..NOSTOCALES												
...NOSTOCACEAE												
....ANABAENA	--	-	--	-	--	-	52#	40	--	-	--	-
....APHANIZOMENON	340	12	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OPSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

MONTH-END ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	5,387.68	74,790	-
Oct. 31	5,380.20	64,880	-9,910
Nov. 30	5,384.20	70,100	+5,220
Dec. 31	5,387.70	74,820	+4,720
CAL YR 1980	-	-	-27,180
Jan. 31	5,398.32	90,010	+15,190
Feb. 28	5,409.10	106,800	+16,790
Mar. 31	5,417.62	121,100	+14,300
Apr. 30	5,421.72	128,300	+7,200
May 31	5,421.60	128,000	-300
June 30	5,416.02	118,300	-9,700
July 31	5,397.48	88,760	-29,540
Aug. 31	5,378.72	62,990	-25,770
Sept.30	5,370.62	53,110	-9,880
WTR YR 1981	-	-	-21,680

EXTREMES FOR 1981 WATER YEAR.--Maximum contents observed, 129,700 acre-ft (160 hm^3) May 7-9, elevation, 5,422.50 ft (1,652.778 m); minimum observed, 53,110 acre-ft (65.5 hm^3) Sept. 30, elevation, 5,370.62 ft (1.636.965 m).

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLING DEPTH (FEET)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)
APR				
16...	1100	.10	5.5	10.3
16...	1105	.10	5.5	10.3
16...	1106	5.00	5.0	10.4
16...	1107	10.0	5.0	10.5
16...	1108	20.0	5.0	10.5
16...	1109	25.0	5.0	10.5
16...	1110	30.0	5.0	10.5
16...	1111	40.0	5.0	10.4
16...	1112	50.0	5.0	10.4
16...	1113	60.0	5.0	10.4
16...	1114	70.0	5.0	10.4
16...	1115	75.0	5.0	10.4
16...	1116	80.0	5.0	10.4
16...	1117	90.0	5.0	10.4
16...	1118	100	5.0	10.4
16...	1119	110	5.0	10.4
16...	1120	120	5.0	10.4
16...	1121	125	5.0	10.4
MAY				
27...	1000	.10	13.0	9.1
27...	1005	.10	13.0	9.1
27...	1006	5.00	12.0	9.2
27...	1007	10.0	12.0	9.2
27...	1008	20.0	11.5	9.2
27...	1009	25.0	11.5	9.2
27...	1010	30.0	10.5	9.2
27...	1011	40.0	8.0	9.3
27...	1012	50.0	7.5	9.3
27...	1013	60.0	7.0	9.2
27...	1014	70.0	7.0	9.2
27...	1015	75.0	7.0	9.2
27...	1016	80.0	7.0	9.2
27...	1017	90.0	7.0	9.2
27...	1018	100	6.5	9.2
27...	1019	110	6.0	9.2
27...	1020	120	6.0	9.2
27...	1021	125	6.0	9.1
27...	1022	130	6.0	9.2
27...	1023	150	6.0	9.0
JUN				
23...	1030	.10	18.5	8.0
23...	1031	5.00	17.5	8.0
23...	1032	10.0	17.0	8.0
23...	1033	20.0	15.5	8.2
23...	1034	25.0	14.0	8.0
23...	1035	30.0	13.0	8.0
23...	1036	40.0	11.0	8.2
23...	1037	50.0	8.0	8.5
23...	1038	60.0	8.0	8.4
23...	1039	70.0	7.5	8.4
23...	1040	75.0	7.5	8.4
23...	1041	80.0	7.5	8.4
23...	1042	90.0	7.0	8.4
23...	1043	100	7.0	8.4
23...	1044	110	7.0	8.2
23...	1045	120	6.5	8.1
23...	1046	125	6.5	8.1
23...	1047	130	6.5	8.0
23...	1048	150	6.5	7.8
AUG				
04...	1040	.10	23.0	7.1
04...	1041	5.00	22.5	7.1
04...	1042	10.0	22.0	7.0
04...	1043	20.0	19.5	6.6
04...	1044	25.0	18.0	6.4
04...	1045	30.0	15.0	6.4
04...	1046	40.0	11.5	6.9
04...	1047	50.0	9.5	7.4
04...	1048	60.0	9.0	7.4
04...	1049	70.0	8.5	7.5
04...	1050	75.0	8.0	7.6
04...	1051	80.0	8.0	7.6
04...	1052	90.0	8.0	7.6
04...	1053	100	8.0	7.6
04...	1054	110	7.5	7.6
04...	1055	120	7.0	7.6
04...	1056	125	7.0	7.5
04...	1057	130	7.0	7.4
04...	1058	140	7.0	7.2
31...	0930	.10	21.0	7.0
31...	0931	5.00	21.0	7.1
AUG				
31...	*0932	10.0	21.0	7.2
31...	0933	20.0	19.5	6.9
31...	0934	25.0	19.0	6.8
31...	0935	30.0	18.0	6.4
31...	0936	40.0	13.0	6.6
31...	0937	50.0	11.0	7.0
31...	0938	60.0	10.0	7.2
31...	0939	70.0	9.5	7.2
31...	0940	75.0	9.0	7.1
31...	0941	80.0	9.0	7.1
31...	0942	90.0	9.0	7.2
31...	0943	100	8.5	7.2
31...	0944	110	8.0	7.1
31...	0945	120	8.0	7.0
31...	0946	125	8.0	6.9
31...	0947	130	7.5	6.8
SEP				
29...	1000	.10	16.5	7.4
29...	1001	5.00	16.0	7.2
29...	1002	10.0	16.0	7.2
29...	1003	20.0	16.0	7.2
29...	1004	25.0	16.0	7.2
29...	1005	30.0	16.0	7.2
29...	1006	40.0	15.0	6.4
29...	1007	50.0	12.5	5.8
29...	1008	60.0	11.0	6.0
29...	1009	70.0	10.0	6.2
29...	1010	75.0	10.0	6.2
29...	1011	80.0	10.0	6.2
29...	1012	90.0	9.5	6.1
29...	1013	100	9.0	6.2
29...	1014	110	8.5	6.0
29...	1015	120	8.0	5.8
29...	1016	125	8.0	5.8
29...	1017	130	8.0	5.8
29...	1018	137	8.0	5.6

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	SPECIFIC CONDUCTANCE LAB (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TRANSPARENCY (SECCHI DISK) (IN)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
APR										
16...	1100	.10	79	75	7.6	5.5	--	10.3	--	--
16...	1105	.10	79	80	7.6	5.5	56.0	10.3	K1	<1
MAY										
27...	1000	.10	79	163	7.1	13.0	--	9.1	--	--
27...	1005	.10	79	77	7.1	13.0	95.0	9.1	<1	<1
JUN										
23...	1030	.10	76	76	7.4	18.5	116	8.0	<1	--
23...	1045	120	76	75	7.4	6.5	--	8.1	--	--
AUG										
04...	1040	.10	75	78	7.1	23.0	--	7.1	<1	<1
04...	1045	30.0	75	76	7.6	15.0	--	6.4	--	--
31...	0930	.10	76	76	7.3	21.0	50.0	7.0	K1	<1
SEP										
29...	1000	.10	76	67	7.8	16.5	58.0	7.4	--	K1
29...	1010	75.0	76	68	7.8	10.0	--	6.2	--	--

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)
APR									
16...	--	31	9.7	1.6	2.5	.2	1.0	35	7.0
16...	--	--	--	--	--	--	--	--	--
MAY									
27...	--	30	9.3	1.6	2.4	.2	.9	<7.0	6.0
27...	--	--	--	--	--	--	--	--	--
JUN									
23...	<1	28	8.6	1.6	5.8	.5	.8	32	7.0
23...	--	--	--	--	--	--	--	--	--
AUG									
04...	--	31	9.8	1.7	2.5	.2	.9	37	5.0
04...	--	--	--	--	--	--	--	--	--
31...	--	30	9.3	1.6	2.8	.2	.8	27	5.0
SEP									
29...	K2	30	9.5	1.6	2.2	.2	.8	19	5.0
29...	--	--	--	--	--	--	--	--	--

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
APR									
16...	.6	.2	2.3	47	46	.06	--	<.020	--
16...	--	--	--	49	--	.07	--	<.020	--
MAY									
27...	32	.2	2.5	--	--	--	--	<.020	--
27...	--	--	--	76	--	.10	<.020	<.020	<.10
JUN									
23...	1.0	.1	2.7	--	47	.06	--	<.020	--
23...	--	--	--	55	--	.07	--	<.020	<.10
AUG									
04...	.6	.2	2.2	--	45	.06	--	<.020	--
04...	--	--	--	51	--	.07	--	<.020	--
31...	2.3	.1	2.7	--	41	.06	--	<.020	--
SEP									
29...	1.2	.2	2.8	--	35	.05	--	<.020	--
29...	--	--	--	42	--	.06	--	<.020	--

K BASED ON NON-IDEAL COLONY COUNT.

06737500 - HORSETOOTH RESERVOIR NEAR FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)
APR									
16...	<.10	--	.080	.66	--	<.010	--	--	--
16...	<.10	.140	--	--	<.010	--	--	<1.0	11000
MAY									
27...	<.10	--	.090	.60	--	.030	--	--	--
27...	<.10	.070	--	--	.090	--	.030	<1.0	370
JUN									
23...	<.10	--	.110	1.30	--	.030	--	--	--
23...	<.10	.110	--	--	<.010	--	--	<1.0	290
AUG									
04...	<.10	--	<.060	.90	--	.020	--	--	--
04...	<.10	.090	--	--	.030	--	--	6.0	160
31...	.10	--	<.060	.40	--	.030	--	--	--
SEP									
29...	.13	--	.060	.60	--	.080	--	--	--
29...	.10	.060	--	--	.010	--	--	--	--

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
APR										
16...	1100	490	--	--	<1	4	--	5	--	29
MAY										
27...	1000	--	<1	100	1	<10	1	7	80	41
JUN										
23...	1030	150	--	--	<1	3	--	6	--	53
AUG										
04...	1040	--	<1	<100	1	10	<1	7	310	3
31...	0930	470	--	--	<1	7	--	6	--	47
SEP										
29...	1000	--	<1	<100	1	<10	<1	6	340	32

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
APR									
16...	1	--	<3	--	--	--	--	<1	10
MAY									
27...	<1	<10	3	.1	<1	4	<1	1	<10
JUN									
23...	5	--	3	--	--	--	--	<1	10
AUG									
04...	1	<10	1	.1	<1	1	<1	<1	30
31...	<1	--	1	--	--	--	--	<1	10
SEP									
29...	<1	<10	<1	.2	3	4	<1	<1	10

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	ODD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)	DIELORIN TOTAL (UG/L)	ENDOSULFAN, TOTAL (UG/L)
MAY										
27...	<.10	<.10	<.01	<.10	<.01	<.01	<.01	<.01	<.01	<.01
SEP										
29...	<.10	<.10	<.01	<.10	<.01	<.01	<.01	<.01	<.01	<.01

DATE	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)	METHYL TRITHION, TOTAL (UG/L)
MAY									
27...	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
SEP									
29...	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01

DATE	MIREX, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	PERTHANE TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
MAY									
27...	<.01	<.01	<.10	<1	<.01	<.01	<.01	<.01	<.01
SEP									
29...	<.01	<.01	<.10	<1	<.01	.04	<.01	<.01	<.01

PHYTOPLANKTON ANALYSES, OCTOBER 1981 TO SEPTEMBER 1982

DATE	APR 16,82	MAY 27,82	JUN 23,82	AUG 4,82	AUG 31,82	SEP 29,82
TIME	1105	1005	1045	1045	0940	1010
TOTAL CELLS/ML	11000	370	290	160	200	1300
DIVERSITY: DIVISION	0.9	0.0	0.3	0.0	0.0	0.6
.CLASS	0.9	0.0	0.3	0.0	0.0	0.6
..ORDER	1.3	0.0	1.2	0.0	0.0	1.3
...FAMILY	1.4	0.8	1.2	0.0	0.0	1.3
....GENUS	2.1	0.8	1.2	0.0	0.0	2.2

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
BACILLARIOPHYTA (DIATOMS)												
.BACILLARIOPHYCEAE												
..EUPODISCALES												
...COSCINODISCACEAE												
....CYCLOTELLA	1300	12	--	-	14	5	--	-	--	-	14	1
....MELOSIRA	6800#	60	--	-	--	-	--	-	--	-	--	-
..FRAGILARIALES												
...FRAGILARIACEAE												
....ASTERIONELLA	450	4	--	-	--	-	--	-	--	-	--	-
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...CHLOROCOCCACEAE												
....SCHROEDERIA	--	-	290#	77	--	-	--	-	--	-	14	1
...COCCOMYXACEAE												
....ELAKATOTHRIX	--	-	86#	23	--	-	--	-	--	-	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	310	3	--	-	--	-	--	-	--	-	28	2
....CHODATELLA	140	1	--	-	--	-	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	160#	100	--	-	55	4
...SCENEDESMACEAE												
....GLOEOACTINIUM	1100	10	--	-	--	-	--	-	200#	100	--	-
....SCENEDESMUS	220	2	--	-	--	-	--	-	--	-	--	-
....TETRASTRUM	220	2	--	-	--	-	--	-	--	-	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	--	-	28	2
..ZYGNEMATALES												
...DESMIDIACEAE												
....SPONDYLOSIUM	590	5	--	-	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONADALES												
...CRYPTOMONADACEAE												
....CRYPTOMONAS	--	-	--	-	--	-	--	-	--	-	14	1
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....AGMENELLUM	--	-	--	-	--	-	--	-	--	-	170	13
....ANACYSTIS	*	0	--	-	170#	60	--	-	--	-	28	2
..OSCILLATORIALES												
...OSCILLATORIACEAE												
....LYNGBYA	--	-	--	-	100#	35	--	-	--	-	620#	49
....OSCILLATORIA	--	-	--	-	--	-	--	-	--	-	290#	23
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....EUGLENA	*	0	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS

MONTH-END ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	5,370.62	53,110	-
Oct. 31	5,362.30	43,770	-9,340
Nov. 30	5,364.98	46,690	+2,920
Dec. 31	5,377.48	61,430	+14,740
CAL YR 1981	-	-	-13,390
Jan. 31	5,390.80	79,110	+17,680
Feb. 28	5,399.57	91,880	+12,770
Mar. 31	5,408.20	105,400	+13,520
Apr. 30	5,413.12	113,400	+8,000
May 31	5,416.60	119,300	+5,900
June 30	5,416.85	119,700	+400
July 31	5,413.42	113,900	-5,800
Aug. 31	5,403.98	98,660	-15,240
Sept.30	5,400.84	93,810	-4,850
WTR YR 1982	-	-	+40,700

EXTREMES FOR 1982 WATER YEAR.--Maximum contents observed, 120,400 acre-ft (148 hm^3) July 14, elevation, 5,417.24 ft (1,651.175 m); minimum observed, 43,180 acre-ft (53.2 hm^3) Oct. 18, elevation, 5,361.75 ft (1,634.261 m).

LOCATION.--Lat 40°24'02", long 105°07'20", in SW¼NE¼ sec.16, T.5 N., R.69 W., Larimer County, Hydrologic Unit 10190006, at Wilson Avenue bridge 9 mi (14.5 km) upstream from Greeley-Loveland Ditch and 2.5 mi (4.0 km) west of Loveland.

DRAINAGE AREA.--525 mi^2 (1,360 km^2), approximately.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
JUN										
28...	0930	366	105	7.4	13.0	9.4	--	34	10	2.3
JUL										
31...	1450	184	175	7.7	18.5	7.7	220	67	19	4.8
AUG										
24...	0835	41	625	8.1	14.0	9.0	K370	289	86	18
SEP										
20...	0850	23	650	8.0	13.0	8.7	180	309	94	18

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
JUN										
28...	3.3	17	.3	.7	16	1.5	.2	7.7	52	.07
JUL										
31...	4.2	12	.2	.9	32	3.5	.2	4.9	88	.12
AUG										
24...	16	11	.4	2.1	170	4.9	.4	15	400	.54
SEP										
20...	12	8	.3	2.6	230	4.0	.3	4.8	434	.59

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
JUN								
28...	51.4	.13	.010	.14	<.010	.10	.010	<.010
JUL								
31...	43.7	.14	.010	.15	.010	.49	.080	<.010
AUG								
24...	44.7	.75	.010	.76	<.010	.38	<.010	.010
SEP								
20...	27.0	.39	.010	.40	<.010	.44	.010	.030

DATE	TIME	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
JUN							
28...	0930	<1	3	70	8	6	<20
JUL							
31...	1450	6	8	50	64	<10	20
AUG							
24...	0835	<2	6	30	2	50	<1
SEP							
20...	0850	<1	8	20	13	>0	120

K BASED ON NON-IDEAL COLONY COUNT.

06741480 - BIG THOMPSON RIVER ABOVE LOVELAND

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT										
25...	0905	16	790	8.0	7.0	10.2	33	399	120	24
NOV										
29...	0935	19	620	8.1	.0	12.4	K61	291	87	18
DEC										
20...	0845	21	750	8.1	1.0	12.2	180	334	99	21
JAN										
23...	0940	46	390	7.9	.0	12.4	--	192	57	12
FEB										
19...	1150	63	340	8.0	5.0	11.6	--	142	42	8.9
MAR										
12...	1515	95	360	8.8	6.5	12.4	--	150	44	9.7
APR										
10...	0930	6.4	947	7.6	6.0	10.0	--	423	120	30
MAY										
07...	0800	1850	140	7.3	7.0	10.4	--	56	16	3.8
JUN										
12...	1015	1370	68	7.1	10.0	9.4	--	23	6.7	1.5
JUL										
16...	1215	231	300	8.0	19.5	8.0	--	105	28	8.6
AUG										
07...	0830	131	400	7.8	20.0	7.8	--	173	46	14
SEP										
11...	1345	69	250	8.7	18.0	9.0	--	94	28	5.9

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
OCT										
25...	17	8	.4	2.2	250	5.9	.4	9.3	528	.72
NOV										
29...	14	9	.4	2.1	190	4.8	.3	10	407	.55
DEC										
20...	17	0	.4	1.8	190	5.9	.4	10	451	.61
JAN										
23...	9.5	0	.3	1.3	110	3.7	.3	9.1	259	.35
FEB										
19...	9.2	12	.3	1.4	74	7.1	.3	8.9	205	.28
MAR										
12...	10	13	.4	1.3	80	3.9	.3	9.0	213	.29
APR										
10...	25	11	.5	2.1	330	8.4	.3	9.4	612	.83
MAY										
07...	6.6	20	.4	1.4	21	2.3	.3	14	89	.12
JUN										
12...	4.8	31	.5	.6	10	1.1	<.1	6.7	45	.06
JUL										
16...	7.9	14	.3	1.1	70	2.3	.4	5.5	153	.21
AUG										
07...	12	13	.4	1.4	120	3.6	.4	4.5	244	.33
SEP										
11...	5.6	11	.3	.9	65	2.7	.2	5.3	140	.19

K BASED ON NON-IDEAL COLONY COUNT.

06741480 - BIG THOMPSON RIVER ABOVE LOVELAND

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT								
25...	23.2	.69	.010	.70	.010	.95	.010	.010
NOV								
29...	20.9	.62	.009	.63	.080	--	.010	.020
DEC								
20...	26.1	.75	.010	.76	.010	.43	.000	<.010
JAN								
23...	32.2	.65	<.010	.65	.030	.32	.010	--
FEB								
19...	34.9	.65	.010	.66	.040	.47	.010	--
MAR								
12...	54.6	.76	.010	.77	.010	.51	.010	--
APR								
10...	10.6	1.90	.050	1.9	.070	.79	.010	--
MAY								
07...	445	.50	<.010	.50	.040	1.10	.030	--
JUN								
12...	166	.23	<.010	.23	<.010	.82	.010	--
JUL								
16...	95.4	.31	.010	.32	<.010	.49	.030	--
AUG								
07...	86.3	.36	.010	.37	.060	1.00	.010	--
SEP								
11...	26.2	.40	.010	.41	.100	.35	.020	--

06741480 - BIG THOMPSON RIVER ABOVE LOVELAND

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT											
25...	0905	--	--	--	<1	5	--	--	--	--	30
NOV											
29...	0935	--	--	--	<1	6	--	--	--	--	30
DEC											
20...	0845	--	--	--	<1	<1	--	--	--	--	<10
JAN											
23...	0940	<100	--	--	<1	<2	--	8	--	--	30
FEB											
19...	1150	--	1	200	--	<1	5	--	410	370	40
MAR											
12...	1515	510	--	--	<1	2	--	8	--	--	40
APR											
10...	0930	200	--	--	<2	2	--	<2	--	--	30
MAY											
07...	0800	--	1	200	<1	<1	<1	9	3700	3600	100
JUN											
12...	1015	540	--	--	<2	<1	--	27	--	--	110
JUL											
16...	1215	550	--	--	<1	6	--	10	--	--	30
AUG											
07...	0830	--	2	100	<1	<20	3	20	590	570	20
SEP											
11...	1345	80	--	--	<1	5	--	12	--	--	40

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT										
25...	<1	--	--	40	--	--	--	--	--	<1
NOV										
29...	4	--	--	40	--	--	--	--	--	<20
DEC										
20...	5	--	--	30	--	--	--	--	--	40
JAN										
23...	--	--	--	20	--	--	--	--	<1	40
FEB										
19...	--	30	<10	20	<.1	2	<1	2	--	--
MAR										
12...	2	--	--	8	--	--	--	--	<1	20
APR										
10...	3	--	--	110	--	--	--	--	<1	<20
MAY										
07...	5	80	70	7	<.1	1	5	1	<1	30
JUN										
12...	<200	--	--	8	--	--	--	--	3	70
JUL										
16...	7	--	--	9	--	--	--	--	<1	20
AUG										
07...	4	30	20	<10	<.1	3	2	3	<2	30
SEP										
11...	27	--	--	<10	--	--	--	--	<2	50

06741480 - BIG THOMPSON RIVER ABOVE LOVELAND

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT										
07...	1255	19	761	761	8.0	16.0	9.5	369	110	23
NOV										
19...	1340	7.6	850	805	8.1	7.0	11.5	382	110	26
DEC										
16...	0930	4.1	1150	1160	7.6	3.0	10.6	564	160	40
JAN										
23...	0945	3.0	1230	1240	7.6	2.0	10.4	635	180	45
FEB										
24...	0940	1.0	1600	1570	7.8	2.0	9.5	826	230	61
MAR										
24...	0915	2.1	1420	1390	7.7	6.0	8.9	759	220	51
APR										
29...	0945	3.2	1400	1330	7.8	14.0	9.1	726	210	49
MAY										
27...	0900	7.5	850	843	7.7	17.0	8.2	415	120	28
JUN										
22...	1540	155	350	322	8.2	20.5	7.6	147	39	12
JUL										
21...	1050	147	350	369	8.1	22.5	7.4	163	44	13
AUG										
11...	1315	123	370	346	8.2	20.5	7.4	150	42	11
SEP										
02...	0900	116	170	165	7.4	16.0	8.5	68	20	4.4

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT									
07...	19	10	.4	1.9	130	260	9.2	.2	6.3
NOV									
19...	23	12	.5	2.2	130	270	8.7	.4	7.0
DEC									
16...	34	12	.6	3.2	170	440	12	.4	8.5
JAN									
23...	37	11	.7	2.3	170	530	13	.5	9.5
FEB									
24...	48	11	.8	3.8	180	670	25	.4	8.5
MAR									
24...	35	9	.6	3.1	170	610	14	.4	8.3
APR									
29...	35	9	.6	3.2	160	560	21	.4	8.7
MAY									
27...	23	11	.5	2.2	130	300	8.8	.3	6.3
JUN									
22...	9.8	13	.4	1.0	57	94	2.0	.2	4.3
JUL									
21...	9.7	11	.3	1.0	61	110	2.0	.2	4.6
AUG									
11...	9.3	12	.3	1.2	71	98	2.0	.2	4.7
SEP									
02...	4.5	12	.2	.9	38	37	2.0	.1	3.9

06741480 - BIG THOMPSON RIVER ABOVE LOVELAND

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT									
07...	513	.70	26.9	1.20	.010	1.2	.060	.96	.030
NOV									
19...	532	.72	10.9	1.40	.010	1.4	.100	13.0	.050
DEC									
16...	811	1.1	9.0	2.30	.020	2.3	.140	.92	.030
JAN									
23...	1100	1.3	8.9	2.90	.020	2.9	.130	1.10	.020
FEB									
24...	1190	1.6	3.2	6.80	.030	6.8	.150	1.10	.040
MAR									
24...	1060	1.4	6.0	3.80	.030	3.8	.060	1.30	.010
APR									
29...	997	1.4	8.6	3.00	.020	3.0	.140	1.90	.020
MAY									
27...	574	.78	11.6	1.60	.020	1.6	.120	1.20	.030
JUN									
22...	197	.27	82.4	.14	.010	.15	.170	.93	.010
JUL									
21...	222	.30	88.1	.09	.020	.11	.200	.67	.010
AUG									
11...	213	.29	70.7	.29	.040	.33	.190	.86	.020
SEP									
02...	97	.13	30.4	.32	.020	.34	.410	.59	<.010

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT											
07...	1255	--	1	200	<1	<1	<1	20	820	790	30
NOV											
19...	1340	110	--	--	<1	4	--	6	--	--	20
DEC											
16...	0930	70	--	--	<1	4	--	4	--	--	20
JAN											
23...	0945	100	--	--	<1	5	--	5	--	--	20
FEB											
24...	0940	--	1	200	<1	<20	<1	5	400	380	20
MAR											
24...	0915	150	--	--	<1	<2	--	2	--	--	30
APR											
29...	0945	160	--	--	<1	<1	--	6	--	--	20
MAY											
27...	0900	--	1	<100	<2	<1	<2	4	170	160	<10
JUN											
22...	1540	1500	--	--	<1	8	--	7	--	--	30
JUL											
21...	1050	690	--	--	<1	6	--	4	--	--	20
AUG											
11...	1315	--	1	<100	<2	30	<2	7	1400	--	<10
SEP											
02...	0900	80	--	--	<2	<20	--	6	--	--	29

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT										
07...	3	60	30	30	<.1	3	4	15	<1	30
NOV										
19...	<2	--	--	80	--	--	--	--	<1	20
DEC										
16...	<2	--	--	180	--	--	--	--	<1	40
JAN										
23...	20	--	--	160	--	--	--	--	<1	30
FEB										
24...	<2	520	<10	530	<.1	3	2	120	<1	<20
MAR										
24...	<2	--	--	290	--	--	--	--	<1	<20
APR										
29...	2	--	--	270	--	--	--	--	<1	30
MAY										
27...	<2	100	<10	100	.2	6	<1	30	<1	<1
JUN										
22...	16	--	--	8	--	--	--	--	<1	380
JUL										
21...	<1	--	--	6	--	--	--	--	<1	<20
AUG										
11...	6	50	40	8	<.1	4	4	6	<1	<20
SEP										
02...	5	--	--	11	--	--	--	--	<1	<20

06741480 - BIG THOMPSON RIVER ABOVE LOVELAND

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT											
07...	1000	164	140	131	7.9	11.0	9.3	54	16	3.4	3.4
NOV											
17...	1440	1.3	1400	1300	8.1	11.0	13.5	647	180	48	40
DEC											
15...	1025	1.0	1480	1340	7.6	2.5	9.6	753	206	58	46
JAN											
21...	1100	1.9	1400	1370	7.8	1.0	11.4	662	186	48	38
FEB											
24...	1020	6.9	1030	925	7.8	4.5	10.7	558	164	36	22
MAR											
25...	0845	2.0	1330	1290	7.7	1.5	--	701	200	49	36
APR											
14...	1400	29	442	399	8.2	16.5	9.0	185	56	11	10
MAY											
13...	1500	136	232	195	7.8	10.0	9.5	83	24	5.5	7.8
JUN											
09...	1715	81	120	131	8.6	17.0	8.0	51	15	3.2	3.5
JUL											
15...	1400	327	154	162	8.0	19.0	7.8	63	18	4.4	4.1
AUG											
17...	1300	157	270	238	7.6	22.0	8.0	101	28	7.6	7.0
SEP											
14...	0935	320	188	195	7.7	10.5	9.2	76	22	5.1	5.7

DATE	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT											
07...	12	.2	.7	36	28	1.0	.2	3.4	78	.11	34.5
NOV											
17...	12	.7	2.9	150	510	16	.4	7.3	902	1.2	3.2
DEC											
15...	12	.8	4.0	150	650	15	.5	8.3	1090	1.5	2.9
JAN											
21...	11	.7	3.2	180	560	13	.4	9.1	975	1.3	5.0
FEB											
24...	8	.4	2.3	80	460	8.8	.3	9.7	755	1.0	14.1
MAR											
25...	10	.6	2.9	130	590	14	.5	7.0	985	1.3	5.3
APR											
14...	10	.3	1.6	91	110	4.6	.4	6.1	256	.35	20.0
MAY											
13...	16	.4	3.9	51	41	3.4	.3	6.1	125	.17	45.9
JUN											
09...	13	.2	.8	29	29	1.6	.2	5.5	77	.10	16.8
JUL											
15...	12	.2	.7	36	36	1.2	.2	5.2	92	.12	81.2
AUG											
17...	13	.3	.8	54	60	1.5	.2	5.0	143	.19	60.6
SEP											
14...	14	.3	2.2	36	41	2.6	.2	7.5	111	.15	95.9

06741480 - BIG THOMPSON RIVER ABOVE LOVELAND

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)
OCT									
07...	.14	.020	.16	.160	--	.61	--	.130	--
NOV									
17...	1.50	.020	1.5	.070	--	.71	--	.040	--
DEC									
15...	2.50	.020	2.5	.130	--	1.10	--	.030	--
JAN									
21...	--	<.020	1.9	.160	--	.96	--	.020	--
FEB									
24...	--	<.020	.87	.090	--	.95	--	.570	--
MAR									
25...	--	<.020	1.6	.130	--	.57	--	.010	--
APR									
14...	--	<.020	.30	.070	--	.56	--	<.010	--
MAY									
13...	--	<.020	.52	.250	--	1.80	--	.030	--
JUN									
09...	--	<.020	.10	.100	.50	.80	.60	.070	--
JUL									
15...	--	<.020	.16	.100	--	1.20	--	.060	.030
AUG									
17...	--	<.020	<.10	.130	--	1.70	--	.020	--
SEP									
14...	--	<.020	.58	.100	--	4.80	--	.050	--

06741480 - BIG THOMPSON RIVER ABOVE LOVELAND

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT											
07...	1000	240	<1	<100	<1	6	<2	8	250	230	19
NOV											
17...	1440	60	--	--	<1	4	--	5	--	--	25
DEC											
15...	1025	110	--	--	<1	3	--	8	--	--	28
JAN											
21...	1100	80	--	--	<1	2	--	2	--	--	31
FEB											
24...	1020	--	<1	100	<1	10	2	4	60	50	14
MAR											
25...	0845	110	--	--	1	4	--	10	--	--	18
APR											
14...	1400	260	--	--	<1	7	--	4	--	--	21
MAY											
13...	1500	--	1	<100	<1	10	1	32	3400	3300	81
JUN											
09...	1715	180	--	--	<1	2	--	8	--	--	60
JUL											
15...	1400	1700	--	--	<1	13	--	7	--	--	32
AUG											
17...	1300	--	1	<100	<1	<10	<1	6	1700	1700	48
SEP											
14...	0935	8100	--	--	<1	16	--	15	--	--	80

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT										
07...	3	20	20	4	<.1	2	2	1	<1	30
NOV										
17...	1	--	--	150	--	--	--	--	<1	10
DEC										
15...	5	--	--	340	--	--	--	--	<1	50
JAN										
21...	<1	--	--	170	--	--	--	--	<1	20
FEB										
24...	3	30	3	27	<.1	3	3	10	<1	70
MAR										
25...	3	--	--	150	--	--	--	--	<1	20
APR										
14...	3	--	--	11	--	--	--	--	<1	10
MAY										
13...	16	110	90	19	.2	5	5	2	<1	40
JUN										
09...	<1	--	--	6	--	--	--	--	<1	10
JUL										
15...	4	--	--	10	--	--	--	--	<1	20
AUG										
17...	<1	50	40	8	.1	2	8	1	<1	10
SEP										
14...	5	--	--	9	--	--	--	--	<1	40

LOCATION.--Lat 40°22'43", long 105°03'38", in SE¼SE¼ sec. 24, T. 5 N., R. 69 W., Larimer County, Hydrologic Unit 10190006, on right bank 690 ft (210 m) downstream from county road bridge C-13, 1.7 mi (2.7 km) south of sugar refinery in Loveland, and 1.9 mi (3.1 km) from Farmers Ditch diversion.

DRAINAGE AREA.--535 mi^2 (1.386 km^2).

