

USES, FUNDING, AND AVAILABILITY OF CONTINUOUS
STREAMFLOW DATA IN MONTANA

By Ronald R. Shields and Melvin K. White

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CONTENTS

	Page
Abstract.	1
Introduction	1
History of the streamflow-gaging program in Montana	2
Hydrologic setting.	3
Current Montana stream-gaging program	6
Uses, funding, and availability of continuous streamflow data	6
Data-use classes.	6
Regional hydrology.	7
Hydrologic systems.	7
Legal obligations	7
Planning and design	9
Project operation	9
Hydrologic forecasts.	9
Water-quality monitoring.	10
Research.	10
Other	10
Funding	11
Frequency of data availability.	11
Data-use presentation	11
Summary	11
References cited.	12

ILLUSTRATIONS

Figure 1. Graph showing history of continuous streamflow-gaging stations in Montana.	4
2. Map showing location of surface-water gaging stations, 1984 water year	5
3. Map showing location of regional hydrology gaging stations, 1984 water year	8

TABLES

Table 1. Selected hydrologic data for stations in the surface-water program.	13
2. Data use, funding, and data availability for stations in the surface-water program.	31

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ABSTRACT

This report documents the results of a study of the uses, funding, and availability of continuous streamflow data collected and published by the U.S. Geological Survey in Montana. Data uses and funding sources are identified for the 218 continuous streamflow gages currently (1984) being operated. These stations are supported by 18 different funding sources at a budget for the 1984 water year of \$1,065,000.

The streamflow-gaging program in Montana has evolved through the years as Federal, State, and local needs for surface-water data have increased. Continuous streamflow records for periods ranging from less than 1 year to more than 90 years have been collected.

This report describes phase 1 of a cost-effectiveness study of the streamflow-gaging program in Montana. Evaluation of the program indicates that numerous agencies use the data for studies involving regional hydrology, hydrologic systems, and planning and design. They also use the data for operations of existing hydroelectric and irrigation dams, forecasting flood and seasonal flows, water-quality monitoring, research studies for fish habitat, and other uses such as recreational management.

INTRODUCTION

The U.S. Geological Survey is the principal Federal agency collecting surface-water data in the Nation. The collection of these data is a major activity of the Geological Survey. The data are collected in cooperation with State and local governments and other Federal agencies. The Survey is presently (1984) operating about 8,000 continuous-record gaging stations nationwide. Some of these records extend back to the turn of the century. Any activity of long standing, such as the collection of surface-water data, needs to be reexamined at intervals, if not continuously, because of changes in objectives, technology, or external constraints. The last systematic nationwide evaluation of the streamflow-information program was completed in 1970 and is documented by Benson and Carter (1973). The Survey is presently (1984) undertaking another nationwide analysis of the streamflow-gaging program that will be completed during a 5-year period, with 20 percent of the program being analyzed each year. This report deals with the first aspect of that analysis, which is data use and availability. The purpose of this report is to define and document the current streamflow-data collection program in Montana and to briefly discuss the history of its development.

For every continuous-record gaging station operated during the 1984 water year, the analysis identifies the principal uses of the data and relates these uses to the funding sources. In addition, gaging stations are categorized as to whether the data are available to users in a real-time sense, on a daily basis during floods, on a periodic basis, or at the end of the water year.

This report is patterned after a pilot study for the State of Maine (Fontaine and others, 1984). Much of the material describing the general methodology is taken from the report by Fontaine and others (1984). This report is organized into two sections; the first is an introduction to the streamflow-gaging activities in Montana and the second describes the current Montana streamflow-gaging program.

History of the streamflow-gaging program in Montana

The streamflow-gaging program has evolved through the years as Federal, State, and local needs for surface-water data have increased. Continuous streamflow records for periods ranging from less than 1 year to more than 90 years have been collected. The earliest known records of river stage in Montana are for the station Missouri River at Fort Benton (06090800). Gage-height records were collected at this station during the summers of 1873-76, 1881-99, and 1901-09 by the Missouri River Commission, the U.S. Army Corps of Engineers, and the U.S. Weather Bureau. Although river-stage records have been collected in Montana since 1873, a systematic collection of streamflow records was not begun by the Geological Survey until 1889 as a part of the work being conducted by the Irrigation Survey. In 1889 the Survey established gaging stations at sites on the Gallatin River at Gallatin Gateway, Missouri River at Canyon Ferry, Sun River near Augusta, and the Yellowstone River at Corwin Springs. These early gages were serviced by observers who read staff and wire-weight gages, and the data were primarily collected to determine the availability of water to satisfy irrigation needs of a particular area.

The depression of 1893 and the severe droughts of the late 1890's pointed out the need for irrigating the arid lands of the Western States, and various appropriations were sought from Congress for making hydrologic surveys and for water availability and potential reservoir-site studies. In 1902, Congress adopted the Reclamation Act. The Director of the Geological Survey was given the authority to collect hydrologic records needed by the public and the scientific community. The number of streamflow-gaging stations increased each year as the irrigation investigations identified data requirements. In 1906, the Montana State Legislature created the Carey Land Act Board, which resulted in the Geological Survey and the State of Montana entering into a Federal-State cooperative agreement. In 1907 the Survey operated 87 gaging stations.

Further expansion of the streamflow-gaging program in Montana resulted from (1) The beginning of international coordination and cooperation with the Canadian Irrigation Office in 1913, as the result of a treaty, which directed the International Joint Commission to supervise the division of waters in the St. Mary and Milk River basins, and (2) the establishment of gaging stations within the national parks starting in 1916. In 1928, the U.S. Department of State expanded their cooperative programs in connection with studies of international streams along the Canadian boundary. In the same year the U.S. Army Corps of Engineers expanded their comprehensive studies of major rivers with emphasis on flood control (Boner and Buswell, 1970). The result was an increase in number of gaging stations from 72 in 1927 to 114 in 1929.

The work continued and by September 30, 1938, records for varying time periods had been collected by the Geological Survey and cooperating agencies at 372 gaging stations, of which 145 were in operation on September 30, 1938. On December 31, 1943, a total of 154 stations were in operation. About one-half of these stations were maintained under cooperative agreements with the State of Montana.

In 1946 gaging stations were starting to be established in connection with reservoir projects under consideration in the upper Missouri River basin by the U.S. Bureau of Reclamation. Other stations were established for the Montana State Engineer and the Montana State Water Conservation Board (presently the Montana Department of Natural Resources and Conservation) in connection with project studies and the expansion of a hydrologic network to obtain streamflow data.

On July 1, 1955, a study of the magnitude and frequency of floods from small drainages was begun in cooperation with the Montana State Highway Commission. This initial program consisting of 45 crest-stage gaging stations was expanded to 138 gages in 1959 and to 202 gages in 1963. About 200 crest-stage gages were in operation from 1963 to 1967, and 185 in 1968 and 1969. At present (1984) 166 crest-stage gages are still in operation.

In 1958, in cooperation with the Montana Water Resources Board, nine sites were designated to define low-flow characteristics; peak-flow data were also collected to aid in defining flood-frequency relations in prairie areas. Ten additional sites were added in 1961. In addition to these nineteen sites, thousands of base-flow measurements have been made at miscellaneous sites throughout the State for various projects and special studies (Boner and Buswell, 1970). These data are published in the report, "Water Resources Data, Montana" (U.S. Geological Survey, issued annually).

The study by Boner and Buswell (1970) described the development of Montana's surface-water program to meet the future needs of water-data users. At the time of that study, the Montana program had 160 continuous-record gages. Not included in that count were 35 stations (generally seasonal) in the Milk River basin within Canada and 58 reservoir gages. At present (1984) there are 218 continuous-record gaging stations being operated on rivers and streams in Montana, by the Geological Survey. This number does not include Canadian and reservoir stations that are published in the annual report. The historical number of stream-gaging stations published by Montana each year is shown in figure 1.

Hydrologic setting

The Hudson Bay and upper Missouri River basins in Montana drain about 83 percent of the State and provide slightly less than 50 percent of the State's total streamflow. The location of the major river basins is shown in figure 2. The Hudson Bay basin comprises less than 1 percent of the drainage area; the major river in the basin is the St. Mary River, which flows from Montana's Glacier National Park northward into Canada to the Saskatchewan River and then into Hudson Bay. The Missouri River, which is formed by the confluence of the Jefferson, Madison, and Gallatin Rivers in southwestern Montana, flows through the northeastern part of the State and into North Dakota. Its major tributaries are the Dearborn, Smith, Sun, Teton, Marias, Judith, Musselshell, Milk, Redwater, and Poplar Rivers. The Milk River originates in Montana, flows north into Canada, and then flows southeastward back into Montana. The Poplar River flows from its source in Canada

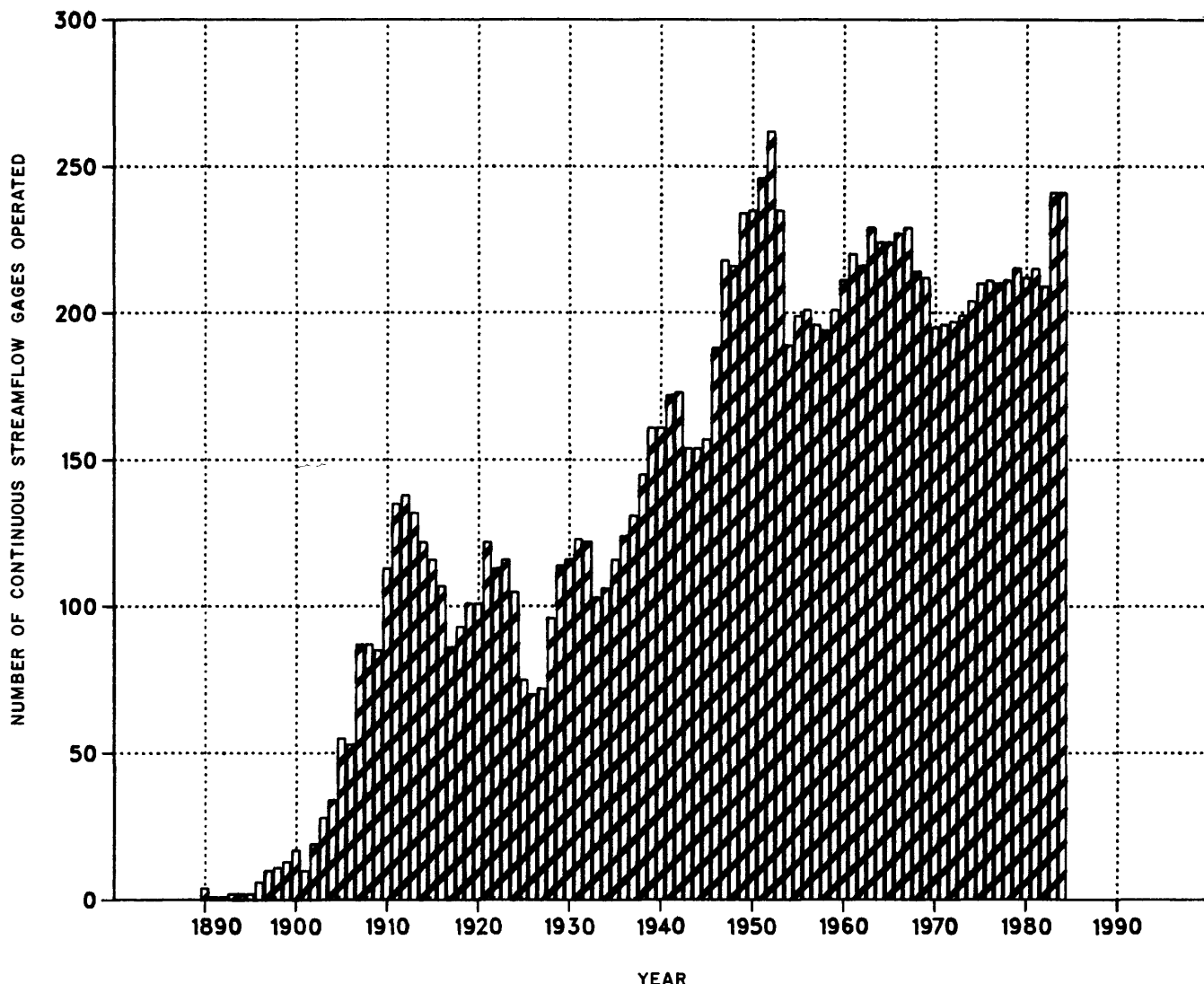


Figure 1.--History of continuous streamflow-gaging stations in Montana.

southward into Montana. The Yellowstone River, which originates in Wyoming, drains the south-central and southeastern sections of Montana; it joins the Missouri River just east of the Montana-North Dakota line. The major tributaries to the Yellowstone are the Shields, Boulder, and Stillwater Rivers that originate in Montana and the Clarks Fork Yellowstone, Bighorn, Tongue, and Powder Rivers that have their source in Wyoming and then flow northward into Montana.

