

STATISTICAL SUMMARIES OF STREAMFLOW AND WATER-QUALITY DATA FOR STREAMS OF WESTERN NORTH DAKOTA, 1977-80

U.S. GEOLOGICAL SURVEY

OPEN-FILE REPORT 81-1066



REPORT DOCUMENTATION PAGE	1. REPORT NO.	2.	3. Recipient's Accession No.
4. Title and Subtitle Statistical Summaries of Streamflow and Water-Quality Data for Streams of Western North Dakota, 1977-80			5. Report Date July 1981 6.
7. Author(s) Norman D. Haffield			8. Performing Organization Rept. No. WRD/OF 81-1066
9. Performing Organization Name and Address U.S. Geological Survey, Water Resources Division 821 East Interstate Avenue Bismarck, North Dakota 58501-1199			10. Project/Task/Work Unit No. 11. Contract(C) or Grant(G) No. (C) (G)
12. Sponsoring Organization Name and Address U.S. Geological Survey, Water Resources Division 821 East Interstate Avenue Bismarck, North Dakota 58501-1199			13. Type of Report & Period Covered Final 14.
15. Supplementary Notes			
16. Abstract (Limit: 200 words) Statistics for the streamflow and water-quality data collected at 67 stations in western North Dakota from October 1977 through September 1980 are presented in a format that will make the data more useful to those who are making water-resources planning and development decisions.			
17. Document Analysis a. Descriptors Hydrologic data, Surface water, Water quality statistics, Sediment b. Identifiers/Open-Ended Terms North Dakota, Fort Union coal region c. COSATI Field/Group			
18. Availability Statement No restriction on distribution		19. Security Class (This Report) Unclassified 20. Security Class (This Page) Unclassified	21. No. of Pages 83 22. Price

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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FOR STREAMS OF WESTERN NORTH DAKOTA, 1977-80

By Norman D. Haffield

Open-File Report 81-1066

Bismarck, North Dakota

July 1981

UNITED STATES DEPARTMENT OF THE INTERIOR

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GEOLOGICAL SURVEY

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CONVERSION FACTORS

For those readers who may prefer to use the International System (SI) of metric units rather than inch-pound units, the conversion factors for the terms used in this report are listed below:

<u>Multiply inch-pound unit</u>	<u>By</u>	<u>To obtain SI unit</u>
cubic foot per second (ft ³ /s)	0.02832	cubic meter per second (m ³ /s)
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
square mile (mi ²)	2.590	square kilometer (km ²)

STATISTICAL SUMMARIES OF STREAMFLOW AND WATER-QUALITY DATA
FOR STREAMS OF WESTERN NORTH DAKOTA, 1977-80

By Norman D. Haffield

ABSTRACT

Statistics for the streamflow and water-quality data collected at 67 stations in western North Dakota from October 1977 through September 1980 are presented in a format that will make the data more useful to those who are making water-resources planning and development decisions.

INTRODUCTION

As much as 4.1 billion tons of strippable lignite lies within the 16 defined strippable deposits in western North Dakota (Pollard and others, 1972). Mining and its associated activities have been increasing at a rapid pace in recent years. In an effort to measure the effect that increased coal development might have on the water resources of western North Dakota, the U.S. Geological Survey established a data-collection network to monitor the quality and quantity of streamflow in drainage basins underlain by strippable lignite deposits. The data from this network will provide a data base that will aid in making the various land-use and development impact decisions that will be required in the future.

Purpose and Scope

The purpose of this report is to present a statistical summary of the streamflow and water-quality data that have been collected from October 1977 through September 1980 at 67 streamflow stations located in that part of North Dakota that is likely to be impacted by coal development. The data used to compile this report have been published in the U.S. Geological Survey's Water-Data Reports for 1978, 1979, and 1980; however, summarization of the data in one report puts it in a more useful and manageable form.

Location and Physical Geography of Study Area

The study area consists of the area in North Dakota located southwest of the Missouri River and Burke, Burleigh, Divide, McLean, Mountrail, Renville, Ward and Williams Counties, located north and east of the Missouri River.

All of the study area except the extreme northeastern part is in the Upper Missouri drainage basin. The major tributaries to the Missouri River are the Knife, Heart, Cannonball, North Fork Grand and Little Missouri Rivers. Of these, the Knife, Heart, and Cannonball lie entirely within the State's boundaries and flow in an easterly direction to their respective confluences with the Missouri. The North Fork Grand River, which begins in Bowman County, flows southeasterly into South Dakota. The Little Missouri River has its head waters in northeastern Wyoming and flows through parts of Montana and South Dakota before entering North Dakota near the southeastern corner; it then continues to flow in a northerly direction to its confluence with Lake Sakakawea.

The northern part of the study area is in the Hudson Bay drainage basin and is drained by the Souris River and its tributaries. The Souris which originates in the southeastern part of the Canadian Province of Saskatchewan flows in a southeasterly direction through the northeast corner of the study area before swinging northward and returning to Canada.

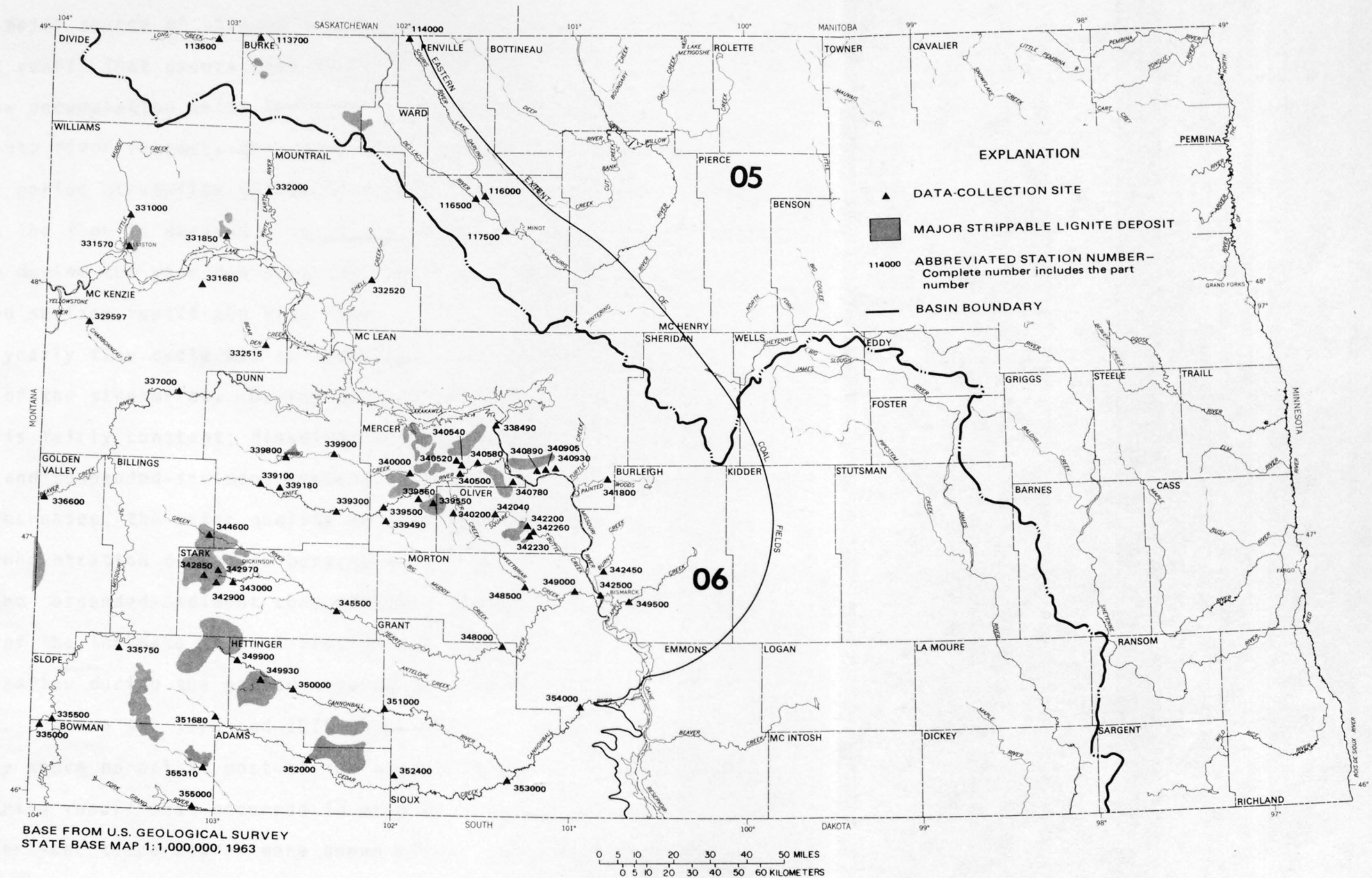


FIGURE 1.—Locations of data-collection sites and major strippable lignite deposits.

Hydrologic Conditions

The major source of streamflow throughout the study area is the snowmelt runoff that occurs each spring. High flows occur as the winters snow accumulation melts and runs overland across mostly frozen ground into river channels that have heavy ice cover. After the snowmelt period streamflow gradually recedes to a base-flow condition in which the flow is derived from ground-water discharge. Rainfall at any time during the year can cause an increase in streamflow through increased surface runoff and base flow.

The yearly flow cycle has an important influence on the water quality of the streamflow. During periods of base flow, the water quality is fairly constant; dissolved-solids concentration generally is high and suspended-sediment concentration is low. When surface runoff increases, the water quality becomes more variable; dissolved-solids concentration decreases because of the dilution by runoff water, and suspended-sediment concentration generally increases because of the increase in bank erosion and channel scour.

Streamflow during the period covered by this report was quite variable. During the 1978 and 1979 water years streamflow was generally above normal in most of the area. This was a result of the heavy spring runoff that occurred in each of these years. During the 1980 water year temperatures were above normal and precipitation was below normal during the winter and spring months, therefore snowmelt runoff was much below normal. These dry conditions which continued throughout the summer months resulted in extremely low streamflow for the year. Mean discharges for each water year and the mean for period of record at selected streamflow stations are given in the following table.

	Mean discharge (ft ³ /s) (cubic feet per second)			
	Water Year			Period of record
Streamflow station	1978	1979	1980	
Souris River above Minot	85.4	680	26.0	173
Little Missouri River near Watford City	1501	580	72.9	612
Knife River at Hazen	332	191	48.6	181
Heart River near Mandan	702	365	61.3	263
Cannonball River at Breien	719	370	64.8	253

DATA COLLECTION

Prior to October 1977, the U.S. Geological Survey was operating 42 surface-water data collection stations in the area covered by this report. These stations were operated to provide information for various Federal and State planning and action programs. Discharge, water temperature, and specific conductance data, were being collected at each station. Other water-quality data were being collected also, but due to the varying needs of the programs for which the individual stations were being operated, the water-quality parameters varied from station to station.

During 1977 and 1978, 25 new data collection stations were added to the network. The new stations were of special benefit to the overall data collection network as they generally were located on smaller drainage basins, therefore making it possible to begin establishing a data base that would aid in defining the hydrologic properties of these smaller drainage systems.

At present data being collected in the area includes continuous discharge record and various water-quality measurements made at approximately monthly intervals. Measurements of specific conductance, water temperature, pH, dissolved oxygen and bicarbonate were made at the time of sample collection. Values for concentrations of dissolved chemical constituents were determined on sample water filtered through a 0.45-micron filter immediately following collection, and values for total concentrations were determined on unfiltered samples of the water-sediment mixture. Chemical analyses of samples were made by the U.S. Geological Survey Central Laboratory in Arvada, Colo. Sediment analyses were made by the sediment laboratory of the U.S. Geological Survey in Worland, Wyo. The data were collected according to U.S. Geological Survey Water Resources Division procedures (Skougstad and others, 1979; Guy and Norman, 1970; and Carter and Davidian, 1968).

STATISTICAL SUMMARIES

The statistical summaries of hydrologic data collected during the period October 1977 through September 1980 are presented in the following tables. Data are identified by an eight digit station number that has been assigned to that station using the downstream-order numbering system, which is used in all U.S. Geological Survey streamflow data reports, and by the gaging station name. Tables were prepared using the SAS System (SAS Institute Incorporated, 1979). The descriptive statistics include:

- (1) Sample size - the number of data values available for computing the descriptive statistics.
- (2) Maximum - the largest value in a group of observations .
- (3) Minimum - the smallest value in a group of observations.
- (4) Mean - the sum of the values of individual observations divided by the total number of observations in the group.
- (5) Median - the value of the middle observation of an uneven number of ordered observations or the mean of the two middle observations.
- (6) Standard deviation - a measure of the dispersion about the mean. It is the square root of the sum of the squares of deviations from the mean of all observations in a group divided by the number of observations.
- (7) Coefficient of variation - a dimensionless measure of the dispersion. It is the percentage the standard deviation is of the mean.

The first table for each station contains the statistics for selected water-quality constituents measured at periodic intervals at that station. The following are given for all constituents that had five or more observations: values for the maximum, minimum, mean, and standard deviations, and values for the 75, 50 (median), and 25 percentiles. When there were less than five observations for any constituent, only maximum and minimum values are given. Because the same sampling schedule was not used at each station, the list of water-quality variables used in the tables and the number of observations of an individual constituent could vary.

The number of observations was also affected by the streamflow conditions. The sampling was done at approximately monthly intervals, however during high flows extra samples were taken, and samples were not collected during periods of no flow. These deviations from a routine sampling schedule cause some bias to exist in the statistics for any individual station, because in order for the data base to be statistically valid, the samples should be collected so as to be representative of the entire streamflow over the period of observation.

The second table for each station contains monthly and annual statistics for daily streamflow data, which are presented in a manner similar to the water-quality data. However, the coefficient of variation, percent of annual runoff, and the 95th and 5th percentiles are also included.

SELECTED REFERENCES

- Carter, R. W., and Davidian, Jacob, 1968, General procedure for gaging streams: U.S. Geological Survey Techniques of Water-Resources Investestigations, Book 3, Chap. A-6, 13 p.
- Guy, H. P., 1969, Laboratory theory and methods for sediment analysis: U.S. Geological Survey Techniques of Water-Resources Investestigations, Book 5, Chap. C-1, 58 p.
- Guy, H. P., and Norman, V. W., 1970, Field methods for measurement of fluvial sediment: U.S. Geological Survey Techniques of Water-Resources Investestigations, Book 3, Chap. C-2, 59 p.
- Hem, J. D., 1970, Study and interpretation of the chemical characteristics of natural water, 2d ed.: U.S. Geological Survey Water-Supply Paper 1473, 363 p.
- North Dakota State Water Commission, 1968, North Dakota Interim State Water Resources Development Plan: Information Series No. 8, 240 p.
- Polland, B. C., Smith, J. B., and Knox, C. C., 1972, Strippable lignite reserves of North Dakota: Location, tonnage, and characteristics of lignite and overburden: U.S. Bureau of Mines Information Circular 8537, 37 p.
- SAS Institute Incorporated, 1979, SAS User's Guide: Raleigh, N.C., 494 p.
- Skougstad, M. W., and others, editors, 1979, Methods for determination of inorganic substances in water and fluvial sediments: U.S. Geological Survey Techniques of Water-Resources Investestigations, Book 5, Chap. A-1, 626 p.

U.S. Geological Survey, 1978, Water-Resources Data for North Dakota, Water
Year 1978: U.S. Geological Survey Water-Data Report ND-78-1, 774 p.

_____ 1979, Water-Resources Data for North Dakota, Water Year 1979: U.S.
Geological Survey Water-Data Report ND-79-1, 784 p.

_____ 1980, Water-Resources Data for North Dakota, Water Year 1980: U.S.
Geological Survey Water-Data Report ND-80-1, 803 p.

05113600 LONG CREEK NEAR NOONAN, ND

LOCATION.--Lat 48°58'52", long 103°04'34" near north line of NE¼ sec.1, T.163 N., R.96 W., Divide County, Hydrologic Unit 09010001, on right bank 150 ft (46 m) upstream from county highway bridge, 1.5 mi (2.4 km) upstream from international boundary, and 7 mi (11 km) northwest of Noonan.

DRAINAGE AREA.--1,790 mi² (4,640 km²), approximately, of which about 1,160 mi² (3,000 km²) is probably noncontributing.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN	
							50	25
TEMPERATURE (DEG C)	40	25.00	0.00	9.01	8.84	18.75	5.25	1.00
STREAMFLOW, INSTANTANEOUS (CFS)	40	4660.00	0.01	481.41	1110.19	201.00	28.50	0.60
SPECIFIC CONDUCTANCE (MICROMHOS)	40	2000.00	300.00	1133.00	506.52	1482.50	1200.00	687.50
PH (UNITS)	17	9.60	7.60	8.40	0.44	8.55	8.30	8.15
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	16	28.00	0.20	4.35	6.70	4.47	2.00	1.42
BICARBONATE (MG/L AS HCO ₃)	17	691.00	82.00	325.53	166.71	431.50	326.00	179.00
CARBONATE (MG/L AS CO ₃)	17	28.00	0.00	1.65	6.79	0.00	0.00	0.00
HARDNESS (MG/L AS CaCO ₃)	17	910.00	90.00	446.24	227.25	560.00	410.00	315.00
HARDNESS, NONCARBONATE (MG/L AS CaCO ₃)	17	350.00	23.00	178.94	123.35	330.00	140.00	56.50
CALCIUM, DISSOLVED (MG/L AS Ca)	17	200.00	18.00	81.88	47.70	90.50	74.00	55.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	17	100.00	11.00	59.35	28.92	85.50	56.00	38.50
SODIUM, DISSOLVED (MG/L AS Na)	17	270.00	23.00	139.41	66.18	195.00	140.00	93.50
SODIUM PERCENT	17	51.00	25.00	39.53	6.78	44.00	42.00	35.50
POTASSIUM, DISSOLVED (MG/L AS K)	17	14.00	7.60	11.15	2.09	13.00	12.00	9.60
CHLORIDE, DISSOLVED (MG/L AS CL)	17	33.00	5.10	19.31	8.39	27.00	19.00	14.50
SULFATE, DISSOLVED (MG/L AS SO ₄)	17	770.00	76.00	450.35	227.30	685.00	430.00	265.00
FLUORIDE, DISSOLVED (MG/L AS F)	17	0.30	0.00	0.16	0.07	0.20	0.20	0.10
SILICA, DISSOLVED (MG/L AS SiO ₂)	17	16.00	1.20	6.50	3.42	7.60	6.70	4.70
BORON, DISSOLVED (UG/L AS B)	17	410.00	0.00	126.47	118.32	210.00	90.00	40.00
IRON, DISSOLVED (UG/L AS FE)	17	450.00	10.00	155.29	117.75	200.00	120.00	60.00
MANGANESE, DISSOLVED (UG/L AS MN)	17	1300.00	40.00	247.06	355.03	270.00	100.00	60.00
SOLIDS, RESIDUE AT 160 DEG. C DISSOLVED (MG/L)	17	1680.00	179.00	966.29	429.61	1325.00	920.00	672.50
SOLIDS, DISSOLVED (TONS PER AC-FT)	17	2.28	0.24	1.31	0.58	1.80	1.25	0.91

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

DESCRIPTIVE STATISTICS						PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS					
MONTH	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25	5
OCTOBER	109.00	0.01	10.55	21.58	204.57	1.0	69.30	11.50	0.60	0.03	0.01
NOVEMBER	9.30	0.04	2.69	3.23	120.09	0.3	8.09	6.70	0.70	0.26	0.09
DECEMBER	6.80	0.00	1.68	2.04	121.42	0.2	6.50	3.00	0.70	0.18	0.00
JANUARY	1.80	0.00	0.37	0.40	107.48	0.0	1.26	0.55	0.31	0.00	0.00
FEBUARY	0.58	0.00	0.19	0.17	88.19	0.0	0.53	0.30	0.19	0.00	0.00
MARCH	1380.00	0.00	87.48	258.39	295.36	8.5	833.00	5.50	0.30	0.19	0.00
APRIL	4650.00	8.70	552.76	1091.07	197.36	51.8	3724.00	354.50	87.50	38.25	13.55
MAY	1100.00	0.16	181.24	279.32	154.12	17.5	757.50	318.50	26.00	3.80	0.30
JUNE	109.00	0.03	23.03	25.23	109.58	2.2	81.40	30.75	18.00	0.14	0.03
JULY	2090.00	0.00	153.42	380.09	247.74	14.8	1065.30	137.50	7.70	0.03	0.00
AUGUST	85.00	0.00	13.38	21.31	159.22	1.3	63.60	24.00	0.66	0.01	0.00
SEPTEMBER	336.00	0.00	25.88	61.68	238.30	2.4	169.00	10.25	0.36	0.02	0.00
ANNUAL	4650.00	0.00	87.67	380.11	433.58	100.0	421.15	21.00	0.70	0.18	0.00

LOCATION.--Lat 48°58'04", long 102°51'04", in SW¼SW¼SW¼ sec.2, T.163 N., R.94 W., Burke County, Hydrologic Unit 09010001, on right bank 1,000 ft (305 m) downstream from bridge on county road, 5.4 mi (8.7 km) northwest of Columbus, 3.1 mi (5.0 km) upstream from international boundary, and 6 mi (9.7 km) upstream from the confluence with East Branch Short Creek.

DRAINAGE AREA.--167 mi² (432 km²), of which 87 mi² (225 km²) is probably noncontributing.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN	25
							50	
TEMPERATURE (DEG C)	18	22.50	0.00	9.00	7.59	16.00	7.25	1.75
STREAMFLOW, INSTANTANEOUS (CFS)	18	474.00	0.05	47.30	111.51	35.50	7.85	0.27
SPECIFIC CONDUCTANCE (MICROMHMS)	17	3850.00	565.00	1809.12	901.63	2445.00	1600.00	1070.00
OXYGEN, DISSOLVED (MG/L)	16	12.20	3.90	9.03	2.33	11.50	8.65	7.60
OXYGEN, DISSOLVED (PERCENT SATURATION)	16	111.00	46.00	82.12	16.62	96.25	83.00	72.00
PH (UNITS)	16	8.60	7.40	8.34	0.41	8.70	8.45	8.10
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	16	9.40	1.10	3.19	2.08	4.18	2.55	1.73
BICARBONATE (MG/L AS HCO ₃)	16	976.00	137.00	406.69	208.95	495.25	405.00	274.50
CARBONATE (MG/L AS CO ₃)	16	31.00	0.00	9.06	10.31	16.25	6.50	0.00
NITROGEN, TOTAL (MG/L AS N)	16	4.00	1.20	1.98	0.79	2.48	1.70	1.43
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	16	4.00	1.00	1.84	0.83	2.45	1.55	1.15
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	17	0.45	0.00	0.08	0.11	0.09	0.05	0.02
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	17	0.30	0.00	0.05	0.08	0.08	0.01	0.00
PHOSPHORUS, TOTAL (MG/L AS P)	16	0.68	0.07	0.23	0.19	0.26	0.19	0.11
PHOSPHORUS, DISSOLVED (MG/L AS P)	17	0.67	0.02	0.16	0.19	0.16	0.09	0.06
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	17	46.00	4.60	24.39	9.34	31.50	23.00	19.50
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	14	3.30	0.00	1.20	0.85	1.75	1.15	0.65
HARDNESS (MG/L AS CaCO ₃)	17	450.00	69.00	243.82	119.92	335.00	230.00	130.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	16	9.00	0.00	0.56	2.25	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	17	85.00	19.00	44.24	19.56	58.00	43.00	24.50
MAGNESIUM, DISSOLVED (MG/L AS MG)	17	65.00	10.00	32.29	17.47	47.00	30.00	16.50
SODIUM, DISSOLVED (MG/L AS NA)	17	850.00	90.00	345.88	197.17	460.00	310.00	185.00
SODIUM PERCENT	17	92.00	65.00	73.76	5.77	76.00	73.00	70.00
POTASSIUM, DISSOLVED (MG/L AS K)	17	17.00	7.00	11.19	2.96	12.50	11.00	8.95
CHLORIDE, DISSOLVED (MG/L AS CL)	17	32.00	4.40	15.38	7.94	20.00	14.00	8.50
SULFATE, DISSOLVED (MG/L AS SO ₄)	17	1300.00	160.00	608.24	356.60	885.00	500.00	280.00
FLUORIDE, DISSOLVED (MG/L AS F)	17	0.50	0.10	0.25	0.12	0.35	0.20	0.20
SILICA, DISSOLVED (MG/L AS SiO ₂)	17	19.00	1.20	11.17	5.46	16.00	11.00	7.45
ARSENIC, DISSOLVED (UG/L AS AS)	7	7.00	1.00	3.86	1.95	5.00	4.00	2.00
ARSENIC, TOTAL (UG/L AS AS)	6	5.00	2.00	3.33	1.21	4.25	3.50	2.00
BARIUM, DISSOLVED (UG/L AS BA)	6	300.00	0.00	98.33	104.20	150.00	70.00	37.50
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	6	200.00	0.00	100.00	63.25	125.00	100.00	75.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	7	1.00	0.00	0.43	0.53	1.00	0.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	6	5.00	0.00	0.83	2.04	1.25	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	17	310.00	70.00	175.29	63.36	220.00	190.00	130.00
CHROMIUM, DISSOLVED (UG/L AS CR)	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	6	20.00	0.00	7.50	7.58	12.50	7.50	0.00
COBALT, DISSOLVED (UG/L AS CU)	7	3.00	0.00	1.43	1.51	3.00	1.00	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CU)	6	1.00	0.00	0.17	0.41	0.25	0.00	0.00
COPPER, DISSOLVED (UG/L AS CU)	7	15.00	2.00	7.43	4.54	10.00	7.00	4.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	6	18.00	3.00	7.00	5.51	9.00	5.50	3.75
IRON, DISSOLVED (UG/L AS FE)	17	250.00	50.00	137.71	63.62	190.00	130.00	80.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	6	150.00	30.00	68.33	47.92	112.50	50.00	30.00
MANGANESE, DISSOLVED (UG/L AS MN)	7	68.00	0.00	24.14	22.23	30.00	20.00	10.00
MOLYBDENUM, DISSOLVED (UG/L AS MO)	7	10.00	0.00	5.00	4.73	10.00	2.00	1.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	6	5.00	0.00	3.00	2.00	4.25	4.00	0.75
NICKEL, DISSOLVED (UG/L AS NI)	7	8.00	1.00	3.86	2.85	7.00	3.00	1.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	6	13.00	4.00	8.50	3.39	10.75	9.50	4.75
VANADIUM, DISSOLVED (UG/L AS V)	7	6.00	0.00	2.59	2.42	6.00	1.80	1.00
ZINC, DISSOLVED (UG/L AS ZN)	7	30.00	3.00	12.57	9.38	20.00	10.00	5.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	6	120.00	10.00	30.00	44.27	45.00	10.00	10.00
ALUMINUM, DISSOLVED (UG/L AS AL)	7	80.00	0.00	34.29	34.09	80.00	20.00	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	7	100.00	10.00	46.86	30.70	60.00	50.00	18.00
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	6	90.00	20.00	40.00	27.57	60.00	30.00	20.00
SELENIUM, DISSOLVED (UG/L AS SE)	7	2.00	0.00	0.29	0.76	0.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	6	4.00	0.00	1.00	1.55	1.75	0.50	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	17	2860.00	378.00	1301.94	699.99	1785.00	1120.00	725.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	17	3.89	0.51	1.77	0.95	2.43	1.52	0.99
MERCURY, DISSOLVED (UG/L AS HG)	7	0.60	0.00	0.11	0.22	0.10	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	6	0.70	0.00	0.17	0.27	0.33	0.05	0.00
SEDIMENT, SUSPENDED (MG/L)	18	70.00	4.00	26.94	19.31	40.00	23.00	9.50
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	18	42.00	0.00	4.45	10.71	3.27	0.24	0.02

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50	25
									MEDIAN	
OCTOBER	2.30	0.00	0.25	0.46	187.58	0.3	1.26	0.33	0.00	0.00
NOVEMBER	3.60	0.00	0.21	0.58	274.46	0.2	1.72	0.16	0.00	0.00
DECEMBER	0.18	0.00	0.01	0.04	287.43	0.0	0.14	0.00	0.00	0.00
JANUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
FEBRUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
MARCH	350.00	0.00	15.08	49.80	330.13	15.5	100.00	0.70	0.00	0.00
APRIL	900.00	0.20	52.01	136.81	263.03	51.6	344.15	27.75	8.70	2.40
MAY	114.00	0.00	15.90	23.34	146.80	16.3	74.20	24.00	7.00	0.30
JUNE	82.00	0.00	8.32	17.80	213.90	8.3	58.30	5.83	0.50	0.00
JULY	64.00	0.00	6.87	15.41	224.30	7.0	49.30	2.45	0.00	0.00
AUGUST	0.18	0.00	0.01	0.03	427.98	0.0	0.07	0.00	0.00	0.00
SEPTEMBER	16.00	0.00	0.88	2.96	337.27	0.9	7.85	0.00	0.00	0.00
ANNUAL	900.00	0.00	8.28	45.01	543.72	100.0	37.15	0.68	0.00	0.00

LOCATION.--Lat 48°59'24", long 101°57'28", in NW¼SE¼NE¼ sec.33, T.164 N., R.87 W., Renville County, Hydrologic Unit 09010001, on right bank 0.8 mi (1.3 km) downstream from international boundary, 16 mi (26 km) northwest of Sherwood, and at mile 511.4 (822.8 km).

DRAINAGE AREA.--8,940 mi² (23,150 km²), approximately, of which about 5,900 mi² (15,300 km²) is probably noncontributing.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	MEDIAN		
						75	50	25
TEMPERATURE (DEG C)	62	24.00	0.00	9.01	8.98	18.50	6.50	0.00
STREAMFLOW, INSTANTANEOUS (CFS)	50	6710.00	0.47	393.32	1240.46	128.00	15.00	4.15
SPECIFIC CONDUCTANCE (MICROMHMS)	61	2110.00	345.00	1165.66	425.55	1460.00	1120.00	857.50
OXYGEN, DISSOLVED (MG/L)	58	14.80	1.80	7.15	3.16	8.90	7.60	4.37
OXYGEN, DISSOLVED (PERCENT SATURATION)	29	107.00	0.00	60.57	31.24	89.00	76.00	26.50
PH (UNITS)	59	9.00	7.04	8.01	0.36	8.30	8.00	7.70
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	12	88.00	0.30	14.53	25.06	11.75	4.45	2.30
BICARBONATE (MG/L AS HCO3)	12	710.00	200.00	400.00	175.96	562.50	335.00	275.00
CARBONATE (MG/L AS CO3)	11	5.00	0.00	0.64	1.57	0.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	48	3.50	0.75	1.59	0.61	2.07	1.55	1.10
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	48	3.00	0.40	1.22	0.53	1.48	1.10	0.87
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	48	1.20	0.00	0.20	0.28	0.26	0.07	0.02
NITROGEN, NO2+NO3, TOTAL (MG/L AS N)	59	1.50	0.00	0.17	0.25	0.21	0.10	0.03
PHOSPHORUS, TOTAL (MG/L AS P)	59	0.36	0.02	0.14	0.08	0.17	0.12	0.09
PHOSPHORUS, DISSOLVED (MG/L AS P)	35	0.39	0.00	0.09	0.08	0.09	0.07	0.04
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	21	71.00	7.10	14.28	13.25	13.00	11.00	9.95
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	20	6.20	0.10	1.04	1.33	1.40	0.50	0.33
HARDNESS (MG/L AS CaCO3)	35	640.00	110.00	365.71	135.22	470.00	350.00	260.00
HARDNESS, NONCARBONATE (MG/L CaCO3)	34	140.00	0.00	33.97	31.79	51.50	30.00	5.50
CALCIUM, DISSOLVED (MG/L AS CA)	35	130.00	27.00	76.14	26.78	95.00	75.00	57.00
MAGNESIUM, DISSOLVED (MG/L AS MG)	35	88.00	11.00	42.91	18.11	52.00	40.00	29.00
SODIUM, DISSOLVED (MG/L AS NA)	35	330.00	27.00	136.86	63.52	180.00	120.00	96.00
SODIUM PERCENT	35	62.00	32.00	44.91	7.09	47.00	44.00	40.00
POTASSIUM, DISSOLVED (MG/L AS K)	35	14.00	8.50	11.39	1.59	13.00	12.00	10.00
CHLORIDE, DISSOLVED (MG/L AS CL)	35	110.00	6.60	47.95	28.39	68.00	43.00	21.00
SULFATE, DISSOLVED (MG/L AS SO4)	35	550.00	82.00	264.63	101.60	320.00	240.00	190.00
FLUORIDE, DISSOLVED (MG/L AS F)	35	0.40	0.00	0.23	0.09	0.30	0.20	0.20
SILICA, DISSOLVED (MG/L AS SiO2)	35	22.00	1.00	9.29	4.44	12.00	9.00	6.90
ARSENIC, DISSOLVED (UG/L AS AS)	5	4.00	1.00	2.40	1.14	3.50	2.00	1.50
ARSENIC, TOTAL (UG/L AS AS)	5	4.00	2.00	2.80	0.84	3.50	3.00	2.00
BARIUM, DISSOLVED (UG/L AS BA)	5	200.00	100.00	120.00	44.72	150.00	100.00	100.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	5	300.00	100.00	180.00	83.67	250.00	200.00	100.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	5	1.00	0.00	0.20	0.45	0.50	0.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	36	940.00	80.00	318.89	165.85	407.50	280.00	232.50
CHROMIUM, DISSOLVED (UG/L AS CR)	5	10.00	0.00	2.00	4.47	5.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	5	10.00	0.00	4.00	5.48	10.00	0.00	0.00
COBALT, DISSOLVED (UG/L AS CO)	5	1.00	0.00	0.40	0.55	1.00	0.00	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	5	1.00	0.00	0.20	0.45	0.50	0.00	0.00
COPPER, DISSOLVED (UG/L AS CU)	5	5.00	0.00	2.00	2.35	4.50	1.00	0.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	5	15.00	3.00	6.60	4.98	11.00	5.00	3.00
IRON, TOTAL RECOVERABLE (UG/L AS FE)	5	2300.00	420.00	1370.00	854.81	2150.00	1600.00	475.00
IRON, DISSOLVED (UG/L AS FE)	6	3200.00	10.00	630.00	1271.52	1152.50	45.00	10.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	5	230.00	50.00	116.00	69.86	175.00	110.00	60.00
MANGANESE, DISSOLVED (UG/L AS MN)	6	190.00	10.00	51.67	69.11	77.50	30.00	10.00
MOLYBDENUM, DISSOLVED (UG/L AS MO)	6	6.00	0.00	2.83	2.79	5.25	3.00	0.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	5	10.00	0.00	3.60	4.04	7.50	2.00	0.50
NICKEL, DISSOLVED (UG/L AS NI)	5	3.00	0.00	1.40	1.52	3.00	1.00	0.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	15	16.00	4.00	7.07	3.01	8.00	6.00	5.00
VANADIUM, DISSOLVED (UG/L AS V)	4	1.00	0.00					
ZINC, DISSOLVED (UG/L AS ZN)	5	10.00	3.00	8.60	3.13	10.00	10.00	6.50
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	14	40.00	0.00	25.00	11.60	32.50	25.00	20.00
ALUMINUM, DISSOLVED (UG/L AS AL)	6	50.00	0.00	20.00	22.80	42.50	15.00	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	5	50.00	20.00	38.00	10.95	45.00	40.00	30.00
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	4	60.00	20.00					
SELENIUM, DISSOLVED (UG/L AS SE)	5	1.00	0.00	0.60	0.55	1.00	1.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	5	1.00	0.00	0.20	0.45	0.50	0.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	58	1530.00	236.00	812.50	299.35	1047.50	740.50	590.75
SOLIDS, DISSOLVED (TONS PER AC-FT)	58	2.08	0.32	1.10	0.41	1.42	1.01	0.81
MERCURY, DISSOLVED (UG/L AS HG)	5	0.10	0.00	0.04	0.05	0.10	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	5	7.00	0.00	1.40	3.13	3.50	0.00	0.00
SEDIMENT, SUSPENDED (MG/L)	28	162.00	8.00	39.68	42.66	46.50	20.50	11.25
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	28	761.00	0.01	111.09	217.59	49.00	0.75	0.22

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS					
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50	25	5
									MEDIAN		
OCTOBER	170.00	1.10	26.27	40.52	154.25	1.0	125.00	30.00	5.70	1.85	1.30
NOVEMBER	21.00	1.50	10.96	5.04	46.03	0.4	20.00	15.00	11.00	8.50	2.26
DECEMBER	15.00	3.40	8.01	3.26	40.68	0.3	13.30	10.00	8.50	4.35	3.60
JANUARY	8.50	1.60	4.12	1.53	37.04	0.2	6.75	5.10	4.30	2.90	1.60
FEBRUARY	5.60	0.80	3.43	1.91	55.76	0.1	5.60	5.50	3.80	0.95	0.80
MARCH	800.00	0.90	92.64	172.67	186.39	3.4	545.00	143.50	5.40	3.20	0.90
APRIL	8450.00	70.00	973.70	1796.68	184.52	34.8	5833.50	627.50	270.00	168.50	80.00
MAY	8040.00	9.90	1198.29	1920.38	160.26	44.2	5737.99	2020.00	127.00	61.50	16.40
JUNE	799.00	2.40	150.28	178.00	118.44	5.4	552.55	200.75	90.00	5.35	2.60
JULY	1120.00	1.50	213.69	321.22	150.32	7.9	1063.00	239.50	74.00	3.00	1.67
AUGUST	168.00	0.45	38.53	43.25	112.26	1.4	144.20	54.00	27.00	1.00	0.60
SEPTEMBER	280.00	0.40	27.05	55.77	206.19	1.0	209.00	24.25	13.00	0.80	0.50
ANNUAL	8450.00	0.40	229.88	860.36	374.26	100.0	932.60	97.50	10.00	4.00	0.90

LOCATION.--Lat 48°22'20", long 101°30'18", in SW¼ sec.34, T.157 N., R.84 W., Ward County, Hydrologic Unit 09010001, on left bank 30 ft (9 m) upstream from county highway bridge, 3 mi (5 km) east of Foxholm, 19 mi (31 km) upstream from Des Lacs River, and at mile 414.5 (666.9 km).

DRAINAGE AREA.--9,470 mi² (24,530 km²), approximately, of which about 6,200 mi² (16,100 km²) is probably noncontributing.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	57	26.50	0.00	10.11	9.05	19.25	8.00	1.50
STREAMFLOW, INSTANTANEOUS (CFS)	56	5310.00	0.18	339.54	1023.50	193.25	51.00	4.60
SPECIFIC CONDUCTANCE (MICROMH/CM)	57	1580.00	420.00	887.89	239.57	1045.00	870.00	765.00
OXYGEN, DISSOLVED (MG/L)	35	17.20	0.20	9.15	3.37	11.00	8.60	7.60
OXYGEN, DISSOLVED (PERCENT SATURATION)	19	142.00	0.00	72.52	33.77	87.00	71.00	60.00
PH (UNITS)	37	9.20	7.40	8.30	0.48	8.70	8.10	8.00
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	12	46.00	0.50	6.50	13.29	13.38	2.35	0.72
BICARBONATE (MG/L AS HCO ₃)	12	720.00	260.00	414.17	153.95	567.50	350.00	290.00
CARBONATE (MG/L AS CO ₃)	12	25.00	0.00	9.08	11.20	21.25	0.50	0.00
NITROGEN, TOTAL (MG/L AS N)	36	3.70	1.00	1.81	0.70	2.28	1.55	1.30
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	36	3.70	0.54	1.46	0.64	1.80	1.40	0.99
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	37	1.10	0.00	0.25	0.29	0.32	0.13	0.06
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	35	0.35	0.00	0.13	0.12	0.25	0.10	0.02
PHOSPHORUS, TOTAL (MG/L AS P)	37	0.67	0.06	0.22	0.17	0.31	0.15	0.09
PHOSPHORUS, DISSOLVED (MG/L AS P)	1	0.06	0.06					
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	8	71.00	11.00	21.87	20.09	19.25	16.00	12.00
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	7	1.40	0.10	0.71	0.53	1.30	0.80	0.20
HARDNESS (MG/L AS CaCO ₃)	37	600.00	150.00	299.19	95.03	345.00	290.00	250.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	35	150.00	0.00	35.77	35.62	57.00	29.00	3.00
CALCIUM, DISSOLVED (MG/L AS Ca)	37	110.00	33.00	59.27	16.57	69.50	55.00	47.50
MAGNESIUM, DISSOLVED (MG/L AS Mg)	37	78.00	15.00	36.73	13.39	41.50	35.00	29.00
SODIUM, DISSOLVED (MG/L AS Na)	37	170.00	32.00	91.41	31.42	110.00	90.00	69.00
SODIUM PERCENT	37	48.00	30.00	39.30	4.43	42.00	40.00	36.50
POTASSIUM, DISSOLVED (MG/L AS K)	37	25.00	1.00	13.87	3.91	15.00	14.00	12.50
CHLORIDE, DISSOLVED (MG/L AS CL)	37	53.00	6.50	22.10	10.08	26.00	22.00	14.50
SULFATE, DISSOLVED (MG/L AS SO ₄)	37	350.00	86.00	208.00	62.08	260.00	190.00	170.00
FLUORIDE, DISSOLVED (MG/L AS F)	37	0.30	0.10	0.22	0.04	0.20	0.20	0.20
SILICA, DISSOLVED (MG/L AS SiO ₂)	36	18.00	0.40	8.77	4.68	12.75	8.05	5.20
ARSENIC, TOTAL (UG/L AS AS)	11	16.00	2.00	6.55	4.48	10.00	6.00	3.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	12	300.00	0.00	100.00	85.28	100.00	100.00	25.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	12	10.00	0.00	5.83	5.15	10.00	10.00	0.00
BORON, DISSOLVED (UG/L AS B)	25	790.00	90.00	231.60	137.83	285.00	190.00	160.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	12	20.00	0.00	5.00	7.98	10.00	0.00	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	12	3.00	0.00	1.00	1.28	2.00	0.00	0.00
COPPER, DISSOLVED (UG/L AS CU)	1	33.00	33.00					
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	12	11.00	2.00	4.83	2.55	5.75	4.50	3.00
IRON, TOTAL RECOVERABLE (UG/L AS FE)	12	820.00	50.00	331.67	245.65	455.00	250.00	132.50
IRON, DISSOLVED (UG/L AS FE)	36	520.00	10.00	40.83	85.30	37.50	20.00	10.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	12	1600.00	90.00	340.00	409.92	380.00	190.00	160.00
MANGANESE, DISSOLVED (UG/L AS MN)	36	3200.00	1.00	371.72	600.89	347.50	170.00	62.50
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	12	8.00	1.00	3.83	2.41	5.75	3.50	1.25
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	12	22.00	2.00	7.67	5.40	10.00	6.00	4.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	8	80.00	10.00	26.75	21.67	30.00	20.00	20.00
LITHIUM, DISSOLVED (UG/L AS LI)	1	50.00	50.00					
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	12	80.00	20.00	43.33	16.70	50.00	40.00	32.50
SELENIUM, TOTAL (UG/L AS SE)	12	1.00	0.00	0.67	0.49	1.00	1.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	37	1110.00	269.00	613.54	176.38	719.50	605.00	518.00
SOLIDS, DISSOLVED (TNS PER AC-FT)	37	1.51	0.37	0.83	0.24	0.98	0.82	0.71
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	12	0.40	0.00	0.10	0.10	0.10	0.10	0.02
SEDIMENT, SUSPENDED (MG/L)	35	66.00	2.00	10.11	11.08	12.00	7.00	4.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	34	272.00	0.00	10.57	46.90	2.30	0.62	0.06

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25
OCTOBER	52.00	0.38	19.18	22.68	118.23	0.7	52.00	50.00	5.40	2.00
NOVEMBER	51.00	2.30	19.39	22.48	115.91	0.7	51.00	51.00	3.85	2.60
DECEMBER	76.00	1.10	21.33	25.87	121.29	0.8	69.20	48.00	5.80	2.60
JANUARY	86.00	0.25	27.52	36.09	131.15	1.1	84.00	72.00	3.00	1.90
FEBRUARY	210.00	0.14	66.85	94.69	141.64	2.4	210.00	205.00	3.20	0.21
MARCH	350.00	0.21	70.29	93.36	132.82	2.7	229.00	160.00	4.50	3.65
APRIL	4080.00	0.98	523.51	1059.73	202.43	19.7	3970.00	346.25	46.00	4.20
MAY	5330.00	0.85	1385.87	2074.35	149.68	53.9	5204.00	4220.00	105.00	4.20
JUNE	1160.00	3.00	219.92	292.91	133.19	8.3	1081.50	278.50	116.00	4.50
JULY	330.00	4.80	136.03	120.58	88.65	5.3	330.00	261.00	108.00	11.00
AUGUST	330.00	2.00	87.42	120.57	137.92	3.4	330.00	174.50	10.00	6.55
SEPTEMBER	119.00	1.60	23.70	29.47	124.35	0.9	96.60	51.00	7.10	2.00
ANNUAL	5330.00	0.14	218.07	780.50	357.92	100.0	571.64	108.00	7.80	3.00

LOCATION.--Lat 48°22'14", long 101°34'11", in NW¼NE¼NW¼ sec.2, T.156 N., R.85 W., Ward County, Hydrologic Unit 09010002, on left bank 200 ft (60 m) upstream from county highway bridge in Foxholm, and at mile 23.0 (37.0 km).

DRAINAGE AREA.--939 mi² (2,432 km²), of which about 400 mi² (1,040 km²) is probably noncontributing.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	48	26.00	0.00	7.24	8.30	14.37	4.25	0.00
STREAMFLOW, INSTANTANEOUS (CFS)	47	2350.00	0.02	110.50	362.47	29.00	6.00	1.40
SPECIFIC CONDUCTANCE (MICROMHOS)	48	3000.00	210.00	1405.83	693.18	1860.00	1325.00	945.00
PH (UNITS)	18	8.90	7.30	8.16	0.43	8.50	8.10	7.87
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	15	52.00	0.70	8.59	14.46	6.70	2.70	2.30
BICARBONATE (MG/L AS HCO3)	16	812.00	115.00	410.63	173.62	509.25	393.00	282.25
CARBONATE (MG/L AS CO3)	16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARDNESS (MG/L AS CaCO3)	18	810.00	150.00	436.11	177.04	492.50	405.00	330.00
HARDNESS, NONCARBONATE (MG/L AS CaCO3)	18	400.00	32.00	94.89	84.82	115.00	66.00	48.75
CALCIUM, DISSOLVED (MG/L AS Ca)	18	160.00	35.00	82.17	34.75	91.00	68.50	63.75
MAGNESIUM, DISSOLVED (MG/L AS MG)	18	100.00	15.00	56.11	23.14	66.25	56.50	38.75
SODIUM, DISSOLVED (MG/L AS NA)	18	290.00	17.00	166.50	73.82	220.00	170.00	117.50
SODIUM PERCENT	17	53.00	19.00	42.18	8.00	47.00	42.00	39.00
POTASSIUM, DISSOLVED (MG/L AS K)	17	37.00	7.50	15.51	7.74	20.00	12.00	9.75
CHLORIDE, DISSOLVED (MG/L AS CL)	18	46.00	5.30	25.01	11.85	33.50	24.00	15.50
SULFATE, DISSOLVED (MG/L AS SO4)	18	770.00	88.00	422.67	173.93	515.00	430.00	285.00
FLUORIDE, DISSOLVED (MG/L AS F)	18	0.40	0.10	0.23	0.09	0.30	0.20	0.17
SILICA, DISSOLVED (MG/L AS SiO2)	18	28.00	4.60	12.07	6.12	15.00	10.50	7.90
BORON, DISSOLVED (UG/L AS B)	18	640.00	0.00	187.22	150.91	245.00	175.00	92.50
IRON, DISSOLVED (UG/L AS FE)	18	710.00	10.00	113.33	174.83	152.50	40.00	20.00
MANGANESE, DISSOLVED (UG/L AS MN)	18	1200.00	10.00	257.78	352.53	255.00	125.00	87.50
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	18	1900.00	268.00	1030.78	424.52	1255.00	1020.00	745.25
SOLIDS, DISSOLVED (TONS PER AC-FT)	18	2.58	0.36	1.40	0.58	1.70	1.38	1.01

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS						PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50	25	5
									MEDIAN		
OCTOBER	50.00	1.00	14.88	18.97	127.46	3.4	49.00	35.00	2.10	1.70	1.40
NOVEMBER	30.00	0.97	9.48	11.13	117.42	2.1	28.45	22.25	2.05	1.80	1.11
DECEMBER	19.00	0.34	5.01	5.96	118.95	1.1	18.00	10.00	1.40	0.68	0.36
JANUARY	8.50	0.03	2.08	2.63	126.30	0.5	6.00	5.40	0.32	0.18	0.10
FEBURARY	3.90	0.01	1.12	1.55	137.76	0.2	3.60	3.10	0.03	0.02	0.01
MARCH	650.00	0.01	31.88	113.42	355.77	7.3	305.90	2.95	1.50	0.15	0.04
APRIL	3100.00	1.80	153.66	442.19	287.76	34.1	639.55	51.25	27.50	13.75	2.00
MAY	611.00	5.50	138.74	181.34	130.70	31.8	452.60	306.00	21.00	10.50	7.00
JUNE	246.00	2.90	55.07	72.43	131.51	12.2	221.60	103.50	8.75	5.35	3.20
JULY	58.00	0.90	13.15	14.61	111.10	3.0	43.90	24.50	5.80	1.60	0.97
AUGUST	18.00	0.69	5.18	5.85	112.87	1.2	16.30	12.00	1.20	0.94	0.60
SEPTEMBER	47.00	0.48	13.49	16.91	125.42	3.0	44.45	33.00	2.80	1.30	0.72
ANNUAL	3100.00	0.01	37.01	151.17	408.43	100.0	219.20	19.00	3.20	1.13	0.04

LOCATION.--Lat 48°14'45", long 101°22'15", in NW¼NW¼SE¼ sec.17, T.155 N., R.83 W., Ward County, Hydrologic Unit 09010001, on right bank 180 ft (55 m) downstream from county highway bridge, 3.5 mi (5.6 km) west of Minot, 7 mi (11 km) downstream from Des Lacs River, and at mile 388.5 (625.1 km).

DRAINAGE AREA.--10,600 mi² (27,500 km²), approximately, of which about 6,700 mi² (17,400 km²) is probably noncontributing.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	50	25
TEMPERATURE (DEG C)	45	26.00	0.00	8.56	8.69	17.00	5.00	0.25
STREAMFLOW, INSTANTANEOUS (CFS)	42	4640.00	0.48	510.69	1283.43	173.25	47.00	6.67
SPECIFIC CONDUCTANCE (MICROMHOS)	45	1800.00	330.00	1041.55	345.48	1200.00	1020.00	835.00
PH (UNITS)	4	8.40	8.10	8.15	0.12	8.18	8.10	8.10
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	4	5.20	2.30	3.46	1.30	4.85	2.80	2.40
BICARBONATE (MG/L AS HCO3)	5	409.00	179.00	298.40	102.05	402.00	286.00	201.00
CARBONATE (MG/L AS CO3)	5	33.00	0.00	6.60	14.76	16.50	0.00	0.00
HARDNESS (MG/L AS CaCO3)	6	370.00	180.00	298.33	78.08	362.50	320.00	225.00
HARDNESS, NONCARBONATE (MG/L CaCO3)	6	59.00	0.00	27.50	23.19	41.75	35.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	6	74.00	38.00	57.83	15.61	71.75	59.50	43.25
MAGNESIUM, DISSOLVED (MG/L AS Mg)	6	45.00	21.00	37.67	10.25	45.00	43.00	27.00
SODIUM, DISSOLVED (MG/L AS Na)	6	140.00	59.00	103.50	36.27	140.00	109.50	62.00
SODIUM PERCENT	6	44.00	35.00	41.00	3.35	44.00	41.50	38.75
POTASSIUM, DISSOLVED (MG/L AS K)	6	16.00	8.90	11.65	2.82	14.50	11.00	8.97
CHLORIDE, DISSOLVED (MG/L AS CL)	6	29.00	10.00	18.67	7.06	26.00	16.50	13.75
SULFATE, DISSOLVED (MG/L AS SO4)	6	310.00	150.00	238.33	76.00	310.00	245.00	165.00
FLUORIDE, DISSOLVED (MG/L AS F)	6	0.20	0.10	0.15	0.05	0.20	0.15	0.10
SILICA, DISSOLVED (MG/L AS SiO2)	6	19.00	5.80	11.72	4.65	15.25	11.45	7.90
BORON, DISSOLVED (UG/L AS B)	6	270.00	30.00	168.33	104.96	262.50	195.00	52.50
IRON, DISSOLVED (UG/L AS Fe)	6	80.00	0.00	30.00	32.25	65.00	15.00	7.50
MANGANESE, DISSOLVED (UG/L AS MN)	6	910.00	100.00	431.67	345.16	797.50	360.00	100.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	6	854.00	404.00	666.67	201.90	842.75	715.00	455.75
SOLIDS, DISSOLVED (TONS PER AC-FT)	6	1.16	0.55	0.90	0.27	1.15	0.97	0.62

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF ANNUAL RUNOFF	PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION		95	75	50	25	5
OCTOBER	98.00	3.50	35.19	21.75	61.82	1.1	55.00	51.00	48.00	8.75	4.50
NOVEMBER	53.00	3.50	28.21	18.35	65.06	0.9	51.00	44.00	37.00	4.50	4.00
DECEMBER	62.00	2.50	22.69	21.34	94.05	0.7	62.00	44.00	12.00	4.75	2.50
JANUARY	82.00	0.80	27.30	33.97	124.43	0.9	82.00	72.00	5.50	1.90	1.34
FEBRUARY	220.00	0.50	66.17	92.43	139.69	1.9	213.50	195.00	6.30	0.80	0.50
MARCH	1050.00	0.90	118.03	204.92	173.62	3.8	639.00	160.00	15.00	6.00	0.90
APRIL	4700.00	20.00	709.57	1375.52	193.85	22.1	4622.50	330.00	141.50	50.00	29.55
MAY	5920.00	7.30	1571.40	2268.33	144.35	50.6	5726.00	4635.00	110.00	27.50	8.49
JUNE	1420.00	2.40	283.26	379.08	133.82	8.8	1323.50	391.50	113.00	7.13	2.82
JULY	568.00	1.30	150.39	136.37	90.67	4.8	328.60	293.00	113.00	8.35	1.80
AUGUST	334.00	7.30	99.01	119.66	120.86	3.2	332.00	182.00	24.00	13.50	8.00
SEPTEMBER	128.00	5.40	36.91	26.27	71.17	1.1	111.35	48.00	38.00	14.75	6.72
ANNUAL	5920.00	0.50	263.75	893.14	338.63	100.0	914.99	116.00	43.00	6.53	1.60

06329597 CHARBONNEAU CREEK NEAR CHARBONNEAU, ND

LOCATION.--Lat 47°51'10", long 103°47'40", in SW¼ sec.31, T.151 N., R.102 W., McKenzie County, Hydrologic Unit 10100004, Little Missouri National Grassland on right bank, 45 ft (14 m) downstream from county highway bridge, and 1.5 mi (2.4 km) west of Charbonneau.

DRAINAGE AREA.--149 mi² (386 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	46	28.00	0.00	7.88	8.66	15.87	5.25	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	46	1460.00	0.00	99.74	278.34	16.50	1.00	0.37
SPECIFIC CONDUCTANCE (MICROMHOS)	45	3800.00	200.00	1904.44	1106.84	2825.00	2170.00	735.00
PH (UNITS)	13	8.80	7.50	8.25	0.32	8.40	8.30	8.10
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	12	12.00	1.00	5.52	3.55	7.82	5.75	2.00
BICARBONATE (MG/L AS HCO3)	13	1570.00	89.00	763.77	444.67	1110.00	784.00	358.50
CARBONATE (MG/L AS CO3)	13	50.00	0.00	9.69	14.04	15.50	6.00	0.00
HARDNESS (MG/L AS CaCO3)	13	260.00	60.00	165.85	66.03	210.00	190.00	88.00
HARDNESS, NONCARBONATE (MG/L CaCO3)	13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	13	36.00	12.00	25.92	9.18	33.00	30.00	16.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	13	41.00	5.50	24.48	11.44	33.50	26.00	12.00
SODIUM, DISSOLVED (MG/L AS Na)	13	970.00	18.00	516.38	313.71	780.00	560.00	230.00
SODIUM PERCENT	13	90.00	33.00	79.08	18.16	86.00	86.00	81.50
POTASSIUM, DISSOLVED (MG/L AS K)	13	10.00	5.50	7.82	1.49	9.15	8.00	6.70
CHLORIDE, DISSOLVED (MG/L AS CL)	13	15.00	0.70	7.08	3.33	7.50	6.90	5.60
SULFATE, DISSOLVED (MG/L AS SO4)	13	1100.00	42.00	636.23	359.13	940.00	760.00	300.00
FLUORIDE, DISSOLVED (MG/L AS F)	13	1.10	0.10	0.58	0.32	0.85	0.60	0.25
SILICA, DISSOLVED (MG/L AS SiO2)	13	16.00	4.40	8.08	3.30	9.75	8.80	5.20
BORON, DISSOLVED (UG/L AS B)	13	440.00	0.00	206.15	117.30	290.00	210.00	110.00
IRON, DISSOLVED (UG/L AS FE)	13	890.00	20.00	182.31	225.10	210.00	120.00	60.00
MANGANESE, DISSOLVED (UG/L AS MN)	13	120.00	0.00	63.08	27.50	80.00	60.00	50.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	13	3010.00	147.00	1628.77	909.43	2365.00	1820.00	803.00
SOLIDS, DISSOLVED (TUNS PER AC-FT)	13	4.09	0.20	2.21	1.24	3.21	2.48	1.09

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF ANNUAL RUNOFF	PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION		95	75	50 MEDIAN	25	5
OCTOBER	1.20	0.09	0.53	0.29	53.62	0.2	1.13	0.64	0.48	0.42	0.11
NOVEMBER	1.40	0.50	0.74	0.20	26.75	0.3	1.04	0.90	0.70	0.60	0.50
DECEMBER	1.50	0.30	0.70	0.22	30.82	0.3	1.03	0.80	0.75	0.55	0.39
JANUARY	0.70	0.00	0.42	0.23	53.91	0.2	0.70	0.60	0.50	0.18	0.00
FEBRUARY	1.50	0.05	0.44	0.31	70.28	0.2	1.27	0.55	0.45	0.35	0.05
MARCH	1600.00	0.40	103.34	270.21	261.48	45.5	892.10	37.50	4.90	0.83	0.49
APRIL	4170.00	0.20	111.04	486.13	437.80	47.4	689.25	20.75	3.95	1.90	0.24
MAY	50.00	0.00	3.33	6.22	186.87	1.5	11.80	3.65	1.90	0.24	0.01
JUNE	210.00	0.00	5.79	24.45	422.39	2.5	19.85	2.10	1.00	0.56	0.02
JULY	70.00	0.00	3.59	10.20	283.85	1.6	29.00	1.60	0.39	0.02	0.00
AUGUST	3.70	0.00	0.41	0.51	123.67	0.2	1.30	0.45	0.26	0.15	0.00
SEPTEMBER	5.80	0.00	0.39	0.80	206.67	0.2	1.71	0.31	0.15	0.09	0.03
ANNUAL	4170.00	0.00	19.25	164.19	852.83	100.0	26.15	1.30	0.59	0.28	0.02

LOCATION.--Lat 48°17'04", long 103°34'21" in NE¼NW¼ sec.5, T.155 N., R.100 W., Williams County, Hydrologic Unit 10110102, on left bank 37 ft (11 m) downstream from centerline of highway, 1 mi (2 km) downstream from Cow Creek, 4 mi (6 km) upstream from Camp Creek, 10 mi (16 km) northeast of Williston, and 13 mi (21 km) upstream from mouth.