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JUN									
28...	1130	222	205	7.5	15.5	8.0	--	49	18
JUL									
31...	1300	91	510	8.1	21.0	7.8	K220	134	43
AUG									
24...	1020	34	775	8.3	16.5	10.5	K370	188	90
SEP									
20...	1050	12	925	8.4	15.5	11.2	>6000	262	110

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
JUN									
28...	6.4	9.2	.5	.9	53	2.4	.2	7.8	112
JUL									
31...	21	23	.7	1.0	180	3.6	.3	4.8	313
AUG									
24...	25	27	.7	2.6	250	6.6	.4	13	502
SEP									
20...	31	35	.8	3.0	350	7.9	.4	4.2	628

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
JUN									
28...	.15	67.2	.21	.010	.22	<.010	.05	.020	.010
JUL									
31...	.43	77.3	.15	<.010	.15	<.010	.46	.090	<.010
AUG									
24...	.68	46.6	.68	.010	.69	<.010	.34	<.010	.010
SEP									
20...	.85	20.3	.41	.020	.43	.010	.55	.040	.040

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
JUN										
28...	1130	290	<2	4	5	70	15	20	<1	<20
JUL										
31...	1300	670	3	11	3	20	24	20	<1	40
AUG										
24...	1020	120	5	3	<20	20	34	60	<1	20
SEP										
20...	1050	80	<1	4	<2	30	<2	80	<1	<1

K BASED ON NON-IDEAL COLONY COUNT.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 4,906 ft (1,495.3 m), from topographic map.

REMARKS.--Records good.

COOPERATION.--City of Loveland.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,970 ft^3/s (197 m^3/s) Apr 30, 1980, gage height, 10.10 ft (3,078 m), from highwater mark; minimum daily, 0.80 ft^3/s (0.023 m^3/s) May 11, 1981.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										---	93	41
2										---	84	46
3										---	84	42
4										144	83	32
5										124	84	37
6										111	88	50
7										111	90	48
8										131	92	42
9										128	88	27
10										121	98	27
11										118	93	41
12										114	95	47
13										116	93	53
14										124	90	50
15										129	94	30
16										125	93	16
17										132	91	8.8
18										160	91	9.6
19										162	110	11
20										117	103	12
21										115	94	19
22										116	76	27
23										113	55	22
24										117	40	20
25										120	47	26
26										128	40	14
27										122	45	18
28										113	57	24
29										111	37	20
30										94	30	4.6
31										88	38	---
TOTAL										---	2386	865.0
MEAN										---	77.0	28.8
MAX										---	110	53
MIN										---	30	4.6
AC-FT										---	4730	1720

EXTREMES FOR 1979 WATER YEAR.--Maximum discharge, 248 ft^3/s (7.02 m^3/s) Aug. 19, 1979, gage height, 3.04 ft (0.927 m); minimum daily, 4.6 ft^3/s (0.13 m^3/s) Sept. 30, 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT									
25...	1100	17	950	8.4	8.5	12.0	220	280	120
NOV									
29...	1115	24	800	8.4	.0	13.0	K55	227	100
DEC									
20...	1100	23	875	8.5	2.0	13.6	260	224	110
JAN									
23...	1200	71	950	8.3	2.5	11.4	--	301	96
FEB									
19...	1445	72	450	8.2	7.0	10.4	--	88	50
MAR									
12...	1245	101	460	8.5	5.0	11.8	--	89	50
APR									
10...	1135	35	1900	8.2	9.5	10.7	--	665	180
MAY									
07...	0930	1850	160	7.6	7.5	10.6	--	25	18
JUN									
12...	0915	1370	80	7.0	10.0	9.3	--	15	7.8
JUL									
16...	1445	138	410	8.2	22.0	8.2	--	94	37
AUG									
07...	1050	83	490	8.2	21.0	9.8	--	127	55
SEP									
11...	1520	71	390	8.7	19.5	9.0	--	98	39

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT									
25...	34	33	.7	2.7	320	8.3	.4	7.6	625
NOV									
29...	31	35	.8	2.7	300	7.8	.1	8.9	579
DEC									
20...	29	30	.7	2.2	260	7.8	.4	8.2	553
JAN									
23...	44	48	1.0	3.0	380	7.2	.4	7.6	661
FEB									
19...	13	15	.5	1.9	100	7.2	.3	8.5	253
MAR									
12...	14	16	.5	1.5	120	4.8	.3	9.0	276
APR									
10...	96	110	1.7	5.3	870	15	.4	4.7	1390
MAY									
07...	4.6	7.6	.4	1.5	28	2.6	.3	14	103
JUN									
12...	2.0	4.6	.4	.7	16	1.5	<.1	6.8	48
JUL									
16...	14	15	.6	1.5	120	4.0	.4	5.6	233
AUG									
07...	18	18	.6	2.0	160	5.5	.4	4.5	317
SEP									
11...	12	15	.6	1.3	120	4.7	.3	5.2	229

K BASED ON NON-IDEAL COLONY COUNT.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT									
25...	.85	28.7	.55	.010	.56	.020	.84	.010	.010
NOV									
29...	.79	37.5	.70	.009	.71	.070	--	.010	.010
DEC									
20...	.75	34.5	.73	.010	.74	.060	.53	<.010	.010
JAN									
23...	.90	127	.53	<.010	.53	.060	.36	.010	--
FEB									
19...	.34	49.2	.68	.010	.69	.120	.55	.030	--
MAR									
12...	.37	75.3	.80	.010	.81	.010	.40	<.010	--
APR									
10...	1.9	131	.72	.010	.73	.060	.87	.010	--
MAY									
07...	.14	514	.53	<.010	.53	.030	.42	.030	--
JUN									
12...	.07	178	.21	<.010	.21	<.010	.69	.010	--
JUL									
16...	.32	86.8	.41	.020	.43	.010	.86	.040	--
AUG									
07...	.43	70.6	.57	.020	.59	.080	1.20	.010	--
SEP									
11...	.31	43.8	.36	.010	.37	.050	.39	.030	--

06741510 - BIG THOMPSON RIVER AT LOVELAND

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT										
25...	1100	180	--	--	<1	5	--	8	--	20
NOV										
29...	1115	400	--	--	<1	6	--	2	--	20
DEC										
20...	1100	100	--	--	<1	3	--	2	--	<10
JAN										
23...	1200	<100	--	--	<1	<2	--	8	--	<10
FEB										
19...	1445	--	1	200	--	<1	5	--	740	30
MAR										
12...	1245	680	--	--	<1	2	--	7	--	50
APR										
10...	1135	400	--	--	<2	3	--	<1	--	<10
MAY										
07...	0930	--	1	300	<1	<20	2	11	7100	100
JUN										
12...	0915	1400	--	--	<2	<1	--	19	--	150
JUL										
16...	1445	420	--	--	<1	6	--	<20	--	30
AUG										
07...	1050	--	2	100	<1	<20	3	5	360	<10
SEP										
11...	1520	80	--	--	<2	5	--	7	--	40

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT									
25...	4	--	40	--	--	--	--	<1	<20
NOV									
29...	5	--	60	--	--	--	--	<1	<20
DEC									
20...	4	--	40	--	--	--	--	<1	30
JAN									
23...	--	--	30	--	--	--	--	<1	<20
FEB									
19...	--	40	20	<.1	2	4	3	--	--
MAR									
12...	3	--	<10	--	--	--	--	<1	20
APR									
10...	2	--	30	--	--	--	--	<1	20
MAY									
07...	6	140	<10	<.1	1	7	1	<1	40
JUN									
12...	140	--	<10	--	--	--	--	3	30
JUL									
16...	14	--	20	--	--	--	--	<1	20
AUG									
07...	41	40	20	<.1	4	<1	4	<1	<20
SEP									
11...	2	--	20	--	--	--	--	<1	<20

06741510 BIG THOMPSON RIVER AT LOVELAND

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	4.6	36	30	54	50	85	27	4240	1440	151	77	72
2	92	30	30	50	53	85	28	2590	1400	178	85	70
3	173	34	30	50	56	93	28	2400	1280	235	89	65
4	177	35	30	50	57	102	30	2300	1190	196	86	65
5	177	43	30	53	48	96	33	2100	1260	175	85	67
6	174	39	30	55	34	91	31	1980	1270	184	88	68
7	100	41	24	55	34	94	30	1860	1340	139	88	72
8	12	40	24	52	34	90	34	1740	1320	144	93	70
9	22	40	24	61	40	88	38	1630	1280	115	110	83
10	20	32	24	74	45	88	37	1450	1320	134	104	99
11	18	27	24	75	45	89	37	1480	1390	139	99	85
12	15	35	25	70	45	95	35	1880	1440	148	104	61
13	10	37	25	66	50	66	33	1770	1420	146	99	47
14	8.1	43	25	76	50	13	108	1400	1330	148	104	33
15	7.7	40	25	93	42	11	154	1230	1110	160	222	34
16	9.2	34	25	90	48	10	193	2740	925	158	246	35
17	12	38	25	84	54	9.2	170	3040	795	133	253	31
18	20	44	24	84	68	9.6	179	2880	662	128	242	30
19	36	43	22	83	72	8.8	207	2380	618	125	240	33
20	30	40	29	76	76	14	237	2120	570	102	231	45
21	16	35	50	79	78	26	229	1980	531	86	218	37
22	22	30	50	77	96	25	215	1960	489	83	220	44
23	23	30	52	70	91	25	540	2120	444	82	148	47
24	15	30	51	51	78	26	880	2420	377	74	99	32
25	15	25	52	56	74	26	835	2370	295	83	102	24
26	16	25	51	39	65	26	735	2110	204	73	114	24
27	6.9	25	51	43	75	26	654	1940	153	61	114	20
28	4.6	25	56	43	89	28	582	1600	128	63	109	24
29	15	25	54	45	89	27	566	1570	125	59	102	26
30	61	30	57	46	---	27	1860	1590	138	65	86	31
31	53	---	67	47	---	28	---	1540	---	76	67	---
TOTAL	1355.1	1031	1116	1947	1736	1527.6	8765	64410	26244	3843	4124	1474
MEAN	43.7	34.4	36.0	62.8	59.9	49.3	292	2078	875	124	133	49.1
MAX	177	44	67	93	96	102	1850	4240	1440	235	253	99
MIN	4.6	25	22	39	34	8.8	27	1230	125	59	67	20
AC-FT	2690	2040	2210	3860	3440	3030	17390	127800	52050	7620	8180	2920

WTR YR 1980 TOTAL 117572.7 MEAN 321 MAX 4240 MIN 4.6 AC-FT 233200

EXTREMES FOR 1980 WATER YEAR.--Maximum discharge, 6,970 ft^3/s (197 m^3/s) at 2300 Apr. 30, gage height, 10.10 ft (3,078 m) from highwater mark; minimum daily, 4.6 ft^3/s (0.13 m^3/s) Oct. 28.

06741510 - BIG THOMPSON RIVER AT LOVELAND

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT										
07...	1050	22	925	911	8.2	13.5	11.0	281	120	32
NOV										
19...	1140	10	925	917	8.3	4.0	13.7	255	110	34
DEC										
16...	1120	6.2	1300	1320	8.1	4.0	13.8	453	170	53
JAN										
23...	1145	5.4	1450	1420	8.0	3.5	12.3	497	180	60
FEB										
24...	1140	3.0	1550	1520	8.0	6.0	12.0	517	180	65
MAR										
24...	1130	6.5	1300	1250	8.2	8.0	12.3	475	170	51
APR										
29...	1145	3.0	1750	1570	8.1	18.0	12.0	581	190	72
MAY										
27...	1115	1.4	1700	1640	7.8	20.0	10.6	528	170	81
JUN										
22...	1245	110	390	372	8.2	21.0	7.8	105	43	13
JUL										
21...	1315	111	440	379	8.6	23.5	9.4	106	45	14
AUG										
11...	1615	103	430	401	8.3	21.5	7.8	93	46	14
SEP										
02...	1130	110	235	212	8.4	18.0	10.1	40	24	6.1

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT									
07...	32	.7	3.3	150	320	12	.2	5.4	620
NOV									
19...	29	.6	3.0	160	310	13	.4	5.0	616
DEC									
16...	60	1.1	4.5	190	510	16	.4	7.1	943
JAN									
23...	65	1.1	3.3	200	620	18	.5	8.7	1080
FEB									
24...	73	1.2	3.8	200	610	20	.4	7.2	1090
MAR									
24...	47	.8	2.8	160	510	14	.4	6.1	904
APR									
29...	80	1.3	4.6	190	650	20	.5	5.8	1140
MAY									
27...	110	1.8	4.8	230	680	23	.4	5.2	1220
JUN									
22...	13	.5	1.2	56	120	2.6	.2	4.4	232
JUL									
21...	12	.4	1.1	64	130	3.6	.2	4.8	250
AUG									
11...	13	.4	1.4	80	110	2.6	.2	4.7	241
SEP									
02...	6.9	.3	1.0	45	53	2.1	.1	3.8	126

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT									
07...	.84	36.0	1.10	.010	1.1	.060	.77	.020	--
NOV									
19...	.82	16.8	1.10	.010	1.1	.060	.79	.050	--
DEC									
16...	1.3	15.8	1.70	.020	1.7	.190	1.70	.060	--
JAN									
23...	1.5	15.7	2.00	.020	2.0	.180	1.20	.050	--
FEB									
24...	1.5	8.8	2.00	.020	2.0	.190	.79	.080	.160
MAR									
24...	1.2	15.9	1.50	.020	1.5	.120	1.10	.020	--
APR									
29...	1.6	9.2	.75	.030	.78	.270	.96	.070	--
MAY									
27...	1.7	4.6	.73	.050	.78	.360	1.40	.100	--
JUN									
22...	.32	68.9	.17	.010	.18	.140	1.10	.010	--
JUL									
21...	.34	74.9	.15	.010	.16	.200	.82	.010	--
AUG									
11...	.33	67.0	.27	.030	.30	.170	.83	.020	--
SEP									
02...	.17	37.4	.31	.020	.33	.400	.50	<.010	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT										
07...	1050	--	4	<100	<2	<1	<1	5	160	30
NOV										
19...	1140	70	--	--	<1	5	--	5	--	--
DEC										
16...	1120	70	--	--	<2	2	--	4	--	40
JAN										
23...	1145	20	--	--	<1	5	--	5	--	<10
FEB										
24...	1140	--	<1	300	<1	<20	<1	4	180	30
MAR										
24...	1130	90	--	--	<1	<1	--	2	--	30
APR										
29...	1145	60	--	--	<1	<1	--	6	--	30
MAY										
27...	1115	--	1	<100	<1	<20	3	4	190	30
JUN										
22...	1245	64	--	--	<2	15	--	12	--	<10
JUL										
21...	1315	530	--	--	<1	5	--	7	--	20
AUG										
11...	1615	--	1	<100	<2	20	<2	7	1500	13
SEP										
02...	1130	150	--	--	<2	6	--	6	--	36

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT									
07...	3	70	50	<.1	3	2	12	<1	30
NOV									
19...	<1	--	--	--	--	--	--	<1	50
DEC									
16...	3	--	90	--	--	--	--	<1	30
JAN									
23...	9	--	130	--	--	--	--	<2	30
FEB									
24...	<2	110	110	<.1	2	1	20	<1	<20
MAR									
24...	3	--	50	--	--	--	--	<1	<20
APR									
29...	<2	--	130	--	--	--	--	<1	<20
MAY									
27...	5	160	160	<.1	5	3	6	<1	<1
JUN									
22...	17	--	20	--	--	--	--	<1	<20
JUL									
21...	2	--	7	--	--	--	--	<1	<20
AUG									
11...	5	50	8	<.1	4	5	5	<1	140
SEP									
02...	5	--	8	--	--	--	--	<1	<20

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	42	7.8	6.6	4.5	3.0	5.2	6.2	2.2	93	310	107
2	21	41	7.8	6.2	4.5	3.0	4.8	35	2.6	98	295	102
3	26	43	7.8	6.6	4.5	3.4	5.2	21	2.8	114	298	115
4	20	41	7.4	8.8	4.0	5.5	3.7	23	3.0	104	310	83
5	20	41	7.4	7.4	4.0	4.0	3.7	3.2	3.2	106	307	54
6	18	42	7.0	6.2	4.0	3.7	3.4	3.4	3.4	95	315	41
7	23	41	7.0	7.8	4.0	4.0	3.7	3.2	7.4	110	322	33
8	30	41	7.0	6.2	3.5	3.7	4.0	1.2	7.0	105	293	28
9	29	41	6.2	6.2	3.5	3.2	4.0	1.2	4.8	106	109	27
10	28	42	5.5	6.2	3.5	3.4	4.2	.85	16	102	114	26
11	28	42	6.6	6.6	3.5	3.4	4.8	.80	13	102	106	29
12	32	40	7.0	7.8	3.0	3.2	4.8	.85	8.8	109	115	29
13	29	39	6.6	7.4	3.0	4.0	4.8	.95	7.0	123	110	30
14	34	40	6.6	6.2	3.0	4.8	5.2	.90	4.0	96	79	25
15	39	40	6.6	5.8	2.4	4.8	5.2	.90	14	112	89	26
16	40	40	6.2	7.4	2.8	5.2	4.8	1.0	32	122	105	21
17	33	37	6.2	8.3	3.4	5.8	4.8	1.4	44	118	110	18
18	31	28	6.2	9.9	3.2	7.0	5.5	1.2	72	114	115	19
19	32	11	5.8	8.8	3.2	7.0	5.5	1.2	72	115	102	25
20	32	7.4	5.8	6.2	3.2	7.0	5.2	1.1	73	106	99	21
21	13	7.8	5.8	6.6	3.0	8.3	5.5	1.1	68	109	102	18
22	12	9.9	6.6	5.5	2.8	12	4.8	1.0	95	93	104	14
23	11	9.9	7.4	5.5	2.6	12	4.8	1.2	92	86	101	16
24	10	9.9	7.8	5.5	3.0	8.3	4.8	1.2	88	78	98	14
25	10	9.9	7.8	5.2	3.0	6.2	4.6	1.5	88	90	99	16
26	10	9.9	8.3	5.5	3.0	5.8	4.2	1.6	92	96	93	12
27	10	9.9	7.8	5.0	3.0	5.8	4.0	1.5	96	90	92	14
28	10	9.4	7.4	5.0	3.0	7.0	3.4	2.2	101	93	77	11
29	10	7.8	7.4	5.0	---	5.8	3.2	2.2	109	85	79	7.0
30	10	7.4	7.4	5.0	---	5.5	3.0	1.8	96	189	86	7.4
31	13	---	7.4	4.5	---	4.6	---	2.4	---	310	95	---
TOTAL	684	831.2	215.6	200.9	94.1	170.4	134.8	126.25	1317.2	3470	4730	988.4
MEAN	22.1	27.7	6.95	6.48	3.36	5.50	4.49	4.07	43.9	112	153	32.9
MAX	40	43	8.3	9.9	4.5	12	5.5	35	109	310	322	115
MIN	10	7.4	5.5	4.5	2.4	3.0	3.0	.80	2.2	78	77	7.0
AC-FT	1360	1650	428	398	187	338	267	250	2610	6880	9380	1960

WTR YR 1981 TOTAL 12962.85 MEAN 35.5 MAX 322 MIN .80 AC-FT 25710

EXTREMES FOR 1981 WATER YEAR.--Maximum discharge, 349 ft^3/s (9.88 m^3/s) at 1000 Aug. 8, gage height, 3.62 ft (1.103 m); minimum daily, 0.80 ft^3/s (0.023 m^3/s) May 11.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT										
07...	1240	169	200	166	7.8	12.5	9.1	29	20	4.7
NOV										
17...	1230	5.0	1550	1420	8.2	9.5	14.5	492	170	60
DEC										
15...	1255	3.1	1630	1460	8.1	3.5	14.9	525	175	70
JAN										
20...	1640	3.9	1490	1460	7.8	1.0	11.4	476	170	61
FEB										
24...	1240	8.2	1360	1180	8.1	5.0	12.0	472	176	54
MAR										
24...	1445	2.8	1520	1490	8.4	12.0	--	600	192	73
APR										
14...	1630	36	645	644	8.3	18.5	8.3	185	82	22
MAY										
13...	1215	191	223	243	7.6	7.0	10.0	60	29	8.2
JUN										
09...	1535	1.6	1310	1410	8.2	22.5	16.0	347	120	60
JUL										
15...	1140	151	368	380	8.2	18.5	8.3	98	38	14
AUG										
17...	1500	59	437	464	8.7	26.0	8.8	118	45	19
SEP										
14...	1215	121	312	328	7.6	12.5	8.6	74	33	11

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT									
07...	5.0	.3	.8	40	41	1.6	.3	3.6	102
NOV									
17...	65	1.1	3.6	180	550	13	.5	5.8	980
DEC									
15...	78	1.3	3.8	200	640	26	.4	7.0	1130
JAN									
20...	64	1.1	3.5	200	580	16	.4	8.2	1030
FEB									
24...	44	.8	3.0	190	580	11	.3	7.9	995
MAR									
24...	76	1.2	4.2	180	710	18	.5	4.1	1190
APR									
14...	21	.6	2.2	110	230	7.2	.5	6.0	438
MAY									
13...	13	.6	3.0	46	70	4.2	.3	4.7	162
JUN									
09...	85	1.6	8.0	200	520	21	.5	5.2	943
JUL									
15...	15	.5	1.2	55	120	2.6	.2	5.4	230
AUG									
17...	21	.7	1.3	73	160	3.3	.2	4.8	299
SEP									
14...	13	.5	2.5	54	92	3.7	.2	7.5	198

06741510 - BIG THOMPSON RIVER AT LOVELAND

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT									
07...	.14	46.5	--	<.020	.17	.160	.85	<.010	--
NOV									
17...	1.3	13.2	.78	.020	.80	.170	.75	.090	--
DEC									
15...	1.5	9.5	--	<.020	1.1	.230	.87	.030	--
JAN									
20...	1.4	11.0	--	<.020	1.1	.290	.75	.020	--
FEB									
24...	1.3	22.0	--	<.020	1.0	.150	.96	.020	--
MAR									
24...	1.6	9.0	--	<.020	.70	.110	.76	.050	--
APR									
14...	.59	42.6	--	<.020	.28	.080	.30	<.010	--
MAY									
13...	.22	83.5	--	<.020	.39	.340	1.80	.050	--
JUN									
09...	1.3	4.1	.58	.050	.63	8.20	3.40	--	1.60
JUL									
15...	.31	93.8	--	<.020	.15	.090	1.30	.060	.030
AUG									
17...	.41	47.6	--	<.020	<.10	.080	1.00	.060	--
SEP									
14...	.27	64.7	--	<.020	.60	.120	2.60	.040	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT 07...	1240	530	1	100	<1	8	<1	4	900	20
NOV 17...	1230	60	--	--	<1	4	--	4	--	48
DEC 15...	1255	170	--	--	<1	2	--	7	--	33
JAN 20...	1640	60	--	--	1	2	--	2	--	43
FEB 24...	1240	--	<1	<100	<1	10	2	6	50	14
MAR 24...	1445	2000	--	--	1	10	--	10	--	43
APR 14...	1630	240	--	--	<1	3	--	5	--	23
MAY 13...	1215	--	1	<100	<1	10	2	25	5900	61
JUN 09...	1535	70	--	--	<1	3	--	4	--	69
JUL 15...	1140	1700	--	--	<1	14	--	7	--	18
AUG 17...	1500	--	1	<100	<1	<10	<1	4	890	19
SEP 14...	1215	7600	--	--	<1	18	--	14	--	74

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT 07...	3	50	6	<.1	2	3	1	<1	20
NOV 17...	1	--	53	--	--	--	--	<1	30
DEC 15...	2	--	62	--	--	--	--	<1	30
JAN 20...	1	--	63	--	--	--	--	<1	60
FEB 24...	3	50	36	<.1	3	2	21	<1	10
MAR 24...	3	--	35	--	--	--	--	<1	30
APR 14...	2	--	22	--	--	--	--	<1	20
MAY 13...	15	320	26	.4	2	7	3	19	50
JUN 09...	<1	--	54	--	--	--	--	<1	20
JUL 15...	3	--	16	--	--	--	--	<1	30
AUG 17...	<1	40	9	.1	1	4	2	<1	10
SEP 14...	5	--	20	--	--	--	--	<1	50

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	3.7	6.2	4.8	3.0	2.8	3.7	45	4.0	53	48	25
2	7.0	3.4	3.4	4.2	3.2	3.0	3.4	47	1.6	9.4	63	16
3	5.2	3.7	3.2	4.6	3.0	4.0	3.7	58	3.0	15	83	12
4	5.5	4.0	3.2	7.0	3.0	3.7	4.2	56	3.4	28	89	9.4
5	7.4	4.0	3.0	5.2	3.0	4.0	4.6	56	2.8	40	69	20
6	75	4.0	3.0	6.6	3.0	3.7	5.5	63	1.8	68	72	22
7	167	4.2	3.0	4.6	3.0	3.4	6.2	64	1.8	104	68	13
8	167	4.0	3.2	5.2	3.0	4.6	7.0	58	2.0	125	54	15
9	169	4.2	3.2	4.8	3.0	4.2	7.4	64	7.5	141	64	13
10	173	4.6	3.0	4.6	3.0	2.6	7.8	68	27	134	59	18
11	169	4.6	3.0	4.6	3.6	2.8	8.3	69	28	126	62	34
12	167	4.6	3.0	4.6	4.2	2.6	8.8	89	31	133	63	34
13	175	4.6	3.0	4.6	4.6	2.6	24	126	45	138	61	28
14	178	5.2	3.0	4.6	5.4	2.4	33	4.2	45	146	67	354
15	196	5.2	3.2	3.4	5.6	2.8	33	2.0	50	149	53	11
16	113	4.8	3.2	3.2	5.8	2.8	27	1.4	53	130	59	6.2
17	11	4.6	3.7	3.0	5.8	2.8	40	1.2	55	160	58	3.2
18	8.3	3.4	4.0	3.4	6.2	3.0	45	1.2	37	150	64	2.6
19	7.8	3.7	3.7	3.8	6.6	3.2	41	1.2	7.0	120	76	2.2
20	7.0	3.7	3.2	4.6	7.6	3.0	35	1.5	7.0	110	73	52
21	6.6	3.4	3.4	5.5	8.6	3.0	37	1.8	5.2	109	58	175
22	5.5	3.4	4.8	3.4	8.8	3.2	36	2.4	19	101	63	180
23	5.2	3.4	5.2	3.4	8.6	3.2	36	2.2	36	93	59	180
24	5.5	3.4	5.5	3.0	8.3	3.4	28	3.0	44	106	63	190
25	4.8	3.7	5.8	2.4	8.8	6.2	28	2.8	54	123	67	184
26	4.8	4.0	5.5	3.4	8.3	5.5	33	1.4	48	146	70	182
27	4.6	3.4	5.2	3.2	4.0	4.0	37	1.5	33	240	57	178
28	4.2	3.2	5.8	4.6	2.8	4.2	42	1.1	14	190	31	190
29	4.0	3.2	5.8	3.4	---	3.7	47	1.0	30	160	28	184
30	4.2	3.4	5.5	4.2	---	3.2	41	1.2	55	100	20	182
31	4.2	---	5.8	4.0	---	3.4	---	1.2	---	60	33	---
TOTAL	1873.8	118.7	125.7	131.9	143.8	107.0	713.6	895.3	751.1	3507.4	1872	2515.6
MEAN	60.4	3.96	4.05	4.25	5.14	3.45	23.8	28.9	25.0	113	60.4	83.9
MAX	196	5.2	6.2	7.0	8.8	6.2	47	126	55	240	88	354
MIN	4.0	3.2	3.0	2.4	2.8	2.4	3.4	1.0	1.6	9.4	20	2.2
AC-FT	3720	235	249	262	285	212	1420	1780	1490	6960	3710	4990

WTR YR 1982 TOTAL 12755.9 MEAN 34.9 MAX 354 MIN 1.0 AC-FT 25300

EXTREMES FOR 1982 WATER YEAR.--Maximum discharge, 2,270 ft^3/s (64.3 m^3/s) at 0100 Sept. 14, gage height, 7.17 ft (2.185 m); minimum daily, 1.0 ft^3/s (0.028 m^3/s) May 29.

LOCATION.--Lat 40°23'00", long 105°01'45", in NW¼SE¼ sec.20, T.5 N., R.58 W., Larimer County, Hydrologic Unit 10190006, at county road 9 E bridge, about 0.3 mi (0.48 km) upstream from outlet ditch and 2.0 mi (3.2 km) southeast of Loveland.

DRAINAGE AREA.--540 mi² (1,400 km²), approximately.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JUN										
28...	1330	230	300	7.6	17.0	7.2	--	100	63	24
JUL										
31...	1100	99	640	7.9	19.0	8.3	K780	218	140	46
AUG										
24...	1130	52	925	8.2	18.5	9.4	K540	380	230	96
SEP										
20...	1215	22	1050	8.4	18.5	10.6	1900	431	281	110

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
JUN									
28...	9.7	16	.7	1.3	82	4.1	.3	8.3	171
JUL									
31...	25	35	1.1	2.8	200	10	.5	5.5	375
AUG									
24...	34	48	1.1	3.7	320	14	.8	12	627
SEP									
20...	38	72	1.6	5.5	420	19	1.1	5.6	777

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
JUN									
28...	.23	106	.56	.010	.57	<.010	.10	.190	.110
JUL									
31...	.51	101	.75	.040	.79	.190	.72	.550	.370
AUG									
24...	.86	88.5	1.80	.120	1.9	.430	.92	.920	.810
SEP									
20...	1.1	46.2	3.10	.310	3.4	1.30	1.80	2.00	1.50

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
JUN										
28...	1330	430	<2	9	6	70	11	20	<1	20
JUL										
31...	1100	550	6	6	3	<10	46	20	<1	30
AUG										
24...	1130	300	ND	3	4	<10	3	50	ND	20
SEP										
20...	1215	<100	<1	<1	2	30	3	60	<1	<20

K BASED ON NON-IDEAL COLONY COUNT.