The western and southwestern parts of the upper Missouri River basin are in the Northern Rocky Mountain physiographic province. The northern and eastern parts are in the Great Plains province. Climatic and hydrologic conditions differ significantly between the two provinces. The elevation ranges from about 10,000 feet at the Continental Divide in Glacier National Park and in the headwaters of the Yellowstone River in Yellowstone National Park to about 1,880 feet where the Missouri and Yellowstone Rivers flow from the State (Shields and others, 1984a).

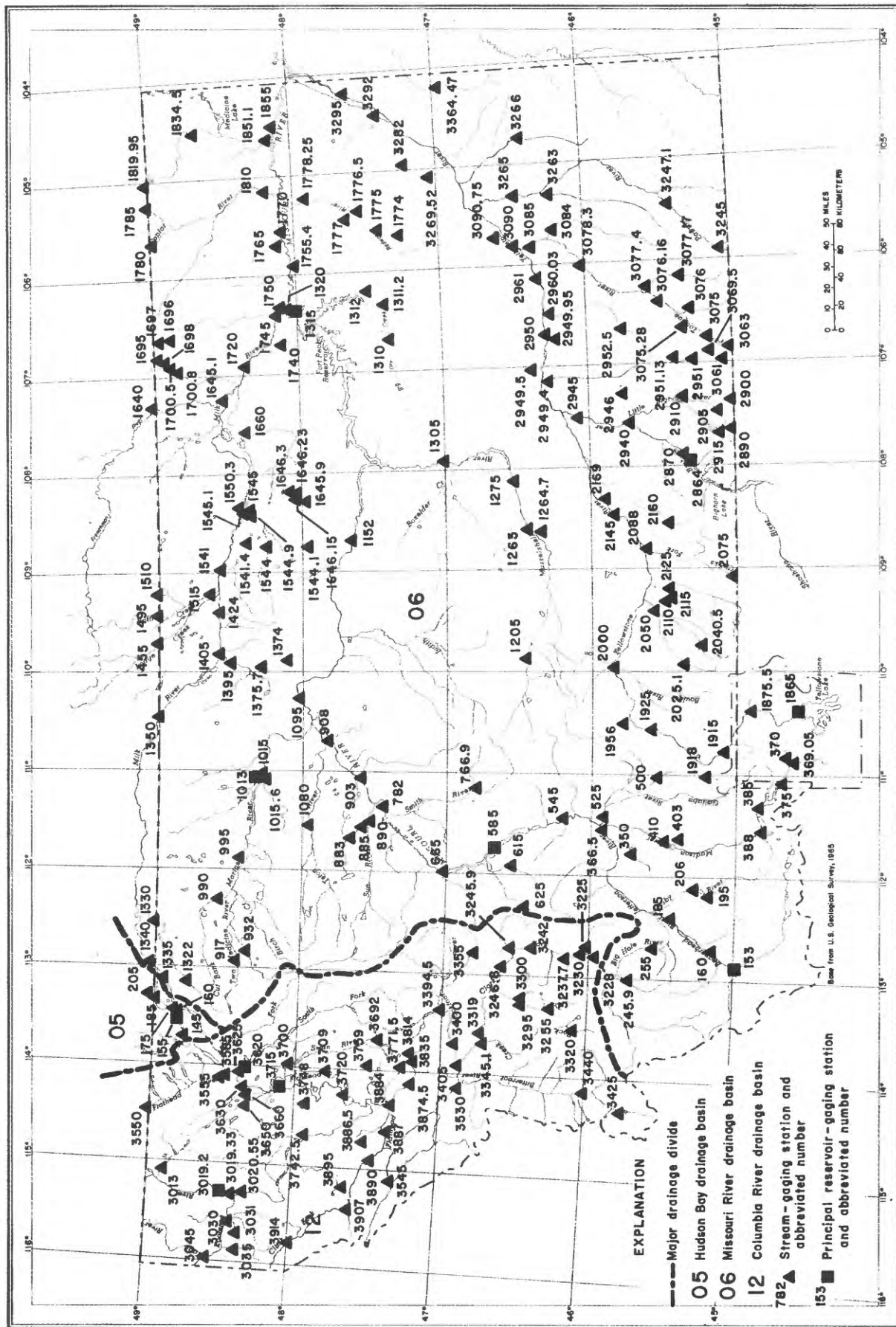


Figure 2.--Location of surface-water gaging stations, 1984 water year.

The upper Columbia River basin in western Montana is composed of three major river systems. They are: the Kootenai River, which flows through Montana from its headwaters in British Columbia, Canada; the Clark Fork (River) that originates in Montana; and the Flathead River, whose North Fork headwaters are in British Columbia. The Flathead River joins with the Clark Fork near Plains, Mont., and flows northwest from the State as the Clark Fork. The upper Columbia River basin lies in the Northern Rocky Mountain physiographic province, which is characterized by densely forested mountains and intermontane valleys where most of the area's population has settled. The range in elevation of the basin is dramatic. Where the Kootenai River flows from the State, the elevation is about 1,800 feet above sea level in contrast to an elevation of about 10,000 feet at the Continental Divide in Glacier National Park. The upper Columbia River basin occupies about 17 percent of the State; however, runoff from the basin is greater than 50 percent of the State's total streamflow (Shields and others, 1984b).

Over 2 1/2 million acres are fully or partially irrigated. Surface water sources yield 99 percent of this water, whereas 1 percent is obtained from groundwater sources (Montana Department of Natural Resources and Conservation, 1975).

Current Montana stream-gaging program

The location of the gaging stations in operation during the 1984 water year is shown in figure 2. The cost of operating the 218 stations within Montana during the 1984 water year was \$1,065,000.

Selected hydrologic data, including drainage area, period of record, and mean annual flow for the 218 stations are listed in table 1. The official name of each stream gage is also given in the table. Because Montana has three major hydrologic drainage basins, station-identification numbers used in this report will include the entire Geological Survey's eight-digit station number, except in the illustrations. Abbreviated station numbers are used on maps to eliminate crowding of numbers. The station-identification number is assigned according to downstream order.

USES, FUNDING, AND AVAILABILITY OF CONTINUOUS STREAMFLOW DATA

The relevance of a stream gage is defined by the uses made of the data obtained from the gage. The uses of the data from each gage in the Montana program were identified by a survey of known data users. The survey documented the importance of each gage and identified gaging stations that might be considered for discontinuation.

Data uses identified by the survey were categorized into nine classes, defined below. The sources of funding for each gage and the frequency at which data are provided to the users were also compiled and are described later.

Data-use classes

The following definitions were used to categorize each known use of streamflow data for each continuous stream gage.

Regional hydrology

For data to be useful in defining regional hydrology, a stream gage must be largely unaffected by manmade storage or diversion. In this class of use, the effects of man on streamflow are not necessarily small, but the effects are limited to those caused primarily by land-use and climate changes. Large amounts of man-made storage may exist in the basin providing the outflow is uncontrolled. These stations are useful in developing regionally transferable information about the relationship between basin characteristics and streamflow.

Seventy-six stations in the Montana network are classified in the regional hydrology data-use category. Seven of the stations are special in that they are designated bench-mark or index stations. Hydrologic bench-mark stations are part of a national network of 57 stations operated in watersheds that are relatively free from manmade alterations; the network is intended to define long-term trends. Index stations are used to prepare a national monthly summary of water conditions. Of the 76 stations in the regional hydrology category, 2 are hydrologic bench-mark stations and 5 are index stations. The location of stream gages that provide information about regional hydrology is shown in figure 3.

Hydrologic systems

Stations that can be used for accounting, that is, to define current hydrologic conditions and the sources, sinks, and fluxes of water through hydrologic systems including regulated systems, are designated as hydrologic systems stations. These stations record diversions and return flows that are useful for defining the interaction of water systems.

Bench-mark and index stations are included in the hydrologic systems category, because they are accounting for current and long-term conditions of the hydrologic systems that they gage. International gaging stations, located on significant drainages that cross the international boundary, are also included. Depending on streamflow conditions in any particular year, water may have to be allocated among users by the Montana Department of Natural Resources and Conservation. Many stations are used by that agency for administration of water rights throughout the State. Also included in this category are stations used for accounting of flows in U.S. Bureau of Reclamation irrigation project areas and of flood-control projects developed by the U.S. Army Corps of Engineers.