DRAINAGE AREA.--875 mi² (2,266 km²), approximately, of which about 100 mi² (260 km²) is probably noncontributing.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	41	24.00	0.00	7.91	8.04	16.00	5.00	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	41	5900.00	4.10	223.72	927.78	33.50	12.00	7.80
SPECIFIC CONDUCTANCE (MICROMHUS)	41	2400.00	235.00	1741.22	605.22	2130.00	1950.00	1555.00
PH (UNITS)	17	10.60	7.60	8.36	0.66	8.50	8.30	7.90
CARBON DIOXIDE, DISSOLVED (MG/L AS CU2)	17	38.00	0.00	8.43	9.87	12.50	4.50	2.65
BICARBONATE (MG/L AS HCU3)	17	939.00	115.00	624.41	230.59	751.50	683.00	507.00
CARBONATE (MG/L AS CU3)	17	19.00	0.00	2.47	5.71	0.00	0.00	0.00
HARDNESS (MG/L AS CACU3)	17	560.00	86.00	393.88	129.58	480.00	420.00	345.00
HARDNESS, NONCARBONATE (MG/L CACU3)	17	7.00	0.00	0.41	1.70	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS CA)	17	120.00	13.00	68.59	28.64	91.00	65.00	49.00
MAGNESIUM, DISSOLVED (MG/L AS MG)	17	69.00	13.00	54.06	16.95	63.00	63.00	49.50
SODIUM, DISSOLVED (MG/L AS NA)	17	420.00	14.00	290.82	119.39	375.00	330.00	235.00
SODIUM PERCENT	17	70.00	24.00	57.76	10.52	64.00	60.00	56.00
POTASSIUM, DISSOLVED (MG/L AS K)	17	13.00	6.80	9.59	1.59	11.00	10.00	8.45
CHLORIDE, DISSOLVED (MG/L AS CL)	17	14.00	2.10	7.78	3.36	9.45	8.20	5.30
SULFATE, DISSOLVED (MG/L AS SO4)	17	680.00	23.00	494.29	183.47	600.00	560.00	455.00
FLUORIDE, DISSOLVED (MG/L AS F)	17	0.40	0.10	0.25	0.11	0.30	0.30	0.15
SILICA, DISSOLVED (MG/L AS SI02)	17	29.00	7.20	14.64	6.29	19.50	14.00	9.70
BORON, DISSOLVED (UG/L AS B)	17	640.00	0.00	317.06	216.50	545.00	290.00	175.00
IRON, DISSOLVED (UG/L AS FE)	17	530.00	0.00	153.53	126.14	190.00	120.00	80.00
MANGANESE, DISSOLVED (UG/L AS MN)	17	220.00	0.00	69.41	78.22	135.00	30.00	10.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	17	1800.00	132.00	1263.53	458.62	1540.00	1400.00	1110.00
SOLIDS, DISSOLVED (TUNS PER AC-FT)	17	2.45	0.18	1.72	0.62	2.09	1.90	1.51

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF ANNUAL RUNOFF	PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION		95	75	50 MEDIAN	25	5
OCTOBER	14.00	8.30	11.04	1.79	16.22	1.7	13.00	13.00	11.00	9.30	8.50
NOVEMBER	16.00	10.00	13.27	1.52	11.46	2.0	16.00	14.00	13.00	13.00	10.00
DECEMBER	13.00	8.50	10.52	1.08	10.31	1.7	13.00	11.00	10.00	10.00	9.00
JANUARY	10.00	4.40	7.17	1.33	18.52	1.1	9.66	7.60	7.20	6.50	4.74
FEBRUARY	8.00	4.20	6.61	1.18	17.89	1.0	7.80	7.50	7.00	5.75	4.40
MARCH	1090.00	6.00	94.72	226.48	239.09	14.9	739.50	28.00	11.00	7.70	6.50
APRIL	6610.00	13.00	355.79	1117.84	314.19	54.2	2250.49	140.25	34.00	28.00	15.00
MAY	183.00	8.00	45.00	43.11	95.79	7.1	151.50	61.50	28.00	12.00	8.50
JUNE	221.00	6.70	23.19	28.89	124.62	3.5	62.55	24.00	19.00	7.60	6.70
JULY	1950.00	5.10	62.51	235.42	376.63	9.8	365.00	20.00	11.00	5.90	5.30
AUGUST	13.00	5.00	8.36	1.68	20.07	1.3	12.00	9.30	8.20	7.45	5.47
SEPTEMBER	22.00	7.00	10.08	3.12	30.91	1.5	16.90	11.00	8.90	8.00	7.46
ANNUAL	6610.00	4.20	53.86	345.87	642.18	100.0	106.00	16.00	10.00	7.80	5.59

06331570 STONY CREEK NEAR WILLISTON, ND

LOCATION.--Lat 48°09'16", long 103°34'27", in SE4SE4SW4 sec.17, T.154 N., R.100 W., Williams County, Hydrologic Unit 10110101, on left bank at the Hardy Salt Company plant, 1.2 mi (1.9 km) upstream from bridge on State Highway 1804, 3.1 mi (5.0 km) upstream from mouth, and 1.4 mi (2.3 km) east of Williston.

DRAINAGE AREA.--146 mi² (378 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	MEDIAN		
						75	50	25
TEMPERATURE (DEG C)	29	26.50	0.00	8.76	9.84	20.00	4.00	0.00
STREAMFLOW, INSTANTANEOUS (CFS)	29	2820.00	0.02	111.79	524.56	5.65	0.80	0.44
SPECIFIC CONDUCTANCE (MICROMHOS)	25	2800.00	240.00	1873.00	716.00	2530.00	2120.00	1250.00
OXYGEN, DISSOLVED (MG/L)	25	12.70	5.30	10.60	2.12	12.15	11.30	9.70
OXYGEN, DISSOLVED (PERCENT SATURATION)	25	147.00	64.00	93.12	16.94	98.00	91.00	85.00
PH (UNITS)	25	8.70	8.00	8.36	0.17	8.45	8.40	8.25
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	23	18.00	2.20	5.11	3.43	6.40	4.30	3.00
BICARBONATE (MG/L AS HCO ₃)	23	1140.00	270.00	686.52	264.04	954.00	695.00	458.00
CARBONATE (MG/L AS CO ₃)	23	33.00	0.00	8.74	11.22	19.00	4.00	0.00
NITROGEN, TOTAL (MG/L AS N)	25	3.80	0.79	1.31	0.72	1.35	1.10	0.95
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	25	2.80	0.60	1.01	0.49	1.10	0.89	0.76
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	25	0.50	0.00	0.11	0.13	0.13	0.08	0.02
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	25	0.86	0.00	0.19	0.23	0.28	0.10	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	25	0.45	0.02	0.10	0.10	0.12	0.07	0.05
PHOSPHORUS, DISSOLVED (MG/L AS P)	25	0.82	0.00	0.07	0.16	0.05	0.02	0.02
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	25	97.00	8.30	18.44	18.05	17.50	13.00	10.00
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	24	13.00	0.30	1.68	2.46	1.55	1.15	0.80
HARDNESS (MG/L AS CaCO ₃)	25	390.00	75.00	277.00	81.47	340.00	290.00	215.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	23	26.00	0.00	1.13	5.42	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	25	63.00	16.00	44.80	11.64	55.00	46.00	38.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	25	63.00	8.50	39.90	13.43	50.50	41.00	29.00
SODIUM, DISSOLVED (MG/L AS Na)	25	590.00	20.00	359.20	168.03	520.00	420.00	225.00
SODIUM PERCENT	25	89.00	34.00	70.08	12.65	77.50	75.00	65.00
POTASSIUM, DISSOLVED (MG/L AS K)	25	17.00	5.80	10.18	2.26	11.00	10.00	9.20
CHLORIDE, DISSOLVED (MG/L AS CL)	25	13.00	1.90	7.38	2.84	9.20	7.70	5.20
SULFATE, DISSOLVED (MG/L AS SO ₄)	25	800.00	47.00	487.88	194.90	650.00	550.00	325.00
FLUORIDE, DISSOLVED (MG/L AS F)	25	0.70	0.10	0.37	0.17	0.50	0.40	0.20
SILICA, DISSOLVED (MG/L AS SiO ₂)	25	18.00	5.40	10.84	3.23	12.00	11.00	8.75
ARSENIC, DISSOLVED (UG/L AS AS)	9	5.00	1.00	2.89	1.54	4.50	3.00	1.50
ARSENIC, TOTAL (UG/L AS AS)	7	5.00	2.00	3.71	1.11	5.00	4.00	3.00
BARIUM, DISSOLVED (UG/L AS BA)	9	200.00	0.00	114.44	72.30	200.00	100.00	65.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	7	300.00	0.00	157.14	113.39	300.00	100.00	100.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	9	3.00	0.00	0.44	1.01	0.50	0.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	7	5.00	0.00	0.71	1.89	0.00	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	24	400.00	60.00	271.67	94.90	350.00	315.00	190.00
CHROMIUM, DISSOLVED (UG/L AS CR)	9	10.00	0.00	1.56	3.43	2.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	7	20.00	0.00	9.29	6.07	10.00	10.00	5.00
COBALT, DISSOLVED (UG/L AS CO)	9	8.00	0.00	1.44	2.70	2.50	0.00	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	7	7.00	0.00	2.43	2.70	4.00	2.00	0.00
COPPER, DISSOLVED (UG/L AS CU)	9	25.00	1.00	8.22	7.12	10.00	8.00	3.50
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	7	58.00	3.00	14.86	19.50	16.00	8.00	4.00
IRON, DISSOLVED (UG/L AS FE)	25	270.00	10.00	78.60	64.31	90.00	60.00	40.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	7	630.00	120.00	220.00	182.76	190.00	160.00	130.00
MANGANESE, DISSOLVED (UG/L AS MN)	9	140.00	20.00	53.33	34.64	55.00	50.00	35.00
MOLYBDENUM, DISSOLVED (UG/L AS MO)	9	25.00	0.00	4.89	8.13	6.50	2.00	0.50
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	7	76.00	1.00	14.29	27.29	7.00	4.00	3.00
NICKEL, DISSOLVED (UG/L AS NI)	9	5.00	0.00	3.11	1.76	5.00	3.00	2.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	7	26.00	4.00	9.71	7.41	10.00	7.00	6.00
VANADIUM, DISSOLVED (UG/L AS V)	9	8.00	0.00	2.40	2.40	3.35	1.90	1.00
ZINC, DISSOLVED (UG/L AS ZN)	9	20.00	0.00	13.56	8.03	20.00	19.00	6.50
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	7	120.00	10.00	34.29	39.52	40.00	20.00	10.00
ALUMINUM, DISSOLVED (UG/L AS AL)	9	60.00	0.00	20.00	23.98	45.00	10.00	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	9	80.00	0.00	50.89	27.42	70.00	60.00	25.00
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	7	80.00	20.00	48.57	20.35	60.00	50.00	30.00
SELENIUM, DISSOLVED (UG/L AS SE)	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	7	1.00	0.00	0.14	0.38	0.00	0.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	25	1930.00	156.00	1282.64	510.97	1770.00	1470.00	798.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	25	2.62	0.21	1.74	0.70	2.41	2.00	1.09
MERCURY, DISSOLVED (UG/L AS HG)	9	0.30	0.00	0.07	0.10	0.10	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	7	0.30	0.00	0.09	0.11	0.10	0.10	0.00
SEDIMENT, SUSPENDED (MG/L)	29	1370.00	16.00	149.59	273.43	105.00	72.00	51.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	29	10400.00	0.00	583.34	1930.74	1.09	0.16	0.08

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF ANNUAL RUNOFF	PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION		95	75	50 MEDIAN	25	5
OCTOBER	0.70	0.00	0.21	0.21	101.42	0.2	0.60	0.41	0.10	0.00	0.00
NOVEMBER	0.53	0.07	0.28	0.12	43.29	0.2	0.48	0.38	0.29	0.20	0.07
DECEMBER	0.60	0.02	0.26	0.17	63.96	0.2	0.56	0.40	0.25	0.10	0.05
JANUARY	0.20	0.00	0.05	0.07	145.21	0.0	0.19	0.10	0.00	0.00	0.00
FEBURARY	0.50	0.00	0.03	0.09	335.15	0.0	0.27	0.00	0.00	0.00	0.00
MARCH	400.00	0.00	26.22	79.89	304.73	22.3	265.00	1.65	0.90	0.04	0.00
APRIL	2810.00	0.17	81.80	347.67	425.02	67.5	313.65	20.25	7.25	2.28	0.36
MAY	36.00	0.00	4.60	6.61	143.71	3.9	19.00	6.75	1.70	0.01	0.00
JUNE	8.40	0.00	1.33	1.58	118.91	1.1	4.89	1.83	1.10	0.00	0.00
JULY	109.00	0.00	5.08	18.31	360.64	4.3	39.60	0.67	0.24	0.00	0.00
AUGUST	0.24	0.00	0.05	0.07	126.49	0.0	0.18	0.12	0.00	0.00	0.00
SEPTEMBER	0.77	0.00	0.11	0.21	186.07	0.1	0.60	0.10	0.00	0.00	0.00
ANNUAL	2810.00	0.00	9.95	104.43	1049.11	100.0	16.00	0.60	0.15	0.00	0.00

LOCATION.--Lat 47°59'33", long 103°09'57", McKenzie County, Hydrologic Unit 10110101, in SE¼SW¼ sec. 12, T.152 N., R.98 W., on left bank at downstream side of bridge on county highway, 14 mi (22 km) northeast of Watford City.

DRAINAGE AREA.--135 mi² (350 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	MEDIAN		
						75	50	25
TEMPERATURE (DEG C)	45	26.00	0.00	8.82	8.44	17.75	7.00	1.25
STREAMFLOW, INSTANTANEOUS (CFS)	45	2370.00	0.29	95.95	375.49	12.70	1.10	0.51
SPECIFIC CONDUCTANCE (MICROMHUS)	45	4200.00	210.00	2217.44	1179.68	3045.00	2800.00	1185.00
PH (UNITS)	25	11.20	7.50	8.47	0.66	8.60	8.40	8.20
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	25	62.00	0.00	9.12	12.75	10.20	5.70	2.25
BICARBONATE (MG/L AS HCO ₃)	25	1550.00	115.00	890.68	341.40	1120.00	1030.00	574.00
CARBONATE (MG/L AS CO ₃)	25	43.00	0.00	8.72	12.79	17.50	0.00	0.00
HARDNESS (MG/L AS CaCO ₃)	25	340.00	52.00	214.48	74.10	265.00	250.00	160.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	25	55.00	12.00	36.04	11.87	44.50	39.00	27.00
MAGNESIUM, DISSOLVED (MG/L AS MG)	25	49.00	5.40	30.28	12.35	40.50	32.00	19.50
SODIUM, DISSOLVED (MG/L AS NA)	25	780.00	26.00	554.24	234.04	720.00	690.00	335.00
SODIUM PERCENT	25	90.00	49.00	81.52	9.18	85.50	84.00	81.00
POTASSIUM, DISSOLVED (MG/L AS K)	25	12.00	5.70	8.72	1.65	9.80	8.60	7.60
CHLORIDE, DISSOLVED (MG/L AS CL)	25	20.00	1.50	5.99	3.60	6.95	5.80	3.75
SULFATE, DISSOLVED (MG/L AS SO ₄)	25	1000.00	21.00	650.04	273.83	835.00	750.00	440.00
FLUORIDE, DISSOLVED (MG/L AS F)	25	1.00	0.00	0.43	0.22	0.60	0.40	0.30
SILICA, DISSOLVED (MG/L AS SiO ₂)	25	30.00	5.70	13.28	6.08	16.00	14.00	8.75
BORON, DISSOLVED (UG/L AS B)	25	1200.00	10.00	378.40	240.32	485.00	360.00	225.00
IRON, DISSOLVED (UG/L AS FE)	25	1300.00	0.00	277.20	323.66	310.00	160.00	50.00
MANGANESE, DISSOLVED (UG/L AS MN)	25	600.00	0.00	100.40	139.57	115.00	50.00	30.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	25	2550.00	119.00	1770.48	694.59	2260.00	2130.00	1160.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	25	3.47	0.16	2.41	0.95	3.07	2.90	1.57

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS						PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25	5
OCTOBER	13.00	0.27	1.18	1.53	129.98	0.8	2.64	1.20	0.95	0.63	0.32
NOVEMBER	1.70	0.60	1.05	0.22	20.65	0.7	1.30	1.20	1.10	0.87	0.68
DECEMBER	1.10	0.54	0.74	0.12	15.93	0.5	0.92	0.80	0.75	0.65	0.57
JANUARY	0.70	0.00	0.47	0.19	40.34	0.3	0.70	0.60	0.55	0.45	0.01
FEBRUARY	0.45	0.00	0.24	0.18	73.23	0.2	0.45	0.40	0.32	0.00	0.00
MARCH	1300.00	0.00	65.73	217.50	330.92	46.4	582.00	3.25	0.65	0.34	0.00
APRIL	1930.00	0.87	57.59	232.99	404.58	39.3	206.00	13.25	6.80	3.28	1.15
MAY	53.00	0.22	4.39	8.44	192.24	3.1	13.34	5.00	2.10	0.95	0.27
JUNE	110.00	0.22	4.07	13.89	341.30	2.8	22.70	1.50	0.62	0.48	0.31
JULY	245.00	0.27	7.46	36.16	484.93	5.3	28.50	0.55	0.46	0.40	0.31
AUGUST	2.70	0.02	0.39	0.38	98.29	0.3	1.12	0.38	0.32	0.25	0.14
SEPTEMBER	3.20	0.09	0.55	0.49	87.93	0.4	1.60	0.70	0.45	0.27	0.15
ANNUAL	1930.00	0.00	12.03	94.98	789.40	100.0	11.15	1.20	0.63	0.38	0.15

LOCATION.--Lat 48°10'52", long 103°11'26", 1n SW&SE&SE sec.33, T.155 N., R.96 W., Williams County, Hydrologic Unit 10110101, on left bank 40 ft (12 m) upstream from bridge on North Dakota State Highway 1804, 12 mi (19 km) southeast of Ray, and 1.4 mi (2.3 km) upstream from mouth.

DRAINAGE AREA.--102 mi² (264 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	35	28.00	0.00	10.67	9.59	19.00	8.50	0.00
STREAMFLOW, INSTANTANEOUS (CFS)	35	127.00	0.13	7.93	24.63	2.40	1.10	0.57
SPECIFIC CONDUCTANCE (MICROMHMS)	33	2400.00	505.00	1883.42	439.73	2115.00	2050.00	1815.00
OXYGEN, DISSOLVED (MG/L)	33	13.80	7.60	10.62	1.65	11.80	10.70	9.55
OXYGEN, DISSOLVED (PERCENT SATURATION)	33	182.00	14.30	95.22	24.63	105.50	97.00	88.50
PH (UNITS)	33	8.60	7.90	8.27	0.21	8.45	8.30	8.05
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	33	15.00	2.40	5.82	3.48	7.15	4.30	3.15
BICARBONATE (MG/L AS HCO ₃)	33	770.00	183.00	595.45	134.85	683.00	610.00	557.50
CARBONATE (MG/L AS CO ₃)	33	31.00	0.00	4.10	7.29	7.50	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	33	2.80	0.36	0.88	0.55	0.96	0.79	0.55
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	33	2.60	0.29	0.72	0.41	0.88	0.64	0.49
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	33	0.20	0.00	0.05	0.05	0.07	0.04	0.01
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	33	1.50	0.00	0.11	0.27	0.09	0.02	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	33	0.24	0.00	0.05	0.05	0.06	0.04	0.02
PHOSPHORUS, DISSOLVED (MG/L AS P)	33	0.14	0.00	0.03	0.03	0.03	0.02	0.01
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	33	40.00	5.20	12.84	7.02	16.00	11.00	8.05
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	28	52.00	0.10	2.85	9.72	1.25	0.50	0.40
HARDNESS (MG/L AS CaCO ₃)	33	590.00	140.00	426.06	94.01	485.00	440.00	400.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	33	90.00	28.00	66.12	13.82	75.00	67.00	59.50
MAGNESIUM, DISSOLVED (MG/L AS MG)	33	92.00	17.00	63.27	15.55	72.50	67.00	59.00
SODIUM, DISSOLVED (MG/L AS NA)	33	390.00	53.00	306.03	84.31	350.00	340.00	290.00
SODIUM PERCENT	33	83.00	42.00	61.61	8.94	63.50	60.00	58.50
POTASSIUM, DISSOLVED (MG/L AS K)	33	12.00	7.90	10.05	0.99	11.00	10.00	9.35
CHLORIDE, DISSOLVED (MG/L AS CL)	33	23.00	5.40	12.65	4.25	15.50	12.00	9.75
SULFATE, DISSOLVED (MG/L AS SO ₄)	33	730.00	100.00	560.91	150.69	640.00	610.00	535.00
FLUORIDE, DISSOLVED (MG/L AS F)	33	0.50	0.10	0.30	0.10	0.30	0.30	0.30
SILICA, DISSOLVED (MG/L AS SiO ₂)	33	20.00	4.60	13.17	4.02	16.00	14.00	10.25
ARSENIC, DISSOLVED (UG/L AS AS)	10	5.00	1.00	2.30	1.16	3.00	2.00	1.75
ARSENIC, TOTAL (UG/L AS AS)	6	3.00	2.00	2.67	0.52	3.00	3.00	2.00
BARIUM, DISSOLVED (UG/L AS BA)	10	300.00	0.00	82.00	98.30	125.00	40.00	7.50
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	6	300.00	0.00	100.00	126.49	225.00	50.00	0.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	10	10.00	0.00	2.60	4.01	4.75	1.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	6	10.00	0.00	1.67	4.08	2.50	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	33	370.00	100.00	275.45	60.99	320.00	290.00	250.00
CHROMIUM, DISSOLVED (UG/L AS CR)	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	6	10.00	0.00	2.50	4.18	6.25	0.00	0.00
COBALT, DISSOLVED (UG/L AS CO)	10	8.00	0.00	1.90	2.56	3.00	1.00	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	6	5.00	0.00	0.83	2.04	1.25	0.00	0.00
COPPER, DISSOLVED (UG/L AS CU)	10	25.00	0.00	7.50	7.14	10.00	6.00	3.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	6	14.00	2.00	7.17	4.71	11.75	6.50	2.75
IRON, DISSOLVED (UG/L AS FE)	33	97.00	0.00	38.33	22.41	45.00	34.00	25.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	6	190.00	30.00	100.00	57.62	152.50	90.00	52.50
MANGANESE, DISSOLVED (UG/L AS MN)	10	110.00	20.00	53.40	33.78	100.00	37.00	27.50
MOLYBDENUM, DISSOLVED (UG/L AS MO)	10	25.00	0.00	5.70	8.18	10.00	1.00	0.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	6	5.00	0.00	2.00	1.90	3.50	2.00	0.00
NICKEL, DISSOLVED (UG/L AS NI)	10	6.00	0.00	2.40	1.65	3.00	2.50	1.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	6	11.00	1.00	6.50	4.68	11.00	7.00	1.75
VANADIUM, DISSOLVED (UG/L AS V)	10	8.00	0.00	2.10	2.77	3.75	1.00	0.00
ZINC, DISSOLVED (UG/L AS ZN)	10	22.00	0.00	11.30	7.15	20.00	10.00	7.25
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	6	50.00	10.00	25.00	15.17	35.00	25.00	10.00
ALUMINUM, DISSOLVED (UG/L AS AL)	10	50.00	0.00	12.00	16.87	22.50	5.00	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	10	100.00	10.00	68.20	28.54	90.00	80.00	46.50
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	6	90.00	20.00	65.00	25.88	82.50	75.00	42.50
SELENIUM, DISSOLVED (UG/L AS SE)	10	1.00	0.00	0.10	0.32	0.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	6	1.00	0.00	0.17	0.41	0.25	0.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	32	1690.00	326.00	1317.47	325.22	1490.00	1425.00	1245.00
SOLIDS, DISSOLVED (TUNS PER AC-FT)	33	2.53	0.44	1.81	0.45	2.03	1.94	1.75
MERCURY, DISSOLVED (UG/L AS HG)	10	0.40	0.00	0.11	0.17	0.25	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	6	0.20	0.00	0.07	0.08	0.13	0.05	0.00
SEDIMENT, SUSPENDED (MG/L)	35	180.00	7.00	44.09	39.06	61.00	25.00	15.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	35	28.00	0.01	1.55	5.80	0.21	0.11	0.04

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS				PERCENT OF ANNUAL RUNOFF	PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS		COEFFICIENT OF VARIATION	95	75	50 MEDIAN	25
OCTOBER	2.10	0.65	1.24	0.49	39.13	1.6	2.00	1.80	0.99	0.86
NOVEMBER	2.40	0.40	1.12	0.49	43.86	1.4	2.10	1.40	0.98	0.80
DECEMBER	3.40	0.14	1.01	0.57	56.50	1.3	2.06	1.20	0.90	0.60
JANUARY	1.80	0.30	0.86	0.49	56.82	1.1	1.80	1.35	0.60	0.50
FEBRUARY	1.20	0.20	0.59	0.36	61.87	0.7	1.20	1.00	0.50	0.20
MARCH	200.00	0.00	12.49	33.78	270.58	15.9	90.00	1.70	1.10	0.28
APRIL	1200.00	1.20	50.24	180.74	359.76	61.9	156.75	19.75	8.80	5.15
MAY	30.00	0.60	5.64	5.82	103.10	7.2	19.00	7.10	3.70	1.30
JUNE	19.00	0.15	2.16	2.59	120.00	2.7	4.60	2.45	1.60	0.75
JULY	130.00	0.09	3.70	16.22	438.16	4.7	11.20	1.20	0.65	0.44
AUGUST	2.50	0.25	0.64	0.29	45.04	0.8	1.03	0.72	0.61	0.48
SEPTEMBER	1.60	0.12	0.60	0.27	44.69	0.7	1.10	0.72	0.60	0.41
ANNUAL	1200.00	0.00	6.66	54.38	816.51	100.0	13.00	1.80	0.92	0.59

LOCATION.--Lat 48°22'35", long 102°46'00", in SE&SW¼ sec.36, T.157 N., R.94 W., Mountrail County, Hydrologic Unit 10110101, 35 ft (11 m) upstream from bridge on county highway, and 0.2 mi (0.3 km) east of White Earth.

DRAINAGE AREA.--780 mi² (2,020 km²), approximately, of which about 290 mi² (750 km²) is probably noncontributing.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	50	25
TEMPERATURE (DEG C)	46	23.00	0.00	6.97	7.72	14.25	3.50	0.38
STREAMFLOW, INSTANTANEOUS (CFS)	46	3540.00	1.20	196.83	605.65	69.50	6.20	2.65
SPECIFIC CONDUCTANCE (MICROMHOS)	46	2550.00	360.00	1635.54	626.22	2062.50	1887.50	1237.50
PH (UNITS)	15	9.00	8.00	8.39	0.25	8.50	8.40	8.30
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	14	9.60	0.40	5.00	2.98	7.37	5.30	1.47
BICARBONATE (MG/L AS HCO ₃)	15	1040.00	132.00	765.13	292.95	969.00	881.00	618.00
CARBONATE (MG/L AS CO ₃)	15	20.00	0.00	3.93	6.28	10.00	0.00	0.00
HARDNESS (MG/L AS CaCO ₃)	15	340.00	110.00	251.53	67.91	310.00	260.00	220.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	15	2.00	0.00	0.13	0.52	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	15	48.00	16.00	36.00	9.31	45.00	38.00	28.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	15	67.00	17.00	39.20	13.05	48.00	40.00	31.00
SODIUM, DISSOLVED (MG/L AS Na)	15	550.00	31.00	375.47	162.18	500.00	420.00	280.00
SODIUM PERCENT	15	85.00	36.00	71.33	14.00	80.00	77.00	63.00
POTASSIUM, DISSOLVED (MG/L AS K)	15	8.90	4.30	6.77	1.30	8.20	6.80	5.90
CHLORIDE, DISSOLVED (MG/L AS CL)	15	64.00	9.60	38.17	17.30	56.00	41.00	23.00
SULFATE, DISSOLVED (MG/L AS SO ₄)	15	530.00	70.00	381.33	131.14	460.00	420.00	360.00
FLUORIDE, DISSOLVED (MG/L AS F)	15	0.90	0.00	0.37	0.22	0.50	0.40	0.20
SILICA, DISSOLVED (MG/L AS SiO ₂)	15	26.00	6.30	15.39	5.67	20.00	15.00	12.00
BORON, DISSOLVED (UG/L AS B)	15	680.00	120.00	414.67	174.88	530.00	460.00	260.00
IRON, DISSOLVED (UG/L AS FE)	15	1700.00	20.00	242.00	416.79	180.00	130.00	60.00
MANGANESE, DISSOLVED (UG/L AS MN)	15	260.00	20.00	104.00	81.40	150.00	80.00	30.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	15	1740.00	197.00	1293.40	459.64	1640.00	1430.00	1170.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	15	2.37	0.27	1.76	0.62	2.23	1.94	1.59

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25
OCTOBER	12.00	2.20	4.66	1.74	37.31	1.1	7.80	5.40	4.30	3.50
NOVEMBER	12.00	2.00	5.13	2.80	54.49	1.2	9.89	8.00	4.00	2.60
DECEMBER	7.00	1.50	4.11	1.47	35.78	1.0	6.50	5.50	4.00	2.50
JANUARY	4.00	0.37	2.56	0.72	28.31	0.6	3.86	3.00	2.50	2.00
FEBRUARY	3.50	1.20	1.98	0.61	30.88	0.4	3.00	2.50	2.20	1.30
MARCH	800.00	1.20	65.94	169.18	256.58	15.9	493.50	15.50	5.50	2.80
APRIL	3620.00	6.00	232.70	577.75	248.28	54.2	1579.50	87.75	42.50	21.75
MAY	429.00	1.40	70.40	95.12	135.12	17.0	283.00	107.00	27.00	6.00
JUNE	66.00	1.30	18.55	16.08	86.71	4.3	54.90	26.25	16.00	3.08
JULY	87.00	0.24	9.81	14.90	151.95	2.4	34.60	15.00	3.50	1.60
AUGUST	9.20	0.13	2.86	2.18	76.32	0.7	7.49	4.25	2.30	1.25
SEPTEMBER	65.00	1.20	5.05	7.36	145.67	1.2	13.80	5.20	3.55	2.18
ANNUAL	3620.00	0.13	35.23	185.43	526.41	100.0	105.60	9.73	4.00	2.33

LOCATION.--Lat 47°47'14", long 102°46'05", in NW¼ sec.30, T.150 N., R.94 W., McKenzie County, Hydrologic Unit 10110101, on right bank 0.5 mi (0.8 km) upstream from county highway culvert, and 5.5 mi (8.8 km) northwest of Mandaree.

DRAINAGE AREA.--74 mi² (192 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS						PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION		75	MEDIAN 50	25
TEMPERATURE (DEG C)	41	25.00	0.00	9.40	8.68		18.25	7.00	0.75
STREAMFLOW, INSTANTANEOUS (CFS)	41	1100.00	0.01	49.53	181.82		15.00	0.46	0.25
SPECIFIC CONDUCTANCE (MICROMHOS)	41	3650.00	240.00	2052.56	1027.53		2900.00	2420.00	1020.00
OXYGEN, DISSOLVED (MG/L)	29	11.40	6.40	9.27	1.41		10.30	9.60	8.20
OXYGEN, DISSOLVED (PERCENT SATURATION)	18	112.00	65.00	90.89	14.72		103.25	92.50	82.50
PH (UNITS)	30	8.80	7.80	8.40	0.25		8.60	8.45	8.20
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	6	24.00	1.60	7.58	8.60		13.50	4.00	1.82
BICARBONATE (MG/L AS HCO ₃)	6	1010.00	300.00	731.67	265.21		957.50	770.00	525.00
CARBONATE (MG/L AS CO ₃)	6	19.00	0.00	5.50	7.69		12.25	2.00	0.00
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	30	1.20	0.00	0.11	0.26		0.08	0.03	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	29	0.80	0.01	0.12	0.19		0.13	0.04	0.03
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	1	24.00	24.00						
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	1	1.00	1.00						
HARDNESS (MG/L AS CaCO ₃)	30	980.00	49.00	238.30	150.77		257.50	215.00	180.00
HARDNESS, NONCARBONATE (MG/L AS CaCO ₃)	28	230.00	0.00	8.21	43.47		0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS CA)	30	67.00	12.00	39.67	15.25		50.75	40.50	23.50
MAGNESIUM, DISSOLVED (MG/L AS MG)	30	230.00	4.60	33.89	37.57		31.25	27.00	25.50
SODIUM, DISSOLVED (MG/L AS NA)	30	880.00	32.00	541.40	216.87		692.50	600.00	357.50
SODIUM PERCENT	30	96.00	55.00	81.63	11.00		90.00	85.00	75.00
POTASSIUM, DISSOLVED (MG/L AS K)	30	11.00	5.50	8.29	1.57		9.35	8.50	6.98
CHLORIDE, DISSOLVED (MG/L AS CL)	30	48.00	3.00	9.74	11.00		10.18	5.10	4.18
SULFATE, DISSOLVED (MG/L AS SO ₄)	30	1100.00	49.00	718.63	211.42		837.50	760.00	637.50
FLUORIDE, DISSOLVED (MG/L AS F)	30	0.80	0.10	0.40	0.14		0.50	0.40	0.30
SILICA, DISSOLVED (MG/L AS SiO ₂)	30	18.00	1.90	9.65	4.39		12.25	8.85	6.10
ARSENIC, DISSOLVED (UG/L AS AS)	2	2.00	2.00						
ARSENIC, TOTAL (UG/L AS AS)	6	2.00	1.00	1.83	0.41		2.00	2.00	1.75
BARIUM, DISSOLVED (UG/L AS BA)	2	30.00	30.00						
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	6	500.00	100.00	200.00	167.33		350.00	100.00	100.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	2	3.00	1.00						
CHROMIUM, DISSOLVED (UG/L AS CR)	1	0.00	0.00						
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	6	10.00	0.00	3.00	3.95		5.50	2.00	0.00
COBALT, DISSOLVED (UG/L AS CO)	2	8.00	3.00						
COPPER, DISSOLVED (UG/L AS CU)	2	25.00	10.00						
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	6	31.00	0.00	8.50	11.52		15.25	4.00	1.50
IRON, TOTAL RECOVERABLE (UG/L AS FE)	6	3900.00	550.00	1423.33	1240.69		1950.00	1010.00	715.00
IRON, DISSOLVED (UG/L AS FE)	2	57.00	48.00						
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	6	800.00	70.00	226.67	282.04		312.50	115.00	100.00
MANGANESE, DISSOLVED (UG/L AS MN)	2	60.00	26.00						
MOLYBDENUM, DISSOLVED (UG/L AS MO)	2	25.00	10.00						
VANADIUM, DISSOLVED (UG/L AS V)	2	8.00	6.00						
ZINC, DISSOLVED (UG/L AS ZN)	2	20.00	8.00						
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	6	40.00	10.00	20.00	12.65		32.50	15.00	10.00
LITHIUM, DISSOLVED (UG/L AS LI)	2	100.00	83.00						
SELENIUM, DISSOLVED (UG/L AS SE)	2	0.00	0.00						
SELENIUM, TOTAL (UG/L AS SE)	6	1.00	0.00	0.17	0.41		0.25	0.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	30	2600.00	175.00	1826.93	554.29		2162.50	1970.00	1432.50
SOLIDS, DISSOLVED (TUNS PER AC-FT)	30	3.54	0.24	2.48	0.75		2.94	2.68	1.95
MERCURY DISSOLVED (UG/L AS HG)	2	0.10	0.10						
MERCURY TOTAL RECOVERABLE (UG/L AS HG)	6	0.40	0.00	0.10	0.15		0.18	0.05	0.00
SEDIMENT, SUSPENDED (MG/L)	20	177.00	8.00	74.05	48.41		110.75	72.50	27.50
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	20	2.40	0.00	0.33	0.67		0.14	0.05	0.01

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS						PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25	5
OCTOBER	0.61	0.22	0.28	0.06	22.11	0.3	0.41	0.30	0.26	0.24	0.24
NOVEMBER	0.40	0.18	0.26	0.04	16.04	0.3	0.33	0.30	0.25	0.22	0.20
DECEMBER	0.40	0.15	0.25	0.07	29.43	0.3	0.40	0.34	0.22	0.20	0.16
JANUARY	0.30	0.00	0.09	0.10	106.80	0.1	0.30	0.15	0.05	0.01	0.00
FEBRUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00	0.00
MARCH	1000.00	0.00	35.27	130.21	369.20	43.8	178.20	10.00	0.50	0.00	0.00
APRIL	1080.00	0.20	38.16	141.44	370.69	45.8	139.00	17.25	4.00	1.80	0.33
MAY	140.00	0.15	4.01	15.22	379.97	5.0	9.83	2.90	1.00	0.24	0.17
JUNE	70.00	0.20	1.61	7.41	460.03	1.9	2.30	0.91	0.48	0.30	0.22
JULY	27.00	0.12	1.33	3.03	228.06	1.6	4.13	2.50	0.34	0.18	0.14
AUGUST	0.50	0.08	0.18	0.07	39.71	0.2	0.33	0.20	0.17	0.15	0.10
SEPTEMBER	6.30	0.07	0.42	0.78	187.47	0.5	1.63	0.33	0.23	0.16	0.10
ANNUAL	1080.00	0.00	6.83	57.06	834.84	100.0	10.00	0.50	0.24	0.16	0.00

LOCATION.--Lat 48°03'11", long 102°08'10", in SE¼NE¼ sec.29, T.153 N., R.89 W., Mountrail County, Hydrologic Unit 10110101, on left bank 800 ft (240 m) downstream from bridge on county highway, and 6 mi (10 km) northwest of Parshall.

DRAINAGE AREA.--465 mi² (1,204 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	38	26.00	0.00	10.34	9.06	18.87	8.00	1.00
STREAMFLOW, INSTANTANEOUS (CFS)	38	1570.00	0.02	83.98	268.67	17.75	1.80	0.50
SPECIFIC CONDUCTANCE (MICROMHUS)	36	3020.00	350.00	2180.42	792.38	2742.50	2450.00	1692.50
PH (UNITS)	12	8.90	7.40	8.33	0.39	8.67	8.25	8.20
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	11	19.00	1.10	6.82	5.18	8.30	4.80	2.90
BICARBONATE (MG/L AS HCO3)	12	1030.00	268.00	691.00	260.41	899.75	786.00	446.75
CARBONATE (MG/L AS CO3)	12	93.00	0.00	12.67	27.12	20.00	0.00	0.00
HARDNESS (MG/L AS CaCO3)	12	350.00	140.00	255.00	70.90	320.00	255.00	195.00
HARDNESS, NONCARBONATE (MG/L CaCO3)	12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	12	59.00	21.00	38.50	12.53	49.50	39.50	24.75
MAGNESIUM, DISSOLVED (MG/L AS MG)	12	49.00	20.00	38.42	10.60	46.75	43.00	28.50
SODIUM, DISSOLVED (MG/L AS NA)	12	710.00	160.00	455.00	184.37	617.50	485.00	270.00
SODIUM PERCENT	12	86.00	68.00	77.50	5.14	79.00	79.00	74.25
POTASSIUM, DISSOLVED (MG/L AS K)	12	9.10	7.30	8.27	0.59	8.80	8.35	7.67
CHLORIDE, DISSOLVED (MG/L AS CL)	12	14.00	5.60	9.30	3.10	11.75	8.90	6.27
SULFATE, DISSOLVED (MG/L AS SO4)	12	930.00	250.00	639.17	220.60	820.00	675.00	455.00
FLUORIDE, DISSOLVED (MG/L AS F)	12	0.40	0.10	0.27	0.11	0.30	0.30	0.15
SILICA, DISSOLVED (MG/L AS SiO2)	12	16.00	2.50	9.70	4.94	14.25	10.50	4.50
BORON, DISSOLVED (UG/L AS B)	12	640.00	80.00	309.17	167.74	445.00	275.00	190.00
IRON, DISSOLVED (UG/L AS FE)	12	970.00	30.00	255.00	243.96	290.00	190.00	130.00
MANGANESE, DISSOLVED (UG/L AS MN)	12	110.00	20.00	59.17	29.99	80.00	60.00	32.50
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	12	2210.00	608.00	1564.92	558.82	2035.00	1725.00	1072.50
SOLIDS, DISSOLVED (TUNS PER AC-FT)	12	3.01	0.83	2.13	0.76	2.77	2.34	1.46

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS						PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25	5
OCTOBER	2.40	0.54	1.41	0.47	33.15	1.0	2.10	1.80	1.40	1.10	0.63
NOVEMBER	1.90	0.50	1.34	0.31	23.28	0.9	1.70	1.50	1.40	1.20	0.58
DECEMBER	1.30	0.02	0.55	0.37	68.33	0.4	1.10	0.80	0.70	0.08	0.02
JANUARY	0.65	0.00	0.05	0.12	249.79	0.0	0.33	0.02	0.02	0.00	0.00
FEBRUARY	0.02	0.00	0.00	0.00	412.80	0.0	0.02	0.00	0.00	0.00	0.00
MARCH	310.00	0.00	28.07	71.26	253.86	20.4	246.50	2.25	0.00	0.00	0.00
APRIL	1560.00	0.00	83.97	254.53	303.13	58.9	439.30	28.75	12.00	6.50	0.00
MAY	54.00	1.40	14.59	12.19	83.54	10.6	42.30	20.50	12.00	4.75	1.50
JUNE	40.00	0.20	5.05	5.14	101.77	3.5	12.00	6.65	4.25	1.48	0.57
JULY	98.00	0.06	3.47	10.35	298.58	2.5	10.30	4.80	0.82	0.41	0.15
AUGUST	4.80	0.02	0.87	0.64	73.40	0.6	1.96	0.99	0.70	0.50	0.32
SEPTEMBER	16.00	0.18	1.50	2.36	157.84	1.0	4.32	1.73	0.77	0.50	0.23
ANNUAL	1560.00	0.00	11.70	79.04	675.55	100.0	26.00	3.00	0.98	0.17	0.00

06335000 LITTLE BEAVER CREEK NEAR MARMARTH, ND

LOCATION.--Lat 46°16'29", long 103°58'33", in NE¼ sec.7, T.132 N., R.106 W., Bowman County, Hydrologic Unit 10110201, on right bank 150 ft (46 m) downstream from concreted ford, 0.8 mi (1.3 km) downstream from Corral Creek, 3 mi (5 km) southwest of Marmarth, and 5 mi (8 km) upstream from mouth.

DRAINAGE AREA.--587 mi² (1,520 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1979

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN	
							50	25
TEMPERATURE (DEG C)	34	24.00	0.00	7.75	8.41	12.50	5.00	0.00
STREAMFLOW, INSTANTANEOUS (CFS)	34	5289.99	1.20	352.71	961.51	240.75	8.80	3.50
SPECIFIC CONDUCTANCE (MICROMHUS)	34	2420.00	261.00	1338.38	585.48	1727.50	1495.00	816.25
PH (UNITS)	7	8.60	8.00	8.34	0.25	8.60	8.20	8.20
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	6	4.40	1.60	2.33	1.06	2.97	1.95	1.60
BICARBONATE (MG/L AS HCO ₃)	6	432.00	136.00	288.33	121.09	387.00	311.00	160.00
CARBONATE (MG/L AS CO ₃)	6	9.00	0.00	2.67	4.18	7.50	0.00	0.00
HARDNESS (MG/L AS CaCO ₃)	7	280.00	130.00	217.14	47.51	250.00	230.00	200.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	7	63.00	0.00	18.00	25.98	45.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	7	60.00	27.00	44.43	10.85	53.00	46.00	36.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	7	32.00	15.00	26.00	5.42	29.00	27.00	24.00
SODIUM, DISSOLVED (MG/L AS Na)	7	300.00	66.00	203.71	93.86	270.00	260.00	100.00
SODIUM PERCENT	7	73.00	51.00	63.43	9.69	71.00	69.00	52.00
POTASSIUM, DISSOLVED (MG/L AS K)	7	7.20	3.30	5.51	1.35	6.80	5.50	4.70
CHLORIDE, DISSOLVED (MG/L AS CL)	7	10.00	3.20	6.80	2.64	8.70	8.10	3.60
SULFATE, DISSOLVED (MG/L AS SO ₄)	7	570.00	160.00	407.14	145.68	520.00	470.00	270.00
FLUORIDE, DISSOLVED (MG/L AS F)	7	0.40	0.10	0.27	0.16	0.40	0.40	0.10
SILICA, DISSOLVED (MG/L AS SiO ₂)	7	9.30	5.10	8.27	1.44	9.10	8.50	8.40
BORON, DISSOLVED (UG/L AS B)	7	400.00	120.00	281.43	114.66	390.00	330.00	150.00
IRON, DISSOLVED (UG/L AS FE)	7	360.00	0.00	114.29	135.51	240.00	60.00	20.00
MANGANESE, DISSOLVED (UG/L AS MN)	7	80.00	9.00	55.57	29.05	80.00	70.00	20.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	7	1180.00	345.00	862.00	307.55	1100.00	1020.00	563.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	7	1.60	0.47	1.17	0.42	1.50	1.39	0.77

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1979

MONTH	DESCRIPTIVE STATISTICS						PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25	5
OCTOBER	334.00	2.00	23.40	59.48	254.19	2.5	194.70	7.35	5.20	4.30	2.22
NOVEMBER	5.20	0.90	3.12	0.99	31.75	0.3	4.90	3.60	3.25	2.50	1.00
DECEMBER	5.00	1.00	2.84	1.05	37.07	0.3	4.50	3.50	3.00	2.00	1.00
JANUARY	2.50	1.40	1.75	0.38	21.93	0.2	2.50	2.08	1.50	1.50	1.50
FEBRUARY	2.50	1.00	1.56	0.55	35.13	0.1	2.50	2.00	1.50	1.00	1.00
MARCH	5870.00	1.50	513.28	1102.10	214.72	53.3	3585.99	420.00	20.00	3.00	1.50
APRIL	927.00	48.00	215.58	202.07	93.73	21.7	673.25	294.25	116.00	70.00	50.05
MAY	2660.00	21.00	128.92	339.71	263.51	13.4	427.60	108.75	53.00	33.75	22.15
JUNE	248.00	7.50	42.96	49.65	115.58	4.3	151.20	45.75	25.00	18.00	9.01
JULY	56.00	1.90	18.29	14.62	79.92	1.9	52.10	29.00	13.50	6.63	2.29
AUGUST	29.00	3.40	5.93	3.47	58.47	0.6	11.00	6.40	4.40	4.30	3.83
SEPTEMBER	134.00	2.10	13.02	23.99	184.29	1.3	78.50	9.70	4.20	2.90	2.30
ANNUAL	5870.00	0.90	81.44	368.56	452.58	100.0	340.20	31.00	5.00	2.50	1.50

06335500 LITTLE MISSOURI RIVER AT MARMARTH, ND

LOCATION.--Lat 46°17'44", long 103°55'06", in SW¼ sec.30, T.133 N., R.105 W., Slope County, Hydrologic Unit 10110203, on left bank 90 ft (27 m) downstream from bridge on U.S. Highway 12 in Marmarth, and 1.5 mi (2.4 km) downstream from Little Beaver Creek.

DRAINAGE AREA.--4,640 mi² (12,020 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	42	28.00	0.00	8.33	8.84	11.50	7.00	0.00
STREAMFLOW, INSTANTANEOUS (CFS)	42	23999.95	0.55	1669.87	4734.60	606.75	58.50	10.00
SPECIFIC CONDUCTANCE (MICROMHUS)	42	3290.00	262.00	1672.95	836.65	2275.00	1620.00	1145.00
PH (UNITS)	7	8.90	7.30	8.19	0.49	8.40	8.20	8.00
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	6	13.00	1.20	4.42	4.37	6.47	3.30	1.35
BICARBONATE (MG/L AS HCO ₃)	7	673.00	118.00	350.86	205.44	528.00	271.00	161.00
CARBONATE (MG/L AS CO ₃)	7	20.00	0.00	4.14	7.31	5.00	0.00	0.00
HARDNESS (MG/L AS CaCO ₃)	7	330.00	110.00	198.57	83.35	260.00	170.00	110.00
HARDNESS, NONCARBONATE (MG/L AS CaCO ₃)	7	110.00	0.00	22.71	40.83	37.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	7	82.00	23.00	41.00	20.07	45.00	40.00	27.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	7	39.00	10.00	23.29	11.09	33.00	23.00	13.00
SODIUM, DISSOLVED (MG/L AS Na)	7	650.00	72.00	327.00	234.98	610.00	250.00	97.00
SODIUM PERCENT	7	89.00	55.00	71.57	14.64	83.00	78.00	56.00
POTASSIUM, DISSOLVED (MG/L AS K)	7	12.00	3.30	7.26	3.04	10.00	7.10	4.80
CHLORIDE, DISSOLVED (MG/L AS CL)	7	29.00	3.40	15.06	10.12	24.00	14.00	4.40
SULFATE, DISSOLVED (MG/L AS SO ₄)	7	1100.00	160.00	591.43	359.05	970.00	540.00	230.00
FLUORIDE, DISSOLVED (MG/L AS F)	7	0.50	0.10	0.34	0.14	0.40	0.40	0.20
SILICA, DISSOLVED (MG/L AS SiO ₂)	7	10.00	4.10	6.29	2.11	7.60	5.80	4.20
BORON, DISSOLVED (UG/L AS B)	7	610.00	120.00	345.71	175.49	550.00	260.00	260.00
IRON, DISSOLVED (UG/L AS FE)	7	340.00	50.00	150.00	110.91	260.00	100.00	60.00
MANGANESE, DISSOLVED (UG/L AS MN)	7	30.00	0.00	14.29	9.76	20.00	10.00	10.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	7	2110.00	353.00	1184.14	681.05	1920.00	1040.00	495.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	7	2.87	0.48	1.61	0.93	2.61	1.41	0.67

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS						PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25	5
OCTOBER	4050.00	9.20	324.58	742.05	228.61	6.5	2048.00	112.00	34.00	29.00	10.70
NOVEMBER	60.00	9.00	32.71	13.11	40.07	0.6	54.45	43.50	30.00	23.00	9.87
DECEMBER	27.00	6.00	17.42	4.89	28.10	0.3	25.00	22.00	18.00	15.00	6.73
JANUARY	20.00	0.50	5.87	5.61	95.51	0.1	16.60	9.10	3.50	0.90	0.80
FEBRUARY	6.00	0.50	2.20	1.43	64.91	0.0	5.00	3.00	1.50	1.15	0.50
MARCH	21900.00	1.30	2006.25	4823.44	240.42	40.2	16739.99	1300.00	165.00	4.50	1.30
APRIL	8530.00	14.00	1212.60	1564.06	128.98	23.5	3886.00	2220.00	519.00	77.75	15.55
MAY	5290.00	0.33	890.36	1476.50	165.83	17.8	4866.00	1064.00	174.00	6.35	0.67
JUNE	3180.00	1.10	344.18	669.34	194.47	6.7	2369.50	315.25	96.50	27.25	2.26
JULY	558.00	0.00	111.60	122.66	109.90	2.2	335.00	188.00	80.00	0.00	0.00
AUGUST	273.00	0.00	56.15	62.10	110.60	1.1	208.10	66.00	41.00	12.00	0.00
SEPTEMBER	390.00	2.30	38.64	61.24	158.48	0.7	182.40	38.25	19.00	5.88	2.86
ANNUAL	21900.00	0.00	423.41	1670.98	394.65	100.0	2501.50	127.75	29.00	5.93	0.50

LOCATION.--Lat 46°34'37", Long 103°33'26", in SE4SW4NE4 sec.24, T.136 N., R.103 W., Slope County, Hydrologic Unit 10110203, on left bank 100 ft (30 m) downstream from county bridge, 3.0 mi (4.8 km) above mouth, and 13 mi (21 km) northwest of Amidon.

DRAINAGE AREA.--250 mi² (648 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	50 MEDIAN	25
TEMPERATURE (DEG C)	40	27.00	0.00	9.31	9.44	18.75	6.75	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	40	1460.00	0.04	53.64	232.52	9.12	1.46	0.54
SPECIFIC CONDUCTANCE (MICROMHMS)	35	5250.00	1220.00	3887.71	803.58	4400.00	3970.00	3380.00
OXYGEN, DISSOLVED (MG/L)	34	17.90	5.50	10.86	2.73	12.40	11.15	8.85
OXYGEN, DISSOLVED (PERCENT SATURATION)	34	729.00	62.00	120.62	112.74	109.25	96.50	84.75
PH (UNITS)	35	8.70	6.90	8.23	0.36	8.50	8.30	8.10
CARBON DIOXIDE, DISSOLVED (MG/L AS CU2)	35	86.00	2.00	9.27	15.18	9.20	5.10	3.00
BICARBONATE (MG/L AS HCO3)	35	912.00	200.00	625.54	153.59	730.00	624.00	532.00
CARBONATE (MG/L AS CU3)	35	41.00	0.00	5.69	9.45	8.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	34	2.70	0.46	1.04	0.44	1.20	0.94	0.79
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	34	1.50	0.40	0.66	0.26	1.03	0.84	0.66
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	35	0.18	0.00	0.05	0.05	0.07	0.03	0.01
NITROGEN, NO2+NO3, TOTAL (MG/L AS N)	35	1.40	0.00	0.14	0.28	0.15	0.03	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	34	0.24	0.00	0.04	0.05	0.05	0.03	0.02
PHOSPHORUS, DISSOLVED (MG/L AS P)	35	0.05	0.00	0.01	0.01	0.02	0.01	0.01
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	35	33.00	10.00	19.63	5.92	23.00	19.00	15.00
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	34	3.80	0.10	0.76	0.87	0.70	0.50	0.38
HARDNESS (MG/L AS CaCO3)	35	1100.00	310.00	780.86	157.69	890.00	790.00	670.00
HARDNESS, NONCARBONATE (MG/L CaCO3)	35	440.00	41.00	256.77	124.99	360.00	230.00	160.00
CALCIUM, DISSOLVED (MG/L AS CA)	35	140.00	50.00	103.00	20.94	110.00	110.00	93.00
MAGNESIUM, DISSOLVED (MG/L AS MG)	35	170.00	46.00	126.83	27.75	150.00	130.00	110.00
SODIUM, DISSOLVED (MG/L AS NA)	35	1000.00	160.00	715.71	185.02	850.00	730.00	600.00
SODIUM PERCENT	35	90.00	51.00	66.51	7.17	69.00	67.00	63.00
POTASSIUM, DISSOLVED (MG/L AS K)	35	19.00	6.40	14.35	2.64	16.00	14.00	13.00
CHLORIDE, DISSOLVED (MG/L AS CL)	35	24.00	1.20	9.86	4.33	12.00	9.30	7.60
SULFATE, DISSOLVED (MG/L AS SO4)	35	2500.00	500.00	1673.71	460.15	2000.00	1700.00	1500.00
FLUORIDE, DISSOLVED (MG/L AS F)	35	0.80	0.10	0.41	0.15	0.50	0.40	0.30
SILICA, DISSOLVED (MG/L AS SiO2)	35	16.00	3.80	8.05	3.28	11.00	7.00	5.70
ARSENIC, DISSOLVED (UG/L AS AS)	10	4.00	1.00	2.20	0.92	3.00	2.00	1.75
ARSENIC, TOTAL (UG/L AS AS)	6	5.00	2.00	3.00	1.26	4.25	2.50	2.00
BARIUM, DISSOLVED (UG/L AS BA)	10	200.00	0.00	46.80	62.33	62.50	30.00	0.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	6	300.00	0.00	100.00	109.54	150.00	100.00	0.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	10	3.00	0.00	0.80	1.23	1.50	0.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	35	2800.00	380.00	1405.71	388.75	1600.00	1500.00	1200.00
CHROMIUM, DISSOLVED (UG/L AS CR)	10	10.00	0.00	2.40	4.54	8.50	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	6	20.00	0.00	6.67	8.16	12.50	5.00	0.00
COBALT, DISSOLVED (UG/L AS CO)	10	8.00	0.00	2.80	3.01	4.25	2.50	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	6	9.00	0.00	3.50	3.02	5.25	3.00	1.50
COPPER, DISSOLVED (UG/L AS CU)	12	26.00	0.00	12.00	10.05	24.00	9.50	2.75
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	6	12.00	4.00	8.17	3.19	11.25	8.50	4.75
IRON, DISSOLVED (UG/L AS FE)	34	180.00	10.00	45.29	40.47	42.50	30.00	30.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	6	280.00	40.00	146.67	77.89	190.00	140.00	100.00
MANGANESE, DISSOLVED (UG/L AS MN)	10	140.00	5.00	76.50	49.11	112.50	100.00	17.50
MOLYBDENUM, DISSOLVED (UG/L AS MO)	10	25.00	0.00	8.10	9.33	13.75	5.00	1.75
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	6	6.00	2.00	4.17	1.47	5.25	4.50	2.75
NICKEL, DISSOLVED (UG/L AS NI)	10	8.00	0.00	3.20	2.30	4.00	3.50	1.50
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	6	14.00	3.00	7.00	4.24	10.25	6.50	3.00
VANADIUM, DISSOLVED (UG/L AS V)	10	8.00	0.00	2.20	3.22	4.25	0.50	0.00
ZINC, DISSOLVED (UG/L AS ZN)	10	30.00	3.00	10.70	7.50	10.75	10.00	6.75
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	6	50.00	20.00	26.67	12.11	35.00	20.00	20.00
ALUMINUM, DISSOLVED (UG/L AS AL)	10	50.00	0.00	9.00	15.95	12.50	0.00	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	10	100.00	20.00	63.80	27.48	80.50	80.00	36.50
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	6	90.00	20.00	65.00	28.11	82.50	80.00	35.00
SELENIUM, DISSOLVED (UG/L AS SE)	10	1.00	0.00	0.50	0.53	1.00	0.50	0.00
SELENIUM, TOTAL (UG/L AS SE)	6	1.00	0.00	0.67	0.52	1.00	1.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	35	4360.00	898.00	3063.94	694.58	3560.00	3160.00	2580.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	35	5.93	1.22	4.17	0.94	4.84	4.30	3.51
MERCURY, DISSOLVED (UG/L AS HG)	10	0.50	0.00	0.10	0.16	0.13	0.05	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	6	0.40	0.00	0.12	0.18	0.33	0.00	0.00
SEDIMENT, SUSPENDED (MG/L)	40	978.00	11.00	151.30	201.52	148.25	85.00	42.25
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	40	3860.00	0.00	117.38	611.05	5.10	0.22	0.09

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25
OCTOBER	25.00	0.10	2.31	4.56	197.41	1.2	12.30	0.97	0.70	0.22
NOVEMBER	2.60	0.35	1.21	0.63	51.62	0.6	2.30	1.68	0.99	0.76
DECEMBER	1.90	0.70	1.28	0.33	26.18	0.7	1.80	1.60	1.30	1.00
JANUARY	1.20	0.01	0.66	0.37	55.50	0.4	1.20	1.00	0.60	0.36
FEBRUARY	1.50	0.00	0.49	0.40	80.90	0.2	1.20	0.70	0.60	0.01
MARCH	1560.00	0.08	98.61	263.31	267.02	52.6	671.00	62.50	3.80	1.20
APRIL	435.00	0.97	59.78	71.46	119.55	30.9	197.15	76.75	38.50	12.50
MAY	117.00	0.18	14.73	19.57	132.91	7.9	54.20	19.50	9.20	0.69
JUNE	63.00	0.10	6.93	11.56	166.93	3.6	34.95	6.68	3.00	0.32
JULY	9.60	0.03	2.10	2.37	113.10	1.1	7.29	3.10	1.40	0.07
AUGUST	5.80	0.03	0.81	1.10	135.84	0.4	3.49	1.20	0.36	0.07
SEPTEMBER	6.90	0.04	0.85	1.12	131.82	0.4	3.18	1.13	0.44	0.06
ANNUAL	1560.00	0.00	15.91	84.71	532.48	100.0	63.00	3.40	1.00	0.40

LOCATION.--Lat 47°09'47", long 103°59'32", in SW¼SW¼NE¼ sec.33, T.143 N., R.105 W., Golden Valley County, Hydrologic Unit 10110204, on left bank 100 ft (30 m) upstream from bridge on county road, 2.4 mi (3.9 km) east of Montana-North Dakota State line, 13 mi (21 km) southwest of Trotters, 17 mi (27 km) north of Beach, 20 mi (32 km) upstream from Elk Creek, and 27 mi (43 km) above mouth.