06741520 - BIG THOMPSON RIVER BELOW LOVELAND

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT										
25...	1230	28	1080	8.1	13.0	10.5	2800	439	289	110
NOV										
29...	1225	35	925	8.3	2.5	13.0	K50	385	235	95
DEC										
20...	1215	36	975	8.5	5.5	13.4	K10	394	234	100
JAN										
23...	1320	86	1080	8.3	3.0	11.0	--	423	283	95
FEB										
19...	1610	79	580	8.0	7.5	9.8	--	218	108	56
MAR										
12...	1050	121	600	7.9	5.0	11.8	--	236	126	60
APR										
10...	1315	53	1850	8.3	11.5	12.6	--	791	591	170
MAY										
07...	1330	1850	195	7.7	9.0	10.0	--	73	34	20
JUN										
12...	1330	1370	110	7.3	13.0	8.6	--	42	0	12
JUL										
16...	1700	167	540	8.3	23.5	8.0	--	202	129	48
AUG										
07...	1330	111	650	8.5	23.5	9.8	--	265	165	65
SEP										
11...	1115	112	440	7.9	17.5	8.2	--	167	102	42

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT									
25...	40	65	1.4	5.5	380	21	1.4	7.6	737
NOV									
29...	36	57	1.3	5.5	320	15	.4	8.7	639
DEC									
20...	35	49	1.1	4.3	320	15	.9	7.6	638
JAN									
23...	45	56	1.2	3.7	390	10	.5	7.7	696
FEB									
19...	19	29	.9	2.7	160	10	.4	8.5	356
MAR									
12...	21	30	.9	2.2	180	8.5	.4	8.5	381
APR									
10...	89	120	1.9	5.7	760	25	.7	5.6	1300
MAY									
07...	5.6	9.2	.5	1.6	37	3.1	.3	14	117
JUN									
12...	3.0	8.0	.6	.8	23	1.9	.0	6.8	91
JUL									
16...	20	26	.8	2.2	170	6.1	.6	6.1	326
AUG									
07...	25	33	.9	2.8	230	8.3	.7	4.9	435
SEP									
11...	15	22	.8	1.9	140	7.3	.4	5.5	278

K BASED ON NON-IDEAL COLONY COUNT.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT									
25...	1.0	55.7	3.30	.310	3.6	2.20	4.70	1.60	1.40
NOV									
29...	.88	61.1	2.40	.170	2.6	1.90	--	1.70	1.80
DEC									
20...	.88	62.2	2.20	.140	2.3	1.20	1.90	4.90	1.30
JAN									
23...	.95	162	.75	.130	.88	.800	.86	.460	--
FEB									
19...	.49	76.2	.91	.090	1.0	1.70	2.70	.840	--
MAR									
12...	.52	124	.95	.050	1.0	.830	1.40	.510	--
APR									
10...	1.8	187	1.10	.130	1.2	1.70	2.60	.810	--
MAY									
07...	.16	584	.55	.010	.56	.090	.92	.040	--
JUN									
12...	.12	337	.24	.010	.25	.040	1.00	.020	--
JUL									
16...	.44	147	.69	.050	.74	.130	.97	.210	--
AUG									
07...	.59	130	1.00	.080	1.1	.230	1.30	.280	--
SEP									
11...	.38	84.1	.95	.050	1.0	.260	.92	.460	--

06741520 - BIG THOMPSON RIVER BELOW LOVELAND

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT 25...	1230	200	--	--	<1	3	--	4	--	20
NOV 29...	1225	300	--	--	<1	5	--	<1	--	<10
DEC 20...	1215	90	--	--	<1	<1	--	4	--	<10
JAN 23...	1320	<100	--	--	<1	--	--	12	--	<10
FEB 19...	1610	--	1	200	--	<20	5	--	830	20
MAR 12...	1050	400	--	--	<1	3	--	7	--	20
APR 10...	1315	250	--	--	<2	3	--	3	--	20
MAY 07...	1330	--	2	300	<1	<20	3	14	8000	100
JUN 12...	1330	2000	--	--	<2	5	--	17	--	100
JUL 16...	1700	430	--	<100	<1	<20	<1	15	560	30
AUG 07...	1330	--	1	<100	<1	<1	3	5	340	<10
SEP 11...	1115	190	--	--	<1	6	--	9	--	60

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT 25...	3	--	40	--	--	--	--	<1	30
NOV 29...	5	--	50	--	--	--	--	<1	<20
DEC 20...	4	--	40	--	--	--	--	<1	30
JAN 23...	10	--	30	--	--	--	--	<1	<20
FEB 19...	--	50	20	<.1	3	2	3	--	--
MAR 12...	<1	--	20	--	--	--	--	<1	20
APR 10...	3	--	40	--	--	--	--	<1	20
MAY 07...	8	170	<10	<.1	1	10	2	<1	40
JUN 12...	<200	--	9	--	--	--	--	<2	30
JUL 16...	9	40	20	--	2	5	--	<1	40
AUG 07...	2	40	20	<.1	3	<1	4	<1	<20
SEP 11...	6	--	30	--	--	--	--	<1	40

06741520 - BIG THOMPSON RIVER BELOW LOVELAND

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT										
07...	0900	28	1020	1020	7.7	12.5	7.2	460	290	120
NOV										
19...	0950	17	1000	1020	7.7	4.0	10.0	397	257	98
DEC										
16...	1300	18	1350	1360	8.0	7.5	11.3	539	379	130
JAN										
23...	1330	14	1320	1310	7.9	8.0	10.7	539	350	130
FEB										
24...	1445	10	1250	1160	8.0	13.5	10.4	447	257	100
MAR										
24...	1350	16	1300	1240	8.2	9.0	11.0	456	316	110
APR										
29...	1340	12	1650	1360	8.3	21.0	10.4	526	376	120
MAY										
27...	1325	13	1500	1460	8.7	25.5	11.5	522	362	110
JUN										
22...	1045	91	560	541	7.7	20.0	7.5	219	147	53
JUL										
21...	1450	121	540	503	8.7	25.0	9.2	204	131	52
AUG										
12...	0815	112	540	511	7.6	17.5	7.5	213	122	54
SEP										
02...	1350	113	370	337	8.5	21.5	8.0	125	69	32

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT										
07...	39	51	1.1	4.4	170	360	15	.2	5.6	705
NOV										
19...	37	60	1.4	4.7	140	330	18	.6	6.8	647
DEC										
16...	52	85	1.6	7.2	160	490	24	.7	7.4	903
JAN										
23...	52	89	1.7	6.2	--	500	28	1.0	10	941
FEB										
24...	48	97	2.1	8.5	190	430	30	.9	8.1	845
MAR										
24...	44	74	1.6	6.0	140	440	27	1.1	7.0	805
APR										
29...	55	110	2.1	8.0	150	490	32	1.2	7.1	935
MAY										
27...	60	130	2.5	7.2	160	560	32	1.1	5.7	1010
JUN										
22...	21	27	.8	1.9	72	180	5.4	.3	4.9	340
JUL										
21...	18	21	.7	1.8	73	170	5.9	.3	4.8	319
AUG										
12...	19	23	.7	2.0	91	160	5.0	.3	4.6	325
SEP										
02...	11	17	.7	1.7	56	96	4.6	.2	4.3	204

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT									
07...	.96	53.5	1.50	.120	1.6	.510	1.40	1.00	--
NOV									
19...	.89	30.4	1.70	.080	1.8	3.30	4.70	1.80	--
DEC									
16...	1.2	43.9	2.30	.140	2.4	4.60	4.90	1.10	--
JAN									
23...	1.3	35.6	2.20	.150	2.3	3.00	4.40	.070	--
FEB									
24...	1.2	22.8	1.60	.250	1.8	5.30	6.70	7.30	6.10
MAR									
24...	1.1	34.8	2.30	.270	2.6	1.20	2.90	1.70	--
APR									
29...	1.3	30.3	4.60	.300	4.9	.640	1.90	3.10	--
MAY									
27...	1.4	35.5	2.30	.250	2.5	.270	2.20	2.40	--
JUN									
22...	.46	83.5	.58	.040	.62	.330	1.30	.400	--
JUL									
21...	.43	104	.32	.040	.36	.250	.80	.200	--
AUG									
12...	.44	98.3	.50	.060	.56	.370	1.20	.290	--
SEP									
02...	.28	62.2	.77	.060	.83	.500	.98	.040	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT										
07...	0900	--	2	<100	<1	<20	<1	4	180	30
NOV										
19...	0950	80	--	--	<1	5	--	6	--	30
DEC										
16...	1300	60	--	--	<2	3	--	5	--	30
JAN										
23...	1330	150	--	--	<1	3	--	6	--	20
FEB										
24...	1445	--	1	200	<1	<20	<1	8	180	30
MAR										
24...	1350	190	--	--	<1	4	--	5	--	30
APR										
29...	1340	270	--	--	<1	<1	--	8	--	30
MAY										
27...	1325	--	1	<100	<1	<1	<1	5	410	20
JUN										
22...	1045	1000	--	--	<1	8	--	7	--	30
JUL										
21...	1450	370	--	--	<1	4	--	6	--	<10
AUG										
12...	0815	--	1	<100	<1	20	<2	7	1300	<10
SEP										
02...	1350	610	--	--	<1	11	--	8	--	29

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT									
07...	3	100	80	<.1	3	4	9	<1	<20
NOV									
19...	2	--	80	--	--	--	--	<1	30
DEC									
16...	2	--	90	--	--	--	--	<1	30
JAN									
23...	8	--	120	--	--	--	--	<2	30
FEB									
24...	<2	100	100	<.1	5	24	9	<1	30
MAR									
24...	2	--	60	--	--	--	--	<1	20
APR									
29...	<1	--	90	--	--	--	--	<1	30
MAY									
27...	6	50	30	<.1	7	6	6	<1	20
JUN									
22...	17	--	30	--	--	--	--	<1	50
JUL									
21...	2	--	<10	--	--	--	--	<1	20
AUG									
12...	6	60	22	<.1	3	4	5	<1	<20
SEP									
02...	7	--	12	--	--	--	--	<1	20

06741520 - BIG THOMPSON RIVER BELOW LOVELAND

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT										
07...	1430	174	280	238	7.9	14.0	9.2	92	43	25
NOV										
17...	1015	11	1450	1380	8.0	9.0	12.5	530	350	120
DEC										
15...	1430	12	1440	1160	8.3	8.0	13.1	450	310	101
JAN										
21...	0840	6.9	1400	1410	7.7	2.0	11.4	498	298	112
FEB										
24...	1535	17	1220	1350	8.1	9.0	10.6	526	346	130
MAR										
24...	1220	14	1440	1420	8.1	11.0	--	587	407	133
APR										
15...	0915	33	841	783	7.8	12.0	9.5	348	218	90
MAY										
13...	0930	167	510	510	7.7	6.5	9.5	185	144	41
JUN										
09...	1245	21	816	829	8.6	18.5	10.5	292	191	66
JUL										
15...	0930	169	440	441	8.0	17.5	8.0	171	107	42
AUG										
17...	1700	94	573	579	8.6	26.0	6.9	213	126	49
SEP										
17...	1000	17	1620	1620	7.9	14.5	6.7	629	448	130

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT										
07...	7.1	11	.5	1.5	49	66	4.1	.3	4.0	150
NOV										
17...	56	93	1.8	6.4	180	470	22	.8	5.4	891
DEC										
15...	48	96	2.0	7.9	140	430	27	1.1	7.7	823
JAN										
21...	53	100	2.0	7.9	200	480	32	.9	8.8	922
FEB										
24...	49	76	1.5	6.8	180	490	28	.5	8.1	906
MAR										
24...	62	110	2.0	7.4	180	560	29	.9	6.7	1020
APR										
15...	30	38	.9	3.3	130	290	11	.5	6.1	550
MAY										
13...	20	36	1.2	4.0	41	180	24	.4	4.8	338
JUN										
09...	31	56	1.5	4.5	101	290	14	.7	5.4	534
JUL										
15...	16	21	.7	1.5	64	140	3.9	.3	5.6	270
AUG										
17...	22	37	1.1	2.6	87	190	10	.4	5.4	371
SEP										
17...	74	140	2.5	7.6	181	700	27	.8	9.9	1210

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT									
07...	.20	70.5	.35	.040	.39	.220	.90	<.010	--
NOV									
17...	1.2	26.5	1.90	.200	2.1	.320	1.70	2.70	--
DEC									
15...	1.1	26.7	4.20	.300	4.5	1.40	3.20	3.70	--
JAN									
21...	1.3	17.2	1.40	.200	1.6	<.070	7.60	2.70	--
FEB									
24...	1.2	41.6	1.80	.290	2.1	3.90	8.70	1.90	--
MAR									
24...	1.4	38.6	1.30	.280	1.6	3.10	4.80	2.70	--
APR									
15...	.75	49.0	.57	.050	.62	.570	1.10	.740	--
MAY									
13...	.46	152	.65	.040	.69	.670	2.20	.380	--
JUN									
09...	.73	30.3	1.10	.200	1.3	.230	1.30	1.10	--
JUL									
15...	.37	123	.25	.020	.27	.140	1.40	.160	.120
AUG									
17...	.50	94.2	.35	.080	.43	.410	2.00	.270	--
SEP									
17...	1.6	55.5	1.40	.150	1.5	2.10	4.40	1.70	--

06741520 - BIG THOMPSON RIVER BELOW LOVELAND

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT 07...	1430	680	1	<100	<1	9	<1	5	1300	19
NOV 17...	1015	60	--	--	<1	4	--	7	--	34
DEC 15...	1430	70	--	--	<1	4	--	8	--	24
JAN 21...	0840	100	--	--	<1	5	--	3	--	75
FEB 24...	1535	--	1	100	<1	10	2	15	290	27
MAR 24...	1220	200	--	--	<1	5	--	13	--	32
APR 15...	0915	340	--	--	<1	1	--	7	--	26
MAY 13...	0930	--	1	<100	<1	10	2	13	4500	52
JUN 09...	1245	410	--	--	<1	2	--	5	--	27
JUL 15...	0930	2000	--	--	<1	12	--	8	--	19
AUG 17...	1700	--	1	100	<1	<10	<1	7	2800	21
SEP 17...	1000	1000	--	--	<1	<1	--	4	--	28

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT 07...	4	60	10	<.1	2	3	2	<1	40
NOV 17...	7	--	64	--	--	--	--	1	20
DEC 15...	4	--	50	--	--	--	--	<1	20
JAN 21...	3	--	130	--	--	--	--	<1	60
FEB 24...	4	70	63	<.1	3	4	10	<1	30
MAR 24...	12	--	96	--	--	--	--	1	40
APR 15...	2	--	59	--	--	--	--	<1	20
MAY 13...	14	130	38	<.1	6	7	3	<1	30
JUN 09...	<1	--	25	--	--	--	--	<1	10
JUL 15...	2	--	22	--	--	--	--	<1	30
AUG 17...	<1	80	16	.1	1	8	3	<1	30
SEP 17...	5	--	170	--	--	--	--	<1	20

LOCATIONS.--Lat 40°32'24", long 105°52'56", in SE¼SE¼ Sec.26, T. 7 N.,R.76 W., Larimer county, Hydrologic Unit 10190007, on left bank 150 ft (46 m) below unnamed tributary and Colorado Highway 14 culvert crossing, 1.5 mi (2.4 km) northeast of Cameron Pass, 1.5 mi (2.4 km) southwest of Joe Wright Dam, and 8 mi (12.9 km) east of Gould.

DRAINAGE AREA.--3.01 mi^2 (7.80 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)	DATE	TIME	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)
OCT				MAY			
26...	--	.5	70	25...	--	.5	40
NOV				JUN			
22...	--	.0	80	04...	--	3.0	38
JAN				14...	--	2.0	28
16...	--	.0	--	21...	--	4.0	28
MAR				SEP			
01...	--	.0	--	06...	--	8.0	62

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)	DATE	TIME	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)
OCT				APR			
18...	1230	6.0	72	10...	1505	.0	70
DEC				JUN			
05...	1530	.0	<50	17...	1750	2.5	22
JAN				JUL			
16...	1520	.0	<50	17...	1145	12.0	43
FEB				AUG			
27...	1100	.0	40	20...	1705	12.0	55

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)	DATE	TIME	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)
OCT				APR			
09...	1310	10.0	70	09...	1055	.0	70
NOV				30...	1800	.5	44
12...	1330	1.5	70	JUN			
DEC				04...	1410	3.0	38
11...	1210	.0	50	JUL			
JAN				08...	1610	11.0	35
28...	1010	.0	90	AUG			
FEB				12...	1425	11.0	54
25...	1050	.0	85				

06746095 JOE WRIGHT CREEK ABOVE JOE WRIGHT RESERVOIR

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,990 ft (3,045 m), from topographic map.

REMARKS.--Records fair except those for periods of no gage-height record, which are poor. Several observations of specific conductance and water temperature were obtained.

EXTREME FOR PERIOD OF RECORD.--Maximum discharge, 107 ft^3/s (3.03 m^3/s) June 18, 1982, gage height, 1.66 ft (0.506 m); maximum gage height, 3.99 ft (1.216 m) Apr. 19, 1981 (backwater from ice); minimum daily discharge, 0.20 ft^3/s (0.006 m^3/s) Jan. 30-Apr. 4, 1979, Feb. 9 to Apr. 9, 1981.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	.40	.35	.30	.20	.20	.20	.50	11	42	7.6	5.7
2	.90	.40	.33	.30	.20	.20	.20	.50	12	36	6.8	5.2
3	1.1	.40	.32	.30	.20	.20	.20	.50	24	34	6.3	4.8
4	1.0	.40	.32	.30	.20	.20	.20	.52	19	32	5.8	4.4
5	1.0	.40	.32	.30	.20	.20	.22	.59	21	27	5.5	4.2
6	1.1	.40	.30	.30	.20	.20	.25	.80	28	26	5.2	4.2
7	1.1	.40	.30	.30	.20	.20	.30	1.0	31	25	5.1	4.1
8	1.0	.40	.30	.30	.20	.20	.30	1.3	22	23	4.2	3.3
9	.80	.35	.30	.30	.20	.20	.30	1.7	18	21	4.0	1.9
10	.70	.34	.30	.30	.20	.20	.30	1.2	17	22	8.4	2.1
11	.70	.34	.30	.30	.20	.20	.30	.80	21	20	5.8	2.0
12	.70	.34	.30	.30	.20	.20	.30	.72	31	23	5.1	1.8
13	.70	.34	.30	.30	.20	.20	.30	.72	38	26	8.6	1.7
14	.70	.34	.30	.30	.20	.20	.30	1.4	51	25	9.2	2.0
15	.70	.35	.30	.30	.20	.20	.35	2.5	59	24	9.5	1.7
16	.70	.35	.30	.30	.20	.20	.37	3.5	54	23	9.7	1.5
17	.70	.35	.30	.30	.20	.20	.40	4.5	51	22	11	1.4
18	.70	.35	.30	.30	.20	.20	.45	6.0	46	20	14	1.2
19	.60	.35	.30	.30	.20	.20	.50	6.6	36	18	23	1.2
20	.60	.35	.30	.30	.20	.20	.50	7.0	33	16	21	1.3
21	.60	.35	.30	.30	.20	.20	.50	7.0	33	16	18	1.2
22	.70	.35	.30	.30	.20	.20	.50	7.3	33	15	14	1.1
23	.90	.35	.30	.30	.20	.20	.52	8.0	37	14	13	1.1
24	.90	.35	.30	.30	.20	.20	.56	8.0	40	17	12	1.1
25	.70	.35	.30	.30	.20	.20	.60	8.2	41	13	11	1.1
26	.60	.35	.30	.30	.20	.20	.60	10	42	12	10	1.3
27	.60	.35	.30	.25	.20	.20	.60	11	45	11	9.2	1.1
28	.50	.35	.30	.23	.20	.20	.60	34	45	11	8.1	1.1
29	.50	.35	.30	.21	---	.20	.56	25	45	9.7	7.3	1.1
30	.40	.35	.30	.20	---	.20	.52	14	44	8.8	7.0	1.1
31	.40	---	.30	.20	---	.20	---	13	---	8.3	6.4	---
TOTAL	23.20	10.85	9.44	8.89	5.60	6.20	11.80	187.85	1028	640.8	291.8	67.0
MEAN	.75	.36	.30	.29	.20	.20	.39	6.06	34.3	20.7	9.41	2.23
MAX	1.1	.40	.35	.30	.20	.20	.60	34	59	42	23	5.7
MIN	.40	.34	.30	.20	.20	.20	.20	.50	11	8.3	4.0	1.1
AC-FT	46	22	19	18	11	12	23	373	2040	1270	579	133

WTR YR 1979 TOTAL 2291.43 MEAN 6.28 MAX 59 MIN .20 AC-FT 4550

EXTREMES FOR 1979 WATER YEAR.--Maximum discharge, 90 ft^3/s (2.55 m^3/s) at 1730 June 4, gage height 1.61 ft (0.491 m); maximum gage height, 3.99 ft (1.216 m) at 1600 Apr. 19 (backwater from ice); minimum daily discharge, 0.20 ft^3/s (0.006 m^3/s) Feb. 9 to Apr. 9.

06746035 JOE WRIGHT CREEK ABOVE JOE WRIGHT RESERVOIR

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	.80	.45	.50	.45	.45	.35	1.7	20	24	6.7	2.1
2	1.0	.82	.45	.50	.45	.45	.35	1.4	24	25	6.3	1.8
3	1.0	.84	.45	.50	.45	.45	.35	1.5	27	23	5.7	1.6
4	1.0	.80	.45	.50	.45	.45	.35	1.7	29	22	5.2	1.4
5	.99	.80	.45	.50	.45	.43	.35	2.0	29	32	4.9	.82
6	.94	.80	.45	.50	.45	.40	.35	2.3	30	29	4.5	.72
7	.94	.80	.45	.50	.45	.38	.35	2.5	31	28	4.1	.68
8	.94	.80	.45	.50	.45	.37	.35	2.8	33	27	3.9	4.0
9	.94	.80	.45	.50	.45	.36	.35	3.2	38	25	3.7	1.8
10	.94	.74	.45	.50	.45	.35	.35	3.1	42	24	3.4	1.1
11	.91	.68	.45	.50	.45	.35	.35	3.0	50	23	3.1	.97
12	.86	.60	.45	.50	.45	.35	.35	2.9	55	23	2.9	1.8
13	.86	.60	.45	.50	.45	.35	.37	2.6	50	22	2.8	1.1
14	.86	.60	.45	.50	.45	.35	.41	2.2	46	19	2.8	.78
15	.86	.60	.45	.50	.45	.35	.41	2.0	40	17	5.8	.72
16	.96	.60	.45	.50	.45	.35	.41	2.3	36	16	4.5	.70
17	1.1	.60	.46	.50	.45	.35	.50	2.8	38	14	3.5	.66
18	.89	.60	.48	.50	.45	.35	.58	3.8	49	14	2.7	.64
19	.80	.58	.50	.50	.45	.35	.70	5.0	60	13	2.4	.64
20	.82	.54	.50	.50	.45	.35	.90	6.2	60	12	2.1	1.4
21	.83	.50	.50	.50	.45	.35	1.1	7.6	64	11	2.2	.73
22	.50	.45	.50	.50	.45	.35	1.3	9.4	66	11	2.1	.67
23	.28	.45	.50	.50	.45	.35	1.4	12	68	10	2.0	.66
24	.64	.45	.50	.50	.45	.35	1.3	15	66	11	2.2	.64
25	.89	.45	.50	.50	.45	.35	1.1	15	62	11	5.7	.64
26	.80	.45	.50	.50	.45	.35	1.2	13	60	9.1	5.0	.64
27	.86	.45	.50	.50	.45	.35	1.3	15	56	8.1	3.2	.64
28	.90	.45	.50	.50	.45	.35	1.5	17	44	7.4	2.5	.58
29	.80	.45	.50	.48	.45	.35	1.7	16	26	7.0	2.1	.53
30	.80	.45	.50	.45	---	.35	1.9	15	25	8.5	2.3	.53
31	.80	---	.50	.45	---	.35	---	15	---	7.9	2.5	---
TOTAL	26.71	18.55	14.64	15.38	13.05	11.44	22.28	205.0	1324	534.0	112.8	31.69
MEAN	.86	.62	.47	.50	.45	.37	.74	6.61	44.1	17.2	3.64	1.06
MAX	1.1	.84	.50	.50	.45	.45	1.9	17	68	32	6.7	4.0
MIN	.28	.45	.45	.45	.45	.35	.35	1.4	20	7.0	2.0	.53
AC-FT	53	37	29	31	26	23	44	407	2630	1060	224	63

CAL YR 1979 TOTAL 2307.84 MEAN 6.32 MAX 59 MIN .20 AC-FT 4580
WTR YR 1980 TOTAL 2329.54 MEAN 6.36 MAX 68 MIN .28 AC-FT 4620

EXTREMES FOR 1980 WATER YEAR.--Maximum discharge, 80 ft^3/s (2.27 m^3/s) at 1630 June 23, gage height, 1.45 ft (0.442 m); maximum gage height, 3.50 ft (1.067 m) at 1500 June 6 (backwater from ice); minimum daily discharge, 0.28 ft^3/s (0.008 m^3/s) Oct. 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	.60	.40	.25	.25	.20	.20	8.0	43	15	5.0	1.3
2	.50	.60	.40	.25	.25	.20	.20	9.1	56	16	4.7	1.6
3	.45	.60	.40	.25	.25	.20	.20	10	59	18	4.5	2.3
4	.45	.60	.40	.25	.25	.20	.20	6.7	63	24	4.5	1.5
5	.45	.60	.40	.25	.25	.20	.20	6.1	48	22	4.5	2.1
6	.45	.60	.35	.25	.25	.20	.20	4.6	46	18	4.0	2.4
7	.45	.60	.30	.25	.25	.20	.20	4.0	67	17	3.8	2.1
8	.45	.60	.30	.25	.25	.20	.20	2.9	69	16	3.5	3.4
9	.41	.60	.30	.25	.20	.20	.20	2.2	64	15	3.5	3.5
10	.41	.60	.25	.25	.20	.20	.25	2.9	68	14	3.5	2.9
11	.41	.60	.25	.25	.20	.20	.35	3.0	58	13	3.5	1.6
12	.45	.60	.25	.25	.20	.20	.35	2.3	53	12	3.3	1.6
13	.50	.55	.25	.25	.20	.20	.35	2.2	56	12	3.7	1.5
14	.53	.50	.25	.25	.20	.20	.35	2.8	50	12	2.6	1.3
15	.64	.45	.25	.25	.20	.20	.40	2.6	45	10	4.7	1.2
16	.64	.45	.25	.25	.20	.20	.45	2.4	35	9.0	4.1	1.2
17	.64	.45	.25	.25	.20	.20	.50	2.7	31	8.0	2.9	2.3
18	.64	.45	.25	.25	.20	.20	.50	2.2	30	8.0	2.3	2.2
19	.60	.45	.25	.25	.20	.20	.55	2.8	29	8.0	2.1	2.1
20	.60	.45	.25	.25	.20	.20	.60	3.5	27	7.0	2.0	2.0
21	.60	.40	.25	.25	.20	.20	1.0	3.6	26	6.5	1.8	2.3
22	.60	.40	.25	.25	.20	.20	.80	3.1	26	6.0	2.2	2.1
23	.60	.40	.25	.25	.20	.20	.70	2.9	23	6.0	2.1	1.9
24	.60	.40	.25	.25	.20	.20	1.0	3.6	20	6.0	2.4	2.1
25	.60	.40	.25	.25	.20	.20	1.5	5.0	20	6.0	2.4	2.1
26	.60	.40	.25	.25	.20	.20	2.0	7.6	19	6.4	1.7	2.3
27	.60	.40	.25	.25	.20	.20	3.0	10	16	7.0	1.5	1.9
28	.60	.40	.25	.25	.20	.20	3.5	12	15	6.4	1.4	1.8
29	.60	.40	.25	.25	---	.20	4.5	15	14	6.0	1.3	1.6
30	.60	.40	.25	.25	---	.20	6.0	22	14	5.6	1.4	1.6
31	.60	---	.25	.25	---	.20	---	30	---	5.4	1.3	---
TOTAL	16.77	14.95	8.75	7.75	6.00	6.20	30.45	197.8	1190	341.3	92.2	59.8
MEAN	.54	.50	.28	.25	.21	.20	1.02	6.38	39.7	11.0	2.97	1.99
MAX	.64	.60	.40	.25	.25	.20	6.0	30	69	24	5.0	3.5
MIN	.41	.40	.25	.25	.20	.20	.20	2.2	14	5.4	1.3	1.2
AC-FT	33	30	17	15	12	12	60	392	2360	677	183	119

CAL YR 1980 TOTAL 2310.11 MEAN 6.31 MAX 68 MIN .25 AC-FT 4580
WTR YR 1981 TOTAL 1971.97 MEAN 5.40 MAX 69 MIN .20 AC-FT 3910

EXTREMES FOR 1981 WATER YEAR.--Maximum discharge, 90 ft^3/s (2.55 m^3/s) at 1730 June 4, gage height, 1.61 ft (0.491 m); maximum gage height, 3.99 ft (1.216 m) at 1600 Apr. 19 (backwater from ice); minimum daily discharge, 0.20 ft^3/s (0.006 m^3/s) Feb. 9 to Apr. 9.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	TEMPERATURE (DEG C) (00010)	SPECIFIC CONDUCTANCE (UMHOS) (00095)
OCT			
07...	1405	9.5	65
NOV			
18...	1430	.5	60
JAN			
19...	0930	.0	70
FEB			
24...	0940	.5	--
APR			
06...	1355	.0	80
MAY			
11...	1430	.5	58
26...	1210	.0	60
JUN			
16...	1400	2.5	35
24...	1545	3.0	30
JUL			
14...	1515	8.5	31
AUG			
05...	1150	11.0	45
SEP			
01...	1200	11.5	55

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	.64	.66	.38	.38	.29	.43	.78	7.9	77	19	2.6
2	1.5	.64	.66	.38	.38	.27	.43	.86	11	70	19	2.4
3	1.9	.64	.66	.38	.36	.26	.43	.98	12	65	19	2.3
4	2.2	.64	.66	.38	.35	.26	.43	1.1	14	62	19	2.1
5	2.4	.64	.66	.38	.33	.26	.43	1.2	16	55	15	3.5
6	2.1	.64	.66	.38	.33	.26	.43	1.4	18	48	11	3.0
7	1.9	.64	.66	.38	.33	.27	.43	1.5	20	49	9.7	2.9
8	2.1	.64	.66	.38	.33	.28	.43	1.7	23	62	9.5	5.2
9	2.2	.64	.66	.38	.33	.29	.43	1.7	27	65	13	3.6
10	2.1	.64	.66	.38	.33	.30	.43	1.7	30	57	9.8	2.0
11	2.1	.64	.66	.38	.33	.31	.43	1.7	35	55	8.5	1.6
12	2.5	.64	.60	.38	.33	.32	.43	1.7	43	54	7.9	1.9
13	2.6	.64	.56	.38	.33	.32	.43	1.7	47	56	8.9	1.8
14	2.5	.64	.50	.38	.33	.32	.43	1.8	47	59	9.3	2.0
15	2.4	.64	.50	.38	.33	.32	.43	2.0	46	56	7.6	3.4
16	2.4	.64	.50	.38	.32	.32	.45	2.2	53	50	7.2	2.5
17	2.8	.64	.50	.38	.31	.32	.48	2.5	73	47	6.8	2.2
18	3.1	.66	.50	.38	.31	.32	.48	2.8	96	42	6.1	1.8
19	3.3	.66	.50	.38	.31	.32	.48	3.3	71	39	5.6	1.7
20	3.2	.66	.50	.38	.31	.32	.48	4.0	74	36	5.2	1.8
21	2.8	.66	.50	.38	.31	.32	.48	4.7	73	33	5.7	1.7
22	2.6	.66	.46	.38	.31	.32	.48	5.6	77	32	5.0	1.6
23	2.1	.66	.44	.38	.31	.32	.50	6.8	63	31	4.3	2.1
24	1.1	.66	.42	.38	.31	.35	.54	7.0	47	30	4.0	1.6
25	1.0	.66	.40	.38	.31	.38	.54	7.0	50	29	3.9	2.3
26	.80	.66	.40	.38	.31	.38	.54	7.0	49	29	3.5	3.0
27	.80	.66	.40	.38	.31	.38	.54	7.0	56	27	3.1	2.1
28	.74	.66	.40	.38	.31	.38	.60	7.0	64	29	3.6	2.0
29	.68	.66	.40	.38	---	.38	.64	7.0	72	24	3.5	2.0
30	.67	.66	.40	.38	---	.38	.70	7.4	73	19	3.1	1.9
31	.64	---	.40	.38	---	.38	---	7.8	---	19	2.9	---
TOTAL	68.73	19.46	16.54	11.78	9.14	9.90	14.38	110.92	1387.9	1406	259.7	70.6
MEAN	1.96	.65	.53	.38	.33	.32	.48	3.58	46.3	45.4	8.38	2.35
MAX	3.3	.66	.66	.38	.38	.38	.70	7.8	96	77	19	5.2
MIN	.64	.64	.40	.38	.31	.26	.43	.78	7.9	19	2.9	1.6
AC-FT	120	39	33	23	18	20	29	220	2750	2790	515	140

CAL YR 1981 TOTAL 2029.23 MEAN 5.56 MAX 69 MIN .20 AC-FT 4020
WTR YR 1982 TOTAL 3377.05 MEAN 9.25 MAX 96 MIN .26 AC-FT 6700

EXTREMES FOR 1982 WATER YEAR.--Maximum discharge, 107 ft^3/s (3.03 m^3/s) at 0200 June 18, gage height, 1.66 ft (0.506 m); maximum gage height, 2.42 ft (0.738 m) at 0230 June 5 (backwater from ice); minimum daily discharge, 0.26 ft^3/s (0.007 m^3/s) Mar. 3-6.

LOCATION.--Lat 40°33'43", long 105°52'09", in SE¼NE¼ sec.24, T.7 N., R.76 W., Larimer County, Hydrologic Unit 10190007, on left bank 500 ft (152 m) downstream from unnamed tributary, 2,000 ft (610 m) downstream from Joe Wright Dam, and 3 mi (4.8 km) southwest of Chambers Lake.