Legal obligations

Some stations provide records of flow for the verification or enforcement of existing treaties, compacts, and decrees. This category contains those stations that the Geological Survey is required to operate to satisfy a legal responsibility. The International Joint Commission designates the Survey to operate gaging stations needed for the equitable distribution of water along the Canadian boundary (Article VI, Treaty Between the United States and Great Britain Relating to Boundary Waters and Questions Arising Between the United States and Canada). Forty gaging stations either in Montana or in Canadian provinces north of Montana are used for this purpose. Reservoirs are not included in this count. Only 15 of the 40 international stations were considered near enough to the international boundary (within 3 miles) to be included in table 1. Also included in this category are four Yellowstone River

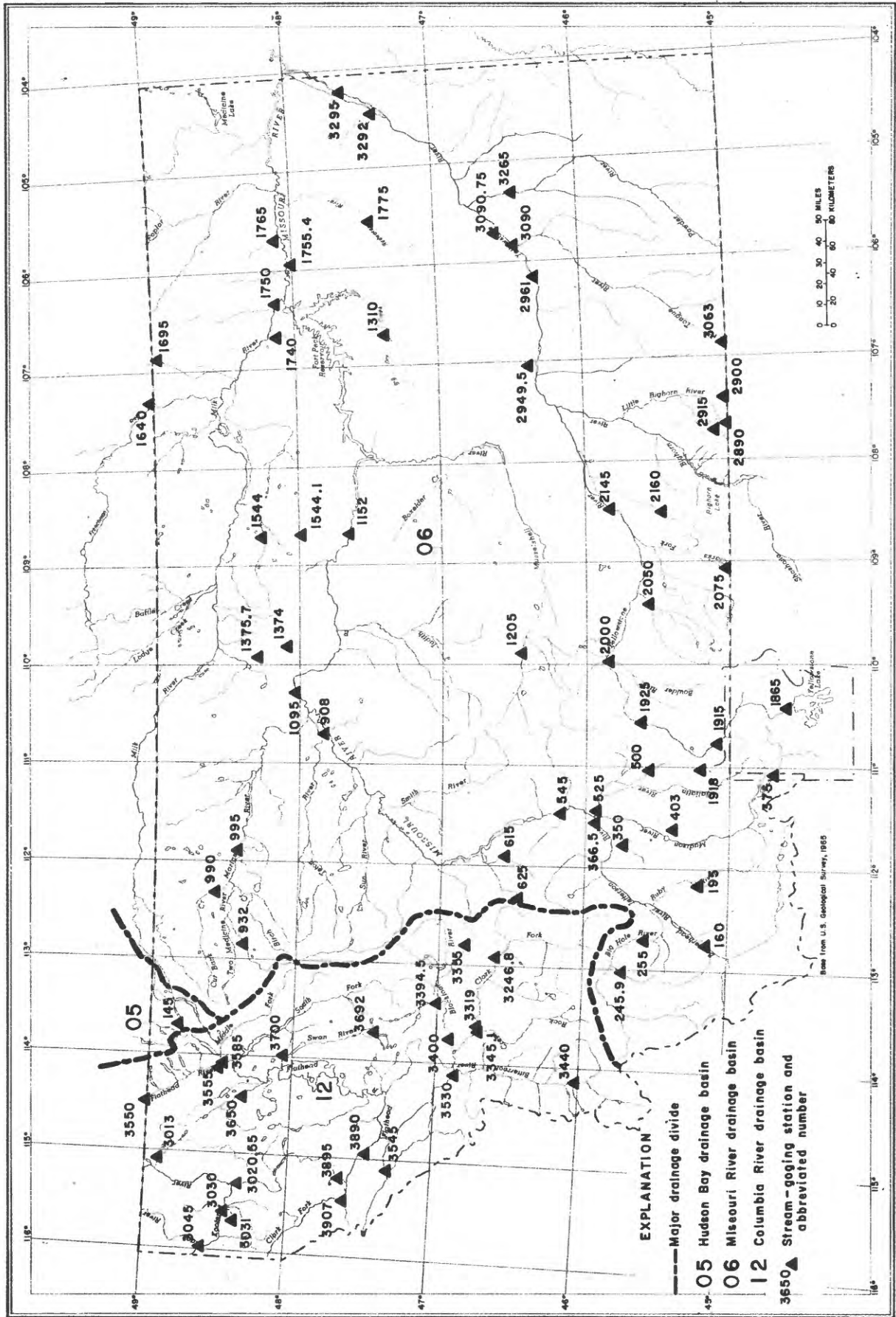


Figure 3.--Location of regional hydrology gaging stations, 1984 water year.

Compact gaging stations used to apportion the waters of certain interstate tributaries of the Yellowstone River (Yellowstone River Compact Commission, 1983).

Planning and design

Gaging stations in this data-use category are used for the planning and design of a specific project (for example, a dam, levee, floodwall, navigation system, water-supply diversion, hydropower plant, or waste-treatment facility) or group of structures. The planning and design category is limited to those stations that were instituted for such purposes and where this purpose is still valid.

Twenty-five stations are included in this category. Twelve stations with less than 2 years of record (as of 1984) are used by the U.S. Bureau of Indian Affairs to plan and design water-use projects on Montana Indian reservations; ten stations in north-central Montana are used to determine water availability for stock reservoirs; two Muddy Creek stations near Vaughn (06088300 and 06088500) are used to monitor return flows from an irrigation project; and one station Willow Creek near Glasgow (06174000), is used in an independent basin study to determine efficiency of existing retention reservoirs.

Project operation

Gaging stations in this category are used, on a continuing basis, to assist water managers in making operational decisions such as reservoir releases, hydropower operations, or diversions. The project operation use generally implies that the data are routinely available to the operators on a rapid-reporting basis. For projects on large streams, data may be needed only every few days.

There are 71 stations being operated in this category. Thirty-nine of these are used to aid operators in the management of reservoirs and control structures that are part of hydropower production systems. The remaining 32 stations are: 13 stations used by the International Joint Commission to administer distribution of water in the St. Mary basin or to assist irrigation districts in project areas; 8 stations being operated to facilitate operation of the Missouri River system; 7 stations used to determine the Milk River natural flow; 2 stations used to quantify inflow-outflow determinations; and 2 stations operated to meet Federal Energy Regulatory Commission licensing requirements.

Hydrologic forecasts

Gaging stations in this category are regularly used to provide information for hydrologic forecasting. These might be flood forecasts for a specific river reach, or periodic (daily, weekly, monthly, or seasonal) flow-volume forecasts for a specific site or region. The hydrologic forecasts use generally implies that the data are routinely available to the forecasters on a rapid-reporting basis. On large streams, data may be needed only every few days.

Most stations in the Montana program included in this category are those used for flood forecasting by the National Weather Service, and those used for predicting irrigation season streamflow runoff based on snow-survey data collected and forecasted by the U.S. Soil Conservation Service. During some part of the year 45 stations provide direct access to river-stage data using satellite telemetry equipment.

Water-quality monitoring

Gaging stations where regular water-quality or sediment-transport monitoring is being conducted and where the availability of streamflow data contributes to the utility or is essential to the interpretation of the water-quality or sediment data are designated as water-quality-monitoring sites. Stations operated as part of the National Stream-Quality Accounting Network (NASQAN) are included in this category. NASQAN stations are operated to define both areal variability and trends in stream quality. There are 19 NASQAN stations in Montana.

In addition to the NASQAN stations, water-quality data are being collected at other stations as follows: (1) Baseline hydrologic data at 19 stations in eastern Montana as part of regional coal studies, (2) annual daily or seasonal daily suspended-sediment sampling at 6 stations, (3) continuous temperature and specific conductance monitoring at 6 stations in Yellowstone National Park as part of a geothermal study being conducted jointly by the National Park Service and the Geological Survey, (4) data collection at 2 stations at the international boundary in the Poplar River basin as part of a U.S. and Canadian monitoring agreement, and (5) continuous monitoring of temperature at 10 stations under a cooperative program with the Montana Department of Fish, Wildlife and Parks. Also about 30 other stations have water-quality data being collected for miscellaneous purposes. Those sites can generally be categorized as follows: baseline hydrology on Montana Indian reservations, requests from Interior Department agencies for Missouri River basin water-quality work, and data collection for planning by the U.S. Army Corps of Engineers.

Research

Gaging stations in this category are operated for a particular research or water investigations study. The largest user of surface-water data for research is the Montana Department of Fish, Wildlife and Parks. Seventy stations, although not primarily funded for research, are used in compiling data on fisheries habitat. The next largest user of data for research is the Montana Department of State Lands. Twelve stations are included in this category. Generally these stations are established on small drainage basins and data are collected to determine water availability for basin modeling and regional planning. Finally, data are collected at six stations in or near Yellowstone National Park for the purpose of developing a baseline hydrologic data base.

Other

In addition to the eight classes above, several Montana stations are used to provide other information. Twenty-five stations are used to provide recreational planning and river floating information by the Montana Department of Fish, Wildlife and Parks. These stations are primarily located in western Montana or just east of the Continental Divide. Seven other stations, located on lower Yellowstone River basin tributaries, are used by the Office of Surface Mining to assess the cumulative hydrologic impact of coal mining in these areas. Seven stations located on the Clark Fork are being used by the Montana Department of Fish, Wildlife and Parks in their study to request in-stream reserve water rights to protect fisheries. Also three Missouri River mainstem stations upstream from Fort Peck Reservoir are used by the U.S. Bureau of Land Management in water-resource management of the Wild and Scenic Rivers Act as approved by Congress.

Funding

The four sources of funding for the streamflow-data program are:

1. Federal program.--Funds that have been directly allocated to the Geological Survey.

2. Other Federal agency (OFA) program.--Funds that have been transferred to the Geological Survey by other Federal agencies.

3. Cooperative program.--Funds that come jointly from Geological Survey cooperative-designated funding and from a non-Federal cooperating agency. Cooperating agency funds may be in the form of direct services or cash.

4. Other non-Federal programs.--Funds that are provided entirely by a non-Federal agency or a private concern under the auspices of a Federal agency. In this study, funding from private concerns was limited to licensing and permitting requirements for hydropower development by the Federal Energy Regulatory Commission. Funds in this category are not matched by Geological Survey cooperative funds.

In all four categories, the identified sources of funding pertain only to the collection of streamflow data; sources of funding for other activities, particularly collection of water-quality samples, that might be conducted at the site may not necessarily be the same as those identified herein. Eighteen organizations currently are contributing funds to the Montana streamflow-gaging program.

Frequency of data availability

Frequency of data availability refers to the times at which the streamflow data can be furnished to the users. In this category, three distinct possibilities exist. Data can be furnished by direct-access telemetry equipment for immediate use, by periodic release of provisional data, or in publication format through the annual data report for Montana published by the Geological Survey. These three categories are designated T, P, A, respectively, in table 2. In the current Montana program, data for all 218 stations are made available through the annual report, data from 73 stations are available on a real-time basis, and data for 39 stations are released on a provisional basis.

Data-use presentation

Data-use and ancillary information is presented for each continuous-recording gaging station in table 2, which is replete with footnotes to expand the information conveyed. The entry of an asterisk in the table indicates that no footnote is required.

SUMMARY

Currently, 218 continuous-record stream gages are being operated by the Geological Survey in Montana. The cost of their operation for the 1984 water year was \$1,065,000. Eighteen individual organizations contributed to the support of the program.

The streamflow-gaging program in Montana has evolved through the years as Federal, State, and local needs for surface-water data have increased. Continuous streamflow records for periods ranging from less than 1 year to more than 90 years have been collected. Streamflow data obtained from the program are used by numerous State, Federal, and private organizations. Nine identified uses were regional hydrology, hydrologic systems, legal obligations, planning and design, project operation, hydrologic forecasts, water-quality monitoring, research, and a category described as other. Much of the data from individual stations is put to multiple use. All stations have sufficient use to justify their continued operation.

Data are available on a real-time basis from 45 gages. Information for the remaining 173 stations may be obtained from the annual publication "Water Resources Data, Montana," volumes 1 and 2, or on a provisional monthly basis from the District office in Helena.