DRAINAGE AREA.--485 mi² (1,260 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	42	24.50	0.00	6.73	8.26	15.75	7.50	0.00
STREAMFLOW, INSTANTANEOUS (CFS)	43	2350.00	0.03	123.72	398.01	33.10	4.40	1.50
SPECIFIC CONDUCTANCE (MICROMHOS)	36	3530.00	695.00	2544.17	639.09	2830.00	2460.00	1935.00
OXYGEN, DISSOLVED (MG/L)	34	14.00	6.20	10.37	1.93	11.93	10.05	9.08
OXYGEN, DISSOLVED (PERCENT SATURATION)	34	126.00	74.00	94.24	10.22	97.25	92.50	88.75
PH (UNITS)	35	8.50	7.80	8.19	0.19	8.30	8.20	8.10
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	35	18.00	1.90	5.85	3.90	7.40	4.80	2.90
BICARBONATE (MG/L AS HCO ₃)	35	727.00	188.00	492.69	134.90	586.00	520.00	422.00
CARBONATE (MG/L AS CO ₃)	35	12.00	0.00	1.54	3.27	0.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	36	2.70	0.36	0.93	0.52	0.95	0.77	0.61
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	36	2.20	0.18	0.74	0.45	0.84	0.63	0.51
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	36	0.28	0.00	0.07	0.08	0.11	0.05	0.02
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	36	0.62	0.00	0.12	0.18	0.15	0.03	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	36	0.43	0.00	0.06	0.08	0.07	0.03	0.02
PHOSPHORUS, DISSOLVED (MG/L AS P)	36	0.08	0.00	0.01	0.02	0.02	0.01	0.01
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	36	30.00	5.10	12.29	5.66	13.75	11.50	8.03
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	35	8.10	0.10	1.11	1.48	1.05	0.70	0.40
HARDNESS (MG/L AS CaCO ₃)	36	950.00	240.00	637.50	178.48	772.50	675.00	530.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	35	350.00	0.00	229.23	87.21	300.00	230.00	170.00
CALCIUM, DISSOLVED (MG/L AS Ca)	36	160.00	51.00	107.00	27.78	120.00	110.00	90.25
MAGNESIUM, DISSOLVED (MG/L AS Mg)	36	140.00	26.00	89.97	28.52	110.00	99.50	69.25
SODIUM, DISSOLVED (MG/L AS Na)	36	520.00	64.00	346.50	111.38	427.50	360.00	277.50
SODIUM PERCENT	36	74.00	36.00	54.61	7.64	56.00	54.00	52.00
POTASSIUM, DISSOLVED (MG/L AS K)	36	14.00	7.10	10.85	1.62	12.00	11.00	10.00
CHLORIDE, DISSOLVED (MG/L AS CL)	36	22.00	2.60	9.11	3.83	10.75	8.55	6.73
SULFATE, DISSOLVED (MG/L AS SO ₄)	36	1400.00	240.00	920.28	283.96	1100.00	1000.00	705.00
FLUORIDE, DISSOLVED (MG/L AS F)	36	0.40	0.00	0.24	0.09	0.30	0.20	0.20
SILICA, DISSOLVED (MG/L AS SiO ₂)	36	13.00	2.90	7.70	2.48	9.18	7.70	5.90
ARSENIC, DISSOLVED (UG/L AS AS)	10	3.00	1.00	1.70	0.67	2.00	2.00	1.00
ARSENIC, TOTAL (UG/L AS AS)	6	5.00	2.00	3.00	1.10	3.50	3.00	2.00
BARIUM, DISSOLVED (UG/L AS BA)	11	480.00	0.00	170.00	173.90	300.00	70.00	30.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	6	400.00	0.00	166.67	136.63	250.00	150.00	75.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	10	5.00	0.00	1.10	1.66	1.50	0.50	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	6	10.00	0.00	1.67	4.08	2.50	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	36	1100.00	190.00	638.89	195.34	737.50	675.00	552.50
CHROMIUM, DISSOLVED (UG/L AS CR)	10	20.00	0.00	4.00	6.99	10.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	6	20.00	0.00	8.33	7.53	12.50	10.00	0.00
COBALT, DISSOLVED (UG/L AS CO)	10	8.00	0.00	1.80	2.57	3.00	0.50	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	6	20.00	0.00	4.17	7.91	8.00	0.50	0.00
COPPER, DISSOLVED (UG/L AS CU)	10	25.00	2.00	9.30	6.99	11.75	9.50	2.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	6	50.00	6.00	16.00	16.85	22.25	10.00	6.75
IRON, DISSOLVED (UG/L AS FE)	36	140.00	0.00	34.00	33.40	40.00	20.00	12.50
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	6	820.00	80.00	301.67	269.70	452.50	230.00	110.00
MANGANESE, DISSOLVED (UG/L AS MN)	10	80.00	10.00	35.40	22.68	51.00	30.00	17.50
MOLYBDENUM, DISSOLVED (UG/L AS MO)	10	25.00	0.00	6.70	7.50	10.00	3.00	2.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	5	3.00	0.00	1.60	1.34	3.00	1.00	0.50
NICKEL, DISSOLVED (UG/L AS NI)	10	4.00	0.00	2.50	1.51	4.00	3.00	1.50
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	6	27.00	4.00	9.83	8.93	15.75	6.00	4.00
VANADIUM, DISSOLVED (UG/L AS V)	10	8.00	0.00	2.37	2.60	3.75	1.20	0.93
ZINC, DISSOLVED (UG/L AS ZN)	10	30.00	0.00	12.30	9.03	20.00	10.00	6.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	6	110.00	20.00	41.67	34.88	57.50	30.00	20.00
ALUMINUM, DISSOLVED (UG/L AS AL)	10	80.00	0.00	21.00	28.07	42.50	5.00	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	10	70.00	5.00	44.40	21.90	61.25	50.00	26.00
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	6	70.00	20.00	40.00	17.89	55.00	35.00	27.50
SELENIUM, DISSOLVED (UG/L AS SE)	10	3.00	0.00	0.30	0.95	0.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	6	1.00	0.00	0.33	0.52	1.00	0.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	36	2760.00	462.00	1773.58	522.09	2165.00	1855.00	1470.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	36	3.75	0.63	2.41	0.71	2.94	2.52	2.00
MERCURY, DISSOLVED (UG/L AS HG)	10	0.60	0.00	0.14	0.22	0.20	0.05	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	6	0.80	0.00	0.25	0.29	0.43	0.20	0.00
SEDIMENT, SUSPENDED (MG/L)	42	2560.00	14.00	201.43	444.41	141.00	79.50	51.75
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	42	16200.00	0.00	573.00	2556.46	7.85	0.80	0.15

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25
OCTOBER	6.00	0.04	0.99	1.40	140.93	0.2	5.50	1.40	0.34	0.19
NOVEMBER	6.50	0.28	2.87	2.05	71.52	0.5	5.50	5.40	2.65	0.80
DECEMBER	6.50	1.40	3.93	1.56	39.67	0.8	6.00	5.05	4.50	2.00
JANUARY	5.30	1.00	2.98	1.24	41.74	0.6	5.00	3.80	3.50	1.90
FEBRUARY	8.00	1.00	3.26	1.69	51.74	0.6	5.50	5.00	2.70	1.85
MARCH	2500.00	1.70	229.36	554.86	241.92	44.8	1772.00	47.50	20.00	6.00
APRIL	1220.00	4.50	197.22	269.99	136.90	37.3	905.65	255.75	85.50	14.75
MAY	87.00	0.54	29.98	23.53	78.50	5.9	75.30	46.00	31.00	3.20
JUNE	212.00	0.34	23.44	35.10	149.76	4.4	112.60	25.50	12.50	1.10
JULY	120.00	0.02	21.37	28.86	135.06	4.2	90.00	29.50	9.00	0.15
AUGUST	11.00	0.02	3.63	3.85	106.07	0.7	11.00	6.95	2.30	0.04
SEPTEMBER	6.00	0.02	0.68	1.05	155.00	0.1	3.46	0.82	0.32	0.07
ANNUAL	2500.00	0.02	43.46	194.81	448.22	100.0	139.35	12.00	3.80	1.10

LOCATION.--Lat 47°35'25", long 103°15'05", in NWSEKSEK sec.35, T.148 N., R.99 W., McKenzie County, Hydrologic Unit 10110205, at bridge on U.S. Highway 85, 17 mi (27 km) upstream from Cherry Creek, and 17.5 mi (28.2 km) south of Watford City.

DRAINAGE AREA.--8,310 mi² (21,520 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	50	25
TEMPERATURE (DEG C)	38	24.00	0.00	9.45	7.84	14.88	7.75	2.00
STREAMFLOW, INSTANTANEOUS (CFS)	38	27899.95	5.50	2384.81	5392.30	2042.50	244.00	29.00
SPECIFIC CONDUCTANCE (MICROMH/CM)	38	3500.00	400.00	1636.97	821.64	2197.50	1600.00	880.00
OXYGEN, DISSOLVED (MG/L)	29	12.00	3.80	8.95	2.08	10.60	9.40	7.55
OXYGEN, DISSOLVED (PERCENT SATURATION)	17	108.00	29.00	85.65	17.58	96.50	87.00	78.50
PH (UNITS)	29	8.80	7.80	8.34	0.26	8.55	8.30	8.15
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	5	4.70	0.80	1.98	1.62	3.45	1.30	0.85
BICARBONATE (MG/L AS HCO ₃)	5	470.00	130.00	272.00	137.19	400.00	270.00	145.00
CARBONATE (MG/L AS CO ₃)	5	4.00	0.00	0.80	1.79	2.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	26	20.00	0.68	3.21	4.35	4.68	1.25	0.87
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	26	19.00	0.57	2.83	4.01	4.15	1.25	0.69
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	29	0.21	0.00	0.06	0.06	0.10	0.04	0.01
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	29	2.40	0.00	0.32	0.53	0.46	0.10	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	29	10.00	0.01	1.12	2.07	1.50	0.16	0.06
PHOSPHORUS, DISSOLVED (MG/L AS P)	29	0.04	0.00	0.01	0.01	0.02	0.01	0.01
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	24	28.00	5.40	11.85	5.49	15.00	9.85	8.20
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	19	12.00	0.20	2.96	3.70	3.00	1.30	0.30
HARDNESS (MG/L AS CaCO ₃)	29	680.00	85.00	358.24	167.14	450.00	380.00	215.00
HARDNESS, NONCARBONATE (MG/L AS CaCO ₃)	29	190.00	0.00	68.24	59.03	110.00	56.00	19.00
CALCIUM, DISSOLVED (MG/L AS Ca)	29	150.00	21.00	75.69	32.85	93.50	84.00	41.50
MAGNESIUM, DISSOLVED (MG/L AS Mg)	29	95.00	3.70	40.94	22.00	56.50	39.00	24.50
SODIUM, DISSOLVED (MG/L AS Na)	29	630.00	92.00	329.03	146.84	435.00	340.00	240.00
SODIUM PERCENT	29	87.00	51.00	67.48	9.73	75.50	66.00	59.50
POTASSIUM, DISSOLVED (MG/L AS K)	29	20.00	4.80	10.99	3.56	13.00	11.00	8.35
CHLORIDE, DISSOLVED (MG/L AS CL)	29	24.00	4.40	11.19	5.01	16.00	10.00	7.70
SULFATE, DISSOLVED (MG/L AS SO ₄)	29	1500.00	180.00	749.66	338.75	955.00	780.00	475.00
FLUORIDE, DISSOLVED (MG/L AS F)	29	0.60	0.00	0.33	0.13	0.40	0.30	0.30
SILICA, DISSOLVED (MG/L AS SiO ₂)	29	13.00	2.70	8.84	2.45	11.00	8.90	7.35
ARSENIC, DISSOLVED (UG/L AS AS)	10	2.00	1.00	1.50	0.53	2.00	1.50	1.00
ARSENIC, TOTAL (UG/L AS AS)	24	100.00	1.00	16.88	23.59	29.50	4.50	2.00
BARIUM, DISSOLVED (UG/L AS BA)	10	300.00	0.00	120.00	122.93	225.00	100.00	0.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	24	3000.00	0.00	483.33	647.85	600.00	350.00	25.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	21	20.00	0.00	4.29	5.98	10.00	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	1	420.00	420.00					
CHROMIUM, DISSOLVED (UG/L AS CR)	10	10.00	0.00	2.00	4.22	2.50	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	24	440.00	0.00	66.79	101.81	82.50	25.00	10.00
CUBALT, DISSOLVED (UG/L AS CU)	10	2.00	0.00	0.50	0.71	1.00	0.00	0.00
CUBALT, TOTAL RECOVERABLE (UG/L AS CU)	24	240.00	0.00	37.25	61.81	48.25	10.50	2.00
COPPER, DISSOLVED (UG/L AS CU)	10	50.00	2.00	9.30	14.65	9.50	3.50	2.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	24	1000.00	1.00	124.08	218.68	180.00	18.50	10.00
IRON, TOTAL RECOVERABLE (UG/L AS FE)	24	57000.00	230.00	69053.75	125675.71	88250.00	12800.00	1650.00
IRON, DISSOLVED (UG/L AS FE)	10	230.00	10.00	71.00	77.38	140.00	30.00	20.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	23	17000.00	10.00	1808.70	3562.98	2700.00	350.00	80.00
MANGANESE, DISSOLVED (UG/L AS MN)	10	80.00	0.00	17.80	24.93	25.00	10.00	0.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MU)	22	10.00	0.00	4.77	3.04	7.25	4.50	2.75
NICKEL, DISSOLVED (UG/L AS NI)	4	10.00	5.00					
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	22	830.00	2.00	122.36	195.81	142.50	25.50	10.75
ZINC, DISSOLVED (UG/L AS ZN)	10	90.00	0.00	25.00	27.99	30.00	15.00	10.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	24	2600.00	20.00	325.83	563.55	375.00	70.00	30.00
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	22	590.00	10.00	109.55	78.77	132.50	85.00	70.00
SELENIUM, DISSOLVED (UG/L AS SE)	10	4.00	0.00	1.30	1.34	2.25	1.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	24	9.00	0.00	2.08	2.36	2.75	1.00	1.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	29	2830.00	441.00	1420.79	616.07	1835.00	1380.00	1003.50
SOLIDS, DISSOLVED (TUNGS PER AC+FT)	29	3.85	0.60	1.93	0.84	2.50	1.88	1.37
MERCURY, DISSOLVED (UG/L AS HG)	10	1.00	0.00	0.20	0.34	0.43	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	24	2.40	0.00	0.43	0.66	0.40	0.20	0.10
SEDIMENT, SUSPENDED (MG/L)	28	29500.00	27.00	3050.21	6067.88	3430.00	308.50	77.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	27	182000.00	1.10	13552.21	40124.00	3120.00	124.00	5.10

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50	25
OCTOBER	2460.00	21.00	353.54	567.60	160.55	4.2	1768.00	412.50	64.00	28.50
NOVEMBER	181.00	14.00	48.28	34.56	71.58	0.6	134.60	62.50	41.00	20.00
DECEMBER	35.00	4.00	16.20	6.35	39.22	0.2	32.00	20.00	16.00	13.00
JANUARY	14.00	0.00	2.55	4.43	173.61	0.0	12.60	3.00	0.00	0.00
FEBRUARY	2.00	0.00	0.08	0.38	466.99	0.0	0.70	0.00	0.00	0.00
MARCH	30900.00	0.00	2910.61	6359.21	218.48	34.5	19919.95	2350.00	450.00	45.00
APRIL	21600.00	53.00	2625.63	3534.04	134.60	30.1	9174.00	3457.50	1405.00	217.25
MAY	6660.00	12.00	1199.82	1734.14	144.53	14.2	6012.00	1515.00	375.00	33.00
JUNE	3820.00	14.00	659.31	1000.22	151.71	7.6	3447.00	795.00	175.00	88.50
JULY	3280.00	1.50	363.71	504.89	138.82	4.3	1453.00	540.00	178.00	11.50
AUGUST	528.00	1.50	142.27	126.19	88.70	1.7	439.40	211.50	106.00	58.00
SEPTEMBER	3210.00	15.00	233.01	463.30	198.83	2.7	1074.80	186.50	79.50	42.75
ANNUAL	30900.00	0.00	716.17	2402.74	335.50	100.0	3424.50	368.75	62.00	14.00

LOCATION.--Lat 47°30'08", long 101°25'50", in S½ sec.31, T.147 N., R.84 W., Mercer County, Hydrologic Unit 10130101, downstream from dam at National Fish Hatchery's supply line from penstocks 4 and 5, in control structure of Garrison Dam, 2.5 mi (4.0 km) west of Riverdale, 14 mi (23 km) upstream from Knife River, and at mile 1,389.9 (2,236.3 km).

DRAINAGE AREA.--181,400 mi² (469,800 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	50	25
TEMPERATURE (DEG C)	35	16.00	1.50	7.00	4.71	11.00	6.00	2.00
STREAMFLOW, INSTANTANEOUS (CFS)	12	29000.00	14000.00	21533.33	4423.35	24650.00	21150.00	18250.00
SPECIFIC CONDUCTANCE (MICROMH/CM)	35	810.00	645.00	728.49	41.91	755.00	730.00	700.00
OXYGEN, DISSOLVED (MG/L)	34	12.90	6.50	10.52	1.82	12.10	11.00	9.17
OXYGEN, DISSOLVED (PERCENT SATURATION)	17	101.00	72.00	88.41	8.02	95.00	88.00	83.50
PH (UNITS)	35	8.50	8.00	8.24	0.15	8.40	8.20	8.10
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	10	2.90	1.00	1.71	0.62	2.12	1.55	1.20
BICARBONATE (MG/L AS HCO ₃)	11	201.00	180.00	193.73	6.84	200.00	190.00	190.00
CARBONATE (MG/L AS CO ₃)	11	5.00	0.00	0.73	1.56	1.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	35	1.30	0.14	0.56	0.27	0.72	0.54	0.38
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	35	1.10	0.03	0.40	0.26	0.51	0.36	0.23
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	35	0.06	0.00	0.02	0.02	0.02	0.01	0.00
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	35	0.26	0.02	0.15	0.07	0.21	0.14	0.11
PHOSPHORUS, TOTAL (MG/L AS P)	35	0.19	0.00	0.02	0.03	0.02	0.01	0.01
PHOSPHORUS, DISSOLVED (MG/L AS P)	35	0.04	0.00	0.01	0.01	0.01	0.01	0.00
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	27	12.00	2.20	4.61	2.33	5.80	3.80	3.00
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	20	0.20	0.10	0.13	0.05	0.20	0.10	0.10
HARDNESS (MG/L AS CaCO ₃)	36	260.00	220.00	235.83	10.52	240.00	230.00	230.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	36	100.00	56.00	82.19	9.42	88.00	80.00	77.00
CALCIUM, DISSOLVED (MG/L AS Ca)	36	62.00	50.00	55.97	2.66	58.00	56.00	54.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	36	27.00	20.00	23.33	1.43	24.00	23.00	22.00
SODIUM, DISSOLVED (MG/L AS Na)	36	82.00	59.00	69.28	6.38	74.00	68.00	63.25
SODIUM PERCENT	36	54.00	34.00	39.75	4.85	40.00	38.00	37.00
POTASSIUM, DISSOLVED (MG/L AS K)	36	5.10	3.10	4.35	0.36	4.60	4.30	4.13
CHLORIDE, DISSOLVED (MG/L AS CL)	36	19.00	3.80	10.19	2.07	11.00	9.90	9.60
SULFATE, DISSOLVED (MG/L AS SO ₄)	36	250.00	180.00	214.17	22.09	230.00	215.00	192.50
FLOURIDE, DISSOLVED (MG/L AS F)	36	0.70	0.30	0.50	0.08	0.58	0.50	0.42
SILICA, DISSOLVED (MG/L AS SiO ₂)	36	14.00	6.50	7.59	1.33	8.00	7.50	6.55
ARSENIC, DISSOLVED (UG/L AS AS)	11	3.00	1.00	1.82	0.75	2.00	2.00	1.00
ARSENIC, TOTAL (UG/L AS AS)	25	3.00	1.00	2.08	0.76	3.00	2.00	1.50
BARIUM, DISSOLVED (UG/L AS Ba)	11	100.00	0.00	52.73	31.97	60.00	50.00	50.00
BARIUM, TOTAL RECOVERABLE (UG/L AS Ba)	24	400.00	0.00	120.83	114.13	200.00	100.00	0.00
BERYLLIUM, DISSOLVED (UG/L AS Be)	10	10.00	0.00	2.10	3.11	2.00	1.00	0.75
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS Be)	24	10.00	0.00	2.50	4.42	7.50	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	11	130.00	0.00	113.64	38.02	130.00	120.00	120.00
CHROMIUM, DISSOLVED (UG/L AS Cr)	11	20.00	0.00	3.64	7.10	5.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS Cr)	25	20.00	0.00	5.88	6.47	10.00	5.00	0.00
COBALT, DISSOLVED (UG/L AS Co)	12	3.00	0.00	1.75	1.54	3.00	3.00	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS Co)	24	50.00	0.00	2.58	10.13	1.00	0.00	0.00
COPPER, DISSOLVED (UG/L AS Cu)	12	5.00	0.00	1.17	1.34	1.00	1.00	0.25
COPPER, TOTAL RECOVERABLE (UG/L AS Cu)	25	10.00	0.00	4.28	2.54	6.00	5.00	2.00
IRON, TOTAL RECOVERABLE (UG/L AS Fe)	25	300.00	0.00	86.40	66.07	120.00	80.00	30.00
IRON, DISSOLVED (UG/L AS Fe)	19	160.00	0.00	28.42	41.80	20.00	10.00	10.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS Mn)	25	50.00	0.00	10.52	10.05	10.00	10.00	9.00
MANGANESE, DISSOLVED (UG/L AS Mn)	13	10.00	0.00	2.08	3.55	1.00	1.00	0.00
MOLYBDENUM, DISSOLVED (UG/L AS Mo)	10	10.00	0.00	6.50	4.55	10.00	10.00	1.75
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS Mo)	23	10.00	0.00	3.30	2.72	5.00	3.00	1.00
NICKEL, DISSOLVED (UG/L AS Ni)	10	21.00	0.00	4.60	6.47	7.25	3.00	0.00
NICKEL, TOTAL RECOVERABLE (UG/L AS Ni)	24	50.00	0.00	8.04	10.96	8.75	5.00	3.00
VANADIUM, DISSOLVED (UG/L AS V)	10	6.00	0.00	0.90	1.85	1.00	0.00	0.00
ZINC, DISSOLVED (UG/L AS Zn)	12	10.00	0.00	4.75	3.36	8.75	3.00	3.00
ZINC, TOTAL RECOVERABLE (UG/L AS Zn)	25	100.00	0.00	22.40	21.07	30.00	20.00	10.00
ALUMINUM, DISSOLVED (UG/L AS Al)	11	20.00	0.00	4.55	6.88	10.00	0.00	0.00
LITHIUM, DISSOLVED (UG/L AS Li)	10	60.00	40.00	50.00	4.71	50.00	50.00	50.00
LITHIUM, TOTAL RECOVERABLE (UG/L AS Li)	24	60.00	3.00	48.46	11.52	50.00	50.00	50.00
SELENIUM, DISSOLVED (UG/L AS Se)	11	1.00	0.00	0.82	0.40	1.00	1.00	1.00
SELENIUM, TOTAL (UG/L AS Se)	25	2.00	0.00	0.96	0.45	1.00	1.00	1.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	35	641.00	421.00	483.91	41.08	503.00	477.00	452.00
SOLIDS, DISSOLVED (LBS PER AC-FI)	36	0.87	0.57	0.66	0.05	0.68	0.66	0.61
MERCURY, DISSOLVED (UG/L AS Hg)	11	0.20	0.00	0.03	0.06	0.00	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS Hg)	25	0.20	0.00	0.06	0.08	0.10	0.00	0.00

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50	25
OCTOBER	35500	11600	19784	8576	43.35	6.7	32330	31400	14900	12800
NOVEMBER	39600	11600	21217	9204	43.38	7.0	34945	32500	14900	13800
DECEMBER	33000	13100	21229	3937	18.55	7.2	29100	24350	21000	17550
JANUARY	33100	17700	26806	4323	16.13	9.1	32230	29950	27500	25200
FEBRUARY	32500	25400	29485	1531	5.19	9.2	32200	29950	29300	28700
MARCH	30100	6300	24565	5584	22.73	8.4	29900	29150	25200	21100
APRIL	31300	8700	21662	5165	23.84	7.1	30445	26425	20100	19200
MAY	39600	9100	23599	9800	41.53	8.0	39500	31250	18700	17550
JUNE	39600	19000	29292	7856	26.82	9.7	39500	38100	29850	21100
JULY	38700	21900	30171	6225	20.65	10.3	38600	38450	28300	24750
AUGUST	39300	18600	27606	7650	27.82	9.4	39100	38450	23500	21950
SEPTEMBER	39300	16800	23864	6857	28.73	7.9	38315	28275	21650	17800
ANNUAL	39600	6300	24917	7623	30.60	100.0	38900	29900	24500	19525

LOCATION.--Lat 47°14'10", long 102°46'10", in SE4NW4 sec.6, T.143 N., R.95 W., Dunn County, Hydrologic Unit 10130201, on left bank 50 ft (15 m) downstream from bridge on State Highway 22, and 0.4 mi (0.6 km) north of Manning.

DRAINAGE AREA.--205 mi² (531 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN	25
TEMPERATURE (DEG C)	86	24.50	0.00	8.48	8.02	16.00	6.50	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	86	1840.00	0.02	82.98	284.03	17.25	2.30	1.30
SPECIFIC CONDUCTANCE (MICROMHMS)	85	3600.00	250.00	1659.41	782.06	2155.00	1740.00	1040.00
OXYGEN, DISSOLVED (MG/L)	36	12.40	2.60	8.96	2.31	11.08	9.10	7.53
OXYGEN, DISSOLVED (PERCENT SATURATION)	36	106.00	25.00	79.58	16.72	93.00	81.00	70.00
PH (UNITS)	41	8.60	7.20	8.14	0.29	8.40	8.20	8.00
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	40	19.00	1.80	7.38	4.67	11.00	5.45	3.77
BICARBONATE (MG/L AS HCO ₃)	40	1180.00	93.00	580.90	248.85	765.75	579.00	448.25
CARBONATE (MG/L AS CO ₃)	40	11.00	0.00	1.30	2.72	0.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	36	2.30	0.69	1.21	0.38	1.40	1.10	0.98
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	36	2.30	0.32	0.96	0.41	1.10	0.89	0.71
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	36	0.31	0.00	0.09	0.08	0.12	0.06	0.04
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	36	0.62	0.00	0.16	0.21	0.35	0.04	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	36	0.25	0.03	0.09	0.04	0.10	0.08	0.06
PHOSPHORUS, DISSOLVED (MG/L AS P)	36	0.17	0.00	0.04	0.04	0.05	0.02	0.01
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	35	110.00	8.40	20.51	18.04	24.00	14.00	11.00
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	30	2.70	0.20	1.15	0.53	1.40	1.10	0.90
HARDNESS (MG/L AS CaCO ₃)	41	420.00	55.00	253.76	87.47	315.00	260.00	205.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	41	84.00	12.00	53.46	17.91	63.00	57.00	42.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	41	54.00	6.10	29.39	10.97	36.50	29.00	23.50
SODIUM, DISSOLVED (MG/L AS Na)	41	650.00	40.00	330.44	145.36	425.00	320.00	235.00
SODIUM PERCENT	41	89.00	54.00	72.12	7.18	76.00	73.00	68.00
POTASSIUM, DISSOLVED (MG/L AS K)	41	13.00	4.60	8.25	1.81	9.40	8.00	7.10
CHLORIDE, DISSOLVED (MG/L AS CL)	41	20.00	2.70	7.18	2.76	8.20	6.60	5.55
SULFATE, DISSOLVED (MG/L AS SO ₄)	41	2400.00	61.00	531.83	357.91	635.00	530.00	350.00
FLUORIDE, DISSOLVED (MG/L AS F)	41	0.90	0.10	0.55	0.21	0.70	0.60	0.40
SILICA, DISSOLVED (MG/L AS SiO ₂)	41	13.00	2.00	7.63	2.48	9.40	7.50	5.75
ARSENIC, DISSOLVED (UG/L AS AS)	10	3.00	1.00	1.70	0.82	2.25	1.50	1.00
ARSENIC, TOTAL (UG/L AS AS)	6	5.00	1.00	2.67	1.37	3.50	2.50	1.75
BARIUM, DISSOLVED (UG/L AS BA)	9	200.00	0.00	100.00	82.61	200.00	90.00	20.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	6	400.00	0.00	166.67	150.55	325.00	100.00	75.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	10	1.00	0.00	0.40	0.52	1.00	0.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	6	10.00	0.00	1.67	4.08	2.50	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	40	830.00	90.00	409.50	164.80	520.00	425.00	285.50
CHROMIUM, DISSOLVED (UG/L AS CR)	10	4.00	0.00	0.40	1.26	0.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	6	20.00	0.00	8.33	9.83	20.00	5.00	0.00
COBALT, DISSOLVED (UG/L AS CO)	10	3.00	0.00	1.30	1.49	3.00	0.50	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	6	4.00	0.00	1.67	1.37	2.50	1.50	0.75
COPPER, DISSOLVED (UG/L AS CU)	10	12.00	2.00	6.50	3.63	10.00	5.00	3.75
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	6	10.00	5.00	7.17	2.04	9.25	7.00	5.00
IRON, DISSOLVED (UG/L AS FE)	40	470.00	0.00	101.90	98.30	107.50	75.00	40.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	6	290.00	60.00	163.33	80.42	230.00	155.00	97.50
MANGANESE, DISSOLVED (UG/L AS MN)	15	180.00	6.00	71.80	57.44	120.00	50.00	30.00
MOLYBDENUM, DISSOLVED (UG/L AS MO)	10	10.00	0.00	4.80	4.61	10.00	3.00	0.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	6	5.00	0.00	2.33	2.25	4.25	2.50	0.00
NICKEL, DISSOLVED (UG/L AS NI)	10	6.00	0.00	3.80	1.62	5.00	4.00	3.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	6	8.00	5.00	6.50	1.38	8.00	6.50	5.00
VANADIUM, DISSOLVED (UG/L AS V)	10	6.00	0.00	2.29	2.66	6.00	1.00	0.00
ZINC, DISSOLVED (UG/L AS ZN)	10	30.00	0.00	9.10	9.30	12.50	6.00	3.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	6	50.00	10.00	26.67	16.33	42.50	25.00	10.00
ALUMINUM, DISSOLVED (UG/L AS AL)	10	90.00	0.00	30.00	30.91	42.50	20.00	7.50
LITHIUM, DISSOLVED (UG/L AS LI)	10	50.00	9.00	31.00	13.76	40.00	38.00	18.50
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	6	40.00	7.00	26.17	11.32	32.50	30.00	16.75
SELENIUM, DISSOLVED (UG/L AS SE)	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	41	2400.00	183.00	1237.95	505.20	1590.00	1290.00	909.50
SOLIDS, DISSOLVED (TUNS PER AC-FT)	41	3.26	0.25	1.68	0.69	2.17	1.75	1.24
MERCURY, DISSOLVED (UG/L AS HG)	10	0.50	0.00	0.14	0.21	0.35	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	6	0.80	0.00	0.18	0.31	0.35	0.05	0.00
SEDIMENT, SUSPENDED (MG/L)	37	173.00	11.00	68.73	36.04	86.50	62.00	43.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	37	71.00	0.00	2.96	11.72	0.78	0.34	0.15

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25
OCTOBER	7.40	0.64	2.19	1.28	58.77	0.7	4.50	2.90	2.10	1.10
NOVEMBER	2.90	0.91	1.79	0.73	40.61	0.6	2.90	2.68	1.40	1.20
DECEMBER	4.00	1.00	1.96	0.68	34.44	0.6	3.50	2.20	2.00	1.55
JANUARY	2.80	1.10	1.72	0.39	22.65	0.6	2.50	2.00	1.60	1.50
FEBRUARY	3.00	1.00	1.47	0.57	38.68	0.4	2.50	2.00	1.20	1.00
MARCH	1630.00	1.10	137.52	297.04	216.00	44.2	906.00	100.00	5.60	1.55
APRIL	1300.00	1.30	106.51	234.52	220.19	33.1	889.45	74.25	27.00	11.00
MAY	584.00	0.15	23.90	68.96	288.50	7.7	120.60	16.50	8.30	0.77
JUNE	194.00	0.25	10.28	23.90	232.59	3.2	44.80	5.23	3.75	2.38
JULY	49.00	0.02	3.47	7.30	210.55	1.1	11.60	3.30	1.40	0.17
AUGUST	52.00	0.02	1.97	7.19	365.21	0.6	5.05	1.10	0.42	0.31
SEPTEMBER	885.00	0.05	23.06	123.40	535.23	7.2	39.20	1.73	0.39	0.26
ANNUAL	1630.00	0.02	26.40	124.58	471.89	100.0	81.50	4.08	2.00	1.10

LOCATION.--Lat 47°12'47", long 102°37'22", in SW¼SE¼SW¼ sec.8, T.143 N., R.94 W., Dunn County, Hydrologic Unit 10130201, on left bank 200 ft (61 m) upstream from bridge on county road, 6.9 mi (11.1 km) east of Manning and 3.0 mi (4.8 km) above mouth.

DRAINAGE AREA.--30.3 mi² (78.4 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1978 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS						PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION		75	MEDIAN 50	25
TEMPERATURE (DEG C)	14	20.00	0.00	8.86	7.57		17.25	8.75	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	14	20.10	0.01	4.06	6.47		9.64	0.43	0.06
SPECIFIC CONDUCTANCE (MICROMHUS)	13	5430.00	550.00	2379.23	1374.78		3355.00	2190.00	1305.00
OXYGEN, DISSOLVED (MG/L)	12	14.80	2.60	10.02	3.44		13.08	10.45	8.23
OXYGEN, DISSOLVED (PERCENT SATURATION)	12	140.00	31.00	91.33	31.51		119.50	92.50	68.00
PH (UNITS)	12	9.60	7.50	8.40	0.51		8.58	8.40	8.08
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	12	7.70	0.20	3.39	2.05		4.75	3.30	2.13
BICARBONATE (MG/L AS HCO ₃)	12	832.00	98.00	437.42	226.25		510.50	468.50	261.25
CARBONATE (MG/L AS CO ₃)	12	156.00	0.00	19.08	44.76		9.25	3.00	0.00
NITROGEN, TOTAL (MG/L AS N)	11	8.70	0.80	2.31	2.27		3.10	1.40	0.98
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	11	7.60	0.79	2.04	1.94		2.30	1.30	0.95
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11	0.65	0.01	0.19	0.23		0.41	0.07	0.02
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	11	0.60	0.00	0.10	0.19		0.10	0.01	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	11	0.84	0.05	0.21	0.26		0.16	0.11	0.05
PHOSPHORUS, DISSOLVED (MG/L AS P)	11	0.47	0.02	0.09	0.13		0.09	0.05	0.02
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	11	46.00	15.00	25.73	10.53		34.00	22.00	16.00
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	8	15.00	0.50	2.69	4.99		1.42	1.00	0.63
HARDNESS (MG/L AS CaCO ₃)	11	920.00	210.00	456.36	195.97		570.00	400.00	330.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	11	170.00	0.00	65.00	67.52		120.00	52.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	11	93.00	32.00	59.36	19.40		77.00	53.00	46.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	11	180.00	30.00	75.27	43.35		90.00	61.00	49.00
SODIUM, DISSOLVED (MG/L AS Na)	11	1100.00	140.00	499.09	276.71		670.00	450.00	300.00
SODIUM PERCENT	11	83.00	57.00	67.27	8.47		73.00	71.00	59.00
POTASSIUM, DISSOLVED (MG/L AS K)	11	19.00	8.70	13.79	3.20		15.00	15.00	11.00
CHLORIDE, DISSOLVED (MG/L AS CL)	11	14.00	3.90	7.97	3.14		9.20	7.10	5.90
SULFATE, DISSOLVED (MG/L AS SO ₄)	11	2500.00	440.00	1113.64	597.97		1400.00	1000.00	700.00
FLUORIDE, DISSOLVED (MG/L AS F)	11	0.50	0.10	0.34	0.14		0.40	0.30	0.30
SILICA, DISSOLVED (MG/L AS SiO ₂)	11	9.80	0.70	3.66	2.94		5.60	2.50	1.30
ARSENIC, DISSOLVED (UG/L AS AS)	4	9.00	3.00						
ARSENIC, TOTAL (UG/L AS AS)	4	10.00	3.00						
BARIUM, DISSOLVED (UG/L AS BA)	4	130.00	0.00						
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	4	400.00	0.00						
BERYLLIUM, DISSOLVED (UG/L AS BE)	4	3.00	0.00						
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	4	0.00	0.00						
BORON, DISSOLVED (UG/L AS B)	11	1100.00	380.00	630.00	252.31		870.00	520.00	410.00
CHROMIUM, DISSOLVED (UG/L AS CR)	4	0.00	0.00						
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	4	20.00	0.00						
COBALT, DISSOLVED (UG/L AS CO)	4	8.00	0.00						
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	4	15.00	0.00						
COPPER, DISSOLVED (UG/L AS CU)	4	30.00	9.00						
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	4	31.00	4.00						
IRON, DISSOLVED (UG/L AS FE)	11	330.00	10.00	84.27	92.35		110.00	47.00	30.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	4	670.00	50.00						
MANGANESE, DISSOLVED (UG/L AS MN)	4	400.00	40.00						
MOLYBDENUM, DISSOLVED (UG/L AS MO)	4	25.00	0.00						
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	4	3.00	0.00						
NICKEL, DISSOLVED (UG/L AS NI)	4	5.00	2.00						
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	4	37.00	7.00						
VANADIUM, DISSOLVED (UG/L AS V)	4	9.00	1.00						
ZINC, DISSOLVED (UG/L AS ZN)	4	33.00	4.00						
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	4	310.00	20.00						
ALUMINUM, DISSOLVED (UG/L AS AL)	4	100.00	0.00						
LITHIUM, DISSOLVED (UG/L AS LI)	4	87.00	14.00						
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	4	90.00	40.00						
SELENIUM, DISSOLVED (UG/L AS SE)	4	1.00	0.00						
SELENIUM, TOTAL (UG/L AS SE)	4	2.00	0.00						
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	11	4360.00	755.00	2078.64	1019.52		2650.00	1930.00	1410.00
SOLIDS, DISSOLVED (TNS PER AC-FT)	11	5.93	1.03	2.83	1.39		3.60	2.62	1.92
MERCURY, DISSOLVED (UG/L AS HG)	4	0.30	0.00						
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	4	0.50	0.10						
SEDIMENT, SUSPENDED (MG/L)	14	1030.00	3.00	157.86	317.30		64.75	33.00	19.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	14	56.00	0.00	5.95	15.85		0.82	0.02	0.00

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1978 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS						PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25	5
OCTOBER	0.04	0.00	0.01	0.01	122.80	0.1	0.03	0.02	0.01	0.00	0.00
NOVEMBER	0.15	0.00	0.06	0.04	76.49	0.5	0.14	0.09	0.05	0.02	0.00
DECEMBER	0.10	0.00	0.02	0.02	139.21	0.2	0.07	0.03	0.00	0.00	0.00
JANUARY	0.01	0.00	0.00	0.00	552.19	0.0	0.00	0.00	0.00	0.00	0.00
FEBRUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00	0.00
MARCH	20.00	0.00	2.64	4.91	186.25	26.2	17.10	2.00	0.45	0.00	0.00
APRIL	70.00	0.07	6.24	12.97	207.71	59.9	41.50	2.50	1.25	0.40	0.08
MAY	0.94	0.00	0.19	0.26	135.27	1.9	0.76	0.33	0.07	0.00	0.00
JUNE	46.00	0.00	1.16	6.06	523.11	11.1	4.11	0.10	0.04	0.00	0.00
JULY	0.02	0.00	0.00	0.00	357.33	0.0	0.02	0.00	0.00	0.00	0.00
AUGUST	0.09	0.00	0.01	0.02	304.67	0.1	0.06	0.00	0.00	0.00	0.00
SEPTEMBER	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00	0.00
ANNUAL	70.00	0.00	0.85	4.66	545.45	100.0	2.00	0.06	0.00	0.00	0.00

LOCATION.--Lat 47°08'17", long 102°20'00", NW¼ sec.10, T.142 N., R.92 W., Dunn County, Hydrologic Unit 10130201, and on right bank 250 ft (75 m) downstream from bridge on State Highway 8 in Marshall.

DRAINAGE AREA.--722 mi² (1,870 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS						PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION		75	50	25
TEMPERATURE (DEG C)	85	28.00	0.00	8.52	8.56		16.75	6.50	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	86	3369.99	0.34	198.85	528.71		63.25	10.00	5.15
SPECIFIC CONDUCTANCE (MICROMH/CM)	86	3680.00	290.00	1840.23	868.34		2462.50	1880.00	1058.75
OXYGEN, DISSOLVED (MG/L)	34	16.20	6.00	9.67	2.22		11.13	9.15	8.28
OXYGEN, DISSOLVED (PERCENT SATURATION)	34	129.00	63.00	87.85	15.80		97.75	89.50	73.50
PH (UNITS)	41	8.80	7.50	8.24	0.33		8.50	8.40	7.95
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	41	39.00	0.90	7.41	8.17		8.70	3.80	2.70
BICARBONATE (MG/L AS HCO ₃)	41	1230.00	124.00	595.56	253.00		802.50	604.00	421.50
CARBONATE (MG/L AS CO ₃)	41	29.00	0.00	6.10	8.32		10.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	36	7.10	0.65	1.37	1.07		1.30	1.10	0.94
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	36	6.20	0.24	1.10	0.96		1.10	0.85	0.66
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	36	0.61	0.00	0.09	0.11		0.12	0.06	0.03
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	36	0.70	0.00	0.19	0.23		0.34	0.06	0.00
PHOSPHORUS, TOTAL (MG/L AS P)	36	0.22	0.02	0.09	0.05		0.13	0.07	0.04
PHOSPHORUS, DISSOLVED (MG/L AS P)	36	0.14	0.00	0.03	0.03		0.03	0.02	0.01
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	36	42.00	7.50	16.21	9.31		16.00	12.50	11.00
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	31	3.30	0.30	1.27	0.75		1.70	1.20	0.60
HARDNESS (MG/L AS CaCO ₃)	41	710.00	82.00	294.44	117.77		370.00	280.00	215.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	41	220.00	0.00	5.37	34.36		0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	41	120.00	18.00	57.71	21.72		71.50	57.00	44.50
MAGNESIUM, DISSOLVED (MG/L AS Mg)	41	100.00	8.90	36.29	16.17		46.00	35.00	26.50
SODIUM, DISSOLVED (MG/L AS Na)	41	700.00	59.00	365.49	160.20		510.00	360.00	270.00
SODIUM PERCENT	41	88.00	51.00	71.76	8.50		77.00	74.00	65.00
POTASSIUM, DISSOLVED (MG/L AS K)	41	13.00	5.20	9.19	1.50		10.00	9.30	8.25
CHLORIDE, DISSOLVED (MG/L AS CL)	41	18.00	2.90	6.08	2.42		6.90	5.60	4.80
SULFATE, DISSOLVED (MG/L AS SO ₄)	41	1000.00	100.00	572.44	225.90		775.00	560.00	435.00
FLUORIDE, DISSOLVED (MG/L AS F)	41	1.00	0.10	0.50	0.20		0.60	0.50	0.40
SILICA, DISSOLVED (MG/L AS SiO ₂)	41	16.00	4.20	9.05	3.25		11.00	8.30	6.20
ARSENIC, DISSOLVED (UG/L AS AS)	10	3.00	1.00	2.20	0.79		3.00	2.00	1.75
ARSENIC, TOTAL (UG/L AS AS)	7	10.00	2.00	3.43	2.94		3.00	2.00	2.00
BARIUM, DISSOLVED (UG/L AS BA)	9	200.00	0.00	75.56	61.46		105.00	80.00	25.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	7	500.00	0.00	185.71	167.62		300.00	100.00	100.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	10	3.00	0.00	0.80	0.92		1.00	1.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	7	0.00	0.00	0.00	0.00		0.00	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	40	740.00	30.00	341.50	146.12		440.00	345.00	265.00
CHROMIUM, DISSOLVED (UG/L AS CR)	10	10.00	0.00	2.40	4.20		5.50	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	7	60.00	0.00	15.71	20.70		20.00	10.00	0.00
COBALT, DISSOLVED (UG/L AS CO)	10	8.00	0.00	2.30	2.50		3.00	3.00	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	7	19.00	0.00	4.43	6.55		4.00	2.00	1.00
COPPER, DISSOLVED (UG/L AS CU)	10	25.00	1.00	10.00	7.89		14.50	8.50	4.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	7	83.00	5.00	22.57	27.80		25.00	9.00	6.00
IRON, DISSOLVED (UG/L AS FE)	41	180.00	0.00	54.24	38.19		70.00	50.00	30.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	7	1200.00	120.00	307.14	394.37		190.00	160.00	150.00
MANGANESE, DISSOLVED (UG/L AS MN)	15	160.00	1.00	38.80	49.83		50.00	20.00	5.00
MOLYBDENUM, DISSOLVED (UG/L AS MU)	10	25.00	0.00	7.70	7.26		10.00	7.50	2.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MU)	7	6.00	0.00	2.71	1.98		4.00	3.00	1.00
NICKEL, DISSOLVED (UG/L AS NI)	10	7.00	0.00	3.80	2.15		6.00	4.00	2.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	7	76.00	3.00	17.43	26.05		13.00	8.00	4.00
VANADIUM, DISSOLVED (UG/L AS V)	10	8.00	0.00	2.64	2.98		6.00	1.10	0.00
ZINC, DISSOLVED (UG/L AS ZN)	10	24.00	3.00	10.20	7.02		12.50	10.00	3.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	7	210.00	20.00	50.00	70.95		40.00	20.00	20.00
ALUMINUM, DISSOLVED (UG/L AS AL)	10	130.00	0.00	38.00	53.91		52.50	30.00	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	10	60.00	10.00	34.40	15.14		42.50	35.00	26.00
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	7	60.00	10.00	34.29	16.18		40.00	40.00	20.00
SELENIUM, DISSOLVED (UG/L AS SE)	10	1.00	0.00	0.10	0.32		0.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	7	2.00	0.00	0.43	0.79		1.00	0.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C. DISSOLVED (MG/L)	41	2560.00	304.00	1373.05	542.78		1815.00	1370.00	1025.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	41	3.48	0.41	1.87	0.74		2.47	1.86	1.40
MERCURY, DISSOLVED (UG/L AS HG)	10	0.50	0.00	0.09	0.17		0.15	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	7	0.20	0.00	0.10	0.10		0.20	0.10	0.00
SEDIMENT, SUSPENDED (MG/L)	35	1510.00	23.00	130.06	245.58		124.00	83.00	49.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	35	477.00	0.05	32.44	100.14		5.80	1.50	0.62

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS						PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25	5
OCTOBER	36.00	4.70	11.35	6.91	60.85	1.3	29.30	15.00	10.00	6.00	5.00
NOVEMBER	12.00	4.50	7.28	2.24	30.70	0.8	11.00	9.50	6.10	5.60	4.50
DECEMBER	9.50	4.00	6.42	1.85	28.81	0.8	9.50	8.50	5.80	4.80	4.00
JANUARY	7.50	2.80	4.73	0.94	19.84	0.6	6.50	5.50	4.50	4.50	2.80
FEBRUARY	6.00	1.50	4.06	1.01	24.88	0.4	5.00	4.50	4.50	4.00	1.65
MARCH	3280.00	3.50	417.17	785.79	188.36	49.0	2330.99	420.00	14.00	5.00	3.50
APRIL	1530.00	8.60	228.05	349.21	153.13	25.9	1174.00	236.75	83.50	30.75	9.56
MAY	566.00	3.30	53.47	85.21	159.37	6.3	205.20	51.00	32.00	6.00	3.44
JUNE	1500.00	3.70	71.81	215.80	300.52	8.2	417.25	38.25	16.00	9.45	4.31
JULY	80.00	1.20	14.97	15.39	102.78	1.8	49.00	18.00	13.00	3.60	1.40
AUGUST	86.00	1.10	8.36	11.88	142.09	1.0	22.60	8.30	6.40	3.40	1.30
SEPTEMBER	925.00	0.34	34.69	127.39	367.21	3.9	131.70	18.25	4.70	1.90	0.42
ANNUAL	3280.00	0.34	72.21	286.69	397.02	100.0	292.30	19.00	6.95	4.50	2.00

LOCATION.--Lat 47°06'25", long 102°03'05", in SE¼NW¼ sec.23, T.142 N., R.90 W., Mercer County, Hydrologic Unit 10130201, on right bank 60 ft (18 m) upstream from highway bridge, and 13.5 mi (21.7 km) south of Golden Valley.

DRAINAGE AREA.--82 mi² (212 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEAN 50	25
TEMPERATURE (DEG C)	39	20.00	0.00	6.77	6.61	11.00	5.00	1.50
STREAMFLOW, INSTANTANEOUS (CFS)	39	460.00	0.01	55.58	122.98	14.00	3.10	0.09
SPECIFIC CONDUCTANCE (MICROMHMS)	39	2999.99	250.00	1351.20	784.07	2040.00	1160.00	760.00
OXYGEN, DISSOLVED (MG/L)	13	12.70	3.60	8.75	3.08	10.90	9.40	5.75
OXYGEN, DISSOLVED (PERCENT SATURATION)	13	99.00	38.00	75.85	21.60	93.00	86.00	56.00
PH (UNITS)	15	8.70	7.20	8.06	0.38	8.30	8.10	7.80
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	15	36.00	1.30	6.89	9.50	6.30	3.50	2.20
BICARBONATE (MG/L AS HCO ₃)	16	886.00	86.00	355.44	241.62	558.50	289.50	155.00
CARBONATE (MG/L AS CO ₃)	16	14.00	0.00	1.13	3.58	0.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	13	2.60	0.80	1.38	0.48	1.70	1.20	1.05
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	13	1.40	0.72	1.09	0.23	1.25	1.10	0.88
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	13	0.68	0.00	0.15	0.20	0.25	0.05	0.03
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	13	0.96	0.00	0.15	0.27	0.26	0.02	0.00
PHOSPHORUS, TOTAL (MG/L AS P)	13	0.44	0.07	0.20	0.13	0.31	0.16	0.10
PHOSPHORUS, DISSOLVED (MG/L AS P)	13	0.34	0.03	0.11	0.09	0.16	0.07	0.05
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	13	23.00	9.60	16.20	3.82	19.50	16.00	13.50
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	13	3.90	0.60	1.76	1.03	2.85	1.30	1.10
HARDNESS (MG/L AS CaCO ₃)	16	450.00	71.00	211.94	137.34	305.00	165.00	88.25
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	16	130.00	0.00	12.63	33.91	3.50	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	16	82.00	15.00	40.44	23.42	58.25	34.00	18.25
MAGNESIUM, DISSOLVED (MG/L AS Mg)	16	62.00	8.20	27.19	19.30	41.00	19.50	10.25
SODIUM, DISSOLVED (MG/L AS Na)	16	530.00	46.00	249.31	172.01	442.50	190.00	107.50
SODIUM PERCENT	16	78.00	54.00	68.38	7.95	76.75	69.00	60.75
POTASSIUM, DISSOLVED (MG/L AS K)	16	16.00	5.20	9.46	3.01	11.75	9.00	7.20
CHLORIDE, DISSOLVED (MG/L AS CL)	16	25.00	1.90	7.31	7.00	9.93	4.20	2.80
SULFATE, DISSOLVED (MG/L AS SO ₄)	16	940.00	100.00	432.50	309.96	790.00	310.00	182.50
FLUORIDE, DISSOLVED (MG/L AS F)	16	0.50	0.10	0.21	0.12	0.28	0.20	0.10
SILICA, DISSOLVED (MG/L AS SiO ₂)	16	18.00	1.30	8.18	4.79	11.75	7.30	5.00
ARSENIC, DISSOLVED (UG/L AS AS)	5	3.00	1.00	2.00	1.00	3.00	2.00	1.00
ARSENIC, TOTAL (UG/L AS AS)	3	3.00	2.00					
BARIUM, DISSOLVED (UG/L AS BA)	5	200.00	0.00	78.00	76.94	150.00	50.00	20.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	3	300.00	0.00					
BERYLLIUM, DISSOLVED (UG/L AS BE)	5	1.00	0.00	0.40	0.55	1.00	0.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	3	10.00	0.00					
BORON, DISSOLVED (UG/L AS B)	16	510.00	0.00	238.12	140.58	370.00	215.00	130.00
CHROMIUM, DISSOLVED (UG/L AS CR)	5	4.00	0.00	0.80	1.79	2.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	3	5.00	0.00					
COBALT, DISSOLVED (UG/L AS CO)	5	3.00	0.00	1.20	1.64	3.00	0.00	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	3	4.00	0.00					
COPPER, DISSOLVED (UG/L AS CU)	5	9.00	2.00	5.40	2.70	8.00	5.00	3.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	3	11.00	3.00					
IRON, DISSOLVED (UG/L AS FE)	15	450.00	10.00	174.67	134.16	250.00	120.00	80.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	3	270.00	80.00					
MANGANESE, DISSOLVED (UG/L AS MN)	8	120.00	9.00	69.87	36.88	100.00	70.00	42.50
MOLYBDENUM, DISSOLVED (UG/L AS MO)	5	10.00	1.00	4.80	4.76	10.00	2.00	1.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	3	6.00	1.00					
NICKEL, DISSOLVED (UG/L AS NI)	5	5.00	3.00	3.80	0.84	4.50	4.00	3.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	3	9.00	5.00					
VANADIUM, DISSOLVED (UG/L AS V)	5	4.30	0.20	1.98	1.77	3.85	1.00	0.60
ZINC, DISSOLVED (UG/L AS ZN)	5	30.00	7.00	17.40	9.15	25.00	20.00	8.50
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	3	30.00	10.00					
ALUMINUM, DISSOLVED (UG/L AS AL)	5	170.00	0.00	54.00	68.41	115.00	20.00	10.00
LITHIUM, DISSOLVED (UG/L AS LI)	5	50.00	10.00	26.00	15.17	40.00	20.00	15.00
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	3	50.00	20.00					
SELENIUM, DISSOLVED (UG/L AS SE)	5	1.00	0.00	0.20	0.45	0.50	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	3	1.00	0.00					
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	16	1900.00	227.00	966.25	624.39	1707.50	742.50	444.75
SOLIDS, DISSOLVED (TNS PER AC-FT)	16	2.58	0.31	1.31	0.85	2.32	1.01	0.61
MERCURY, DISSOLVED (UG/L AS HG)	5	0.50	0.00	0.10	0.22	0.25	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	3	0.00	0.00					
SEDIMENT, SUSPENDED (MG/L)	13	864.00	15.00	131.31	222.31	93.00	74.00	50.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	13	826.00	0.00	63.92	228.98	0.79	0.07	0.01

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF ANNUAL RUNOFF	PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION		95	75	50 MEDIAN	25	5
OCTOBER	15.00	0.00	0.48	2.06	425.95	0.5	2.83	0.05	0.00	0.00	0.00
NOVEMBER	0.13	0.00	0.01	0.03	256.33	0.0	0.12	0.00	0.00	0.00	0.00
DECEMBER	0.25	0.00	0.03	0.06	215.06	0.0	0.20	0.00	0.00	0.00	0.00
JANUARY	0.05	0.00	0.01	0.01	248.69	0.0	0.05	0.00	0.00	0.00	0.00
FEBRUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00	0.00
MARCH	982.00	0.00	51.93	166.86	321.30	58.9	451.30	3.65	0.00	0.00	0.00
APRIL	302.00	0.17	32.85	64.91	197.60	36.1	206.50	20.00	4.20	1.80	0.32
MAY	32.00	0.00	3.42	6.24	182.41	3.9	18.30	3.55	1.10	0.04	0.00
JUNE	10.00	0.00	0.36	1.28	355.54	0.4	2.22	0.13	0.01	0.00	0.00
JULY	4.20	0.00	0.14	0.54	388.60	0.2	0.79	0.01	0.00	0.00	0.00
AUGUST	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00	0.00
SEPTEMBER	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00	0.00
ANNUAL	982.00	0.00	7.48	54.30	725.81	100.0	11.00	0.06	0.00	0.00	0.00

LOCATION.--Lat 47°09'40", long 102°03'39", in SE¼ sec.34, T.143 N., R.90 W., Mercer County, Hydrologic Unit 10130201, on left bank 6 ft (2 m) downstream from highway bridge, 4.5 mi (7.2 km) downstream from Elm Creek, and 9 mi (14 km) south of Golden Valley.