DRAINAGE AREA.--6.90 mi^2 (17.9 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 29, 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,710 ft (2,960 m), from topographic map.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Several observations of specific conductance and water temperature were obtained.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 145 ft^3/s (4.11 m^3/s), June 30, 1978, gage height, 2.46 ft (0.750 m); minimum daily, 0.27 ft^3/s (0.008 m^3/s) Jan. 31 to Feb. 14, 1979.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									---	104	9.4	3.0
2									---	87	8.9	2.8
3									---	82	8.2	2.6
4									---	72	8.1	2.6
5									---	63	7.9	2.5
6									---	56	7.4	2.3
7									---	49	7.0	2.0
8									---	45	6.6	2.5
9									---	43	6.2	3.0
10									---	40	6.0	3.5
11									---	38	5.8	4.0
12									---	39	5.6	3.5
13									---	34	5.6	3.0
14									---	31	7.0	2.5
15									---	29	9.0	2.3
16									---	27	6.5	2.0
17									---	27	5.0	3.0
18									---	24	6.0	4.5
19									---	22	5.6	4.0
20									---	21	5.4	4.5
21									---	19	5.0	7.0
22									---	18	4.8	5.0
23									---	16	4.6	4.0
24									---	14	4.4	3.5
25									---	14	4.2	3.3
26									---	13	4.0	3.0
27									---	12	3.8	2.7
28									.00	11	3.6	2.4
29									113	13	3.4	2.2
30									127	11	3.2	2.0
31									---	9.7	3.0	---
TOTAL									---	1083.7	181.2	95.2
MEAN									---	35.0	5.85	3.17
MAX									---	104	9.4	7.0
MIN									---	9.7	3.0	2.0
AC-FT									---	2150	359	189

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)	DATE	TIME	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)
OCT				MAY			
17...	--	3.5	55	09...	--	.5	75
NOV				JUN			
22...	--	.0	65	04...	--	3.0	40
JAN				14...	--	5.0	--
16...	--	.0	--	21...	--	5.0	36
MAR				SEP			
01...	--	.0	--	05...	--	13.0	60

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)	DATE	TIME	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)
OCT				MAY			
18...	1100	2.0	56	20...	1300	.0	--
DEC				JUN			
06...	1250	.0	70	17...	1320	9.0	34
JAN				JUL			
17...	0930	.0	--	17...	1230	8.0	38
FEB				AUG			
26...	1405	.0	60	20...	1050	6.5	35
APR							
11...	1500	.0	40				

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)	DATE	TIME	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)
OCT				APR			
09...	1205	7.0	40	09...	1000	.5	52
NOV				30...	1620	2.0	44
12...	1130	1.5	45	JUN			
DEC				04...	1230	5.5	50
11...	1320	.0	42	JUL			
JAN				08...	1520	9.0	45
28...	1435	.0	50	AUG			
FEB				12...	1545	--	45
25...	1620	.5	45				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.0	1.0	.40	.27	.30	.30	.85	29	74	13	11
2	2.0	1.0	.90	.40	.27	.30	.30	.82	30	66	12	10
3	2.4	1.0	.90	.40	.27	.30	.30	.82	38	64	11	9.8
4	2.2	1.0	.90	.40	.27	.30	.30	.90	46	62	10	9.8
5	2.2	1.0	.90	.40	.27	.30	.30	1.0	55	53	10	9.7
6	2.5	1.0	.80	.35	.27	.30	.35	1.2	65	48	9.8	9.1
7	2.7	1.0	.70	.35	.27	.30	.35	1.5	76	45	9.8	9.1
8	2.4	1.0	.60	.35	.27	.30	.35	2.0	54	42	9.6	9.1
9	2.3	1.0	.60	.32	.27	.30	.35	2.5	44	39	9.3	9.1
10	2.0	1.0	.60	.32	.27	.30	.35	2.0	45	38	14	8.8
11	2.0	1.0	.60	.30	.27	.30	.35	1.3	53	36	11	8.0
12	1.9	1.0	.60	.30	.27	.30	.35	1.0	71	30	9.4	7.6
13	2.2	1.0	.60	.30	.27	.30	.35	.75	84	49	17	7.2
14	2.1	1.0	.60	.30	.27	.30	.35	1.7	100	39	19	7.0
15	2.3	1.0	.60	.30	.28	.30	.39	4.6	105	37	18	6.8
16	2.2	1.0	.60	.32	.30	.30	.45	8.3	91	36	18	6.4
17	1.9	1.0	.60	.35	.30	.30	.55	12	84	35	23	6.0
18	1.5	1.0	.60	.35	.30	.30	.60	19	78	32	27	5.0
19	1.5	1.0	.60	.35	.30	.30	.70	32	66	28	40	5.0
20	1.4	1.0	.60	.35	.30	.30	.75	38	58	25	43	5.0
21	1.4	1.0	.60	.35	.30	.30	.80	36	61	26	32	4.8
22	1.7	1.0	.60	.35	.30	.30	.85	34	65	26	25	4.6
23	1.3	1.0	.60	.35	.30	.30	.85	37	70	22	22	4.2
24	1.2	1.0	.60	.35	.30	.30	.90	40	71	27	22	4.0
25	1.1	1.0	.60	.35	.30	.30	.95	40	73	25	20	4.0
26	1.0	1.0	.60	.35	.30	.30	.95	44	73	20	17	4.0
27	1.0	1.0	.60	.35	.30	.30	.95	45	77	19	16	3.5
28	1.0	1.0	.50	.32	.30	.30	.90	60	78	19	14	3.2
29	1.0	1.0	.45	.30	---	.30	.90	63	75	16	13	3.0
30	1.0	1.0	.40	.28	---	.30	.89	46	74	15	13	3.0
31	1.0	---	.40	.27	---	.30	---	35	---	14	12	---
TOTAL	54.4	30.0	19.85	10.53	7.96	9.30	17.03	612.24	1989	1107	539.9	197.8
MEAN	1.75	1.00	.64	.34	.28	.30	.57	19.7	66.3	35.7	17.4	6.59
MAX	2.7	1.0	1.0	.40	.30	.30	.95	63	105	74	43	11
MIN	1.0	1.0	.40	.27	.27	.30	.30	.75	29	14	9.3	3.0
AC-FT	108	60	39	21	16	18	34	1210	3950	2200	1070	392

WTR YR 1979 TOTAL 4595.01 MEAN 12.6 MAX 105 MIN .27 AC-FT 9110

EXTREMES FOR 1979 WATER YEAR.--Maximum discharge, 101 ft^3/s (2.86 m^3/s) at 1630 June 4, gage height, 2.35 ft (0.716 m); minimum daily, 0.30 ft /s (0.008 m^3/s) Feb 10 to Apr. 8, Apr. 10-12.

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	2.9	.90	.70	1.0	.90	.90	.40	.60	4.6	23	5.2	1.9
2	2.7	.74	.70	1.0	.90	.90	.40	.60	4.7	21	6.9	1.9
3	2.6	.70	.60	1.0	.90	.90	.40	.60	5.1	21	6.9	1.9
4	2.4	.70	.60	1.0	.90	.70	.40	.60	6.0	21	6.9	1.9
5	2.2	.70	.60	1.0	.90	.70	.40	.60	6.6	21	6.2	1.4
6	2.1	.70	.60	1.0	.90	.70	.40	.60	8.1	21	4.3	.90
7	2.0	.70	.60	1.0	.90	.70	.40	.60	7.5	20	3.6	.90
8	1.9	.70	.60	1.0	.90	.70	.40	.60	8.3	19	2.1	1.4
9	1.8	.70	.60	1.0	.90	.60	.40	.60	9.2	19	2.5	1.2
10	1.7	.70	.60	1.0	.90	.60	.40	.60	9.3	19	3.0	1.2
11	1.6	.70	.80	1.0	.90	.60	.40	.60	10	19	3.3	1.1
12	1.5	.70	.80	1.0	.90	.60	.40	.60	12	20	3.0	1.6
13	1.4	.70	.80	1.0	.90	.50	.40	.62	12	20	2.3	1.6
14	1.3	.70	.80	1.0	.90	.50	.40	.63	12	20	6.9	1.7
15	1.2	.70	.80	1.0	.90	.50	.40	.66	11	19	16	1.6
16	1.1	.70	.90	1.0	.90	.50	.40	.68	12	19	16	1.7
17	1.1	.70	1.0	1.0	.90	.50	.41	.70	11	17	16	1.9
18	1.0	.70	1.0	1.0	.90	.45	.42	.70	9.2	14	16	2.1
19	1.0	.70	1.0	1.0	.90	.45	.44	.70	10	11	16	2.1
20	1.0	.70	1.0	1.0	.90	.45	.45	.70	11	8.4	15	2.5
21	1.0	.70	1.0	1.0	.90	.45	.46	.84	11	7.3	15	2.1
22	1.0	.70	1.0	1.0	.90	.45	.48	1.0	11	7.3	15	2.3
23	1.0	.70	1.0	1.0	.90	.45	.49	1.2	11	7.3	11	2.5
24	1.0	.70	1.0	1.0	.90	.45	.50	1.4	11	8.4	2.6	2.5
25	1.0	.70	1.0	1.0	.90	.45	.52	1.7	11	9.8	4.9	2.5
26	1.0	.70	1.0	1.0	.90	.45	.53	2.0	20	9.8	9.4	2.6
27	1.0	.70	1.0	1.0	.90	.45	.55	2.3	37	9.8	11	2.6
28	1.0	.70	1.0	1.0	.90	.45	.56	2.7	33	8.7	11	2.6
29	1.0	.70	1.0	1.0	.90	.40	.58	3.2	26	3.6	5.9	2.6
30	1.0	.70	1.0	1.0	---	.40	.60	3.9	26	2.5	2.3	2.6
31	1.0	---	1.0	1.0	---	.40	---	4.6	---	3.0	1.9	---
TOTAL	45.5	21.24	26.10	31.0	26.10	17.25	13.39	37.43	376.6	449.9	248.1	57.40
MEAN	1.47	.71	.84	1.00	.90	.56	.45	1.21	12.6	14.5	8.00	1.91
MAX	2.9	.90	1.0	1.0	.90	.90	.60	4.6	37	23	16	2.6
MIN	1.0	.70	.60	1.0	.90	.40	.40	.60	4.6	2.5	1.9	.90
AC-FT	90	42	52	61	52	34	27	74	747	892	492	114

CAL YR 1979 TOTAL 4583.60 MEAN 12.6 MAX 105 MIN .27 AC-FT 9090
WTR YR 1980 TOTAL 1350.01 MEAN 3.69 MAX 37 MIN .40 AC-FT 2680

EXTREMES FOR 1980 WATER YEAR.--Maximum discharge, 40 ft^3/s (1.13 m^3/s) at 1600 June 26, gage height, 1.99 ft (0.607 m); minimum daily, 0.40 ft^3/s (0.01 m^3/s) Mar. 29 to Apr. 16.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	.75	.45	.40	.35	.30	.30	2.3	63	6.2	8.0	2.9
2	2.1	.75	.45	.40	.35	.30	.30	2.6	77	7.6	8.0	4.0
3	2.3	.67	.45	.40	.35	.30	.30	4.9	81	12	8.0	4.3
4	2.3	.67	.45	.40	.35	.30	.30	2.6	92	20	7.6	4.0
5	2.2	.67	.45	.40	.35	.30	.30	2.3	93	18	7.6	4.1
6	2.3	.67	.45	.40	.35	.30	.30	2.3	84	18	7.3	4.3
7	2.3	.67	.45	.40	.35	.30	.30	1.9	79	17	6.9	4.3
8	2.5	.86	.45	.40	.35	.30	.30	2.1	76	16	6.9	4.2
9	2.5	.75	.45	.40	.35	.30	.35	2.5	77	16	7.2	2.5
10	2.5	.75	.45	.40	.30	.30	.30	2.5	77	14	6.9	1.8
11	2.8	.82	.40	.40	.30	.30	.30	2.5	75	12	6.4	2.4
12	2.9	.82	.40	.40	.30	.30	.30	3.5	76	12	6.2	2.6
13	3.0	.80	.40	.40	.30	.30	.35	4.5	77	12	6.2	2.6
14	3.3	.80	.40	.40	.30	.30	.35	5.5	83	12	6.2	2.6
15	3.5	.80	.40	.40	.30	.30	.35	6.9	85	11	6.2	2.6
16	3.6	.80	.40	.40	.30	.30	.45	6.6	79	11	6.2	2.6
17	3.6	.70	.40	.40	.30	.30	.60	5.6	78	11	6.2	2.6
18	3.6	.60	.40	.40	.30	.30	.90	4.9	76	11	6.2	2.6
19	3.7	.50	.40	.40	.30	.30	1.2	8.7	77	9.9	6.2	2.6
20	3.6	.45	.40	.40	.30	.30	1.0	9.5	74	9.1	6.2	2.6
21	4.0	.45	.40	.40	.30	.30	.75	12	74	8.7	6.2	2.6
22	3.6	.45	.40	.40	.30	.30	.67	9.1	74	8.7	5.9	2.6
23	3.6	.45	.40	.40	.30	.30	.45	10	44	8.5	5.9	2.6
24	3.6	.45	.40	.40	.30	.30	.90	11	21	8.0	5.9	2.6
25	3.6	.45	.40	.40	.30	.30	1.7	14	13	8.0	5.9	2.7
26	4.0	.45	.40	.40	.30	.30	2.6	20	6.6	7.7	5.9	2.8
27	4.0	.45	.40	.40	.30	.30	1.9	20	6.9	8.1	5.6	2.6
28	4.0	.45	.40	.40	.30	.30	1.6	23	6.9	8.7	5.6	2.5
29	4.0	.45	.40	.40	---	.30	2.1	22	6.6	9.2	5.6	2.5
30	4.0	.45	.40	.40	---	.30	1.9	26	6.6	9.0	5.6	2.5
31	1.9	---	.40	.35	---	.30	---	47	---	8.0	4.8	---
TOTAL	97.0	18.80	12.90	12.35	8.85	9.30	23.42	298.3	1838.6	348.4	199.5	88.2
MEAN	3.13	.63	.42	.40	.32	.30	.78	9.62	61.3	11.2	6.44	2.94
MAX	4.0	.86	.45	.40	.35	.30	2.6	47	93	20	8.0	4.3
MIN	1.9	.45	.40	.35	.30	.30	.30	1.9	6.6	6.2	4.8	1.8
AC-FT	192	37	26	24	18	18	46	592	3650	691	396	175

CAL YR 1980 TOTAL 1385.87 MEAN 3.79 MAX 37 MIN .40 AC-FT 2750
WTR YR 1981 TOTAL 2955.62 MEAN 8.10 MAX 93 MIN .30 AC-FT 5860

EXTREMES FOR 1981 WATER YEAR.--Maximum discharge, 101 ft^3/s (2.86 m^3/s) at 1630 June 4, gage height, 2.35 ft (0.716 m); minimum daily, 0.30 ft^3/s (0.008 m^3/s) Feb. 10 to Apr. 8, Apr. 10-12.

06746110 - JOE WRIGHT CREEK BELOW JOE WRIGHT RESERVOIR

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	TEMPERATURE (DEG C) (00010)	SPECIFIC CONDUCTANCE (UMHOS) (00095)
OCT			
07...	1215	6.0	40
DEC			
16...	1000	10.0	42
FEB			
24...	0830	.5	--
APR			
06...	1500	.0	70
MAY			
11...	1730	1.0	52
27...	1230	2.5	48
JUN			
16...	1300	3.5	44
24...	1445	4.5	40
JUL			
14...	1330	6.0	40
AUG			
05...	1120	6.5	46
SEP			
01...	1020	6.5	45

06746110 JOE WRIGHT CREEK BELOW JOE WRIGHT RESERVOIR

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	2.6	.86	.60	.58	.35	.35	.35	5.6	103	26	67
2	2.5	2.6	.76	.60	.54	.35	.35	.35	6.5	97	22	68
3	2.6	2.8	.66	.60	.50	.34	.35	.35	19	96	21	68
4	2.6	2.8	.60	.60	.48	.32	.35	1.2	31	88	20	68
5	2.6	2.8	.60	.60	.45	.32	.35	8.8	36	79	20	68
6	2.6	2.8	.60	.60	.43	.32	.35	8.8	41	70	20	67
7	2.6	2.8	.60	.60	.40	.34	.35	8.8	60	71	20	67
8	2.6	2.8	.60	.60	.37	.35	.35	8.8	77	73	20	67
9	2.6	2.8	.60	.60	.35	.35	.35	8.8	83	78	15	69
10	2.6	2.8	.60	.60	.35	.35	.35	8.8	84	80	14	54
11	2.6	3.2	.60	.60	.35	.35	.35	9.0	87	83	17	10
12	2.6	3.3	.60	.60	.35	.35	.35	9.1	92	86	17	6.0
13	2.8	3.8	.60	.60	.35	.35	.35	8.8	97	80	18	4.0
14	2.8	4.0	.60	.60	.35	.35	.35	8.8	94	78	18	3.0
15	2.8	4.0	.60	.60	.35	.35	.35	8.8	98	78	18	2.5
16	2.8	4.0	.60	.60	.35	.35	.35	8.8	99	76	18	2.0
17	2.8	4.0	.60	.60	.35	.35	.35	8.8	75	69	18	1.8
18	2.8	4.0	.60	.60	.35	.35	.35	8.6	67	60	16	1.6
19	2.8	3.8	.60	.60	.35	.35	.35	8.6	80	59	16	1.5
20	2.8	3.8	.60	.60	.35	.35	.35	6.0	83	57	16	1.4
21	2.8	3.8	.60	.60	.35	.35	.35	1.5	81	49	16	1.4
22	2.7	3.8	.60	.60	.35	.35	.35	1.5	77	48	16	1.3
23	2.8	3.6	.60	.60	.35	.35	.35	1.9	49	48	16	1.3
24	2.8	3.4	.60	.60	.35	.35	.35	1.8	31	47	11	1.2
25	2.8	2.6	.60	.60	.35	.35	.35	1.3	64	43	9.1	1.2
26	2.8	2.2	.60	.60	.35	.35	.35	1.4	76	36	22	1.2
27	2.7	1.7	.60	.60	.35	.35	.35	1.6	79	32	49	1.2
28	2.6	1.5	.60	.60	.35	.35	.35	3.0	80	32	54	1.1
29	2.6	1.2	.60	.60	---	.35	.35	3.7	88	36	62	1.1
30	2.6	1.0	.60	.60	---	.35	.35	4.0	96	35	66	1.1
31	2.6	---	.60	.60	---	.35	---	4.4	---	35	67	---
TOTAL	83.2	90.3	19.08	18.60	10.75	10.74	10.50	166.45	2036.1	2002	758.1	708.9
MEAN	2.68	3.01	.62	.60	.38	.35	.35	5.37	67.9	64.6	24.5	23.6
MAX	2.8	4.0	.86	.60	.58	.35	.35	9.1	99	103	67	69
MIN	2.5	1.0	.60	.60	.35	.32	.35	.35	5.6	32	9.1	1.1
AC-FT	165	179	38	37	21	21	21	330	4040	3970	1500	1410

CAL YR 1981 TOTAL 3019.50 MEAN 8.27 MAX 93 MIN .30 AC-FT 5990
WTR YR 1982 TOTAL 5914.72 MEAN 16.2 MAX 103 MIN .32 AC-FT 11730

EXTREMES FOR 1982 WATER YEAR.--Maximum discharge, 111 ft^3/s (3.14 m /s) at 0815 July 1, gage height, 2.31 ft (0.704 m); minimum daily, 0.32 ft^3/s (0.009 m^3/s) Mar. 4-6.

LOCATION.--Lat 40°42'04", long 105°14'27", in NW¼SW¼ sec.33, T.9 N., R.70 W., Larimer County, Hydrologic Unit 10190007, 1,000 ft (300 m) upstream from North Fork and 11 mi (18 Km) northwest of Fort Collins.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT									
24...	1450	39	82	7.0	8.0	9.8	26	0	7.2
NOV									
29...	1510	22	97	7.4	.0	11.9	31	0	8.7
DEC									
04...	1207	36	98	--	.0	11.5	35	0	9.7
JAN									
24...	1245	19	103	--	1.0	13.8	39	0	11
FEB									
20...	1200	31	109	8.2	.0	11.8	40	0	11
MAR									
24...	1335	36	130	8.3	7.0	9.0	44	0	12
APR									
24...	1045	E700	107	7.9	5.0	9.6	39	8	11
MAY									
21...	0845	904	130	7.8	7.5	9.8	43	8	12
JUN									
16...	1200	970	<50	6.6	9.0	9.5	11	0	3.3
JUL									
16...	1215	474	<50	7.5	17.0	7.9	14	0	4.1
AUG									
19...	1150	117	<50	7.5	16.5	7.9	17	0	5.1
SEP									
23...	1030	52	48	7.4	9.0	9.2	18	1	5.3

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT									
24...	1.9	3.6	.3	1.0	26	8.9	1.1	.2	10
NOV									
29...	2.3	4.5	.4	1.0	34	8.7	1.5	.2	12
DEC									
04...	2.5	4.7	.4	.8	36	7.2	1.7	.2	12
JAN									
24...	2.9	5.0	.4	1.0	39	6.3	1.9	.2	12
FEB									
20...	3.1	5.0	.4	1.0	43	4.2	2.6	.2	11
MAR									
24...	3.3	5.5	.4	1.0	44	12	2.2	.3	12
APR									
24...	2.9	4.8	.3	1.3	31	8.1	2.1	.3	14
MAY									
21...	3.1	4.6	.3	1.2	35	9.1	2.1	.3	15
JUN									
16...	.7	1.9	.3	.6	13	1.2	.5	.1	7.4
JUL									
16...	.8	1.8	.2	.6	16	.7	.3	.2	7.1
AUG									
19...	1.1	1.8	.2	.7	18	6.3	1.4	.2	7.2
SEP									
23...	1.2	2.1	.2	.7	17	.8	1.3	.2	8.6

E ESTIMATED.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT									
24...	50	.07	5.3	.01	.010	.02	.020	.91	.010
NOV									
29...	60	.08	3.6	.12	.010	.13	.020	--	.010
DEC									
04...	61	.08	5.9	.15	.010	.16	.020	.53	.000
JAN									
24...	64	.09	3.3	.11	<.010	.11	<.010	.37	.010
FEB									
20...	65	.09	5.4	.12	<.010	.12	.030	.22	.010
MAR									
24...	75	.10	7.3	.04	.010	.05	.020	1.80	.030
APR									
24...	64	.09	E121	.17	.010	.18	.040	1.20	.020
MAY									
21...	69	.09	168	.17	<.010	.17	.010	.67	.020
JUN									
16...	24	.03	62.9	.06	<.010	.06	<.010	.93	.010
JUL									
16...	25	.03	32.0	<.01	<.010	.00	<.010	.70	.010
AUG									
19...	35	.05	11.1	<.01	<.010	.00	<.010	.30	.020
SEP									
23...	31	.04	4.3	<.01	<.010	.00	<.010	.42	.020

DATE	TIME	PCB, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)
APR										
24...	1045	.00	.00	.00	.00	.00	.00	.00	.00	.00
JUL										
16...	1215	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)
APR									
24...	.00	.00	.00	.00	.00	.00	.00	.00	.00
JUL									
16...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	METHYL TRI-THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
APR									
24...	.00	.00	.00	.00	0	.00	.00	.00	.00
JUL									
16...	.00	.00	.00	.00	0	.00	.00	.00	.00

E ESTIMATED.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT 24...	1450	--	<1	200	<2	<1	<1	8	70	50
NOV 29...	1510	--	<1	200	<1	<1	<1	<1	80	40
DEC 04...	1207	--	<1	400	<1	<1	2	<1	130	60
JAN 24...	1245	100	<1	100	<2	<1	<1	8	100	30
FEB 20...	1200	--	2	200	3	<20	<1	2	120	20
MAR 24...	1335	--	1	<100	<1	20	2	2	70	<10
APR 24...	1045	--	2	200	<2	<20	<2	8	5300	50
MAY 21...	0845	--	1	<100	<1	<1	4	6	1800	170
JUN 16...	1200	--	1	<100	<1	<1	1	24	570	100
JUL 16...	1215	--	2	<100	<1	<20	3	14	270	40
AUG 19...	1150	--	2	<100	<1	40	<1	12	170	70
SEP 23...	1030	--	1	<100	<1	<20	<1	2	220	100

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT 24...	2	4	4	.2	<1	4	<1	<1	<1
NOV 29...	4	<10	<10	<.1	<1	6	<1	<1	<20
DEC 04...	<1	<10	3	<.1	1	2	<1	<1	<1
JAN 24...	<2	<10	7	.4	1	6	<1	<1	20
FEB 20...	<2	<10	2	<.1	2	<1	<1	<1	<20
MAR 24...	3	<10	1	<.1	1	<2	<1	<1	<20
APR 24...	7	120	2	<.1	<1	9	1	<1	.50
MAY 21...	3	40	3	<.1	<1	10	<1	<1	30
JUN 16...	250	20	<3	.3	<1	<1	<1	<1	80
JUL 16...	27	<10	<3	<.1	<1	6	<1	<1	30
AUG 19...	5	20	4	<.1	<1	2	<1	<1	50
SEP 23...	3	<10	3	<.1	2	2	<1	<1	<20

06749500 - CACHE LA POUDRE RIVER NEAR FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT										
20...	1100	48	70	78	7.5	4.0	10.5	29	0	8.1
NOV										
20...	1030	22	62	110	7.0	.0	10.8	40	1	11
DEC										
18...	1020	37	45	88	7.9	.5	10.8	34	0	9.0
JAN										
22...	1400	14	104	115	7.7	.5	11.8	44	1	12
FEB										
20...	0930	20	100	97	7.6	1.0	11.5	37	0	10
MAR										
26...	1150	18	112	111	7.7	9.5	10.1	41	0	11
APR										
23...	1330	53	85	85	8.2	13.0	8.2	31	0	8.4
MAY										
21...	1230	296	65	63	7.7	11.5	9.0	23	0	6.6
JUN										
18...	1330	600	50	37	7.6	12.5	8.7	14	0	4.0
JUL										
16...	1050	195	34	40	7.4	17.5	7.7	15	0	4.2
AUG										
12...	1445	102	40	47	7.3	17.5	7.8	18	5	4.8
SEP										
02...	0845	66	40	53	7.2	14.0	8.1	19	0	5.5

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT										
20...	2.2	3.5	.3	.9	32	32	4.8	1.6	.2	9.6
NOV										
20...	3.0	4.9	.4	1.1	--	39	1.3	2.4	.3	13
DEC										
18...	2.9	4.0	.3	.9	--	41	1.5	1.6	.3	10
JAN										
22...	3.3	6.2	.4	1.0	--	43	8.7	2.0	.3	12
FEB										
20...	2.9	5.6	.4	1.0	--	38	8.2	2.0	.2	9.9
MAR										
26...	3.2	5.9	.4	1.1	--	43	6.9	2.0	.3	10
APR										
23...	2.4	4.3	.3	1.1	--	32	2.0	1.3	.2	10
MAY										
21...	1.7	4.9	.5	.8	--	29	1.6	.9	.1	11
JUN										
18...	1.0	1.8	.2	.7	--	16	.9	.4	.1	7.3
JUL										
16...	1.0	2.2	.3	.5	--	19	2.8	.3	.1	7.2
AUG										
12...	1.5	2.6	.3	.8	--	13	<5.0	.3	.1	7.2
SEP										
02...	1.3	2.1	.2	1.0	--	22	<5.0	.7	.5	8.1

06749500 - CACHE LA POUDRE RIVER NEAR FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)
OCT										
20...	50	.07	6.5	<.01	--	<.010	<.10	.010	.29	.010
NOV										
20...	61	.08	3.6	.10	--	.010	.11	.030	.33	.020
DEC										
18...	56	.08	5.6	.18	--	.010	.19	.030	2.10	.020
JAN										
22...	72	.10	3.1	.10	--	<.010	.10	.010	1.40	.020
FEB										
20...	63	.09	1.8	.05	--	<.010	.05	.030	.04	.010
MAR										
26...	67	.09	3.3	.08	--	<.010	.08	.050	.35	.020
APR										
23...	49	.07	7.0	.06	--	<.010	.06	.070	.37	.010
MAY										
21...	45	.06	36.0	.07	<.010	<.010	.07	.080	.54	.040
JUN										
18...	26	.04	42.1	.03	--	.010	.04	.150	1.00	.010
JUL										
16...	30	.04	15.8	.02	--	.010	.03	.030	.72	.030
AUG										
12...	--	--	--	.13	<.010	<.010	.13	.150	.49	<.010
SEP										
02...	--	--	--	--	--	<.020	<.10	.100	.29	.020

DATE	TIME	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)
MAY										
21...	1230	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP										
02...	0845	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)	METHYL TRITHION, TOTAL (UG/L)
MAY										
21...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP										
02...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	MIREX, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	PERTHANE TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)
MAY									
21...	.00	.00	.00	0	.00	.00	.00	.00	.00
SEP									
02...	.00	.00	.00	0	.00	<.01	.00	.00	.00

06749500 - CACHE LA POUDRE RIVER NEAR FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT										
20...	1100	--	1	<100	<1	<1	<1	7	140	30
NOV										
20...	1030	40	--	--	<2	3	--	<2	--	30
DEC										
18...	1020	20	--	--	<1	<1	--	<2	--	40
JAN										
22...	1400	20	--	--	<1	3	--	3	--	<10
FEB										
20...	0930	--	1	<100	<1	<20	<1	3	60	20
MAR										
26...	1150	40	--	--	<1	4	--	2	--	20
APR										
23...	1330	70	--	--	<1	<1	--	4	--	60
MAY										
21...	1230	--	1	<100	<1	30	<1	3	530	90
JUN										
18...	1330	170	--	--	<1	3	--	6	--	80
JUL										
16...	1050	90	--	--	<1	4	--	3	--	60
AUG										
12...	1445	--	<1	<100	<1	<1	<1	3	120	45
SEP										
02...	0845	240	--	--	<1	7	--	2	--	47

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT									
20...	2	<10	<1	<.1	1	<2	<1	<1	<20
NOV									
20...	2	--	2	--	--	--	--	<1	50
DEC									
18...	<1	--	<1	--	--	--	--	<1	20
JAN									
22...	5	--	3	--	--	--	--	<1	<20
FEB									
20...	2	<10	2	<.1	1	<1	<1	<1	<20
MAR									
26...	<2	--	2	--	--	--	--	<1	20
APR									
23...	2	--	2	--	--	--	--	<1	<1
MAY									
21...	5	<10	2	<.1	10	5	<1	<1	<20
JUN									
18...	4	--	<1	--	--	--	--	<1	<20
JUL									
16...	6	--	1	--	--	--	--	<1	<20
AUG									
12...	<2	<10	3	.2	3	<1	<1	<1	<1
SEP									
02...	4	--	2	--	--	--	--	<1	<20

06749500 - CACHE LA POUDRE RIVER NEAR FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT									
08...	1415	30	70	55	7.7	12.0	7.8	23	0
NOV									
17...	1030	18	75	65	7.0	4.5	10.6	26	0
DEC									
16...	1030	13	77	55	7.1	.5	11.5	30	0
JAN									
20...	1115	22	82	87	7.3	.5	11.6	30	0
FEB									
23...	1330	23	77	73	7.2	1.5	11.6	27	0
MAR									
23...	0920	17	82	86	7.4	1.0	--	31	0
APR									
14...	1015	16	86	78	--	10.0	9.2	29	0
MAY									
12...	1415	377	39	48	7.0	7.0	9.9	24	3
JUN									
11...	1200	1870	41	37	7.2	9.0	9.2	13	0
JUL									
14...	1030	1320	35	33	7.5	12.5	8.8	11	0
AUG									
19...	1200	650	39	38	7.2	17.0	7.8	13	0
SEP									
15...	1330	173	75	62	7.1	10.0	9.2	24	6

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT									
08...	6.7	1.6	2.9	.3	.9	28	5.0	1.1	.2
NOV									
17...	7.3	2.0	3.8	.3	.9	28	6.0	1.2	.2
DEC									
16...	8.2	2.3	4.0	.3	1.0	33	5.0	1.1	.2
JAN									
20...	8.2	2.3	4.0	.3	1.0	36	<5.0	1.4	.3
FEB									
23...	7.2	2.1	3.3	.3	.8	33	6.0	1.8	.2
MAR									
23...	8.4	2.4	4.1	.3	1.1	36	6.0	1.6	.3
APR									
14...	8.0	2.2	4.1	.3	1.1	36	6.0	1.4	.3
MAY									
12...	7.3	1.3	2.3	.2	.9	21	7.0	.7	.2
JUN									
11...	3.8	1.0	1.9	.2	.8	15	<5.0	.8	.1
JUL									
14...	3.2	.7	1.3	.2	.5	14	<5.0	.4	.1
AUG									
19...	3.6	.9	1.8	.2	.5	17	<5.0	.5	.1
SEP									
15...	6.8	[illegible]	[illegible]	[illegible]	.9	18	[illegible]	[illegible]	.2

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT									
08...	9.6	45	.06	3.6	<.020	<.10	.130	.55	<.010
NOV									
17...	11	50	.07	2.4	<.020	.14	.140	.28	<.010
DEC									
16...	11	53	.07	1.9	<.020	<.10	<.070	.31	.010
JAN									
20...	11	--	--	--	<.020	<.09	<.070	.25	<.010
FEB									
23...	8.8	50	.07	3.1	<.020	<.10	.060	.69	<.010
MAR									
23...	10	56	.08	2.6	<.020	<.10	.080	.24	.010
APR									
14...	9.7	54	.07	2.3	<.020	<.10	<.060	.32	<.010
MAY									
12...	8.2	41	.06	41.7	<.020	<.10	.120	.51	<.010
JUN									
11...	8.5	--	--	--	<.020	<.10	<.060	1.40	.040
JUL									
14...	7.1	--	--	--	<.020	<.10	<.060	.80	.050
AUG									
19...	6.8	--	--	--	<.020	<.10	.130	1.00	.070
SEP									
15...	10	40	.05	18.7	<.020	<.10	.100	.50	.060

DATE	TIME	PCB, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)
MAY										
12...	1415	<.10	<.10	<.01	<.10	<.01	<.01	<.01	<.01	<.01
SEP										
15...	1330	<.10	<.10	<.01	<.10	<.01	<.01	<.01	<.01	<.01

DATE	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)
MAY										
12...	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
SEP										
15...	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01

DATE	MIREX, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)
MAY									
12...	<.01	<.01	<.10	<1	<.01	<.01	<.01	<.01	<.01
SEP									
15...	<.01	<.01	<.10	<1	<.01	<.01	<.01	<.01	<.01

06749500 - CACHE LA POUDRE RIVER NEAR FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT										
08...	1415	70	--	--	<1	5	--	2	--	32
NOV										
17...	1030	--	<1	<100	<1	<10	<1	5	30	37
DEC										
16...	1030	110	--	--	<1	2	--	7	--	28
JAN										
20...	1115	120	--	--	<1	3	--	2	--	34
FEB										
23...	1330	--	<1	<100	<1	<10	1	8	40	24
MAR										
23...	0920	150	--	--	<1	5	--	3	--	9
APR										
14...	1015	70	--	--	<1	3	--	3	--	12
MAY										
12...	1415	--	<1	<100	<1	<10	<1	9	330	120
JUN										
11...	1200	770	--	--	<1	1	--	4	--	120
JUL										
14...	1030	270	--	--	<1	8	--	2	--	81
AUG										
19...	1200	--	<1	<100	<1	<10	<1	3	520	61
SEP										
15...	1330	180	--	--	<1	<1	--	2	--	100

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT									
08...	<2	--	3	--	--	--	--	<1	20
NOV									
17...	<1	10	2	<.1	2	2	<1	<1	10
DEC									
16...	2	--	2	--	--	--	--	<1	10
JAN									
20...	2	--	<1	--	--	--	--	<1	20
FEB									
23...	2	<10	2	<.1	<1	2	<1	<1	10
MAR									
23...	7	--	4	--	--	--	--	<1	10
APR									
14...	2	--	<3	--	--	--	--	<1	10
MAY									
12...	6	10	3	<.1	<1	4	<1	7	10
JUN									
11...	1	--	4	--	--	--	--	<1	20
JUL									
14...	1	--	3	--	--	--	--	<1	30
AUG									
19...	1	20	2	.1	<1	6	<1	<1	10
SEP									
15...	5	--	2	--	--	--	--	<1	10