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Table 1.--Selected hydrologic data for stations in the surface-water program

[All stations are located in Montana except as noted. Symbol: P, Present-1984]

Station No.	Station name	Drainage area (mi ²)	Period of record	Mean annual flow ¹ (ft ³ /s)
05014500	Swiftcurrent Creek at Many Glacier.	30.9	June 1912-P	144
05016000	Swiftcurrent Creek at Sherburne.	64.3	July 1912 - Nov. 1915; Mar. 1916 - Oct. 1923; May 1924 - Sept. 1981; Mar. 1984-P	199
05017500	St. Mary River near Babb	276	July 1901 - Oct. 1902; May 1910 - Sept. 1925; Oct. 1950-P	782
05018500	St. Mary Canal at St. Mary Crossing, near Babb.	---	July 1918-P	(²)
05020500	St. Mary River at international boundary.	465	Sept. 1902 - Sept. 1916; Oct. 1916-P	³ 1,003 695
06016000	Beaverhead River at Barretts	2,737	Aug. 1907-P	430
06018500	Beaverhead River near Twin Bridges.	3,619	Aug. 1935-P	419
06019500	Ruby River above reservoir, near Alder.	538	May 1938-P	181
06020600	Ruby River below reservoir, near Alder.	596	Nov. 1962-P	224
06024590	Wise River near Wise River	214	Oct. 1972-P	188
06025500	Big Hole River near Melrose	2,476	Oct. 1923-P	1,173
06035000	Willow Creek near Harrison	83.8	Apr. 1938 - Sept. 1982; Oct. 1982-P ²	40.7

See footnotes at end of table.

Table 1.--Selected hydrologic data for stations in
the surface-water program--Continued

Station No.	Station name	Drainage area (mi ²)	Period of record	Mean annual flow ¹ (ft ³ /s)
06036650	Jefferson River near Three Forks.	9,532	Oct. 1978-P	2,553
06036905	Firehole River near West Yellowstone.	282	Oct. 1983-P	(⁴)
06037000	Gibbon River near West Yellowstone.	111	Oct. 1983-P	(⁴)
06037500	Madison River near West Yellowstone.	420	June 1913 - Dec. 1917; July 1918 - Oct. 1923; June 1922 - Sept. 1973; Oct. 1983-P	488
06038500	Madison River below Hebgen Lake, near Grayling.	905	June 1909-P	1,000
06038800	Madison River at Kirby Ranch, near Cameron.	1,065	Sept. 1959 - Sept. 1963; May 1978-P	(²)
06040300	Jack Creek near Ennis	51.5	Sept. 1973-P	47.4
06041000	Madison River below Ennis Lake, near McAllister.	2,186	Oct. 1901 - Dec. 1905; Oct. 1906-P	1,766
06050000	Hyalite Creek at Hyalite Ranger Station, near Bozeman.	48.2	Aug. 1895 - Oct. 1896; Apr. 1898 - Oct. 1899; June - Oct. 1900; May - Sept. 1902; Sept. - Dec. 1904; Sept. 1934-P	67.4
06052500	Gallatin River at Logan	1,795	Sept. 1893 - Dec. 1905; Aug. 1928-P	1,073

See footnotes at end of table.

Table 1.--Selected hydrologic data for stations in
the surface-water program--Continued

Station No.	Station name	Drainage area (mi ²)	Period of record	Mean annual flow ¹ (ft ³ /s)
06054500	Missouri River at Toston	14,669	Apr. 1890 - Feb. 1891; Apr. 1910 - Dec. 1916; Apr. 1941-P	5,414
06061500	Prickly Pear Creek near Clancy.	192	July 1908 - Sept. 1916; July 1921 - Sept. 1933; Oct. 1945 - Oct. 1953; Oct. 1954 - Sept. 1969; Oct. 1978-P	50.8
06062500	Tenmile Creek near Rimini	32.7	Oct. 1914-P	18.0
06066500	Missouri River below Holter Dam, near Wolf Creek.	17,149	Oct. 1945-P	5,673
06076690	Smith River near Fort Logan	846	Oct. 1977-P	200
06078200	Missouri River near Ulm	20,941	Aug. 1957-P	6,878
06088300	Muddy Creek near Vaughn	282	June 1968-P	120
06088500	Muddy Creek at Vaughn	314	May 1925 - Feb. 1926; Apr. 1934 - Sept. 1968; July 1971-P	128
06089000	Sun River near Vaughn	1,854	July - Oct. 1897; Apr. 1934-P	726
06090300	Missouri River near Great Falls.	23,292	May - July 1953; Oct. 1956-P	8,034
06090800	Missouri River at Fort Benton	24,749	Oct. 1890-P	7,827
06091700	Two Medicine River below South Fork, near Browning	250	May 1977-P	324

Table 1.--Selected hydrologic data for stations in
the surface-water program--Continued

Station No.	Station name	Drainage area (mi ²)	Period of record	Mean annual flow ¹ (ft ³ /s)
06093200	Badger Creek below Four Horns Canal, near Browning.	152	Oct. 1951-P	⁵ 227
06099000	Cut Bank Creek at Cut Bank	1,065	Aug. 1905 - Oct. 1919; May - Oct. 1920; May 1922 - Oct. 1924; May 1951 - Sept. 1973; Oct. 1981-P	193
06099500	Marias River near Shelby	3,242	Apr. 1902 - Dec. 1904; May 1905 - Dec. 1906; May 1907 - Jan. 1908; Apr. 1911-P	940
06101500	Marias River near Chester	4,927	Apr. - Sept. 1921; Oct. 1945 - Sept. 1947; Oct. 1955-P	883
06101560	Pondera Coulee near Chester	598	Oct. 1975-P	16.1
06108000	Teton River near Dutton	1,307	Aug. 1954-P	161
06109500	Missouri River at Virgelle	34,379	Feb. 1935-P	8,708
06115200	Missouri River near Landusky	40,987	Feb. 1934-P	9,470
06120500	Musselshell River at Harlowton	1,125	July 1907 - Nov. 1929; Mar. 1930 - Dec. 1932; Apr. - Aug. 1933; Feb. 1934-P	167

See footnotes at end of table.

Table 1.--Selected hydrologic data for stations in
the surface-water program--Continued

Station No.	Station name	Drainage area (mi ²)	Period of record	Mean annual flow ¹ (ft ³ /s)
06126470	Halfbreed Creek near Klein	53.2	Oct. 1977-P	1.34
06126500	Musselshell River near Roundup.	4,023	May 1946-P	238
06127500	Musselshell River at Musselshell.	4,568	Aug. 1928 - Sept. 1932; Aug. 1945 - Sept. 1979; Oct. 1982-P	215
06130500	Musselshell River at Mosby	7,846	May - Nov. 1929; Mar. 1930 - Sept. 1932; Feb. 1934-P	301
06131000	Big Dry Creek near Van Norman	2,554	Oct. 1939 - July 1969; July 1970-P	55.8
06131120	Timber Creek near Van Norman	287	Mar. 1982-P	(⁴)
06131200	Nelson Creek near Van Norman	100	Oct. 1975-P	2.24
06132000	Missouri River below Fort Peck Dam.	57,556	Mar. 1934- Sept. 1939; Oct. 1943-P	⁶ 6,347 ⁷ 10,000
06132200	South Fork Milk River near Babb.	70.4	May 1961-P	(²)
06133000	Milk River at western crossing of international boundary.	401	Mar. 1931-P	(²)
06133500	North Fork Milk River above St. Mary Canal, near Browning.	60.2	May 1911 - July 1912; June - July 1918; May 1919-P	(²)

Table 1.--Selected hydrologic data for stations in
the surface-water program--Continued

Station No.	Station name	Drainage area (mi ²)	Period of record	Mean annual flow ¹ (ft ³ /s)
06134000	North Milk River near inter- national boundary.	91.6	July 1909 - Oct. 1912; Jan. 1913 - Oct. 1922; Mar. 1923-P	(²)
06135000	Milk River at eastern crossing of international boundary.	2,506	Aug. 1909-P	(²)
06137400	Big Sandy Creek at reservation boundary, near Rocky Boy.	24.7	May 1982-P	(⁴)
06137570	Boxelder Creek near Rocky Boy	48.2	Oct. 1975-P	9.40
06139500	Big Sandy Creek near Havre	1,805	May 1984-P	(⁴)
06140500	Milk River at Havre	5,785	May - Nov. 1898; Apr. 1899 - Sept. 1916; Oct. 1916 - Nov. 1922; Mar., Apr. 1923; Mar., Apr. 1952; June 1953; Aug. 1954-P	³ 273 430
06142400	Clear Creek near Chinook	135	June 1984-P	(⁴)
06145500	Lodge Creek below McRae Creek, at international boundary.	825	Oct. 1951-P	(²)
06149500	Battle Creek at international boundary.	997	Apr. 1917-P	(²)
06151000	Lyons Creek at international boundary.	66.7	Mar. 1927-P	(²)
06151500	Battle Creek near Chinook	1,539	June 1984-P	(⁴)

See footnotes at end of table.

Table 1.--Selected hydrologic data for stations in
the surface-water program--Continued

Station No.	Station name	Drainage area (mi ²)	Period of record	Mean annual flow ¹ (ft ³ /s)
06154100	Milk River near Harlem	9,822	Oct. 1959 - Sept. 1969; Oct. 1982-P	391
06154140	Fifteenmile Creek tributary near Harlem.	2.31	May 1983-P	(⁴)
06154400	Peoples Creek near Hays	220	Dec. 1966-P	17.5
06154410	Little Peoples Creek near Hays	13.0	Aug. 1972-P	5.22
06154490	Willow Coulee near Dodson	5.16	May 1983-P	(⁴)
06154500	Peoples Creek near Dodson	670	Apr. 1918 - Nov. 1921; June 1951 - Sept. 1973; Oct. 1981-P	32.1
06154510	Kuhr Coulee tributary near Dodson.	1.25	May 1983-P	(⁴)
06155030	Milk River near Dodson	11,192	Oct. 1982-P	(⁴)
06164000	Frenchman River at inter- national boundary.	2,120	Apr. 1917-P	(²)
06164510	Milk River at Juneberg Bridge, near Saco.	17,670	Oct. 1977-P	530
06164590	Beaver Creek near Zortman	10.1	May 1983-P	(⁴)
06164615	Little Warm Creek at reservation boundary, near Zortman.	6.31	May 1983-P	(⁴)
06164623	Little Warm Creek tributary near Lodge Pole.	2.42	May 1983-P	(⁴)
06164630	Big Warm Creek near Zortman	53.8	May 1983-P	(⁴)
06166000	Beaver Creek below Guston Coulee, near Saco.	1,208	Apr. 1981-P	(⁴)

Table 1.--Selected hydrologic data for stations in
the surface-water program--Continued

Station No.	Station name	Drainage area (mi ²)	Period of record	Mean annual flow ¹ (ft ³ /s)
06169500	Rock Creek below Horse Creek, near international boundary.	328	Mar. 1916 - Oct. 1926; ² Sept. 1956 - Oct. 1978; ² Nov. 1978-P	18.8
06169600	South Creek tributary near Opheim.	2.15	May 1983-P	(⁴)
06169700	South Creek tributary No. 2 near Opheim.	1.62	May 1983-P	(⁴)
06169800	South Creek tributary No. 3 near international boundary.	.32	May 1983-P	(⁴)
06170050	Rock Creek below McEachern Creek, near international boundary.	650	May 1983-P	(⁴)
06170080	Starbuck Coulee near inter- national boundary.	4.16	May 1983-P	(⁴)
06172000	Milk River near Vandalia	20,926	Oct. 1914 - Sept. 1925; Aug. 1928 - Sept. 1939; Oct. 1969 - Sept. 1973; Oct. 1982-P	686
06174000	Willow Creek near Glasgow	538	Oct. 1953-P	57.3
06174500	Milk River at Nashua	22,332	Oct. 1939-P	710
06175000	Porcupine Creek at Nashua	725	July 1908 - Sept. 1924; Oct. 1981-P	26.5
06175540	Prairie Elk Creek near Oswego.	352	Oct. 1975-P	18.6

See footnotes at end of table.