DRAINAGE AREA.--1,230 mi² (3,190 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	49	24.50	0.00	8.82	8.85	18.50	6.50	1.00
STREAMFLOW, INSTANTANEOUS (CFS)	49	6395.99	1.10	529.97	1231.09	456.00	19.00	6.63
SPECIFIC CONDUCTANCE (MICROHMOS)	49	4380.00	275.00	1771.33	1000.94	2510.00	1850.00	810.00
PH (UNITS)	6	8.30	7.50	7.93	0.31	8.22	7.95	7.65
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	6	6.90	2.50	5.22	1.94	6.75	6.05	2.95
BICARBONATE (MG/L AS HCO ₃)	6	667.00	98.00	328.50	231.04	576.25	265.00	122.00
CARBONATE (MG/L AS CO ₃)	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARDNESS (MG/L AS CaCO ₃)	6	310.00	76.00	184.50	103.94	310.00	160.00	87.25
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	6	54.00	18.00	34.33	16.22	54.00	30.00	19.50
MAGNESIUM, DISSOLVED (MG/L AS Mg)	6	43.00	7.50	24.08	15.67	43.00	20.50	9.38
SODIUM, DISSOLVED (MG/L AS Na)	6	420.00	36.00	198.00	155.06	352.50	170.00	55.50
SODIUM PERCENT	6	74.00	49.00	64.00	9.53	72.50	65.50	55.75
POTASSIUM, DISSOLVED (MG/L AS K)	6	9.40	5.60	7.67	1.48	9.10	7.70	6.35
CHLORIDE, DISSOLVED (MG/L AS Cl)	6	9.00	2.70	5.23	2.53	8.02	4.30	3.22
SULFATE, DISSOLVED (MG/L AS SO ₄)	6	660.00	72.00	340.33	245.57	592.50	310.00	108.00
FLUORIDE, DISSOLVED (MG/L AS F)	6	0.60	0.10	0.35	0.19	0.52	0.35	0.17
SILICA, DISSOLVED (MG/L AS SiO ₂)	6	9.40	3.60	5.73	2.32	7.52	5.30	3.82
BORON, DISSOLVED (UG/L AS B)	6	260.00	0.00	98.33	89.76	162.50	75.00	37.50
IRON, DISSOLVED (UG/L AS Fe)	6	570.00	40.00	221.67	206.44	412.50	155.00	47.50
MANGANESE, DISSOLVED (UG/L AS Mn)	6	80.00	10.00	43.33	31.41	80.00	35.00	17.50
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	6	1560.00	259.00	794.83	548.37	1357.50	689.00	276.25
SOLIDS, DISSOLVED (TUNS PER AC-FT)	6	2.12	0.35	1.08	0.75	1.84	0.93	0.37

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS						PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25	5
OCTOBER	70.00	5.10	17.77	14.31	80.55	1.4	53.30	17.00	13.00	8.00	5.82
NOVEMBER	16.00	5.00	9.49	3.52	37.07	0.7	16.00	12.25	8.00	6.95	5.50
DECEMBER	15.00	6.00	9.80	3.06	31.23	0.7	15.00	12.50	8.50	7.50	6.00
JANUARY	10.00	1.50	5.51	1.78	32.40	0.4	8.00	6.50	5.50	5.00	2.00
FEBRUARY	6.50	1.00	4.36	2.26	51.90	0.3	6.50	6.00	5.50	1.50	1.00
MARCH	7520.00	1.00	666.63	1474.04	221.12	50.8	4361.99	616.00	10.00	6.00	1.00
APRIL	2050.00	15.00	363.12	478.26	131.71	26.8	1600.50	450.00	164.00	71.50	15.55
MAY	390.00	2.40	73.32	85.73	116.93	5.6	314.80	89.00	55.00	8.25	2.77
JUNE	2180.00	2.60	104.50	284.68	272.42	7.7	511.05	78.25	27.00	17.75	6.11
JULY	99.00	1.20	29.35	27.07	92.24	2.2	88.00	41.00	24.00	4.50	1.94
AUGUST	67.00	1.10	9.97	11.64	116.81	0.8	38.40	12.00	6.00	4.00	1.20
SEPTEMBER	811.00	2.30	36.62	114.72	313.24	2.7	173.30	20.25	6.75	4.98	2.60
ANNUAL	7520.00	1.00	111.45	497.24	446.14	100.0	421.95	33.00	10.00	6.00	2.00

LOCATION.--Lat 47°11'57", long 101°54'42", in NW¼SW¼SW¼ sec.13, T.143 N., R.89 W., Mercer County, Hydrologic Unit 10130201, on right bank 40 ft (12 m) upstream from bridge on county road 6.0 mi (9.6 km) south of Zap, and 0.8 mi (1.3 km) upstream from mouth.

DRAINAGE AREA.--65.2 mi² (169 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	50	25
TEMPERATURE (DEG C)	34	30.00	0.00	10.37	9.88	19.25	9.00	0.38
STREAMFLOW, INSTANTANEOUS (CFS)	34	204.00	0.02	11.60	35.99	3.23	0.93	0.48
SPECIFIC CONDUCTANCE (MICROMHOS)	30	3300.00	375.00	1871.33	621.05	2115.00	2000.00	1465.00
OXYGEN, DISSOLVED (MG/L)	29	12.80	6.60	10.47	1.90	12.10	11.20	9.00
OXYGEN, DISSOLVED (PERCENT SATURATION)	29	130.00	72.00	98.21	15.18	110.00	95.00	86.50
PH (UNITS)	30	8.50	7.70	8.25	0.24	8.40	8.30	8.00
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	30	27.00	1.50	5.67	5.11	6.75	3.50	2.77
BICARBONATE (MG/L AS HCO3)	30	1050.00	106.00	541.87	227.55	623.50	540.00	405.75
CARBONATE (MG/L AS CO3)	30	26.00	0.00	4.19	6.14	6.25	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	30	3.20	0.42	1.10	0.63	1.20	0.97	0.70
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	30	2.20	0.29	0.85	0.40	0.95	0.73	0.64
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	30	0.48	0.00	0.10	0.12	0.12	0.04	0.03
NITROGEN, NO2+NO3, TOTAL (MG/L AS N)	30	1.60	0.00	0.15	0.33	0.13	0.02	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	30	0.47	0.02	0.07	0.10	0.07	0.04	0.03
PHOSPHORUS, DISSOLVED (MG/L AS P)	30	0.34	0.00	0.04	0.07	0.04	0.12	0.01
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	30	43.00	0.80	14.83	7.93	15.25	12.50	11.00
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	26	4.00	0.10	0.90	0.82	0.98	0.60	0.48
HARDNESS (MG/L AS CaCO3)	30	550.00	100.00	317.00	107.36	372.50	325.00	240.00
HARDNESS, NONCARBONATE (MG/L AS CaCO3)	30	110.00	0.00	9.03	26.12	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	30	95.00	22.00	59.80	20.16	76.25	61.00	44.75
MAGNESIUM, DISSOLVED (MG/L AS Mg)	30	75.00	11.00	40.70	14.21	50.00	42.50	31.50
SODIUM, DISSOLVED (MG/L AS Na)	30	650.00	37.00	330.67	136.57	362.50	340.00	247.50
SODIUM PERCENT	30	86.00	43.00	69.17	10.83	75.50	70.00	62.00
POTASSIUM, DISSOLVED (MG/L AS K)	30	15.00	6.10	10.30	2.02	11.00	10.00	9.23
CHLORIDE, DISSOLVED (MG/L AS CL)	30	13.00	2.30	7.42	2.56	8.98	7.30	5.48
SULFATE, DISSOLVED (MG/L AS SO4)	30	1000.00	100.00	563.33	195.81	665.00	600.00	447.50
FLUORIDE, DISSOLVED (MG/L AS F)	30	0.50	0.10	0.31	0.10	0.40	0.30	0.28
SILICA, DISSOLVED (MG/L AS SiO2)	30	300.00	3.40	18.37	53.28	11.00	8.70	6.88
ARSENIC, DISSOLVED (UG/L AS AS)	9	3.00	1.00	1.78	0.83	2.50	2.00	1.00
ARSENIC, TOTAL (UG/L AS AS)	6	3.00	1.00	2.17	0.75	3.00	2.00	1.75
BARIUM, DISSOLVED (UG/L AS BA)	9	100.00	0.00	55.56	38.12	90.00	70.00	20.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	6	200.00	0.00	100.00	89.44	200.00	100.00	0.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	9	1.00	0.00	0.56	0.53	1.00	1.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	30	700.00	90.00	360.33	121.90	422.50	365.00	300.00
CHROMIUM, DISSOLVED (UG/L AS CR)	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	6	10.00	0.00	3.33	5.16	10.00	0.00	0.00
COBALT, DISSOLVED (UG/L AS CO)	9	3.00	0.00	2.11	1.36	3.00	3.00	0.50
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	6	4.00	0.00	1.67	1.63	3.25	1.50	0.00
COPPER, DISSOLVED (UG/L AS CU)	9	14.00	2.00	5.89	4.34	10.00	4.00	2.50
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	6	28.00	3.00	9.83	9.33	15.25	6.50	3.75
IRON, DISSOLVED (UG/L AS FE)	30	290.00	0.00	54.13	63.78	60.00	30.00	18.50
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	6	260.00	60.00	143.33	73.94	200.00	145.00	67.50
MANGANESE, DISSOLVED (UG/L AS MN)	9	190.00	18.00	66.44	51.71	80.00	50.00	35.00
MOLYBDENUM, DISSOLVED (UG/L AS MO)	9	17.00	1.00	7.67	5.15	10.00	10.00	3.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	6	6.00	0.00	2.33	2.34	4.50	2.00	0.00
NICKEL, DISSOLVED (UG/L AS NI)	9	5.00	2.00	3.56	1.13	4.50	4.00	2.50
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	6	11.00	6.00	8.50	2.17	11.00	8.00	6.75
VANADIUM, DISSOLVED (UG/L AS V)	9	6.00	0.00	2.03	2.35	4.20	1.00	0.45
ZINC, DISSOLVED (UG/L AS ZN)	9	10.00	3.00	7.56	3.43	10.00	10.00	3.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	6	30.00	10.00	21.67	7.53	30.00	20.00	17.50
ALUMINUM, DISSOLVED (UG/L AS AL)	9	80.00	0.00	20.00	27.84	35.00	10.00	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	9	67.00	20.00	46.67	14.91	60.00	50.00	36.50
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	6	70.00	10.00	41.67	21.37	62.50	40.00	25.00
SELENIUM, DISSOLVED (UG/L AS SE)	9	1.00	0.00	0.11	0.33	0.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	6	1.00	0.00	0.17	0.41	0.25	0.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	30	2420.00	233.00	1306.57	471.94	1475.00	1370.00	1017.50
SOLIDS, DISSOLVED (TONS PER AC-FT)	30	3.29	0.32	1.78	0.64	2.01	1.87	1.38
MERCURY, DISSOLVED (UG/L AS HG)	9	0.60	0.00	0.12	0.22	0.25	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	6	0.30	0.00	0.12	0.15	0.30	0.05	0.00
SEDIMENT, SUSPENDED (MG/L)	33	638.00	14.00	65.00	104.57	62.00	44.00	32.50
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	33	351.00	0.00	11.65	60.99	0.43	0.12	0.05

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50	25
OCTOBER	10.00	0.00	0.78	1.50	192.32	0.7	3.81	0.75	0.29	0.15
NOVEMBER	1.70	0.28	0.68	0.24	35.61	0.6	1.20	0.80	0.62	0.50
DECEMBER	1.70	0.10	0.62	0.37	59.25	0.6	1.53	0.90	0.50	0.40
JANUARY	1.20	0.00	0.41	0.29	70.97	0.4	0.96	0.62	0.30	0.20
FEBRUARY	0.40	0.00	0.11	0.13	114.85	0.1	0.55	0.21	0.05	0.00
MARCH	1500.00	0.00	71.51	222.32	310.91	63.9	530.00	26.00	7.00	0.29
APRIL	268.00	0.80	32.67	54.01	165.29	28.3	180.10	28.50	12.50	7.08
MAY	20.00	0.07	3.08	3.53	114.64	2.7	12.00	4.20	2.10	0.66
JUNE	18.00	0.03	1.76	2.64	150.46	1.5	7.43	1.63	1.00	0.62
JULY	23.00	0.00	1.06	2.74	257.75	1.0	3.73	0.99	0.54	0.00
AUGUST	5.00	0.00	0.22	0.62	276.73	0.2	1.16	0.20	0.00	0.00
SEPTEMBER	0.52	0.00	0.11	0.11	94.84	0.1	0.36	0.16	0.11	0.02
ANNUAL	1500.00	0.00	9.49	69.46	731.80	100.0	25.00	1.20	0.47	0.15

LOCATION.--Lat 47°10'43", long 101°47'05", in NW¼SW¼NW¼ sec.25, T.143 N., R.88 W., Mercer County, Hydrologic Unit 10130201, on right bank 60 ft (18 m) upstream from bridge on State Highway 49, and 6 mi (10 km) south of Beulah.

DRAINAGE AREA.--22 mi² (57 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	38	19.50	0.00	8.37	7.14	16.13	8.50	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	38	137.00	0.04	9.29	25.00	2.97	0.34	0.14
SPECIFIC CONDUCTANCE (MICROMH/CM)	36	2310.00	250.00	1495.83	576.37	1837.50	1750.00	1092.50
OXYGEN, DISSOLVED (MG/L)	29	11.50	4.00	7.98	2.08	9.65	7.80	6.35
OXYGEN, DISSOLVED (PERCENT SATURATION)	19	107.00	43.00	75.21	15.93	84.00	73.00	68.00
PH (UNITS)	29	8.20	7.70	7.92	0.13	8.00	7.90	7.85
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	20	25.00	4.80	12.20	5.03	14.00	12.50	8.73
BICARBONATE (MG/L AS HCO ₃)	20	794.00	298.00	614.05	127.89	689.75	658.00	594.50
CARBONATE (MG/L AS CO ₃)	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	28	2.10	0.49	0.81	0.31	0.93	0.74	0.61
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	10	1.20	0.44	0.81	0.26	0.98	0.82	0.58
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10	0.50	0.00	0.07	0.15	0.05	0.03	0.01
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	28	0.36	0.00	0.07	0.09	0.09	0.05	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	28	0.42	0.01	0.06	0.07	0.07	0.04	0.04
PHOSPHORUS, DISSOLVED (MG/L AS P)	29	0.28	0.00	0.04	0.05	0.04	0.03	0.02
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	28	40.00	7.20	13.72	7.39	16.75	11.00	9.25
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	23	1.00	0.10	0.36	0.24	0.50	0.30	0.20
HARDNESS (MG/L AS CaCO ₃)	29	620.00	110.00	420.34	113.59	505.00	420.00	360.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	29	68.00	0.00	8.31	18.07	7.50	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	29	110.00	23.00	72.34	19.57	89.00	71.00	58.50
MAGNESIUM, DISSOLVED (MG/L AS Mg)	29	97.00	13.00	58.17	16.92	66.00	57.00	51.50
SODIUM, DISSOLVED (MG/L AS Na)	29	380.00	43.00	257.69	71.67	295.00	280.00	260.00
SODIUM PERCENT	29	78.00	44.00	57.83	8.46	62.50	59.00	52.00
POTASSIUM, DISSOLVED (MG/L AS K)	29	14.00	6.70	9.68	1.70	11.00	9.50	8.25
CHLORIDE, DISSOLVED (MG/L AS CL)	29	9.80	2.30	6.30	1.88	7.30	6.50	4.95
SULFATE, DISSOLVED (MG/L AS SO ₄)	29	730.00	92.00	476.62	125.66	545.00	480.00	435.00
FLUORIDE, DISSOLVED (MG/L AS F)	29	0.80	0.10	0.27	0.12	0.30	0.30	0.20
SILICA, DISSOLVED (MG/L AS SiO ₂)	29	17.00	5.60	10.38	2.61	12.00	10.00	8.80
ARSENIC, DISSOLVED (UG/L AS AS)	9	3.00	1.00	1.56	0.73	2.00	1.00	1.00
ARSENIC, TOTAL (UG/L AS AS)	2	3.00	2.00					
BARIUM, DISSOLVED (UG/L AS BA)	9	200.00	50.00	85.56	48.51	100.00	60.00	50.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	2	200.00	0.00					
BERYLLIUM, DISSOLVED (UG/L AS BE)	2	1.00	1.00					
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	2	0.00	0.00					
BORON, DISSOLVED (UG/L AS B)	17	470.00	170.00	345.88	85.44	395.00	370.00	305.00
CHROMIUM, DISSOLVED (UG/L AS CR)	9	10.00	0.00	3.33	5.00	10.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	2	10.00	0.00					
COBALT, DISSOLVED (UG/L AS CO)	2	3.00	3.00					
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	2	3.00	3.00					
COPPER, DISSOLVED (UG/L AS CU)	9	10.00	0.00	2.67	4.21	6.00	1.00	0.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	2	7.00	6.00					
IRON, DISSOLVED (UG/L AS FE)	17	280.00	30.00	97.82	64.84	130.00	90.00	50.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	2	300.00	100.00					
MANGANESE, DISSOLVED (UG/L AS MN)	9	280.00	30.00	89.22	74.89	95.00	70.00	50.00
MOLYBDENUM, DISSOLVED (UG/L AS MO)	9	21.00	0.00	7.11	6.99	10.00	10.00	0.50
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	2	2.00	1.00					
NICKEL, DISSOLVED (UG/L AS NI)	2	3.00	0.00					
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	2	5.00	4.00					
VANADIUM, DISSOLVED (UG/L AS V)	2	6.00	6.00					
ZINC, DISSOLVED (UG/L AS ZN)	9	10.00	0.00	5.67	3.71	10.00	6.00	3.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	2	20.00	10.00					
ALUMINUM, DISSOLVED (UG/L AS AL)	9	70.00	0.00	11.11	22.61	10.00	0.00	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	9	100.00	30.00	67.67	25.19	85.00	80.00	39.00
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	2	90.00	30.00					
SELENIUM, DISSOLVED (UG/L AS SE)	9	3.00	0.00	0.33	1.00	0.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	2	0.00	0.00					
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	29	1650.00	263.00	1187.10	289.83	1340.00	1230.00	1150.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	29	2.24	0.36	1.61	0.39	1.82	1.67	1.57
MERCURY, DISSOLVED (UG/L AS HG)	9	2.80	0.00	0.34	0.92	0.15	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	3	0.30	0.10					
SEDIMENT, SUSPENDED (MG/L)	31	105.00	3.00	22.03	27.36	32.00	8.00	4.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	30	39.00	0.00	1.31	7.28	0.04	0.01	0.00

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25
OCTOBER	0.70	0.07	0.25	0.13	50.12	1.7	0.51	0.30	0.26	0.16
NOVEMBER	0.45	0.14	0.28	0.09	32.24	1.8	0.42	0.36	0.30	0.18
DECEMBER	0.50	0.00	0.16	0.14	87.45	1.1	0.41	0.28	0.10	0.06
JANUARY	0.16	0.00	0.02	0.04	145.53	0.2	0.10	0.05	0.00	0.00
FEBRUARY	0.08	0.00	0.02	0.03	142.49	0.1	0.07	0.06	0.00	0.00
MARCH	137.00	0.00	8.03	23.78	296.13	54.1	51.80	1.10	0.45	0.00
APRIL	70.00	0.20	4.97	9.82	197.56	32.4	23.35	4.15	1.75	0.90
MAY	3.80	0.05	0.64	0.67	104.53	4.3	2.23	0.79	0.54	0.22
JUNE	1.00	0.04	0.24	0.20	83.72	1.5	0.74	0.29	0.18	0.10
JULY	1.80	0.03	0.19	0.26	136.76	1.3	0.79	0.19	0.10	0.05
AUGUST	0.70	0.02	0.09	0.12	130.83	0.6	0.34	0.10	0.04	0.03
SEPTEMBER	0.58	0.01	0.15	0.11	70.65	1.0	0.32	0.22	0.14	0.09
ANNUAL	137.00	0.00	1.26	7.84	621.46	100.0	2.91	0.36	0.15	0.05

LOCATION.--Lat 47°20'34", long 102°37'03", in NW¼NW¼NE¼ sec.35, T.145 N., R.94 W., Dunn County, Hydrologic Unit 10130201, on right bank 100 ft (30 m) upstream from bridge on township road, 0.5 mi (0.8 km) south of Dunn Center, and 3.8 mi (6.1 km) downstream from Lake Ilo.

DRAINAGE AREA.--116 mi² (300 km²), of which about 12 mi² (31 km²) is probably noncontributing.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	41	25.00	0.00	9.87	8.82	19.25	10.00	1.00
STREAMFLOW, INSTANTANEOUS (CFS)	41	743.00	0.37	35.31	126.33	2.30	1.36	0.56
SPECIFIC CONDUCTANCE (MICROMH/CM)	37	4400.00	150.00	1752.62	794.84	2260.00	1770.00	1330.00
OXYGEN, DISSOLVED (MG/L)	36	15.40	2.50	8.32	3.05	10.42	8.65	6.33
OXYGEN, DISSOLVED (PERCENT SATURATION)	36	145.00	19.00	80.53	31.74	99.00	87.50	55.75
PH (UNITS)	37	8.70	7.10	8.04	0.41	8.35	8.10	7.70
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	37	63.00	1.40	11.02	13.52	14.00	5.60	3.15
BICARBONATE (MG/L AS HCO ₃)	37	696.00	76.00	467.27	139.44	567.00	498.00	391.50
CARBONATE (MG/L AS CO ₃)	37	24.00	0.00	2.91	6.46	0.50	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	35	5.10	0.76	1.62	0.82	2.10	1.30	1.10
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	35	2.10	0.17	1.17	0.44	1.40	1.20	0.86
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	35	2.90	0.00	0.28	0.51	0.28	0.13	0.05
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	35	0.72	0.00	0.18	0.20	0.29	0.09	0.02
PHOSPHORUS, TOTAL (MG/L AS P)	35	0.33	0.05	0.13	0.06	0.17	0.11	0.09
PHOSPHORUS, DISSOLVED (MG/L AS P)	35	0.15	0.01	0.05	0.03	0.08	0.05	0.03
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	34	39.00	3.80	19.25	8.03	25.00	17.50	13.75
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	31	2.70	0.10	1.16	0.64	1.40	1.00	0.80
HARDNESS (MG/L AS CaCO ₃)	35	880.00	50.00	351.71	166.65	440.00	330.00	240.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	34	480.00	0.00	30.47	93.59	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	35	170.00	11.00	67.03	30.75	86.00	60.00	49.00
MAGNESIUM, DISSOLVED (MG/L AS MG)	35	110.00	5.40	44.58	21.94	54.00	41.00	29.00
SODIUM, DISSOLVED (MG/L AS NA)	35	630.00	35.00	303.86	115.06	390.00	320.00	240.00
SODIUM PERCENT	35	80.00	58.00	65.77	4.20	68.00	65.00	62.00
POTASSIUM, DISSOLVED (MG/L AS K)	35	11.00	1.20	8.42	2.03	10.00	8.50	7.50
CHLORIDE, DISSOLVED (MG/L AS CL)	35	42.00	1.80	9.01	8.44	7.50	6.20	5.80
SULFATE, DISSOLVED (MG/L AS SO ₄)	35	1500.00	57.00	583.34	303.45	760.00	510.00	390.00
FLUORIDE, DISSOLVED (MG/L AS F)	35	0.80	0.10	0.52	0.18	0.60	0.50	0.40
SILICA, DISSOLVED (MG/L AS SiO ₂)	35	23.00	0.40	9.47	5.13	12.00	9.10	6.30
ARSENIC, DISSOLVED (UG/L AS AS)	8	4.00	1.00	2.38	1.06	3.00	2.50	1.25
ARSENIC, TOTAL (UG/L AS AS)	5	5.00	2.00	3.00	1.22	4.00	3.00	2.00
BARIUM, DISSOLVED (UG/L AS BA)	8	300.00	0.00	107.50	97.21	175.00	80.00	50.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	5	400.00	100.00	180.00	130.38	300.00	100.00	100.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	8	3.00	0.00	0.63	1.06	1.00	0.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	35	1300.00	80.00	554.29	259.24	690.00	490.00	400.00
CHROMIUM, DISSOLVED (UG/L AS CR)	8	10.00	0.00	3.63	4.41	8.75	2.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	5	20.00	0.00	7.00	9.75	17.50	0.00	0.00
COBALT, DISSOLVED (UG/L AS CO)	8	8.00	0.00	2.13	2.70	3.00	1.50	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	5	3.00	0.00	1.20	1.64	3.00	0.00	0.00
COPPER, DISSOLVED (UG/L AS CU)	8	29.00	0.00	10.00	10.98	21.25	5.50	2.25
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	5	15.00	4.00	7.40	4.56	11.50	6.00	4.00
IRON, DISSOLVED (UG/L AS FE)	35	520.00	0.00	143.86	143.89	200.00	110.00	30.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	5	600.00	60.00	354.00	193.34	500.00	370.00	200.00
MANGANESE, DISSOLVED (UG/L AS MN)	8	330.00	40.00	166.00	109.97	272.50	139.00	67.50
MOLYBDENUM, DISSOLVED (UG/L AS MO)	8	25.00	0.00	6.88	8.22	10.00	3.00	2.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MU)	5	6.00	0.00	2.60	2.19	4.50	2.00	1.00
NICKEL, DISSOLVED (UG/L AS NI)	8	5.00	1.00	2.50	1.51	3.75	2.50	1.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	5	8.00	4.00	5.80	1.79	7.50	6.00	4.00
VANADIUM, DISSOLVED (UG/L AS V)	8	8.00	0.00	2.02	2.55	2.55	1.00	1.00
ZINC, DISSOLVED (UG/L AS ZN)	8	30.00	0.00	10.50	10.00	17.50	9.00	3.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	5	40.00	10.00	26.00	11.40	35.00	30.00	15.00
ALUMINUM, DISSOLVED (UG/L AS AL)	8	40.00	0.00	18.75	14.58	30.00	20.00	2.50
LITHIUM, DISSOLVED (UG/L AS LI)	8	70.00	5.00	38.63	20.60	57.00	35.00	27.00
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	5	70.00	8.00	45.60	26.77	70.00	50.00	19.00
SELENIUM, DISSOLVED (UG/L AS SE)	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	35	2430.00	164.00	1297.60	524.97	1750.00	1260.00	981.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	35	3.30	0.22	1.76	0.71	2.38	1.71	1.33
MERCURY, DISSOLVED (UG/L AS HG)	8	0.30	0.00	0.08	0.12	0.18	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	5	0.50	0.00	0.16	0.19	0.30	0.10	0.05
SEDIMENT, SUSPENDED (MG/L)	39	120.00	8.00	40.10	25.48	57.00	38.00	20.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	39	241.00	0.02	8.41	39.14	0.22	0.09	0.05

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25
OCTOBER	3.20	0.42	0.90	0.58	63.67	0.7	2.06	1.10	0.58	0.51
NOVEMBER	3.00	0.50	0.91	0.43	47.11	0.7	1.80	1.00	0.82	0.60
DECEMBER	2.30	0.60	1.18	0.58	49.46	0.9	2.00	1.90	0.86	0.70
JANUARY	2.00	0.70	1.24	0.55	44.29	1.0	2.00	2.00	0.92	0.83
FEBRUARY	2.10	0.47	1.18	0.60	51.05	0.9	2.10	2.00	0.90	0.71
MARCH	900.00	0.47	54.41	169.31	311.15	43.4	530.00	3.50	1.50	0.96
APRIL	530.00	0.52	52.06	97.21	186.75	40.2	269.40	48.50	14.50	1.10
MAY	75.00	0.37	10.04	15.41	153.40	8.0	57.00	12.00	4.40	0.61
JUNE	20.00	0.39	2.25	2.97	131.94	1.7	7.62	2.20	1.40	0.68
JULY	7.00	0.31	1.33	1.00	75.66	1.1	3.16	1.80	0.92	0.52
AUGUST	2.40	0.29	0.78	0.48	61.59	0.6	1.80	1.10	0.48	0.42
SEPTEMBER	5.40	0.28	1.00	0.84	84.66	0.8	2.29	1.63	0.57	0.41
ANNUAL	900.00	0.28	10.64	59.74	561.56	100.0	28.15	2.00	0.95	0.60

LOCATION.--Lat 47°21'56", long 102°22'35", in NEKSENEK sec.22, T.145 N., R.92 W., Dunn County, Hydrologic Unit 10130201, on left bank 600 ft (183 m) upstream from bridge on township road, 1.7 mi (2.7 km) northwest of Halliday, and 3.6 mi (5.8 km) upstream from Alkali Creek.

DRAINAGE AREA.--260 mi² (673 km²) approximately, of which about 25 mi² (65 km²) probably is noncontributing.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	50	25
TEMPERATURE (DEG C)	42	26.00	0.00	10.35	9.08	18.62	10.00	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	42	1300.00	0.77	88.02	266.66	10.95	5.42	3.60
SPECIFIC CONDUCTANCE (MICROMHUS)	37	2190.00	250.00	1675.27	438.66	2000.00	1840.00	1500.00
OXYGEN, DISSOLVED (MG/L)	36	13.50	6.20	9.75	1.76	10.68	9.80	8.38
OXYGEN, DISSOLVED (PERCENT SATURATION)	36	132.00	55.00	93.67	20.73	105.25	97.00	76.00
PH (UNITS)	37	8.70	7.00	8.15	0.41	8.40	8.30	7.90
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	37	50.00	1.50	8.80	11.50	9.95	3.40	2.60
BICARBONATE (MG/L AS HCO ₃)	37	656.00	132.00	466.65	124.86	564.50	493.00	386.00
CARBONATE (MG/L AS CO ₃)	37	41.00	0.00	5.17	8.94	7.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	36	3.20	0.17	1.07	0.59	1.20	0.91	0.75
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	36	2.00	0.13	0.82	0.40	0.98	0.77	0.58
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	36	0.69	0.00	0.12	0.16	0.17	0.05	0.02
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	36	0.58	0.00	0.14	0.17	0.23	0.05	0.02
PHOSPHORUS, TOTAL (MG/L AS P)	36	0.40	0.01	0.08	0.09	0.09	0.05	0.04
PHOSPHORUS, DISSOLVED (MG/L AS P)	36	0.33	0.00	0.04	0.06	0.03	0.02	0.01
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	35	40.00	2.10	15.47	7.81	17.00	13.00	11.00
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	33	3.50	0.20	1.03	0.77	1.20	0.70	0.55
HARDNESS (MG/L AS CaCO ₃)	36	600.00	49.00	410.81	123.94	500.00	420.00	362.50
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	36	140.00	0.00	27.22	32.12	31.75	19.50	3.50
CALCIUM, DISSOLVED (MG/L AS Ca)	36	100.00	10.00	73.17	21.68	91.50	75.00	60.75
MAGNESIUM, DISSOLVED (MG/L AS MG)	36	86.00	5.90	55.61	17.80	66.00	58.50	48.25
SODIUM, DISSOLVED (MG/L AS NA)	36	340.00	30.00	247.78	69.57	290.00	270.00	215.00
SODIUM PERCENT	36	74.00	50.00	57.17	5.39	59.00	56.50	54.00
POTASSIUM, DISSOLVED (MG/L AS K)	36	17.00	5.90	8.59	1.87	9.25	8.55	7.50
CHLORIDE, DISSOLVED (MG/L AS CL)	36	26.00	3.10	6.73	3.68	7.45	6.45	4.95
SULFATE, DISSOLVED (MG/L AS SO ₄)	36	770.00	53.00	537.31	160.13	657.50	590.00	480.00
FLUORIDE, DISSOLVED (MG/L AS F)	36	0.60	0.10	0.50	0.13	0.60	0.50	0.50
SILICA, DISSOLVED (MG/L AS SiO ₂)	36	19.00	1.90	9.32	5.14	13.50	8.20	5.40
ARSENIC, DISSOLVED (UG/L AS AS)	10	2.00	1.00	1.40	0.52	2.00	1.00	1.00
ARSENIC, TOTAL (UG/L AS AS)	6	3.00	1.00	2.00	1.10	3.00	2.00	1.00
BARIUM, DISSOLVED (UG/L AS BA)	10	200.00	0.00	99.00	75.49	200.00	85.00	40.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	6	300.00	100.00	166.67	81.65	225.00	150.00	100.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	10	1.00	0.00	0.60	0.52	1.00	1.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	36	920.00	100.00	612.78	189.55	740.00	670.00	500.00
CHROMIUM, DISSOLVED (UG/L AS CR)	10	10.00	0.00	3.00	4.83	10.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	6	20.00	0.00	8.33	7.53	12.50	10.00	0.00
COBALT, DISSOLVED (UG/L AS CO)	10	3.00	0.00	2.00	1.41	3.00	3.00	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	6	3.00	0.00	1.50	1.38	3.00	1.50	0.00
COPPER, DISSOLVED (UG/L AS CU)	10	28.00	0.00	9.00	8.39	12.50	7.00	3.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	6	23.00	4.00	11.50	6.77	16.25	10.50	6.25
IRON, DISSOLVED (UG/L AS FE)	36	220.00	10.00	51.00	53.08	50.00	30.00	20.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	6	380.00	120.00	195.00	97.52	245.00	175.00	120.00
MANGANESE, DISSOLVED (UG/L AS MN)	10	180.00	20.00	83.30	65.23	162.50	60.00	27.50
MOLYBDENUM, DISSOLVED (UG/L AS MO)	10	10.00	0.00	6.80	4.26	10.00	10.00	2.50
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	6	5.00	0.00	2.67	1.75	4.25	2.50	1.50
NICKEL, DISSOLVED (UG/L AS NI)	10	12.00	0.00	3.20	3.43	3.50	2.50	1.50
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	6	15.00	0.00	7.17	5.34	11.25	7.50	2.25
VANADIUM, DISSOLVED (UG/L AS V)	10	6.00	0.00	1.94	2.30	3.75	1.00	0.30
ZINC, DISSOLVED (UG/L AS ZN)	10	10.00	0.00	5.70	3.89	10.00	4.00	3.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	6	60.00	10.00	28.33	18.35	45.00	20.00	17.50
ALUMINUM, DISSOLVED (UG/L AS AL)	10	60.00	0.00	12.00	19.89	22.50	0.00	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	10	80.00	20.00	55.80	18.83	70.00	60.50	40.50
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	6	70.00	10.00	43.33	23.38	62.50	45.00	25.00
SELENIUM, DISSOLVED (UG/L AS SE)	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	34	1620.00	157.00	1160.15	343.65	1405.00	1285.00	937.50
SOLIDS, DISSOLVED (TUNS PER AC-FT)	36	6.79	0.21	1.72	0.98	1.92	1.75	1.32
MERCURY, DISSOLVED (UG/L AS HG)	10	0.20	0.00	0.05	0.08	0.13	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	6	0.40	0.00	0.22	0.13	0.33	0.20	0.15
SEDIMENT, SUSPENDED (MG/L)	41	618.00	14.00	86.71	123.64	75.00	56.00	42.50
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	41	2100.00	0.09	103.49	420.10	1.50	0.78	0.51

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50	25
OCTOBER	9.00	2.10	4.23	1.13	26.68	1.7	6.10	4.90	4.30	3.30
NOVEMBER	6.50	2.10	3.90	1.00	25.64	1.5	5.68	4.60	3.90	3.00
DECEMBER	8.00	2.00	4.42	1.93	43.73	1.8	8.00	6.00	3.60	2.80
JANUARY	5.00	1.20	3.16	1.00	31.82	1.3	5.00	4.00	3.00	2.30
FEBRUARY	5.00	0.40	2.62	1.46	52.55	1.0	4.77	3.80	3.50	1.00
MARCH	1500.00	0.00	73.35	256.74	350.00	29.7	730.00	14.50	4.00	3.30
APRIL	1340.00	4.70	111.18	208.70	187.70	43.5	572.50	94.50	35.00	8.55
MAY	122.00	2.00	20.09	24.24	120.67	8.1	82.00	22.00	14.00	4.15
JUNE	244.00	2.40	13.14	30.66	233.41	5.1	44.40	9.08	6.95	4.83
JULY	61.00	1.50	7.64	9.41	123.20	3.1	30.20	9.30	4.60	2.40
AUGUST	12.00	2.00	3.77	1.50	39.72	1.5	6.09	4.40	3.60	2.80
SEPTEMBER	12.00	1.00	4.01	2.03	50.55	1.6	8.44	4.60	3.70	2.68
ANNUAL	1500.00	0.00	20.98	101.52	484.00	100.0	50.15	6.80	4.10	3.00

LOCATION.--Lat 47°17'10", long 101°55'31", in SW¼ sec.14, T.144 N., R.89 W., Mercer County, Hydrologic Unit 10130201, on right bank 250 ft (76 m) downstream from Burlington Northern Railway bridge in Zap, and 9 mi (14 km) upstream from mouth.

DRAINAGE AREA.--549 mi² (1,422 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	49	23.00	0.00	7.90	8.27	15.50	5.50	0.00
STREAMFLOW, INSTANTANEOUS (CFS)	50	3110.00	2.60	249.97	649.58	63.00	12.25	7.43
SPECIFIC CONDUCTANCE (MICROMHMS)	47	2410.00	190.00	1448.34	539.88	1880.00	1570.00	1200.00
OXYGEN, DISSOLVED (MG/L)	36	12.40	6.70	9.55	1.55	10.80	9.65	8.40
OXYGEN, DISSOLVED (PERCENT SATURATION)	19	109.00	56.00	81.89	14.07	91.00	81.00	73.00
PH (UNITS)	35	8.50	7.50	8.11	0.29	8.30	8.20	7.90
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	12	19.00	2.20	6.41	5.59	8.85	3.75	3.05
BICARBONATE (MG/L AS HCO3)	12	630.00	170.00	475.83	133.24	597.50	495.00	380.00
CARBONATE (MG/L AS CO3)	12	10.00	0.00	0.83	2.89	0.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	35	3.70	0.33	1.07	0.66	1.20	0.86	0.71
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	35	2.50	0.06	0.81	0.47	0.98	0.75	0.51
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	35	0.40	0.00	0.08	0.10	0.11	0.03	0.01
NITROGEN, NO2+NO3, TOTAL (MG/L AS N)	35	0.98	0.00	0.18	0.24	0.27	0.06	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	35	0.49	0.00	0.08	0.11	0.08	0.05	0.02
PHOSPHORUS, DISSOLVED (MG/L AS P)	1	0.01	0.01					
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	33	36.00	4.50	13.45	7.40	15.50	11.00	8.85
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	22	4.30	0.00	1.18	0.93	1.58	0.90	0.50
HARDNESS (MG/L AS CaCO3)	36	620.00	170.00	405.83	108.30	477.50	395.00	360.00
HARDNESS, NONCARBONATE (MG/L CaCO3)	36	77.00	0.00	19.61	24.65	31.00	9.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	36	120.00	35.00	79.06	20.47	95.50	77.00	66.25
MAGNESIUM, DISSOLVED (MG/L AS MG)	36	78.00	19.00	50.61	14.26	60.75	49.50	44.00
SODIUM, DISSOLVED (MG/L AS NA)	36	370.00	53.00	235.75	73.87	287.50	250.00	200.00
SODIUM PERCENT	36	74.00	40.00	56.22	7.42	58.00	56.00	53.00
POTASSIUM, DISSOLVED (MG/L AS K)	36	14.00	7.10	9.00	1.37	9.43	8.80	8.20
CHLORIDE, DISSOLVED (MG/L AS CL)	36	14.00	2.30	7.13	2.05	8.28	7.20	6.33
SULFATE, DISSOLVED (MG/L AS SO4)	35	800.00	180.00	495.14	139.12	590.00	520.00	440.00
FLUORIDE, DISSOLVED (MG/L AS F)	36	0.70	0.10	0.42	0.13	0.50	0.40	0.40
SILICA, DISSOLVED (MG/L AS SiO2)	36	55.00	5.50	12.01	8.27	13.00	9.75	7.90
ARSENIC, DISSOLVED (UG/L AS AS)	9	2.00	1.00	1.33	0.50	2.00	1.00	1.00
ARSENIC, TOTAL (UG/L AS AS)	9	4.00	1.00	1.89	1.05	2.50	2.00	1.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	9	10.00	0.00	2.00	3.39	3.00	1.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	9	10.00	0.00	1.67	3.54	2.50	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	35	650.00	1.00	414.03	144.04	490.00	460.00	340.00
CHROMIUM, DISSOLVED (UG/L AS CR)	9	10.00	0.00	1.67	3.54	2.50	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	9	25.00	0.00	11.22	9.67	20.00	10.00	0.00
COPPER, DISSOLVED (UG/L AS CU)	9	3.00	0.00	1.11	0.93	1.50	1.00	0.50
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	9	38.00	0.00	8.78	11.55	10.50	5.00	2.50
IRON, TOTAL RECOVERABLE (UG/L AS FE)	9	19000.00	580.00	3304.44	6041.02	3100.00	840.00	680.00
IRON, DISSOLVED (UG/L AS FE)	9	170.00	10.00	60.00	68.92	140.00	20.00	10.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	9	820.00	80.00	208.89	232.94	185.00	130.00	105.00
MANGANESE, DISSOLVED (UG/L AS MN)	9	140.00	20.00	62.22	37.01	80.00	60.00	30.00
MOLYBDENUM, DISSOLVED (UG/L AS MO)	9	10.00	0.00	4.11	4.68	10.00	1.00	0.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	8	7.00	0.00	2.13	2.70	4.50	1.00	0.00
NICKEL, DISSOLVED (UG/L AS NI)	9	14.00	0.00	2.89	4.46	3.50	2.00	0.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	9	36.00	0.00	12.44	10.44	17.00	9.00	6.50
VANADIUM, DISSOLVED (UG/L AS V)	9	3.00	0.00	1.08	1.07	2.00	1.00	0.00
ZINC, DISSOLVED (UG/L AS ZN)	9	20.00	0.00	7.89	5.95	10.00	10.00	3.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	9	100.00	0.00	40.00	32.79	70.00	30.00	20.00
ALUMINUM, DISSOLVED (UG/L AS AL)	9	20.00	0.00	8.89	9.28	20.00	10.00	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	9	80.00	4.00	50.44	26.49	70.00	60.00	25.00
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	9	80.00	20.00	50.00	22.91	70.00	60.00	25.00
SELENIUM, DISSOLVED (UG/L AS SE)	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	9	1.00	0.00	0.11	0.33	0.00	0.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	36	1700.00	360.00	1124.22	313.57	1340.00	1160.00	957.25
SOLIDS, DISSOLVED (TONS PER AC-FT)	35	2.31	0.49	1.52	0.43	1.82	1.58	1.29
MERCURY, DISSOLVED (UG/L AS HG)	9	0.60	0.00	0.13	0.24	0.30	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	9	1.80	0.00	0.29	0.60	0.35	0.00	0.00
SEDIMENT, SUSPENDED (MG/L)	38	872.00	9.00	90.87	188.78	57.50	36.50	20.75
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	38	7320.00	0.06	253.33	1217.78	3.72	1.05	0.45

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25
OCTOBER	14.00	5.80	9.49	2.18	22.99	1.9	13.00	11.00	10.00	7.40
NOVEMBER	16.00	6.40	10.07	2.38	23.62	1.9	15.00	12.00	9.95	8.15
DECEMBER	11.00	5.00	8.25	1.88	22.86	1.6	11.00	10.00	8.50	7.00
JANUARY	8.80	1.50	5.50	2.21	40.18	1.1	8.60	7.75	4.80	4.50
FEBRUARY	6.90	1.50	4.71	1.79	37.98	0.9	6.67	6.20	5.50	2.50
MARCH	3100.00	2.50	182.11	591.81	324.98	36.0	1956.99	36.00	13.00	6.00
APRIL	2410.00	11.00	189.74	377.74	199.08	36.3	918.00	143.50	62.50	25.75
MAY	225.00	5.80	40.18	36.80	91.59	7.9	112.30	52.50	35.00	9.00
JUNE	253.00	5.60	27.50	35.28	128.27	5.3	69.00	25.00	19.00	16.00
JULY	114.00	3.60	17.76	18.61	104.74	3.5	57.60	22.50	11.00	4.80
AUGUST	46.00	3.60	9.40	6.46	68.67	1.9	19.20	11.00	8.20	6.25
SEPTEMBER	19.00	4.40	8.85	3.08	34.78	1.7	16.00	10.00	8.35	6.33
ANNUAL	3100.00	1.50	42.90	213.25	497.11	100.0	97.45	18.00	9.50	6.40

LOCATION.--Lat 47°08'05", Long 101°39'35", in NW¼NW¼SW¼ sec.12, T.142 N., R.87 W., Oliver County, Hydrologic Unit 10130201, and on right bank 10 mi (16 km) southeast of Beulah.

DRAINAGE AREA.--26.5 mi² (68.6 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	MEDIAN		
						75	50	25
TEMPERATURE (DEG C)	28	23.00	0.00	8.84	8.59	18.75	6.25	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	28	136.00	0.02	18.26	32.44	27.25	1.95	0.08
SPECIFIC CONDUCTANCE (MICROMH/CM)	29	2220.00	250.00	1130.65	610.71	1615.00	1200.00	462.50
PH (UNITS)	4	9.60	7.70					
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	4	6.50	0.10					
BICARBONATE (MG/L AS HCO ₃)	4	415.00	107.00					
CARBONATE (MG/L AS CO ₃)	4	55.00	0.00					
HARDNESS (MG/L AS CaCO ₃)	4	280.00	91.00					
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	4	70.00	0.00					
CALCIUM, DISSOLVED (MG/L AS Ca)	4	53.00	20.00					
MAGNESIUM, DISSOLVED (MG/L AS Mg)	4	43.00	10.00					
SODIUM, DISSOLVED (MG/L AS Na)	4	260.00	48.00					
SODIUM PERCENT	4	68.00	52.00					
POTASSIUM, DISSOLVED (MG/L AS K)	4	7.70	3.70					
CHLORIDE, DISSOLVED (MG/L AS CL)	4	6.40	2.40					
SULFATE, DISSOLVED (MG/L AS SO ₄)	4	490.00	110.00					
FLUORIDE, DISSOLVED (MG/L AS F)	4	0.30	0.10					
SILICA, DISSOLVED (MG/L AS SiO ₂)	4	9.10	1.10					
BORON, DISSOLVED (UG/L AS B)	4	330.00	70.00					
IRON, DISSOLVED (UG/L AS FE)	4	220.00	100.00					
MANGANESE, DISSOLVED (UG/L AS MN)	4	110.00	0.00					
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	4	1090.00	256.00					
SOLIDS, DISSOLVED (TONS PER AC-FT)	4	1.48	0.35					

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS						PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	MEDIAN				
							95	75	50	25	5
OCTOBER	3.50	0.00	0.24	0.50	207.98	0.8	1.60	0.14	0.08	0.04	0.00
NOVEMBER	0.38	0.01	0.07	0.08	104.67	0.2	0.18	0.16	0.02	0.02	0.01
DECEMBER	0.50	0.00	0.06	0.08	133.52	0.2	0.19	0.10	0.02	0.02	0.01
JANUARY	0.02	0.00	0.01	0.01	123.61	0.0	0.02	0.02	0.00	0.00	0.00
FEBRUARY	0.04	0.00	0.01	0.02	143.13	0.0	0.04	0.04	0.00	0.00	0.00
MARCH	386.00	0.00	19.48	61.92	317.83	64.2	138.60	2.75	0.50	0.04	0.00
APRIL	200.00	0.10	9.09	28.56	314.36	29.0	28.90	4.45	2.40	0.80	0.12
MAY	5.40	0.01	0.51	0.80	155.00	1.7	2.20	0.64	0.16	0.08	0.02
JUNE	2.40	0.01	0.15	0.31	201.61	0.5	0.60	0.12	0.08	0.04	0.02
JULY	51.00	0.00	0.91	5.45	600.85	3.0	3.55	0.08	0.04	0.00	0.00
AUGUST	0.99	0.00	0.07	0.17	258.13	0.2	0.37	0.04	0.00	0.00	0.00
SEPTEMBER	0.22	0.00	0.04	0.07	164.15	0.1	0.17	0.07	0.00	0.00	0.00
ANNUAL	386.00	0.00	2.57	20.58	799.31	100.0	4.00	0.16	0.04	0.00	0.00

LOCATION.--Lat 47°17'07", long 101°37'18", in SW¼SE¼SE¼ sec.18, T.144 N., R.86 W., Mercer County, Hydrologic Unit 10130201, on left bank at downstream side of highway bridge, 0.5 mi (0.8 km) south of Hazen, and 3 mi (5 km) upstream from Antelope Creek.

DRAINAGE AREA.--2,240 mi² (5,800 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	47	25.50	0.00	9.26	9.58	20.00	4.50	0.00
STREAMFLOW, INSTANTANEOUS (CFS)	45	10239.97	14.00	892.06	2222.83	213.00	50.00	24.55
SPECIFIC CONDUCTANCE (MICROHMUS)	46	2220.00	240.00	1342.17	588.68	1680.00	1460.00	1005.00
OXYGEN, DISSOLVED (MG/L)	37	13.40	7.00	9.72	1.55	11.00	9.60	8.40
OXYGEN, DISSOLVED (PERCENT SATURATION)	20	106.00	6.80	85.19	21.88	96.75	90.00	77.75
PH (UNITS)	37	8.50	7.70	8.15	0.24	8.30	8.20	8.00
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	11	23.00	1.90	7.43	7.20	11.00	4.00	3.40
BICARBONATE (MG/L AS HCO ₃)	11	730.00	150.00	509.09	167.00	660.00	500.00	430.00
CARBONATE (MG/L AS CO ₃)	11	12.00	0.00	1.09	3.62	0.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	36	3.90	0.44	1.20	0.71	1.28	0.98	0.75
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	36	3.10	0.10	0.90	0.59	1.08	0.75	0.58
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	36	0.30	0.00	0.09	0.10	0.14	0.06	0.01
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	36	0.96	0.00	0.21	0.24	0.42	0.09	0.02
PHOSPHORUS, TOTAL (MG/L AS P)	36	0.65	0.00	0.11	0.16	0.09	0.06	0.03
PHOSPHORUS, DISSOLVED (MG/L AS P)	36	0.21	0.00	0.02	0.04	0.03	0.02	0.01
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	29	25.00	0.80	10.12	4.72	12.00	8.70	7.70
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	25	8.90	0.20	2.00	2.49	2.10	1.10	0.50
HARDNESS (MG/L AS CaCO ₃)	35	500.00	100.00	342.57	104.33	430.00	360.00	290.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	35	27.00	0.00	2.71	7.47	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	35	100.00	24.00	71.26	21.27	89.00	74.00	58.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	35	61.00	9.80	39.74	12.74	48.00	41.00	34.00
SODIUM, DISSOLVED (MG/L AS Na)	35	370.00	40.00	243.20	83.59	320.00	240.00	220.00
SODIUM PERCENT	35	77.00	45.00	60.49	6.17	62.00	60.00	58.00
POTASSIUM, DISSOLVED (MG/L AS K)	36	12.00	2.20	8.51	1.85	9.38	8.80	8.13
CHLORIDE, DISSOLVED (MG/L AS CL)	36	15.00	1.80	6.75	2.58	7.78	6.50	5.73
SULFATE, DISSOLVED (MG/L AS SO ₄)	36	650.00	99.00	429.97	127.02	525.00	435.00	380.00
FLUORIDE, DISSOLVED (MG/L AS F)	36	0.60	0.10	0.38	0.10	0.40	0.40	0.33
SILICA, DISSOLVED (MG/L AS SiO ₂)	35	21.00	5.50	12.05	3.74	14.00	12.00	9.00
ARSENIC, DISSOLVED (UG/L AS AS)	12	2.00	1.00	1.33	0.49	2.00	1.00	1.00
ARSENIC, TOTAL (UG/L AS AS)	26	6.00	1.00	2.23	1.31	3.00	2.00	1.00
BARIUM, DISSOLVED (UG/L AS BA)	12	200.00	0.00	79.17	71.66	100.00	95.00	0.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	26	500.00	0.00	173.08	118.52	225.00	100.00	100.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	8	10.00	0.00	1.63	3.42	1.00	0.50	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	25	10.00	0.00	1.80	3.79	0.00	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	11	380.00	110.00	297.27	74.04	330.00	310.00	290.00
CHROMIUM, DISSOLVED (UG/L AS CR)	12	20.00	0.00	5.00	7.98	10.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	25	20.00	0.00	7.84	8.46	18.00	10.00	0.00
COBALT, DISSOLVED (UG/L AS CU)	12	10.00	0.00	2.08	2.84	3.00	1.50	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CU)	25	10.00	0.00	1.96	2.78	2.00	1.00	0.00
COPPER, DISSOLVED (UG/L AS CU)	12	40.00	0.00	5.25	11.01	3.75	2.00	1.25
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	25	90.00	0.00	12.36	18.58	10.50	6.00	4.50
IRON, TOTAL RECOVERABLE (UG/L AS FE)	25	24000.00	230.00	2866.80	5366.85	2050.00	910.00	640.00
IRON, DISSOLVED (UG/L AS FE)	20	230.00	10.00	57.50	57.39	70.00	40.00	22.50
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	25	840.00	90.00	224.00	179.05	210.00	160.00	135.00
MANGANESE, DISSOLVED (UG/L AS MN)	12	180.00	0.00	56.58	51.49	77.50	45.00	20.00
MOLYBDENUM, DISSOLVED (UG/L AS MO)	8	10.00	0.00	3.00	4.44	8.25	0.50	0.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MU)	24	7.00	0.00	2.79	1.98	4.75	3.00	1.00
NICKEL, DISSOLVED (UG/L AS NI)	9	22.00	0.00	5.00	6.60	5.00	3.00	2.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	24	42.00	4.00	11.58	10.13	13.00	8.00	5.25
VANADIUM, DISSOLVED (UG/L AS V)	9	7.00	0.00	1.83	2.36	3.00	1.30	0.05
ZINC, DISSOLVED (UG/L AS ZN)	12	30.00	0.00	10.75	8.74	17.50	10.00	3.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	25	140.00	0.00	38.40	39.02	45.00	30.00	10.00
ALUMINUM, DISSOLVED (UG/L AS AL)	9	20.00	0.00	7.78	8.33	15.00	10.00	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	8	60.00	0.00	36.25	23.26	57.50	45.00	12.50
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	24	60.00	10.00	41.25	11.16	50.00	40.00	32.50
SELENIUM, DISSOLVED (UG/L AS SE)	12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	25	4.00	0.00	0.32	0.85	0.00	0.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	35	1610.00	238.00	1068.77	338.43	1360.00	1030.00	957.00
SOLIDS, DISSOLVED (100S PER AC-FT)	36	2.19	0.32	1.45	0.45	1.83	1.41	1.31
MERCURY, DISSOLVED (UG/L AS HG)	12	0.10	0.00	0.03	0.05	0.08	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	25	0.80	0.00	0.12	0.17	0.15	0.10	0.00
SEDIMENT, SUSPENDED (MG/L)	37	1320.00	8.00	144.05	292.17	81.00	41.00	20.50
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	37	19000.00	0.30	754.19	3225.21	26.00	3.50	1.35

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25
OCTOBER	185.00	22.00	46.48	31.49	67.75	2.1	110.80	47.00	41.00	27.00
NOVEMBER	45.00	21.00	31.04	6.63	21.34	1.3	41.00	36.00	30.50	25.00
DECEMBER	34.00	23.00	27.60	3.13	11.33	1.2	33.00	30.00	27.00	25.00
JANUARY	26.00	14.00	21.39	3.99	18.68	1.0	26.00	25.00	22.00	18.00
FEBRUARY	23.00	13.00	18.20	3.08	16.91	0.7	23.00	20.00	19.00	14.00
MARCH	10500.00	14.00	899.86	2177.19	241.95	40.1	7876.00	400.50	48.00	20.00
APRIL	5490.00	41.00	757.99	1131.25	149.24	32.7	3575.50	902.75	295.00	141.00
MAY	739.00	16.00	164.14	169.42	103.22	7.3	636.00	192.00	136.00	31.50
JUNE	1850.00	17.00	144.54	255.55	176.80	6.2	624.40	136.50	71.50	41.75
JULY	355.00	12.00	71.84	64.75	90.14	3.2	203.70	98.00	49.00	21.00
AUGUST	99.00	12.00	29.77	14.33	48.13	1.3	51.70	35.00	29.00	16.50
SEPTEMBER	912.00	13.00	63.42	133.45	210.42	2.7	239.60	48.50	31.00	19.00
ANNUAL	10500.00	12.00	140.29	772.59	406.01	100.0	698.65	76.75	32.00	23.00

LOCATION.--Lat 47°20'07", Long 101°41'41", in SE₄SE₄NE₄ sec.36, T.145 N., R.87 W., Mercer County, Hydrologic Unit 10130201, on left bank about 100 ft (30 m) upstream from bridge on county road, 4.2 mi (6.8 km) northeast of Hazen, and 2.0 mi (3.2 km) upstream from Schramm Dam.