LOCATION.--Lat 40°36'11", long 105°05'43", in NE¼SE¼ sec.3, T.7 N., R.69 W., Larimer County, Hydrologic Unit 10190007, at Shields Street bridge, 0.8 mi (1.3 km) downstream from Larimer-Weld Canal and 1.0 mi (1.6 km) northwest of Fort Collins.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
OCT												
25...	1105	18	430	7.7	11.0	9.8	196	57	13	11	.4	2.2
NOV												
29...	1315	56	370	6.8	.5	12.4	173	51	11	9.4	.3	1.7
DEC												
04...	1450	10	365	--	4.0	11.6	165	48	11	10	.4	1.3
JAN												
24...	1430	29	430	7.9	4.5	11.2	182	53	12	10	.3	1.6
FEB												
21...	0930	39	415	8.1	2.5	11.4	165	48	11	9.7	.3	2.0
MAR												
19...	1410	E550	315	9.0	9.0	10.6	133	39	8.7	8.4	.3	1.3
APR												
23...	1520	1370	170	8.0	8.5	9.2	59	17	4.0	6.1	.4	1.4
MAY												
21...	1105	2440	160	8.1	10.5	9.2	55	16	3.7	5.3	.3	1.4
JUN												
16...	1430	765	58	7.1	14.5	8.1	22	6.4	1.5	2.2	.2	.8
JUL												
17...	0950	28	160	7.3	17.0	5.5	59	17	4.1	6.0	.4	1.5
AUG												
20...	0945	52	145	7.8	13.0	9.2	57	17	3.6	4.5	.3	1.1
SEP												
23...	1300	57	265	8.2	14.0	10.0	112	33	7.1	6.5	.3	1.5

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT												
25...	79	3.8	.4	8.0	261	.35	12.7	.45	.020	.020	30	20
NOV												
29...	69	3.3	.3	9.6	230	.31	34.8	.54	.020	.010	20	20
DEC												
04...	51	3.9	.4	9.0	216	.29	5.8	.67	.030	<.010	30	<10
JAN												
24...	70	4.4	.4	11	238	.32	18.6	.77	.040	<.010	<10	20
FEB												
21...	64	4.4	.4	11	226	.31	23.8	.81	.090	.010	<10	20
MAR												
19...	52	4.1	.4	10	177	.24	--	.49	<.010	.030	20	6
APR												
23...	11	2.9	.7	14	90	.12	333	.28	.080	.030	50	5
MAY												
21...	13	2.3	.6	15	87	.12	573	.41	.010	.020	40	4
JUN												
16...	2.6	.9	.1	8.3	37	.05	76.4	.10	<.010	.010	70	5
JUL												
17...	16	2.6	.4	7.6	90	.12	6.8	.33	.230	.020	70	20
AUG												
20...	21	2.5	.2	6.3	86	.12	12.1	.25	<.010	.020	<10	6
SEP												
23...	34	3.4	.4	6.9	145	.20	22.4	.31	<.010	.010	50	<10

E ESTIMATED.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)	ENDOSULFAN, TOTAL (UG/L)
JAN										
24...	1430	.00	.00	.00	.00	.00	.00	.00	.00	.00
JUL										
17...	0950	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)	METHYL TRITHION, TOTAL (UG/L)
JAN									
24...	.00	.00	.00	.00	.00	.00	.00	.00	.00
JUL									
17...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	MIREX, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	PERTHANE TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
JAN									
24...	.00	.00	.00	.00	0	.00	.00	.00	.00
JUL									
17...	.00	.00	.00	.00	0	.00	.01	.00	.00

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT									
20...	1440	73	230	216	8.9	12.0	10.2	92	26
NOV									
20...	1330	6.7	485	502	7.4	6.5	9.6	223	63
DEC									
18...	1340	2.5	596	524	7.9	6.5	10.1	235	66
JAN									
22...	1100	2.0	530	566	7.9	4.0	10.6	271	77
FEB									
20...	1220	2.5	520	536	8.0	9.5	10.2	246	69
MAR									
26...	1440	1.8	508	525	8.1	16.0	10.6	239	66
APR									
23...	1530	8.8	310	313	8.8	18.0	9.8	139	39
MAY									
21...	1430	114	160	165	8.9	14.5	9.2	69	20
JUN									
18...	0945	140	100	98	8.1	13.5	9.0	38	11
JUL									
16...	1320	82	130	132	8.1	16.5	8.7	54	16
AUG									
13...	0915	54	166	155	7.9	14.5	9.3	62	18
SEP									
02...	1145	15	180	189	8.4	18.5	9.3	79	23

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT									
20...	6.5	7.8	.4	1.2	88	22	3.6	.4	6.8
NOV									
20...	16	14	.4	2.0	190	64	6.4	.6	10
DEC									
18...	17	15	.4	1.6	210	56	7.5	.6	10
JAN									
22...	19	20	.5	1.7	210	73	7.3	.6	12
FEB									
20...	18	18	.5	1.8	200	69	7.0	.5	9.3
MAR									
26...	18	16	.5	1.7	190	73	7.0	.5	8.5
APR									
23...	10	11	.4	1.5	100	46	4.5	.4	9.3
MAY									
21...	4.7	9.1	.5	1.2	65	17	2.7	.3	10
JUN									
18...	2.6	3.1	.2	.9	29	2.3	1.3	.2	7.8
JUL									
16...	3.4	4.8	.3	1.0	50	<5.0	2.0	.2	6.6
AUG									
13...	4.2	4.9	.3	1.2	53	16	1.6	.2	6.4
SEP									
02...	5.2	5.7	.3	1.4	69	21	2.1	.5	6.7

06752250 - CACHE LA POUDRE R A SHIELDS ST A FT COLLINS,

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT								
20...	128	.17	25.4	.16	.040	.010	30	4
NOV								
20...	296	.40	5.4	1.4	.050	.030	<10	20
DEC								
18...	308	.42	2.1	1.9	.050	.030	<10	<10
JAN								
22...	344	.47	1.9	1.7	.030	.030	<10	40
FEB								
20...	320	.43	1.4	1.5	.030	.010	<10	20
MAR								
26...	311	.42	1.5	1.4	.100	.020	20	<10
APR								
23...	183	.25	4.4	.34	.050	.010	<10	9
MAY								
21...	105	.14	32.3	.18	.080	.040	90	6
JUN								
18...	47	.06	17.8	.11	.110	.020	80	4
JUL								
16...	65	.09	14.4	.19	.020	.020	40	4
AUG								
13...	86	.12	12.5	.25	.120	<.010	35	5
SEP								
02...	108	.15	4.4	.20	.090	.020	23	8

DATE	TIME	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)
MAY										
21...	1430	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP										
02...	1145	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)
MAY									
21...	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP									
02...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	MIREX, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
MAY									
21...	.00	.00	.00	.00	0	.00	.01	.00	.00
SEP									
02...	.00	.00	.00	.00	0	.00	.02	.00	.00

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT										
08...	1140	88	190	195	8.1	14.0	9.8	83	25	5.1
NOV										
17...	1215	5.2	480	479	7.8	9.5	10.8	221	62	16
DEC										
16...	1320	3.6	480	469	7.7	4.0	12.0	230	64	17
JAN										
20...	1420	1.9	524	537	7.7	4.0	11.2	249	70	18
FEB										
23...	1515	1.8	470	521	7.8	7.5	11.5	216	60	16
MAR										
24...	0930	1.8	520	495	7.8	6.5	--	253	70	19
APR										
13...	1750	3.8	528	499	8.2	13.0	9.6	249	70	18
MAY										
12...	1115	45	200	195	8.0	9.5	9.0	89	26	5.8
JUN										
10...	1600	113	80	75	7.6	15.0	8.2	28	8.2	1.9
JUL										
14...	1320	299	61	57	7.8	16.0	8.3	22	6.6	1.4
AUG										
19...	1420	141	80	79	7.7	18.0	8.8	31	9.2	2.0
SEP										
15...	0930	20	178	183	7.5	10.5	9.0	76	22	5.1

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
OCT										
08...	4.7	.2	1.2	69	20	2.2	.2	5.6	114	.16
NOV										
17...	13	.4	2.0	160	69	5.6	.4	9.4	270	.37
DEC										
16...	14	.4	1.8	160	67	5.6	.5	11	268	.36
JAN										
20...	15	.4	1.8	210	62	6.5	.5	11	310	.42
FEB										
23...	12	.4	1.5	180	59	5.6	.3	9.7	273	.36
MAR										
24...	18	.5	1.9	160	71	7.2	.6	9.1	293	.40
APR										
13...	14	.4	2.1	180	91	6.1	.5	7.6	322	.43
MAY										
12...	6.5	.3	1.4	70	20	2.4	.4	6.7	118	.16
JUN										
10...	3.0	.3	.9	27	9.0	1.2	.2	9.0	90	.07
JUL										
14...	1.9	.2	.7	23	5.0	.7	.1	7.0	38	.05
AUG										
19...	2.5	.2	.7	33	8.0	.8	.2	6.1	49	.07
SEP										
15...	5.9	.3	1.8	67	20	2.5	.3	8.9	100	.15

06752258 - CACHE LA POUDRE R A SHIELDS ST A FT COLLINS,

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT									
08...	27.1	.19	.140	--	--	<.010	--	22	8
NOV									
17...	3.9	.10	.080	--	--	.010	--	23	16
DEC									
16...	2.7	1.0	<.070	--	--	.020	--	17	11
JAN									
20...	1.6	1.2	.100	--	--	<.010	--	12	16
FEB									
23...	1.3	1.1	.080	--	--	.010	--	20	26
MAR									
24...	1.4	.94	.060	--	--	.030	--	16	20
APR									
13...	3.3	.92	.090	--	--	<.010	--	24	15
MAY									
12...	14.3	.11	.180	--	--	.020	--	59	8
JUN									
10...	15.3	<.10	.140	.46	.60	.050	--	110	8
JUL									
14...	30.7	<.10	<.060	--	--	.050	.010	84	5
AUG									
19...	18.7	<.10	.080	--	--	.020	--	68	5
SEP									
15...	5.8	.21	.060	--	--	.030	--	77	11

DATE	TIME	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)
MAY										
12...	1115	<.10	<.01	<.10	<.01	<.01	<.01	<.01	<.01	<.01
SEP										
15...	0930	<.10	<.01	<.10	<.01	<.01	<.01	<.01	<.01	.01

DATE	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)
MAY									
12...	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
SEP									
15...	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01

DATE	MIREX, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
MAY									
12...	<.01	<.10	<.01	<.10	<1	<.01	<.01	<.01	<.01
SEP									
15...	<.01	<.10	<.01	<.10	<1	<.01	.02	<.01	<.01

LOCATION.--Lat 40°35'17", long 105°04'08", in NE¼SW¼ sec.12, T.7 N., R.69 W., Larimer County, Hydrologic Unit 10190007, on left bank 150 ft (46 m) downstream from Lincoln Ave. Bridge, and 2,200 ft (670 m) east of intersection of College Ave. (U.S. Highway 287) and Mountain Ave. in Fort Collins.

DRAINAGE AREA.--1,127 mi^2 (2,919 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1975 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	OXYGEN, DIS-SOLVED (MG/L)
OCT		
19...	1115	10.6
NOV		
23...	1315	13.0
DEC		
06...	0945	12.2
JAN		
24...	1100	11.9
24...	1700	12.3
24...	1800	11.7
24...	1900	11.1
24...	2000	11.1
24...	2100	11.0
24...	2200	10.8
24...	2300	10.8
24...	2400	10.7
25...	0100	10.7
25...	0200	10.6
25...	0300	10.6
25...	0400	10.6
25...	0500	10.4
25...	0600	10.3
25...	0700	10.3
25...	0800	10.1
25...	0900	10.6
25...	1000	11.9
25...	1100	12.6
25...	1200	13.0
25...	1300	13.0
25...	1400	13.0
25...	1500	13.0
25...	1600	12.9
FEB		
29...	1030	11.2
MAR		
26...	1400	12.4
26...	1500	12.1
26...	1600	11.8
26...	1700	11.0
26...	1800	10.1
26...	1900	9.2
26...	2000	8.5
26...	2100	8.1
26...	2200	8.1
26...	2300	8.1
MAR		
26...	2400	8.2
27...	0100	8.3
27...	0200	8.4
27...	0300	8.4
27...	0400	8.5
27...	0500	8.6
27...	0600	8.7
27...	0700	8.9
27...	0800	9.8
27...	0900	10.7
27...	1000	11.4
27...	1100	12.1
27...	1200	12.9
27...	1300	13.5
APR		
24...	0830	10.3
MAY		
14...	1000	10.4
14...	1100	12.2
14...	1200	13.2
14...	1300	14.2
14...	1400	14.3
14...	1500	14.5
14...	1600	13.9
14...	1700	13.3
14...	1800	12.3
14...	1900	10.5
14...	2000	9.7
14...	2100	8.2
14...	2200	6.7
14...	2300	5.6
14...	2400	5.3
15...	0100	4.9
15...	0200	5.2
15...	0300	5.5
15...	0400	5.9
15...	0500	6.1
15...	0600	6.3
15...	0700	6.5
15...	0800	6.7
15...	0900	7.3

06752260 - CACHE LA POUDRE RIVER AT FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	OXYGEN, DIS-SOLVED (MG/L)
MAY		
15...	0945	7.8
JUN		
30...	1020	9.4
JUL		
25...	1240	10.6
25...	1300	10.8
25...	1400	10.6
25...	1500	9.6
25...	1600	9.4
25...	1700	7.4
25...	1800	8.5
25...	1900	8.7
25...	2000	8.1
25...	2100	7.4
25...	2200	7.1
25...	2300	7.1
25...	2400	7.2
26...	0100	7.3
26...	0200	7.4
26...	0300	7.3
26...	0400	7.3
26...	0500	7.4
26...	0600	7.6
26...	0700	7.8
26...	0800	8.1
26...	0900	9.1
26...	1000	10.6
26...	1100	10.7
26...	1200	10.4
26...	1300	10.3
AUG		
17...	1000	8.8
SEP		
22...	1200	10.4

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT										
19...	1115	4.7	580	7.8	11.0	10.6	257	54	70	20
NOV										
23...	1315	4.0	680	7.4	3.0	13.0	270	63	75	20
DEC										
06...	0945	4.3	550	7.4	3.0	12.2	251	56	71	18
JAN										
24...	1100	3.1	680	7.6	2.0	11.9	284	71	79	21
FEB										
29...	1030	2.8	660	7.4	4.0	11.2	294	75	78	24
MAR										
26...	1400	4.0	590	8.1	11.0	12.4	266	69	72	21
APR										
24...	0830	8.5	570	7.8	9.0	10.3	247	67	66	20
MAY										
15...	0945	2.0	540	7.4	11.0	7.8	264	51	71	21
JUN										
30...	1020	366	96	6.4	11.5	9.4	34	0	10	2.3
JUL										
25...	1240	51	185	7.6	17.0	10.6	72	9	21	4.8
AUG										
17...	1000	7.0	120	7.0	13.5	8.8	51	9	16	2.6
SEP										
22...	1200	6.2	300	8.2	16.0	10.4	142	25	41	9.7

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT										
19...	23	.6	3.2	248	0	203	75	8.6	.4	8.3
NOV										
23...	29	.8	2.9	252	0	207	95	21	.5	8.8
DEC										
06...	21	.6	2.5	238	0	195	82	8.1	.5	8.0
JAN										
24...	23	.6	3.0	260	0	213	110	12	.5	8.1
FEB										
29...	25	.7	3.3	267	0	219	110	13	.5	6.9
MAR										
26...	23	.6	3.1	240	0	197	100	11	.5	7.6
APR										
24...	20	.6	3.1	220	0	180	93	8.7	.5	7.9
MAY										
15...	28	.8	3.7	260	0	213	94	13	.5	7.9
JUN										
30...	2.6	.2	.8	41	0	34	7.1	1.1	.3	6.4
JUL										
25...	4.7	.3	1.2	77	0	63	21	2.0	.3	6.3
AUG										
17...	3.2	.2	.9	51	0	42	11	1.4	.3	5.8
SEP										
22...	12	.5	2.2	143	0	117	47	5.6	.3	6.5

06752260 - CACHE LA POUDRE RIVER AT FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT										
19...	333	.45	4.2	.55	.050	.00	.05	.010	--	<.010
NOV										
23...	380	.51	4.1	.78	<.010	.38	.38	<.010	--	<.010
DEC										
06...	331	.45	3.9	.59	.020	.36	.38	<.010	--	.010
JAN										
24...	389	.52	3.3	.91	.020	.31	.33	.020	--	<.010
FEB										
29...	396	.53	3.0	.73	.020	.56	.58	<.010	<.010	<.010
MAR										
26...	359	.48	3.9	.52	.010	.44	.45	.020	--	<.010
APR										
24...	329	.45	7.6	.28	.040	.34	.38	.040	--	<.010
MAY										
15...	370	.50	2.0	.60	.020	.36	.38	.010	--	<.010
JUN										
30...	51	.07	50.4	.07	--	--	.32	.020	--	<.010
JUL										
25...	100	.13	13.9	.13	<.010	.11	.11	.020	--	.010
AUG										
17...	67	.09	1.3	.17	.020	.08	.10	.040	--	.010
SEP										
22...	197	.26	3.3	.37	.050	.32	.37	.030	--	<.010

DATE	TIME	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT			
19...	1115	30	30
NOV			
23...	1315	40	30
DEC			
06...	0945	20	40
JAN			
24...	1100	20	50
FEB			
29...	1030	30	70
MAR			
26...	1400	30	60
APR			
24...	0830	40	40
MAY			
15...	0945	30	90
JUN			
30...	1020	60	20
JUL			
25...	1240	70	<10
AUG			
17...	1000	100	<10
SEP			
22...	1200	70	30

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,940 ft (1,506 m), from topographic map.

REMARKS.--Records good except for period of fragmentary gage-height record Mar. 25 to May 4, 1981, which is fair. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, diversion for municipal supply, diversions above station for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,700 ft^3/s (161 m^3/s) Aug. 1, 1976, gage height, 8.84 ft (2.694 m), from floodmarks, from rating curve extended above 1,200 ft^3/s (34 m^3/s), on basis of slope-area measurement of peak flow; minimum daily, 0.77 ft^3/s (0.022 m^3/s) Sept. 16, 1981.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	5.0	3.5	3.2	3.1	2.7	2.7	5.3	27	430	1110	86
2	13	6.1	5.0	3.1	3.5	3.2	2.5	4.0	51	362	753	95
3	11	4.6	8.2	2.9	4.6	3.1	2.4	3.7	43	254	283	126
4	6.5	5.0	4.8	3.1	4.5	2.8	2.5	3.7	107	248	194	16
5	4.8	5.2	5.0	3.5	4.2	3.0	2.4	3.5	52	225	44	7.8
6	4.6	4.8	5.0	3.5	3.8	3.1	5.4	4.2	90	271	51	6.1
7	5.1	4.6	5.0	3.5	5.2	3.0	3.1	3.0	51	296	66	28
8	6.4	5.8	4.4	3.3	3.9	2.8	2.5	2.0	53	264	63	47
9	6.4	5.4	4.0	3.3	3.7	2.7	4.4	2.0	78	234	62	40
10	5.1	4.8	4.1	3.4	3.4	2.7	5.0	2.0	58	220	51	24
11	4.6	4.5	4.2	3.3	3.7	2.8	4.9	1.9	60	176	57	26
12	4.2	4.4	4.2	3.4	3.6	2.7	4.7	1.8	46	184	30	42
13	4.2	4.4	4.0	3.3	3.5	2.4	4.5	1.9	69	227	50	48
14	4.2	4.8	3.7	3.2	3.5	2.5	4.5	2.2	77	217	86	41
15	4.1	5.2	3.6	4.6	3.0	2.6	4.8	2.2	91	177	62	15
16	4.5	4.6	3.6	4.5	3.2	2.7	5.0	2.3	95	138	135	48
17	4.6	4.4	3.7	4.2	3.2	2.8	4.9	2.3	123	69	188	56
18	4.6	4.2	3.5	4.0	3.2	2.8	5.2	16	244	60	202	9.2
19	4.5	4.4	3.7	3.6	3.3	2.6	5.5	12	369	64	192	24
20	4.6	4.1	3.9	3.8	3.8	2.3	5.6	13	454	139	132	38
21	8.6	3.6	3.8	3.9	4.1	2.3	6.2	50	412	202	57	18
22	6.8	3.8	3.8	3.7	3.5	2.5	6.1	74	417	173	41	6.2
23	16	4.4	3.8	3.5	3.0	2.7	6.4	4.3	381	104	77	27
24	15	4.4	3.5	3.3	2.9	2.8	9.4	12	233	85	171	56
25	8.1	3.7	3.8	3.0	2.8	4.7	18	37	100	63	202	4.2
26	5.9	4.3	3.8	2.9	3.0	4.2	33	43	197	61	147	5.3
27	5.8	3.6	3.8	3.2	2.9	2.7	24	46	171	100	123	9.4
28	5.9	3.4	3.4	3.1	2.9	4.2	6.8	41	223	47	81	12
29	5.6	3.5	3.6	3.2	2.8	3.2	11	34	287	21	50	11
30	5.7	3.1	3.3	3.4	---	2.8	8.3	26	342	28	74	14
31	5.7	---	3.0	3.4	---	2.8	---	5.9	---	47	112	---
TOTAL	224.1	134.1	126.7	107.3	101.8	90.2	211.7	462.2	5001	5186	4946	986.2
MEAN	7.23	4.47	4.09	3.46	3.51	2.91	7.06	14.9	167	167	160	32.9
MAX	28	6.1	8.2	4.6	5.2	4.7	33	74	454	430	1110	126
MIN	4.1	3.1	3.0	2.9	2.8	2.3	2.4	1.8	27	21	30	4.2
AC-FT	445	266	251	213	202	179	420	917	9920	10290	9810	1960

WTR YR 1976 TOTAL 17577.3 MEAN 48.0 MAX 1110 MIN 1.8 AC-FT 34860

EXTREMES FOR 1976 WATER YEAR.--Maximum discharge, 5,700 ft^3/s (161 m^3/s) Aug. 1, gage height, 8.84 ft (2.694 m), from floodmarks, from rating curve extended above 1,200 ft^3/s (34 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 1.8 ft^3/s (0.051 m) May 12.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	OXYGEN, DIS-SOLVED (MG/L)
OCT		
25...	1315	12.5
NOV		
27...	1200	12.0
DEC		
11...	1530	11.7
11...	1600	11.6
11...	1700	10.8
11...	1800	10.5
11...	1900	10.2
11...	2000	10.0
11...	2100	10.0
11...	2200	10.1
11...	2300	10.2
11...	2400	10.2
12...	0100	10.2
12...	0200	10.2
12...	0300	10.2
12...	0400	10.3
12...	0500	10.3
12...	0600	10.3
12...	0700	10.3
12...	0800	10.3
12...	0900	11.2
12...	1000	11.7
12...	1100	12.1
12...	1200	12.1
12...	1300	12.1
12...	1400	12.1
12...	1500	11.8
12...	1600	11.4
JAN		
29...	1145	12.5
FEB		
26...	1200	13.2
MAR		
19...	1400	13.0
APR		
20...	1600	11.2
MAY		
05...	1700	12.2
JUN		
17...	1000	8.9
17...	1800	7.8
17...	1900	7.8
17...	2000	7.8
17...	2100	7.8
17...	2200	7.9
JUN		
17...	2300	8.0
17...	2400	8.0
18...	0100	8.1
18...	0200	8.2
18...	0300	8.2
18...	0400	8.2
18...	0500	8.3
18...	0600	8.3
18...	0700	8.4
18...	0800	8.5
18...	0900	8.7
18...	1000	8.7
18...	1100	8.9
18...	1200	8.9
18...	1300	8.9
18...	1400	9.1
18...	1500	9.2
18...	1600	9.1
18...	1700	8.9
18...	1800	8.7
18...	1900	8.7
18...	2000	8.5
18...	2100	8.4
18...	2200	8.4
18...	2300	8.4
18...	2400	8.3
19...	0100	8.3
19...	0200	8.3
19...	0300	8.3
19...	0400	8.3
19...	0500	8.3
19...	0600	8.3
19...	0700	8.4
19...	0800	8.5
19...	0900	8.7
19...	1000	8.8
19...	1100	8.8
19...	1200	8.9
19...	1300	8.9
19...	1400	8.8
19...	1600	8.7
JUL		
29...	0930	8.2
AUG		
21...	1330	9.8

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT										
25...	1315	3.7	640	7.2	10.0	12.5	262	51	72	20
NOV										
27...	1200	2.4	690	6.9	2.0	12.0	315	70	85	25
DEC										
11...	1530	1.5	720	7.1	4.0	11.7	296	66	79	24
JAN										
29...	1145	3.1	750	6.9	1.5	12.5	309	77	84	24
FEB										
26...	1200	3.0	700	6.7	2.0	13.2	300	73	79	25
MAR										
19...	1400	3.4	660	7.3	9.0	13.0	291	94	77	24
APR										
20...	1000	2.8	600	6.6	14.0	11.2	268	--	71	22
MAY										
05...	1700	2.2	610	7.6	19.0	12.2	267	--	69	23
JUN										
17...	1000	230	120	7.1	14.0	8.9	47	8	14	3.0
JUL										
29...	0930	56	340	6.8	18.0	8.2	153	55	40	13
AUG										
21...	1330	82	210	--	21.0	9.8	86	15	25	5.7

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT										
25...	22	.6	3.4	257	0	211	80	8.8	.5	8.3
NOV										
27...	24	.6	3.4	299	0	245	100	11	.6	11
DEC										
11...	26	.7	3.4	280	0	230	98	15	.5	9.8
JAN										
29...	24	.6	3.1	283	0	232	110	11	.8	10
FEB										
26...	25	.6	3.3	277	0	227	110	13	.4	9.2
MAR										
19...	25	.7	3.3	240	0	197	110	13	.5	8.7
APR										
20...	25	.7	3.7	--	0	--	100	12	.5	8.4
MAY										
05...	31	.9	3.5	--	0	--	99	13	.6	7.7
JUN										
17...	3.1	.2	1.0	47	0	39	11	1.2	.2	6.5
JUL										
29...	9.0	.3	2.5	120	0	98	54	3.4	.3	10
AUG										
21...	6.1	.3	1.3	87	0	71	23	2.8	.3	7.2

06752260 - CACHE LA POUDRE RIVER AT FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT									
25...	341	.46	3.4	.45	.010	.12	.13	.030	<.010
NOV									
27...	407	.55	2.6	1.3	.030	.53	.56	.020	.010
DEC									
11...	394	.54	1.6	1.2	.020	.83	.85	.010	<.010
JAN									
29...	406	.55	3.4	1.0	.010	.26	.27	.010	.020
FEB									
26...	401	.55	3.3	.81	.030	.16	.19	.010	.010
MAR									
19...	380	.52	3.5	.57	<.010	.46	.46	.030	.010
APR									
20...	--	--	--	.59	.010	.24	.25	<.010	.010
MAY									
05...	--	--	--	.48	<.010	.31	.31	.040	<.010
JUN									
17...	63	.09	39.3	.13	.010	.18	.19	.030	.010
JUL									
29...	191	.26	28.9	.43	.010	.52	.53	.040	.030
AUG									
21...	114	.16	25.3	.07	.100	.29	.39	.040	<.010

DATE	TIME	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
OCT			
25...	1315	70	40
NOV			
27...	1200	60	70
DEC			
11...	1530	70	60
JAN			
29...	1145	20	90
FEB			
26...	1200	20	80
MAR			
19...	1400	130	60
APR			
20...	1600	50	60
MAY			
05...	1700	40	50
JUN			
17...	1000	70	<10
JUL			
29...	0930	50	20
AUG			
21...	1330	70	--

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	2.4	1.6	2.0	2.6	2.8	3.9	11	246	95	109	10
2	8.8	2.6	1.7	2.0	2.7	3.0	7.6	3.9	272	71	77	11
3	7.9	3.1	1.8	2.2	2.5	2.7	8.0	3.5	231	66	72	7.2
4	6.6	3.1	1.8	2.2	2.4	2.8	4.4	2.4	305	70	30	5.3
5	8.7	3.1	1.7	2.2	2.5	3.0	3.9	2.3	252	83	52	50
6	8.4	2.6	1.8	2.2	2.5	3.0	4.6	2.2	366	132	40	47
7	8.7	2.8	1.9	2.3	2.7	3.0	4.6	2.1	449	97	15	49
8	7.9	3.1	2.0	2.3	2.8	3.1	4.4	6.2	339	70	11	53
9	6.2	3.4	1.9	2.1	2.8	3.1	4.6	17	374	41	16	59
10	5.2	3.7	1.7	2.2	2.5	3.1	4.8	20	358	22	3.0	41
11	5.3	3.7	1.9	2.3	2.5	2.5	4.6	2.6	228	22	4.6	7.6
12	5.5	3.7	2.3	2.3	2.6	3.2	4.2	3.4	242	75	4.4	17
13	5.5	3.6	2.4	2.5	2.7	3.0	4.2	14	252	82	7.2	9.6
14	6.0	3.4	2.5	2.5	2.7	3.2	4.4	26	370	91	4.2	9.2
15	7.2	3.4	2.5	2.5	2.7	3.0	21	38	260	64	26	9.2
16	7.6	3.1	2.5	2.4	2.6	3.0	3.2	13	203	27	50	11
17	8.8	2.1	2.4	2.5	2.6	3.0	2.8	173	178	22	23	3.9
18	10	2.1	2.2	2.6	2.7	3.1	3.0	232	183	20	26	2.1
19	5.3	2.1	2.0	2.7	2.9	3.0	3.2	216	191	23	75	14
20	3.6	2.1	2.4	2.7	2.8	3.1	2.8	224	143	54	102	3.4
21	4.2	2.0	2.4	2.7	2.8	3.2	2.6	178	133	126	70	11
22	5.1	2.1	2.3	2.7	2.9	3.1	2.6	162	122	54	79	9.2
23	6.4	2.2	2.4	2.8	2.4	3.1	2.5	167	146	10	68	5.5
24	4.6	2.1	2.3	2.7	2.6	3.1	3.1	227	178	30	60	40
25	3.6	2.1	2.0	2.8	2.6	3.1	2.5	278	113	784	64	18
26	3.4	2.1	2.0	2.9	2.7	3.2	2.8	265	68	276	50	5.6
27	2.4	2.0	2.0	2.6	2.6	3.2	3.7	244	66	56	40	3.5
28	2.5	1.6	2.0	2.5	2.8	3.2	4.4	213	36	48	24	3.5
29	2.5	1.6	2.0	2.5	---	3.2	4.2	259	46	44	23	4.4
30	2.4	1.6	1.9	2.5	---	3.6	3.9	288	88	14	29	4.2
31	2.4	---	2.1	2.6	---	3.1	---	309	---	41	8.8	---
TOTAL	182.7	78.6	64.4	76.0	74.2	94.8	136.5	3602.6	6438	2710	1263.2	524.4
MEAN	5.89	2.62	2.08	2.45	2.65	3.06	4.55	116	215	87.4	40.7	17.5
MAX	10	3.7	2.5	2.9	2.9	3.6	21	309	449	784	109	59
MIN	2.4	1.6	1.6	2.0	2.4	2.5	2.5	2.1	36	10	3.0	2.1
AC-FT	362	156	128	151	147	188	271	7150	12770	5380	2510	1040

CAL YR 1976 TOTAL 17418.1 MEAN 47.6 MAX 1110 MIN 1.6 AC-FT 34550
WTR YR 1977 TOTAL 15245.4 MEAN 41.8 MAX 784 MIN 1.6 AC-FT 30240

EXTREMES FOR 1977 WATER YEAR.--Maximum discharge, 1,100 ft^3/s (31.2 m^3/s) July 25, gage height, 4.20 ft (1.280 m); minimum daily, 1.6 ft^3/s (0.045 m^3/s) Nov. 28 to Dec. 1.