Table 1.--Selected hydrologic data for stations in
the surface-water program--Continued

Station No.	Station name	Drainage area (mi ²)	Period of record	Mean annual flow ¹ (ft ³ /s)
06176500	Wolf Creek near Wolf Point	251	Aug. 1908 - July 1914; Mar. 1950 - Sept. 1953; Oct. - Sept. 1954; Oct. 1981-P	(⁴)
06177000	Missouri River near Wolf Point.	82,290	Sept. 1928- Sept. 1939; Oct. 1943-P	⁶ 7,219 ⁷ 10,680
06177400	McCune Creek near Circle	29.9	Mar. 1982-P	(⁴)
06177500	Redwater River at Circle	547	Apr. - Nov. 1929; Mar. - Nov. 1930; July 1931 - Dec. 1932; Mar. - June 1933; Feb. - Nov. 1934; Apr. 1935 - Dec. 1936; Apr. 1937 - June 1972; Oct. 1974-P	13.3
06177650	Redwater River near Richey	1,071	May 1982-P	(⁴)
06177700	Cow Creek tributary near Vida	1.71	Mar. 1982-P	(⁴)
06177825	Redwater River near Vida	1,974	Oct. 1975-P	46.2
06178000	Poplar River at international boundary.	362	Mar. 1931-P	(²)
06178500	East Poplar River at inter- national boundary.	541	Mar. 1931-P	(²)

Table 1.--Selected hydrologic data for stations in
the surface-water program--Continued

Station No.	Station name	Drainage area (mi ²)	Period of record	Mean annual flow ¹ (ft ³ /s)
06181000	Poplar River near Poplar	3,174	Aug. 1908 - Oct. 1924; Aug. 1947 - Sept. 1969; June 1975 - Sept. 1979; Oct. 1981-P	138
06181995	Beaver Creek at inter- national boundary.	149	July 1977 - Nov. 1982 Nov. 1982-P	(⁴) (²)
06183450	Big Muddy Creek near Antelope	967	Oct. 1978-P	47.9
06185110	Big Muddy Creek near mouth, near Culbertson.	2,684	Nov. 1981-P	(⁴)
06135500	Missouri River near Cul- bertson.	91,557	July 1941- Dec. 1951; Apr. 1958-P	⁷ 11,000
06186500	Yellowstone River at Yellow- stone Lake outlet, Yellow- stone National Park.	1,006	Dec. 1922 - Sept. 1982; Oct. 1983-P	1,327
06187550	Yellowstone River near Tower Junction, Yellowstone National Park.	1,342	Oct. 1983-P	(⁴)
06191500	Yellowstone River at Corwin Springs.	2,623	Aug. 1889 - Nov. 1893; Sept. 1910-P	3,116
06191800	Big Creek near Emigrant	60.9	Sept. 1973 - Sept 1979; Oct. 1982-P	64.8
06192500	Yellowstone River near Livingston.	3,551	May 1897 - Dec. 1905; Aug. 1928 - Sept. 1932; Oct. 1937-P	3,767

See footnotes at end of table.

Table 1.--Selected hydrologic data for stations in
the surface-water program--Continued

Station No.	Station name	Drainage area (mi ²)	Period of record	Mean annual flow ¹ (ft ³ /s)
06195600	Shields River near Livingston	852	Oct. 1978-P	376
06200000	Boulder River at Big Timber	523	Apr. 1947 - Dec. 1953; Mar. 1955-P	543
06202510	Stillwater River above Nye Creek, near Nye.	193	Nov. 1979-P	(⁴)
06204050	West Rosebud Creek near Roscoe	52.1	Sept. 1965-P	129
06205000	Stillwater River near Absarokee	975	July 1910 - Sept. 1914; Mar. 1935-P	970
06207500	Clarks Fork Yellowstone River near Belfry.	1,154	July 1921-P	953
06208800	Clarks Fork Yellowstone River near Silesia.	2,093	Oct. 1969-P	1,180
06211000	Red Lodge Creek above Cooney Reservoir, near Boyd.	143	May 1937-P	(⁴)
06211500	Willow Creek near Boyd	53.3	June 1937-P	(⁴)
06212500	Red Lodge Creek below Cooney Reservoir, near Boyd.	210	Sept. 1937-P	102
06214500	Yellowstone River at Billings	11,795	May 1904 - Dec. 1905; Aug. 1928-P	7,074
06216000	Pryor Creek at Pryor	117	June 1921 - Sept. 1924; Oct. 1966-P	39.5
06216900	Pryor Creek near Huntley	582	Oct. 1978-P	79.5
06287000	Bighorn River near St. Xavier	19,667	Oct. 1934-P	3,596
06289000	Little Bighorn River at State line, near Wyola.	193	Mar. 1939-P	155

Table 1.--Selected hydrologic data for stations in
the surface-water program--Continued

Station No.	Station name	Drainage area (mi ²)	Period of record	Mean annual flow ¹ (ft ³ /s)
06290000	Pass Creek near Wyola	111	June 1935 - Sept. 1956; Oct. 1982-P	35.8
06290500	Little Bighorn River below Pass Creek, near Wyola.	428	Mar. 1939 - Dec. 1958; Aug. 1959 - Sept. 1975; Oct. 1976-P	214
06291000	Owl Creek near Lodge Grass	163	Apr. 1939 - Sept. 1945; Oct. 1979-P	10.3
06291500	Lodge Grass Creek above Willow Creek Diversion, near Wyola.	80.7	Mar. 1939 - Sept. 1974; Oct. 1982-P	49.8
06294000	Little Bighorn River near Hardin.	1,294	June 1953-P	313
06294500	Bighorn River above Tullock Creek, near Bighorn.	22,414	Oct. 1981-P	3,939
06294600	East Cabin Creek tributary near Hardin.	8.63	Oct. 1981-P	(⁴)
06294940	Sarpy Creek near Hysham	453	Sept. 1973-P	7.06
06294950	Starved To Death Creek near Sanders.	36.9	June 1979-P	(⁴)
06294995	Armells Creek near Forsyth	370	July 1974-P	6.57
06295000	Yellowstone River at Forsyth	40,339	July 1921 - Sept. 1923; Oct. 1977-P	11,870
06295100	Rosebud Creek near Kirby	35.5	Oct. 1981-P	(⁴)
06295113	Rosebud Creek at reservation boundary near Kirby.	123	Oct. 1979-P	(⁴)

See footnotes at end of table.

Table 1.--Selected hydrologic data for stations in
the surface-water program--Continued

Station No.	Station name	Drainage area (mi ²)	Period of record	Mean annual flow ¹ (ft ³ /s)
06295250	Rosebud Creek near Colstrip	799	Oct. 1974-P	45.0
06296003	Rosebud Creek at mouth, near Rosebud.	1,302	Oct. 1974-P	50.9
06296100	Snell Creek near Hathaway	10.5	Oct. 1981-P	(⁴)
06306100	Squirrel Creek near Decker	33.6	Sept. 1975-P	3.43
06306300	Tongue River at State line, near Decker.	1,477	Aug. 1960-P	494
06306950	South Fork Leaf Rock Creek near Kirby.	4.53	Oct. 1981-P	(⁴)
06307500	Tongue River at Tongue River Dam, near Decker.	1,770	May 1939-P	459
06307528	Prairie Dog Creek near Birney	19.6	Nov. 1978-P	(⁴)
06307600	Hanging Woman Creek near Birney	470	Sept. 1973-P	4.51
06307616	Tongue River at Birney Day School Bridge, near Birney	2,621	Oct. 1979-P	(⁴)
06307717	Otter Creek below Fifteenmile Creek, near Otter	453	June 1982-P	(⁴)
06307740	Otter Creek at Ashland	707	Oct. 1972-P	7.03
06307830	Tongue River below Branden- berg Bridge, near Ashland.	4,062	Oct. 1973-P	496
06308400	Pumpkin Creek near Miles City	697	Oct. 1972-P	16.1
06308500	Tongue River at Miles City	5,379	Apr. 1938 - Apr. 1942; Apr. 1946-P	440
06309000	Yellowstone River at Miles City.	48,253	Sept. 1922 - Sept. 1923; Aug. 1928-P	11,620
06309075	Sunday Creek near Miles City.	714	Oct. 1974-P	40.5

Table 1.--Selected hydrologic data for stations in
the surface-water program--Continued

Station No.	Station name	Drainage area (mi ²)	Period of record	Mean annual flow ¹ (ft ³ /s)
06324500	Powder River at Moorhead	8,088	May 1929 - Sept. 1972; Oct. 1974-P	460
06324710	Powder River at Broadus	8,748	Oct. 1975-P	488
06326300	Mizpah Creek near Mizpah	797	Oct. 1974-P	16.8
06326500	Powder River near Locate	13,194	Mar. 1938-P	612
06326600	O'Fallon Creek near Ismay	669	Oct. 1977-P	23.7
06326952	Clear Creek near Lindsay	101	Mar. 1982-P	(⁴)
06328200	Lower Sevenmile Creek near Bloomfield.	25.2	Mar. 1982-P	(⁴)
06329200	Burns Creek near Savage	233	Oct. 1957 - Sept. 1967; Sept. 1975-P	6.74
06329500	Yellowstone River near Sidney.	69,103	Oct. 1910 - Sept. 1931; Oct. 1933-P	13,080
06336447	Duck Creek near Wibaux	46.5	Mar. 1978 - Sept. 1981; May 1982-P	(⁴)
12301300	Tobacco River near Eureka	440	Sept. 1958-P	273
12301933	Kootenai River below Libby Dam, near Libby.	8,985	Oct. 1971-P	11,460
12302055	Fisher River near Libby	838	Sept. 1967-P	503
12303000	Kootenai River at Libby	10,240	Oct. 1910-P	12,160
12303100	Flower Creek near Libby	11.1	Sept. 1960-P	27.1
12303500	Lake Creek at Troy	210	Jan. 1945 - Sept. 1957; Oct. 1982-P	510

See footnotes at end of table.