DRAINAGE AREA.--25.6 mi² (66.3 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	26	24.50	0.00	7.13	7.90	10.38	5.75	0.38
STREAMFLOW, INSTANTANEOUS (CFS)	26	332.00	0.03	29.29	73.72	22.25	0.32	0.09
SPECIFIC CONDUCTANCE (MICROMHOS)	20	3180.00	422.00	1787.20	766.74	2345.00	1745.00	1472.50
OXYGEN, DISSOLVED (MG/L)	19	13.10	2.00	9.85	2.99	12.00	11.00	7.90
OXYGEN, DISSOLVED (PERCENT SATURATION)	19	118.00	24.00	86.16	25.25	98.00	88.00	85.00
PH (UNITS)	20	8.50	7.50	8.16	0.27	8.38	8.20	8.00
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	20	41.00	2.00	8.42	9.46	8.90	4.70	3.13
BICARBONATE (MG/L AS HCO ₃)	20	1300.00	123.00	573.97	284.03	796.25	556.00	432.75
CARBONATE (MG/L AS CO ₃)	18	547.00	0.00	33.67	128.33	7.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	20	4.00	0.93	1.86	0.94	1.95	1.70	1.13
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	20	2.40	0.40	1.26	0.56	1.68	1.20	0.82
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	20	0.78	0.00	0.21	0.27	0.34	0.09	0.04
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	20	1.80	0.01	0.40	0.45	0.72	0.23	0.07
PHOSPHORUS, TOTAL (MG/L AS P)	20	0.68	0.04	0.17	0.15	0.22	0.13	0.07
PHOSPHORUS, DISSOLVED (MG/L AS P)	20	0.63	0.01	0.12	0.14	0.16	0.07	0.04
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	20	33.00	8.70	17.20	6.62	18.75	16.50	13.00
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	19	2.10	0.20	0.96	0.55	1.40	0.90	0.50
HARDNESS (MG/L AS CaCO ₃)	20	680.00	120.00	379.50	146.20	505.00	400.00	310.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	20	81.00	0.00	8.65	21.99	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	20	120.00	23.00	68.30	26.01	87.25	70.00	47.00
MAGNESIUM, DISSOLVED (MG/L AS MG)	20	92.00	14.00	50.80	23.27	67.00	52.00	35.50
SODIUM, DISSOLVED (MG/L AS NA)	20	740.00	36.00	295.75	167.66	387.50	265.00	202.50
SODIUM PERCENT	20	91.00	35.00	59.00	11.43	63.75	61.00	54.25
POTASSIUM, DISSOLVED (MG/L AS K)	20	23.00	7.80	12.59	3.58	14.00	12.00	10.18
CHLORIDE, DISSOLVED (MG/L AS CL)	20	24.00	3.10	11.12	5.15	13.75	11.00	8.03
SULFATE, DISSOLVED (MG/L AS SO ₄)	20	1100.00	110.00	509.50	236.25	647.50	500.00	452.50
FLUORIDE, DISSOLVED (MG/L AS F)	20	0.30	0.00	0.18	0.08	0.20	0.20	0.10
SILICA, DISSOLVED (MG/L AS SiO ₂)	20	19.00	1.60	8.84	5.35	13.00	8.00	3.68
ARSENIC, DISSOLVED (UG/L AS AS)	7	4.00	2.00	2.57	0.79	3.00	2.00	2.00
ARSENIC, TOTAL (UG/L AS AS)	5	5.00	2.00	3.00	1.22	4.00	3.00	2.00
BARIUM, DISSOLVED (UG/L AS BA)	7	400.00	40.00	154.29	138.31	300.00	100.00	70.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	5	200.00	0.00	100.00	70.71	150.00	100.00	50.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	7	10.00	0.00	3.29	4.61	10.00	1.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	20	430.00	80.00	240.00	84.54	280.00	250.00	187.50
CHROMIUM, DISSOLVED (UG/L AS CR)	7	10.00	0.00	2.00	3.83	4.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	5	10.00	0.00	2.00	4.47	5.00	0.00	0.00
COBALT, DISSOLVED (UG/L AS CO)	7	3.00	0.00	1.43	1.51	3.00	1.00	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	5	2.00	0.00	0.80	1.10	2.00	0.00	0.00
COPPER, DISSOLVED (UG/L AS CU)	7	10.00	0.00	7.00	4.04	10.00	10.00	4.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	5	22.00	4.00	9.60	7.09	15.00	7.00	5.50
IRON, DISSOLVED (UG/L AS FE)	20	330.00	30.00	88.50	75.34	105.00	70.00	40.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	5	200.00	40.00	126.00	67.68	180.00	160.00	55.00
MANGANESE, DISSOLVED (UG/L AS MN)	7	130.00	10.00	59.29	49.18	110.00	28.00	20.00
MOLYBDENUM, DISSOLVED (UG/L AS MO)	7	10.00	0.00	5.00	4.76	10.00	3.00	1.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	5	5.00	0.00	1.60	2.07	3.50	1.00	0.00
NICKEL, DISSOLVED (UG/L AS NI)	7	4.00	0.00	1.71	1.38	2.00	2.00	0.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	5	13.00	3.00	7.40	4.72	12.50	5.00	3.50
VANADIUM, DISSOLVED (UG/L AS V)	7	6.00	0.00	2.90	2.29	6.00	2.00	1.60
ZINC, DISSOLVED (UG/L AS ZN)	7	10.00	3.00	7.86	3.34	10.00	10.00	3.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	5	50.00	10.00	30.00	15.81	45.00	30.00	15.00
ALUMINUM, DISSOLVED (UG/L AS AL)	7	70.00	0.00	21.43	30.24	60.00	10.00	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	7	71.00	4.00	41.71	29.23	70.00	57.00	10.00
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	5	70.00	10.00	36.00	31.30	70.00	20.00	10.00
SELENIUM, DISSOLVED (UG/L AS SE)	7	1.00	0.00	0.43	0.53	1.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	5	1.00	0.00	0.60	0.55	1.00	1.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	20	2350.00	281.00	1253.00	549.09	1497.50	1250.00	1060.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	20	3.20	0.38	1.70	0.75	2.04	1.70	1.44
MERCURY, DISSOLVED (UG/L AS HG)	7	0.30	0.00	0.06	0.11	0.10	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	5	0.40	0.00	0.14	0.17	0.30	0.10	0.00
SEDIMENT, SUSPENDED (MG/L)	26	406.00	6.00	56.46	94.32	49.50	28.00	13.75
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	26	293.00	0.00	20.50	68.94	1.75	0.01	0.01

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25
OCTOBER	2.20	0.00	0.14	0.36	250.02	0.3	0.90	0.09	0.02	0.00
NOVEMBER	0.17	0.01	0.05	0.03	66.25	0.1	0.11	0.07	0.05	0.02
DECEMBER	0.20	0.01	0.07	0.05	75.08	0.2	0.18	0.10	0.05	0.03
JANUARY	0.16	0.00	0.04	0.04	107.60	0.1	0.15	0.06	0.02	0.01
FEBRUARY	0.02	0.00	0.00	0.01	170.86	0.0	0.02	0.01	0.00	0.00
MARCH	300.00	0.00	20.31	58.34	287.32	48.7	193.00	2.70	0.12	0.01
APRIL	456.00	0.01	19.66	67.07	341.06	45.7	125.00	6.05	2.65	0.67
MAY	6.80	0.00	0.89	1.14	128.32	2.1	3.00	1.30	0.52	0.06
JUNE	0.52	0.00	0.15	0.15	98.76	0.4	0.45	0.26	0.12	0.00
JULY	41.00	0.00	0.96	4.76	495.72	2.3	1.88	0.29	0.07	0.00
AUGUST	0.23	0.00	0.01	0.04	306.90	0.0	0.12	0.00	0.00	0.00
SEPTEMBER	0.64	0.00	0.00	0.00	616.39	0.0	0.00	0.00	0.00	0.00
ANNUAL	456.00	0.00	3.53	26.61	752.77	100.0	4.11	0.18	0.03	0.00

LOCATION.--Lat 47°19'00", long 101°41'27", in NE¼SE¼SW¼ sec.3, T.144 N., R.87 W., Mercer County, Hydrologic Unit 10130201, on right bank 50 ft (15 m) upstream from bridge on county road, 600 ft (183 m) upstream from mouth, and 3.2 mi (5.1 km) northwest of Hazen.

DRAINAGE AREA.--37.7 mi² (97.6 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	50	25
TEMPERATURE (DEG C)	12	19.00	0.00	7.71	6.26	12.38	7.00	1.75
STREAMFLOW, INSTANTANEOUS (CFS)	12	228.00	0.32	47.84	78.49	48.00	10.55	1.18
SPECIFIC CONDUCTANCE (MICROMHUS)	7	1780.00	194.00	967.00	610.81	1395.00	1150.00	368.00
OXYGEN, DISSOLVED (MG/L)	7	11.20	3.90	8.73	2.62	10.90	9.50	6.50
OXYGEN, DISSOLVED (PERCENT SATURATION)	7	90.00	45.00	76.14	14.94	84.00	81.00	71.00
PH (UNITS)	7	8.60	7.70	8.07	0.30	8.20	8.10	7.80
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	7	7.10	1.70	4.13	2.20	6.80	4.30	1.80
BICARBONATE (MG/L AS HCO3)	7	678.00	67.00	346.14	235.62	561.00	416.00	137.00
CARBONATE (MG/L AS CO3)	7	11.00	0.00	1.57	4.16	0.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	7	3.40	0.69	1.82	1.21	3.10	1.00	0.77
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	7	2.50	0.64	1.31	0.69	1.90	0.96	0.74
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	7	0.58	0.01	0.22	0.24	0.43	0.06	0.03
NITROGEN, NO2+NO3, TOTAL (MG/L AS N)	7	0.83	0.00	0.30	0.37	0.70	0.02	0.02
PHOSPHORUS, TOTAL (MG/L AS P)	7	0.75	0.09	0.34	0.23	0.49	0.30	0.12
PHOSPHORUS, DISSOLVED (MG/L AS P)	7	0.63	0.06	0.24	0.19	0.28	0.20	0.09
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	7	26.00	10.00	16.57	6.48	24.00	14.00	11.00
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	7	8.00	0.40	2.19	2.87	4.00	0.60	0.40
HARDNESS (MG/L AS CaCO3)	7	390.00	53.00	241.43	144.46	360.00	320.00	97.00
HARDNESS, NONCARBONATE (MG/L AS CaCO3)	7	8.00	0.00	1.14	3.02	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	7	84.00	12.00	50.43	29.18	72.00	65.00	19.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	7	48.00	5.50	28.21	18.11	44.00	34.00	11.00
SODIUM, DISSOLVED (MG/L AS Na)	7	300.00	14.00	133.43	104.70	200.00	140.00	30.00
SODIUM PERCENT	7	64.00	32.00	48.00	11.36	53.00	52.00	34.00
POTASSIUM, DISSOLVED (MG/L AS K)	7	14.00	6.90	9.56	2.37	11.00	8.40	8.30
CHLORIDE, DISSOLVED (MG/L AS CL)	7	4.50	1.90	3.09	1.00	4.10	3.10	1.90
SULFATE, DISSOLVED (MG/L AS SO4)	7	460.00	32.00	236.86	161.76	360.00	280.00	76.00
FLUORIDE, DISSOLVED (MG/L AS F)	7	0.30	0.00	0.16	0.13	0.30	0.20	0.00
SILICA, DISSOLVED (MG/L AS SiO2)	7	16.00	5.50	8.73	3.87	12.00	7.30	5.60
ARSENIC, DISSOLVED (UG/L AS AS)	3	2.00	1.00					
ARSENIC, TOTAL (UG/L AS AS)	3	4.00	2.00					
BARIUM, DISSOLVED (UG/L AS BA)	3	100.00	0.00					
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	3	300.00	0.00					
BERYLLIUM, DISSOLVED (UG/L AS BE)	3	1.00	0.00					
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	3	10.00	0.00					
BORON, DISSOLVED (UG/L AS B)	7	290.00	40.00	155.71	83.44	200.00	170.00	70.00
CHROMIUM, DISSOLVED (UG/L AS CR)	3	0.00	0.00					
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	3	20.00	0.00					
COBALT, DISSOLVED (UG/L AS CO)	3	3.00	0.00					
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	3	5.00	0.00					
COPPER, DISSOLVED (UG/L AS CU)	3	11.00	5.00					
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	3	24.00	10.00					
IRON, DISSOLVED (UG/L AS FE)	7	330.00	40.00	122.86	113.68	230.00	60.00	40.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	3	420.00	130.00					
MANGANESE, DISSOLVED (UG/L AS MN)	3	100.00	20.00					
MOLYBDENUM, DISSOLVED (UG/L AS MO)	3	10.00	0.00					
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	3	5.00	0.00					
NICKEL, DISSOLVED (UG/L AS NI)	3	3.00	1.00					
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	3	27.00	6.00					
VANADIUM, DISSOLVED (UG/L AS V)	3	6.00	1.70					
ZINC, DISSOLVED (UG/L AS ZN)	3	20.00	10.00					
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	3	80.00	30.00					
ALUMINUM, DISSOLVED (UG/L AS AL)	3	70.00	30.00					
LITHIUM, DISSOLVED (UG/L AS LI)	3	15.00	4.00					
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	3	10.00	7.00					
SELENIUM, DISSOLVED (UG/L AS SE)	3	6.00	0.00					
SELENIUM, TOTAL (UG/L AS SE)	3	18.00	0.00					
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	7	1240.00	113.00	657.43	428.37	966.00	755.00	241.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	7	1.69	0.15	0.89	0.58	1.31	1.03	0.33
MERCURY, DISSOLVED (UG/L AS HG)	3	0.60	0.00					
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	3	0.50	0.00					
SEDIMENT, SUSPENDED (MG/L)	11	1120.00	10.00	218.27	331.16	330.00	74.00	19.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	11	689.00	0.02	90.41	210.17	30.00	1.70	0.05

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50	25
OCTOBER	0.62	0.00	0.01	0.07	627.37	0.0	0.00	0.00	0.00	0.00
NOVEMBER	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
DECEMBER	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
JANUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
FEBRUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
MARCH	250.00	0.00	16.00	47.59	297.45	54.1	125.20	2.95	0.00	0.00
APRIL	418.00	0.00	13.46	56.18	417.50	44.0	63.95	2.58	1.30	0.00
MAY	3.00	0.00	0.49	0.70	141.29	1.7	2.36	0.75	0.20	0.00
JUNE	0.16	0.00	0.01	0.03	301.72	0.0	0.10	0.00	0.00	0.00
JULY	1.60	0.00	0.04	0.23	558.01	0.1	0.04	0.00	0.00	0.00
AUGUST	0.48	0.00	0.01	0.05	964.37	0.0	0.00	0.00	0.00	0.00
SEPTEMBER	0.25	0.00	0.00	0.03	707.90	0.0	0.00	0.00	0.00	0.00
ANNUAL	418.00	0.00	2.51	21.85	870.11	100.0	2.30	0.00	0.00	0.00

LOCATION.--Lat 47°20'03", Long 101°31'38", in SE¼NE¼SE¼ sec.32, T.145 N., R.85 W., Mercer County, Hydrologic Unit 10130201, on right bank 60 ft (18.3 m) upstream from bridge, on county road 6.3 mi (10.1 km) west of Stanton, 5.3 mi (8.5 km) northwest of Hazen, and 1.1 mi (1.8 km) upstream from mouth.

DRAINAGE AREA.--15.8 mi² (40.9 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	50	25
TEMPERATURE (DEG C)	23	23.00	0.00	7.93	7.85	13.00	6.00	1.00
STREAMFLOW, INSTANTANEOUS (CFS)	24	463.00	0.03	25.48	94.42	5.34	0.33	0.10
SPECIFIC CONDUCTANCE (MICROMHOS)	21	3150.00	278.00	1808.95	843.63	2445.00	1850.00	1070.00
OXYGEN, DISSOLVED (MG/L)	21	17.00	5.20	10.96	2.71	12.30	11.00	9.90
OXYGEN, DISSOLVED (PERCENT SATURATION)	21	198.00	60.00	98.10	30.23	106.50	92.00	79.50
PH (UNITS)	21	9.00	7.90	8.33	0.31	8.55	8.30	8.15
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	21	14.00	1.10	4.99	4.26	6.10	3.80	2.45
BICARBONATE (MG/L AS HCO ₃)	21	1100.00	90.00	594.52	292.20	875.00	572.00	377.50
CARBONATE (MG/L AS CO ₃)	21	78.00	0.00	10.67	19.39	15.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	21	2.60	0.50	1.35	0.56	1.50	1.30	1.00
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	21	2.70	0.47	1.16	0.51	1.40	1.10	0.79
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	21	0.26	0.00	0.08	0.08	0.14	0.03	0.01
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	21	0.65	0.00	0.12	0.18	0.19	0.03	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	21	0.47	0.05	0.15	0.13	0.20	0.10	0.08
PHOSPHORUS, DISSOLVED (MG/L AS P)	21	0.36	0.00	0.09	0.10	0.11	0.06	0.03
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	21	41.00	10.00	22.19	8.44	27.00	23.00	16.00
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	19	5.10	0.10	0.97	1.14	0.90	0.60	0.40
HARDNESS (MG/L AS CaCO ₃)	21	650.00	70.00	356.14	174.84	495.00	370.00	195.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	21	94.00	15.00	56.29	26.32	81.50	58.00	31.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	21	100.00	7.90	52.04	27.97	69.50	61.00	24.50
SODIUM, DISSOLVED (MG/L AS Na)	21	600.00	27.00	319.38	167.64	455.00	330.00	170.00
SODIUM PERCENT	21	74.00	43.00	63.43	7.36	68.50	65.00	61.00
POTASSIUM, DISSOLVED (MG/L AS K)	21	23.00	1.20	10.65	4.64	13.00	10.00	7.40
CHLORIDE, DISSOLVED (MG/L AS CL)	21	18.00	1.80	8.19	4.18	10.00	8.10	4.80
SULFATE, DISSOLVED (MG/L AS SO ₄)	21	1000.00	56.00	510.52	273.78	665.00	590.00	225.00
FLUORIDE, DISSOLVED (MG/L AS F)	21	0.40	0.00	0.22	0.10	0.30	0.20	0.20
SILICA, DISSOLVED (MG/L AS SiO ₂)	21	20.00	0.30	9.32	5.78	13.00	8.80	5.10
ARSENIC, DISSOLVED (UG/L AS AS)	7	5.00	1.00	2.71	1.38	4.00	2.00	2.00
ARSENIC, TOTAL (UG/L AS AS)	5	6.00	2.00	3.20	1.79	5.00	2.00	2.00
BARIUM, DISSOLVED (UG/L AS BA)	7	600.00	50.00	147.14	200.81	100.00	70.00	50.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	5	200.00	0.00	80.00	83.67	150.00	100.00	0.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	7	3.00	0.00	0.86	1.07	1.00	1.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	5	5.00	0.00	1.00	2.24	2.50	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	21	430.00	70.00	285.24	107.82	365.00	320.00	200.00
CHROMIUM, DISSOLVED (UG/L AS CR)	7	4.00	0.00	0.57	1.51	0.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	5	10.00	0.00	6.00	5.48	10.00	10.00	0.00
COBALT, DISSOLVED (UG/L AS CO)	7	8.00	0.00	2.71	2.69	3.00	3.00	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	5	3.00	0.00	1.80	1.30	3.00	2.00	0.50
COPPER, DISSOLVED (UG/L AS CU)	7	25.00	2.00	8.57	7.91	10.00	6.00	3.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	5	13.00	3.00	7.00	3.94	10.50	7.00	3.50
IRON, DISSOLVED (UG/L AS FE)	21	470.00	27.00	102.67	99.04	130.00	60.00	40.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	5	130.00	30.00	78.00	44.38	125.00	60.00	40.00
MANGANESE, DISSOLVED (UG/L AS MN)	7	87.00	8.00	33.71	29.52	60.00	28.00	10.00
MOLYBDENUM, DISSOLVED (UG/L AS MO)	7	25.00	0.00	8.14	8.78	10.00	10.00	1.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	5	5.00	0.00	2.20	1.92	4.00	2.00	0.50
NICKEL, DISSOLVED (UG/L AS NI)	7	4.00	0.00	2.29	1.60	3.00	3.00	0.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	5	11.00	4.00	6.40	2.88	9.00	6.00	4.00
VANADIUM, DISSOLVED (UG/L AS V)	7	8.00	2.00	3.64	2.39	6.00	2.50	2.00
ZINC, DISSOLVED (UG/L AS ZN)	7	20.00	3.00	8.00	5.80	10.00	6.00	4.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	5	40.00	10.00	26.00	13.42	40.00	20.00	15.00
ALUMINUM, DISSOLVED (UG/L AS AL)	7	90.00	0.00	34.29	32.07	60.00	30.00	10.00
LITHIUM, DISSOLVED (UG/L AS LI)	7	110.00	10.00	70.00	43.43	110.00	83.00	27.00
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	5	110.00	20.00	60.00	46.37	110.00	40.00	20.00
SELENIUM, DISSOLVED (UG/L AS SE)	7	1.00	0.00	0.14	0.38	0.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	21	2380.00	166.00	1292.67	634.78	1750.00	1370.00	744.50
SOLIDS, DISSOLVED (TONS PER AC+FT)	21	3.24	0.23	1.76	0.86	2.38	1.86	1.02
MERCURY, DISSOLVED (UG/L AS HG)	7	0.40	0.00	0.10	0.18	0.10	0.10	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	5	0.40	0.00	0.16	0.18	0.35	0.10	0.00
SEDIMENT, SUSPENDED (MG/L)	24	894.00	6.00	85.92	174.99	74.00	44.00	32.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	24	1120.00	0.00	47.66	228.42	0.70	0.05	0.01

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50	25
OCTOBER	0.86	0.00	0.13	0.13	103.43	0.6	0.39	0.18	0.13	0.00
NOVEMBER	0.30	0.05	0.14	0.07	51.02	0.6	0.28	0.19	0.10	0.04
DECEMBER	0.40	0.00	0.08	0.07	85.20	0.4	0.20	0.10	0.08	0.02
JANUARY	0.05	0.00	0.01	0.02	276.72	0.0	0.05	0.00	0.00	0.00
FEBRUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
MARCH	90.00	0.00	9.36	19.40	207.51	42.2	66.50	6.00	2.00	0.00
APRIL	179.00	0.22	11.16	28.46	255.29	48.7	56.65	8.33	3.40	1.58
MAY	15.00	0.00	0.98	2.12	217.25	4.4	3.98	0.86	0.45	0.03
JUNE	6.50	0.00	0.43	0.94	215.88	1.9	1.82	0.35	0.25	0.04
JULY	2.60	0.00	0.19	0.43	230.95	0.6	1.07	0.18	0.00	0.00
AUGUST	0.40	0.00	0.04	0.10	257.89	0.2	0.31	0.00	0.00	0.00
SEPTEMBER	1.10	0.00	0.05	0.17	379.15	0.2	0.26	0.00	0.00	0.00
ANNUAL	179.00	0.00	1.86	10.59	563.28	100.0	6.00	0.28	0.08	0.00

LOCATION.--Lat 47°16'09", long 101°18'34", in NW¼NW¼NE¼ sec.27, T.144 N., R.84 W., Mercer County, Hydrologic Unit 10130101, on left bank 80 ft (24 m) upstream from box culvert on North Dakota Highway 200-A, 3.5 mi (5.6 km) northwest of Ft. Clark, and 2.3 mi (3.7 km) upstream from mouth.

DRAINAGE AREA.--21.9 mi² (56.7 km²) of which 1.1 mi² (2.8 km²) is probably noncontributing.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION		75	MEDIAN 50	25
TEMPERATURE (DEG C)	25	21.00	0.00	10.11	7.00		16.25	10.00	3.50
STREAMFLOW, INSTANTANEOUS (CFS)	25	314.00	0.01	26.51	73.60		3.65	1.40	0.18
SPECIFIC CONDUCTANCE (MICROMHUS)	21	2710.00	276.00	1634.81	713.06		2220.00	1700.00	1255.00
OXYGEN, DISSOLVED (MG/L)	21	12.50	7.50	9.95	1.49		11.25	9.70	8.90
OXYGEN, DISSOLVED (PERCENT SATURATION)	21	111.00	69.00	95.67	10.68		102.00	98.00	90.50
PH (UNITS)	21	8.60	7.90	8.40	0.16		8.50	8.40	8.30
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	21	7.10	1.10	3.01	1.32		3.90	2.70	2.05
BICARBONATE (MG/L AS HCO ₃)	21	843.00	115.00	475.10	198.38		671.00	466.00	356.00
CARBONATE (MG/L AS CO ₃)	21	31.00	0.00	6.50	7.82		11.50	5.00	0.00
NITROGEN, TOTAL (MG/L AS N)	21	4.40	0.84	1.72	0.84		1.85	1.60	1.15
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	21	2.40	0.47	1.40	0.48		1.70	1.40	1.03
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	21	0.71	0.00	0.13	0.21		0.15	0.04	0.02
NITROGEN, NITRUS, TOTAL (MG/L AS N)	21	1.60	0.00	0.20	0.38		0.22	0.03	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	21	0.80	0.01	0.15	0.17		0.18	0.11	0.07
PHOSPHORUS, DISSOLVED (MG/L AS P)	21	0.18	0.00	0.04	0.05		0.05	0.03	0.01
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	20	50.00	7.60	24.43	10.82		29.25	23.50	16.25
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	16	6.40	0.40	2.23	2.01		3.25	1.65	0.73
HARDNESS (MG/L AS CaCO ₃)	21	440.00	56.00	250.19	109.15		315.00	260.00	170.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	21	0.00	0.00	0.00	0.00		0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	21	89.00	12.00	46.76	20.59		56.50	47.00	33.00
MAGNESIUM, DISSOLVED (MG/L AS MG)	21	68.00	6.30	32.60	15.40		41.50	34.00	21.50
SODIUM, DISSOLVED (MG/L AS NA)	21	530.00	30.00	296.43	150.99		410.00	310.00	195.00
SODIUM PERCENT	21	86.00	48.00	69.62	11.17		77.00	73.00	60.50
POTASSIUM, DISSOLVED (MG/L AS K)	21	15.00	6.90	10.75	2.10		12.50	11.00	8.80
CHLORIDE, DISSOLVED (MG/L AS CL)	21	9.50	1.90	5.55	2.01		6.90	5.10	4.00
SULFATE, DISSOLVED (MG/L AS SO ₄)	21	920.00	51.00	485.05	239.10		665.00	490.00	350.00
FLUORIDE, DISSOLVED (MG/L AS F)	21	0.80	0.00	0.31	0.17		0.40	0.30	0.20
SILICA, DISSOLVED (MG/L AS SiO ₂)	21	11.00	2.60	6.38	2.25		8.45	6.30	4.50
ARSENIC, DISSOLVED (UG/L AS AS)	7	3.00	1.00	2.14	0.69		3.00	2.00	2.00
ARSENIC, TOTAL (UG/L AS AS)	4	10.00	2.00						
BARIUM, DISSOLVED (UG/L AS BA)	7	200.00	0.00	64.29	67.05		70.00	60.00	0.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	4	300.00	100.00						
BERYLLIUM, DISSOLVED (UG/L AS BE)	7	3.00	0.00	0.86	1.07		1.00	1.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	4	10.00	0.00						
BORON, DISSOLVED (UG/L AS B)	21	500.00	80.00	288.10	120.77		410.00	270.00	210.00
CHROMIUM, DISSOLVED (UG/L AS CR)	7	10.00	0.00	2.86	4.88		10.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	4	40.00	10.00						
COBALT, DISSOLVED (UG/L AS CO)	7	8.00	0.00	2.86	2.54		3.00	3.00	1.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	4	9.00	1.00						
COPPER, DISSOLVED (UG/L AS CU)	7	28.00	8.00	16.43	9.03		25.00	10.00	9.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	4	60.00	5.00						
IRON, DISSOLVED (UG/L AS FE)	21	290.00	10.00	98.81	76.39		170.00	70.00	50.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	4	1200.00	20.00						
MANGANESE, DISSOLVED (UG/L AS MN)	7	56.00	4.00	30.43	23.41		50.00	40.00	4.00
MOLYBDENUM, DISSOLVED (UG/L AS MU)	7	10.00	0.00	6.00	4.51		10.00	7.00	0.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MU)	4	4.00	0.00						
NICKEL, DISSOLVED (UG/L AS NI)	7	11.00	0.00	5.43	3.60		8.00	5.00	3.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	4	41.00	7.00						
VANADIUM, DISSOLVED (UG/L AS V)	7	11.00	0.00	3.80	3.72		6.00	3.00	1.00
ZINC, DISSOLVED (UG/L AS ZN)	7	20.00	0.00	9.14	8.01		20.00	8.00	3.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	4	180.00	10.00						
ALUMINUM, DISSOLVED (UG/L AS AL)	7	140.00	10.00	54.29	45.41		80.00	40.00	10.00
LITHIUM, DISSOLVED (UG/L AS LI)	7	83.00	0.00	36.57	31.21		60.00	45.00	5.00
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	4	90.00	10.00						
SELENIUM, DISSOLVED (UG/L AS SE)	7	2.00	0.00	1.00	0.82		2.00	1.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	4	2.00	0.00						
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	21	2020.00	162.00	1142.29	519.02		1525.00	1220.00	846.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	21	2.75	0.22	1.55	0.71		2.08	1.66	1.15
MERCURY, DISSOLVED (UG/L AS HG)	7	0.50	0.00	0.13	0.19		0.20	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	4	0.70	0.00						
SEDIMENT, SUSPENDED (MG/L)	24	6100.00	9.00	603.96	1284.16		379.75	158.50	105.25
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	24	5170.00	0.00	274.45	1062.55		3.42	0.48	0.05

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25
OCTOBER	4.50	0.00	0.52	0.78	149.17	2.0	2.00	0.83	0.10	0.02
NOVEMBER	0.65	0.00	0.04	0.09	230.95	0.1	0.18	0.03	0.00	0.00
DECEMBER	0.09	0.00	0.00	0.01	518.21	0.0	0.01	0.00	0.00	0.00
JANUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
FEBRUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
MARCH	110.00	0.00	10.60	22.09	208.38	40.1	75.80	9.25	2.00	0.00
APRIL	407.00	0.00	10.60	49.25	464.45	38.8	20.00	3.90	1.20	0.00
MAY	6.70	0.00	0.57	1.10	194.13	2.1	3.04	0.54	0.16	0.00
JUNE	12.00	0.00	0.73	2.23	305.11	2.7	7.12	0.20	0.10	0.00
JULY	48.00	0.02	1.63	5.35	327.34	6.2	7.34	1.10	0.34	0.08
AUGUST	47.00	0.00	1.45	5.61	387.10	5.5	5.94	0.68	0.19	0.03
SEPTEMBER	20.00	0.00	0.66	2.47	372.89	2.4	3.29	0.19	0.13	0.04
ANNUAL	407.00	0.00	2.24	16.08	717.19	100.0	8.00	0.47	0.06	0.00

LOCATION.--Lat 47°16'31", long 101°11'49", in SW¼NE¼SE¼ sec.21, T.144 N., R.83 W., McLean County, Hydrologic Unit 10130101, on right bank 200 ft (61 m) upstream from culvert on county road, 7.9 mi (12.7 km) west of Washburn, 5.4 mi (8.7 km) northwest of Hensler and 0.5 mi (0.8 km) upstream from mouth.

DRAINAGE AREA.--9.8 mi² (25.4 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1978 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	50	25
TEMPERATURE (DEG C)	7	12.00	0.00	6.43	5.00	11.50	6.50	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	7	128.00	0.31	20.39	47.50	5.80	2.00	0.31
SPECIFIC CONDUCTANCE (MICROMHMS)	5	1920.00	352.00	1294.40	598.70	1750.00	1500.00	736.00
OXYGEN, DISSOLVED (MG/L)	5	13.00	9.50	11.06	1.28	12.20	10.80	10.05
OXYGEN, DISSOLVED (PERCENT SATURATION)	5	99.00	90.00	93.60	3.51	97.00	92.00	91.00
PH (UNITS)	4	8.40	8.20					
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	4	4.40	3.90					
BICARBONATE (MG/L AS HCO3)	4	673.00	390.00					
CARBONATE (MG/L AS CO3)	4	5.00	0.00					
NITROGEN, TOTAL (MG/L AS N)	5	2.60	0.72	1.30	0.79	2.05	0.86	0.78
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	5	1.80	0.63	1.04	0.53	1.60	0.72	0.65
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	5	0.23	0.04	0.10	0.08	0.17	0.09	0.05
NITROGEN, NO2+NO3, TOTAL (MG/L AS N)	5	0.63	0.01	0.16	0.27	0.39	0.03	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	5	0.45	0.02	0.14	0.18	0.29	0.08	0.04
PHOSPHORUS, DISSOLVED (MG/L AS P)	5	0.36	0.04	0.12	0.14	0.21	0.06	0.05
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	4	24.00	14.00					
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	3	2.80	0.80					
HARDNESS (MG/L AS CaCO3)	5	430.00	87.00	307.40	131.71	405.00	330.00	198.50
HARDNESS, NONCARBONATE (MG/L CaCO3)	4	0.00	0.00					
CALCIUM, DISSOLVED (MG/L AS Ca)	5	89.00	20.00	64.00	26.32	83.50	67.00	43.00
MAGNESIUM, DISSOLVED (MG/L AS MG)	5	50.00	9.00	36.20	16.21	48.00	41.00	22.00
SODIUM, DISSOLVED (MG/L AS NA)	5	310.00	38.00	193.60	104.33	280.00	220.00	94.00
SODIUM PERCENT	5	61.00	45.00	54.60	6.84	61.00	55.00	48.00
POTASSIUM, DISSOLVED (MG/L AS K)	5	12.00	6.10	7.98	2.41	10.20	6.90	6.30
CHLORIDE, DISSOLVED (MG/L AS CL)	5	5.70	2.50	3.98	1.36	5.30	4.00	2.65
SULFATE, DISSOLVED (MG/L AS SO4)	5	540.00	83.00	354.60	174.27	490.00	410.00	191.50
FLUORIDE, DISSOLVED (MG/L AS F)	5	0.20	0.00	0.14	0.09	0.20	0.20	0.05
SILICA, DISSOLVED (MG/L AS SiO2)	5	14.00	6.60	10.72	3.00	13.50	11.00	7.80
ARSENIC, DISSOLVED (UG/L AS AS)	3	3.00	2.00					
ARSENIC, TOTAL (UG/L AS AS)	2	3.00	2.00					
BARIUM, DISSOLVED (UG/L AS BA)	3	200.00	50.00					
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	2	100.00	100.00					
BERYLLIUM, DISSOLVED (UG/L AS BE)	3	1.00	0.00					
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	2	0.00	0.00					
BORON, DISSOLVED (UG/L AS B)	5	220.00	110.00	170.00	43.01	210.00	170.00	130.00
CHROMIUM, DISSOLVED (UG/L AS CR)	3	0.00	0.00					
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	2	0.00	0.00					
COBALT, DISSOLVED (UG/L AS CO)	3	3.00	0.00					
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	2	1.00	0.00					
COPPER, DISSOLVED (UG/L AS CU)	3	11.00	10.00					
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	2	11.00	9.00					
IRON, DISSOLVED (UG/L AS FE)	5	230.00	10.00	90.20	86.14	165.00	80.00	20.50
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	2	130.00	40.00					
MANGANESE, DISSOLVED (UG/L AS MN)	3	88.00	22.00					
MOLYBDENUM, DISSOLVED (UG/L AS MO)	3	12.00	0.00					
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	2	1.00	0.00					
NICKEL, DISSOLVED (UG/L AS NI)	3	4.00	1.00					
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	2	5.00	4.00					
VANADIUM, DISSOLVED (UG/L AS V)	3	6.00	1.00					
ZINC, DISSOLVED (UG/L AS ZN)	3	20.00	3.00					
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	2	30.00	20.00					
ALUMINUM, DISSOLVED (UG/L AS AL)	3	130.00	10.00					
LITHIUM, DISSOLVED (UG/L AS LI)	3	56.00	13.00					
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	2	40.00	10.00					
SELENIUM, DISSOLVED (UG/L AS SE)	3	1.00	0.00					
SELENIUM, TOTAL (UG/L AS SE)	2	1.00	0.00					
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	5	1350.00	227.00	899.00	426.88	1220.00	1050.00	502.50
SOLIDS, DISSOLVED (TUNS PER AC-FT)	4	1.84	1.06					
MERCURY, DISSOLVED (UG/L AS HG)	3	0.40	0.10					
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	2	0.30	0.10					
SEDIMENT, SUSPENDED (MG/L)	7	676.00	13.00	128.29	243.42	70.00	42.00	17.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	7	234.00	0.01	33.64	88.35	0.94	0.17	0.06

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1978 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50	25
OCTOBER	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
NOVEMBER	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
DECEMBER	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
JANUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
FEBRUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
MARCH	15.00	0.00	1.62	2.82	173.92	12.7	5.85	2.50	0.15	0.00
APRIL	170.00	0.00	10.02	27.68	276.42	76.1	87.50	4.23	0.69	0.36
MAY	2.60	0.00	0.41	0.57	139.67	3.2	1.48	0.66	0.18	0.00
JUNE	3.10	0.00	0.20	0.50	251.07	1.5	1.27	0.19	0.02	0.00
JULY	19.00	0.00	0.37	2.41	655.71	2.9	0.32	0.11	0.00	0.00
AUGUST	7.40	0.00	0.44	1.58	363.04	3.4	6.32	0.05	0.00	0.00
SEPTEMBER	0.19	0.00	0.01	0.04	291.39	0.1	0.12	0.00	0.00	0.00
ANNUAL	170.00	0.00	1.08	8.41	778.79	100.0	2.54	0.09	0.00	0.00

LOCATION.--Lat 47°18'09", long 101°07'52", in SW¼SE¼ sec.12, T.144 N., R.83 W., McLean County, Hydrologic Unit 10130101, on right bank 100 ft (30 m) upstream from bridge, on county road 4.5 mi (7.2 km) west of Washburn, 3.6 mi (5.8 km) northwest of Hensler, and 0.3 mi (0.8 km) upstream from mouth.

DRAINAGE AREA.--7.5 mi² (19.5 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	13	25.00	0.00	8.92	7.93	14.50	6.00	2.50
STREAMFLOW, INSTANTANEOUS (CFS)	13	216.00	0.06	21.60	58.85	12.10	2.30	0.73
SPECIFIC CONDUCTANCE (MICROMHMS)	10	1480.00	356.00	694.60	367.13	897.50	587.00	384.00
OXYGEN, DISSOLVED (MG/L)	10	12.70	7.00	10.65	1.97	12.30	11.05	9.33
OXYGEN, DISSOLVED (PERCENT SATURATION)	10	126.00	72.00	99.20	13.80	107.25	97.50	93.50
PH (UNITS)	10	8.70	7.80	8.26	0.28	8.50	8.30	8.00
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	10	3.90	1.20	2.33	0.98	3.27	2.00	1.52
BICARBONATE (MG/L AS HCO ₃)	10	604.00	98.00	278.40	160.00	381.50	244.50	142.75
CARBONATE (MG/L AS CO ₃)	10	60.00	0.00	9.90	18.98	17.25	0.50	0.00
NITROGEN, TOTAL (MG/L AS N)	10	2.90	0.90	1.34	0.59	1.45	1.10	0.99
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	10	1.80	0.69	1.13	0.38	1.45	1.03	0.83
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10	0.45	0.00	0.09	0.13	0.11	0.04	0.01
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	10	0.68	0.00	0.14	0.22	0.24	0.02	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	10	0.53	0.05	0.16	0.14	0.21	0.11	0.08
PHOSPHORUS, DISSOLVED (MG/L AS P)	10	0.43	0.04	0.12	0.12	0.14	0.08	0.05
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	10	29.00	7.70	16.77	6.17	20.00	17.00	13.25
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	7	2.90	0.30	1.29	0.92	2.00	1.00	0.40
HARDNESS (MG/L AS CaCO ₃)	10	320.00	81.00	177.70	76.16	230.00	180.00	106.50
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	10	12.00	0.00	1.30	3.77	0.25	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	10	61.00	18.00	36.90	15.18	53.50	32.50	23.50
MAGNESIUM, DISSOLVED (MG/L AS Mg)	10	40.00	8.70	20.37	10.00	28.00	20.50	11.50
SODIUM, DISSOLVED (MG/L AS Na)	10	250.00	40.00	90.00	68.48	113.00	66.00	43.75
SODIUM PERCENT	10	63.00	33.00	48.00	8.43	53.50	48.00	43.25
POTASSIUM, DISSOLVED (MG/L AS K)	10	17.00	4.90	9.45	3.91	11.75	8.75	6.43
CHLORIDE, DISSOLVED (MG/L AS CL)	9	6.10	2.00	3.37	1.39	4.30	2.70	2.30
SULFATE, DISSOLVED (MG/L AS SO ₄)	9	300.00	63.00	119.22	76.23	150.00	83.00	79.50
FLUORIDE, DISSOLVED (MG/L AS F)	9	0.20	0.10	0.12	0.04	0.15	0.10	0.10
SILICA, DISSOLVED (MG/L AS SiO ₂)	9	19.00	3.30	12.39	5.08	16.50	14.00	8.10
ARSENIC, DISSOLVED (UG/L AS AS)	5	4.00	2.00	3.00	1.00	4.00	3.00	2.00
ARSENIC, TOTAL (UG/L AS AS)	4	4.00	2.00					
BARIUM, DISSOLVED (UG/L AS BA)	5	90.00	0.00	62.00	38.34	90.00	80.00	25.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	4	100.00	0.00					
BERYLLIUM, DISSOLVED (UG/L AS BE)	5	1.00	0.00	0.80	0.45	1.00	1.00	0.50
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	4	0.00	0.00					
BORON, DISSOLVED (UG/L AS B)	9	250.00	70.00	148.89	58.83	200.00	140.00	100.00
CHROMIUM, DISSOLVED (UG/L AS CR)	5	10.00	0.00	2.00	4.47	5.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	4	20.00	0.00					
COBALT, DISSOLVED (UG/L AS CO)	5	3.00	0.00	2.40	1.34	3.00	3.00	1.50
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	4	3.00	0.00					
COPPER, DISSOLVED (UG/L AS CU)	5	11.00	3.00	7.80	3.11	10.50	8.00	5.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	4	9.00	4.00					
IRON, DISSOLVED (UG/L AS FE)	10	260.00	30.00	107.00	71.19	155.00	95.00	47.50
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	4	140.00	40.00					
MANGANESE, DISSOLVED (UG/L AS MN)	5	55.00	6.00	21.60	19.86	37.50	20.00	6.50
MOLYBDENUM, DISSOLVED (UG/L AS MO)	5	10.00	2.00	8.40	3.58	10.00	10.00	6.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	4	6.00	1.00					
NICKEL, DISSOLVED (UG/L AS NI)	5	3.00	0.00	1.40	1.34	2.50	2.00	0.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	4	7.00	0.00					
VANADIUM, DISSOLVED (UG/L AS V)	5	6.00	1.00	3.40	2.41	6.00	2.00	1.50
ZINC, DISSOLVED (UG/L AS ZN)	5	11.00	0.00	4.40	4.10	8.00	3.00	1.50
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	4	40.00	10.00					
ALUMINUM, DISSOLVED (UG/L AS AL)	5	150.00	0.00	48.00	59.75	100.00	20.00	10.00
LITHIUM, DISSOLVED (UG/L AS LI)	5	40.00	8.00	21.00	13.49	35.00	15.00	10.00
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	4	20.00	10.00					
SELENIUM, DISSOLVED (UG/L AS SE)	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	4	8.00	0.00					
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	10	1000.00	217.00	467.00	258.85	628.25	384.50	260.25
SOLIDS, DISSOLVED (TONS PER AC-FT)	10	1.36	0.30	0.64	0.35	0.85	0.53	0.35
MERCURY, DISSOLVED (UG/L AS HG)	5	0.30	0.00	0.10	0.12	0.20	0.10	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	4	0.50	0.00					
SEDIMENT, SUSPENDED (MG/L)	12	887.00	5.00	102.33	247.96	61.75	27.00	14.25
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	12	517.00	0.01	43.45	149.13	0.88	0.10	0.04

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25
OCTOBER	0.54	0.00	0.01	0.06	964.37	0.0	0.00	0.00	0.00	0.00
NOVEMBER	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
DECEMBER	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
JANUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
FEBRUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
MARCH	40.00	0.00	3.07	7.04	229.36	11.8	20.90	2.00	0.20	0.00
APRIL	226.00	0.00	6.85	29.98	437.31	25.6	19.20	1.75	0.80	0.05
MAY	40.00	0.00	6.57	10.25	156.06	25.3	29.30	13.00	0.13	0.00
JUNE	15.00	0.00	3.79	5.66	149.59	14.1	14.00	9.23	0.00	0.00
JULY	17.00	0.00	2.15	4.42	205.92	8.3	13.30	0.85	0.00	0.00
AUGUST	190.00	0.00	3.77	21.66	574.94	14.5	14.50	0.00	0.00	0.00
SEPTEMBER	2.30	0.00	0.07	0.29	443.33	0.2	0.35	0.00	0.00	0.00
ANNUAL	226.00	0.00	2.20	11.66	530.19	100.0	13.00	0.00	0.00	0.00

06340930 BUFFALO CREEK NEAR WASHBURN, ND

LOCATION.--Lat 47°18'12", long 101°05'20", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.8, T.144 N., R.82 W., McLean County, Hydrologic Unit 10130101, on right bank 70 ft (21 m) upstream from culvert, on county road 1.2 mi (1.9 km) above mouth, and 2.7 mi (4.3 km) west of Washburn.

DRAINAGE AREA.--57.3 mi² (148 km²) of which 30.0 mi² (77.7 km²) is probably noncontributing.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1978 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	50	25
TEMPERATURE (DEG C)	23	23.50	0.00	10.76	8.51	19.00	11.00	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	23	174.00	0.05	10.91	36.50	2.10	0.18	0.12
SPECIFIC CONDUCTANCE (MICROMHMS)	20	4010.00	345.00	2172.40	853.30	2620.00	2410.00	1842.50
OXYGEN, DISSOLVED (MG/L)	19	13.40	5.90	9.22	2.38	11.80	9.00	6.70
OXYGEN, DISSOLVED (PERCENT SATURATION)	19	146.00	62.00	88.26	20.71	100.00	87.00	73.00
PH (UNITS)	20	8.80	7.70	8.30	0.22	8.40	8.30	8.20
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	20	17.00	1.20	6.90	4.20	9.35	6.30	4.50
BICARBONATE (MG/L AS HCO ₃)	20	2070.00	85.00	852.95	445.52	1055.50	950.00	525.25
CARBONATE (MG/L AS CO ₃)	20	24.00	0.00	5.95	8.44	13.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	20	4.00	0.62	1.63	0.93	2.23	1.35	0.92
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	20	2.30	0.60	1.30	0.55	1.68	1.20	0.86
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	20	0.58	0.00	0.11	0.15	0.19	0.04	0.01
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	20	1.80	0.00	0.23	0.49	0.11	0.02	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	19	0.52	0.04	0.15	0.15	0.17	0.08	0.05
PHOSPHORUS, DISSOLVED (MG/L AS P)	20	0.41	0.02	0.08	0.10	0.08	0.05	0.02
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	20	65.00	11.00	23.45	12.06	29.75	21.00	15.25
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	18	9.70	0.30	1.46	2.20	1.35	0.80	0.40
HARDNESS (MG/L AS CaCO ₃)	20	400.00	78.00	200.15	77.80	245.00	195.00	145.00
HARDNESS, NONCARBONATE (MG/L AS CaCO ₃)	20	8.00	0.00	0.40	1.79	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	20	82.00	15.00	37.30	16.20	46.75	34.50	24.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	20	55.00	7.40	25.97	11.14	30.75	24.00	20.50
SODIUM, DISSOLVED (MG/L AS Na)	20	1000.00	28.00	473.40	222.90	572.50	540.00	362.50
SODIUM PERCENT	20	90.00	34.00	78.50	13.77	84.75	84.00	74.75
POTASSIUM, DISSOLVED (MG/L AS K)	20	19.00	6.10	10.70	3.35	12.50	10.00	9.05
CHLORIDE, DISSOLVED (MG/L AS CL)	20	150.00	2.00	14.66	32.06	11.50	6.75	4.68
SULFATE, DISSOLVED (MG/L AS SO ₄)	20	1000.00	76.00	516.45	217.96	590.00	520.00	435.00
FLUORIDE, DISSOLVED (MG/L AS F)	20	0.80	0.00	0.40	0.20	0.50	0.40	0.23
SILICA, DISSOLVED (MG/L AS SiO ₂)	20	30.00	1.20	10.58	6.89	12.75	8.90	6.45
ARSENIC, DISSOLVED (UG/L AS AS)	5	6.00	2.00	3.00	1.73	4.50	2.00	2.00
ARSENIC, TOTAL (UG/L AS AS)	4	8.00	3.00					
BARIUM, DISSOLVED (UG/L AS BA)	5	100.00	0.00	44.00	40.37	80.00	50.00	5.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	4	200.00	0.00					
BERYLLIUM, DISSOLVED (UG/L AS BE)	5	1.00	0.00	0.60	0.55	1.00	1.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	4	10.00	0.00					
BORON, DISSOLVED (UG/L AS B)	20	1100.00	70.00	581.00	273.69	727.50	665.00	362.50
CHROMIUM, DISSOLVED (UG/L AS CR)	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	4	20.00	0.00					
COBALT, DISSOLVED (UG/L AS CO)	5	3.00	0.00	1.80	1.64	3.00	3.00	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	4	7.00	0.00					
COPPER, DISSOLVED (UG/L AS CU)	5	10.00	8.00	9.40	0.89	10.00	10.00	8.50
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	4	40.00	8.00					
IRON, DISSOLVED (UG/L AS FE)	20	260.00	23.00	103.15	65.51	152.50	80.00	52.50
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	4	470.00	50.00					
MANGANESE, DISSOLVED (UG/L AS MN)	5	120.00	8.00	59.60	47.97	110.00	40.00	19.00
MOLYBDENUM, DISSOLVED (UG/L AS MO)	5	10.00	0.00	6.40	4.98	10.00	10.00	1.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	4	50.00	0.00					
NICKEL, DISSOLVED (UG/L AS NI)	5	10.00	2.00	4.80	3.27	8.00	3.00	2.50
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	4	26.00	6.00					
VANADIUM, DISSOLVED (UG/L AS V)	5	6.00	1.00	3.14	1.60	4.50	3.00	1.85
ZINC, DISSOLVED (UG/L AS ZN)	5	20.00	3.00	8.60	6.91	15.00	6.00	3.50
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	4	80.00	30.00					
ALUMINUM, DISSOLVED (UG/L AS AL)	5	170.00	0.00	70.00	74.83	145.00	60.00	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	5	100.00	4.00	46.00	40.94	88.00	36.00	9.00
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	4	100.00	10.00					
SELENIUM, DISSOLVED (UG/L AS SE)	5	1.00	0.00	0.20	0.45	0.50	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	4	1.00	0.00					
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	20	3120.00	233.00	1526.20	632.39	1805.00	1665.00	1255.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	20	4.24	0.32	2.08	0.86	2.46	2.27	1.71
MERCURY, DISSOLVED (UG/L AS HG)	5	0.20	0.10	0.18	0.04	0.20	0.20	0.15
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	4	0.30	0.10					
SEDIMENT, SUSPENDED (MG/L)	23	824.00	0.28	108.06	174.05	131.00	54.00	20.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	23	387.00	0.00	18.25	80.53	0.10	0.05	0.01

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1978 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25
OCTOBER	0.23	0.10	0.14	0.03	24.05	0.3	0.18	0.18	0.14	0.11
NOVEMBER	0.18	0.10	0.13	0.03	21.67	0.3	0.18	0.15	0.12	0.10
DECEMBER	0.24	0.00	0.12	0.07	55.66	0.3	0.24	0.15	0.10	0.09
JANUARY	0.09	0.00	0.00	0.02	423.37	0.0	0.05	0.00	0.00	0.00
FEBRUARY	0.00	0.00	0.00	0.00		0.0	0.00	0.00	0.00	0.00
MARCH	40.00	0.00	3.07	7.20	234.94	7.2	20.95	2.50	0.20	0.00
APRIL	918.00	0.10	38.13	149.53	392.17	86.8	168.00	4.75	2.00	0.21
MAY	3.50	0.08	0.77	0.93	120.86	1.8	3.00	1.25	0.29	0.10
JUNE	0.63	0.04	0.14	0.13	93.28	0.3	0.45	0.18	0.08	0.05
JULY	1.20	0.05	0.13	0.17	134.92	0.3	0.53	0.11	0.09	0.06
AUGUST	23.00	0.04	0.90	3.18	354.27	2.1	5.32	0.25	0.14	0.09
SEPTEMBER	1.10	0.11	0.22	0.16	75.23	0.5	0.45	0.21	0.19	0.15
ANNUAL	918.00	0.00	3.60	43.82	1215.89	100.0	3.50	0.19	0.12	0.06

LOCATION.--Lat 47°16'30", long 100°47'30", in SW¼SW¼ sec.23, T.144 N., R.80 W., McLean County, Hydrologic Unit 10130101, on right bank 600 ft (180 km) upstream from county highway bridge, 7 mi (11 km) upstream from Yanktonai Creek, and 8 mi (13 km) north of Wilton.

DRAINAGE AREA.--427 mi² (1,110 km²), approximately, of which about 310 mi² (800 km²) is probably noncontributing.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	39	28.00	0.00	9.91	9.44	18.00	8.00	1.00
STREAMFLOW, INSTANTANEOUS (CFS)	39	2900.00	0.03	160.00	521.31	10.00	1.00	0.16
SPECIFIC CONDUCTANCE (MICROMHUS)	39	2700.00	115.00	1361.79	683.37	1810.00	1400.00	820.00
PH (UNITS)	10	9.90	6.70	8.12	0.86	8.60	8.05	7.60
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	10	66.00	0.10	16.23	22.09	34.50	4.45	1.00
BICARBONATE (MG/L AS HCO3)	11	1080.00	72.00	507.45	344.39	903.00	502.00	206.00
CARBONATE (MG/L AS CO3)	11	200.00	0.00	20.00	60.00	0.00	0.00	0.00
HARDNESS (MG/L AS CaCO3)	11	590.00	64.00	310.36	164.14	500.00	270.00	220.00
HARDNESS, NONCARBONATE (MG/L CaCO3)	11	50.00	0.00	7.73	16.64	5.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	11	110.00	12.00	48.82	34.66	88.00	35.00	21.00
MAGNESIUM, DISSOLVED (MG/L AS MG)	11	77.00	8.30	45.94	21.72	62.00	53.00	32.00
SODIUM, DISSOLVED (MG/L AS NA)	11	440.00	16.00	245.55	143.27	370.00	250.00	110.00
SODIUM PERCENT	11	73.00	33.00	58.00	12.08	63.00	61.00	51.00
POTASSIUM, DISSOLVED (MG/L AS K)	11	12.00	5.10	8.95	2.14	11.00	9.10	7.50
CHLORIDE, DISSOLVED (MG/L AS CL)	11	20.00	1.90	10.72	5.39	13.00	11.00	6.00
SULFATE, DISSOLVED (MG/L AS SO4)	11	640.00	35.00	385.91	192.18	530.00	400.00	290.00
FLUORIDE, DISSOLVED (MG/L AS F)	11	0.20	0.10	0.15	0.05	0.20	0.10	0.10
SILICA, DISSOLVED (MG/L AS SiO2)	11	39.00	1.40	12.92	14.13	30.00	6.00	2.80
BORON, DISSOLVED (UG/L AS B)	11	410.00	0.00	174.61	124.91	250.00	220.00	60.00
IRON, DISSOLVED (UG/L AS FE)	11	1700.00	0.00	317.44	478.57	370.00	150.00	100.00
MANGANESE, DISSOLVED (UG/L AS MN)	11	1200.00	0.80	244.62	373.59	410.00	60.00	20.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	11	1890.00	148.00	1046.82	562.75	1580.00	1140.00	580.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	11	2.57	0.20	1.42	0.77	2.15	1.55	0.79

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS						PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25	5
OCTOBER	4.20	0.01	0.71	1.04	146.74	0.4	3.11	1.30	0.12	0.03	0.01
NOVEMBER	1.20	0.01	0.35	0.35	99.59	0.2	1.10	0.37	0.27	0.08	0.04
DECEMBER	0.28	0.09	0.18	0.06	34.70	0.1	0.28	0.22	0.20	0.10	0.09
JANUARY	0.20	0.05	0.12	0.04	30.28	0.1	0.18	0.15	0.11	0.09	0.08
FEBRUARY	0.17	0.02	0.09	0.05	58.89	0.0	0.17	0.13	0.09	0.03	0.02
MARCH	830.00	0.02	43.06	131.64	305.72	25.0	335.80	5.25	0.21	0.08	0.02
APRIL	3060.00	0.27	112.60	408.81	363.07	63.2	792.80	28.75	7.85	0.96	0.28
MAY	50.00	0.01	7.63	10.16	133.10	4.4	29.90	10.40	4.10	0.32	0.04
JUNE	123.00	0.03	8.19	18.75	229.10	4.6	47.00	3.63	1.80	0.86	0.23
JULY	1.60	0.09	0.38	0.27	71.40	0.2	1.03	0.49	0.32	0.20	0.10
AUGUST	11.00	0.00	0.92	1.91	206.85	0.5	5.62	0.65	0.09	0.06	0.01
SEPTEMBER	99.00	0.00	2.04	10.78	529.61	1.1	4.46	0.67	0.10	0.03	0.01
ANNUAL	3060.00	0.00	14.62	126.82	867.45	100.0	24.15	1.10	0.22	0.09	0.02

LOCATION.--Lat 47°08'06", long 101°25'31" in NW¼SW¼NW¼ sec.11, T.142 N., R.85 W., Oliver County, Hydrologic Unit 10130101, on left bank 100 ft (30 m) downstream from box culvert on North Dakota Highway 31, 1.5 mi (2.4 km) north of Hannover, and 2.6 mi (4.2 km) upstream from Brady Creek.

DRAINAGE AREA.--16.9 mi² (43.8 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	21	27.00	0.00	10.45	7.99	17.00	7.50	2.50
STREAMFLOW, INSTANTANEOUS (CFS)	21	1360.00	0.07	100.13	318.34	9.50	1.30	0.30
SPECIFIC CONDUCTANCE (MICROMHOS)	18	1550.00	125.00	1029.67	374.75	1235.00	1115.00	1010.00
OXYGEN, DISSOLVED (MG/L)	17	12.50	4.60	10.35	1.94	11.90	10.80	9.25
OXYGEN, DISSOLVED (PERCENT SATURATION)	17	144.00	54.00	101.24	21.75	120.00	99.00	88.00
PH (UNITS)	17	8.60	7.60	8.08	0.27	8.30	8.20	7.83
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	16	10.00	1.30	4.11	2.22	5.38	3.65	2.70
BICARBONATE (MG/L AS HCO3)	16	494.00	44.00	313.25	133.45	417.50	352.00	218.75
CARBONATE (MG/L AS CO3)	16	19.00	0.00	1.19	4.75	0.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	18	3.10	0.32	1.05	0.73	1.33	0.82	0.56
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	18	2.10	0.31	0.84	0.44	0.93	0.80	0.50
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	18	0.66	0.00	0.12	0.21	0.09	0.04	0.01
NITROGEN, NO2+NO3, TOTAL (MG/L AS N)	18	0.50	0.00	0.10	0.15	0.10	0.03	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	18	0.47	0.03	0.12	0.15	0.11	0.05	0.04
PHOSPHORUS, DISSOLVED (MG/L AS P)	18	0.41	0.00	0.09	0.11	0.12	0.05	0.03
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	18	39.00	7.80	14.86	7.96	18.50	14.00	8.58
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	16	4.70	0.10	0.96	1.14	1.03	0.60	0.33
HARDNESS (MG/L AS CaCO3)	17	620.00	42.00	374.82	158.41	485.00	430.00	310.00
HARDNESS, NONCARBONATE (MG/L CaCO3)	16	240.00	6.00	101.25	67.27	150.00	81.50	47.00
CALCIUM, DISSOLVED (MG/L AS Ca)	18	110.00	9.30	73.07	31.93	100.00	83.50	47.25
MAGNESIUM, DISSOLVED (MG/L AS Mg)	18	84.00	4.60	45.81	21.93	58.00	54.50	32.50
SODIUM, DISSOLVED (MG/L AS Na)	18	130.00	6.20	86.51	35.81	110.00	98.00	76.75
SODIUM PERCENT	18	45.00	22.00	33.72	6.90	40.00	32.50	30.00
POTASSIUM, DISSOLVED (MG/L AS K)	18	17.00	4.40	8.81	3.41	11.00	8.00	6.55
CHLORIDE, DISSOLVED (MG/L AS CL)	18	9.70	1.30	6.46	2.30	8.40	6.55	5.05
SULFATE, DISSOLVED (MG/L AS SO4)	18	520.00	25.00	298.28	125.88	357.50	330.00	265.00
FLUORIDE, DISSOLVED (MG/L AS F)	18	0.60	0.10	0.38	0.15	0.50	0.40	0.30
SILICA, DISSOLVED (MG/L AS SiO2)	18	19.00	0.42	8.52	4.26	10.50	8.45	6.33
ARSENIC, DISSOLVED (UG/L AS AS)	9	3.00	0.00	1.22	0.83	1.50	1.00	1.00
ARSENIC, TOTAL (UG/L AS AS)	6	3.00	1.00	1.83	0.75	2.25	2.00	1.00
BARIUM, DISSOLVED (UG/L AS BA)	9	300.00	0.00	81.11	89.08	90.00	70.00	25.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	6	200.00	0.00	116.67	75.28	200.00	100.00	75.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	9	1.00	0.00	0.56	0.53	1.00	1.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	6	10.00	0.00	2.50	4.18	6.25	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	18	310.00	60.00	197.22	66.40	240.00	190.00	167.50
CHROMIUM, DISSOLVED (UG/L AS CR)	9	10.00	0.00	2.00	4.00	4.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	6	20.00	0.00	6.67	8.16	12.50	5.00	0.00
COBALT, DISSOLVED (UG/L AS CO)	9	3.00	0.00	1.89	1.45	3.00	3.00	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	6	2.00	0.00	0.83	0.98	2.00	0.50	0.00
COPPER, DISSOLVED (UG/L AS CU)	9	14.00	2.00	6.22	4.12	10.00	5.00	3.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	6	18.00	4.00	7.17	5.46	9.75	5.00	4.00
IRON, DISSOLVED (UG/L AS FE)	18	220.00	10.00	62.89	53.58	77.50	48.00	29.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	6	330.00	20.00	116.67	112.01	165.00	105.00	27.50
MANGANESE, DISSOLVED (UG/L AS MN)	9	100.00	0.00	44.67	42.02	90.00	20.00	8.00
MOLYBDENUM, DISSOLVED (UG/L AS MO)	9	10.00	0.00	4.67	5.07	10.00	1.00	0.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MU)	6	5.00	0.00	1.67	2.25	4.25	0.50	0.00
NICKEL, DISSOLVED (UG/L AS NI)	9	3.00	0.00	1.67	1.41	3.00	2.00	0.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	6	17.00	2.00	5.83	5.60	8.00	4.00	2.75
VANADIUM, DISSOLVED (UG/L AS V)	9	6.00	0.20	2.37	2.21	4.50	1.50	0.80
ZINC, DISSOLVED (UG/L AS ZN)	9	20.00	0.00	7.56	6.31	11.50	6.00	3.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	6	60.00	0.00	20.00	20.98	30.00	15.00	7.50
ALUMINUM, DISSOLVED (UG/L AS AL)	9	40.00	0.00	15.56	16.67	35.00	10.00	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	9	70.00	4.00	41.89	25.26	60.00	50.00	12.50
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	6	60.00	3.00	31.50	27.90	60.00	30.00	5.25
SELENIUM, DISSOLVED (UG/L AS SE)	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	18	1120.00	81.00	710.17	269.95	874.25	775.50	671.00
SOLIDS, DISSOLVED (TUNS PER AC-FT)	18	1.52	0.11	0.97	0.37	1.19	1.05	0.91
MERCURY, DISSOLVED (UG/L AS HG)	9	0.20	0.00	0.03	0.07	0.05	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	6	0.40	0.00	0.12	0.15	0.10	0.10	0.00
SEDIMENT, SUSPENDED (MG/L)	20	425.00	3.00	48.70	99.34	35.25	17.50	8.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	20	1560.00	0.00	95.91	353.39	0.31	0.03	0.01

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF ANNUAL RUNOFF	PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION		95	75	50 MEDIAN	25	5
OCTOBER	2.20	0.00	0.18	0.40	216.48	0.6	0.78	0.28	0.00	0.00	0.00
NOVEMBER	0.32	0.00	0.08	0.09	114.83	0.3	0.25	0.19	0.05	0.00	0.00
DECEMBER	0.50	0.00	0.03	0.08	277.75	0.1	0.20	0.01	0.00	0.00	0.00
JANUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00	0.00
FEBRUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00	0.00
MARCH	190.00	0.00	11.21	30.40	271.04	36.3	73.00	3.50	0.00	0.00	0.00
APRIL	650.00	0.00	17.06	81.46	477.54	53.4	35.85	4.85	2.00	0.68	0.00
MAY	8.50	0.00	0.92	1.31	142.34	3.0	2.40	1.00	0.52	0.22	0.00
JUNE	21.00	0.00	1.16	2.69	232.45	3.6	3.84	0.83	0.45	0.08	0.00
JULY	10.00	0.00	0.49	1.57	320.65	1.6	4.05	0.09	0.00	0.00	0.00
AUGUST	15.00	0.00	0.29	1.66	570.71	0.9	0.83	0.00	0.00	0.00	0.00
SEPTEMBER	2.50	0.00	0.10	0.37	389.18	0.3	0.57	0.00	0.00	0.00	0.00
ANNUAL	650.00	0.00	2.62	25.42	968.65	100.0	4.63	0.32	0.00	0.00	0.00

LOCATION.--Lat 47°06'08", long 101°15'22", in SW¼NW¼SW¼ sec.19, T.142 N., R.83 W., Oliver County, Hydrologic Unit 10130101, on left bank 30 ft (9'm) downstream from bridge on county road 2 mi (3.2 km) southeast of Center, and 2 mi (3.2 km) upstream from Nelson Lake.