06752260 - CACHE LA POUDRE RIVER AT FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT										
26...	0900	1.8	600	7.9	9.0	8.0	258	38	72	19
NOV										
11...	0910	1.6	620	8.0	5.0	11.0	287	47	77	23
DEC										
13...	1315	1.8	650	7.9	5.0	12.4	296	66	79	24
JAN										
19...	1020	2.1	650	7.8	1.0	10.4	296	66	79	24
FEB										
24...	1220	2.4	600	8.0	6.0	10.4	285	75	76	23
MAR										
17...	1310	3.3	570	8.2	11.5	13.0	280	80	74	23
APR										
27...	1630	6.2	540	8.0	16.5	6.9	257	87	70	20
JUN										
01...	1530	70	115	7.7	11.0	9.2	46	7	13	3.2
27...	1645	540	45	7.5	14.0	8.9	18	2	5.3	1.2
JUL										
28...	0930	65	115	7.9	16.5	8.5	53	14	15	3.7
AUG										
18...	1000	57	140	8.3	15.5	9.1	59	6	17	3.9
SEP										
28...	1345	2.6	460	8.2	17.5	--	206	46	56	16

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT										
26...	24	.7	3.4	270	0	220	75	13	.6	12
NOV										
11...	26	.7	3.5	290	0	240	79	16	.6	12
DEC										
13...	30	.8	3.5	280	0	230	90	16	.6	12
JAN										
19...	35	.9	3.3	280	0	230	120	18	.6	11
FEB										
24...	27	.7	3.1	260	0	210	100	15	.6	9.8
MAR										
17...	25	.7	2.8	240	0	200	99	15	.6	7.9
APR										
27...	21	.6	3.5	210	0	170	110	9.9	.5	9.4
JUN										
01...	5.3	.4	1.0	48	0	39	10	2.2	.3	10
27...	2.0	.2	.7	20	0	16	4.7	.7	.1	8.3
JUL										
28...	3.8	.2	1.0	48	0	39	13	1.6	.2	7.7
AUG										
18...	4.6	.3	1.2	64	0	53	13	1.9	.2	7.0
SEP										
28...	21	.7	2.8	200	0	160	68	12	.6	6.6

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT									
26...	356	.48	1.7	.86	.020	.48	.50	.010	.010
NOV									
11...	386	.52	1.7	1.2	.040	.38	.42	.020	.010
DEC									
13...	400	.53	2.0	1.4	.040	.27	.31	.020	.020
JAN									
19...	434	.58	2.5	1.1	.020	.34	.36	.020	.040
FEB									
24...	387	.52	2.5	.96	.030	.14	.17	.060	.020
MAR									
17...	369	.50	3.3	.63	<.010	.11	.11	.080	.010
APR									
27...	349	.47	5.9	.27	.060	.51	.57	.120	.050
JUN									
01...	70	.09	13.2	.17	<.010	.41	.41	.020	.020
27...	33	.04	48.1	.09	.010	.20	.21	.050	.010
JUL									
28...	71	.09	12.5	.19	<.010	.18	.18	.020	.030
AUG									
18...	81	.11	12.5	.22	<.010	.20	.20	.020	.010
SEP									
28...	285	.38	2.0	.75	.030	.24	.27	.020	.030

DATE	TIME	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT			
26...	0900	30	40
NOV			
11...	0910	50	60
DEC			
13...	1315	80	40
JAN			
19...	1020	30	70
FEB			
24...	1220	40	80
MAR			
17...	1310	50	40
APR			
27...	1630	100	90
JUN			
01...	1530	160	20
27...	1645	110	<10
JUL			
28...	0930	70	<10
AUG			
18...	1000	70	20
SEP			
28...	1345	20	30

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	1.8	1.9	2.0	2.4	3.3	4.0	23	72	624	116	23
2	3.6	1.8	1.9	2.0	2.5	3.5	3.3	3.7	110	372	112	7.7
3	3.7	1.7	1.9	2.1	2.2	2.8	3.3	3.4	49	287	95	4.9
4	3.7	2.3	2.1	2.0	2.6	3.0	3.4	3.2	22	154	88	4.9
5	3.6	2.8	2.4	2.0	2.1	3.0	3.4	8.4	121	69	72	4.5
6	3.0	2.8	2.0	2.0	2.1	3.3	2.9	8.2	211	179	63	4.0
7	3.0	2.0	2.0	2.0	1.9	3.4	2.3	14	438	258	64	4.0
8	3.0	1.5	2.1	2.0	1.9	3.2	2.1	9.7	618	404	71	3.4
9	2.6	1.6	1.9	1.9	1.8	3.2	2.3	6.8	867	348	70	3.1
10	3.2	1.6	1.8	1.8	1.9	3.2	2.8	5.8	1340	214	66	2.9
11	3.0	1.7	1.9	1.8	1.8	3.3	2.8	4.0	2340	233	64	15
12	3.0	1.7	2.1	1.9	1.9	3.3	2.6	3.6	2060	314	36	24
13	3.0	1.6	2.0	2.0	1.7	3.2	2.6	3.0	2170	291	32	15
14	2.2	1.6	1.9	2.3	1.7	3.3	2.7	2.5	2430	262	41	13
15	1.6	1.8	2.2	3.0	1.8	3.5	2.4	2.9	1960	235	66	8.1
16	1.6	1.9	1.7	2.8	2.3	3.6	2.1	3.2	2020	135	58	3.4
17	1.7	1.9	2.0	2.5	2.2	3.6	2.4	51	1920	95	47	3.3
18	1.8	1.9	1.8	2.4	2.0	3.6	2.1	95	1350	81	51	3.1
19	1.9	1.8	1.6	2.1	2.0	3.6	2.2	13	707	5.6	20	37
20	1.9	1.7	1.4	2.0	2.2	3.5	2.4	3.1	753	98	18	46
21	2.0	1.5	1.5	2.1	2.3	3.5	2.5	249	757	167	35	57
22	2.0	1.5	1.6	2.4	2.4	3.8	2.5	205	601	142	45	69
23	1.8	1.6	1.5	2.8	2.4	3.9	2.6	85	636	48	33	81
24	1.9	1.5	1.7	2.8	2.4	4.5	3.0	68	759	16	23	72
25	2.0	1.5	1.9	2.6	2.2	3.5	5.1	454	852	78	17	21
26	2.0	1.6	1.8	2.6	2.6	3.3	4.2	482	773	90	11	2.7
27	2.1	1.6	1.9	2.7	4.4	3.6	4.0	520	482	67	5.5	2.7
28	2.1	1.6	2.0	2.6	3.1	3.7	4.6	414	430	84	15	2.6
29	1.9	1.8	2.4	2.6	---	3.7	7.8	208	427	66	31	2.2
30	1.7	1.9	2.2	2.6	---	3.6	4.5	106	633	76	28	2.0
31	1.8	---	2.2	2.5	---	3.5	---	78	---	74	27	---
TOTAL	76.1	53.6	59.3	70.9	62.8	107.0	94.9	3136.5	27908	5566.6	1520.5	542.5
MEAN	2.45	1.79	1.91	2.29	2.24	3.45	3.16	101	930	180	49.0	18.1
MAX	3.7	2.8	2.4	3.0	4.4	4.5	7.8	520	2430	624	116	81
MIN	1.6	1.5	1.4	1.8	1.7	2.8	2.1	2.5	22	5.6	5.5	2.0
AC-FT	151	106	118	141	125	212	188	6220	55360	11040	3020	1080

CAL YR 1977 TOTAL 15108.7 MEAN 41.4 MAX 784 MIN 1.4 AC-FT 29970
WTR YR 1978 TOTAL 39198.7 MEAN 107 MAX 2430 MIN 1.4 AC-FT 77750

EXTREMES FOR 1978 WATER YEAR.--Maximum discharge, 2,940 ft^3/s (83.3 m^3/s) at 0900 June 14, gage height, 8.81 ft (2.076 m); minimum daily, 1.4 ft^3/s (0.040 m^3/s) Dec. 20.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT										
16...	1200	2.1	560	8.0	11.0	10.6	254	44	67	21
NOV										
29...	1233	4.5	580	8.2	4.5	12.2	264	64	71	21
DEC										
27...	1328	E7.6	650	8.0	1.0	12.0	287	87	77	23
JAN										
25...	1454	54	775	7.9	1.5	11.1	287	67	77	23
FEB										
14...	0747	3.4	670	8.1	1.0	9.6	275	75	74	22
MAR										
15...	1310	3.4	630	8.4	10.5	13.3	312	102	82	26
APR										
11...	1016	20	432	7.9	3.0	15.3	204	74	57	15
MAY										
10...	1010	225	215	8.0	5.0	10.0	89	30	25	6.5
JUN										
21...	1033	1580	63	7.6	12.0	8.4	25	9	7.4	1.6
JUL										
26...	0840	13	283	7.9	16.0	7.4	105	27	28	8.6
AUG										
15...	1307	41	146	8.5	13.5	8.9	60	17	17	4.3
SEP										
27...	1200	60	267	8.4	16.5	7.0	112	22	32	7.8

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT										
16...	27	.8	3.6	250	0	210	90	15	.6	9.9
NOV										
29...	23	.6	2.9	240	0	200	94	16	.5	9.9
DEC										
27...	29	.8	3.0	240	0	200	120	15	.5	11
JAN										
25...	47	1.3	3.7	--	--	220	98	51	.5	11
FEB										
14...	30	.8	4.0	--	--	200	100	26	.4	10
MAR										
15...	26	.7	3.3	--	--	210	140	10	.5	7.5
APR										
11...	21	.7	2.6	--	--	130	93	12	.3	5.7
MAY										
10...	8.4	.4	1.6	--	--	59	34	3.5	.4	14
JUN										
21...	2.6	.2	.9	--	--	16	6.8	1.2	.2	8.4
JUL										
26...	14	.6	2.4	--	--	78	41	8.8	.3	7.9
AUG										
15...	7.4	.4	1.3	--	--	43	20	2.5	.2	7.9
SEP										
27...	7.8	.3	1.8	--	--	90	30	3.6	.5	8.7

E ESTIMATED.

06752260 - CACHE LA POUDRE RIVER AT FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT										
16...	362	.49	2.0	.98	.010	.63	.64	.020	.020	.040
NOV										
29...	363	.48	4.4	1.3	<.010	.18	.18	1.00	.030	.010
DEC										
27...	403	.54	6.1	1.3	.010	.39	.40	<.010	<.010	<.010
JAN										
25...	450	.60	65.6	1.5	.110	.42	.53	.050	.050	.010
FEB										
14...	393	.53	3.6	1.4	.150	.33	.48	.080	.040	.010
MAR										
15...	426	.57	3.9	1.0	.010	.28	.29	.020	.010	.010
APR										
11...	291	.39	15.7	.70	.070	.77	.84	1.30	1.10	.850
MAY										
10...	132	.18	80.2	.58	<.010	.14	.14	.040	.020	--
JUN										
21...	39	.05	166	.09	<.010	.34	.34	.010	.010	--
JUL										
26...	161	.21	5.7	.70	<.010	.20	.20	.260	.070	--
AUG										
15...	88	.12	9.7	.24	<.010	.16	.16	.010	.010	--
SEP										
27...	147	.20	23.8	.06	<.010	.42	.42	.010	<.010	--

DATE	TIME	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT			
16...	1200	30	40
NOV			
29...	1233	50	50
DEC			
27...	1328	40	50
JAN			
25...	1454	20	80
FEB			
14...	0747	120	140
MAR			
15...	1310	70	70
APR			
11...	1016	<10	50
MAY			
10...	1010	90	<10
JUN			
21...	1033	70	<10
JUL			
26...	0840	60	30
AUG			
15...	1307	60	8
SEP			
27...	1200	50	<10

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	3.2	4.1	2.8	2.7	3.2	6.0	2.3	1360	590	15	144
2	1.6	2.9	4.5	2.7	2.6	3.2	4.2	37	944	518	12	91
3	1.4	2.8	3.9	2.8	2.6	3.2	5.0	52	782	432	46	25
4	1.8	2.7	5.4	3.0	3.6	3.2	6.4	53	594	330	106	5.6
5	1.7	2.7	3.3	2.9	4.1	3.2	5.8	71	530	303	42	6.0
6	1.7	3.0	3.0	2.8	3.9	4.2	5.2	82	795	520	18	3.0
7	1.4	5.4	2.7	2.8	3.5	4.7	4.6	112	1130	503	19	10
8	1.4	5.3	2.4	2.6	3.4	6.0	4.7	232	1510	89	24	22
9	1.3	4.6	2.2	2.5	4.1	5.1	4.7	248	1900	185	32	12
10	1.3	3.9	2.3	2.5	3.4	4.9	7.7	226	2030	90	93	9.6
11	1.3	3.8	2.2	2.5	3.7	4.6	16	220	2330	41	71	51
12	1.7	3.6	2.5	2.6	3.5	3.6	5.8	228	2120	46	23	100
13	2.2	3.4	2.6	2.7	3.5	3.6	5.0	179	2080	217	29	122
14	2.3	3.1	2.7	2.6	4.0	3.4	4.5	192	2220	268	74	97
15	2.1	3.0	3.0	2.8	3.3	3.4	4.1	219	2570	226	55	32
16	2.1	2.8	3.2	2.7	3.0	3.4	3.9	266	2620	88	144	6.7
17	2.5	3.4	3.2	2.7	3.0	3.3	4.5	395	2580	54	120	3.6
18	2.7	3.6	3.2	2.9	3.1	9.1	6.0	460	2360	39	30	4.9
19	2.8	3.6	4.0	3.6	3.2	10	4.6	480	2060	7.4	54	3.8
20	3.3	3.5	3.3	3.6	3.7	4.2	3.4	556	1610	32	22	10
21	5.3	3.0	3.2	3.5	3.8	6.1	3.1	605	1300	137	5.2	27
22	27	3.0	3.5	2.6	3.9	7.4	3.0	768	1150	86	5.2	39
23	3.8	3.5	4.0	2.8	4.1	4.7	3.2	850	990	40	12	40
24	3.4	3.5	4.2	2.8	4.7	4.9	3.1	1110	858	82	21	3.8
25	3.3	3.5	4.0	2.8	4.3	6.0	3.9	1340	581	74	18	2.8
26	3.2	3.4	4.1	2.7	3.2	9.3	11	1530	558	44	18	14
27	3.2	3.4	4.4	2.6	4.1	6.0	4.2	1680	518	53	8.5	57
28	3.1	3.7	4.2	2.6	3.1	5.1	3.0	1490	416	44	6.7	42
29	3.1	3.9	3.4	2.7	---	4.9	2.8	2080	460	44	8.5	29
30	3.2	3.9	3.0	2.5	---	5.2	2.9	2330	527	40	46	23
31	3.1	---	2.9	2.6	---	5.3	---	1700	---	12	98	---
TOTAL	99.9	105.1	104.6	86.3	99.1	154.4	152.3	19793.3	41483	5234.4	1276.1	1036.8
MEAN	3.22	3.50	3.37	2.78	3.54	4.98	5.08	638	1383	169	41.2	34.6
MAX	27	5.4	5.4	3.6	4.7	10	16	2330	2620	590	144	144
MIN	1.3	2.7	2.2	2.5	2.6	3.2	2.8	2.3	416	7.4	5.2	2.8
AC-FT	198	208	207	171	197	306	302	39260	82280	10380	2530	2060

CAL YR 1978 TOTAL 39319.3 MEAN 108 MAX 2430 MIN 1.3 AC-FT 77990
WTR YR 1979 TOTAL 69625.3 MEAN 191 MAX 2620 MIN 1.3 AC-FT 138100

EXTREMES FOR 1979 WATER YEAR.--Maximum discharge, 3,030 ft^3/s (85.8 m^3/s) at 0700 June 17, gage height, 6.98 ft (2.128 m); minimum daily, 1.3 ft^3/s (0.037 m^3/s) Oct. 9-11.

06752260 - CACHE LA POUDRE RIVER AT FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT									
25...	1220	19	460	7.9	10.5	9.8	214	64	61
NOV									
29...	1100	30	400	9.0	.0	13.0	186	56	53
DEC									
05...	1107	9.9	550	--	3.5	12.0	236	66	65
JAN									
24...	0950	32	490	7.8	.5	13.5	212	62	60
FEB									
20...	1530	48	460	--	5.0	10.1	174	44	50
MAR									
25...	0900	41	435	8.3	4.5	11.0	188	68	54
APR									
23...	1325	1270	160	8.0	9.0	9.3	56	13	16
MAY									
21...	1400	2490	165	8.0	12.5	8.5	56	12	16
JUN									
16...	1625	663	68	7.4	13.5	8.5	25	5	7.2
JUL									
17...	1200	26	275	7.9	19.5	7.0	102	31	28
AUG									
20...	1230	13	240	8.2	16.5	10.6	90	16	25
SEP									
23...	1430	14	330	8.3	16.5	11.4	134	24	38

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT									
25...	15	13	.4	2.7	150	86	5.8	.4	7.8
NOV									
29...	13	12	.4	2.1	130	74	5.2	.4	9.3
DEC									
05...	18	25	.7	2.8	170	95	17	.4	7.3
JAN									
24...	15	14	.4	2.0	150	87	7.3	.4	11
FEB									
20...	12	16	.5	2.8	130	75	11	.4	11
MAR									
25...	13	12	.4	2.0	120	80	6.6	.4	9.1
APR									
23...	4.0	5.6	.3	1.5	43	16	2.1	.3	13
MAY									
21...	3.8	5.2	.3	1.4	44	13	2.5	.5	15
JUN									
16...	1.6	2.6	.2	.8	20	6.2	1.1	.1	8.3
JUL									
17...	7.8	9.6	.4	2.2	71	44	6.0	.4	8.1
AUG									
20...	6.6	9.0	.4	2.0	74	28	5.9	.3	6.5
SEP									
23...	9.6	11	.4	2.0	110	45	6.8	.4	6.7

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)
OCT									
25...	284	.39	14.6	.49	.020	.51	.010	.85	<.010
NOV									
29...	250	.34	20.2	.61	.009	.62	.020	--	.010
DEC									
05...	337	.46	9.0	.96	.020	.98	.030	.58	.010
JAN									
24...	291	.40	25.1	.90	.009	.91	.040	.35	.020
FEB									
20...	261	.35	33.8	.92	.020	.94	.220	.80	.050
MAR									
25...	253	.34	28.3	.71	.020	.73	.040	1.20	.010
APR									
23...	86	.12	295	.31	.010	.32	.080	1.60	.040
MAY									
21...	86	.12	578	.39	.010	.40	.040	.78	.020
JUN									
16...	41	.06	73.4	.12	.010	.13	<.010	.43	.010
JUL									
17...	151	.21	10.5	.52	<.010	.52	.190	1.20	.010
AUG									
20...	130	.18	4.6	.46	.010	.47	<.010	1.30	.020
SEP									
23...	188	.26	7.1	.49	.010	.50	<.010	1.00	.040

DATE	TIME	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)
JAN										
24...	0950	.00	.00	.00	.00	.00	.00	.00	.00	.00
APR										
23...	1325	.00	.00	.00	.00	.00	.00	.00	.00	.00
JUL										
17...	1200	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)
JAN									
24...	.00	.00	.00	.00	.00	.00	.00	.00	.00
APR									
23...	.00	.00	.00	.00	.00	.00	.00	.00	.00
JUL									
17...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	METHYL TRITHION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	PERTHANE TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
JAN									
24...	.00	.00	.00	.00	0	.00	.01	.00	.00
APR									
23...	.00	.00	.00	.00	0	.00	.01	.00	.00
JUL									
17...	.00	.00	.00	.00	0	.00	.02	.00	.00

06752260 - CACHE LA POUDRE RIVER AT FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT										
25...	1220	160	--	--	<1	2	--	<1	--	90
NOV										
29...	1100	300	--	--	<2	6	--	<1	--	40
DEC										
05...	1107	160	--	--	<2	15	--	<1	--	50
JAN										
24...	0950	100	1	200	<1	<1	<2	13	160	30
FEB										
20...	1530	570	--	--	3	2	--	4	--	20
MAR										
25...	0900	110	--	--	<1	3	--	3	--	20
APR										
23...	1325	--	3	300	<2	<20	4	12	9400	70
MAY										
21...	1400	850	--	--	2	4	--	8	--	70
JUN										
16...	1625	460	--	--	<2	7	--	26	--	50
JUL										
17...	1200	150	1	<100	2	<1	3	18	220	70
AUG										
20...	1230	250	--	--	<2	2	--	12	--	50
SEP										
23...	1430	220	--	--	<1	8	--	3	--	20

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT									
25...	<1	--	20	--	--	--	--	<1	<1
NOV									
29...	3	--	30	--	--	--	--	<1	<20
DEC									
05...	3	--	50	--	--	--	--	<1	30
JAN									
24...	3	40	20	<.1	<1	3	1	<1	70
FEB									
20...	10	--	30	--	--	--	--	<1	30
MAR									
25...	5	--	20	--	--	--	--	<1	20
APR									
23...	13	220	5	<.1	<1	12	1	<1	70
MAY									
21...	9	--	4	--	--	--	--	<1	40
JUN									
16...	120	--	6	--	--	--	--	<1	30
JUL									
17...	9	20	30	.2	<1	6	<1	<1	50
AUG									
20...	6	--	20	--	--	--	--	<1	<20
SEP									
23...	6	--	20	--	--	--	--	<1	40

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	15	55	23	26	27	51	309	2420	2800	418	51	6.8
2	18	28	20	50	24	46	622	3450	2500	458	32	12
3	11	22	17	36	28	71	374	2750	2200	536	26	5.8
4	14	40	15	17	33	64	66	2230	1900	356	18	10
5	14	68	13	6.8	35	224	70	2120	1700	277	28	23
6	14	57	11	3.8	30	469	82	2050	1550	121	29	21
7	10	50	9.9	4.3	31	90	113	2030	1400	73	26	8.5
8	11	54	9.4	4.0	30	48	106	1940	1300	56	34	4.6
9	12	55	8.7	3.9	29	44	108	1600	1550	62	28	7.4
10	8.9	48	8.4	4.1	28	44	124	918	2000	91	28	14
11	6.8	41	54	4.2	26	44	134	999	2060	89	10	8.5
12	3.8	38	102	18	25	251	121	2600	2200	79	11	7.0
13	5.4	39	40	86	25	536	112	2720	2000	73	11	6.7
14	7.2	13	10	271	35	343	399	2490	1550	71	14	7.4
15	8.1	12	6.8	351	35	69	789	2400	1200	40	43	14
16	8.6	19	5.4	259	508	68	551	3290	740	44	45	7.6
17	18	38	5.4	47	346	57	143	3270	464	31	24	9.2
18	12	33	6.7	37	47	50	142	3340	325	24	15	13
19	11	25	6.2	32	43	171	448	3010	291	23	14	16
20	10	50	51	29	46	540	736	2740	421	23	15	14
21	11	39	56	28	45	331	224	2530	515	22	13	7.2
22	47	33	17	30	40	82	840	2590	432	18	24	13
23	19	36	8.6	33	174	64	880	2960	268	23	16	14
24	17	51	5.4	35	436	51	1840	3420	202	22	10	6.0
25	18	58	4.8	166	66	46	1720	3700	199	11	15	3.2
26	17	53	5.6	442	43	54	1560	3600	202	22	15	15
27	16	53	8.4	372	43	54	1390	3400	413	26	5.3	12
28	17	44	10	108	52	57	1180	3500	727	17	3.2	11
29	28	31	8.1	79	60	64	1020	3600	413	12	17	12
30	21	42	6.6	36	---	60	1220	3400	437	21	11	12
31	30	---	4.5	31	---	66	---	3250	---	49	8.1	---
TOTAL	459.8	1225	557.9	2650.1	2390	4209	17423	84317	33959	3188	639.6	321.9
MEAN	14.8	40.8	18.0	85.5	82.4	136	581	2720	1132	103	20.6	10.7
MAX	47	68	102	442	508	540	1840	3700	2800	536	51	23
MIN	3.8	12	4.5	3.8	24	44	66	918	199	11	3.2	3.2
AC-FT	912	2430	1110	5260	4740	8350	34560	167200	67360	6320	1270	638

CAL YR 1979 TOTAL 71558.4 MEAN 196 MAX 2620 MIN 2.3 AC-FT 141900
WTR YR 1980 TOTAL 151340.3 MEAN 413 MAX 3700 MIN 3.2 AC-FT 300200

EXTREMES FOR 1980 WATER YEAR.--Maximum discharge, 3,960 ft^3/s (112 m^3/s) at 0115 May 2, gage height, 7.71 ft (2.350 m); maximum gage height, 7.80 ft (2.377 m) about May 25; minimum daily discharge, 3.2 ft^3/s (0.091 m^3/s) Aug. 28, Sept. 25.

06752260 - CACHE LA POUDRE RIVER AT FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT										
21...	0930	53	304	291	7.9	7.5	10.3	127	17	36
NOV										
20...	1555	5.1	627	640	7.6	5.5	11.8	273	63	73
DEC										
18...	1540	3.8	685	695	8.0	5.0	11.3	301	71	81
JAN										
22...	0930	3.2	730	757	7.7	1.0	10.2	346	106	94
FEB										
19...	1700	3.2	680	716	8.0	10.0	12.4	310	90	83
MAR										
26...	0950	3.8	720	738	7.8	8.5	10.4	326	116	86
APR										
23...	1030	8.6	475	484	8.3	12.5	11.5	215	75	58
MAY										
21...	1010	4.8	352	350	8.3	12.0	9.1	148	28	41
JUN										
17...	1700	9.7	230	231	8.2	21.0	8.5	90	26	25
JUL										
16...	1500	59	155	160	8.7	18.5	10.1	65	5	19
AUG										
13...	1030	27	204	196	8.1	16.5	9.8	81	23	23
SEP										
02...	1330	14	260	277	8.4	19.0	9.3	114	20	32

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT										
21...	9.1	10	.4	1.6	110	110	35	4.8	.4	4.7
NOV										
20...	22	25	.7	4.0	--	210	100	15	.6	9.4
DEC										
18...	24	26	.7	3.5	--	230	110	16	.6	9.7
JAN										
22...	27	34	.8	3.7	--	240	140	20	.6	12
FEB										
19...	25	31	.8	3.7	--	220	140	16	.4	9.0
MAR										
26...	27	32	.8	3.5	--	210	150	14	.5	7.4
APR										
23...	17	18	.6	2.5	--	140	89	9.1	.4	8.2
MAY										
21...	11	18	.7	2.2	--	120	58	7.5	.4	7.8
JUN										
17...	6.7	9.6	.5	1.6	--	64	44	6.0	.2	8.1
JUL										
16...	4.3	6.0	.3	1.1	--	60	9.0	2.7	.2	6.5
AUG										
13...	5.7	6.8	.3	1.5	--	58	25	2.9	.2	5.7
SEP										
02...	8.3	9.9	.4	2.0	--	94	41	7.5	.5	5.9

06752260 - CACHE LA POUDRE RIVER AT FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)
OCT									
21...	169	.23	24.2	.37	<.010	.37	.030	.44	.010
NOV									
20...	382	.52	5.3	1.60	.030	1.6	.060	.73	.040
DEC									
18...	417	.57	4.3	1.80	.030	1.8	.050	.65	.050
JAN									
22...	483	.66	4.2	1.70	.020	1.7	.040	.96	.030
FEB									
19...	447	.61	2.6	1.50	.020	1.5	.040	.01	.030
MAR									
26...	452	.61	4.6	1.10	.020	1.1	.050	.93	.030
APR									
23...	289	.39	6.7	.44	.010	.45	.050	.89	.020
MAY									
21...	221	.30	2.9	.55	.010	.56	.080	.68	.050
JUN									
17...	142	.19	3.7	.46	<.010	.46	.050	.50	.040
JUL									
16...	86	.12	13.7	.14	.010	.15	.040	.61	.020
AUG									
13...	107	.15	7.8	.25	<.010	.25	.110	.48	<.010
SEP									
02...	165	.22	6.2	--	<.020	.26	.110	.61	.020

DATE	TIME	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)
MAY										
21...	1010	.00	.00	.00	.00	.00	.00	.00	.01	.00
SEP										
02...	1330	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)
MAY									
21...	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP									
02...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	METHYL TRITHION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	PERTHANE TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
MAY									
21...	.00	.00	.00	.00	0	.00	.01	.00	.00
SEP									
02...	.00	.00	.00	.00	0	.00	.02	.00	.00

06752260 - CACHE LA POUDRE RIVER AT FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT										
21...	0930	70	--	--	<1	5	--	8	--	20
NOV										
20...	1555	--	1	100	<1	<1	<1	2	280	20
DEC										
18...	1540	20	--	--	<2	<1	--	2	--	<10
JAN										
22...	0930	20	--	--	<1	6	--	4	--	20
FEB										
19...	1700	--	1	<100	<1	<1	<1	4	270	40
MAR										
26...	0950	50	--	--	<1	<1	--	2	--	80
APR										
23...	1030	70	--	--	<1	<1	--	5	--	80
MAY										
21...	1010	--	1	<100	<1	<20	<1	3	500	60
JUN										
17...	1700	10	--	--	<1	3	--	5	--	90
JUL										
16...	1500	200	--	--	<1	6	--	6	--	60
AUG										
13...	1030	--	<1	<100	<1	<1	<2	7	130	70
SEP										
02...	1330	340	--	--	<1	7	--	4	--	29

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT									
21...	<1	--	20	--	--	--	--	<2	<20
NOV									
20...	3	40	40	<.1	2	2	1	<1	20
DEC									
18...	2	--	40	<.1	--	--	--	<1	20
JAN									
22...	7	--	80	--	--	--	--	<1	<20
FEB									
19...	<2	70	70	<.1	1	3	1	<1	<20
MAR									
26...	4	--	70	--	--	--	--	<1	<20
APR									
23...	2	--	50	--	--	--	--	<1	20
MAY									
21...	6	40	20	<.1	1	10	1	<1	20
JUN									
17...	4	--	20	--	--	--	--	<1	<20
JUL									
16...	4	--	4	--	--	--	--	<1	<20
AUG									
13...	<1	20	12	<.1	4	2	<1	<1	<20
SEP									
02...	2	--	10	--	--	--	--	<1	<20

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	9.7	4.7	4.3	3.3	4.9	3.0	95	71	189	85	15
2	11	8.6	4.5	3.9	2.9	4.5	2.7	116	2.2	152	27	17
3	7.4	8.5	4.4	3.4	2.9	12	12	182	84	417	11	19
4	5.9	8.4	4.5	3.4	2.9	12	3.0	200	669	100	28	20
5	5.2	8.5	4.5	3.6	2.8	3.4	3.0	128	964	2.2	36	23
6	6.3	9.2	4.5	3.6	3.0	3.2	2.2	65	1230	70	57	15
7	25	8.6	4.6	3.7	3.0	5.3	2.2	69	1430	111	46	13
8	72	8.0	5.3	4.3	2.9	2.8	3.0	34	1460	138	59	2.2
9	75	8.5	5.2	4.5	2.9	3.1	3.0	14	1130	132	92	.86
10	75	8.5	5.2	4.5	2.8	4.1	3.0	11	732	151	112	.86
11	80	8.5	4.9	4.4	2.7	4.3	3.8	7.1	443	157	47	21
12	80	6.7	5.2	3.6	3.6	4.4	8.0	2.8	286	58	4.5	19
13	86	7.3	4.5	3.9	3.1	4.5	12	2.7	156	216	29	14
14	85	7.9	3.9	3.9	3.5	3.3	12	3.2	41	37	80	1.9
15	80	6.4	3.8	3.8	3.5	3.0	12	40	15	41	100	1.6
16	67	6.3	3.8	3.7	3.5	3.1	9.9	41	14	55	123	.77
17	60	6.1	3.7	3.3	3.5	3.2	8.0	110	8.5	59	112	11
18	57	6.2	3.9	3.8	3.0	5.2	6.6	61	9.2	26	180	20
19	61	6.0	4.1	3.4	3.1	3.4	21	36	4.4	31	176	15
20	64	5.4	3.4	3.7	3.8	3.3	13	4.4	41	30	155	12
21	42	6.4	3.4	3.7	3.4	6.2	12	14	52	28	78	6.3
22	11	5.1	3.3	3.3	3.2	3.2	8.6	75	45	18	19	4.6
23	11	5.1	3.4	3.3	3.3	3.0	9.2	64	32	31	19	4.0
24	11	6.0	3.4	3.2	3.3	4.9	11	5.5	25	67	15	4.3
25	9.4	6.3	3.5	3.2	4.1	3.2	11	51	52	77	11	4.3
26	9.0	6.2	3.7	3.1	4.3	4.4	11	262	89	104	13	16
27	9.0	5.2	4.5	3.3	4.7	4.4	9.2	331	151	71	9.9	68
28	10	5.3	4.7	4.1	4.9	6.0	4.4	227	82	74	40	38
29	10	5.3	4.8	4.1	---	4.4	8.0	296	148	65	34	33
30	9.6	4.7	4.9	4.0	---	4.4	51	46	233	68	12	25
31	9.4	---	4.7	3.9	---	3.2	---	64	---	108	15	---
TOTAL	1152.6	208.9	132.9	115.9	93.9	140.3	278.8	2657.7	9699.3	2883.2	1825.4	445.69
MEAN	37.2	6.96	4.29	3.74	3.35	4.53	9.29	85.7	323	93.0	58.9	14.9
MAX	86	9.7	5.3	4.5	4.9	12	51	331	1460	417	180	68
MIN	5.2	4.7	3.3	3.1	2.7	2.8	2.2	2.7	2.2	2.2	4.5	.77
AC-FT	2290	414	264	230	186	278	553	5270	19240	5720	3620	884

CAL YR 1980 TOTAL 150592.00 MEAN 411 MAX 3700 MIN 3.2 AC-FT 298700
WTR YR 1981 TOTAL 19634.59 MEAN 53.8 MAX 1460 MIN .77 AC-FT 38950

EXTREMES FOR 1981 WATER YEAR.--Maximum discharge, 1,930 ft^3/s (54.7 m^3/s) at 0730 June 8, gage height, 5.83 ft (1,777 m); minimum daily, 0.77 ft^3/s (0.022 m^3/s) Sept. 16.