Table 1.--Selected hydrologic data for stations in
the surface-water program--Continued

Station No.	Station name	Drainage area (mi ²)	Period of record	Mean annual flow ¹ (ft ³ /s)
12304500	Yaak River near Troy	766	Oct. 1910 - Sept. 1916; Mar. 1956-P	903
12322500	Silver Bow Creek above Black- tail Creek, at Butte.	(⁸)	Oct. 1983-P	(⁴)
12322800	Blacktail Creek near Butte	14.7	Oct. 1983-P	(⁴)
12323000	Silver Bow Creek below Black- tail Creek, at Butte.	(⁸)	Oct. 1983-P	(⁴)
12323770	Warm Springs Creek at Warm Springs.	163	Oct. 1983-P	(⁴)
12324200	Clark Fork at Deer Lodge	1,005	Oct. 1978-P	365
12324590	Little Blackfoot River near Garrison.	398	Oct. 1972-P	190
12324680	Clark Fork at Gold Creek	1,704	Oct. 1977-P	723
12325500	Flint Creek near Southern Cross	52.6	Oct. 1940-P	29.8
12329500	Flint Creek at Maxville	208	Aug. 1941-P	102
12330000	Boulder Creek at Maxville	71.3	Apr. 1939-P	48.3
12331900	Clark Fork near Clinton	2,629	June 1979-P	(⁴)
12332000	Middle Fork Rock Creek near Philipsburg.	123	Sept. 1937-P	124
12334510	Rock Creek near Clinton	885	Oct. 1972-P	604
12335500	Nevada Creek above Reservoir, near Finn.	116	Apr. 1939-P	38.7
12339450	Clearwater River near Clear- water.	345	Oct. 1974-P	305

Table 1.--Selected hydrologic data for stations in
the surface-water program--Continued

Station No.	Station name	Drainage area (mi ²)	Period of record	Mean annual flow ¹ (ft ³ /s)
12340000	Blackfoot River near Bonner	2,290	July - Nov. 1898; Mar. 1899 - Sept. 1901; May 1903 - Jan. 1905; Mar. - Oct. 1905; Oct. 1939-P	1,651
12340500	Clark Fork above Missoula	5,999	Mar. 1929-P	3,050
12342500	West Fork Bitterroot River near Conner.	317	Apr. 1941-P	290
12344000	Bitterroot River near Darby	1,049	Apr. 1937-P	931
12353000	Clark Fork below Missoula	9,003	Oct. 1929-P	5,541
12354500	Clark Fork at St. Regis	10,709	Oct. 1910-P	7,583
12355000	Flathead River at Flathead, British Columbia.	427	Mar. 1929-P	947
12355500	North Fork Flathead River near Columbia Falls.	1,548	Sept. 1910 - Sept. 1917; Apr. 1929 - Feb. 1935; June 1935-P	2,989
12358500	Middle Fork Flathead River near West Glacier.	1,128	Oct. 1939-P	2,935
12362500	South Fork Flathead River near Columbia Falls	1,663	Sept. 1910 - Jan. 1911; Feb. 1911 - Sept. 1913; Oct. 1913 - Aug. 1916; Apr. 1923 - Nov. 1924; May - Nov. 1927; May 1928-P	3,564

See footnotes at end of table.

Table 1.--Selected hydrologic data for stations in
the surface-water program--Continued

Station No.	Station name	Drainage area (mi ²)	Period of record	Mean annual flow ¹ (ft ³ /s)
12363000	Flathead River at Columbia Falls.	4,464	May 1922 - Sept. 1923; June 1982-P	9,737
12365000	Stillwater River near White- fish.	524	Oct. - Nov. 1930; Dec. 1930 - Sept. 1950; Oct. 1972-P	339
12366000	Whitefish River near Kalispell	170	July - Nov. 1928; Apr. 1929 - Sept. 1950; Oct. 1972-P	193
12369200	Swan River near Condon	69.1	Oct. 1972-P	166
12370000	Swan River near Bigfork	671	Oct. 1910 - May 1911; Apr. 1922-P	1,170
12370900	Teepee Creek near Polson	2.18	Oct. 1982-P	(⁴)
12372000	Flathead River near Polson	7,096	July 1907-P	11,720
12374250	Mill Creek above Bassoo Creek, near Niarada.	19.6	Oct. 1982-P	(⁴)
12374800	Cromwell Creek near Niarada	14.3	Oct. 1982-P	(⁴)
12375900	South Fork Crow Creek near Ronan.	7.57	Oct. 1982-P	(⁴)
12377150	Mission Creek above reservoir, near St. Ignatius.	12.4	Oct. 1982-P	(⁴)
12381400	South Fork Jocko River near Arlee.	56.0	Oct. 1982-P	(⁴)
12383500	Big Knife Creek near Arlee	6.88	Aug. 1910 - Sept. 1916 ² Oct. 1982-P	(⁴)
12387450	Valley Creek near Arlee	15.3	Oct. 1982-P	(⁴)

Table 1.--Selected hydrologic data for stations in
the surface-water program--Continued

Station No.	Station name	Drainage area (mi ²)	Period of record	Mean annual flow ¹ (ft ³ /s)
12388400	Revais Creek below West Fork, near Dixon.	26.3	Oct. 1982-P	(⁴)
12388650	Camas Creek near Hot Springs	4.46	Oct. 1982-P	(⁴)
12388700	Flathead River at Perma	8,795	Oct. 1983-P	(⁴)
12389000	Clark Fork near Plains	19,958	Oct. 1910-P	20,010
12389500	Thompson River near Thompson Falls.	642	Mar. - Sept. 1911; Oct. 1911 - Sept. 1916; Apr. 1956-P	476
12390700	Prospect Creek at Thompson Falls.	182	Apr. 1956-P	257
12391400	Clark Fork below Noxon Rapids Dam, near Noxon.	21,833	May 1960-P	21,350

¹ Average as of 1983 Water Year.

² Seasonal records only.

³ Prior to operation of St. Mary Canal.

⁴ Less than 5 years of annual record.

⁵ Adjusted for flow in Four Horns Canal since 1973.

⁶ Prior to Fort Peck Lake reaching operational level.

⁷ After operational level in Fort Peck Lake was reached.

⁸ Not applicable. Anaconda Company has constructed numerous holding ponds above gage.

Table 2.--Data use, funding, and data availability for
stations in the surface-water program

[Frequency of data availability: A, annual; P, provisional; T, telemetry equipment]

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
05014500	1,2	1,2			3	4				*				A
05016000					5						6			A,P
05017500		1			7						6			A
05018500			8		7	9					6			A,P,T
05020500			8		7	10	11				6			A,P,T
06016000	1	1			12	4,13		14			15			A,P
06018500		1			12	13		14		*				A,P,T

1. General hydrologic knowledge and definition of long-term trends.
2. Hydrologic bench-mark station.
3. Inflow to Lake Sherburne.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
5. Outflow from Lake Sherburne.
6. International Joint Commission (U.S. Department of State).
7. Operation of St. Mary-Milk River Project.
8. International gaging station, Boundary Waters Treaty of 1909, Article VI.
9. Forecasting inflow to Fresno Reservoir.
10. Flood forecasting - National Weather Service.
11. Water-quality monitoring station, NASQAN program.
12. Operation of East Bench Irrigation Project.
13. Operation of Missouri River system.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
15. U.S. Bureau of Reclamation.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06019500	1	16				4						17		A
06020600		1,13				10		14				17		A
06024590	1	1,18										17		A
06025500	1	13			13	4,10		14				17		A,T
06035000	1	16						14				17		A
06036650	1				13	13		14				19		A,T
06036905		1					20	20		*				A,P

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
10. Flood forecasting - National Weather Service.
13. Operation of Missouri River system.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
16. Reservoir-management station.
17. Montana Department of Natural Resources and Conservation.
18. Water-use studies by U.S. Forest Service.
19. Montana Department of Fish, Wildlife and Parks.
20. Water-quality-monitoring station - Geological Survey geothermal study.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Station No.	Uses									Funding				Frequency of data availability
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06037000		1					20	20		*				A,P
06037500	1	1,16					20	14,20		*				A,P
06038500		21			16,21	4		14					22	A,T
06038800					16			14				19		A,T
06040300	1	1,18										17		A
06041000		1,21			13,16	4		14					22	A,T
					21									
06050000	1	18,23			16	4						17		A

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
13. Operation of Missouri River system.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
16. Reservoir-management station.
17. Montana Department of Natural Resources and Conservation.
18. Water-use studies by U.S. Forest Service.
19. Montana Department of Fish, Wildlife and Parks.
20. Water-quality monitoring station - Geological Survey geothermal study.
21. Federal Energy Regulatory Commission hydropower licensing requirements.
22. Montana Power Company.
23. Used by State of Montana for water-rights administration.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06052500	1	1,13,18			16	4,10		14			24			A,T
06054500	1	1,13,23			16	4,10	11	14		*				A,P,T
06061500	1	23,25										17		A
06062500	1	1,18											26	A
06066500		21,23			16,21			14	27				22	A
06076690		1,13						14	27			19		A,T
06078200		1,13			16	10		14			24			A,T

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
10. Flood forecasting - National Weather Service.
11. Water-quality-monitoring station, NASQAN program.
13. Operation of Missouri River system.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
16. Reservoir-management station.
17. Montana Department of Natural Resources and Conservation.
18. Water-use studies by U.S. Forest Service.
19. Montana Department of Fish, Wildlife and Parks.
21. Federal Energy Regulatory Commission hydropower licensing requirements.
22. Montana Power Company.
23. Used by State of Montana for water-rights administration.
24. U.S. Army Corps of Engineers.
25. Water-use studies by Montana Department of Health and Environmental Sciences.
26. City of Helena.
27. Streamflow-data request for recreational planning and river floating.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06088300		1		28	28					*				A
06088500		1		28	28					*				A
06089000		1,13,21			21	10	29						22	A,T
06090300		13,21, 23			16,21			14					22	A,T
06090800	1	1,13,23				4,10	11		27,30	*				A,T
06091700		31		31	32						33			A
06093200	1	31			16	4					33			A

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
10. Flood forecasting - National Weather Service.
11. Water-quality monitoring station, NASQAN program.
13. Operation of Missouri River system.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks
16. Reservoir-management station.
21. Federal Energy Regulatory Commission hydropower licensing requirements.
22. Montana Power Company.
23. Used by State of Montana for water-rights administration.
27. Streamflow data requests for recreational planning and river floating.
28. Monitor return flow from Greenfields Irrigation project.
29. Water-quality monitoring station, other.
30. Wild and Scenic River management.
31. Hydrologic activities - U.S. Bureau of Indian Affairs.
32. Operation of Two Medicine Irrigation project.
33. U.S. Bureau of Indian Affairs.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Station No.	Uses									Funding				Frequency of data availability
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06099000	1	31				4					33			A
06099500	1	1,31			13,16	4,10				*				A,P,T
06101500		13			13,16		11				15			A,T
06101560		23										17		A
06108000		1,13				10				*				A,T
06109500	1	1,13				4,10	11	14	27,30		24			A,P,T
06115200	1	1,13			16	4,10	11,34	14	27,30	*				A,T

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
10. Flood forecasting - National Weather Service.
11. Water-quality monitoring station, NASQAN program.
13. Operation of Missouri River system.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
15. U.S. Bureau of Reclamation.
16. Reservoir-management station.
17. Montana Department of Natural Resources and Conservation.
23. Used by State of Montana for water-rights administration.
24. U.S. Army Corps of Engineers.
27. Streamflow data requests for recreational planning and river floating.
30. Wild and Scenic River management.
31. Hydrologic activities - U.S. Bureau of Indian Affairs.
33. U.S. Bureau of Indian Affairs.
34. Sediment-transport monitoring station.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06120500	1	1,25				4,10		14				17		A,T
06126470		35					35					17		A
06126500		1,24				10		14				17		A,T
06127500		1,25										17		A
06130500		1,23, 24,25			13,16	10	11,34	14				17		A
06131000	1	1,15,23				10,24	29			*				A,T
06131120								36				36		A

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
10. Flood forecasting - National Weather Service.
11. Water-quality-monitoring station, NASQAN program.
13. Operation of Missouri River system.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
15. U.S. Bureau of Reclamation.
16. Reservoir-management station.
17. Montana Department of Natural Resources and Conservation.
23. Used by State of Montana for water-rights administration.
24. U.S. Army Corps of Engineers.
25. Water-use studies by Montana Department of Health and Environmental Sciences.
29. Water-quality monitoring station, other.
34. Sediment-transport monitoring station.
35. Baseline hydrologic information-regional coal studies.
36. Montana Department of State Lands.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06131200		25						36			37			A
06132000		1,23			13,16	4	11	14		*	24			A
06132200		1,23			7	4					6			A
06133000		1,23	8		7	4	29				6			A,P
06133500		1,23	8		7	4					6			A,P,T
06134000		1,23	8		7	4	29				6			A,P,T
06135000		1,23,38	8		7	4,9	29				6			A,P,T

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
6. International Joint Commission (U.S. Department of State).
7. Operation of St. Mary-Milk River project.
8. International gaging station, Boundary Waters Treaty of 1909, Article IV.
9. Forecasting inflow to Freano Reservoir.
11. Water-quality monitoring station, NASQAN program.
13. Operation of Missouri River system.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
16. Reservoir-management station.
23. Used by State of Montana for water-rights administration.
24. U.S. Army Corps of Engineers.
25. Water-use studies by Montana Department of Health and Environmental Sciences.
29. Water-quality monitoring station, other.
36. Montana Department of State Lands.
37. U.S. Bureau of Land Management.
38. Milk River natural flow study.