DRAINAGE AREA.--75.8 mi² (196 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	42	26.00	0.00	9.05	7.92	15.13	7.00	1.75
STREAMFLOW, INSTANTANEOUS (CFS)	43	3240.00	0.61	96.56	494.70	8.20	1.63	1.10
SPECIFIC CONDUCTANCE (MICROMHMS)	37	1440.00	110.00	1049.05	341.63	1250.00	1180.00	950.00
OXYGEN, DISSOLVED (MG/L)	34	12.80	6.20	9.15	1.88	10.67	9.00	7.60
OXYGEN, DISSOLVED (PERCENT SATURATION)	34	113.00	57.00	84.00	15.38	94.25	88.00	72.00
PH (UNITS)	36	14.50	7.50	8.22	1.11	8.28	8.10	7.83
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	35	27.00	1.70	7.41	5.93	10.00	5.00	3.40
BICARBONATE (MG/L AS HCO ₃)	35	564.00	82.00	427.29	129.75	512.00	464.00	410.00
CARBONATE (MG/L AS CO ₃)	35	22.00	0.00	0.66	3.72	0.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	37	5.70	0.60	2.26	1.14	3.10	1.90	1.40
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	37	2.50	0.27	0.85	0.43	0.94	0.84	0.62
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	37	0.83	0.01	0.18	0.18	0.26	0.11	0.06
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	37	4.70	0.01	1.23	1.10	1.85	0.85	0.45
PHOSPHORUS, TOTAL (MG/L AS P)	37	0.52	0.01	0.07	0.08	0.09	0.05	0.03
PHOSPHORUS, DISSOLVED (MG/L AS P)	37	0.43	0.00	0.03	0.07	0.02	0.01	0.01
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	36	47.00	5.20	13.34	8.30	14.75	10.00	8.35
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	33	5.00	0.20	1.12	0.92	1.40	0.90	0.55
HARDNESS (MG/L AS CaCO ₃)	37	410.00	68.00	272.38	74.07	320.00	290.00	255.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	36	26.00	0.00	2.06	5.80	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	37	83.00	16.00	57.14	15.75	69.00	60.00	48.50
MAGNESIUM, DISSOLVED (MG/L AS Mg)	37	48.00	6.70	31.52	8.85	36.50	34.00	29.00
SODIUM, DISSOLVED (MG/L AS Na)	37	210.00	14.00	146.35	49.73	180.00	160.00	130.00
SODIUM PERCENT	37	69.00	29.00	52.27	8.13	56.50	53.00	50.50
POTASSIUM, DISSOLVED (MG/L AS K)	37	18.00	4.60	6.78	2.08	7.15	6.40	6.00
CHLORIDE, DISSOLVED (MG/L AS CL)	37	12.00	1.40	6.40	1.96	7.30	6.30	5.40
SULFATE, DISSOLVED (MG/L AS SO ₄)	37	410.00	38.00	229.62	77.86	270.00	230.00	195.00
FLUORIDE, DISSOLVED (MG/L AS F)	37	0.50	0.10	0.25	0.08	0.30	0.30	0.20
SILICA, DISSOLVED (MG/L AS SiO ₂)	37	25.00	5.10	11.95	5.51	16.00	11.00	7.35
ARSENIC, DISSOLVED (UG/L AS AS)	11	2.00	1.00	1.27	0.47	2.00	1.00	1.00
ARSENIC, TOTAL (UG/L AS AS)	6	4.00	1.00	2.17	0.98	2.50	2.00	1.75
BARIUM, DISSOLVED (UG/L AS BA)	11	600.00	50.00	182.73	157.04	200.00	150.00	80.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	6	200.00	0.00	66.67	81.65	125.00	50.00	0.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	11	1.00	0.00	0.64	0.50	1.00	1.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	6	5.00	0.00	0.83	2.04	1.25	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	36	750.00	70.00	332.22	151.09	377.50	300.00	252.50
CHROMIUM, DISSOLVED (UG/L AS CR)	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	6	10.00	0.00	5.83	4.92	10.00	7.50	0.00
COBALT, DISSOLVED (UG/L AS CU)	11	3.00	0.00	2.00	1.41	3.00	3.00	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CU)	6	2.00	0.00	0.67	0.82	1.25	0.50	0.00
COPPER, DISSOLVED (UG/L AS CU)	11	36.00	0.00	8.73	9.89	10.00	9.00	2.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	6	31.00	1.00	7.83	11.46	11.50	4.00	1.75
IRON, DISSOLVED (UG/L AS FE)	36	310.00	0.00	58.00	60.18	67.50	40.00	21.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	6	360.00	90.00	158.33	100.28	195.00	125.00	105.00
MANGANESE, DISSOLVED (UG/L AS MN)	11	220.00	20.00	91.00	52.62	110.00	90.00	60.00
MOLYBDENUM, DISSOLVED (UG/L AS MO)	11	11.00	0.00	6.91	4.57	10.00	10.00	2.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	6	3.00	0.00	2.00	1.26	3.00	2.50	0.75
NICKEL, DISSOLVED (UG/L AS NI)	11	9.00	0.00	3.00	2.49	4.00	3.00	1.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	6	18.00	3.00	7.17	6.11	12.75	4.00	3.00
VANADIUM, DISSOLVED (UG/L AS V)	11	6.00	0.00	2.31	2.51	6.00	1.00	0.20
ZINC, DISSOLVED (UG/L AS ZN)	11	10.00	3.00	6.36	3.53	10.00	5.00	3.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	6	60.00	0.00	26.67	21.60	45.00	25.00	7.50
ALUMINUM, DISSOLVED (UG/L AS AL)	11	60.00	0.00	9.09	18.14	10.00	0.00	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	11	63.00	8.00	41.00	17.44	57.00	40.00	30.00
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	6	60.00	10.00	31.67	19.41	52.50	25.00	17.50
SELENIUM, DISSOLVED (UG/L AS SE)	11	1.00	0.00	0.27	0.47	1.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	6	1.00	0.00	0.17	0.41	0.25	0.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	37	1030.00	137.00	717.84	215.09	838.00	765.00	653.00
SOLIDS, DISSOLVED (TUNS PER AC-FT)	37	1.40	0.19	0.98	0.29	1.14	1.04	0.89
MERCURY, DISSOLVED (UG/L AS HG)	11	0.20	0.00	0.05	0.07	0.10	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	6	0.20	0.00	0.08	0.08	0.13	0.10	0.00
SEDIMENT, SUSPENDED (MG/L)	41	2140.00	6.00	102.32	327.89	63.00	40.00	29.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	41	18700.00	0.02	462.77	2919.50	0.99	0.24	0.13

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25
OCTOBER	4.90	0.67	1.65	1.02	61.64	1.6	4.30	1.95	1.20	1.00
NOVEMBER	1.90	0.72	1.17	0.25	20.91	1.1	1.60	1.40	1.20	1.00
DECEMBER	1.60	0.90	1.15	0.14	11.98	1.1	1.40	1.20	1.10	1.00
JANUARY	1.40	0.70	1.10	0.16	14.85	1.1	1.30	1.20	1.10	1.00
FEBRUARY	1.40	0.50	1.01	0.21	20.34	0.9	1.30	1.20	1.00	0.90
MARCH	550.00	0.01	36.87	106.65	289.26	35.9	343.00	9.25	1.40	1.10
APRIL	1370.00	0.79	47.05	172.33	366.29	44.3	126.30	30.25	8.70	4.08
MAY	22.00	0.61	4.73	4.01	84.83	4.6	13.00	6.00	3.90	1.60
JUNE	32.00	0.87	4.34	5.62	129.49	4.1	18.80	3.80	2.70	2.05
JULY	9.00	0.57	1.82	1.12	61.84	1.8	3.69	2.25	1.50	1.10
AUGUST	35.00	0.18	2.32	4.61	198.63	2.3	11.30	1.75	1.10	0.61
SEPTEMBER	4.60	0.38	1.43	0.74	51.65	1.3	2.75	1.60	1.30	1.08
ANNUAL	1370.00	0.01	8.72	60.01	687.85	100.0	17.00	2.50	1.30	1.00

LOCATION.--Lat 47°03'58", long 101°14'11", in SE¼NE¼NE¼ sec.6, T.141 N., R.83 W., Oliver County, Hydrologic Unit 10130101, on right bank 1,200 ft (366 m) upstream from bridge on county road, 0.8 mi (1.3 km) upstream from Nelson Lake, 1 mi (1.6 km) west of Milton R. Young Powerplant, and 4.5 mi (7.2 km) southeast of Center.

DRAINAGE AREA.--45.6 mi² (118 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	28	25.00	0.00	8.75	8.26	16.75	6.25	1.00
STREAMFLOW, INSTANTANEOUS (CFS)	29	217.00	0.02	36.78	66.54	45.00	2.30	0.20
SPECIFIC CONDUCTANCE (MICROMHUS)	24	2130.00	178.00	1087.42	477.24	1428.75	1140.00	740.00
OXYGEN, DISSOLVED (MG/L)	22	14.20	4.70	9.66	2.71	11.65	10.05	7.38
OXYGEN, DISSOLVED (PERCENT SATURATION)	22	133.00	12.30	84.06	26.16	97.25	89.50	71.50
PH (UNITS)	23	9.10	7.00	8.19	0.48	8.50	8.20	8.00
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	23	48.00	0.30	6.88	10.25	7.20	3.30	1.90
BICARBONATE (MG/L AS HCO3)	23	1010.00	62.00	408.13	235.80	561.00	390.00	239.00
CARBONATE (MG/L AS CO3)	23	23.00	0.00	4.65	8.12	8.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	24	5.20	0.96	1.85	0.96	2.18	1.50	1.30
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	24	5.10	0.46	1.54	0.92	1.88	1.35	1.03
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	24	0.46	0.00	0.14	0.13	0.25	0.12	0.02
NITROGEN, NO2+NO3, TOTAL (MG/L AS N)	24	0.58	0.00	0.17	0.22	0.38	0.05	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	24	0.40	0.03	0.14	0.10	0.16	0.11	0.07
PHOSPHORUS, DISSOLVED (MG/L AS P)	24	0.27	0.01	0.08	0.07	0.09	0.06	0.03
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	23	31.00	7.60	18.06	6.04	23.00	18.00	15.00
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	22	3.40	0.30	1.44	0.80	2.20	1.35	0.85
HARDNESS (MG/L AS CaCO3)	24	460.00	46.00	201.96	96.49	260.00	200.00	140.00
HARDNESS, NONCARBONATE (MG/L CaCO3)	23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	24	110.00	11.00	37.71	21.06	43.75	34.00	24.00
MAGNESIUM, DISSOLVED (MG/L AS MG)	24	45.00	4.60	26.10	11.97	36.75	26.00	16.00
SODIUM, DISSOLVED (MG/L AS NA)	24	400.00	18.00	181.17	92.49	245.00	190.00	110.00
SODIUM PERCENT	24	81.00	43.00	63.42	8.11	68.00	65.00	58.25
POTASSIUM, DISSOLVED (MG/L AS K)	24	18.00	4.40	9.23	3.27	10.75	9.60	6.23
CHLORIDE, DISSOLVED (MG/L AS CL)	24	10.00	1.60	4.35	1.94	5.18	4.20	2.98
SULFATE, DISSOLVED (MG/L AS SO4)	24	460.00	32.00	237.29	118.78	320.00	240.00	162.50
FLUORIDE, DISSOLVED (MG/L AS F)	24	0.30	0.00	0.17	0.07	0.20	0.20	0.10
SILICA, DISSOLVED (MG/L AS SiO2)	24	13.00	0.40	4.63	3.44	7.48	3.70	1.55
ARSENIC, DISSOLVED (UG/L AS AS)	9	3.00	1.00	2.00	0.71	2.50	2.00	1.50
ARSENIC, TOTAL (UG/L AS AS)	7	4.00	0.20	2.31	1.45	4.00	2.00	1.00
BARIUM, DISSOLVED (UG/L AS BA)	10	500.00	0.00	124.00	142.22	140.00	85.00	55.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	7	400.00	100.00	200.00	100.00	200.00	200.00	100.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	10	1.00	0.00	0.70	0.48	1.00	1.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	24	750.00	80.00	380.00	167.72	485.00	400.00	260.00
CHROMIUM, DISSOLVED (UG/L AS CR)	8	10.00	0.00	1.75	3.62	3.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	7	20.00	0.00	5.71	7.87	10.00	0.00	0.00
COBALT, DISSOLVED (UG/L AS CO)	10	3.00	0.00	2.30	1.25	3.00	3.00	1.50
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	7	2.00	0.00	0.86	0.90	2.00	1.00	0.00
COPPER, DISSOLVED (UG/L AS CU)	10	11.00	1.00	5.60	3.69	10.00	5.50	2.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	7	21.00	2.00	6.57	6.60	7.00	5.00	2.00
IRON, DISSOLVED (UG/L AS FE)	24	700.00	24.00	153.92	162.90	212.50	95.00	62.50
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	7	320.00	60.00	182.86	106.26	320.00	170.00	70.00
MANGANESE, DISSOLVED (UG/L AS MN)	10	240.00	0.00	63.00	76.40	97.75	35.00	4.75
MOLYBDENUM, DISSOLVED (UG/L AS MU)	10	10.00	1.00	7.40	4.20	10.00	10.00	1.75
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MU)	7	9.00	0.00	2.29	3.04	2.00	1.00	1.00
NICKEL, DISSOLVED (UG/L AS NI)	10	8.00	0.00	2.60	2.55	4.25	2.00	0.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	7	18.00	6.00	8.43	4.47	10.00	6.00	6.00
VANADIUM, DISSOLVED (UG/L AS V)	10	6.00	0.20	2.98	2.44	6.00	1.70	1.00
ZINC, DISSOLVED (UG/L AS ZN)	10	15.00	3.00	8.30	4.64	11.25	9.50	3.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	7	70.00	0.00	30.00	24.49	50.00	20.00	10.00
ALUMINUM, DISSOLVED (UG/L AS AL)	10	60.00	0.00	16.06	22.16	27.50	5.30	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	10	54.00	10.00	36.70	14.62	50.00	40.00	26.00
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	7	60.00	10.00	37.14	19.76	60.00	30.00	20.00
SELENIUM, DISSOLVED (UG/L AS SE)	10	1.00	0.00	0.10	0.32	0.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	7	1.00	0.00	0.14	0.36	0.00	0.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	24	1490.00	112.00	721.92	330.67	999.75	753.50	476.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	24	2.03	0.15	0.98	0.45	1.36	1.03	0.65
MERCURY, DISSOLVED (UG/L AS HG)	10	3.40	0.00	0.37	1.07	0.10	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	6	3.30	0.00	0.63	1.31	0.98	0.10	0.08
SEDIMENT, SUSPENDED (MG/L)	27	1440.00	4.00	98.37	272.06	76.00	27.00	20.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	27	844.00	0.00	37.95	162.23	1.30	0.22	0.01

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25
OCTOBER	5.30	0.00	0.57	1.09	192.54	0.9	2.82	0.78	0.00	0.00
NOVEMBER	0.36	0.00	0.10	0.09	95.88	0.1	0.29	0.19	0.07	0.01
DECEMBER	0.73	0.00	0.14	0.18	131.94	0.2	0.61	0.20	0.06	0.02
JANUARY	0.20	0.00	0.05	0.07	148.65	0.1	0.20	0.10	0.00	0.00
FEBRUARY	0.10	0.00	0.02	0.03	171.77	0.0	0.10	0.02	0.00	0.00
MARCH	250.00	0.00	22.34	55.92	250.37	33.9	186.00	8.75	2.20	0.01
APRIL	335.00	0.38	31.41	51.82	164.99	46.2	110.35	54.25	6.10	2.35
MAY	46.00	0.00	4.24	8.65	204.07	6.4	28.50	3.30	1.70	0.16
JUNE	138.00	0.00	5.53	19.80	357.70	8.1	21.85	1.55	0.53	0.27
JULY	28.00	0.00	1.01	3.83	379.66	1.5	3.72	0.49	0.17	0.02
AUGUST	40.00	0.00	1.49	4.54	304.37	2.3	6.68	0.67	0.21	0.00
SEPTEMBER	4.50	0.00	0.14	0.54	377.84	0.2	0.58	0.10	0.00	0.00
ANNUAL	335.00	0.00	5.59	24.88	445.39	100.0	24.45	0.93	0.10	0.00

LOCATION.--Lat 47°03'25", long 101°11'35", in SE¼ sec.4, T.141 N., R.83 W., Oliver County, Hydrologic Unit 10130101, on right bank at southeast corner of farmyard, and 6 mi (10 km) southeast of Center.

DRAINAGE AREA.--146 mi² (378 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	42	24.00	0.00	10.82	7.99	17.62	11.00	2.00
STREAMFLOW, INSTANTANEOUS (CFS)	43	1020.00	0.90	74.38	207.13	6.40	1.60	1.40
SPECIFIC CONDUCTANCE (MICROMHUS)	43	1500.00	480.00	1148.26	261.85	1300.00	1180.00	1050.00
PH (UNITS)	6	8.30	7.60	7.93	0.27	8.22	7.85	7.75
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	6	11.00	1.10	6.52	3.58	9.65	6.60	3.72
BICARBONATE (MG/L AS HCO ₃)	6	456.00	130.00	321.17	155.60	453.75	377.00	133.00
CARBONATE (MG/L AS CO ₃)	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARDNESS (MG/L AS CaCO ₃)	6	430.00	130.00	298.33	119.90	400.00	330.00	167.50
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	6	170.00	0.00	49.00	64.59	95.00	27.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	6	85.00	28.00	64.00	27.36	85.00	77.50	30.25
MAGNESIUM, DISSOLVED (MG/L AS Mg)	6	53.00	15.00	33.67	13.44	45.50	33.00	22.50
SODIUM, DISSOLVED (MG/L AS Na)	6	210.00	65.00	143.67	58.84	187.50	165.00	74.00
SODIUM PERCENT	6	53.00	47.00	50.17	1.94	51.50	50.00	49.25
POTASSIUM, DISSOLVED (MG/L AS K)	6	11.00	4.30	6.77	2.53	8.90	6.05	4.82
CHLORIDE, DISSOLVED (MG/L AS CL)	6	11.00	4.10	7.27	2.58	9.65	7.10	4.85
SULFATE, DISSOLVED (MG/L AS SO ₄)	6	620.00	150.00	340.00	165.77	470.00	305.00	217.50
FLUORIDE, DISSOLVED (MG/L AS F)	6	0.60	0.20	0.33	0.15	0.45	0.30	0.20
SILICA, DISSOLVED (MG/L AS SiO ₂)	6	20.00	3.10	13.50	6.64	19.25	15.50	6.70
BORON, DISSOLVED (UG/L AS B)	6	1500.00	90.00	500.00	507.74	697.50	390.00	172.50
IRON, DISSOLVED (UG/L AS Fe)	6	410.00	0.00	151.67	151.32	237.50	160.00	0.00
MANGANESE, DISSOLVED (UG/L AS Mn)	6	150.00	30.00	81.67	47.08	127.50	75.00	37.50
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	6	1150.00	364.00	775.50	296.57	1000.75	851.50	454.75
SOLIDS, DISSOLVED (TONS PER AC-FT)	6	1.56	0.50	1.05	0.40	1.36	1.15	0.62

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF ANNUAL RUNOFF	PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION		95	75	50 MEDIAN	25	5
OCTOBER	2.50	0.71	1.60	0.42	26.12	0.9	2.40	1.90	1.60	1.35	0.82
NOVEMBER	4.70	0.80	1.54	0.69	45.06	0.8	2.69	1.70	1.20	1.20	0.93
DECEMBER	4.70	1.10	2.04	1.10	53.67	1.2	4.50	2.50	1.50	1.30	1.10
JANUARY	2.00	1.00	1.48	0.31	20.93	0.8	1.93	1.70	1.50	1.20	1.00
FEBRUARY	53.00	0.90	3.50	10.09	288.09	1.8	33.40	1.40	1.20	1.00	0.90
MARCH	1120.00	0.90	67.32	212.87	316.20	38.5	604.00	5.65	4.10	2.15	0.90
APRIL	2600.00	1.40	72.79	288.95	396.99	40.3	197.55	48.50	9.80	1.68	1.51
MAY	78.00	1.10	6.95	14.43	207.52	4.0	51.20	6.50	1.40	1.30	1.10
JUNE	246.00	1.00	12.04	39.98	332.19	6.7	29.54	6.30	3.75	2.40	1.06
JULY	6.20	1.10	3.09	1.83	59.23	1.8	6.10	4.95	2.00	1.60	1.30
AUGUST	16.00	0.98	3.26	2.37	72.95	1.9	6.60	5.35	2.10	1.60	1.10
SEPTEMBER	6.30	0.02	2.57	2.36	92.07	1.4	6.30	6.10	1.30	0.84	0.20
ANNUAL	2600.00	0.02	14.85	106.63	718.09	100.0	24.15	4.50	1.70	1.20	0.96

LOCATION.--Lat 46°54'54", long 100°48'48", in SW¼NW¼SW¼ sec.29, T.140 N., R. 80 W., Burleigh County, Hydrologic Unit 10130101, on left bank on upstream side of county highway bridge, and 7 mi (11 km) northwest of Bismarck.

DRAINAGE AREA.--108 mi² (280 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	38	22.00	0.00	5.43	7.14	10.50	1.00	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	38	5000.00	0.01	214.68	833.93	49.00	5.25	0.73
SPECIFIC CONDUCTANCE (MICROMHUS)	38	1650.00	110.00	856.58	496.98	1300.00	900.00	362.50
PH (UNITS)	5	8.60	7.50	8.06	0.43	8.45	8.10	7.65
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	5	17.00	0.30	6.12	6.45	11.70	3.50	1.85
BICARBONATE (MG/L AS HCO ₃)	5	500.00	72.00	297.20	186.51	467.00	345.00	103.50
CARBONATE (MG/L AS CO ₃)	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARDNESS (MG/L AS CaCO ₃)	5	380.00	49.00	235.80	143.96	360.00	290.00	84.50
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	5	9.00	0.00	3.20	4.44	8.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	5	56.00	8.10	37.22	20.06	53.00	47.00	16.55
MAGNESIUM, DISSOLVED (MG/L AS Mg)	5	58.00	7.10	34.62	23.10	56.00	40.00	10.55
SODIUM, DISSOLVED (MG/L AS Na)	5	160.00	6.10	83.42	67.42	145.00	100.00	13.55
SODIUM PERCENT	5	47.00	19.00	36.00	12.33	46.00	42.00	23.00
POTASSIUM, DISSOLVED (MG/L AS K)	5	6.70	4.30	5.62	0.97	6.55	5.60	4.70
CHLORIDE, DISSOLVED (MG/L AS CL)	5	6.60	1.40	4.74	2.18	6.40	5.80	2.55
SULFATE, DISSOLVED (MG/L AS SO ₄)	5	320.00	7.00	177.20	140.67	300.00	230.00	28.00
FLUORIDE, DISSOLVED (MG/L AS F)	5	0.30	0.10	0.18	0.08	0.25	0.20	0.10
SILICA, DISSOLVED (MG/L AS SiO ₂)	5	8.30	2.00	5.66	2.48	7.60	6.70	3.20
BORON, DISSOLVED (UG/L AS B)	5	300.00	60.00	184.00	110.59	295.00	180.00	75.00
IRON, DISSOLVED (UG/L AS FE)	5	1300.00	0.00	330.00	549.91	770.00	70.00	20.00
MANGANESE, DISSOLVED (UG/L AS MN)	5	160.00	0.00	50.00	63.25	100.00	30.00	10.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	5	887.00	84.00	510.00	340.28	818.50	593.00	160.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	5	1.21	0.11	0.69	0.47	1.11	0.81	0.21

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS						PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25	5
OCTOBER	4.50	0.00	0.31	0.75	241.06	0.2	1.79	0.20	0.10	0.00	0.00
NOVEMBER	1.70	0.00	0.16	0.38	235.23	0.1	1.23	0.10	0.00	0.00	0.00
DECEMBER	0.90	0.00	0.32	0.34	104.23	0.2	0.90	0.60	0.30	0.00	0.00
JANUARY	0.49	0.00	0.23	0.19	82.33	0.2	0.48	0.44	0.20	0.00	0.00
FEBRUARY	0.39	0.00	0.15	0.15	102.05	0.1	0.38	0.33	0.08	0.00	0.00
MARCH	520.00	0.00	39.39	106.27	269.79	28.9	330.00	9.00	1.70	0.31	0.00
APRIL	3900.00	0.21	88.65	479.59	541.02	62.9	190.25	19.25	9.70	1.95	0.64
MAY	41.00	0.00	5.76	5.52	95.90	4.2	15.00	8.25	4.10	3.10	0.08
JUNE	6.00	0.01	1.72	1.42	82.26	1.2	4.84	2.60	1.20	0.92	0.02
JULY	7.80	0.00	0.75	1.45	193.69	0.5	4.16	0.65	0.28	0.00	0.00
AUGUST	18.00	0.00	0.59	2.35	395.39	0.4	3.99	0.03	0.00	0.00	0.00
SEPTEMBER	56.00	0.00	1.23	6.34	517.22	0.9	5.45	0.21	0.02	0.00	0.00
ANNUAL	3900.00	0.00	11.56	142.47	1232.01	100.0	15.15	1.50	0.25	0.00	0.00

LOCATION.--Lat 46°48'51", long 100°49'12", in SE¼NW¼SE¼ sec.31, T.139 N., R.80 W., Burleigh County, Hydrologic Unit 10130101, on left bank 40 ft (12 m) upstream from Bismarck city waterplant, 2,100 ft (640 m) downstream from Burlington Northern Railway bridge, 1.6 mi (2.6 km) northwest of Bismarck Post Office, 3.5 mi (5.6 km) upstream from Heart River, and at mile 1,314.5 (2,115.0 km).

DRAINAGE AREA.--186,400 mi² (482,800 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS						PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION		75	MEDIAN	25
								50	
TEMPERATURE (DEG C)	66	17.00	0.00	7.77	6.30		14.00	8.25	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	24	32000.00	14800.00	24204.16	5242.09	29874.95	24450.00	20700.00	
SPECIFIC CONDUCTANCE (MICROMHOS)	59	822.00	510.00	704.49	52.83	735.00	700.00	675.00	
OXYGEN, DISSOLVED (MG/L)	55	13.20	8.30	10.95	1.59	12.50	10.70	9.50	
OXYGEN, DISSOLVED (PERCENT SATURATION)	33	103.00	79.00	92.06	6.03	96.00	93.00	87.00	
PH (UNITS)	59	8.60	7.80	8.32	0.16	8.40	8.30	8.30	
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	12	2.70	0.80	1.47	0.56	1.72	1.30	1.05	
BICARBONATE (MG/L AS HCO3)	12	220.00	180.00	195.00	11.68	200.00	190.00	190.00	
CARBONATE (MG/L AS CO3)	12	5.00	0.00	0.83	1.47	1.00	0.00	0.00	
NITROGEN, TOTAL (MG/L AS N)	57	1.80	0.13	0.54	0.29	0.62	0.47	0.39	
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	57	1.80	0.00	0.37	0.28	0.45	0.30	0.21	
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	57	0.16	0.00	0.02	0.03	0.02	0.01	0.00	
NITROGEN, NO2+NO3, TOTAL (MG/L AS N)	58	0.43	0.03	0.15	0.08	0.20	0.15	0.09	
PHOSPHORUS, TOTAL (MG/L AS P)	57	0.42	0.00	0.05	0.07	0.04	0.03	0.02	
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	47	15.00	2.50	4.41	2.30	4.90	3.80	3.20	
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	44	1.50	0.00	0.35	0.29	0.40	0.30	0.20	
HARDNESS (MG/L AS CaCO3)	34	260.00	210.00	236.47	11.25	250.00	235.00	230.00	
HARDNESS, NONCARBONATE (MG/L AS CaCO3)	34	100.00	62.00	82.79	9.68	88.25	81.50	76.75	
CALCIUM, DISSOLVED (MG/L AS Ca)	34	61.00	47.00	55.88	2.89	58.00	56.00	54.00	
MAGNESIUM, DISSOLVED (MG/L AS Mg)	35	26.00	22.00	23.54	1.29	24.00	23.00	22.00	
SODIUM, DISSOLVED (MG/L AS Na)	35	80.00	58.00	69.14	6.36	75.00	67.00	65.00	
SODIUM PERCENT	35	54.00	3.00	38.80	7.98	40.00	39.00	37.00	
POTASSIUM, DISSOLVED (MG/L AS K)	35	5.00	2.70	4.34	0.39	4.60	4.30	4.20	
CHLORIDE, DISSOLVED (MG/L AS CL)	36	13.00	8.00	10.23	1.15	10.00	9.90	9.65	
SULFATE, DISSOLVED (MG/L AS SO4)	36	260.00	170.00	211.67	24.67	230.00	210.00	190.00	
FLUORIDE, DISSOLVED (MG/L AS F)	36	0.70	0.30	0.51	0.09	0.60	0.50	0.43	
SILICA, DISSOLVED (MG/L AS SiO2)	36	8.90	2.70	7.27	1.10	8.10	7.60	6.60	
ARSENIC, DISSOLVED (UG/L AS AS)	5	2.00	2.00	2.00	0.00	2.00	2.00	2.00	
ARSENIC, TOTAL (UG/L AS AS)	19	5.00	1.00	2.84	1.12	4.00	3.00	2.00	
BARIUM, DISSOLVED (UG/L AS BA)	18	400.00	0.00	133.33	108.47	200.00	100.00	100.00	
BERYLLIUM, DISSOLVED (UG/L AS BE)	5	10.00	0.00	2.00	4.47	5.00	0.00	0.00	
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	19	20.00	0.00	1.84	5.06	0.00	0.00	0.00	
BORON, DISSOLVED (UG/L AS B)	36	540.00	9.00	140.53	75.15	140.00	130.00	120.00	
CHROMIUM, DISSOLVED (UG/L AS CR)	5	10.00	0.00	2.00	4.47	5.00	0.00	0.00	
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	18	10.00	0.00	4.17	4.93	10.00	0.00	0.00	
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	18	50.00	0.00	3.17	11.72	1.00	0.00	0.00	
COPPER, DISSOLVED (UG/L AS CU)	5	3.00	0.00	1.60	1.14	2.50	2.00	0.50	
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	19	14.00	1.00	7.26	3.35	10.00	7.00	6.00	
IRON, TOTAL RECOVERABLE (UG/L AS FE)	19	2200.00	370.00	1426.84	551.22	1800.00	1600.00	910.00	
IRON, DISSOLVED (UG/L AS FE)	5	400.00	0.00	90.00	173.49	210.00	20.00	5.00	
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	19	50.00	10.00	37.37	12.40	50.00	40.00	30.00	
MANGANESE, DISSOLVED (UG/L AS MN)	5	30.00	0.00	10.80	11.54	20.00	10.00	2.00	
MOLYBDENUM, DISSOLVED (UG/L AS MU)	5	3.00	0.00	1.40	1.34	2.50	2.00	0.00	
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MU)	19	9.00	0.00	3.47	2.57	5.00	3.00	2.00	
NICKEL, DISSOLVED (UG/L AS NI)	5	7.00	0.00	2.20	2.77	4.50	1.00	0.50	
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	19	50.00	3.00	8.47	10.29	8.00	6.00	4.00	
VANADIUM, DISSOLVED (UG/L AS V)	5	1.10	0.00	0.42	0.58	1.05	0.00	0.00	
ZINC, DISSOLVED (UG/L AS ZN)	5	20.00	8.00	11.60	4.77	15.00	10.00	9.00	
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	19	40.00	10.00	21.05	8.75	30.00	20.00	10.00	
ALUMINUM, DISSOLVED (UG/L AS AL)	5	220.00	0.00	58.00	91.49	125.00	30.00	5.00	
LITHIUM, DISSOLVED (UG/L AS LI)	5	50.00	40.00	44.00	5.48	50.00	40.00	40.00	
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	8	50.00	30.00	43.75	9.16	50.00	50.00	32.50	
SELENIUM, DISSOLVED (UG/L AS SE)	5	2.00	0.00	1.00	0.71	1.50	1.00	0.50	
SELENIUM, TOTAL (UG/L AS SE)	19	1.00	0.00	0.95	0.23	1.00	1.00	1.00	
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	59	548.00	349.00	474.98	34.88	493.00	476.00	451.00	
SOLIDS, DISSOLVED (TONS PER AC-FT)	59	0.75	0.47	0.65	0.05	0.67	0.65	0.61	
MERCURY, DISSOLVED (UG/L AS HG)	5	1.20	0.00	0.24	0.54	0.60	0.00	0.00	
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	19	0.20	0.00	0.05	0.06	0.10	0.00	0.00	
SEDIMENT, SUSPENDED (MG/L)	62	892.00	14.00	137.52	117.33	164.75	124.00	73.50	
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	44	80000.00	794.00	12752.59	13651.24	15025.00	9165.00	4470.00	

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS						PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50	25	5
									MEDIAN		
OCTOBER	43100	12400	21748	9280	42.67	6.8	34530	33900	16500	14750	13100
NOVEMBER	37200	12400	22493	9600	42.68	6.8	36235	34600	15850	14875	12655
DECEMBER	59500	14800	22755	4402	19.35	7.1	30870	25500	22500	20000	15910
JANUARY	35000	19000	27602	4363	15.81	8.6	34300	30500	28000	25750	19000
FEBRUARY	34500	28000	31005	1615	5.21	8.8	34440	32000	30500	30000	29000
MARCH	33200	21000	27963	3266	11.68	8.7	32000	31000	29000	25500	22000
APRIL	53500	16000	26567	7357	27.90	8.0	42150	29350	22950	21650	18000
MAY	44100	10900	25767	10781	41.84	8.0	43830	34850	20000	18350	14140
JUNE	43500	20200	31927	8774	27.48	9.6	43400	41850	33250	23075	21065
JULY	42800	24500	32956	7063	21.43	10.3	42630	42300	30300	26900	24500
AUGUST	43500	21500	30162	8737	28.97	9.4	43130	42350	25200	23750	21800
SEPTEMBER	42900	17300	25972	7494	28.85	7.8	40925	31225	23550	19375	17765
ANNUAL	53500	10900	27205	8222	30.22	100.0	42900	32075	26450	21500	14785

LOCATION.--Lat 46°51'12", long 103°08'51" in NW¼NW¼SW¼ sec.14, T.139 N., R.99 W., Stark County, Hydrologic Unit 10130202, on left bank 60 ft (18 m) downstream from bridge on township road, 3.4 mi (5.5 km) southeast of Belfield, and 5.4 mi (8.7 km) upstream from mouth.

DRAINAGE AREA.--39.8 mi² (103 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1978 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	MEDIAN		
						75	50	25
TEMPERATURE (DEG C)	6	15.00	0.00	4.67	5.57	8.25	3.50	0.00
STREAMFLOW, INSTANTANEOUS (CFS)	6	53.00	0.06	10.10	21.06	16.25	1.66	0.19
SPECIFIC CONDUCTANCE (MICROHMS)	6	4250.00	645.00	2327.50	1324.92	3492.50	2310.00	1068.75
OXYGEN, DISSOLVED (MG/L)	6	62.00	9.10	19.27	20.97	24.60	11.25	9.48
OXYGEN, DISSOLVED (PERCENT SATURATION)	6	101.00	67.00	84.33	12.55	97.25	83.00	73.75
PH (UNITS)	6	8.20	7.60	7.98	0.24	8.20	8.05	7.75
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	6	8.10	2.40	4.43	2.05	5.78	4.20	2.63
BICARBONATE (MG/L AS HCO3)	6	509.00	105.00	285.67	159.46	424.25	290.00	119.25
CARBONATE (MG/L AS CO3)	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	6	2.70	1.00	1.67	0.59	2.03	1.65	1.15
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	6	1.90	0.90	1.29	0.40	1.68	1.20	0.92
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	6	0.50	0.06	0.23	0.17	0.39	0.18	0.08
NITROGEN, NO2+NO3, TOTAL (MG/L AS N)	6	0.58	0.01	0.15	0.23	0.36	0.02	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	6	0.29	0.07	0.16	0.09	0.24	0.14	0.08
PHOSPHORUS, DISSOLVED (MG/L AS P)	6	0.21	0.02	0.07	0.07	0.11	0.06	0.02
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	6	43.00	18.00	30.67	9.42	39.25	31.50	21.00
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	4	2.00	1.50					
HARDNESS (MG/L AS CaCO3)	6	1000.00	130.00	480.00	330.70	752.50	445.00	175.00
HARDNESS, NONCARBONATE (MG/L CaCO3)	6	580.00	44.00	247.00	201.76	407.50	210.00	77.00
CALCIUM, DISSOLVED (MG/L AS Ca)	6	170.00	24.00	87.50	57.87	132.50	88.50	31.50
MAGNESIUM, DISSOLVED (MG/L AS MG)	6	140.00	16.00	63.00	46.38	102.50	53.50	22.75
SODIUM, DISSOLVED (MG/L AS NA)	6	630.00	86.00	364.33	199.98	532.50	390.00	164.00
SODIUM PERCENT	6	71.00	58.00	63.00	5.02	68.00	61.50	58.75
POTASSIUM, DISSOLVED (MG/L AS K)	6	10.00	5.20	7.87	1.90	10.00	7.70	6.25
CHLORIDE, DISSOLVED (MG/L AS CL)	6	8.50	3.10	5.80	2.19	7.75	6.05	3.48
SULFATE, DISSOLVED (MG/L AS SO4)	6	1800.00	220.00	923.33	556.08	1350.00	920.00	415.00
FLUORIDE, DISSOLVED (MG/L AS F)	6	0.40	0.10	0.25	0.14	0.40	0.25	0.10
SILICA, DISSOLVED (MG/L AS SiO2)	6	7.50	2.10	4.92	1.90	6.15	5.40	3.08
ARSENIC, DISSOLVED (UG/L AS AS)	2	2.00	1.00					
ARSENIC, TOTAL (UG/L AS AS)	2	2.00	2.00					
BARIUM, DISSOLVED (UG/L AS BA)	2	50.00	40.00					
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	2	100.00	100.00					
BERYLLIUM, DISSOLVED (UG/L AS BE)	2	1.00	1.00					
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	2	0.00	0.00					
BORON, DISSOLVED (UG/L AS B)	6	1300.00	1.00	575.17	530.09	1067.50	510.00	105.25
CHROMIUM, DISSOLVED (UG/L AS CR)	2	10.00	0.00					
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	2	10.00	10.00					
COBALT, DISSOLVED (UG/L AS CO)	2	3.00	3.00					
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	2	3.00	2.00					
COPPER, DISSOLVED (UG/L AS CU)	2	10.00	9.00					
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	2	13.00	5.00					
IRON, DISSOLVED (UG/L AS FE)	6	260.00	60.00	145.00	92.68	252.50	115.00	67.50
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	2	530.00	180.00					
MANGANESE, DISSOLVED (UG/L AS MN)	2	510.00	120.00					
MOLYBDENUM, DISSOLVED (UG/L AS MU)	2	10.00	10.00					
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MU)	2	3.00	3.00					
NICKEL, DISSOLVED (UG/L AS NI)	2	3.00	0.00					
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	2	8.00	6.00					
VANADIUM, DISSOLVED (UG/L AS V)	2	6.00	1.40					
ZINC, DISSOLVED (UG/L AS ZN)	2	6.00	6.00					
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	2	50.00	20.00					
ALUMINUM, DISSOLVED (UG/L AS AL)	2	80.00	50.00					
LITHIUM, DISSOLVED (UG/L AS LI)	2	22.00	8.00					
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	2	10.00	4.00					
SELENIUM, DISSOLVED (UG/L AS SE)	2	0.00	0.00					
SELENIUM, TOTAL (UG/L AS SE)	2	0.00	0.00					
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	6	3500.00	445.00	1797.50	1116.10	2720.00	1760.00	756.25
SOLIDS, DISSOLVED (TONS PER AC-FT)	6	4.76	0.61	2.45	1.52	3.70	2.40	1.03
MERCURY, DISSOLVED (UG/L AS HG)	2	0.10	0.10					
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	2	0.10	0.10					
SEDIMENT, SUSPENDED (MG/L)	6	62.00	32.00	43.83	11.44	55.25	40.50	34.25
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	6	8.90	0.01	1.60	3.58	2.49	0.16	0.02

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1978 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	MEDIAN			
							95	75	50	25
OCTOBER	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
NOVEMBER	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
DECEMBER	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
JANUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
FEBRUARY	0.08	0.00	0.00	0.01	479.20	0.0	0.02	0.00	0.00	0.00
MARCH	120.00	0.00	11.63	26.98	232.02	34.4	79.25	5.13	0.40	0.02
APRIL	146.00	0.00	22.25	37.46	168.32	63.7	119.85	41.25	1.32	0.04
MAY	2.40	0.00	0.56	0.72	128.68	1.7	1.98	1.05	0.14	0.00
JUNE	0.26	0.00	0.05	0.08	151.09	0.1	0.22	0.09	0.00	0.00
JULY	0.06	0.00	0.00	0.01	274.62	0.0	0.04	0.00	0.00	0.00
AUGUST	0.02	0.00	0.00	0.00	465.51	0.0	0.01	0.00	0.00	0.00
SEPTEMBER	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
ANNUAL	146.00	0.00	2.87	14.77	515.61	100.0	5.20	0.01	0.00	0.00

LOCATION.--Lat 46°50'24", Long 103°01'12", in NE&NE&SE sec.22, T.139 N., R.98 W., Stark County, Hydrologic Unit 10130202, on left bank 20 ft (6.1 m) upstream from bridge on county road, 4.1 mi (6.6 km) upstream from mouth and 2.1 mi (3.4 km) southwest of South Heart.

DRAINAGE AREA.--132 mi² (342 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1978 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	50	25
TEMPERATURE (DEG C)	11	21.00	0.00	9.64	9.05	19.00	8.00	0.00
STREAMFLOW, INSTANTANEOUS (CFS)	11	517.00	0.01	72.54	159.65	68.00	1.60	0.02
SPECIFIC CONDUCTANCE (MICROHMUS)	9	2460.00	448.00	1137.44	723.45	1785.00	892.00	536.00
OXYGEN, DISSOLVED (MG/L)	9	12.40	4.50	9.56	2.96	11.90	11.20	6.75
OXYGEN, DISSOLVED (PERCENT SATURATION)	9	113.00	52.00	86.78	19.50	102.00	85.00	74.00
PH (UNITS)	9	8.80	7.40	8.14	0.44	8.40	8.30	7.75
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	9	5.40	0.50	2.67	1.50	5.70	2.40	1.70
BICARBONATE (MG/L AS HCO ₃)	9	422.00	84.00	225.22	125.57	356.00	199.00	102.50
CARBONATE (MG/L AS CO ₃)	9	10.00	0.00	1.69	3.33	3.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	9	3.20	0.14	1.62	1.07	2.85	1.20	0.93
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	9	2.60	0.09	1.25	0.83	1.90	1.10	0.77
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	9	0.38	0.01	0.11	0.11	0.12	0.08	0.06
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	9	1.80	0.00	0.26	0.59	0.27	0.01	0.00
PHOSPHORUS, TOTAL (MG/L AS P)	9	0.66	0.06	0.24	0.18	0.28	0.21	0.11
PHOSPHORUS, DISSOLVED (MG/L AS P)	9	0.52	0.01	0.14	0.15	0.18	0.11	0.05
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	9	27.00	8.40	15.71	5.45	19.00	15.00	12.00
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	9	1.90	0.60	1.11	0.43	1.30	1.10	0.70
HARDNESS (MG/L AS CaCO ₃)	7	470.00	16.00	154.56	162.15	255.00	91.00	66.00
HARDNESS, NONCARBONATE (MG/L AS CaCO ₃)	9	120.00	0.00	26.89	46.29	58.50	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	7	94.00	4.70	38.24	36.30	87.00	21.00	17.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	8	56.00	1.00	18.60	20.20	36.75	10.15	6.43
SODIUM, DISSOLVED (MG/L AS Na)	8	380.00	65.00	196.00	126.38	317.50	175.00	68.25
SODIUM PERCENT	9	94.00	58.00	73.11	14.21	89.00	63.00	62.50
POTASSIUM, DISSOLVED (MG/L AS K)	9	12.00	3.50	7.29	2.71	9.10	7.50	4.70
CHLORIDE, DISSOLVED (MG/L AS CL)	9	15.00	3.80	6.59	4.26	9.25	4.70	4.15
SULFATE, DISSOLVED (MG/L AS SO ₄)	9	910.00	140.00	381.11	282.24	615.00	280.00	160.00
FLUORIDE, DISSOLVED (MG/L AS F)	9	0.80	0.10	0.29	0.22	0.35	0.30	0.10
SILICA, DISSOLVED (MG/L AS SiO ₂)	8	20.00	1.60	8.84	6.02	13.78	6.70	6.30
ARSENIC, DISSOLVED (UG/L AS AS)	3	17.00	2.00					
ARSENIC, TOTAL (UG/L AS AS)	4	26.00	2.00					
BARIUM, DISSOLVED (UG/L AS BA)	4	100.00	0.00					
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	4	200.00	0.00					
BERYLLIUM, DISSOLVED (UG/L AS BE)	4	1.00	0.00					
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	4	0.00	0.00					
BORON, DISSOLVED (UG/L AS B)	9	420.00	110.00	210.00	106.42	295.00	190.00	120.00
CHROMIUM, DISSOLVED (UG/L AS CR)	4	10.00	0.00					
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	4	10.00	0.00					
COBALT, DISSOLVED (UG/L AS CO)	4	3.00	0.00					
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	4	3.00	0.00					
COPPER, DISSOLVED (UG/L AS CU)	4	25.00	10.00					
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	4	30.00	5.00					
IRON, DISSOLVED (UG/L AS FE)	8	320.00	20.00	125.75	111.64	232.50	75.00	31.50
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	4	250.00	60.00					
MANGANESE, DISSOLVED (UG/L AS MN)	4	230.00	2.00					
MOLYBDENUM, DISSOLVED (UG/L AS MO)	4	10.00	0.00					
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	4	2.00	0.00					
NICKEL, DISSOLVED (UG/L AS NI)	4	4.00	0.00					
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	4	10.00	3.00					
VANADIUM, DISSOLVED (UG/L AS V)	4	28.00	1.90					
ZINC, DISSOLVED (UG/L AS ZN)	4	30.00	3.00					
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	4	30.00	10.00					
ALUMINUM, DISSOLVED (UG/L AS AL)	4	80.00	10.00					
LITHIUM, DISSOLVED (UG/L AS LI)	4	10.00	9.00					
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	4	20.00	7.00					
SELENIUM, DISSOLVED (UG/L AS SE)	4	4.00	0.00					
SELENIUM, TOTAL (UG/L AS SE)	4	3.00	0.00					
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	9	1720.00	265.00	776.44	521.81	1250.00	593.00	368.00
SOLIDS, DISSOLVED (TUNS PER AC-FT)	9	2.34	0.36	1.06	0.71	1.70	0.81	0.50
MERCURY, DISSOLVED (UG/L AS HG)	4	0.10	0.00					
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	4	0.20	0.00					
SEDIMENT, SUSPENDED (MG/L)	11	18000.00	18.00	1745.73	5392.47	200.00	59.00	28.00
SEDIMENT DISCHARGE, SUSPENDED (T/UY)	11	624.00	0.00	69.67	185.46	32.00	0.19	0.01

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1978 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50	25
OCTOBER	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
NOVEMBER	0.10	0.00	0.00	0.02	480.47	0.0	0.03	0.00	0.00	0.00
DECEMBER	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
JANUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
FEBRUARY	0.12	0.00	0.00	0.02	531.33	0.0	0.01	0.00	0.00	0.00
MARCH	270.00	0.00	27.80	60.18	216.51	26.6	194.00	16.25	2.50	0.10
APRIL	492.00	0.00	74.27	127.42	171.57	68.8	423.75	97.50	5.40	0.54
MAY	7.00	0.00	1.13	1.69	149.49	1.1	5.30	1.88	0.20	0.00
JUNE	3.70	0.00	0.24	0.69	284.58	0.2	2.47	0.08	0.00	0.00
JULY	37.00	0.00	1.19	4.94	413.80	1.1	6.05	0.03	0.00	0.00
AUGUST	44.00	0.00	1.37	5.75	419.97	1.3	7.15	0.38	0.00	0.00
SEPTEMBER	30.00	0.00	0.81	3.99	489.29	0.8	2.60	0.16	0.01	0.00
ANNUAL	492.00	0.00	8.85	45.41	512.89	100.0	21.80	0.12	0.00	0.00

LOCATION.--Lat 46°53'44", long 102°59'55", in SE¼NE¼SE¼ sec.35, T.140 N., R.98 W., Stark County, Hydrologic Unit 10130202, on left bank 120 ft (36 m) downstream from culvert on county road, 5.4 mi (8.7 km) upstream from mouth and 2.2 mi (3.5 km) north of South Heart.

DRAINAGE AREA.--40.8 mi² (106 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1978 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	50 MEDIAN	25
TEMPERATURE (DEG C)	11	24.00	0.00	6.73	7.47	11.00	3.00	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	11	74.00	0.01	7.08	22.20	0.88	0.07	0.04
SPECIFIC CONDUCTANCE (MICROMHUS)	10	4740.00	337.00	2194.20	1387.99	3215.00	1745.00	1156.25
OXYGEN, DISSOLVED (MG/L)	10	13.30	7.60	10.42	1.70	11.73	10.15	9.50
OXYGEN, DISSOLVED (PERCENT SATURATION)	10	108.00	72.00	90.20	13.43	103.00	91.00	75.75
PH (UNITS)	10	8.60	7.60	8.24	0.38	8.60	8.35	7.80
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	10	6.70	1.50	3.67	1.76	5.38	3.15	2.23
BICARBONATE (MG/L AS HCO3)	10	1240.00	66.00	461.30	360.63	645.00	328.50	258.00
CARBONATE (MG/L AS CO3)	10	34.00	0.00	7.80	12.81	13.25	1.50	0.00
NITROGEN, TOTAL (MG/L AS N)	10	2.90	1.00	1.66	0.60	2.08	1.55	1.23
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	10	2.20	0.95	1.49	0.45	1.95	1.40	1.14
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10	0.47	0.02	0.10	0.14	0.09	0.06	0.03
NITROGEN, NO2+NO3, TOTAL (MG/L AS N)	10	0.28	0.00	0.07	0.11	0.14	0.02	0.00
PHOSPHORUS, TOTAL (MG/L AS P)	10	0.38	0.05	0.15	0.11	0.22	0.11	0.07
PHOSPHORUS, DISSOLVED (MG/L AS P)	10	0.30	0.02	0.07	0.08	0.08	0.05	0.02
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	10	42.00	8.90	22.21	10.83	28.75	21.50	12.80
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	10	4.60	0.50	1.77	1.20	2.58	1.55	0.80
HARDNESS (MG/L AS CaCO3)	10	710.00	65.00	301.50	199.75	390.00	290.00	115.00
HARDNESS, NONCARBONATE (MG/L AS CaCO3)	10	410.00	0.00	60.40	126.38	73.75	10.50	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	10	120.00	12.00	50.70	32.80	67.50	46.00	20.50
MAGNESIUM, DISSOLVED (MG/L AS Mg)	10	100.00	8.60	42.26	29.14	57.50	39.50	15.75
SODIUM, DISSOLVED (MG/L AS Na)	10	1100.00	41.00	429.10	336.70	647.50	310.00	195.00
SODIUM PERCENT	10	95.00	55.00	71.50	13.47	85.25	68.50	60.50
POTASSIUM, DISSOLVED (MG/L AS K)	10	15.00	4.90	10.26	3.59	14.00	11.00	7.05
CHLORIDE, DISSOLVED (MG/L AS CL)	10	9.70	1.80	6.23	2.67	8.85	6.20	4.08
SULFATE, DISSOLVED (MG/L AS SO4)	10	1600.00	100.00	815.00	534.57	1400.00	615.00	390.00
FLUORIDE, DISSOLVED (MG/L AS F)	10	0.60	0.10	0.27	0.16	0.35	0.20	0.18
SILICA, DISSOLVED (MG/L AS SiO2)	10	8.60	0.40	4.19	3.21	7.53	4.10	0.73
ARSENIC, DISSOLVED (UG/L AS AS)	2	3.00	1.00					
ARSENIC, TOTAL (UG/L AS AS)	2	3.00	2.00					
BARIUM, DISSOLVED (UG/L AS BA)	2	50.00	40.00					
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	2	100.00	100.00					
BERYLLIUM, DISSOLVED (UG/L AS BE)	2	1.00	1.00					
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	2	0.00	0.00					
BORON, DISSOLVED (UG/L AS B)	10	1600.00	150.00	789.00	545.50	1450.00	530.00	400.00
CHROMIUM, DISSOLVED (UG/L AS CR)	1	0.00	0.00					
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	2	20.00	20.00					
COBALT, DISSOLVED (UG/L AS CO)	2	3.00	3.00					
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	2	3.00	3.00					
COPPER, DISSOLVED (UG/L AS CU)	2	13.00	10.00					
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	2	8.00	7.00					
IRON, DISSOLVED (UG/L AS FE)	10	430.00	10.00	147.00	132.92	197.50	110.00	67.50
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	2	260.00	200.00					
MANGANESE, DISSOLVED (UG/L AS MN)	2	250.00	70.00					
MOLYBDENUM, DISSOLVED (UG/L AS MO)	2	10.00	10.00					
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	2	2.00	1.00					
NICKEL, DISSOLVED (UG/L AS NI)	2	4.00	0.00					
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	2	12.00	6.00					
VANADIUM, DISSOLVED (UG/L AS V)	2	6.00	2.30					
ZINC, DISSOLVED (UG/L AS ZN)	2	9.00	8.00					
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	2	40.00	20.00					
ALUMINUM, DISSOLVED (UG/L AS AL)	2	230.00	40.00					
LITHIUM, DISSOLVED (UG/L AS LI)	2	11.00	6.00					
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	2	10.00	4.00					
SELENIUM, DISSOLVED (UG/L AS SE)	2	0.00	0.00					
SELENIUM, TOTAL (UG/L AS SE)	2	0.00	0.00					
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	10	3460.00	235.00	1601.70	1042.89	2482.50	1194.50	829.25
SOLIDS, DISSOLVED (TONS PER AC-FT)	10	4.71	0.32	2.18	1.42	3.37	1.62	1.13
MERCURY, DISSOLVED (UG/L AS HG)	2	0.10	0.00					
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	2	0.10	0.10					
SEDIMENT, SUSPENDED (MG/L)	11	260.00	11.00	81.91	70.97	129.00	62.00	36.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	11	27.00	0.00	2.51	8.12	0.15	0.01	0.01

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1978 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF ANNUAL RUNOFF	PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION		95	75	50 MEDIAN	25	5
OCTOBER	0.07	0.00	0.03	0.02	67.29	0.1	0.06	0.05	0.04	0.01	0.00
NOVEMBER	0.08	0.01	0.04	0.02	46.37	0.1	0.07	0.06	0.04	0.03	0.01
DECEMBER	0.04	0.00	0.01	0.01	96.60	0.0	0.04	0.02	0.01	0.00	0.00
JANUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00	0.00
FEBRUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00	0.00
MARCH	100.00	0.00	9.60	20.89	217.55	27.0	63.50	2.90	0.14	0.01	0.00
APRIL	220.00	0.06	24.05	44.90	186.69	65.5	136.70	30.00	1.76	0.16	0.08
MAY	2.00	0.00	0.25	0.45	178.01	0.7	1.35	0.25	0.05	0.00	0.00
JUNE	53.00	0.00	1.28	7.12	554.56	3.5	4.08	0.04	0.01	0.00	0.00
JULY	29.00	0.00	1.00	4.45	443.49	2.8	6.83	0.05	0.00	0.00	0.00
AUGUST	0.06	0.00	0.00	0.01	390.26	0.0	0.03	0.00	0.00	0.00	0.00
SEPTEMBER	3.80	0.00	0.09	0.51	535.15	0.3	0.19	0.02	0.00	0.00	0.00
ANNUAL	220.00	0.00	3.02	15.86	526.08	100.0	17.80	0.06	0.01	0.00	0.00

LOCATION.--Lat 46°51'56", long 102°56'53", in NE&SE&SW sec.8, T.139 N., R.97 W., Stark County, Hydrologic Unit 10130202, on left bank 1.7 mi (2.7 km) downstream from North Creek, 2 mi (3.2 km) east of South Heart, and 5.5 mi (8.8 km) upstream from Edward Arthur Patterson Lake.