06752260 - CACHE LA POUDRE RIVER AT FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT										
08...	0945	83	210	205	7.9	12.5	9.4	91	16	27
NOV										
16...	1645	6.4	560	567	7.8	11.0	10.8	246	66	67
DEC										
14...	1700	5.3	640	536	7.8	5.0	13.0	255	85	69
JAN										
18...	1530	2.2	776	785	7.7	3.5	12.3	327	87	88
FEB										
23...	1615	3.9	554	426	7.8	6.5	11.0	257	57	70
MAR										
23...	1645	4.1	680	640	8.1	12.0	--	294	114	75
APR										
13...	1520	3.8	616	590	8.2	16.0	11.1	275	85	72
MAY										
12...	0850	49	210	205	7.7	9.5	9.2	93	22	27
JUN										
10...	1330	77	92	91	8.1	14.5	9.2	35	3	10
JUL										
13...	1600	215	65	63	7.7	17.0	8.1	23	0	6.8
AUG										
19...	1730	116	96	105	8.0	19.5	8.5	42	3	12
SEP										
14...	1510	255	162	174	7.8	13.0	9.2	74	15	21

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT										
08...	5.7	5.4	.3	1.1	75	29	2.2	.3	5.3	122
NOV										
16...	19	20	.6	2.8	180	91	9.7	.5	8.1	330
DEC										
14...	20	25	.7	3.0	170	110	11	.5	10	436
JAN										
18...	26	36	.9	4.0	240	130	26	.5	12	474
FEB										
23...	20	22	.6	3.0	200	96	12	.3	8.5	356
MAR										
23...	26	30	.8	3.3	180	130	14	.5	6.0	397
APR										
13...	23	25	.7	3.4	190	120	12	.6	4.8	377
MAY										
12...	6.2	8.1	.4	2.2	71	26	4.5	.4	5.8	124
JUN										
10...	2.5	3.7	.3	1.0	32	11	1.8	.2	9.8	68
JUL										
13...	1.5	2.3	.2	.7	24	7.0	1.0	.1	7.6	42
AUG										
19...	3.0	4.0	.3	1.0	39	12	1.5	.2	6.4	64
SEP										
14...	5.3	5.9	.3	1.9	59	26	2.1	.2	8.8	108

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT										
08...	.17	27.3	.15	.020	.17	.130	--	.60	.010	--
NOV										
16...	.45	5.7	.84	.030	.87	.180	--	.77	.010	--
DEC										
14...	.48	6.2	--	<.020	1.1	<.070	--	.75	.020	--
JAN										
18...	.63	2.8	--	<.020	1.7	.130	--	.82	.010	--
FEB										
23...	.48	3.8	--	<.020	.81	.060	--	.91	.030	--
MAR										
23...	.53	4.4	--	<.020	.79	.150	--	.84	.050	--
APR										
13...	.51	3.9	--	<.020	.48	.100	--	.63	<.010	--
MAY										
12...	.17	16.4	--	<.020	.18	.300	--	.77	.010	--
JUN										
10...	.08	14.1	--	<.020	<.10	<.060	.50	.80	.040	--
JUL										
13...	.06	24.4	--	<.020	<.10	.080	--	.70	.050	.010
AUG										
19...	.09	20.0	--	<.020	.15	.090	--	1.10	.080	--
SEP										
14...	.15	74.4	--	<.020	.22	.090	--	.80	.030	--

DATE	TIME	PCB, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)
MAY										
12...	0850	<.10	<.10	<.01	<.10	<.01	<.01	<.01	.03	<.01
SEP										
14...	1510	<.10	<.10	<.01	<.10	<.01	<.01	<.01	<.01	<.01

DATE	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)
MAY									
12...	<.01	<.01	<.01	<.01	<.01	<.01	.03	.12	<.01
SEP									
14...	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01

DATE	METHYL TRI-THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
MAY									
12...	<.01	<.01	<.01	<.10	<1	<.01	.16	<.01	.01
SEP									
14...	<.01	<.01	<.01	<.10	<1	<.01	.02	<.01	<.01

06752260 - CACHE LA POUDRE RIVER AT FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT										
08...	0945	360	--	--	<1	15	--	9	--	30
NOV										
16...	1645	--	1	<100	1	<10	<1	5	170	63
DEC										
14...	1700	80	--	--	<1	3	--	7	--	61
JAN										
18...	1530	100	--	--	<1	3	--	2	--	37
FEB										
23...	1615	--	1	100	<1	10	2	10	200	52
MAR										
23...	1645	220	--	--	<1	2	--	5	--	81
APR										
13...	1520	150	--	--	<1	3	--	5	--	110
MAY										
12...	0850	--	1	<100	<1	<10	<1	10	510	56
JUN										
10...	1330	320	--	--	<1	1	--	4	--	120
JUL										
13...	1600	220	--	--	<1	8	--	2	--	82
AUG										
19...	1730	--	<1	<100	<1	<10	<1	3	400	62
SEP										
14...	1510	690	--	--	<1	2	--	5	--	87

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT									
08...	4	--	8	--	--	--	--	<1	20
NOV									
16...	<1	40	24	<.1	2	2	<1	<1	10
DEC									
14...	2	--	32	--	--	--	--	<1	10
JAN									
18...	3	--	63	--	--	--	--	<1	20
FEB									
23...	3	50	49	<.1	3	2	1	<1	10
MAR									
23...	2	--	27	--	--	--	--	<1	10
APR									
13...	1	--	34	--	--	--	--	<1	10
MAY									
12...	16	30	18	<.1	5	2	<1	2	20
JUN									
10...	1	--	9	--	--	--	--	<1	20
JUL									
13...	1	--	7	--	--	--	--	<1	20
AUG									
19...	<1	20	5	.1	<1	3	<1	<1	10
SEP									
14...	<1	--	8	--	--	--	--	<1	20

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	4.9	25	3.1	4.5	2.3	5.6	28	44	2810	58	96
2	37	4.4	23	2.8	4.5	2.5	3.8	22	94	2700	87	161
3	86	4.3	22	2.6	110	5.6	3.4	20	116	2320	72	125
4	88	4.6	13	2.7	44	2.6	3.5	4.7	68	1850	19	18
5	113	4.3	7.6	2.8	3.5	3.0	3.1	34	187	1460	36	15
6	104	3.8	7.3	2.9	2.9	2.5	4.8	57	353	947	28	67
7	84	6.5	7.3	2.4	2.4	2.1	3.8	50	277	494	166	82
8	81	9.1	6.9	2.4	2.7	2.2	4.8	61	207	266	80	95
9	83	7.9	6.0	2.5	2.7	2.2	5.3	101	139	267	118	39
10	89	8.2	5.7	2.7	1.8	1.9	5.1	42	52	483	31	35
11	70	8.0	5.7	2.5	8.7	2.2	4.5	79	150	444	4.4	9.9
12	70	7.3	5.4	2.4	19	2.3	4.3	83	313	344	8.6	14
13	79	7.3	5.4	2.5	101	2.1	4.7	214	457	253	49	35
14	91	6.9	5.4	2.5	94	5.0	7.7	36	341	143	148	299
15	118	6.6	5.3	2.5	87	3.0	7.9	24	312	98	34	75
16	123	6.8	3.8	2.5	67	2.6	8.4	33	445	90	11	6.0
17	92	7.9	4.1	2.3	69	1.9	10	25	817	51	65	4.3
18	63	8.3	3.2	2.4	51	2.2	9.4	19	966	30	86	3.8
19	39	7.6	3.3	3.0	5.1	2.6	10	108	865	9.9	88	3.1
20	25	8.4	4.5	2.8	7.4	2.2	11	150	967	111	88	2.7
21	15	7.0	3.2	2.7	6.7	1.8	11	167	1350	176	156	2.6
22	5.4	6.8	4.4	2.6	9.8	2.7	11	156	1560	135	66	2.4
23	4.4	7.5	3.1	2.5	4.7	3.7	13	187	1250	143	13	2.1
24	5.8	7.9	2.9	2.7	3.0	4.6	8.5	84	1290	153	8.2	1.9
25	4.6	7.2	3.0	2.9	2.5	13	6.3	126	1740	162	30	2.3
26	4.3	8.4	3.0	4.3	2.6	11	7.7	37	2150	187	20	2.5
27	4.3	12	3.1	3.8	2.1	12	19	22	2400	433	42	1.9
28	4.3	19	3.0	4.0	2.4	17	20	135	2540	296	36	3.8
29	4.3	19	2.4	4.3	---	9.4	38	154	2580	394	50	1.8
30	4.8	18	2.6	4.3	---	8.8	40	157	2610	299	29	1.6
31	4.9	---	3.2	4.6	---	15	---	66	---	155	6.6	---
TOTAL	1617.1	245.9	203.8	91.0	722.0	152.0	295.6	2481.7	26640	17703.9	1733.8	1208.7
MEAN	52.2	8.20	6.57	2.94	25.8	4.90	9.85	80.1	888	571	55.9	40.3
MAX	123	19	25	4.6	110	17	40	214	2610	2810	166	299
MIN	4.3	3.8	2.4	2.3	1.8	1.8	3.1	4.7	44	9.9	4.4	1.6
AC-FT	3210	488	404	180	1430	301	586	4920	52840	35120	3440	2400

CAL YR 1981 TOTAL 20206.99 MEAN 55.4 MAX 1460 MIN .77 AC-FT 40080
WTR YR 1982 TOTAL 53095.50 MEAN 145 MAX 2810 MIN 1.6 AC-FT 105300

EXTREMES FOR 1982 WATER YEAR.--Maximum discharge, 3,160 ft^3/s (89.5 m^3/s) at 0200 July 1, gage height, 5.65 ft (1.722 m); minimum daily, 1.6 ft^3/s (0.045 m^3/s) Sept. 30.

LOCATION.--Lat 40°34'01", long 105°01'36", in NW¼NE¼ sec.20, T.7 N., R.68 W., Larimer County, Hydrologic Unit 101900007, 1.4 mi (2.3 km) west of Interstate 25 on Prospect Street in Fort Collins.

PERIOD OF RECORD.--January 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	OXYGEN, DIS-SOLVED (MG/L)
JAN		
19...	1100	10.5
FEB		
24...	1410	12.4
MAR		
17...	1340	12.8
APR		
28...	1010	13.0
JUN		
01...	1300	9.4
27...	1715	8.5
JUL		
28...	1600	7.2
AUG		
18...	1145	10.2
SEP		
12...	1030	10.2
12...	1100	10.3
12...	1200	10.8
12...	1300	11.6
12...	1400	11.9
12...	1500	11.9
12...	1600	11.2
12...	1700	10.4
12...	1800	9.4
12...	1900	8.4
12...	2000	6.5
12...	2100	5.4
12...	2200	4.8
12...	2300	4.4
12...	2400	4.3
13...	0100	4.2
13...	0200	4.2
13...	0300	4.2
13...	0400	4.2
13...	0500	4.2
13...	0600	4.2
13...	0700	4.3
13...	0800	4.8
13...	0900	6.4
13...	1000	8.4
13...	1030	9.6
13...	1100	10.3

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JAN									
19...	1100	E8.0	800	8.1	1.5	10.5	360	110	93
FEB									
24...	1410	E10	730	8.2	8.0	12.4	350	100	92
MAR									
17...	1340	E8.0	650	8.5	15.0	12.8	330	120	86
APR									
28...	1010	E10	800	8.4	14.5	13.0	290	76	75
JUN									
01...	1300	100	195	7.7	10.5	9.4	73	22	21
27...	1715	E500	90	7.4	15.0	8.5	29	7	8.3
JUL									
28...	1600	E100	240	8.0	20.5	7.2	90	32	24
AUG									
18...	1145	E75	265	8.6	16.5	10.2	93	20	26
SEP									
28...	1415	E5.0	800	8.6	18.5	--	290	74	75

E ESTIMATED.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
JAN									
19...	30	35	.8	2.9	310	0	250	130	16
FEB									
24...	30	29	.7	1.9	310	0	250	110	18
MAR									
17...	28	31	.8	1.9	260	0	210	110	18
APR									
28...	24	58	1.5	7.2	250	5	210	100	70
JUN									
01...	5.1	11	.6	1.4	62	0	51	32	9.6
27...	2.1	5.0	.4	.8	27	0	22	11	3.8
JUL									
28...	7.2	12	.6	2.1	71	0	58	37	9.5
AUG									
18...	6.7	16	.8	1.9	89	0	73	32	12
SEP									
28...	26	47	1.2	3.9	270	0	220	120	41

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
JAN									
19...	.8	13	487	.65	10.5	3.0	.580	.22	.240
FEB									
24...	.8	13	461	.61	12.4	2.9	.050	.06	.100
MAR									
17...	.8	9.8	425	.56	9.2	2.5	.030	.11	.110
APR									
28...	.9	11	482	.66	13.0	1.1	3.80	.50	1.50
JUN									
01...	.3	10	123	.17	33.2	.31	.290	.39	.160
27...	.1	8.5	54	.07	72.9	13	.010	.42	.080
JUL									
28...	.3	7.9	137	.18	37.0	.31	<.010	.75	.220
AUG									
18...	.3	7.1	150	.20	30.4	.67	.020	.27	.280
SEP									
28...	.8	8.8	468	.62	6.3	2.5	.310	.58	.330

DATE	TIME	OXYGEN, DIS-SOLVED (MG/L)
OCT		
16...	1115	12.2
NOV		
29...	1201	13.7
DEC		
27...	1235	14.8
27...	1300	14.8
27...	1400	15.0
27...	1500	14.6
27...	1600	14.1
27...	1700	11.8
27...	1800	10.5
27...	1900	9.8
27...	2000	9.5
27...	2100	9.3
27...	2200	9.2
27...	2300	9.2
27...	2400	9.0
28...	0100	9.0
28...	0200	9.0
28...	0300	9.0
28...	0400	9.0
28...	0500	9.0
28...	0600	9.1
28...	0700	9.1
28...	0800	9.2
28...	0900	10.6
28...	1000	12.2
28...	1100	12.5
28...	1200	14.2
28...	1239	14.5
JAN		
25...	1715	10.1
FEB		
14...	1115	11.4
MAR		
14...	1110	14.1
14...	1200	14.3
14...	1300	14.8
14...	1400	14.9
14...	1500	15.0
14...	1600	14.6
14...	1700	13.8
14...	1800	12.6
14...	1900	11.5
MAR		
14...	2000	10.9
14...	2100	10.9
14...	2200	10.9
14...	2300	10.9
14...	2400	11.0
15...	0100	11.0
15...	0200	11.0
15...	0300	11.1
15...	0400	11.1
15...	0500	11.2
15...	0600	11.2
15...	0700	11.4
15...	0800	11.9
15...	0900	12.9
15...	1000	13.9
15...	1100	14.8
15...	1155	15.2
APR		
11...	1250	10.2
MAY		
10...	1225	10.3
JUN		
21...	1445	8.2
JUL		
25...	1125	9.3
25...	1200	9.4
25...	1300	9.8
25...	1400	10.1
25...	1500	9.3
25...	1600	9.1
25...	1700	9.0
25...	1800	8.2
25...	1900	7.4
25...	2000	6.2
25...	2100	5.2
25...	2200	4.7
25...	2300	4.5
25...	2400	4.4
26...	0100	4.3
26...	0200	4.3
26...	0300	4.5
26...	0400	4.8
26...	0500	4.7
JUL		
26...	0600	4.9
26...	0700	5.4
26...	0800	6.1
26...	0900	7.5
26...	1000	9.1
26...	1050	11.1
26...	1100	10.4
26...	1200	11.2
26...	1300	11.0
26...	1309	11.0
AUG		
15...	1101	9.9
SEP		
27...	1030	10.3

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT										
16...	1115	E10	675	8.2	12.0	12.2	290	80	75	25
NOV										
29...	1201	E26	670	8.4	6.0	13.7	337	97	87	29
DEC										
27...	1235	E28	750	8.4	3.0	14.8	330	120	86	28
JAN										
25...	1715	4.9	775	8.5	2.0	10.1	338	98	86	30
FEB										
14...	1115	7.0	778	8.3	6.0	11.4	321	101	84	27
MAR										
15...	1155	5.4	730	8.6	7.0	15.2	347	107	88	31
APR										
11...	1250	18	425	8.1	5.5	10.2	203	73	55	16
MAY										
10...	1225	254	310	8.0	7.0	10.3	126	53	34	9.9
JUN										
21...	1445	E1930	80	7.6	14.5	8.2	27	0	8.7	1.4
JUL										
26...	1050	44	867	8.5	21.0	11.1	327	229	70	37
AUG										
15...	1101	83	374	8.2	13.5	9.9	120	49	32	9.7
SEP										
27...	1030	12	760	8.4	15.5	10.3	305	95	81	25

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT									
16...	43	1.1	4.3	260	0	210	130	29	.8
NOV									
29...	30	.7	2.1	290	0	240	120	21	.7
DEC									
27...	29	.7	2.2	250	0	210	130	16	.6
JAN									
25...	33	.8	2.4	--	--	240	130	20	.7
FEB									
14...	33	.8	5.5	--	--	220	120	26	.5
MAR									
15...	32	.8	2.9	--	--	240	150	16	.7
APR									
11...	18	.6	2.4	--	--	130	92	9.4	.4
MAY									
10...	15	.6	2.1	--	--	73	66	7.9	.4
JUN									
21...	5.7	.5	1.0	--	--	32	8.6	1.9	.2
JUL									
26...	61	1.5	4.2	--	--	98	320	19	.5
AUG									
15...	35	1.4	2.5	--	--	71	64	31	.3
SEP									
27...	55	1.4	4.4	--	--	210	140	44	.7

E ESTIMATED.

06752270 - CACHE LA POUDRE RIVER BELOW FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT 16...	11	459	.61	12.4	2.4	.920	.68	.760	.690
NOV 29...	13	462	.61	31.8	3.6	.010	.32	1.00	.020
DEC 27...	13	443	.58	33.5	3.4	<.010	.56	<.010	<.010
JAN 25...	11	471	.62	6.3	3.1	.020	.32	.060	.030
FEB 14...	11	451	.60	8.5	2.5	.370	.73	.160	.110
MAR 15...	8.4	483	.64	7.1	2.2	<.010	.21	.020	.020
APR 11...	5.6	283	.38	14.0	1.3	.120	.30	.200	.050
MAY 10...	14	198	.26	136	.90	.360	.01	.090	.080
JUN 21...	8.4	56	.07	292	.11	<.010	.23	.030	.010
JUL 26...	6.4	580	.78	68.9	.75	<.010	.56	.260	.230
AUG 15...	8.9	230	.31	51.5	.83	.010	.36	.260	.220
SEP 27...	8.0	494	.66	16.0	2.2	.010	.74	.320	.290

DATE	TIME	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT 16...	1115	20	40
NOV 29...	1201	<10	30
DEC 27...	1235	<10	50
JAN 25...	1715	<10	90
FEB 14...	1115	40	120
MAR 15...	1155	<10	120
APR 11...	1250	<10	40
MAY 10...	1225	90	20
JUN 21...	1445	70	<10
JUL 26...	1050	20	30
AUG 15...	1101	70	<10
SEP 27...	1030	60	<10

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	OXYGEN, DIS-SOLVED (MG/L)
OCT		
24...	1130	11.8
NOV		
14...	1345	13.8
14...	1400	14.0
14...	1500	13.8
14...	1600	13.2
14...	1700	12.2
14...	1800	11.4
14...	1900	11.0
14...	2000	10.8
14...	2100	10.7
14...	2200	10.7
14...	2300	10.7
14...	2400	10.7
15...	0100	10.6
15...	0200	10.6
15...	0300	10.6
15...	0400	10.6
15...	0500	10.6
15...	0600	10.7
15...	0700	10.7
15...	0800	10.9
15...	0900	11.6
15...	1000	12.4
15...	1100	13.4
15...	1117	13.6
15...	1200	13.8
15...	1300	14.0
15...	1400	14.0
15...	1430	13.7
DEC		
05...	1348	13.5
JAN		
23...	1350	11.6
FEB		
21...	0830	10.8
MAR		
25...	1035	11.4
APR		
24...	1715	9.1
MAY		
21...	1630	8.5
JUN		
17...	1315	8.4
JUL		
17...	1415	12.4
AUG		
21...	0925	9.2
SEP		
24...	0830	6.6

06752270 - CACHE LA POUDRE RIVER BELOW FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT									
24...	1130	34	605	7.9	10.5	11.8	231	71	63
NOV									
15...	1117	34	690	--	6.0	13.6	262	102	72
DEC									
05...	1348	33	800	--	5.5	13.5	270	90	72
JAN									
23...	1350	70	655	7.9	4.0	11.6	236	76	65
FEB									
21...	0830	59	655	--	2.5	10.8	234	84	64
MAR									
25...	1035	75	590	8.3	7.0	11.4	230	100	64
APR									
24...	1715	2250	170	8.0	9.0	9.1	61	13	18
MAY									
21...	1630	2750	170	8.1	14.0	8.5	62	15	18
JUN									
17...	1315	641	110	7.6	15.5	8.4	36	11	10
JUL									
17...	1415	61	590	8.5	24.0	12.4	221	101	54
AUG									
21...	0925	29	725	7.7	15.5	9.2	236	76	60
SEP									
24...	0830	13	695	7.8	13.0	6.6	263	73	69

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT									
24...	18	33	1.0	4.3	160	110	21	.5	8.8
NOV									
15...	20	45	1.3	4.8	160	150	38	.6	8.2
DEC									
05...	22	64	1.8	4.8	180	140	63	.6	9.3
JAN									
23...	18	34	1.0	3.6	160	120	28	.5	12
FEB									
21...	18	32	.9	3.3	150	130	24	.5	11
MAR									
25...	17	27	.8	3.0	130	120	19	.5	9.8
APR									
24...	4.0	6.4	.4	1.9	48	15	3.8	.6	14
MAY									
21...	4.2	6.0	.3	1.5	47	16	2.9	.6	15
JUN									
17...	2.6	4.5	.3	.9	25	12	2.3	.1	9.3
JUL									
17...	21	33	1.0	3.2	120	140	18	.6	8.2
AUG									
21...	21	56	1.6	4.5	160	110	49	.6	7.8
SEP									
24...	22	41	1.1	3.3	190	98	41	.7	9.4

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT									
24...	363	.49	33.3	1.70	.210	1.9	.450	1.70	.620
NOV									
15...	435	.59	39.9	.00	.000	.00	.030	1.70	.120
DEC									
05...	494	.67	44.3	2.10	.190	2.3	1.10	1.90	.870
JAN									
23...	386	.53	73.0	1.90	.079	2.0	1.20	1.10	.680
FEB									
21...	378	.52	60.1	1.10	.090	1.2	1.10	1.60	.300
MAR									
25...	343	.47	69.0	.90	.100	1.0	1.20	1.40	.390
APR									
24...	94	.13	571	.39	.020	.41	.020	1.40	.060
MAY									
21...	94	.13	698	.40	.010	.41	.060	.83	.030
JUN									
17...	58	.08	100	.18	.010	.19	.030	.92	.030
JUL									
17...	355	.48	58.7	1.10	.020	1.1	.010	1.30	.140
AUG									
21...	415	.56	32.4	2.10	.100	2.2	.020	.87	.350
SEP									
24...	414	.56	14.8	3.20	.240	3.4	.210	1.10	.370

DATE	TIME	PCB, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)
JAN										
23...	1350	.00	.00	.00	.00	.00	.00	.00	.02	.00
JUL										
17...	1415	.10	.00	.00	.00	.00	.00	.00	.01	.00

DATE	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)
JAN									
23...	.00	.00	.00	.00	.00	.00	.00	.00	.00
JUL									
17...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	METHYL TRI-THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
JAN									
23...	.00	.00	.00	.00	0	.00	.01	.00	.00
JUL									
17...	.00	.00	.00	.00	0	.00	.08	.00	.00

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT										
24...	1130	100	--	--	<1	3	--	<1	--	40
NOV										
15...	1117	130	--	--	2	4	--	<1	--	40
DEC										
05...	1348	300	--	--	<1	48	--	5	--	50
JAN										
23...	1350	170	1	200	<1	<1	<2	9	170	20
FEB										
21...	0830	220	--	--	2	4	--	4	--	20
MAR										
25...	1035	80	--	--	<1	2	--	3	--	30
APR										
24...	1715	--	3	200	<2	<1	<1	9	6000	60
MAY										
21...	1630	420	--	--	3	<2	--	7	--	70
JUN										
17...	1315	330	--	--	<2	5	--	10	--	90
JUL										
17...	1415	150	2	<100	3	5	3	10	310	30
AUG										
21...	0925	130	--	--	2	4	--	31	--	30
SEP										
24...	0830	230	--	--	<1	<20	--	3	--	30

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT									
24...	2	--	20	--	--	--	--	<1	<1
NOV									
15...	4	--	30	--	--	--	--	<1	<1
DEC									
05...	9	--	40	--	--	--	--	<1	40
JAN									
23...	4	60	30	<.1	1	6	1	<1	300
FEB									
21...	4	--	40	--	--	--	--	<1	20
MAR									
25...	2	--	30	--	--	--	--	<1	20
APR									
24...	11	150	4	<.1	<1	11	1	<1	60
MAY									
21...	6	--	6	--	--	--	--	<1	30
JUN									
17...	73	--	9	--	--	--	--	<1	20
JUL									
17...	8	20	20	<.1	1	5	1	<1	40
AUG									
21...	53	--	30	--	--	--	--	<1	<1
SEP									
24...	5	--	40	--	--	--	--	<1	20

06752270 - CACHE LA POUDRE RIVER BELOW FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT										
20...	1705	21	650	669	8.2	13.5	9.8	300	60	79
NOV										
21...	0950	8.2	785	791	7.7	5.0	11.3	351	131	91
DEC										
19...	0910	8.1	780	813	8.0	3.0	9.3	373	113	100
JAN										
21...	1615	6.0	810	839	8.2	5.0	11.2	377	117	100
FEB										
19...	1500	6.5	760	813	8.2	10.5	10.6	358	138	94
MAR										
25...	1540	8.2	665	704	8.3	11.0	11.5	306	106	78
APR										
22...	1600	5.3	665	693	8.8	15.5	13.3	306	96	78
MAY										
20...	1620	11	600	633	8.8	16.0	12.0	254	94	67
JUN										
17...	1500	24	580	593	8.7	22.0	11.8	230	90	59
JUL										
15...	1640	56	400	409	9.0	23.5	11.9	137	52	35
AUG										
13...	1315	44	650	624	8.7	23.0	16.0	207	77	55
SEP										
01...	1645	28	690	673	8.9	22.0	14.6	205	65	54

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT										
20...	25	25	.6	1.8	240	240	91	13	.7	12
NOV										
21...	30	32	.8	2.1	--	220	160	15	.7	13
DEC										
19...	30	31	.7	1.6	--	260	130	18	.7	12
JAN										
21...	31	41	1.0	2.1	--	260	160	25	.8	12
FEB										
19...	30	32	.8	2.5	--	220	180	16	.6	11
MAR										
25...	27	31	.8	2.2	--	200	120	17	.6	8.1
APR										
22...	27	33	.8	2.9	--	210	120	25	.6	8.9
MAY										
20...	21	31	.9	3.3	--	160	130	22	.5	7.4
JUN										
17...	20	36	1.1	2.7	--	140	110	26	.5	8.6
JUL										
15...	12	28	1.1	2.3	--	85	83	23	.3	6.4
AUG										
13...	17	48	1.5	3.8	--	130	100	48	.5	6.5
SEP										
01...	17	56	1.8	4.2	--	140	100	64	.0	7.4

06752270 - CACHE LA POUDRE RIVER BELOW FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)
OCT										
20...	409	.56	23.4	3.80	.010	3.8	.040	--	.96	.060
NOV										
21...	494	.67	11.0	4.00	.040	4.0	.030	--	1.10	.060
DEC										
19...	497	.68	10.9	4.00	.040	4.0	.340	--	1.10	.040
JAN										
21...	544	.74	8.8	3.60	.020	3.6	.020	--	1.30	.040
FEB										
19...	513	.70	6.3	3.30	.020	3.3	.030	--	.08	.040
MAR										
25...	417	.57	9.2	2.80	.030	2.8	.080	--	1.30	.030
APR										
22...	434	.59	6.2	2.70	.050	2.7	.050	--	1.20	.110
MAY										
20...	388	.53	11.5	2.10	.060	2.2	.110	--	1.10	.140
JUN										
17...	357	.49	23.1	2.20	.050	2.2	.120	--	1.00	.360
JUL										
15...	245	.34	37.8	.78	.010	.79	.020	.58	.88	.210
AUG										
13...	363	.49	43.1	1.40	<.010	1.4	.130	--	.85	<.010
SEP										
01...	396	.54	29.9	2.00	.070	2.1	.090	--	1.10	.530

DATE	TIME	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)
MAY										
20...	1620	.00	.00	.00	.00	.00	.00	.00	.04	.00
SEP										
01...	1645	.00	.00	.00	.00	.00	.00	.00	.02	.00

DATE	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)
MAY									
20...	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP									
01...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	METHYL TRITHION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	PERTHANE TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
MAY									
20...	.00	.00	.00	.00	0	.00	>.14	.00	>.01
SEP									
01...	.00	.00	.00	.00	0	.00	.05	.00	.00

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT										
20...	1705	50	--	--	<1	5	--	11	--	<10
NOV										
21...	0950	--	1	200	<1	<1	<1	2	240	<10
DEC										
19...	0910	150	--	--	<1	3	--	3	--	<10
JAN										
21...	1615	70	--	--	<1	9	--	4	--	<10
FEB										
19...	1500	--	2	<100	<1	<20	<1	7	2600	<10
MAR										
25...	1540	280	--	--	<1	3	--	3	--	20
APR										
22...	1600	140	--	--	<1	<2	--	4	--	40
MAY										
20...	1620	--	1	<100	<1	<20	<1	3	340	30
JUN										
17...	1500	10	--	--	<1	3	--	4	--	40
JUL										
15...	1640	160	--	--	<1	4	--	4	--	30
AUG										
13...	1315	--	1	<100	<1	<20	<2	6	210	23
SEP										
01...	1645	200	--	--	<1	7	--	4	--	28

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT									
20...	6	--	<10	--	--	--	--	<1	20
NOV									
21...	5	20	<10	<.1	5	4	5	<1	60
DEC									
19...	6	--	70	--	--	--	--	<1	30
JAN									
21...	6	--	20	--	--	--	--	<1	20
FEB									
19...	8	90	20	<.1	4	5	4	<1	20
MAR									
25...	6	--	<10	--	--	--	--	<1	<20
APR									
22...	4	--	<10	--	--	--	--	<1	<20
MAY									
20...	7	30	20	<.1	4	4	2	<1	<1
JUN									
17...	4	--	20	--	--	--	--	<1	<20
JUL									
15...	7	--	4	--	--	--	--	<1	<20
AUG									
13...	3	20	11	.2	5	0	1	<1	<20
SEP									
01...	<2	--	7	--	--	--	--	<2	<20

06752270 - CACHE LA POUDRE RIVER BELOW FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT										
07...	1545	14	605	600	8.5	17.0	11.4	265	85	70
NOV										
16...	1400	6.7	770	747	8.2	12.0	12.2	344	124	90
DEC										
14...	1440	12	720	696	8.1	6.0	13.6	321	101	84
JAN										
18...	1320	9.1	873	840	8.0	6.0	14.3	326	76	86
FEB										
23...	1235	9.2	689	695	8.2	6.0	13.2	290	70	75
MAR										
23...	1500	11	770	760	8.4	12.0	--	274	64	70
APR										
13...	1215	4.6	689	654	8.6	16.0	12.9	275	75	69
MAY										
10...	1545	45	385	430	8.4	17.5	10.2	168	58	46
JUN										
10...	1030	89	202	208	8.0	13.0	9.6	69	11	19
JUL										
13...	1345	298	123	124	7.9	18.0	8.2	46	9	13
AUG										
20...	0930	94	423	335	7.6	17.5	8.8	110	28	30
SEP										
15...	1615	82	450	456	7.8	14.0	9.2	173	55	46

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT										
07...	22	26	.7	2.4	180	110	10	.7	9.0	366
NOV										
16...	29	30	.7	1.9	220	110	17	.7	13	435
DEC										
14...	27	37	.9	3.5	220	120	19	.7	11	453
JAN										
18...	27	45	1.1	3.2	250	110	40	.7	12	494
FEB										
23...	25	37	1.0	4.0	220	110	29	.4	8.9	432
MAR										
23...	24	59	1.6	5.2	210	110	52	.7	8.4	468
APR										
13...	25	38	1.0	4.5	200	110	25	.8	6.6	415
MAY										
10...	13	15	.5	3.0	110	80	12	.6	6.7	248
JUN										
10...	5.2	12	.7	1.4	58	25	11	.3	8.2	119
JUL										
13...	3.3	5.6	.4	.9	37	20	3.7	.2	8.0	78
AUG										
20...	8.6	22	.9	1.7	82	49	21	.3	6.9	192
SEP										
15...	14	23	.8	2.9	118	87	16	.3	8.5	274

06752270 - CACHE LA POUDRE RIVER BELOW FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT									
07...	.50	13.8	1.80	.050	1.8	.170	--	1.00	.090
NOV									
16...	.60	7.9	3.10	.040	3.1	.130	--	1.00	.050
DEC									
14...	.62	14.7	4.00	.100	4.1	.370	--	1.80	.600
JAN									
18...	.67	12.1	4.40	.030	4.4	.110	--	1.70	.010
FEB									
23...	.59	10.7	2.20	.080	2.3	1.70	--	4.60	.570
MAR									
23...	.64	13.9	2.70	.170	2.9	2.50	--	3.80	1.10
APR									
13...	.56	5.2	3.50	.120	3.6	.200	--	1.10	.880
MAY									
10...	.34	30.1	1.20	.110	1.3	.520	--	1.60	.390
JUN									
10...	.16	28.6	--	<.020	.50	.140	.66	.70	.160
JUL									
13...	.10	62.8	--	<.020	.28	.060	--	.90	.080
AUG									
20...	.26	48.7	--	<.020	.60	.150	--	1.30	.080
SEP									
15...	.37	60.7	1.30	.020	1.3	.130	--	1.10	.130

DATE	TIME	PCB, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)
MAY										
10...	1545	<.10	<.10	<.01	<.10	<.01	<.01	<.01	.01	<.01
SEP										
15...	1615	<.10	<.10	<.01	<.10	<.01	<.01	<.01	.04	<.01

DATE	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)
MAY									
10...	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
SEP									
15...	<.01	<.01	<.01	<.01	<.01	<.01	.01	<.01	<.01

DATE	METHYL TRI-THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
MAY									
10...	<.01	<.01	<.01	<.10	<1	<.01	.09	<.01	<.01
SEP									
15...	<.01	<.01	<.01	<.10	<1	<.01	.13	<.01	.01

06752270 - CACHE LA POUDRE RIVER BELOW FORT COLLINS

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT										
07...	1545	160	--	--	<1	7	--	6	--	12
NOV										
16...	1400	--	1	<100	1	<10	1	8	110	12
DEC										
14...	1440	140	--	--	<1	5	--	8	--	18
JAN										
18...	1320	220	--	--	<1	5	--	3	--	16
FEB										
23...	1235	--	1	100	<1	<10	2	4	160	25
MAR										
23...	1500	360	--	--	<1	5	--	6	--	33
APR										
13...	1215	170	--	--	<1	2	--	3	--	59
MAY										
10...	1545	--	1	100	<1	<10	1	7	540	49
JUN										
10...	1030	430	--	--	1	3	--	5	--	88
JUL										
13...	1345	290	--	--	<1	7	--	2	--	83
AUG										
20...	0930	--	1	100	<1	<10	<1	3	300	41
SEP										
15...	1615	550	--	--	<1	<1	--	3	--	43

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT									
07...	3	--	11	--	--	--	--	<1	60
NOV									
16...	1	20	9	<.1	4	12	4	<1	10
DEC									
14...	2	--	11	--	--	--	--	<1	20
JAN									
18...	2	--	18	--	--	--	--	<1	20
FEB									
23...	5	50	41	.1	4	3	2	<1	10
MAR									
23...	14	--	29	--	--	--	--	<1	20
APR									
13...	2	--	47	--	--	--	--	<1	10
MAY									
10...	12	50	28	.1	6	3	1	<1	10
JUN									
10...	<1	--	12	--	--	--	--	1	20
JUL									
13...	1	--	10	--	--	--	--	<1	20
AUG									
20...	<1	30	12	.1	<1	4	1	<1	20
SEP									
15...	9	--	24	--	--	--	--	<1	20

06752280 CACHE LA POUDRE RIVER ABOVE BOX ELDER CREEK NEAR TIMNATH, CO.

LOCATION.--Lat 40°32'56", long 105°00'28", in NW¼NE¼ sec.28, T.7 N., R.68 W., Larimer County, Hydrologic Unit 10190007, on left bank 2,100 ft (640 m) upstream from Box Elder Creek, 2.0 mi (3.2 km) upstream from Interstate Highway 25 bridge and 3.8 mi (6.1 km) southeast of intersection of College Avenue and Prospect Street in Fort Collins.