Table 2.—Data use, funding, and data availability for stations in the surface-water program--Continued

Station No.	Uses									Funding				Frequency of data availability
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06137400	1	23,31					29				33			A
06137570	1	1,2,3,31									33			A
06139500		38			38						33			A,T
06140500		25,38			16	10					24			A
06142400		38			38						33			A,T
06145500		1,38	8		38						6			A,P,T
06149500		1,38	8		38						6			A,P

1. General hydrologic knowledge and definition of long-term trends.
2. Hydrologic bench-mark station.
3. Inflow to Lake Sherburne.
6. International Joint Commission (U.S. Department of State).
8. International gaging station, Boundary Waters Treaty of 1909, Article IV.
10. Flood Forecasting - National Weather Service.
16. Reservoir-management station.
23. Used by State of Montana for water-rights administration.
24. U.S. Army Corps of Engineers.
25. Water-use studies by Montana Department of Health and Environmental Sciences.
29. Water-quality-monitoring station, other.
31. Hydrologic activities - U.S. Bureau of Indian Affairs.
33. U.S. Bureau of Indian Affairs.
38. Milk River natural flow study.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06151000		1,38			38						6			A
06151500		31,38			38						33			A,T
06154100		1,38			38	10						17		A
06154140		31,39		39							33			A
06154400	1	1,31									33			A
06154410	1	1,31					29			*				A
06154490		31,39		39							33			A

1. General hydrologic knowledge and definition of long-term trends.
6. International Joint Commission (U.S. Department of State).
10. Flood forecasting - National Weather Service.
17. Montana Department of Natural Resources and Conservation.
29. Water-quality monitoring station, other.
31. Hydrologic activities - U.S. Bureau of Indian Affairs.
33. U.S. Bureau of Indian Affairs.
38. Milk River natural flow study.
39. Water availability for stock reservoirs.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	GFA program	Coop program	Other non-federal	
06154500		1, 31					29				33			A
06154510		31, 39		39							33			A
06155030		1, 31			16	10						17		A, T
06164000	1	1, 25	8			10					6			A, P, T
06164510		1, 23			16	10	29			*				A, T
06164590		31					29				33			A
06164615		31					29				33			A

1. General hydrologic knowledge and definition of long-term trends.
6. International Joint Commission (U.S. Department of State).
8. International gaging station, Boundary Waters Treaty of 1909, Article VI.
10. Flood forecasting - National Weather Service.
16. Reservoir-management station.
17. Montana Department of Natural Resources and Conservation.
23. Used by State of Montana for water-rights administration.
25. Water-use studies by Montana Department of Health and Environmental Sciences.
29. Water-quality monitoring station, other.
31. Hydrologic activities - U.S. Bureau of Indian Affairs.
33. U.S. Bureau of Indian Affairs.
39. Water availability for stock reservoirs.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06164623		31,39		39							33			A
06164630		31					29				33			A
06166000		23,40					29			*				A
06169500	2	1,2		39			29			*				A
06169600		23,39		39							37			A
06169700		39		39							37			A
06169800		39		39							37			A

1. General hydrologic knowledge and definition of long-term trends.
2. Hydrologic bench-mark station.
23. Used by State of Montana for water-rights administration.
29. Water-quality monitoring station, other.
31. Hydrologic activities - U.S. Bureau of Indian Affairs.
33. U.S. Bureau of Indian Affairs.
37. U.S. Bureau of Land Management.
39. Water availability for stock reservoirs.
40. Bowdoin Lake studies--U.S. Fish and Wildlife Service.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06170050		39		39							37			A
06170080		39		39							37			A
06172000		1,23			16	10						17		A
06174000	1	1,23		41						*				A
06174500		1,13, 23,25			13	10,13	11				24			A,T
06175000	1	1,23,31					29				33			A
06175540	1	1,23,35								*				A

1. General hydrologic knowledge and definition of long-term trends.
10. Flood forecasting - National Weather Service.
11. Water-quality monitoring station, NASQAN program.
13. Operation of Missouri River system.
16. Reservoir-management station.
17. Montana Department of Natural Resources and Conservation.
23. Used by State of Montana for water-rights administration.
24. U.S. Army Corps of Engineers.
25. Water-use studies by Montana Department of Health and Environmental Sciences.
29. Water-quality monitoring station, other.
31. Hydrologic activities - U.S. Bureau of Indian Affairs.
33. U.S. Bureau of Indian Affairs.
35. Baseline hydrologic information - regional coal studies.
37. U.S. Bureau of Land Management.
39. Water availability for stock reservoirs.
41. Willow Creek retention reservoir study - U.S. Bureau of Land Management.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06176500	1	1					29				33			A
06177000		13,31			13		29	14			24			A,T
06177400		42						42				36		A
06177500	1	1,35					35				37			A
06177650		35					35					36		A
06177700		42						42				36		A
06177825		1,35					35				37			A

- 1. General hydrologic knowledge and definition of long-term trends.
- 13. Operation of Missouri River system.
- 14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
- 24. U.S. Army Corps of Engineers.
- 29. Water-quality monitoring station, other.
- 31. Hydrologic activities - U.S. Bureau of Indian Affairs.
- 33. U.S. Bureau of Indian Affairs.
- 35. Baseline hydrologic information - regional coal study.
- 36. Montana Department of State Lands.
- 37. U.S. Bureau of Land Management.
- 42. Small drainage basin index station - Montana Department of State Lands.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06178000		1,31,43					43		14			17		A,T
06178500		1,31,43					43		14			17		A,T
06181000		1,31						14			33			A
06181995		1					29				6			A
06183450		1,31			16		29			*				A
06185110		23,31					29				33			A
06185500		1,13, 23,25			13,16	10	11				24			A,P,T

1. General hydrologic knowledge and definition of long-term trends.
6. International Joint Commission (U.S. Department of State).
10. Flood forecasting - National Weather Service.
11. Water-quality monitoring station, NASQAN program.
13. Operation of Missouri River system.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
16. Reservoir-management station.
17. Montana Department of Natural Resources and Conservation.
23. Used by State of Montana for water-rights administration.
24. U.S. Army Corps of Engineers.
25. Water-use studies by Montana Department of Health and Environmental Sciences.
29. Water-quality monitoring station, other.
31. Hydrologic activities - U.S. Bureau of Indian Affairs.
33. U.S. Bureau of Indian Affairs.
43. Poplar River bilateral monitoring committee.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06186500	1	1				4	20	20		*				A
06187550		1					20	20		*				A
06191500	1	1,13,23				4,10	20	14,20	27		24			A,P,T
06191800	1	1,14,23						14	14			19		A
06192500	1	1,13,23				4,10	11	14	27		24			A,P,T
06195600		1,23				4,10		14				19		A,T
06200000	1	1,13,23				4,10		14				17		A,T

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
10. Flood forecasting - National Weather Service.
11. Water-quality-monitoring station, NASQAN program.
13. Operation of Missouri River system.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
17. Montana Department of Natural Resources and Conservation.
19. Montana Department of Fish, Wildlife and Parks.
20. Water-quality-monitoring station - Geological Survey geothermal study.
23. Used by State of Montana for water-rights administration.
24. U.S. Army Corps of Engineers.
27. Streamflow data requests for recreational planning and river floating.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06202510		44							14			19		A,T
06204050		1,23			16,21	4		14					22	A
06205000	1	1,13,23				4,10		14			24			A,T
06207500	1	1,23,25				4,10	34		14			17		A,T
06208800		1,23	45				34		14			17,46		A
06211000		1			16	4						17		A
06211500		1			16	4						17		A

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
10. Flood forecasting - National Weather Service.
13. Operation of Missouri River system.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
16. Reservoir-management station.
17. Montana Department of Natural Resources and Conservation.
19. Montana Department of Fish, Wildlife and Parks.
21. Federal Energy Regulatory Commission hydropower licensing requirements.
22. Montana Power Company.
23. Used by State of Montana for water-rights administration.
24. U.S. Army Corps of Engineers.
25. Water-use studies by Montana Department of Health and Environmental Sciences.
34. Sediment-transport monitoring station.
44. Baseline hydrologic information - Stillwater Complex study.
45. Yellowstone River Compact - Appendix A.
46. Wyoming State Engineer.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06212500		16			16							17		A
06214500	1	1,13,23			13	4,10	11	14	14		24			A,P,T
06216000	1	1,25,31								*				A
06216900		1,31								*				A
06287000		1,23			16			14			15			A
06289000	1	1,23,31				4				*				A
06290000	1	1,23,31									33			A

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
10. Flood forecasting - National Weather Service.
11. Water-quality monitoring station, NASQAN program.
13. Operation of Missouri River system.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
15. U.S. Bureau of Reclamation.
16. Reservoir-management station.
17. Montana Department of Natural Resources and Conservation.
23. Used by State of Montana for water rights administration.
24. U.S. Army Corps of Engineers.
25. Water-use studies by Montana Department of Health and Environmental Sciences.
31. Hydrologic activities - U.S. Bureau of Indian Affairs.
33. U.S. Bureau of Indian Affairs.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06290500		1,23,31				4				*				A
06291000		1,23,31									33			A
06291500	1	1,23,31			16						33			A
06294000		1,23,31	45			4,10						17,46		A
06294500		1,13,23	45		13	10	11	14				17,46		A
06294600		42						42				36		A
06294940		1,23,35					35			*				A,T

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
10. Flood forecasting - National Weather Service.
11. Water-quality monitoring station, NASQAN program.
13. Operation of Missouri River system.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
16. Reservoir-management station.
17. Montana Department of Natural Resources and Conservation.
23. Used by State of Montana for water-rights administration.
31. Hydrologic activities - U.S. Bureau of Indian Affairs.
33. U.S. Bureau of Indian Affairs.
35. Baseline hydrologic information - regional coal studies.
36. Montana Department of State Lands.
42. Small drainage basin index station - Montana Department of State Lands.
45. Yellowstone River Compact - Appendix A.
46. Wyoming State Engineer.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06294950	1	1,47								*				A,T
06294995		1,25					35		48	*		17		A
06295000		1,13, 23,25									15			A
06295100		42						42				36		A
06295113		25,31						36		*				A
06295250		1,31,48					25,35		48		33			A
06296003		25,48					35		48			17		A