DRAINAGE AREA.--311 mi² (805 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	50	25
TEMPERATURE (DEG C)	41	24.00	0.00	8.82	8.35	17.00	7.50	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	41	745.00	0.04	49.59	147.97	11.65	0.92	0.59
SPECIFIC CONDUCTANCE (MICROMH/CM)	36	3900.00	587.00	2480.72	921.43	3232.50	2525.00	1862.50
OXYGEN, DISSOLVED (MG/L)	36	14.20	5.40	8.93	2.02	10.70	8.45	7.62
OXYGEN, DISSOLVED (PERCENT SATURATION)	36	109.00	42.00	82.00	15.90	93.75	83.50	71.25
PH (UNITS)	36	8.80	7.40	8.18	0.32	8.40	8.20	8.00
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	36	71.00	1.10	9.09	12.45	11.28	4.35	3.23
BICARBONATE (MG/L AS HCO ₃)	36	1160.00	95.00	634.67	312.96	862.50	628.00	413.00
CARBONATE (MG/L AS CO ₃)	36	29.00	0.00	3.82	7.48	4.35	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	35	14.00	0.61	1.78	2.26	1.70	1.30	0.98
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	35	11.00	0.29	1.41	1.78	1.40	1.10	0.82
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	35	2.10	0.00	0.17	0.36	0.18	0.06	0.02
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	35	1.40	0.00	0.19	0.31	0.31	0.02	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	35	0.73	0.06	0.21	0.14	0.27	0.19	0.10
PHOSPHORUS, DISSOLVED (MG/L AS P)	36	0.35	0.00	0.11	0.08	0.14	0.10	0.04
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	35	44.00	1.00	19.69	9.12	24.00	16.00	14.00
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	30	10.00	0.40	1.86	1.69	1.93	1.60	1.10
HARDNESS (MG/L AS CaCO ₃)	36	510.00	84.00	283.28	126.79	377.50	295.00	150.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	36	150.00	0.00	19.61	41.75	17.25	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	36	110.00	21.00	54.25	24.47	67.75	55.50	30.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	36	66.00	7.70	35.81	16.86	48.00	39.00	19.00
SODIUM, DISSOLVED (MG/L AS Na)	36	900.00	72.00	504.50	219.35	680.00	505.00	352.50
SODIUM PERCENT	36	93.00	57.00	78.14	10.51	87.50	79.00	67.75
POTASSIUM, DISSOLVED (MG/L AS K)	36	24.00	5.60	8.86	3.15	9.25	8.40	7.03
CHLORIDE, DISSOLVED (MG/L AS CL)	36	47.00	3.80	20.91	11.48	31.25	20.50	10.50
SULFATE, DISSOLVED (MG/L AS SO ₄)	36	1200.00	180.00	796.67	287.53	1000.00	815.00	545.00
FLUORIDE, DISSOLVED (MG/L AS F)	36	1.80	0.10	0.75	0.44	1.08	0.75	0.33
SILICA, DISSOLVED (MG/L AS SiO ₂)	36	25.00	3.40	10.50	5.20	13.75	9.55	6.38
ARSENIC, DISSOLVED (UG/L AS AS)	10	14.00	1.00	4.30	3.92	5.00	3.00	2.00
ARSENIC, TOTAL (UG/L AS AS)	7	14.00	2.00	5.71	4.19	8.00	4.00	3.00
BARIUM, DISSOLVED (UG/L AS BA)	10	300.00	0.00	98.00	90.77	125.00	80.00	45.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	7	400.00	100.00	200.00	115.47	300.00	200.00	100.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	10	10.00	0.00	1.90	3.07	3.00	1.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	7	10.00	0.00	4.29	5.35	10.00	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	36	1300.00	150.00	744.44	304.97	982.50	780.00	512.50
CHROMIUM, DISSOLVED (UG/L AS CR)	10	10.00	0.00	2.40	4.20	5.50	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	7	10.00	0.00	4.29	5.35	10.00	0.00	0.00
COBALT, DISSOLVED (UG/L AS CO)	10	8.00	0.00	2.60	3.13	4.25	2.00	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	7	4.00	0.00	2.00	1.29	3.00	2.00	1.00
COPPER, DISSOLVED (UG/L AS CU)	12	35.00	2.00	14.17	11.55	25.00	9.00	3.50
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	7	17.00	3.00	10.29	5.22	16.00	10.00	5.00
IRON, DISSOLVED (UG/L AS FE)	36	560.00	10.00	122.86	121.73	137.50	86.50	50.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	7	360.00	90.00	197.14	96.21	290.00	180.00	110.00
MANGANESE, DISSOLVED (UG/L AS MN)	10	270.00	4.00	64.90	75.48	61.25	55.00	23.75
MOLYBDENUM, DISSOLVED (UG/L AS MO)	10	25.00	1.00	9.50	8.86	13.75	7.50	2.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	7	8.00	0.00	2.71	2.75	4.00	2.00	0.00
NICKEL, DISSOLVED (UG/L AS NI)	10	10.00	0.00	3.90	2.64	5.00	4.00	2.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	7	16.00	3.00	8.43	4.50	12.00	8.00	4.00
VANADIUM, DISSOLVED (UG/L AS V)	10	32.00	0.00	6.50	9.48	8.25	3.00	1.50
ZINC, DISSOLVED (UG/L AS ZN)	10	23.00	3.00	10.80	6.25	12.50	10.00	7.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	7	30.00	10.00	24.29	7.87	30.00	30.00	20.00
ALUMINUM, DISSOLVED (UG/L AS AL)	10	50.00	0.00	28.00	16.19	42.50	30.00	17.50
LITHIUM, DISSOLVED (UG/L AS LI)	10	48.00	7.00	28.90	14.17	40.00	30.00	13.50
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	7	60.00	9.00	25.57	19.16	40.00	20.00	10.00
SELENIUM, DISSOLVED (UG/L AS SE)	10	1.00	0.00	0.30	0.48	1.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	7	1.00	0.00	0.29	0.49	1.00	0.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	35	2840.00	392.00	1776.89	688.46	2300.00	1840.00	1280.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	36	3.86	0.53	2.40	0.93	3.11	2.46	1.77
MERCURY, DISSOLVED (UG/L AS HG)	10	0.10	0.00	0.03	0.05	0.10	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	7	0.60	0.00	0.13	0.22	0.20	0.00	0.00
SEDIMENT, SUSPENDED (MG/L)	41	1250.00	19.00	153.61	192.76	174.50	117.00	75.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	41	887.00	0.01	38.87	145.45	4.65	0.27	0.11

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50	25
OCTOBER	165.00	0.23	9.58	27.26	284.58	2.4	75.10	1.40	0.68	0.56
NOVEMBER	1.50	0.20	0.77	0.21	27.45	0.2	1.20	0.87	0.70	0.65
DECEMBER	1.30	0.50	0.78	0.17	21.49	0.2	1.10	0.89	0.76	0.69
JANUARY	1.00	0.20	0.62	0.20	32.87	0.2	0.96	0.76	0.63	0.43
FEBRUARY	1.20	0.30	0.78	0.19	24.10	0.2	1.00	0.94	0.80	0.68
MARCH	3820.00	0.80	243.51	639.58	262.65	60.1	1874.99	95.00	3.00	1.25
APRIL	900.00	0.58	116.23	193.70	166.66	27.7	669.80	141.25	33.50	4.35
MAY	507.00	0.23	23.66	66.80	282.31	5.8	140.90	13.50	5.10	0.76
JUNE	101.00	0.00	7.34	16.06	218.76	1.8	41.95	6.45	1.65	0.65
JULY	29.00	0.00	2.51	4.25	169.54	0.6	9.59	3.70	0.88	0.10
AUGUST	36.00	0.00	1.29	3.86	298.72	0.3	3.11	1.20	0.54	0.23
SEPTEMBER	60.00	0.05	2.42	8.03	332.59	0.6	14.25	0.90	0.56	0.21
ANNUAL	3820.00	0.00	34.39	207.14	602.26	100.0	113.20	2.68	0.82	0.60

LOCATION.--Lat 47°01'40", long 103°03'10", on line between secs.13 and 14, T.141 N., R.98 W., Billings County,
Hydrologic Unit 10130202, on left bank below county highway bridge, and 8 mi (13 km) west of New Hradec.

DRAINAGE AREA.--152 mi² (394 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	84	25.00	0.00	8.69	8.65	17.37	5.75	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	86	1080.00	0.32	70.90	202.14	9.85	2.30	1.20
SPECIFIC CONDUCTANCE (MICROMHUS)	84	1600.00	165.00	959.11	334.92	1160.00	1045.00	771.25
OXYGEN, DISSOLVED (MG/L)	35	14.10	6.00	9.29	2.15	10.80	9.00	7.20
OXYGEN, DISSOLVED (PERCENT SATURATION)	35	116.00	58.00	85.60	14.09	99.00	82.00	75.00
PH (UNITS)	42	8.90	6.50	8.05	0.42	8.40	8.15	7.80
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	42	36.00	0.60	6.24	7.05	6.07	3.85	2.50
BICARBONATE (MG/L AS HCO3)	42	499.00	59.00	340.33	122.73	429.25	382.00	280.00
CARBONATE (MG/L AS CO3)	42	26.00	0.00	2.24	4.72	4.25	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	36	5.40	0.17	1.22	0.85	1.38	1.10	0.80
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	36	5.40	0.12	1.03	0.88	1.20	0.85	0.54
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	36	0.37	0.00	0.07	0.08	0.09	0.05	0.02
NITROGEN, NO2+NO3, TOTAL (MG/L AS N)	36	0.64	0.00	0.13	0.18	0.22	0.04	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	36	0.34	0.00	0.09	0.07	0.11	0.06	0.04
PHOSPHORUS, DISSOLVED (MG/L AS P)	36	0.17	0.00	0.03	0.04	0.03	0.02	0.01
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	36	23.00	5.40	11.96	4.22	14.00	12.00	8.85
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	32	5.30	0.10	1.19	0.98	1.48	1.05	0.60
HARDNESS (MG/L AS CaCO3)	42	340.00	40.00	221.95	76.84	270.00	240.00	207.50
HARDNESS, NONCARBONATE (MG/L CaCO3)	42	12.00	0.00	0.50	2.02	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	42	83.00	7.80	44.63	16.18	55.00	46.50	38.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	42	40.00	4.30	26.83	9.36	33.00	30.00	25.50
SODIUM, DISSOLVED (MG/L AS Na)	42	320.00	20.00	147.48	55.49	170.00	160.00	130.00
SODIUM PERCENT	42	74.00	49.00	58.71	6.24	61.00	57.50	54.75
POTASSIUM, DISSOLVED (MG/L AS K)	42	10.00	4.20	6.10	1.34	6.95	5.80	5.18
CHLORIDE, DISSOLVED (MG/L AS CL)	42	13.00	0.50	5.70	2.49	6.75	5.40	4.35
SULFATE, DISSOLVED (MG/L AS SO4)	42	510.00	36.00	251.95	93.44	292.50	255.00	210.00
FLUORIDE, DISSOLVED (MG/L AS F)	42	1.10	0.00	0.34	0.17	0.40	0.40	0.20
SILICA, DISSOLVED (MG/L AS SiO2)	42	16.00	2.20	7.91	3.63	9.40	6.80	5.30
ARSENIC, DISSOLVED (UG/L AS AS)	10	3.00	1.00	1.70	0.67	2.00	2.00	1.00
ARSENIC, TOTAL (UG/L AS AS)	6	3.00	1.00	2.50	0.84	3.00	3.00	1.75
BARIUM, DISSOLVED (UG/L AS BA)	10	200.00	0.00	109.00	60.08	155.00	100.00	82.50
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	6	300.00	0.00	116.67	116.90	225.00	100.00	0.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	10	1.00	0.00	0.50	0.53	1.00	0.50	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	42	640.00	0.00	330.95	126.31	412.50	355.00	295.00
CHROMIUM, DISSOLVED (UG/L AS CR)	10	10.00	0.00	1.00	3.16	0.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	6	10.00	0.00	3.33	5.16	10.00	0.00	0.00
COBALT, DISSOLVED (UG/L AS CO)	10	3.00	0.00	1.50	1.58	3.00	1.50	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	6	3.00	0.00	1.50	1.05	2.25	1.50	0.75
COPPER, DISSOLVED (UG/L AS CU)	11	35.00	0.00	9.55	10.50	10.00	7.00	3.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	6	20.00	4.00	10.67	6.06	15.00	10.00	5.50
IRON, DISSOLVED (UG/L AS FE)	42	590.00	10.00	94.02	131.64	100.00	35.00	20.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	6	500.00	80.00	173.33	83.59	232.50	180.00	87.50
MANGANESE, DISSOLVED (UG/L AS MN)	16	170.00	5.00	51.44	49.77	89.75	30.00	12.50
MOLYBDENUM, DISSOLVED (UG/L AS MO)	10	15.00	0.00	6.30	5.40	10.00	7.50	0.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	6	7.00	1.00	3.67	2.66	6.25	3.50	1.00
NICKEL, DISSOLVED (UG/L AS NI)	10	5.00	0.00	2.40	2.07	4.25	2.50	0.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	6	10.00	6.00	7.67	1.97	10.00	7.00	6.00
VANADIUM, DISSOLVED (UG/L AS V)	10	6.00	0.00	2.46	2.54	6.00	1.00	0.75
ZINC, DISSOLVED (UG/L AS ZN)	10	10.00	3.00	6.70	3.40	10.00	7.50	3.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	6	290.00	10.00	75.00	108.21	132.50	25.00	17.50
ALUMINUM, DISSOLVED (UG/L AS AL)	10	80.00	0.00	25.00	26.77	42.50	15.00	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	10	32.00	9.00	22.80	8.64	30.00	24.00	17.25
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	6	30.00	9.00	23.17	8.50	30.00	25.00	17.25
SELENIUM, DISSOLVED (UG/L AS SE)	10	1.00	0.00	0.10	0.32	0.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	40	1120.00	112.00	665.82	226.83	789.50	708.00	611.25
SOLIDS, DISSOLVED (TONS PER AC-FT)	42	1.52	0.15	0.91	0.30	1.07	0.96	0.84
MERCURY, DISSOLVED (UG/L AS HG)	10	0.10	0.00	0.03	0.05	0.10	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	6	0.20	0.00	0.08	0.08	0.13	0.10	0.00
SEDIMENT, SUSPENDED (MG/L)	37	215.00	9.00	47.38	43.10	51.00	33.00	24.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	37	371.00	0.02	11.26	60.87	0.58	0.16	0.06

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25
OCTOBER	46.00	0.62	4.53	7.95	175.49	1.9	25.10	2.55	1.90	1.30
NOVEMBER	3.00	0.88	1.67	0.60	35.66	0.7	2.70	2.08	1.50	1.20
DECEMBER	4.00	0.85	1.94	0.86	44.32	0.8	3.66	2.35	2.10	1.00
JANUARY	2.40	0.60	1.43	0.52	36.45	0.6	2.00	2.00	1.30	1.00
FEBRUARY	1.90	1.00	1.31	0.30	23.20	0.5	1.80	1.60	1.20	1.00
MARCH	1380.00	1.20	117.47	262.45	223.42	48.7	738.70	35.00	5.00	2.50
APRIL	1040.00	1.40	75.34	173.90	230.85	30.2	487.00	50.75	13.50	3.63
MAY	337.00	0.83	16.01	47.05	293.97	6.6	85.80	8.95	4.70	1.30
JUNE	515.00	0.65	15.06	61.59	408.82	6.0	47.35	5.40	2.95	1.68
JULY	25.00	0.30	2.35	3.28	139.55	1.0	7.09	2.60	1.90	0.60
AUGUST	16.00	0.25	1.77	3.10	174.88	0.7	13.00	1.55	0.93	0.41
SEPTEMBER	70.00	0.26	5.80	11.55	199.35	2.3	31.75	5.25	0.95	0.70
ANNUAL	1380.00	0.25	20.48	100.11	488.71	100.0	50.45	3.68	1.80	1.00

LOCATION.--Lat 46°44'46", long 102°18'27", in NE¼ sec.29, T.138 N., R.92 W., Stark County, Hydrologic Unit 10130202, on right bank 5 ft (2 m) upstream from bridge on State Highway 8, 0.5 mi (0.8 km) downstream from Plum Creek, and 9.5 mi (15.3 km) south of Richardton.

DRAINAGE AREA.--1,240 mi² (3,210 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	MEDIAN		
						75	50	25
TEMPERATURE (DEG C)	52	26.00	0.00	8.37	9.37	18.37	3.50	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	54	9770.00	0.33	891.01	1953.27	585.75	36.50	15.50
SPECIFIC CONDUCTANCE (MICROMHUS)	53	2760.00	290.00	1513.02	645.01	1880.00	1630.00	952.50
PH (UNITS)	4	8.40	7.90					
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	4	3.50	1.70					
BICARBONATE (MG/L AS HCO3)	4	401.00	107.00					
CARBONATE (MG/L AS CO3)	4	0.00	0.00					
HARDNESS (MG/L AS CaCO3)	4	420.00	120.00					
HARDNESS, NONCARBONATE (MG/L CaCO3)	4	120.00	32.00					
CALCIUM, DISSOLVED (MG/L AS Ca)	4	83.00	25.00					
MAGNESIUM, DISSOLVED (MG/L AS Mg)	4	55.00	14.00					
SODIUM, DISSOLVED (MG/L AS Na)	4	240.00	64.00					
SODIUM PERCENT	4	56.00	41.00					
POTASSIUM, DISSOLVED (MG/L AS K)	4	10.00	5.40					
CHLORIDE, DISSOLVED (MG/L AS CL)	4	18.00	4.70					
SULFATE, DISSOLVED (MG/L AS SO4)	4	600.00	160.00					
FLUORIDE, DISSOLVED (MG/L AS F)	4	0.50	0.10					
SILICA, DISSOLVED (MG/L AS SiO2)	4	9.10	4.90					
BORON, DISSOLVED (UG/L AS B)	4	230.00	70.00					
IRON, DISSOLVED (UG/L AS FE)	4	120.00	10.00					
MANGANESE, DISSOLVED (UG/L AS MN)	4	100.00	20.00					
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	4	1210.00	352.00					
SOLIDS, DISSOLVED (TONS PER AC-FT)	4	1.65	0.48					

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS						PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	MEDIAN				
							95	75	50	25	5
OCTOBER	394.00	6.00	54.08	84.64	156.51	3.2	305.00	49.00	19.00	15.00	6.40
NOVEMBER	42.00	13.00	24.10	8.57	35.56	1.4	40.45	28.00	25.00	15.75	13.55
DECEMBER	28.00	10.00	20.62	5.62	27.27	1.2	26.00	25.50	23.00	14.50	12.70
JANUARY	23.00	2.00	9.82	4.84	49.27	0.6	21.00	13.00	8.50	6.90	2.85
FEBRUARY	50.00	3.00	9.92	7.64	77.10	0.5	28.50	9.00	8.20	6.00	4.30
MARCH	9460.00	6.20	865.52	1969.83	227.59	50.9	5925.99	430.00	60.00	18.50	6.89
APRIL	3240.00	13.00	506.93	678.36	133.82	28.9	2257.00	806.50	195.50	60.00	18.10
MAY	958.00	3.40	109.01	173.01	158.72	6.4	579.50	113.00	63.00	12.50	4.10
JUNE	430.00	4.10	61.82	62.82	101.62	3.5	188.35	72.50	45.50	24.00	6.11
JULY	79.00	2.60	24.16	14.74	60.94	1.4	57.50	30.50	21.00	13.00	7.38
AUGUST	34.00	0.10	12.12	7.95	65.62	0.7	26.00	18.00	12.00	5.25	0.17
SEPTEMBER	237.00	2.00	22.92	41.89	182.76	1.3	126.90	20.00	8.50	4.53	2.60
ANNUAL	9460.00	0.10	144.28	657.81	455.93	100.0	572.45	45.00	19.00	10.00	4.10

LOCATION.--Lat 46°36'37", long 101°22'54", in NW¼NW¼SW¼ sec.9, T.136 N., R.85 W., Grant County, Hydrologic Unit 10130203, on right bank 20 ft (6 m) downstream from county highway bridge, 0.6 mi (1.0 km) downstream from Big Muddy Creek, and 10 mi (16 km) north of Lark.

DRAINAGE AREA.--2,750 mi² (7,120 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	43	27.00	0.00	8.98	9.49	18.00	4.00	0.00
STREAMFLOW, INSTANTANEOUS (CFS)	43	10100.00	9.30	921.15	2126.67	513.00	82.00	35.00
SPECIFIC CONDUCTANCE (MICROMHUS)	43	1800.00	420.00	1056.39	327.27	1275.00	1100.00	850.00
PH (UNITS)	5	8.60	7.80	8.24	0.35	8.60	8.10	7.95
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	5	8.60	1.10	3.48	3.11	6.40	2.20	1.20
BICARBONATE (MG/L AS HCO3)	6	338.00	141.00	260.50	84.04	332.00	291.50	163.50
CARBONATE (MG/L AS CO3)	6	7.00	0.00	1.17	2.86	1.75	0.00	0.00
HARDNESS (MG/L AS CaCO3)	6	350.00	120.00	273.33	87.56	335.00	310.00	195.00
HARDNESS, NONCARBONATE (MG/L CaCO3)	6	99.00	6.00	57.67	34.25	84.00	66.00	24.00
CALCIUM, DISSOLVED (MG/L AS Ca)	6	65.00	24.00	51.00	16.12	64.25	56.50	36.00
MAGNESIUM, DISSOLVED (MG/L AS MG)	6	46.00	15.00	35.50	11.52	42.25	41.00	25.50
SODIUM, DISSOLVED (MG/L AS NA)	6	170.00	42.00	127.67	52.97	170.00	150.00	73.50
SODIUM PERCENT	6	53.00	41.00	48.33	4.97	53.00	49.50	43.25
POTASSIUM, DISSOLVED (MG/L AS K)	6	7.40	4.10	6.45	1.20	7.25	6.80	5.82
CHLORIDE, DISSOLVED (MG/L AS CL)	6	12.00	3.40	6.83	3.45	10.50	5.80	3.85
SULFATE, DISSOLVED (MG/L AS SO4)	6	430.00	95.00	325.83	132.53	422.50	385.00	203.75
FLUORIDE, DISSOLVED (MG/L AS F)	6	0.40	0.10	0.22	0.12	0.32	0.24	0.10
SILICA, DISSOLVED (MG/L AS SiO2)	6	11.00	1.10	5.62	3.32	7.55	5.90	2.82
BORON, DISSOLVED (UG/L AS B)	6	270.00	0.00	133.33	89.37	187.50	140.00	67.50
IRON, DISSOLVED (UG/L AS FE)	6	630.00	6.30	257.72	276.96	555.00	175.00	24.07
MANGANESE, DISSOLVED (UG/L AS MN)	6	160.00	0.80	40.13	59.56	62.50	20.00	7.70
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	6	943.00	315.00	714.83	248.75	885.25	833.00	453.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	6	1.28	0.43	0.97	0.34	1.20	1.13	0.62

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25
OCTOBER	613.00	14.00	107.85	141.97	131.64	3.2	446.90	197.50	33.00	19.50
NOVEMBER	125.00	11.00	40.20	28.52	70.94	1.2	122.45	50.00	32.00	25.00
DECEMBER	51.00	13.00	34.87	10.33	29.63	1.0	46.00	42.00	38.00	28.50
JANUARY	48.00	9.00	27.99	13.54	48.36	0.8	48.00	40.00	30.00	12.00
FEBRUARY	121.00	9.50	30.75	28.02	91.13	0.8	108.70	35.50	20.00	11.00
MARCH	12000.00	10.00	1019.11	2372.07	232.76	30.5	7406.00	425.00	127.00	90.00
APRIL	5700.00	13.00	1457.61	1522.16	104.43	42.3	4570.50	2607.50	901.50	99.00
MAY	834.00	26.00	263.43	217.51	82.57	7.9	730.50	423.00	210.00	65.00
JUNE	900.00	17.00	156.81	158.91	101.34	4.5	516.60	160.50	124.00	66.00
JULY	273.00	34.00	96.76	50.83	52.53	2.9	214.80	120.00	84.00	58.00
AUGUST	212.00	39.00	87.77	27.48	31.31	2.6	128.30	102.00	83.00	69.50
SEPTEMBER	484.00	18.00	71.30	67.31	94.40	2.1	162.90	96.00	51.00	28.25
ANNUAL	12000.00	9.00	283.08	929.17	328.23	100.0	1083.00	122.75	57.00	32.00

LOCATION.--Lat 46°51'06", long 101°15'10", in SW¼ sec.14, T.139 N., R.84 W., Morton County, Hydrologic Unit 10130203, on right bank 80 ft (24 km) downstream from bridge on county highway, 2 mi (3 km) northeast of Judson, and 16 mi (26 km) upstream from mouth.

DRAINAGE AREA.--157 mi² (407 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	31	24.00	0.00	7.87	8.96	17.50	5.00	0.00
STREAMFLOW, INSTANTANEOUS (CFS)	31	1070.00	0.38	124.21	288.22	119.00	1.80	0.69
SPECIFIC CONDUCTANCE (MICROMHUS)	31	1400.00	145.00	762.10	329.05	1000.00	850.00	470.00
PH (UNITS)	3	8.40	8.00					
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	3	4.10	2.40					
BICARBONATE (MG/L AS HCO3)	4	507.00	56.00					
CARBONATE (MG/L AS CO3)	4	0.00	0.00					
HARDNESS (MG/L AS CaCO3)	4	220.00	38.00					
HARDNESS, NONCARBONATE (MG/L CaCO3)	4	0.00	0.00					
CALCIUM, DISSOLVED (MG/L AS Ca)	4	43.00	10.00					
MAGNESIUM, DISSOLVED (MG/L AS Mg)	4	27.00	3.20					
SODIUM, DISSOLVED (MG/L AS Na)	4	210.00	13.00					
SODIUM PERCENT	4	67.00	39.00					
POTASSIUM, DISSOLVED (MG/L AS K)	4	7.10	4.40					
CHLORIDE, DISSOLVED (MG/L AS CL)	4	6.00	2.90					
SULFATE, DISSOLVED (MG/L AS SO4)	4	270.00	22.00					
FLUORIDE, DISSOLVED (MG/L AS F)	4	0.60	0.10					
SILICA, DISSOLVED (MG/L AS SiO2)	4	8.60	4.00					
BORON, DISSOLVED (UG/L AS B)	4	320.00	140.00					
IRON, DISSOLVED (UG/L AS Fe)	4	1100.00	140.00					
MANGANESE, DISSOLVED (UG/L AS Mn)	4	210.00	30.00					
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	4	865.00	121.00					
SOLIDS, DISSOLVED (TONS PER AC-FT)	4	1.18	0.16					

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS						PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25	5
OCTOBER	57.00	0.53	5.41	9.88	182.75	1.9	29.65	5.43	1.35	1.00	0.68
NOVEMBER	1.80	0.47	0.91	0.43	47.64	0.3	1.80	1.10	0.71	0.60	0.48
DECEMBER	4.00	0.40	1.16	0.93	80.04	0.4	3.25	1.70	0.81	0.40	0.40
JANUARY	1.60	0.40	0.73	0.40	55.10	0.3	1.57	1.20	0.50	0.40	0.40
FEBRUARY	0.70	0.40	0.48	0.10	21.43	0.2	0.70	0.60	0.40	0.40	0.40
MARCH	2140.00	0.40	159.03	409.46	257.47	55.3	1324.50	8.00	1.40	0.59	0.40
APRIL	2060.00	1.10	113.30	291.81	257.56	38.1	673.95	117.75	23.00	9.93	1.11
MAY	10.00	1.40	5.39	2.14	39.77	1.9	9.89	6.70	5.35	3.70	1.72
JUNE	7.20	0.52	2.21	1.59	71.77	0.7	3.99	3.60	1.30	0.74	0.57
JULY	1.40	0.38	0.72	0.25	35.03	0.2	1.18	0.89	0.73	0.49	0.38
AUGUST	3.40	0.27	1.14	0.76	67.14	0.4	3.18	1.20	1.00	0.78	0.31
SEPTEMBER	2.30	0.46	0.92	0.29	31.65	0.3	1.40	1.00	0.93	0.71	0.53
ANNUAL	2140.00	0.27	24.42	153.45	628.27	100.0	42.35	3.23	1.00	0.60	0.40

LOCATION.--Lat 46°50'02", Long 100°58'27", in NW¼NE¼ sec.25, T.139 N., R.82 W., Morton County, Hydrologic Unit 10130203, on left bank near downstream wingwall of bridge on county highway, 3 mi (5 km) west of Mandan, and 4 mi (6 km) downstream from Sweetbriar Creek.

DRAINAGE AREA.--3,310 mi² (8,570 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	45	28.00	0.00	9.34	9.80	19.50	6.00	0.00
STREAMFLOW, INSTANTANEOUS (CFS)	46	8189.98	8.10	769.90	1793.72	263.50	80.50	39.57
SPECIFIC CONDUCTANCE (MICROMHUS)	46	1890.00	440.00	1269.52	401.90	1602.50	1337.50	1030.00
OXYGEN, DISSOLVED (MG/L)	33	13.30	4.30	9.15	2.25	10.85	9.00	7.95
OXYGEN, DISSOLVED (PERCENT SATURATION)	16	105.00	31.00	81.50	24.79	96.75	92.50	65.25
PH (UNITS)	34	8.60	7.70	8.24	0.29	8.50	8.35	8.00
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	4	18.00	2.20					
BICARBONATE (MG/L AS HCO ₃)	4	550.00	150.00					
CARBONATE (MG/L AS CO ₃)	4	0.00	0.00					
NITROGEN, TOTAL (MG/L AS N)	32	3.00	0.46	1.13	0.68	1.30	0.87	0.70
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	32	2.00	0.28	0.85	0.47	1.10	0.71	0.49
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	33	0.39	0.00	0.06	0.08	0.08	0.03	0.01
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	33	0.81	0.00	0.21	0.24	0.39	0.13	0.02
PHOSPHORUS, TOTAL (MG/L AS P)	33	0.84	0.00	0.11	0.18	0.12	0.04	0.02
PHOSPHORUS, DISSOLVED (MG/L AS P)	33	0.10	0.00	0.02	0.02	0.02	0.01	0.00
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	24	24.00	3.70	9.70	4.27	10.73	8.65	7.15
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	19	48.00	0.10	3.95	11.05	1.30	0.90	0.30
HARDNESS (MG/L AS CaCO ₃)	33	500.00	140.00	334.55	97.34	430.00	330.00	285.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	33	160.00	0.00	27.33	38.84	50.00	2.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	33	100.00	31.00	66.12	19.27	85.50	65.00	55.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	33	60.00	15.00	40.85	12.19	52.00	40.00	34.50
SODIUM, DISSOLVED (MG/L AS Na)	33	300.00	56.00	190.76	61.85	230.00	190.00	150.00
SODIUM PERCENT	33	72.00	44.00	54.94	6.41	59.50	55.00	50.50
POTASSIUM, DISSOLVED (MG/L AS K)	33	13.00	6.40	9.15	1.28	9.70	8.90	8.35
CHLORIDE, DISSOLVED (MG/L AS CL)	33	20.00	3.00	10.61	4.66	14.00	10.00	7.25
SULFATE, DISSOLVED (MG/L AS SO ₄)	33	560.00	140.00	403.33	115.61	515.00	420.00	325.00
FLUORIDE, DISSOLVED (MG/L AS F)	33	0.70	0.10	0.34	0.11	0.40	0.30	0.30
SILICA, DISSOLVED (MG/L AS SiO ₂)	33	11.00	2.80	6.49	1.91	7.75	6.10	5.10
ARSENIC, DISSOLVED (UG/L AS AS)	11	4.00	1.00	1.55	0.93	2.00	1.00	1.00
ARSENIC, TOTAL (UG/L AS AS)	22	10.00	1.00	2.32	2.25	2.25	1.50	1.00
BARIUM, DISSOLVED (UG/L AS BA)	11	200.00	0.00	79.09	55.04	100.00	90.00	40.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	23	600.00	0.00	165.22	143.36	200.00	100.00	100.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	22	10.00	0.00	1.82	3.95	0.00	0.00	0.00
CHROMIUM, DISSOLVED (UG/L AS CR)	10	10.00	0.00	1.00	3.16	0.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	20	30.00	0.00	7.00	10.81	10.00	0.00	0.00
COPPER, DISSOLVED (UG/L AS CU)	10	3.00	0.00	1.80	1.40	3.00	2.50	0.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	22	12.00	0.00	2.09	3.38	2.00	1.00	0.00
COPPER, DISSOLVED (UG/L AS CU)	10	35.00	0.00	5.10	10.55	3.00	2.00	1.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	22	43.00	1.00	10.77	11.43	13.00	6.50	4.00
IRON, TOTAL RECOVERABLE (UG/L AS FE)	22	34000.00	180.00	4269.55	9305.31	1450.00	595.00	420.00
IRON, DISSOLVED (UG/L AS FE)	10	140.00	10.00	46.00	51.90	92.50	15.00	10.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS Mn)	22	1000.00	8.00	159.00	269.04	85.00	60.00	40.00
MANGANESE, DISSOLVED (UG/L AS Mn)	10	20.00	0.00	7.20	6.07	10.00	7.50	2.25
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MU)	22	8.00	0.00	3.68	2.68	6.25	4.00	1.00
NICKEL, DISSOLVED (UG/L AS NI)	4	0.00	3.00					
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	22	40.00	0.00	12.27	10.59	16.50	8.00	6.00
VANADIUM, TOTAL (UG/L AS V)	1	0.20	0.20					
ZINC, DISSOLVED (UG/L AS ZN)	11	10.00	0.00	6.64	3.85	10.00	9.00	3.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	23	260.00	0.00	53.04	57.00	70.00	40.00	20.00
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	22	550.00	20.00	69.55	108.21	60.00	50.00	37.50
SELENIUM, DISSOLVED (UG/L AS SE)	11	1.00	0.00	0.36	0.50	1.00	0.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	22	2.00	0.00	0.55	0.60	1.00	0.50	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	33	1310.00	335.00	926.36	262.23	1140.00	935.00	766.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	33	1.78	0.46	1.26	0.36	1.55	1.27	1.04
MERCURY, DISSOLVED (UG/L AS HG)	11	0.70	0.00	0.08	0.21	0.10	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	22	1.00	0.00	0.18	0.29	0.20	0.10	0.00
SEDIMENT, SUSPENDED (MG/L)	33	2690.00	4.00	236.06	650.69	53.50	24.00	12.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	33	44200.00	0.15	2992.84	10415.21	18.00	4.80	1.25

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25
OCTOBER	660.00	38.00	127.70	138.09	108.14	2.9	466.60	193.50	53.00	45.50
NOVEMBER	120.00	19.00	48.98	19.51	39.83	1.1	100.45	49.00	45.00	39.00
DECEMBER	49.00	27.00	40.13	6.28	15.65	0.9	49.00	48.00	39.00	36.50
JANUARY	40.00	10.00	25.78	9.36	36.32	0.6	38.00	35.00	28.00	16.00
FEBRUARY	32.00	8.00	16.53	9.27	56.06	0.3	30.00	29.00	11.00	9.00
MARCH	16300.00	8.00	1257.77	3386.35	269.23	28.4	11999.99	375.00	135.00	24.50
APRIL	7420.00	34.00	2051.96	1963.48	95.69	44.8	5560.00	3770.00	1500.00	177.50
MAY	1340.00	26.00	423.83	368.33	86.91	9.6	1166.00	677.50	385.00	44.00
JUNE	1510.00	29.00	208.84	231.91	111.04	4.6	621.50	236.00	151.50	70.75
JULY	486.00	14.00	108.11	86.90	80.38	2.4	299.40	135.00	96.00	35.00
AUGUST	359.00	14.00	92.75	41.53	44.77	2.1	148.00	109.00	88.00	75.00
SEPTEMBER	720.00	36.00	110.77	108.62	98.07	2.4	321.20	116.00	94.50	54.75
ANNUAL	16300.00	8.00	376.21	1287.68	342.27	100.0	1521.99	150.00	55.00	36.00

LOCATION.--Lat 46°47'40", long 100°39'25", in NW¼NE¼ sec.9, T.138 N., R.79 W., Burleigh County, Hydrologic Unit 10130103, on left bank 75 ft (23 m) downstream from bridge on county highway, 4 mi (6 km) upstream from Hay Creek, 6.3 mi (10.1 km) west of Menoken, and 6.4 mi (10.3 km) east of Bismarck.

DRAINAGE AREA.--1,680 mi² (4,350 km²), approximately, of which about 500 mi² (1,300 km²) is probably noncontributing.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	52	25.00	0.00	7.92	8.63	14.38	4.00	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	51	3700.00	0.07	257.92	662.82	72.00	2.00	1.04
SPECIFIC CONDUCTANCE (MICROHMUS)	52	2100.00	100.00	1015.00	578.36	1452.50	1065.00	548.75
OXYGEN, DISSOLVED (MG/L)	22	10.70	3.80	7.73	1.91	9.35	7.65	6.15
OXYGEN, DISSOLVED (PERCENT SATURATION)	9	81.00	52.00	66.44	11.10	74.00	70.00	52.50
PH (UNITS)	36	8.80	7.40	8.09	0.37	8.40	8.10	7.80
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	12	45.00	1.30	11.64	13.35	17.00	4.95	3.37
BICARBONATE (MG/L AS HCO ₃)	13	735.00	122.00	455.00	185.65	607.50	427.00	302.00
CARBONATE (MG/L AS CO ₃)	13	18.00	0.00	1.62	4.99	0.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	31	3.30	1.00	1.66	0.48	1.90	1.60	1.30
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	31	1.40	0.00	0.17	0.33	0.24	0.03	0.00
PHOSPHORUS, TOTAL (MG/L AS P)	31	0.97	0.16	0.43	0.22	0.55	0.34	0.27
PHOSPHORUS, DISSOLVED (MG/L AS P)	31	0.90	0.02	0.29	0.19	0.35	0.23	0.19
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	8	27.00	9.50	16.69	5.22	19.50	15.50	13.50
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	7	2.50	0.60	1.89	0.66	2.30	2.20	1.40
HARDNESS (MG/L AS CaCO ₃)	37	490.00	45.00	251.70	104.27	305.00	250.00	190.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	37	6.00	0.00	0.19	1.00	0.00	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	37	100.00	11.00	48.97	19.28	54.00	47.00	39.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	37	62.00	4.30	31.40	14.43	39.50	30.00	22.50
SODIUM, DISSOLVED (MG/L AS Na)	37	350.00	8.80	209.75	87.61	275.00	240.00	145.00
SODIUM PERCENT	36	82.00	27.00	63.33	9.37	67.00	63.50	60.00
POTASSIUM, DISSOLVED (MG/L AS K)	36	13.00	4.80	8.27	1.88	9.20	7.95	7.03
CHLORIDE, DISSOLVED (MG/L AS CL)	37	55.00	1.00	28.57	14.98	42.50	28.00	17.50
SULFATE, DISSOLVED (MG/L AS SO ₄)	37	420.00	19.00	232.43	101.04	320.00	230.00	155.00
FLUORIDE, DISSOLVED (MG/L AS F)	37	0.70	0.00	0.35	0.17	0.50	0.40	0.25
SILICA, DISSOLVED (MG/L AS SiO ₂)	37	30.00	3.90	12.30	6.80	16.00	9.90	7.20
ARSENIC, DISSOLVED (UG/L AS AS)	8	12.00	1.00	5.25	3.28	6.75	4.50	3.25
BARIUM, DISSOLVED (UG/L AS BA)	7	100.00	0.00	45.71	51.27	100.00	20.00	0.00
BORON, DISSOLVED (UG/L AS B)	37	1300.00	50.00	766.22	349.49	1100.00	800.00	480.00
CHROMIUM, DISSOLVED (UG/L AS CR)	8	10.00	0.00	1.25	3.54	0.00	0.00	0.00
COBALT, DISSOLVED (UG/L AS CO)	7	6.00	0.00	2.14	2.34	4.00	2.00	0.00
COPPER, DISSOLVED (UG/L AS CU)	8	2.00	1.00	1.38	0.52	2.00	1.00	1.00
IRON, DISSOLVED (UG/L AS FE)	37	830.00	10.00	153.51	210.23	225.00	50.00	20.00
MANGANESE, DISSOLVED (UG/L AS MN)	37	2600.00	0.00	327.57	589.37	185.00	80.00	40.00
MOLYBDENUM, DISSOLVED (UG/L AS MO)	8	10.00	0.00	4.13	3.98	8.75	3.00	1.00
NICKEL, DISSOLVED (UG/L AS NI)	7	8.00	0.00	4.00	3.11	7.00	4.00	0.00
VANADIUM, DISSOLVED (UG/L AS V)	5	2.10	0.00	0.56	0.91	1.40	0.00	0.00
ZINC, DISSOLVED (UG/L AS ZN)	8	20.00	0.00	7.38	6.61	10.00	7.50	1.00
ALUMINUM, DISSOLVED (UG/L AS AL)	8	70.00	0.00	15.63	24.70	27.50	2.50	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	7	160.00	5.00	83.57	57.93	140.00	80.00	20.00
SELENIUM, DISSOLVED (UG/L AS SE)	8	1.00	0.00	0.13	0.35	0.00	0.00	0.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	36	1410.00	93.00	847.67	332.73	1057.50	892.00	632.50
SOLIDS, DISSOLVED (TONS PER AC-FT)	37	1.92	0.13	1.16	0.45	1.44	1.22	0.87
MERCURY, DISSOLVED (UG/L AS HG)	8	0.10	0.00	0.03	0.05	0.08	0.00	0.00
SEDIMENT, SUSPENDED (MG/L)	10	34.00	3.00	18.20	11.15	30.00	15.00	8.25
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	9	1.00	0.01	0.15	0.32	0.10	0.03	0.01

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF ANNUAL RUNOFF	PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION		95	75	50 MEDIAN	25	5
OCTOBER	18.00	0.28	4.91	5.98	121.82	0.9	17.00	9.15	1.10	0.93	0.58
NOVEMBER	6.90	0.20	2.14	1.57	73.32	0.4	5.54	3.33	1.40	1.08	0.51
DECEMBER	2.20	0.96	1.41	0.25	17.87	0.3	2.03	1.50	1.40	1.20	1.10
JANUARY	1.60	0.97	1.21	0.14	11.19	0.2	1.50	1.30	1.20	1.10	1.00
FEBURARY	1.80	0.60	1.02	0.28	27.36	0.2	1.47	1.20	1.10	0.80	0.60
MARCH	1600.00	0.60	101.01	306.51	303.45	19.5	1025.80	16.00	2.00	1.20	0.60
APRIL	4700.00	1.60	321.65	699.91	217.60	60.2	1311.00	442.75	45.00	3.00	1.70
MAY	439.00	0.51	75.43	93.59	124.08	14.6	307.40	89.00	50.00	1.30	0.54
JUNE	39.00	0.09	12.82	11.56	90.19	2.4	34.35	21.00	13.00	0.38	0.13
JULY	12.00	0.05	4.08	3.41	83.54	0.8	10.30	6.70	4.10	0.20	0.08
AUGUST	12.00	0.08	1.54	1.69	109.36	0.3	4.40	2.00	1.40	0.36	0.10
SEPTEMBER	11.00	0.06	1.20	1.87	155.07	0.2	5.90	1.13	0.60	0.31	0.09
ANNUAL	4700.00	0.05	43.91	237.49	540.90	100.0	157.20	6.18	1.40	0.99	0.18

LOCATION.--Lat 46°32'35", long 102°53'16", in SW¼SE¼SE¼ sec.32 T.136 N., R.97 W., Hettinger County, Hydrologic Unit 10130204, on left bank 70 ft (21 m) upstream from bridge on county road, 1.0 mi (1.6 km) west of New England, 0.3 mi (0.5 km) above Coon Creek and 17 mi (27 km) below confluence of North Fork Cannonball River and Philbrick Creek.

DRAINAGE AREA.--285 mi² (738 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1978 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	28	24.00	0.00	8.66	8.92	18.00	3.25	0.13
STREAMFLOW, INSTANTANEOUS (CFS)	28	1090.00	0.01	51.52	208.02	1.58	0.13	0.06
SPECIFIC CONDUCTANCE (MICROMHOS)	24	4240.00	405.00	2601.46	891.16	2937.50	2490.00	2310.00
OXYGEN, DISSOLVED (MG/L)	23	14.80	6.40	10.06	2.38	12.00	10.00	7.50
OXYGEN, DISSOLVED (PERCENT SATURATION)	23	185.00	48.00	95.13	30.40	106.00	97.00	77.00
PH (UNITS)	24	8.60	7.60	8.15	0.29	8.40	8.20	7.93
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	24	26.00	1.00	8.01	7.58	11.63	4.70	3.05
BICARBONATE (MG/L AS HCO ₃)	24	824.00	81.00	542.33	180.67	657.50	548.00	497.00
CARBONATE (MG/L AS CO ₃)	24	24.00	0.00	3.68	6.91	5.50	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	24	2.90	0.65	1.55	0.70	1.50	1.00	0.91
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	24	2.40	0.61	1.05	0.42	1.35	0.91	0.77
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	24	0.28	0.00	0.09	0.08	0.18	0.06	0.02
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	24	2.00	0.00	0.21	0.45	0.14	0.03	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	24	0.42	0.00	0.07	0.09	0.08	0.04	0.02
PHOSPHORUS, DISSOLVED (MG/L AS P)	24	0.16	0.00	0.03	0.03	0.03	0.02	0.01
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	23	66.00	7.50	19.06	11.88	23.00	16.00	13.00
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	19	9.70	0.20	1.38	2.13	1.50	0.60	0.50
HARDNESS (MG/L AS CaCO ₃)	24	1200.00	92.00	574.25	241.88	682.50	560.00	412.50
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	24	520.00	0.00	142.71	148.54	250.00	105.00	9.50
CALCIUM, DISSOLVED (MG/L AS Ca)	24	170.00	17.00	92.63	34.40	110.00	93.50	66.75
MAGNESIUM, DISSOLVED (MG/L AS MG)	24	180.00	12.00	82.83	37.76	100.00	76.50	58.50
SODIUM, DISSOLVED (MG/L AS NA)	24	810.00	46.00	444.71	174.45	495.00	430.00	365.00
SODIUM PERCENT	24	85.00	41.00	64.33	9.64	67.75	63.50	59.25
POTASSIUM, DISSOLVED (MG/L AS K)	24	15.00	5.40	10.39	2.14	11.00	10.00	9.43
CHLORIDE, DISSOLVED (MG/L AS CL)	24	33.00	2.00	9.80	6.52	9.95	8.20	6.38
SULFATE, DISSOLVED (MG/L AS SO ₄)	24	2200.00	120.00	1038.75	460.55	1250.00	980.00	802.50
FLUORIDE, DISSOLVED (MG/L AS F)	24	0.70	0.10	0.41	0.14	0.50	0.40	0.30
SILICA, DISSOLVED (MG/L AS SiO ₂)	24	10.00	2.90	6.77	2.03	8.35	6.70	5.20
ARSENIC, DISSOLVED (UG/L AS AS)	6	3.00	1.00	1.33	0.82	1.50	1.00	1.00
ARSENIC, TOTAL (UG/L AS AS)	4	3.00	1.00					
BARIUM, DISSOLVED (UG/L AS BA)	6	100.00	50.00	75.00	27.39	100.00	75.00	50.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	4	200.00	0.00					
BERYLLIUM, DISSOLVED (UG/L AS BE)	6	10.00	0.00	3.17	3.66	4.75	3.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	4	0.00	0.00					
BURON, DISSOLVED (UG/L AS B)	24	930.00	130.00	586.67	174.30	680.00	630.00	547.50
CHROMIUM, DISSOLVED (UG/L AS CR)	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	4	20.00	0.00					
COBALT, DISSOLVED (UG/L AS CO)	6	8.00	0.00	4.00	4.38	8.00	4.00	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	4	2.00	0.00					
COPPER, DISSOLVED (UG/L AS CU)	8	35.00	0.00	13.88	14.49	25.00	12.50	0.25
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	4	11.00	2.00					
IRON, DISSOLVED (UG/L AS FE)	24	440.00	0.00	85.83	130.91	66.75	35.00	10.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	4	510.00	160.00					
MANGANESE, DISSOLVED (UG/L AS MN)	6	530.00	110.00	273.33	164.03	447.50	205.00	155.00
MOLYBDENUM, DISSOLVED (UG/L AS MO)	6	28.00	0.00	13.50	13.78	25.75	14.00	0.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	4	6.00	1.00					
NICKEL, DISSOLVED (UG/L AS NI)	6	6.00	0.00	3.50	2.07	5.25	3.50	2.25
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	4	13.00	3.00					
VANADIUM, DISSOLVED (UG/L AS V)	6	8.00	1.00	4.53	3.80	8.00	4.60	1.00
ZINC, DISSOLVED (UG/L AS ZN)	6	30.00	8.00	12.33	8.71	15.00	9.00	8.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	4	50.00	10.00					
ALUMINUM, DISSOLVED (UG/L AS AL)	6	80.00	0.00	25.00	28.81	42.50	15.00	7.50
LITHIUM, DISSOLVED (UG/L AS LI)	6	70.00	20.00	51.17	17.33	62.50	55.00	40.25
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	4	60.00	20.00					
SELENIUM, DISSOLVED (UG/L AS SE)	6	2.00	0.00	0.67	0.82	1.25	0.50	0.00
SELENIUM, TOTAL (UG/L AS SE)	4	1.00	0.00					
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	23	4070.00	281.00	1988.17	819.89	2250.00	1850.00	1700.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	24	5.54	0.38	2.64	1.13	3.04	2.49	2.19
MERCURY, DISSOLVED (UG/L AS HG)	6	0.10	0.00	0.05	0.05	0.10	0.05	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	4	0.20	0.00					
SEDIMENT, SUSPENDED (MG/L)	27	700.00	19.00	89.52	130.00	90.00	50.00	36.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	27	2060.00	0.00	81.29	396.06	0.23	0.03	0.01

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1978 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25
OCTOBER	0.25	0.03	0.10	0.05	47.52	0.1	0.20	0.13	0.09	0.06
NOVEMBER	0.60	0.02	0.26	0.23	88.54	0.1	0.60	0.51	0.13	0.06
DECEMBER	1.80	0.02	0.46	0.48	104.93	0.3	1.48	0.60	0.34	0.06
JANUARY	0.90	0.02	0.35	0.30	85.90	0.2	0.80	0.60	0.30	0.06
FEBRUARY	0.75	0.04	0.30	0.25	83.85	0.2	0.70	0.50	0.08	0.06
MARCH	213.00	0.03	23.40	43.79	187.14	14.1	131.25	13.25	4.35	0.22
APRIL	1300.00	0.41	138.97	273.00	196.44	80.9	786.10	152.00	13.65	2.30
MAY	19.00	0.10	5.27	6.19	117.29	3.2	16.70	11.00	1.72	0.12
JUNE	10.00	0.09	1.32	1.97	148.65	0.8	6.29	1.90	0.35	0.13
JULY	1.20	0.05	0.19	0.20	106.60	0.1	0.65	0.17	0.12	0.10
AUGUST	0.54	0.03	0.10	0.07	68.98	0.1	0.17	0.12	0.11	0.06
SEPTEMBER	0.06	0.01	0.04	0.02	57.82	0.0	0.06	0.06	0.05	0.01
ANNUAL	1300.00	0.01	14.10	87.32	619.40	100.0	38.00	0.70	0.13	0.06

LOCATION.--Lat 46°27'50", long 102°44'20", in NW¼SW¼ sec.34, T.135 N., R.96 W., Hettinger County, Hydrologic Unit 10130204, 1 mi (1.6 km) south of Havelock, and at county highway bridge.

DRAINAGE AREA.--70.0 mi² (181.3 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEIDIAN 50	25
TEMPERATURE (DEG C)	44	25.00	0.00	8.30	8.33	15.75	6.25	0.63
STREAMFLOW, INSTANTANEOUS (CFS)	44	700.00	0.02	58.06	172.69	3.35	0.14	0.10
SPECIFIC CONDUCTANCE (MICROMHUS)	43	4800.00	230.00	1777.56	862.13	2300.00	1910.00	1240.00
OXYGEN, DISSOLVED (MG/L)	33	16.00	1.40	9.07	4.20	12.60	9.80	5.60
OXYGEN, DISSOLVED (PERCENT SATURATION)	21	208.00	0.00	96.24	55.34	132.50	95.00	67.00
PH (UNITS)	34	10.10	7.00	8.00	0.67	8.33	8.00	7.48
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	22	83.00	0.00	17.75	22.69	34.00	6.10	1.80
BICARBONATE (MG/L AS HCO ₃)	22	761.00	92.00	396.77	176.81	530.00	391.50	278.25
CARBONATE (MG/L AS CO ₃)	21	103.00	0.00	7.14	23.09	0.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	34	4.40	0.41	1.23	0.89	1.43	0.92	0.71
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	10	1.30	0.49	0.89	0.31	1.20	0.97	0.54
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10	0.11	0.01	0.04	0.03	0.06	0.04	0.02
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	34	2.90	0.00	0.28	0.58	0.18	0.04	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	34	0.38	0.01	0.06	0.07	0.06	0.04	0.03
PHOSPHORUS, DISSOLVED (MG/L AS P)	34	0.09	0.00	0.03	0.02	0.03	0.02	0.01
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	33	30.00	9.00	16.12	5.08	19.50	15.00	12.00
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	28	5.00	0.20	0.91	1.13	0.78	0.60	0.40
HARDNESS (MG/L AS CaCO ₃)	34	990.00	160.00	611.76	197.58	780.00	615.00	480.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	34	650.00	50.00	281.56	144.09	350.00	270.00	167.50
CALCIUM, DISSOLVED (MG/L AS Ca)	34	210.00	25.00	117.68	45.62	160.00	120.00	86.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	34	130.00	18.00	77.06	24.21	94.00	75.00	63.00
SODIUM, DISSOLVED (MG/L AS Na)	34	390.00	52.00	253.32	72.16	310.00	265.00	220.00
SODIUM PERCENT	34	72.00	38.00	47.44	7.59	50.25	45.50	42.00
POTASSIUM, DISSOLVED (MG/L AS K)	34	14.00	4.40	8.90	2.13	10.00	9.10	7.53
CHLORIDE, DISSOLVED (MG/L AS CL)	34	89.00	3.20	12.75	14.38	12.00	10.00	8.13
SULFATE, DISSOLVED (MG/L AS SO ₄)	34	1300.00	200.00	794.41	246.26	940.00	795.00	645.00
FLUORIDE, DISSOLVED (MG/L AS F)	34	1.00	0.10	0.34	0.18	0.33	0.30	0.28
SILICA, DISSOLVED (MG/L AS SiO ₂)	34	14.00	0.20	6.25	4.94	11.00	5.20	1.38
ARSENIC, DISSOLVED (UG/L AS AS)	10	4.00	1.00	1.80	1.03	2.25	1.50	1.00
ARSENIC, TOTAL (UG/L AS AS)	2	4.00	2.00					
BARIUM, DISSOLVED (UG/L AS BA)	10	200.00	0.00	101.00	84.39	200.00	100.00	0.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	2	200.00	100.00					
BERYLLIUM, DISSOLVED (UG/L AS BE)	2	1.00	1.00					
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	2	0.00	0.00					
BORON, DISSOLVED (UG/L AS B)	18	2000.00	680.00	1233.33	321.16	1500.00	1250.00	1000.00
CHROMIUM, DISSOLVED (UG/L AS CR)	10	10.00	0.00	5.00	5.27	10.00	5.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	2	30.00	0.00					
COBALT, DISSOLVED (UG/L AS CO)	2	3.00	3.00					
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	2	1.00	0.00					
COPPER, DISSOLVED (UG/L AS CU)	10	10.00	0.00	3.00	3.80	4.75	1.50	0.75
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	2	9.00	4.00					
IRON, DISSOLVED (UG/L AS FE)	18	330.00	0.00	63.39	79.16	82.50	35.00	16.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	2	440.00	70.00					
MANGANESE, DISSOLVED (UG/L AS MN)	10	1900.00	40.00	650.50	653.77	1250.00	415.00	56.25
MOLYBDENUM, DISSOLVED (UG/L AS MO)	10	10.00	0.00	2.20	4.13	3.25	0.00	0.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	2	2.00	0.00					
NICKEL, DISSOLVED (UG/L AS NI)	2	3.00	2.00					
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	2	6.00	4.00					
VANADIUM, DISSOLVED (UG/L AS V)	2	6.00	6.00					
ZINC, DISSOLVED (UG/L AS ZN)	10	340.00	3.00	46.10	103.45	20.00	15.00	9.50
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	2	40.00	10.00					
ALUMINUM, DISSOLVED (UG/L AS AL)	10	350.00	0.00	46.50	107.39	32.50	10.00	3.75
LITHIUM, DISSOLVED (UG/L AS LI)	10	100.00	35.00	55.40	17.11	60.00	50.00	49.75
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	2	50.00	30.00					
SELENIUM, DISSOLVED (UG/L AS SE)	10	2.00	0.00	1.10	0.74	2.00	1.00	0.75
SELENIUM, TOTAL (UG/L AS SE)	2	1.00	1.00					
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	33	2420.00	396.00	1512.24	427.74	1785.00	1550.00	1285.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	34	3.29	0.54	2.07	0.58	2.44	2.13	1.78
MERCURY, DISSOLVED (UG/L AS HG)	10	0.40	0.00	0.09	0.14	0.20	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	2	0.10	0.00					
SEDIMENT, SUSPENDED (MG/L)	34	396.00	3.00	54.91	77.30	69.50	30.00	9.75
SEDIMENT DISCHARGE, SUSPENDED (1/DAY)	34	75.00	0.00	3.61	14.45	0.03	0.01	0.00

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF ANNUAL RUNOFF	PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION		95	75	50 MEDIAN	25	5
OCTOBER	0.16	0.00	0.07	0.04	60.13	0.1	0.12	0.10	0.08	0.05	0.00
NOVEMBER	0.24	0.05	0.12	0.05	38.27	0.2	0.20	0.16	0.11	0.09	0.06
DECEMBER	0.20	0.02	0.11	0.05	47.07	0.2	0.18	0.15	0.12	0.06	0.02
JANUARY	0.15	0.01	0.12	0.04	34.29	0.2	0.15	0.15	0.12	0.10	0.02
FEBRUARY	0.25	0.08	0.13	0.03	24.68	0.2	0.20	0.14	0.13	0.10	0.10
MARCH	820.00	0.06	40.77	142.61	349.82	59.8	336.20	0.80	0.16	0.14	0.07
APRIL	340.00	0.08	23.76	56.45	237.58	33.7	140.00	12.50	4.00	0.12	0.10
MAY	13.00	0.00	1.91	2.45	128.38	2.8	8.26	2.70	1.30	0.09	0.02
JUNE	64.00	0.00	1.58	6.83	432.92	2.2	4.32	1.13	0.35	0.08	0.00
JULY	0.97	0.00	0.16	0.18	110.54	0.2	0.54	0.25	0.13	0.00	0.00
AUGUST	12.00	0.00	0.19	1.25	640.01	0.3	0.12	0.08	0.05	0.00	0.00
SEPTEMBER	0.32	0.02	0.09	0.05	58.80	0.1	0.20	0.11	0.08	0.05	0.03
ANNUAL	820.00	0.00	5.78	46.12	797.21	100.0	7.03	0.20	0.12	0.08	0.00

LOCATION.--Lat 46°25'36", long 102°33'05", in NE¼NE¼ sec.13, T.134 N., R.95 W., Hettinger County, Hydrologic Unit 10130204, on right bank 400 ft (120 m) upstream from bridge on county highway, and 0.3 mi (0.5 km) north of Regent.