DRAINAGE AREA.-- 1,245 mi² (3,225 km²).

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	OXYGEN, DISSOLVED (MG/L)
OCT		
24...	0910	7.7
NOV		
14...	1310	10.9
14...	1400	11.0
14...	1500	11.0
14...	1600	10.4
14...	1700	9.7
14...	1800	8.9
14...	1900	8.3
14...	2000	8.0
14...	2100	7.6
14...	2200	7.4
14...	2300	7.1
14...	2400	7.0
15...	0100	6.9
15...	0200	6.8
15...	0300	6.7
15...	0400	6.7
15...	0500	6.7
15...	0600	6.8
15...	0700	6.9
15...	0800	7.2
15...	0900	8.0
15...	0930	9.6
15...	1000	9.1
15...	1100	10.0
15...	1200	10.5
15...	1300	10.8
15...	1400	10.8
15...	1405	10.8
DEC		
05...	1610	10.6
JAN		
25...	0935	10.2
FEB		
20...	1000	8.6
MAR		
25...	1310	8.8
APR		
23...	1000	8.4
MAY		
22...	1400	8.2
JUN		
17...	1030	7.9
JUL		
17...	1700	12.1
AUG		
21...	1335	11.0
SEP		
24...	1020	7.8

06752280 - CACHE LA POUDRE R AB BOXELDER C, NR TIMNATH

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT									
24...	0910	47	720	7.8	10.5	7.7	259	89	69
NOV									
15...	0930	46	930	--	5.0	9.6	360	190	93
DEC									
05...	1610	49	950	--	5.5	10.6	361	181	95
JAN									
25...	0935	5.5	2500	7.7	1.5	10.2	1136	916	290
FEB									
20...	1000	7.2	2000	--	3.0	8.6	854	654	220
MAR									
25...	1310	82	745	8.2	10.5	8.8	296	146	79
APR									
23...	1000	448	400	8.1	10.0	8.4	152	80	41
MAY									
22...	1400	2800	230	7.8	14.5	8.2	80	32	22
JUN									
17...	1030	727	115	7.4	12.5	7.9	35	7	9.8
JUL									
17...	1700	7.8	2050	8.3	28.0	12.1	908	798	220
AUG									
21...	1335	6.3	2800	7.6	23.5	11.0	1293	1073	320
SEP									
24...	1020	15	1400	8.1	15.0	7.8	659	449	170

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT								
24...	21	43	1.2	5.7	150	25	.7	11
NOV								
15...	31	53	1.3	5.5	240	32	.8	11
DEC								
05...	30	64	1.5	5.2	220	49	.7	12
JAN								
25...	100	130	1.7	5.8	1100	26	1.1	12
FEB								
20...	74	89	1.4	5.1	770	30	.9	12
MAR								
25...	24	36	.9	3.9	190	20	.6	10
APR								
23...	12	18	.7	2.2	92	7.4	.4	13
MAY								
22...	6.1	7.9	.4	1.5	35	3.0	.5	15
JUN								
17...	2.5	5.4	.4	.9	13	2.8	.1	8.7
JUL								
17...	87	98	1.5	5.8	940	27	1.2	8.9
AUG								
21...	120	130	1.6	7.3	1200	31	1.2	8.7
SEP								
24...	57	74	1.3	4.4	530	27	.9	9.1

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)
OCT										
24...	0910	436	.60	55.6	1.60	.260	1.9	2.80	3.10	2.00
NOV										
15...	0930	569	.77	70.7	<.01	<.010	.00	.060	1.90	.760
DEC										
05...	1610	603	.82	79.8	4.10	.200	4.3	1.40	3.10	.190
JAN										
25...	0935	1820	2.5	27.0	4.20	.030	4.2	.330	.73	.040
FEB										
20...	1000	1330	1.8	25.9	2.90	.070	3.0	.650	1.90	.040
MAR										
25...	1310	467	.64	104	2.80	.160	3.0	1.40	2.00	1.30
APR										
23...	1000	233	.32	282	.86	.060	.92	.330	1.30	.250
MAY										
22...	1400	122	.17	922	.48	.010	.49	.070	.83	.030
JUN										
17...	1030	61	.08	120	.22	.010	.23	<.010	.58	.030
JUL										
17...	1700	1470	2.0	30.9	2.60	.049	2.6	.210	1.80	.010
AUG										
21...	1335	1970	2.7	33.4	4.40	.060	4.5	<.010	1.30	.010
SEP										
24...	1020	1010	1.4	39.8	3.10	.090	3.2	<.010	.94	.160

DATE	TIME	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)
JAN										
25...	0935	.00	.00	.00	.00	.00	.00	.00	.00	.00
APR										
23...	1000	.00	.00	.00	.00	.00	.00	.00	.00	.00
JUL										
17...	1700	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)
JAN									
25...	.00	.00	.00	.00	.00	.00	.00	.00	.00
APR									
23...	.00	.00	.00	.00	.00	.05	.00	.00	.00
JUL									
17...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	METHYL TRITHION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	PERTHANE TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
JAN									
25...	.00	.00	.00	.00	0	.00	.00	.00	.00
APR									
23...	.00	.00	.00	.00	0	.00	.02	.00	.00
JUL									
17...	.00	.00	.00	.00	0	.00	.58	.00	.00

06752280 - CACHE LA POUDRE R AB BOXELDER C, NR TIMNATH

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT 24...	60	--	--	<1	6	--	<2	--	40
NOV 15...	140	--	--	<2	5	--	4	--	50
DEC 05...	210	--	--	<1	--	--	<2	--	50
JAN 25...	630	1	200	<2	<20	4	8	480	20
FEB 20...	2000	--	--	3	3	--	6	--	<10
MAR 25...	240	--	--	<1	2	--	4	--	20
APR 23...	--	2	200	<2	<1	<1	7	3200	80
MAY 22...	540	--	--	<1	2	--	6	--	100
JUN 17...	700	--	--	<1	4	--	4	--	100
JUL 17...	200	2	<100	2	<1	3	<20	430	60
AUG 21...	320	--	--	<2	3	--	12	--	40
SEP 24...	200	--	--	<1	7	--	4	--	60

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT 24...	2	--	20	--	--	--	--	<1	<1
NOV 15...	4	--	40	--	--	--	--	<1	<1
DEC 05...	25	--	50	--	--	--	--	<1	20
JAN 25...	--	220	210	<.1	2	9	16	<1	60
FEB 20...	10	--	150	--	--	--	--	<1	30
MAR 25...	3	--	30	--	--	--	--	<1	20
APR 23...	9	90	<10	<.1	1	6	1	<1	50
MAY 22...	3	--	6	--	--	--	--	<1	20
JUN 17...	<2	--	8	--	--	--	--	<1	20
JUL 17...	7	160	70	<.1	9	5	12	<1	60
AUG 21...	8	--	70	--	--	--	--	<1	<20
SEP 24...	5	--	40	--	--	--	--	<1	30

06752280 CACHE LA POUDRE RIVER ABOVE BOX ELDER CREEK NEAR TIMNATH

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 4,860 ft (1,481 m), from topographic map.

REMARKS.--Records good. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, diversion for municipal supply, diversions above station for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,410 ft^3/s (125 m^3/s) May 25, 1980, gage height, 6.40 ft (1.951 m); minimum daily, 3.0 ft^3/s (0.085 m^3/s) Oct. 4. 1979.

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	3.7	70	40	5.8	7.0	44	298	2200	2970	239	9.1	6.2
2	3.4	50	35	8.4	6.4	39	648	2870	2420	296	6.8	5.9
3	3.2	30	30	7.6	6.4	48	468	2520	1990	372	6.1	6.2
4	3.0	50	39	8.0	6.7	74	89	2230	1820	302	5.9	6.6
5	5.3	100	50	5.8	7.0	246	69	2130	1710	236	6.6	6.4
6	9.4	93	46	8.4	6.4	496	77	2130	1700	91	7.2	6.2
7	9.4	85	46	6.0	6.4	119	96	2130	1540	30	7.2	6.2
8	13	85	42	6.0	7.0	67	93	2060	1350	25	6.4	6.6
9	22	83	45	6.0	8.0	64	108	1730	1550	17	6.2	6.9
10	17	78	47	6.0	8.0	67	136	1110	2080	37	6.1	6.4
11	12	71	69	6.0	6.4	67	148	1300	1910	42	5.9	6.8
12	8.0	67	116	10	7.0	227	134	2970	2180	38	5.7	6.4
13	10	60	74	50	6.4	535	123	2750	2070	33	6.1	6.4
14	11	52	44	250	6.1	382	351	1710	1650	33	6.9	6.2
15	12	46	43	320	5.8	88	768	1490	1300	11	11	14
16	13	51	37	200	318	80	636	2170	867	9.4	13	18
17	30	71	37	50	308	74	172	2870	372	9.4	6.1	14
18	20	50	38	10	17	67	167	3360	300	8.6	5.7	11
19	17	40	18	8.0	8.7	217	438	3260	246	8.4	5.4	12
20	15	56	8.0	6.9	9.4	540	860	2870	405	8.4	5.4	21
21	30	50	10	6.0	8.4	406	267	2630	496	8.4	5.9	12
22	78	44	11	6.0	8.0	118	867	2750	452	7.9	5.9	14
23	57	48	8.0	6.0	60	96	900	3190	242	6.9	6.1	12
24	50	53	6.1	6.0	414	85	2580	3840	178	6.8	5.7	12
25	52	60	6.1	91	93	83	1810	4190	139	6.6	5.9	11
26	51	57	6.1	383	29	96	1650	3920	162	6.6	6.9	14
27	45	55	6.4	361	48	91	1450	3680	271	6.8	7.4	16
28	47	47	6.4	149	51	103	1250	3650	718	6.2	6.2	16
29	58	40	6.7	12	48	101	1080	3840	372	5.9	5.4	17
30	60	45	6.7	13	---	96	1260	3710	350	6.4	5.4	16
31	64	---	6.1	8.4	---	101	---	3330	---	7.4	6.1	---
TOTAL	829.4	1787	983.6	2020.3	1521.5	4917	18993	84590	33810	1922.1	205.7	319.4
MEAN	26.8	59.6	31.7	65.2	52.5	159	633	2729	1127	62.0	6.64	10.6
MAX	78	100	116	383	414	540	2580	4190	2970	372	13	21
MIN	3.0	30	6.1	5.8	5.8	39	69	1110	139	5.9	5.4	5.9
AC-FT	1650	3540	1950	4010	3020	9750	37670	167800	67060	3810	408	634

WTR YR 1980 TOTAL 151899.0 MEAN 415 MAX 4190 MIN 3.0 AC-FT 301300

EXTREMES FOR 1980 WATER YEAR.--Maximum discharge, 4,410 ft^3/s (125 m^3/s) at 0900 May 25, gage height, 6.40 ft (1.951 m); minimum daily, 3.0 ft^3/s (0.085 m^3/s) Oct. 4.

06752280 - CACHE LA POUDRE R AB BOXELDER C, NR TIMNATH

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT										
21...	1200	13	1410	1410	8.2	11.0	12.3	601	401	150
NOV										
19...	1530	23	1020	1010	7.6	9.0	9.4	389	229	98
DEC										
19...	1045	10	866	889	8.0	1.0	9.5	390	130	100
JAN										
21...	1400	6.6	2040	2000	8.2	4.0	13.4	1012	792	260
FEB										
19...	1315	5.8	2080	1950	8.0	8.5	13.4	1012	792	260
MAR										
25...	1400	4.8	2160	2130	8.3	13.0	13.3	1078	888	270
APR										
22...	1415	4.7	2200	2160	8.4	16.5	13.6	1111	951	280
MAY										
20...	1420	7.9	2160	2090	8.3	14.5	12.8	1074	874	270
JUN										
17...	1320	5.5	1800	1790	8.3	23.0	12.4	900	730	230
JUL										
15...	1440	8.5	1980	1990	8.2	28.0	13.9	1036	856	260
AUG										
13...	1530	7.4	1980	2030	8.3	26.0	13.3	974	794	240
SEP										
01...	1500	5.9	2120	2110	8.2	24.0	13.2	1086	916	270

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT									
21...	55	62	1.1	4.6	200	500	22	.9	9.7
NOV									
19...	35	56	1.3	6.6	160	300	23	1.1	13
DEC									
19...	34	32	.7	2.1	260	180	18	.8	12
JAN									
21...	88	110	1.6	4.7	220	930	40	1.1	10
FEB									
19...	88	94	1.3	5.3	220	940	28	.9	9.1
MAR									
25...	98	110	1.5	5.8	190	1000	44	1.0	6.4
APR									
22...	100	120	1.6	6.6	160	1100	35	1.0	4.9
MAY									
20...	97	110	1.5	7.2	200	1000	34	.9	6.6
JUN									
17...	79	90	1.3	5.4	170	870	26	.9	7.5
JUL									
15...	94	110	1.5	9.9	180	970	35	.9	9.8
AUG									
13...	91	100	1.4	6.4	180	920	31	1.0	9.1
SEP									
01...	100	110	1.5	6.8	170	990	30	.9	11

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)
OCT										
21...	1200	938	1.3	33.2	3.10	.040	3.1	.060	.94	.040
NOV										
19...	1530	671	.91	41.7	9.20	.160	9.4	.270	1.60	2.40
DEC										
19...	1045	544	.74	14.7	1.90	.030	1.9	.050	1.30	.110
JAN										
21...	1400	1590	2.2	28.3	4.00	.040	4.0	.120	1.30	.040
FEB										
19...	1315	1570	2.1	17.7	3.40	.040	3.4	.150	.71	.040
MAR										
25...	1400	1660	2.3	21.5	3.40	.040	3.4	.090	1.40	.030
APR										
22...	1415	1750	2.4	22.2	2.20	.040	2.2	.060	1.30	.020
MAY										
20...	1420	1660	2.3	35.4	2.10	.040	2.1	.120	1.30	.040
JUN										
17...	1320	1420	1.9	21.1	1.50	.050	1.5	.180	1.10	.030
JUL										
15...	1440	1620	2.2	37.2	4.10	.060	4.2	.030	1.40	.020
AUG										
13...	1530	1520	2.1	30.4	2.40	<.010	2.4	.170	1.20	<.010
SEP										
01...	1500	1630	2.2	26.0	2.90	.080	3.0	.120	1.40	.020

DATE	TIME	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)
MAY										
20...	1420	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP										
01...	1500	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)
MAY									
20...	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP									
01...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	METHYL TRITHION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	PERTHANE TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
MAY									
20...	.00	.00	.00	.00	0	.00	.02	.00	.00
SEP									
01...	.00	.00	.00	.00	0	.00	.03	.00	.00

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT 21...	60	--	--	<1	4	--	7	--	<10
NOV 19...	--	2	<100	<1	<1	<2	4	250	30
DEC 19...	80	--	--	<1	<1	--	3	--	<10
JAN 21...	100	--	--	<1	2	--	4	--	<10
FEB 19...	--	1	<100	<1	<20	<1	4	320	60
MAR 25...	210	--	--	<1	4	--	3	--	30
APR 22...	300	--	--	<1	<1	--	5	--	60
MAY 20...	--	1	<100	<1	<20	18	4	330	60
JUN 17...	40	--	--	<1	4	--	5	--	20
JUL 15...	320	--	--	<1	8	--	4	--	<10
AUG 13...	--	1	<100	<1	<1	<2	5	150	20
SEP 01...	150	--	--	<2	7	--	3	--	50

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT 21...	<1	--	90	--	--	--	--	<1	20
NOV 19...	5	50	40	<.1	5	4	6	<1	30
DEC 19...	3	--	30	--	--	--	--	<1	20
JAN 21...	7	--	50	--	--	--	--	<1	<20
FEB 19...	8	90	60	<.1	5	4	15	<1	20
MAR 25...	3	--	70	--	--	--	--	<1	<20
APR 22...	2	--	70	--	--	--	--	<1	<20
MAY 20...	6	130	50	<.1	8	19	12	<1	20
JUN 17...	2	--	60	--	--	--	--	<1	<20
JUL 15...	7	--	20	--	--	--	--	<1	<20
AUG 13...	6	110	20	<.1	7	2	11	<1	40
SEP 01...	14	--	40	--	--	--	--	<1	<20

06752280 CACHE LA POUDRE R AB BOXELDER C, NR TIMNATH

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	9.8	20	9.4	6.1	4.9	4.0	6.4	20	89	43	5.9
2	15	9.8	20	9.8	5.9	5.0	4.0	12	8.1	51	7.9	6.1
3	13	9.8	20	9.1	8.1	5.5	4.4	53	16	291	7.2	6.4
4	10	10	20	9.4	10	7.4	4.8	66	375	99	6.6	6.6
5	8.1	12	20	9.4	8.4	6.8	4.6	34	921	8.4	6.6	6.6
6	9.1	13	20	9.1	7.9	6.1	4.4	11	1340	21	18	9.6
7	8.9	12	20	8.6	6.6	5.9	4.3	7.6	1560	24	9.0	6.2
8	15	13	19	8.6	5.9	5.5	4.3	7.2	1700	35	14	6.1
9	17	14	17	8.4	5.9	5.4	4.3	6.6	1340	41	36	5.9
10	17	17	15	7.9	6.9	5.2	4.3	6.4	792	54	45	5.7
11	19	21	8.9	8.4	5.7	5.2	4.2	6.2	420	75	13	5.5
12	20	20	9.1	8.4	5.7	5.0	4.2	6.2	213	8.9	6.9	5.5
13	23	22	8.9	8.4	5.7	4.9	4.3	6.2	109	176	8.4	5.9
14	23	24	8.9	8.4	5.7	4.9	4.3	6.2	9.1	11	26	5.9
15	21	23	8.9	8.4	5.7	4.9	4.2	6.1	6.2	8.6	32	7.4
16	27	22	8.6	8.1	5.7	4.9	4.2	6.4	5.7	7.6	44	14
17	15	22	8.6	7.9	5.7	4.8	4.3	45	5.5	7.4	35	17
18	14	22	9.1	8.1	5.7	4.8	4.4	12	5.9	7.4	76	26
19	14	22	10	8.4	5.7	4.8	4.4	8.6	5.5	7.2	77	24
20	17	22	8.9	7.9	5.7	4.6	4.6	8.1	5.5	7.2	60	15
21	14	22	8.6	6.8	5.7	4.6	4.6	7.6	5.7	6.9	31	13
22	12	23	8.9	6.9	5.5	4.6	4.8	7.2	5.7	7.2	7.9	12
23	11	23	8.4	7.6	5.4	4.8	4.8	6.8	5.7	7.4	7.2	11
24	11	21	8.6	6.9	5.4	4.8	4.8	6.9	6.1	9.8	6.8	10
25	11	21	8.6	6.6	5.2	4.8	4.8	8.1	6.2	13	6.6	10
26	12	20	10	7.6	5.0	4.8	4.8	100	6.8	33	6.4	10
27	12	20	10	9.1	5.0	4.4	4.8	203	53	15	6.4	24
28	11	20	10	7.6	4.9	4.4	4.6	64	7.9	13	8.3	22
29	12	20	10	6.8	---	4.3	4.6	93	38	7.9	6.9	20
30	11	21	9.8	6.8	---	4.2	5.2	16	108	7.9	6.2	18
31	10	---	9.8	6.4	---	4.2	---	13	---	26	6.1	---
TOTAL	448.1	551.4	383.6	251.2	170.8	156.4	134.3	846.8	9100.6	1176.8	671.4	341.3
MEAN	14.5	18.4	12.4	8.10	6.10	5.05	4.48	27.3	303	38.0	21.7	11.4
MAX	27	24	20	9.8	10	7.4	5.2	203	1700	291	77	26
MIN	8.1	9.8	8.4	6.4	4.9	4.2	4.0	6.1	5.5	6.9	6.1	5.5
AC-FT	889	1090	761	498	339	310	266	1680	18050	2330	1330	677

CAL YR 1980 TOTAL 149682.1 MEAN 409 MAX 4190 MIN 5.4 AC-FT 296900
WTR YR 1981 TOTAL 14232.7 MEAN 39.0 MAX 1700 MIN 4.0 AC-FT 28230

EXTREMES FOR 1981 WATER YEAR.--Maximum discharge, 2,270 ft^3/s (64.3 m^3/s) at 1100 June 8, gage height, 5.51 ft (1.679 m); minimum daily, 4.0 ft^3/s (0.11 m^3/s) Apr. 1, 2.

06752280 - CACHE LA POUDRE R AB BOXELDER C, NR TIMNATH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT										
07...	1340	15	1290	1430	8.3	16.5	10.9	634	464	163
NOV										
16...	1240	25	980	1020	7.4	13.0	8.5	386	216	100
DEC										
14...	1300	5.4	2140	1950	8.0	5.5	15.2	1082	882	280
JAN										
18...	1140	4.2	2110	2150	7.8	3.5	15.7	1095	855	280
FEB										
23...	1035	5.6	1640	1510	7.7	4.5	11.5	801	718	202
MAR										
23...	1320	5.1	2120	2050	8.1	11.0	--	1136	956	290
APR										
13...	1020	3.9	2170	2060	8.1	13.0	11.3	1111	901	280
MAY										
10...	1320	5.2	1670	1650	8.3	19.5	10.7	885	765	221
JUN										
10...	1030	8.7	1840	1880	8.3	18.0	9.4	929	761	240
JUL										
13...	1145	242	167	165	7.8	16.5	8.4	58	21	16
AUG										
16...	1745	137	437	449	8.5	21.5	7.8	174	92	45
SEP										
16...	0930	63	898	894	7.8	13.0	8.0	377	232	98

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT									
07...	55	65	1.2	4.2	170	520	20	.9	8.1
NOV									
16...	33	57	1.3	5.9	170	270	28	1.0	13
DEC									
14...	93	98	1.3	6.0	200	980	27	1.2	9.5
JAN									
18...	96	110	1.5	6.0	240	1000	38	.9	10
FEB									
23...	72	83	1.3	5.6	83	840	27	.5	8.3
MAR									
23...	100	110	1.5	5.9	180	1100	33	1.1	26
APR									
13...	100	110	1.5	6.6	210	1000	34	1.2	11
MAY									
10...	81	94	1.4	5.7	120	780	65	1.3	9.4
JUN									
10...	80	90	1.3	5.2	168	910	26	1.1	8.7
JUL									
13...	4.4	6.8	.4	1.0	37	32	3.9	.2	7.8
AUG									
16...	15	27	.9	2.0	82	110	15	.4	7.3
SEP									
16...	32	52	1.2	4.6	145	270	33	.5	10

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)
OCT										
07...	1340	946	1.3	38.3	1.60	.050	1.6	.150	1.20	.050
NOV										
16...	1240	642	.88	43.3	7.00	.350	7.3	3.70	4.80	2.60
DEC										
14...	1300	1630	2.2	23.8	2.90	.030	2.9	.110	1.30	.090
JAN										
18...	1140	1700	2.3	19.3	--	<.020	3.3	.170	1.30	.470
FEB										
23...	1035	1300	1.8	19.7	2.20	.030	2.2	.220	2.00	.020
MAR										
23...	1320	1730	2.4	24.6	--	<.020	2.4	.100	1.10	.050
APR										
13...	1020	1680	2.3	17.7	2.00	.030	2.0	.090	.89	.020
MAY										
10...	1320	1340	1.8	18.8	1.20	.030	1.2	.290	1.60	.120
JUN										
10...	1030	1460	2.0	34.3	--	.030	<.10	.160	1.00	.060
JUL										
13...	1145	96	.13	62.7	--	<.020	.26	.080	1.00	.090
AUG										
16...	1745	275	.37	102	.96	.020	.98	.100	1.40	.260
SEP										
16...	0930	546	.81	101	1.90	.110	2.0	.510	1.80	.210

DATE	TIME	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)
JUN										
10...	1030	<.10	<.10	<.01	<.10	<.01	<.01	<.01	.01	<.01
SEP										
16...	0930	<.10	<.10	<.01	<.10	<.01	<.01	<.01	.03	<.01

DATE	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)
JUN									
10...	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
SEP									
16...	<.01	<.01	<.01	<.01	<.01	<.01	.01	<.01	<.01

DATE	METHYL TRITHION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	PERTHANE TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
JUN									
10...	<.01	<.01	<.01	<.10	<1	<.01	.05	<.01	<.01
SEP									
16...	<.01	<.01	<.01	<.10	<1	<.01	.09	<.01	<.01

06752280 - CACHE LA POUDRE R AB BOXELDER C, NR TIMNATH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT 07...	210	--	--	<1	7	--	7	--	11
NOV 16...	--	1	100	1	<10	<1	7	380	22
DEC 14...	140	--	--	<1	4	--	8	--	50
JAN 18...	110	--	--	<1	7	--	2	--	40
FEB 23...	--	1	100	<1	10	3	8	340	11
MAR 23...	500	--	--	<1	5	--	8	--	80
APR 13...	840	--	--	<1	7	--	6	--	50
MAY 10...	--	1	<100	<1	10	1	6	1400	88
JUN 10...	210	--	--	<1	<1	--	3	--	13
JUL 13...	290	--	--	<1	6	--	3	--	98
AUG 16...	--	1	<100	<1	<10	<1	4	400	30
SEP 16...	330	--	--	<1	8	--	2	--	26

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT 07...	2	--	19	--	--	--	--	<1	40
NOV 16...	1	60	30	<.1	4	1	4	<1	20
DEC 14...	1	--	60	--	--	--	--	<1	20
JAN 18...	1	--	70	--	--	--	--	1	50
FEB 23...	4	140	120	<.1	5	3	9	<1	20
MAR 23...	8	--	100	--	--	--	--	1	20
APR 13...	2	--	100	--	--	--	--	<1	20
MAY 10...	6	160	100	.1	10	4	10	<1	20
JUN 10...	3	--	28	--	--	--	--	1	20
JUL 13...	2	--	11	--	--	--	--	<1	30
AUG 16...	<1	30	9	.1	<1	2	1	<1	10
SEP 16...	<1	--	28	--	--	--	--	<1	10

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	14	5.5	4.9	4.4	5.0	4.8	3.6	5.4	3000	111	105
2	16	14	5.0	4.9	4.4	5.4	4.9	3.6	5.4	2830	114	178
3	16	13	4.6	4.8	16	5.4	4.3	4.0	6.1	2220	95	179
4	16	14	4.6	4.6	5.0	5.2	4.3	4.4	5.2	1800	56	62
5	16	15	4.6	4.8	4.4	5.2	4.3	4.2	10	1500	54	54
6	16	14	4.9	4.8	4.2	4.9	4.0	5.0	62	929	41	88
7	16	25	5.5	4.6	4.0	4.9	4.2	5.4	26	702	123	96
8	18	23	5.5	4.6	3.8	5.4	4.0	5.2	13	302	98	50
9	15	23	5.7	4.8	3.8	5.5	4.2	5.5	8.9	329	120	41
10	14	23	5.5	4.8	3.6	4.8	3.8	5.4	8.6	502	88	34
11	14	23	5.4	4.6	3.5	5.0	3.6	5.4	10	470	48	32
12	14	23	5.4	4.6	3.5	5.2	3.8	7.4	24	276	48	33
13	16	23	5.4	4.4	3.7	5.0	3.8	98	57	195	58	57
14	16	23	5.4	4.4	4.0	5.0	4.0	14	23	116	180	381
15	27	23	5.4	4.4	4.4	5.0	4.0	8.6	17	71	94	164
16	34	22	5.2	4.3	4.8	5.0	3.8	6.4	73	66	54	64
17	19	14	5.0	4.2	5.0	5.0	3.8	6.1	279	41	75	54
18	15	5.4	5.0	4.3	23	5.0	4.0	5.5	322	23	120	52
19	16	4.8	5.0	4.3	8.1	5.0	4.2	5.5	222	15	88	50
20	20	4.6	4.9	4.2	5.9	5.0	4.0	5.2	263	48	94	46
21	19	4.6	4.9	4.2	5.5	5.0	4.0	5.5	441	91	175	42
22	18	4.6	5.0	4.0	5.5	5.0	4.0	5.2	614	68	106	42
23	16	4.8	5.0	3.8	5.4	5.0	3.8	5.5	755	50	46	40
24	16	4.9	4.9	4.2	5.4	4.9	3.7	5.9	867	20	46	37
25	17	4.9	4.9	4.2	5.2	4.4	3.7	6.1	1240	25	62	35
26	16	4.9	4.9	4.3	5.0	4.4	3.6	5.7	1940	32	66	36
27	15	4.9	4.9	4.0	5.0	4.4	4.3	4.9	2110	406	65	35
28	14	4.9	4.8	4.2	4.9	4.3	4.0	4.8	2510	296	75	46
29	14	4.9	4.8	4.3	---	4.8	3.7	5.4	2620	425	70	36
30	14	4.6	4.8	4.4	---	4.4	3.3	5.5	2780	380	80	33
31	15	---	4.9	4.4	---	4.4	---	5.5	---	228	33	---
TOTAL	524	391.8	157.3	137.3	161.4	152.9	119.9	268.4	17317.6	17456	2583	2202
MEAN	16.9	13.1	5.07	4.43	5.76	4.93	4.00	8.66	577	563	83.3	73.4
MAX	34	25	5.7	4.9	23	5.5	4.9	98	2780	3000	180	381
MIN	14	4.6	4.6	3.8	3.5	4.3	3.3	3.6	5.2	15	33	32
AC-FT	1040	777	312	272	320	303	238	532	34350	34620	5120	4370

CAL YR 1981 TOTAL 13922.7 MEAN 38.1 MAX 1700 MIN 4.0 AC-FT 27620
WTR YR 1982 TOTAL 41471.6 MEAN 114 MAX 3000 MIN 3.3 AC-FT 82260

EXTREMES FOR 1982 WATER YEAR.--Maximum discharge, 3,000 ft^3/s (85.0 m^3/s) at 2300 June 30, gage height, 6.73 ft (2.051 m); minimum daily, 3.3 ft^3/s (0.093 m^3/s) Apr. 30.

☆ U.S. Government Printing Office 1984 - 778-548/9226 Reg. 8