DRAINAGE AREA.--580 mi² (1,500 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	50	25
TEMPERATURE (DEG C)	86	28.50	0.00	9.12	9.28	18.25	6.00	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	87	9619.98	0.68	313.48	1275.80	41.00	7.10	4.10
SPECIFIC CONDUCTANCE (MICROMHOS)	84	2800.00	270.00	1742.20	581.78	2027.50	1900.00	1520.00
OXYGEN, DISSOLVED (MG/L)	36	15.90	5.90	9.41	2.57	11.55	8.70	7.23
OXYGEN, DISSOLVED (PERCENT SATURATION)	35	127.00	44.00	88.97	22.84	104.00	90.00	78.00
PH (UNITS)	42	8.60	7.40	8.15	0.30	8.40	8.20	7.88
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	41	33.00	0.60	7.23	7.62	9.60	3.90	2.75
BICARBONATE (MG/L AS HCO ₃)	41	869.00	80.00	438.39	139.77	494.00	439.00	383.50
CARBONATE (MG/L AS CO ₃)	41	16.80	0.00	1.85	3.84	1.50	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	36	1.70	0.54	1.08	0.28	1.30	1.10	0.91
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	36	1.70	0.29	0.79	0.30	0.94	0.78	0.53
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	36	0.44	0.00	0.08	0.09	0.10	0.05	0.03
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	36	0.86	0.00	0.21	0.26	0.33	0.09	0.02
PHOSPHORUS, TOTAL (MG/L AS P)	36	0.14	0.00	0.04	0.03	0.07	0.04	0.02
PHOSPHORUS, DISSOLVED (MG/L AS P)	36	0.69	0.00	0.03	0.11	0.02	0.01	0.01
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	36	120.00	8.70	15.65	18.11	14.00	12.00	11.00
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	35	5.70	0.10	0.87	0.97	0.90	0.60	0.40
HARDNESS (MG/L AS CaCO ₃)	42	890.00	72.00	498.86	156.54	602.50	530.00	417.50
HARDNESS, NONCARBONATE (MG/L AS CaCO ₃)	41	380.00	0.00	138.05	104.00	215.00	150.00	47.00
CALCIUM, DISSOLVED (MG/L AS Ca)	42	190.00	15.00	94.10	33.86	120.00	100.00	64.75
MAGNESIUM, DISSOLVED (MG/L AS MG)	42	100.00	8.40	64.13	18.52	75.25	67.00	55.75
SODIUM, DISSOLVED (MG/L AS NA)	42	390.00	54.00	267.86	72.88	320.00	275.00	237.50
SODIUM PERCENT	42	74.00	45.00	54.43	6.78	59.00	53.00	49.00
POTASSIUM, DISSOLVED (MG/L AS K)	42	10.00	4.80	7.77	1.14	8.30	7.85	7.18
CHLORIDE, DISSOLVED (MG/L AS CL)	42	55.00	0.90	10.83	7.71	12.25	9.90	8.10
SULFATE, DISSOLVED (MG/L AS SO ₄)	42	1100.00	120.00	685.00	195.89	762.50	700.00	627.50
FLUORIDE, DISSOLVED (MG/L AS F)	42	0.70	0.10	0.43	0.13	0.50	0.45	0.40
SILICA, DISSOLVED (MG/L AS SiO ₂)	42	13.00	2.00	7.01	3.15	9.45	6.25	4.85
ARSENIC, DISSOLVED (UG/L AS AS)	10	2.00	1.00	1.50	0.53	2.00	1.50	1.00
ARSENIC, TOTAL (UG/L AS AS)	6	3.00	2.00	2.33	0.52	3.00	2.00	2.00
BARIUM, DISSOLVED (UG/L AS BA)	9	200.00	30.00	81.11	52.07	95.00	80.00	35.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	6	200.00	100.00	133.33	51.64	200.00	100.00	100.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	10	1.00	0.00	0.60	0.52	1.00	1.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	42	930.00	150.00	588.10	164.79	690.00	615.00	490.00
CHROMIUM, DISSOLVED (UG/L AS CR)	10	10.00	0.00	2.00	4.22	2.50	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	6	20.00	5.00	10.83	4.92	12.50	10.00	8.75
COBALT, DISSOLVED (UG/L AS CO)	10	3.00	0.00	1.80	1.55	3.00	3.00	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	6	4.00	0.00	1.17	1.60	2.50	0.50	0.00
COPPER, DISSOLVED (UG/L AS CU)	11	29.00	2.00	9.73	7.96	10.00	8.00	4.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	6	12.00	4.00	8.00	3.41	11.25	8.50	4.00
IRON, DISSOLVED (UG/L AS FE)	42	1400.00	10.00	86.74	222.82	60.00	30.00	20.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	6	430.00	180.00	288.33	96.00	370.00	290.00	187.50
MANGANESE, DISSOLVED (UG/L AS MN)	16	230.00	10.00	84.50	67.79	137.50	61.00	22.50
MOLYBDENUM, DISSOLVED (UG/L AS MO)	10	14.00	0.00	7.20	5.12	10.50	10.00	1.75
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	6	5.00	0.00	2.67	1.97	4.25	3.00	0.75
NICKEL, DISSOLVED (UG/L AS NI)	10	5.00	0.00	2.80	1.69	4.25	2.50	1.75
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	6	9.00	5.00	6.50	1.38	7.50	6.00	5.75
VANADIUM, DISSOLVED (UG/L AS V)	10	6.00	0.00	2.00	2.79	6.00	0.50	0.00
ZINC, DISSOLVED (UG/L AS ZN)	10	20.00	3.00	7.80	7.04	12.50	3.00	3.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	6	40.00	10.00	25.00	10.49	32.50	25.00	17.50
ALUMINUM, DISSOLVED (UG/L AS AL)	10	30.00	0.00	8.00	10.33	12.50	5.00	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	10	60.00	30.00	44.70	11.58	53.25	47.50	30.75
SELENIUM, DISSOLVED (UG/L AS SE)	6	60.00	20.00	41.67	14.72	52.50	45.00	27.50
SELENIUM, TOTAL (UG/L AS SE)	10	1.00	0.00	0.50	0.53	1.00	0.50	0.00
SOLIDS, RESIDUE AT 100 DEG. C DISSOLVED (MG/L)	42	2120.00	233.00	1363.14	364.88	1512.50	1395.00	1282.50
SOLIDS, DISSOLVED (TONS PER AC-FT)	42	2.88	0.32	1.85	0.50	2.06	1.90	1.74
MERCURY, DISSOLVED (UG/L AS HG)	10	0.40	0.00	0.05	0.13	0.03	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	6	0.20	0.00	0.05	0.08	0.13	0.00	0.00
SEDIMENT, SUSPENDED (MG/L)	39	436.00	11.00	82.74	69.48	116.00	68.00	40.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	39	2500.00	0.07	66.59	399.83	5.00	1.20	0.60

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50	25
OCTOBER	115.00	2.90	15.01	20.15	134.25	2.1	59.00	15.50	6.20	4.50
NOVEMBER	9.50	4.10	6.41	1.54	23.99	0.9	9.00	7.55	6.55	4.60
DECEMBER	9.00	3.50	6.04	1.46	24.17	0.8	8.00	7.00	6.50	4.50
JANUARY	5.50	2.00	3.39	1.07	31.53	0.5	5.00	4.50	3.00	2.50
FEBRUARY	6.00	2.00	3.76	0.90	23.81	0.5	5.85	4.00	4.00	2.50
MARCH	7880.00	3.00	371.28	1198.39	322.77	52.2	2503.98	31.00	8.00	5.50
APRIL	2190.00	4.60	240.70	395.14	164.16	32.8	1113.50	332.50	62.50	16.00
MAY	130.00	1.70	27.75	26.89	96.93	3.9	97.20	39.50	23.00	4.70
JUNE	645.00	1.40	29.04	71.85	247.44	4.0	94.35	26.50	13.00	7.18
JULY	28.00	0.60	7.30	6.24	85.42	1.0	21.00	11.00	6.90	1.10
AUGUST	25.00	0.55	4.62	3.34	72.21	0.7	8.80	6.50	4.60	1.50
SEPTEMBER	13.00	1.50	4.93	2.71	55.05	0.7	11.00	6.40	4.50	2.48
ANNUAL	7880.00	0.55	60.32	383.24	635.36	100.0	132.25	12.00	6.10	4.00

06351000 CANNONBALL RIVER BELOW BENTLEY, ND

LOCATION.--Lat 46°21'30", long 102°02'30", in SW¼SW¼ sec.6, T.133 N., R.90 W., Grant County, Hydrologic Unit 10130204, on left bank 0.25 mi (0.4 km) downstream from Thirty Mile Creek, and 2 mi (3 km) northeast of Bentley.

DRAINAGE AREA.--1,140 mi² (2,950 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	44	25.00	0.00	8.16	8.60	15.75	5.50	0.00
STREAMFLOW, INSTANTANEOUS (CFS)	44	9289.98	1.30	617.01	1762.73	180.75	20.50	11.25
SPECIFIC CONDUCTANCE (MICROHMUS)	44	2750.00	330.00	1661.82	636.33	2150.00	1760.00	1172.50
PH (UNITS)	6	8.20	7.70	7.98	0.19	8.20	7.95	7.85
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	6	12.00	2.20	4.83	3.64	6.67	3.60	2.57
BICARBONATE (MG/L AS HCO3)	6	391.00	111.00	269.17	114.56	385.00	284.00	149.25
CARBONATE (MG/L AS CO3)	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARDNESS (MG/L AS CaCO3)	6	540.00	160.00	351.67	145.11	465.00	370.00	212.50
HARDNESS, NONCARBONATE (MG/L CaCO3)	6	220.00	70.00	131.67	61.01	197.50	114.00	79.00
CALCIUM, DISSOLVED (MG/L AS Ca)	6	98.00	33.00	65.50	25.34	87.50	65.00	44.25
MAGNESIUM, DISSOLVED (MG/L AS Mg)	6	72.00	19.00	45.67	20.13	61.50	49.00	25.00
SODIUM, DISSOLVED (MG/L AS Na)	6	220.00	55.00	159.83	68.24	212.50	190.00	84.25
SODIUM PERCENT	6	57.00	42.00	48.33	5.01	51.75	47.50	45.00
POTASSIUM, DISSOLVED (MG/L AS K)	6	8.70	5.70	7.27	1.02	7.87	7.50	6.37
CHLORIDE, DISSOLVED (MG/L AS CL)	6	10.00	3.10	6.92	3.06	9.55	7.90	3.17
SULFATE, DISSOLVED (MG/L AS SO4)	6	680.00	170.00	463.33	197.65	627.50	520.00	252.50
FLUORIDE, DISSOLVED (MG/L AS F)	6	0.40	0.10	0.25	0.14	0.40	0.25	0.10
SILICA, DISSOLVED (MG/L AS SiO2)	6	8.00	3.60	6.17	1.79	8.00	6.40	4.35
BORON, DISSOLVED (UG/L AS B)	6	550.00	140.00	286.67	143.62	362.50	275.00	170.00
IRON, DISSOLVED (UG/L AS FE)	6	140.00	10.00	68.33	49.16	110.00	70.00	17.50
MANGANESE, DISSOLVED (UG/L AS MN)	6	130.00	0.00	68.33	60.80	122.50	70.00	15.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	6	1350.00	362.00	916.67	374.61	1222.50	1009.00	533.00
SOLIDS, DISSOLVED (TUNS PER AC-FT)	6	1.84	0.49	1.24	0.51	1.66	1.37	0.72

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS						PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25	5
OCTOBER	231.00	7.10	46.10	63.42	137.57	2.9	202.90	33.50	16.00	15.00	7.10
NOVEMBER	78.00	11.00	18.51	7.89	42.65	1.1	24.45	22.00	16.00	15.00	13.00
DECEMBER	26.00	11.00	16.41	4.03	24.55	1.0	25.00	20.00	15.00	14.00	11.00
JANUARY	14.00	6.00	10.05	1.85	18.43	0.6	13.30	11.00	10.00	10.00	6.00
FEBRUARY	16.00	6.00	10.38	1.91	18.39	0.6	15.40	11.00	10.00	10.00	7.30
MARCH	10700.00	8.00	681.73	1992.22	292.23	43.2	5823.99	136.00	21.00	14.00	9.70
APRIL	3640.00	12.00	554.00	751.16	135.59	34.0	2211.50	882.50	214.00	45.00	17.00
MAY	562.00	3.70	91.51	105.61	115.41	5.8	361.80	115.00	73.00	14.00	4.27
JUNE	2080.00	5.30	106.91	236.39	221.11	6.6	372.75	74.75	48.50	31.00	7.43
JULY	491.00	1.50	39.44	66.29	168.09	2.5	130.30	44.50	24.00	3.65	2.00
AUGUST	59.00	1.10	14.25	11.43	80.18	0.9	36.30	18.00	14.00	2.40	1.20
SEPTEMBER	40.00	4.90	12.67	6.83	53.95	0.8	27.90	16.00	12.00	7.73	5.21
ANNUAL	10700.00	1.10	133.96	659.04	491.96	100.0	439.60	38.00	16.00	11.00	3.79

LOCATION.--Lat 46°19'20", Long 102°59'45", in NW¼ sec.21, T.133 N., R.98 W., Slope County, Hydrologic Unit 10130205, on left bank 1,200 ft (366 m) downstream from county highway bridge, and 13 mi (21 km) northeast of Scranton.

DRAINAGE AREA.--42.9 mi² (111 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	30	25.50	0.00	7.87	8.94	14.75	5.50	0.38
STREAMFLOW, INSTANTANEOUS (CFS)	30	208.00	0.01	18.92	50.59	8.02	0.48	0.12
SPECIFIC CONDUCTANCE (MICROMHOS)	30	6499.99	338.00	3037.83	1593.67	4205.00	3174.99	1490.00
PH (UNITS)	5	8.20	7.50	7.90	0.26	8.10	8.00	7.65
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	5	17.00	2.20	5.82	6.29	10.55	2.90	2.55
BICARBONATE (MG/L AS HCO ₃)	5	328.00	163.00	215.00	66.78	275.00	182.00	171.50
CARBONATE (MG/L AS CO ₃)	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARDNESS (MG/L AS CaCO ₃)	5	1600.00	240.00	982.00	672.47	1550.00	1300.00	255.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	5	1400.00	110.00	786.00	629.98	1350.00	1000.00	115.00
CALCIUM, DISSOLVED (MG/L AS Ca)	5	240.00	47.00	145.20	92.32	230.00	170.00	48.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	5	240.00	30.00	149.20	106.65	235.00	210.00	33.00
SODIUM, DISSOLVED (MG/L AS Na)	5	710.00	96.00	445.20	313.41	690.00	640.00	103.00
SODIUM PERCENT	5	53.00	46.00	48.40	2.88	51.00	48.00	46.00
POTASSIUM, DISSOLVED (MG/L AS K)	5	13.00	4.70	9.50	3.92	12.50	12.00	5.25
CHLORIDE, DISSOLVED (MG/L AS CL)	5	27.00	3.00	14.92	10.58	24.00	19.00	3.80
SULFATE, DISSOLVED (MG/L AS SO ₄)	5	2800.00	310.00	1714.00	1267.55	2750.00	2400.00	335.00
FLUORIDE, DISSOLVED (MG/L AS F)	5	0.40	0.10	0.22	0.13	0.35	0.20	0.10
SILICA, DISSOLVED (MG/L AS SiO ₂)	5	10.00	0.00	4.68	4.86	9.95	1.80	0.85
BORON, DISSOLVED (UG/L AS B)	5	1200.00	300.00	818.00	367.72	1150.00	880.00	455.00
IRON, DISSOLVED (UG/L AS FE)	5	400.00	40.00	196.00	134.46	320.00	160.00	90.00
MANGANESE, DISSOLVED (UG/L AS MN)	5	550.00	60.00	202.00	200.30	365.00	140.00	70.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	5	4300.00	639.00	2704.40	1872.71	4230.00	3730.00	666.00
SOLIDS, DISSOLVED (TONS PER AC-FT)	5	5.85	0.87	3.68	2.55	5.75	5.07	0.90

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF ANNUAL RUNOFF	PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION		95	75	50 MEDIAN	25	5
OCTOBER	26.00	0.00	0.86	3.14	363.68	1.8	3.91	0.45	0.00	0.00	0.00
NOVEMBER	0.86	0.01	0.16	0.14	89.36	0.3	0.46	0.20	0.11	0.09	0.04
DECEMBER	0.80	0.00	0.20	0.16	79.95	0.4	0.63	0.20	0.18	0.10	0.05
JANUARY	0.16	0.00	0.05	0.06	121.60	0.1	0.16	0.12	0.00	0.00	0.00
FEBRUARY	0.22	0.00	0.05	0.07	146.92	0.1	0.18	0.13	0.00	0.00	0.00
MARCH	453.00	0.00	23.89	80.42	336.63	48.6	239.60	0.55	0.14	0.00	0.00
APRIL	250.00	0.01	20.15	40.78	202.42	39.7	97.50	20.50	6.00	0.20	0.02
MAY	30.00	0.00	2.97	5.05	170.04	6.1	15.30	3.15	1.40	0.02	0.00
JUNE	35.00	0.00	1.22	4.35	356.62	2.4	4.37	0.56	0.31	0.05	0.00
JULY	8.10	0.00	0.25	0.93	370.60	0.5	0.79	0.18	0.02	0.00	0.00
AUGUST	0.02	0.00	0.00	0.00	251.67	0.0	0.01	0.00	0.00	0.00	0.00
SEPTEMBER	0.01	0.00	0.00	0.00	466.28	0.0	0.00	0.00	0.00	0.00	0.00
ANNUAL	453.00	0.00	4.17	27.36	656.56	100.0	9.04	0.30	0.08	0.00	0.00

LOCATION.--Lat 46°09'15", long 102°28'25", in W½ sec.20, T.131 N., R.94 W., Adams County, Hydrologic Unit 10130205, on left bank 30 ft (9 m) downstream from bridge on State Highway 8, and 12.5 mi (20 km) north of Haynes.

DRAINAGE AREA.--553 mi² (1,430 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	47	26.00	0.00	7.64	8.79	15.00	4.50	0.00
STREAMFLOW, INSTANTANEOUS (CFS)	47	6819.99	0.40	476.00	1471.33	58.00	5.60	3.40
SPECIFIC CONDUCTANCE (MICROMHUS)	47	3510.00	300.00	1988.40	846.47	2420.00	1990.00	1700.00
PH (UNITS)	8	8.30	7.90	8.16	0.16	8.30	8.20	8.02
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	7	9.30	1.90	4.21	2.62	5.80	3.30	1.90
BICARBONATE (MG/L AS HCO3)	7	528.00	120.00	359.43	160.82	463.00	416.00	146.00
CARBONATE (MG/L AS CO3)	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARDNESS (MG/L AS CaCO3)	8	630.00	200.00	482.50	167.82	620.00	525.00	310.00
HARDNESS, NONCARBONATE (MG/L CaCO3)	8	320.00	56.00	187.00	95.90	292.50	170.00	107.50
CALCIUM, DISSOLVED (MG/L AS Ca)	8	110.00	37.00	81.00	27.51	107.50	85.50	53.00
MAGNESIUM, DISSOLVED (MG/L AS MG)	8	90.00	26.00	68.25	24.66	85.75	76.00	43.25
SODIUM, DISSOLVED (MG/L AS NA)	8	350.00	73.00	240.62	107.67	332.50	265.00	121.50
SODIUM PERCENT	8	60.00	41.00	49.75	6.50	55.50	48.50	44.00
POTASSIUM, DISSOLVED (MG/L AS K)	8	10.00	5.80	8.20	1.39	9.35	8.25	7.17
CHLORIDE, DISSOLVED (MG/L AS CL)	8	14.00	2.30	9.49	4.24	12.75	10.50	5.30
SULFATE, DISSOLVED (MG/L AS SO4)	8	910.00	260.00	678.75	258.48	847.50	805.00	385.00
FLUORIDE, DISSOLVED (MG/L AS F)	8	0.50	0.10	0.31	0.16	0.40	0.40	0.12
SILICA, DISSOLVED (MG/L AS SiO2)	8	8.20	4.30	6.32	1.18	7.20	6.25	5.70
BORON, DISSOLVED (UG/L AS B)	8	970.00	120.00	456.25	271.92	585.00	460.00	195.00
IRON, DISSOLVED (UG/L AS FE)	8	530.00	0.00	137.50	182.11	220.00	50.00	12.50
MANGANESE, DISSOLVED (UG/L AS MN)	8	140.00	40.00	75.00	30.24	87.50	65.00	60.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	8	1720.00	448.00	1300.88	500.28	1612.50	1550.00	766.75
SOLIDS, DISSOLVED (TONS PER AC-FT)	8	2.34	0.61	1.77	0.68	2.19	2.10	1.04

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF ANNUAL RUNOFF	PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION		95	75	50 MEDIAN	25	5
OCTOBER	28.00	1.70	6.75	6.85	101.54	0.9	24.30	7.50	3.80	2.75	1.70
NOVEMBER	6.80	2.70	4.10	0.85	20.62	0.5	6.49	4.10	4.00	3.70	3.11
DECEMBER	7.50	2.50	4.84	1.43	29.57	0.7	7.50	6.00	4.50	4.00	3.00
JANUARY	4.50	1.50	2.63	0.69	26.14	0.4	4.00	3.00	2.50	2.00	1.50
FEBRUARY	5.00	2.00	3.12	1.00	32.04	0.4	4.50	4.50	2.50	2.50	2.00
MARCH	6540.00	2.50	304.36	1134.07	372.61	41.1	3183.98	9.00	5.50	3.75	2.50
APRIL	3580.00	3.40	343.95	631.45	183.59	44.9	1784.50	425.50	96.00	6.88	3.46
MAY	195.00	1.50	38.19	40.10	104.99	5.2	126.00	53.00	33.00	2.85	1.70
JUNE	772.00	1.70	31.53	89.36	283.44	4.1	62.35	23.25	13.00	8.08	2.17
JULY	37.00	0.40	6.12	5.95	97.29	0.8	14.30	9.05	5.00	1.05	0.45
AUGUST	5.50	0.45	2.73	1.52	55.51	0.4	5.33	3.65	3.00	0.99	0.50
SEPTEMBER	27.00	0.81	5.09	6.27	123.27	0.7	26.45	4.83	3.00	2.30	0.86
ANNUAL	6540.00	0.40	62.85	393.85	626.62	100.0	140.20	8.35	4.00	2.80	1.00

LOCATION.--Lat 46°06'05", long 101°57'26", in NE¼NE¼NE¼ sec.8, T.130 N., R.90 W., Grant County, Hydrologic Unit 10130205, on left bank 100 ft (30 m) upstream from bridge on North Dakota Highway 49, 17 mi (27 km) southeast of Bentley, and 7 mi (11 km) upstream from mouth.

DRAINAGE AREA.--100 mi² (260 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	40	28.00	-0.50	9.84	9.43	20.13	8.25	0.00
STREAMFLOW, INSTANTANEOUS (CFS)	41	2140.00	0.27	68.64	335.14	11.20	1.90	0.86
SPECIFIC CONDUCTANCE (MICROMHUS)	35	4250.00	810.00	2801.14	803.30	3500.00	2670.00	2240.00
OXYGEN, DISSOLVED (MG/L)	32	14.50	6.10	10.03	2.49	11.88	9.75	8.07
OXYGEN, DISSOLVED (PERCENT SATURATION)	32	176.00	51.00	93.78	24.19	106.00	93.50	75.50
PH (UNITS)	35	8.50	7.50	8.09	0.25	8.30	8.20	7.90
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	35	34.00	2.40	8.17	7.91	8.80	4.60	3.70
BICARBONATE (MG/L AS HCO ₃)	35	870.00	124.00	496.81	162.98	550.00	478.00	403.00
CARBONATE (MG/L AS CO ₃)	35	14.00	0.00	0.89	2.84	0.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	35	6.20	0.56	2.20	1.52	3.40	1.40	1.10
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	35	3.40	0.42	0.99	0.52	1.20	0.97	0.68
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	35	0.37	0.00	0.08	0.08	0.14	0.06	0.03
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	35	4.80	0.00	1.12	1.46	2.40	0.25	0.02
PHOSPHORUS, TOTAL (MG/L AS P)	35	1.30	0.00	0.09	0.21	0.06	0.04	0.03
PHOSPHORUS, DISSOLVED (MG/L AS P)	35	0.08	0.00	0.02	0.02	0.02	0.01	0.01
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	33	30.00	5.50	16.16	5.87	20.50	15.00	12.50
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	32	2.70	0.10	0.74	0.58	0.98	0.55	0.40
HARDNESS (MG/L AS CaCO ₃)	35	1200.00	250.00	774.86	244.10	1000.00	740.00	600.00
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	35	830.00	130.00	364.86	175.86	450.00	330.00	240.00
CALCIUM, DISSOLVED (MG/L AS Ca)	35	190.00	39.00	124.43	37.21	150.00	130.00	100.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	35	180.00	32.00	112.03	37.39	140.00	110.00	86.00
SODIUM, DISSOLVED (MG/L AS Na)	35	670.00	70.00	404.63	142.23	520.00	390.00	320.00
SODIUM PERCENT	35	82.00	39.00	53.34	7.33	56.00	54.00	51.00
POTASSIUM, DISSOLVED (MG/L AS K)	35	18.00	1.20	12.13	3.31	15.00	12.00	10.00
CHLORIDE, DISSOLVED (MG/L AS CL)	35	510.00	3.40	27.23	84.12	16.00	14.00	9.80
SULFATE, DISSOLVED (MG/L AS SO ₄)	35	2100.00	270.00	1171.71	408.52	1500.00	1200.00	880.00
FLUORIDE, DISSOLVED (MG/L AS F)	35	0.90	0.00	0.33	0.14	0.40	0.30	0.30
SILICA, DISSOLVED (MG/L AS SiO ₂)	35	14.00	0.10	5.48	4.40	8.10	4.50	1.90
ARSENIC, DISSOLVED (UG/L AS AS)	11	3.00	1.00	1.82	0.75	2.00	2.00	1.00
ARSENIC, TOTAL (UG/L AS AS)	7	3.00	1.00	2.43	0.79	3.00	3.00	2.00
BARIUM, DISSOLVED (UG/L AS BA)	11	200.00	0.00	81.82	72.64	150.00	50.00	30.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	7	200.00	0.00	138.57	82.14	200.00	200.00	70.00
BERYLLIUM, DISSOLVED (UG/L AS BE)	11	5.00	0.00	1.18	1.54	1.00	1.00	0.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BORON, DISSOLVED (UG/L AS B)	34	1300.00	250.00	693.24	232.09	797.50	685.00	517.50
CHROMIUM, DISSOLVED (UG/L AS CR)	11	10.00	0.00	1.64	3.67	0.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	7	10.00	0.00	4.29	5.35	10.00	0.00	0.00
COBALT, DISSOLVED (UG/L AS CO)	11	8.00	0.00	2.09	2.47	3.00	3.00	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	7	3.00	0.00	1.71	1.11	3.00	2.00	1.00
COPPER, DISSOLVED (UG/L AS CU)	13	27.00	1.00	11.15	8.81	19.50	10.00	4.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	7	19.00	1.00	7.86	6.12	10.00	8.00	1.00
IRON, DISSOLVED (UG/L AS FE)	34	550.00	10.00	64.76	104.63	52.50	33.00	20.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	7	420.00	140.00	252.86	118.70	370.00	240.00	140.00
MANGANESE, DISSOLVED (UG/L AS MN)	11	250.00	26.00	131.45	68.55	170.00	120.00	70.00
MOLYBDENUM, DISSOLVED (UG/L AS MO)	11	25.00	0.00	7.55	7.35	10.00	10.00	1.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	7	7.00	0.00	3.43	2.51	6.00	3.00	1.00
NICKEL, DISSOLVED (UG/L AS NI)	11	8.00	0.00	3.64	2.11	5.00	3.00	2.00
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	7	16.00	2.00	8.57	4.58	12.00	8.00	6.00
VANADIUM, DISSOLVED (UG/L AS V)	10	8.00	0.00	2.52	3.05	6.00	1.00	0.00
ZINC, DISSOLVED (UG/L AS ZN)	11	30.00	3.00	11.36	9.50	20.00	8.00	3.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	7	40.00	20.00	25.71	7.87	30.00	20.00	20.00
ALUMINUM, DISSOLVED (UG/L AS AL)	11	170.00	0.00	31.82	49.36	50.00	10.00	0.00
LITHIUM, DISSOLVED (UG/L AS LI)	11	140.00	20.00	83.27	39.21	120.00	96.00	43.00
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	7	130.00	20.00	90.00	38.30	120.00	100.00	60.00
SELENIUM, DISSOLVED (UG/L AS SE)	11	9.00	1.00	3.09	2.47	5.00	2.00	1.00
SELENIUM, TOTAL (UG/L AS SE)	7	9.00	1.00	2.86	2.91	4.00	2.00	1.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	35	3480.00	531.00	2185.46	692.48	2750.00	2080.00	1700.00
SOLIDS, DISSOLVED (TUNGS PER AC-FT)	35	4.73	0.72	2.97	0.94	3.74	2.83	2.31
MERCURY, DISSOLVED (UG/L AS HG)	11	0.30	0.00	0.04	0.09	0.00	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	7	0.30	0.00	0.11	0.11	0.20	0.10	0.00
SEDIMENT, SUSPENDED (MG/L)	39	572.00	10.00	63.62	91.57	73.00	42.00	22.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	39	3310.00	0.01	89.04	529.57	1.20	0.25	0.07

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS						PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25	5
OCTOBER	59.00	0.32	5.39	9.68	179.65	2.0	28.60	5.10	1.10	0.55	0.38
NOVEMBER	3.20	0.80	1.79	0.59	32.86	0.7	2.85	2.20	1.80	1.30	0.96
DECEMBER	2.20	0.40	1.37	0.40	29.32	0.5	2.00	1.70	1.40	1.05	0.60
JANUARY	1.60	0.50	1.03	0.30	29.05	0.4	1.53	1.25	1.00	0.80	0.57
FEBRUARY	1.30	0.00	0.75	0.41	54.87	0.3	1.30	1.00	0.80	0.50	0.00
MARCH	1980.00	0.00	95.48	318.98	334.08	35.6	844.70	8.75	2.30	1.20	0.00
APRIL	430.00	2.50	63.55	83.18	130.88	23.1	222.50	101.00	26.50	4.70	2.76
MAY	97.00	1.10	14.70	17.86	121.47	5.5	64.00	19.00	11.00	2.30	1.20
JUNE	1040.00	0.78	47.88	151.55	316.53	17.4	297.00	19.00	7.10	3.65	1.15
JULY	1670.00	0.38	37.13	184.85	497.87	13.9	176.90	5.85	3.10	0.58	0.43
AUGUST	4.70	0.00	0.95	1.02	107.37	0.4	3.58	1.10	0.51	0.34	0.16
SEPTEMBER	1.50	0.21	0.50	0.28	56.05	0.2	1.00	0.68	0.35	0.28	0.24
ANNUAL	1980.00	0.00	22.64	121.67	537.45	100.0	75.00	4.70	1.40	0.80	0.28

LOCATION.--Lat 46°05'30", long 101°20'00", in NE¼SE¼ sec.8, T.130 N., R.85 W., Grant County, Hydrologic Unit 10130205, on left bank at upstream side of bridge on N.D. Highway 31, 6 mi (10 km) upstream from mouth, and 19 mi (30 km) south of Raleigh.

DRAINAGE AREA.--1,750 mi² (4,530 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	46	27.00	0.00	10.51	10.09	19.37	7.50	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	48	10400.00	0.01	672.50	1927.68	187.75	14.50	7.50
SPECIFIC CONDUCTANCE (MICROMHUS)	48	3800.00	240.00	1854.17	1024.97	2500.00	1950.00	975.00
PH (UNITS)	15	8.60	7.40	8.08	0.39	8.50	8.10	7.80
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	15	35.00	1.40	9.47	10.66	15.00	4.70	1.90
BICARBONATE (MG/L AS HCO3)	16	746.00	73.00	399.44	173.27	419.25	393.00	327.00
CARBONATE (MG/L AS CO3)	16	6.00	0.00	0.38	1.50	0.00	0.00	0.00
HARDNESS (MG/L AS CaCO3)	16	980.00	68.00	574.25	247.93	767.50	545.00	460.00
HARDNESS, NONCARBONATE (MG/L CaCO3)	16	440.00	8.00	246.56	125.01	357.50	235.00	167.50
CALCIUM, DISSOLVED (MG/L AS Ca)	16	170.00	17.00	95.19	41.00	125.00	88.00	74.50
MAGNESIUM, DISSOLVED (MG/L AS MG)	16	140.00	6.20	81.70	36.66	110.00	82.50	54.25
SODIUM, DISSOLVED (MG/L AS NA)	16	550.00	23.00	312.69	138.60	385.00	330.00	235.00
SODIUM PERCENT	16	61.00	40.00	52.75	6.03	58.00	53.50	48.00
POTASSIUM, DISSOLVED (MG/L AS K)	16	14.00	5.70	10.39	2.53	12.00	9.95	8.67
CHLORIDE, DISSOLVED (MG/L AS CL)	16	16.00	2.10	12.05	4.32	14.00	13.00	9.52
SULFATE, DISSOLVED (MG/L AS SO4)	16	1400.00	63.00	888.31	369.22	1100.00	915.00	727.50
FLUORIDE, DISSOLVED (MG/L AS F)	16	0.50	0.00	0.31	0.13	0.40	0.30	0.22
SILICA, DISSOLVED (MG/L AS SiO2)	16	12.00	2.70	6.83	2.42	8.77	6.75	4.87
BORON, DISSOLVED (UG/L AS B)	16	880.00	90.00	470.62	256.61	720.00	440.00	282.50
IRON, DISSOLVED (UG/L AS FE)	16	1500.00	0.00	216.87	385.78	225.00	80.00	25.00
MANGANESE, DISSOLVED (UG/L AS MN)	16	240.00	0.00	71.87	71.01	87.50	55.00	20.00
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	16	2810.00	174.00	1648.13	700.37	2012.50	1655.00	1310.00
SOLIDS, DISSOLVED (TUNS PER AC-FT)	16	3.82	0.24	2.24	0.95	2.73	2.25	1.78

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF ANNUAL RUNOFF	PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION		95	75	50 MEDIAN	25	5
OCTOBER	319.00	4.00	27.00	45.65	169.08	1.6	115.80	30.50	8.60	6.90	4.34
NOVEMBER	17.00	8.50	10.79	1.41	13.11	0.6	13.45	12.00	10.00	10.00	9.00
DECEMBER	12.00	2.50	6.99	2.01	28.76	0.4	10.00	8.50	7.00	5.80	3.48
JANUARY	6.00	0.10	2.96	1.43	48.24	0.2	5.00	4.00	3.50	1.70	0.37
FEBRUARY	10.00	0.20	2.61	2.08	79.57	0.1	8.76	3.00	2.50	0.80	0.20
MARCH	10900.00	1.60	569.14	2043.17	358.99	33.7	7371.98	70.00	13.00	5.00	1.60
APRIL	7450.00	8.60	706.58	1073.80	151.97	40.5	2716.50	865.00	441.50	26.00	13.10
MAY	521.00	1.40	129.59	127.22	98.17	7.7	381.80	212.50	112.00	3.20	2.17
JUNE	700.00	2.60	118.49	122.48	103.37	6.8	412.80	134.75	80.50	38.50	23.65
JULY	2400.00	0.22	117.57	328.76	279.62	7.0	599.70	65.00	33.00	9.10	0.96
AUGUST	220.00	0.00	19.19	31.48	164.06	1.1	36.60	28.50	12.00	0.96	0.00
SEPTEMBER	26.00	0.01	6.57	4.91	74.76	0.4	13.00	10.00	7.80	0.25	0.03
ANNUAL	10900.00	0.00	143.41	712.88	497.09	100.0	509.15	42.00	10.00	4.00	0.40

LOCATION.--Lat 46°22'33", long 100°56'03", in sec.36, T.134 N., R.82 W., Morton County, Hydrologic Unit 10130206, on left bank at downstream side of bridge on State Highway 6, 1,500 ft (460 m) downstream from Louise Creek and 0.6 mi (1.0 km) southeast of Breien. Prior to June 12, 1973, at site 600 ft (180 m) upstream on right bank.

DRAINAGE AREA.--4,100 mi² (10,600 km²), approximately.

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	50	25
TEMPERATURE (DEG C)	49	25.00	0.00	8.89	9.20	17.25	6.00	0.00
STREAMFLOW, INSTANTANEOUS (CFS)	48	22859.95	7.50	1874.67	4898.99	1430.00	73.00	23.25
SPECIFIC CONDUCTANCE (MICROMHUS)	48	3710.00	190.00	1558.60	837.32	2092.50	1560.00	915.00
OXYGEN, DISSOLVED (MG/L)	35	13.10	5.00	9.43	1.99	11.30	9.30	7.80
OXYGEN, DISSOLVED (PERCENT SATURATION)	17	102.00	52.00	83.29	18.35	98.50	89.00	68.00
PH (UNITS)	35	8.70	7.60	8.22	0.30	8.50	8.30	8.00
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	8	21.00	1.50	8.37	8.80	19.25	2.65	1.95
BICARBONATE (MG/L AS HCO ₃)	7	670.00	220.00	450.00	182.85	660.00	450.00	290.00
CARBONATE (MG/L AS CO ₃)	7	1.00	0.00	0.14	0.38	0.00	0.00	0.00
NITROGEN, TOTAL (MG/L AS N)	31	5.50	0.61	1.45	1.00	1.70	1.00	0.93
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	31	4.20	0.27	1.13	0.78	1.50	0.90	0.67
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	35	0.22	0.00	0.06	0.06	0.11	0.04	0.01
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	35	1.10	0.00	0.26	0.31	0.39	0.10	0.01
PHOSPHORUS, TOTAL (MG/L AS P)	35	1.00	0.00	0.16	0.23	0.26	0.05	0.02
PHOSPHORUS, DISSOLVED (MG/L AS P)	35	0.08	0.00	0.02	0.02	0.03	0.01	0.01
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	25	14.00	7.40	9.66	1.51	10.00	9.50	8.70
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	22	32.00	0.20	3.65	7.08	3.60	1.05	0.30
HARDNESS (MG/L AS CaCO ₃)	35	1000.00	98.00	466.23	228.85	610.00	440.00	290.00
HARDNESS, NONCARBONATE (MG/L AS CaCO ₃)	35	380.00	0.00	133.97	93.04	210.00	140.00	67.00
CALCIUM, DISSOLVED (MG/L AS Ca)	35	160.00	23.00	84.46	39.19	120.00	71.00	56.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	35	150.00	9.80	62.14	33.08	91.00	62.00	38.00
SODIUM, DISSOLVED (MG/L AS Na)	35	620.00	61.00	270.09	129.05	370.00	270.00	160.00
SODIUM PERCENT	35	79.00	39.00	56.03	9.35	60.00	56.00	51.00
POTASSIUM, DISSOLVED (MG/L AS K)	35	16.00	2.30	10.00	2.50	12.00	11.00	8.20
CHLORIDE, DISSOLVED (MG/L AS CL)	35	39.00	2.50	13.47	8.49	18.00	12.00	7.30
SULFATE, DISSOLVED (MG/L AS SO ₄)	35	1500.00	120.00	682.29	320.37	900.00	670.00	390.00
FLUORIDE, DISSOLVED (MG/L AS F)	35	0.70	0.10	0.39	0.13	0.40	0.40	0.30
SILICA, DISSOLVED (MG/L AS SiO ₂)	35	14.00	3.00	7.70	2.69	9.40	7.90	5.80
ARSENIC, DISSOLVED (UG/L AS AS)	11	3.00	0.00	1.55	1.04	3.00	1.00	1.00
ARSENIC, TOTAL (UG/L AS AS)	24	20.00	1.00	3.63	4.19	4.75	2.00	1.00
BARIUM, DISSOLVED (UG/L AS BA)	10	200.00	0.00	90.00	50.99	100.00	100.00	70.00
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	24	800.00	0.00	183.33	171.10	200.00	100.00	100.00
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	22	10.00	0.00	0.91	2.94	0.00	0.00	0.00
CHROMIUM, DISSOLVED (UG/L AS CR)	11	10.00	0.00	1.82	4.05	0.00	0.00	0.00
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	24	75.00	0.00	13.96	17.63	20.00	10.00	0.00
COBALT, DISSOLVED (UG/L AS CO)	11	5.00	0.00	1.55	1.75	3.00	1.00	0.00
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	24	40.00	0.00	5.42	9.27	5.75	2.50	0.00
COPPER, DISSOLVED (UG/L AS CU)	12	28.00	0.00	3.75	7.70	2.75	2.00	1.00
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	24	100.00	1.00	20.25	26.28	22.25	9.00	6.25
IRON, TOTAL RECOVERABLE (UG/L AS FE)	24	78000.00	150.00	8482.50	17669.08	5325.00	910.00	310.00
IRON, DISSOLVED (UG/L AS FE)	11	840.00	0.00	108.18	244.57	70.00	30.00	10.00
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	24	2200.00	20.00	282.92	457.18	367.50	115.00	72.50
MANGANESE, DISSOLVED (UG/L AS MN)	11	80.00	0.00	28.82	27.19	50.00	20.00	5.00
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MU)	22	9.00	0.00	3.95	2.54	5.25	4.00	2.75
NICKEL, DISSOLVED (UG/L AS NI)	4	6.00	0.00					
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	22	140.00	3.00	25.32	32.59	31.50	13.00	7.00
ZINC, DISSOLVED (UG/L AS ZN)	11	120.00	0.00	17.27	34.57	10.00	10.00	3.00
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	24	300.00	0.00	64.58	70.22	87.50	40.00	20.00
LITHIUM, DISSOLVED (UG/L AS LI)	1	80.00	80.00					
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	22	100.00	20.00	65.45	19.93	80.00	70.00	50.00
SELENIUM, DISSOLVED (UG/L AS SE)	11	2.00	0.00	0.82	0.75	1.00	1.00	0.00
SELENIUM, TOTAL (UG/L AS SE)	24	3.00	0.00	0.92	0.72	1.00	1.00	0.25
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	35	2960.00	288.00	1348.26	613.81	1810.00	1320.00	791.00
SOLIDS, DISSOLVED (TUNGS PER AC-FT)	35	4.03	0.39	1.83	0.83	2.46	1.80	1.08
MERCURY, DISSOLVED (UG/L AS Hg)	11	0.20	0.00	0.04	0.07	0.10	0.00	0.00
MERCURY, TOTAL RECOVERABLE (UG/L AS Hg)	24	1.00	0.00	0.16	0.23	0.28	0.10	0.00
SEDIMENT, SUSPENDED (MG/L)	35	4000.00	6.00	424.11	902.00	308.00	32.00	18.00
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	35	50900.00	0.15	2794.46	9612.97	75.00	3.90	0.98

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50	25
OCTOBER	802.00	21.00	114.69	157.41	137.25	2.5	454.50	124.00	38.00	31.00
NOVEMBER	59.00	5.00	38.04	11.21	29.46	0.8	52.00	46.50	42.00	30.50
DECEMBER	48.00	18.00	33.78	5.97	17.68	0.7	42.00	37.50	35.00	30.00
JANUARY	33.00	7.00	16.70	6.31	37.81	0.4	31.00	22.00	15.00	12.00
FEBRUARY	13.00	7.50	8.75	1.30	14.87	0.2	11.70	9.25	8.50	8.00
MARCH	21900.00	8.00	1383.31	4544.57	328.53	30.5	16359.95	195.00	20.00	9.50
APRIL	17500.00	49.00	1910.33	2624.19	137.37	40.8	6213.50	2145.00	1095.00	135.00
MAY	2710.00	16.00	404.23	453.34	112.15	8.9	1257.00	550.00	331.00	38.50
JUNE	2330.00	22.00	317.40	326.57	102.89	6.8	836.70	401.25	239.00	106.50
JULY	3510.00	3.90	276.48	536.18	192.54	6.1	1295.99	274.00	122.00	26.50
AUGUST	385.00	2.30	65.63	69.98	106.63	1.4	233.40	81.50	53.00	10.85
SEPTEMBER	86.00	5.90	34.03	20.05	58.91	0.7	69.00	46.00	37.00	12.75
ANNUAL	21900.00	2.30	384.43	1640.95	426.86	100.0	1511.50	149.50	40.00	18.00

LOCATION.--Lat 45°57'39", long 103°07'09", at southwest corner of sec.30, T.129 N., R.99 W., Bowman County, Hydrologic Unit 10130301, on left bank 10 ft (3 m) downstream from county highway bridge, 300 ft (91 m) south of post office at Haley, and 1 mi (1.6 km) north of South Dakota state line.

DRAINAGE AREA.--509 mi² (1,318 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN		
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	MEDIAN 50	25
TEMPERATURE (DEG C)	50	27.00	0.00	9.85	9.38	18.87	6.75	0.50
STREAMFLOW, INSTANTANEOUS (CFS)	50	2210.00	0.28	129.74	438.98	33.00	2.00	1.20
SPECIFIC CONDUCTANCE (MICROMH/CM)	50	3600.00	400.00	2254.60	730.17	2750.00	2390.00	1687.50
OXYGEN, DISSOLVED (MG/L)	6	10.20	8.00	8.87	0.94	9.97	8.45	8.15
OXYGEN, DISSOLVED (PERCENT SATURATION)	4	114.00	94.00					
PH (UNITS)	10	9.10	7.20	8.39	0.50	8.60	8.40	8.30
CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	6	17.00	0.60	4.72	6.09	6.65	2.75	1.65
BICARBONATE (MG/L AS HCO3)	6	504.00	165.00	371.17	128.54	480.75	387.50	273.75
CARBONATE (MG/L AS CO3)	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARDNESS (MG/L AS CaCO3)	6	350.00	210.00	288.33	54.92	335.00	300.00	232.50
HARDNESS, NONCARBONATE (MG/L AS CaCO3)	6	110.00	0.00	22.83	44.05	47.75	0.00	0.00
CALCIUM, DISSOLVED (MG/L AS Ca)	6	61.00	40.00	51.17	8.01	57.25	53.00	43.00
MAGNESIUM, DISSOLVED (MG/L AS Mg)	6	51.00	27.00	39.17	8.70	45.75	40.50	30.75
SODIUM, DISSOLVED (MG/L AS Na)	6	480.00	86.00	327.67	147.38	465.00	335.00	224.00
SODIUM PERCENT	6	75.00	43.00	67.33	12.18	74.25	72.00	61.75
POTASSIUM, DISSOLVED (MG/L AS K)	6	11.00	4.10	7.87	2.39	10.10	7.60	6.35
CHLORIDE, DISSOLVED (MG/L AS CL)	6	13.00	3.00	7.85	3.29	10.15	7.75	5.55
SULFATE, DISSOLVED (MG/L AS SO4)	6	940.00	290.00	670.00	244.05	887.50	700.00	462.50
FLUORIDE, DISSOLVED (MG/L AS F)	6	1.20	0.10	0.53	0.39	0.75	0.55	0.17
SILICA, DISSOLVED (MG/L AS SiO2)	6	7.60	0.70	3.78	2.41	5.20	4.15	1.45
BORON, DISSOLVED (UG/L AS B)	6	830.00	130.00	475.00	236.45	650.00	485.00	280.00
IRON, DISSOLVED (UG/L AS FE)	6	610.00	20.00	313.33	258.04	355.00	355.00	27.50
MANGANESE, DISSOLVED (UG/L AS MN)	6	80.00	10.00	46.67	33.27	80.00	45.00	17.50
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	6	1800.00	613.00	1308.83	458.63	1755.00	1335.00	925.75
SOLIDS, DISSOLVED (TONS PER AC-FT)	6	2.45	0.83	1.78	0.63	2.39	1.81	1.26

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS						PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25	5
OCTOBER	2.90	1.20	1.73	0.34	19.67	0.5	2.30	1.90	1.70	1.50	1.30
NOVEMBER	2.40	0.80	1.60	0.38	23.97	0.4	2.20	1.90	1.60	1.40	0.90
DECEMBER	2.50	0.80	1.54	0.43	28.13	0.4	2.36	1.80	1.60	1.00	0.85
JANUARY	1.80	0.30	0.83	0.45	54.98	0.2	1.53	1.20	0.80	0.40	0.30
FEBRUARY	2.00	0.35	0.97	0.47	48.25	0.2	1.50	1.30	1.20	0.40	0.40
MARCH	2250.00	1.00	133.73	488.83	365.54	36.2	2004.00	3.00	2.40	1.50	1.00
APRIL	1930.00	1.20	176.14	297.59	168.95	46.1	706.65	209.50	85.50	1.80	1.30
MAY	161.00	0.63	33.09	36.41	110.02	9.0	122.50	46.50	30.00	0.99	0.70
JUNE	79.00	0.21	16.56	22.06	133.21	4.3	70.45	26.00	5.05	1.00	0.39
JULY	21.00	0.21	5.12	4.97	97.08	1.4	17.30	6.90	3.70	2.05	0.34
AUGUST	7.10	1.10	3.14	1.78	56.70	0.8	5.82	5.10	2.30	1.70	1.20
SEPTEMBER	3.70	0.28	1.41	0.76	53.95	0.4	2.73	1.80	1.40	0.67	0.35
ANNUAL	2250.00	0.21	31.35	175.02	558.28	100.0	106.35	4.00	1.70	1.20	0.40

06355310 BUFFALO CREEK TRIBUTARY NEAR GASCOYNE, ND

LOCATION.--Lat 46°06'40", long 103°02'20", in SE¼NE¼ sec.3, T.130 N., R.99 W., Bowman County, Hydrologic Unit 10130301, on left bank 46 ft (14 m) downstream from Chicago, Milwaukee, St. Paul, Pacific Railway bridge, and 1.8 mi (2.9 km) east of Gascoyne.

DRAINAGE AREA.--15.7 mi² (40.7 km²).

SUMMARY OF WATER-QUALITY DATA COLLECTED AT PERIODIC INTERVALS DURING PERIOD OCT,1977 THROUGH SEPT,1980

WATER QUALITY CONSTITUENT	SAMPLE SIZE	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN			
		MAXIMUM	MINIMUM	MEAN	STANDARD DEVIATION	75	50 MEDIAN	25	
TEMPERATURE (DEG C)	39	25.00	0.00	7.69	7.52	13.00	7.50	0.50	
STREAMFLOW, INSTANTANEOUS (CFS)	39	86.00	0.02	9.24	17.06	15.00	1.30	0.18	
SPECIFIC CONDUCTANCE (MICROMH/CM)	38	8000.00	555.00	3746.97	2181.63	5700.00	3750.00	1592.50	
OXYGEN, DISSOLVED (MG/L)	25	13.80	3.80	8.74	2.58	10.70	9.00	6.90	
OXYGEN, DISSOLVED (PERCENT SATURATION)	14	111.00	29.00	80.43	22.01	96.00	82.00	70.75	
PH (UNITS)	27	8.70	7.20	8.21	0.30	8.40	8.20	8.10	
CARBON DIOXIDE, DISSOLVED (MG/L AS CO ₂)	17	22.00	0.80	5.76	4.81	7.55	4.70	2.45	
BICARBONATE (MG/L AS HCO ₃)	17	871.00	153.00	567.06	232.66	739.00	640.00	411.50	
CARBONATE (MG/L AS CO ₃)	17	36.00	0.00	6.00	11.44	9.50	0.00	0.00	
NITROGEN, TOTAL (MG/L AS N)	26	4.10	0.57	1.69	0.77	2.23	1.50	1.20	
NITROGEN, ORGANIC, TOTAL (MG/L AS N)	7	2.30	0.74	1.39	0.51	1.60	1.30	1.00	
NITROGEN, AMMONIA, TOTAL (MG/L AS N)	7	0.33	0.08	0.19	0.09	0.30	0.18	0.11	
NITROGEN, NO ₂ +NO ₃ , TOTAL (MG/L AS N)	26	3.00	0.00	0.25	0.62	0.14	0.05	0.01	
PHOSPHORUS, TOTAL (MG/L AS P)	26	0.66	0.04	0.12	0.12	0.11	0.10	0.06	
PHOSPHORUS, DISSOLVED (MG/L AS P)	26	0.14	0.00	0.04	0.03	0.06	0.03	0.02	
CARBON, ORGANIC, DISSOLVED (MG/L AS C)	25	77.00	13.00	34.40	17.60	43.00	32.00	21.00	
CARBON, ORGANIC, SUSPENDED (MG/L AS C)	20	13.00	0.30	2.10	2.96	2.43	0.90	0.50	
HARDNESS (MG/L AS CaCO ₃)	27	2300.00	260.00	968.89	433.91	1200.00	1000.00	700.00	
HARDNESS, NONCARBONATE (MG/L CaCO ₃)	27	1300.00	120.00	499.63	267.36	680.00	430.00	320.00	
CALCIUM, DISSOLVED (MG/L AS Ca)	27	180.00	30.00	113.74	42.91	150.00	113.00	80.00	
MAGNESIUM, DISSOLVED (MG/L AS Mg)	27	460.00	36.00	166.56	88.86	230.00	160.00	110.00	
SODIUM, DISSOLVED (MG/L AS Na)	27	1900.00	130.00	812.22	429.86	1100.00	840.00	550.00	
SODIUM PERCENT	27	92.00	17.00	63.74	12.39	68.00	64.00	61.00	
POTASSIUM, DISSOLVED (MG/L AS K)	27	32.00	8.10	14.93	4.76	17.00	15.00	11.00	
CHLORIDE, DISSOLVED (MG/L AS CL)	27	34.00	3.90	13.80	6.68	18.00	14.00	9.10	
SULFATE, DISSOLVED (MG/L AS SO ₄)	27	5400.00	460.00	2160.37	1126.38	2700.00	2300.00	1500.00	
FLUORIDE, DISSOLVED (MG/L AS F)	27	1.50	0.10	0.79	0.33	1.00	0.80	0.60	
SILICA, DISSOLVED (MG/L AS SiO ₂)	27	15.00	0.40	5.40	4.20	7.50	4.80	1.60	
ARSENIC, DISSOLVED (UG/L AS AS)	8	5.00	1.00	2.75	1.39	4.00	2.00	2.00	
ARSENIC, TOTAL (UG/L AS AS)	2	4.00	2.00						
BARIUM, DISSOLVED (UG/L AS BA)	8	100.00	0.00	50.00	46.29	100.00	50.00	0.00	
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	2	200.00	100.00						
BERYLLIUM, DISSOLVED (UG/L AS BE)	2	3.00	3.00						
BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	2	0.00	0.00						
BORON, DISSOLVED (UG/L AS B)	15	5100.00	3.60	2558.91	1452.53	3400.00	2800.00	1300.00	
CHROMIUM, DISSOLVED (UG/L AS CR)	8	10.00	0.00	2.50	4.63	7.50	0.00	0.00	
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	2	0.00	0.00						
COBALT, DISSOLVED (UG/L AS CO)	2	8.00	8.00						
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	2	1.00	0.00						
COPPER, DISSOLVED (UG/L AS CU)	8	25.00	0.00	7.88	10.70	20.00	3.00	1.00	
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	2	6.00	2.00						
IRON, DISSOLVED (UG/L AS FE)	15	400.00	0.60	100.71	97.24	140.00	70.00	40.00	
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	2	220.00	100.00						
MANGANESE, DISSOLVED (UG/L AS MN)	10	2100.00	1.70	335.17	628.43	262.50	135.00	67.50	
MOLYBDENUM, DISSOLVED (UG/L AS MO)	8	25.00	0.00	7.38	11.01	19.75	2.50	0.00	
MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	2	3.00	3.00						
NICKEL, DISSOLVED (UG/L AS NI)	2	1.00	1.00						
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	2	21.00	0.00						
VANADIUM, DISSOLVED (UG/L AS V)	2	8.00	8.00						
ZINC, DISSOLVED (UG/L AS ZN)	8	40.00	8.00	21.38	10.27	26.25	20.00	12.50	
ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	2	30.00	20.00						
ALUMINUM, DISSOLVED (UG/L AS AL)	8	90.00	0.00	28.75	29.00	37.50	30.00	2.50	
LITHIUM, DISSOLVED (UG/L AS LI)	8	210.00	40.00	101.88	53.98	132.50	95.00	58.75	
LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	2	140.00	50.00						
SELENIUM, DISSOLVED (UG/L AS SE)	8	1.00	0.00	0.38	0.52	1.00	0.00	0.00	
SELENIUM, TOTAL (UG/L AS SE)	2	0.00	0.00						
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	27	9280.00	848.00	3893.30	1905.66	5040.00	4250.00	2710.00	
SOLIDS, DISSOLVED (TONS PER AC-FT)	27	12.60	1.15	5.29	2.59	6.85	5.78	3.69	
MERCURY, DISSOLVED (UG/L AS HG)	8	0.20	0.00	0.08	0.09	0.18	0.05	0.00	
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	2	0.20	0.00						
SEDIMENT, SUSPENDED (MG/L)	26	232.00	2.00	69.65	63.25	122.00	46.00	11.00	
SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	26	9.40	0.00	0.60	1.89	0.18	0.07	0.02	

SUMMARY OF DAILY STREAMFLOW DATA FOR PERIOD OCT,1977 THROUGH SEPT,1980

MONTH	DESCRIPTIVE STATISTICS					PERCENT OF DAYS WHICH HAD VALUES LESS THAN OR EQUAL TO THOSE SHOWN IN CFS				
	MAXIMUM CFS	MINIMUM CFS	MEAN CFS	STANDARD DEVIATION CFS	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF	95	75	50 MEDIAN	25
OCTOBER	15.00	0.02	1.13	2.50	222.14	5.5	8.46	0.62	0.35	0.13
NOVEMBER	11.00	0.06	0.54	1.62	298.03	2.6	0.95	0.35	0.21	0.10
DECEMBER	0.40	0.00	0.12	0.14	110.69	0.6	0.36	0.28	0.03	0.00
JANUARY	0.27	0.00	0.02	0.05	364.32	0.1	0.20	0.00	0.00	0.00
FEBRUARY	0.00	0.00	0.00	0.00	.	0.0	0.00	0.00	0.00	0.00
MARCH	80.00	0.00	10.86	16.61	152.94	53.1	50.00	15.00	2.60	0.01
APRIL	16.00	0.08	3.93	3.76	96.07	18.6	15.45	5.95	2.70	0.97
MAY	28.00	0.00	2.30	3.56	154.95	11.2	7.92	2.85	1.70	0.09
JUNE	5.60	0.00	0.97	1.07	110.21	4.6	3.29	1.50	0.54	0.20
JULY	3.80	0.00	0.43	0.60	137.85	2.1	1.43	0.70	0.21	0.00
AUGUST	2.00	0.00	0.14	0.26	190.65	0.7	0.52	0.19	0.00	0.00
SEPTEMBER	1.60	0.00	0.19	0.34	179.81	0.9	1.24	0.23	0.04	0.00
ANNUAL	80.00	0.00	1.74	5.94	342.08	100.0	8.41	0.90	0.16	0.00