- 1. General hydrologic knowledge and definition of long-term trends.
- 13. Operation of Missouri River system.
- 15. U.S. Bureau of Reclamation.
- 17. Montana Department of Natural Resources and Conservation.
- 23. Used by State of Montana for water-rights administration.
- 25. Water-use studies by Montana Department of Health and Environmental Sciences.
- 31. Hydrologic activities - U.S. Bureau of Indian Affairs.
- 33. U.S. Bureau of Indian Affairs.
- 35. Baseline hydrologic information - regional coal studies.
- 36. Montana Department of State Lands.
- 42. Small drainage basin index station - Montana Department of State Lands.
- 47. Inventory of potential Yellowstone River offstream storage basin.
- 48. Cumulative hydrologic impact assessment - Office of Surface Mining.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06296100	1	42						42				36		A
06306100		1,35					35		48			36		A
06306300	1	1,23,35			16	10	35		14,48			17		A,T
06306950		42						42				36		A
06307500		1,23,35			16	4,10	35		48			17		A,T
06307528		1,35						35		*				A
06307600		1,23,35					35	14			37			A

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
10. Flood forecasting - National Weather Service.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
16. Reservoir-management station.
17. Montana Department of Natural Resources and Conservation.
23. Used by State of Montana for water-rights administration.
35. Baseline hydrologic information - regional coal studies.
36. Montana Department of State Lands.
37. U.S. Bureau of Land Management.
42. Small drainage basin index station - Montana Department of State Lands.
48. Cumulative hydrologic impact assessment - Office of Surface Mining.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06307616		23,31					31,35	14		*				A
06307717		18,35					35	14				36		A
06307740		1,35					35	14				36		A
06307830		23,35						14	48			17		A
06308400		1,35					35	14				36		A
06308500		1,13, 23,35	45			10	11,34 35	14		*		17,46		A,P,T
06309000	1	1,13, 23,25				4,10		14			24			A,P,T

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
10. Flood forecasting - National Weather Service.
11. Water-quality monitoring station, NASQAN program.
13. Operation of Missouri River system.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
17. Montana Department of Natural Resources and Conservation.
18. Water-use studies by U.S. Forest Service.
23. Used by State of Montana for water-rights administration.
24. U.S. Army Corps of Engineers.
31. Hydrologic activities - U.S. Bureau of Indian Affairs.
34. Sediment-transport-monitoring station.
35. Baseline hydrologic information - regional coal studies.
36. Montana Department of State Lands.
45. Yellowstone River Compact - Appendix A.
48. Cumulative hydrologic impact assessment - Office of Surface Mining.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06309075	1	1,25										17		A
06324500		1,23,35				4	34	14		*		17		A,T
06324710		1,35					34			*				A,T
06326300		1,23,35					35					17		A
06326500	1	1,13,23 25,35	45			10	11,34	14		*		17,46		A,P,T
06326600		1,23					35					17		A
06326952		42						42				36		A

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
10. Flood forecasting - National Weather Service.
11. Water-quality-monitoring station, NASQAN program.
13. Operation of Missouri River system.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
17. Montana Department of Natural Resources and Conservation.
23. Used by State of Montana for water-rights administration.
25. Water-use studies by Montana Department of Health and Environmental Sciences.
34. Sediment-transport monitoring station.
35. Baseline hydrologic information - regional coal studies.
36. Montana Department of State Lands.
42. Small drainage basin index station - Montana Department of State Lands.
45. Yellowstone River Compact - Appendix A.
46. Wyoming State Engineer.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
06328200		42						42				36		A
06329200	1	1,35					35			*				A
06329500	1	1,13, 23,25			16	4,10	11,34	14			24			A,P,T
06336447		42						42				36		A
12301300	1	1				4		14			24			A
12301933		1,25,49			16	4	29	14			24			A,T
12302055	1	1				4		14			24			A

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
10. Flood forecasting - National Weather Service.
11. Water-quality-monitoring station, NASQAN program.
13. Operation of Missouri River system.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
16. Reservoir-management station.
23. Used by State of Montana for water-rights administration.
24. U.S. Army Corps of Engineers.
25. Water-use studies by Montana Department of Health and Environmental Sciences.
29. Water-quality monitoring station, other.
34. Sediment-transport-monitoring station.
35. Baseline hydrologic information - regional coal studies.
36. Montana Department of State Lands.
42. Small drainage basin index station - Montana Department of State Lands.
49. Operation of upper Columbia River system.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
12303000	1	1,49			16	10		14			24			A,P,T
12303100	1	1,18			21								50	A
12303500		1,18			21	4		14					51	A
12304500		1,18,49				4,10			14		24			A,T
12322500		1,25,52										53		A
12322800		1,25,52										53		A
12323000		1,25,52										53		A

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
10. Flood forecasting - National Weather Service.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
16. Reservoir-management station.
18. Water-use studies by U.S. Forest Service.
21. Federal Energy Regulatory Commission hydropower licensing requirement.
24. U.S. Army Corps of Engineers.
25. Water-use studies by Montana Department of Health and Environmental Sciences.
49. Operation of upper Columbia River system.
50. Pacific Power and Light.
51. Montana Light and Power Company.
52. Baseline hydrologic information - U.S. Environmental Protection Agency superfund site.
53. Montana Bureau of Mines and Geology.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Station No.	Uses									Funding				Frequency of data availability
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
12323770		1,18						14	54			19		A
12324200		1,25						14	54			19		A
12324590		1,23, 25				4		14	54			17		A
12324680	1	1,25						14	54			17		A
12325500		1,18, 25				10			54			19		A
12329500		1			21	4		14					22	A,T
12330000		1,18,23						14				17		A

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
10. Flood forecasting - National Weather Service.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
17. Montana Department of Natural Resources and Conservation.
18. Water-use studies by U.S. Forest Service.
19. Montana Department of Fish, Wildlife and Parks.
21. Federal Energy Regulatory Commission hydropower licensing requirements.
22. Montana Power Company.
23. Used by State of Montana for water-rights administration.
25. Water-use studies by Montana Department of Health and Environmental Sciences.
54. Clark Fork reserve flow water study - Montana Department of Fish, Wildlife and Parks.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
12331900	1	1,18, 23				4		14	54			17		A
12332000		1				10		14				19		A,T
12334510	1	1,18,23				4		14				17		A
12335500	1	1,18,25			16	4						17		A
12339450	1	1,23				4			14,27			17		A
12340000	1	1,23, 25,49				4,10		14	27	*				A,P,T
12340500		1,23,25 49				10		14	27,54		24			A,P,T

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
10. Flood forecasting - National Weather Service.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
16. Reservoir-management station.
17. Montana Department of Natural Resources and Conservation.
18. Water-use studies by U.S. Forest Service.
19. Montana Department of Fish, Wildlife and Parks.
23. Used by State of Montana for water-rights administration.
24. U.S. Army Corps of Engineers.
25. Water-use studies by Montana Department of Health and Environmental Sciences.
27. Streamflow data requests for recreational planning and river floating.
49. Operation of upper Columbia River system.
54. Clark Fork reserve flow water study - Montana Department of Fish, Wildlife and Parks.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Station No.	Uses									Funding				Frequency of data availability
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
12342500		1,18			16	4		14	27			17		A
12344000	1	1,18,49				4,10		14				17		A,P,T
12353000	1	1,23,25,49				4,10	11		14,27			55		A,P,T
12354500	1	1,49				4,10			14,27	*	56			A,P,T
12355000	1	1,18,49				4	11	14	27		6			A
12355500	1	1,18,23,25,49				4,10		14	27	*	56			A,P,T
12358500	1	1,18,25,49				4		14	27		56			A,P,T

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
6. International Joint Commission (U.S. Department of State).
10. Flood forecasting - National Weather Service.
11. Water-quality monitoring station, NASQAN program.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
16. Reservoir-management station.
17. Montana Department of Natural Resources and Conservation.
18. Water-use studies by U.S. Forest Service.
23. Used by State of Montana for water-rights administration.
25. Water-use studies by Montana Department of Health and Environmental Sciences.
27. Streamflow data requests for recreational planning and river floating.
49. Operation of upper Columbia River system.
55. Montana Department of Health and Environmental Sciences.
56. Bonneville Power Administration.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Sta- tion No.	Uses									Funding				Fre- quen- cy of data avail- abil- ity
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
12362500		1,18,23 25,49			16	4		14	27		15			A,P,T
12363000		1,18,23 25,49			16,21	10	11	14	27				22	A,P,T
12365000	1	1,25							14			17		A
12366000		1,18,25							14			17		A
12369200	1	1,18						14				19		A
12370000	1	1,18,25			16	4,10		14			56			A,T
12370900		25,57		31			29				56			A

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
10. Flood forecasting - National Weather Service.
11. Water-quality-monitoring station, NASQAN program.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
15. U.S. Bureau of Reclamation.
16. Reservoir-management station.
17. Montana Department of Natural Resources and Conservation.
18. Water-use studies by U.S. Forest Service.
19. Montana Department of Fish, Wildlife and Parks.
21. Federal Energy Regulatory Commission hydropower licensing requirements.
22. Montana Power Company.
23. Used by State of Montana for water-rights administration.
25. Water-use studies by Montana Department of Health and Environmental Sciences.
27. Streamflow data requests for recreational planning and river floating.
29. Water-quality monitoring station, other.
31. Hydrologic activities - U.S. Bureau of Indian Affairs.
49. Operation of upper Columbia River system.
56. Bonneville Power Administration.
57. Small drainage basin index station - Bonneville Power Administration.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Station No.	Uses									Funding				Frequency of data availability
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
12372000		1,23,25,49			16,21	4							22	A,P,T
12374250		1,25,57		31			29				56			A
12374800		1,25,57		31			29				56			A
12375900		1,25,57		31			29				56			A
12377150		1,25,57		31			29				56			A
12381400		1,25,57		31			29				56			A
12383500		1,25,57		31			29				56			A

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
16. Reservoir-management station.
21. Federal Energy Regulatory Commission hydropower licensing requirements.
22. Montana Power Company.
23. Used by State of Montana for water-rights administration.
25. Water-use studies by Montana Department of Health and Environmental Sciences.
29. Water-quality monitoring station, other.
31. Hydrologic activities - U.S. Bureau of Indian Affairs.
49. Operation of upper Columbia River system.
56. Bonneville Power Administration.
57. Small drainage basin index station - Bonneville Power Administration.

Table 2.--Data use, funding, and data availability for stations in the surface-water program--Continued

Station No.	Uses									Funding				Frequency of data availability
	Regional hydrology	Hydrologic systems	Legal obligations	Planning and design	Project operation	Hydrologic forecasts	Water-quality monitoring	Research	Other	Federal program	OFA program	Coop program	Other non-federal	
12387450		1,25,57		31			29				56			A
12388400		1,25,57		31			29				56			A
12388650		1,25,57		31			29				56			A
12388700		1,23,25,49		31			29	14			56			A
12389000	1	1,23,25,49			16,21	4,10							22	A,P,T
12389500	1	1,23,25			16,21	4		14					22	A
12390700	1	1,18,23,25			21	4		14					22	A
12391400		23,25,49			16,21								58	A,P

1. General hydrologic knowledge and definition of long-term trends.
4. Streamflow forecasts by U.S. Soil Conservation Service based on snow survey data.
10. Flood forecasting - National Weather Service.
14. Fisheries habitat research conducted by Montana Department of Fish, Wildlife and Parks.
16. Reservoir-management station.
18. Water-use studies by U.S. Forest Service.
21. Federal Energy Regulatory Commission hydropower licensing requirements.
22. Montana Power Company.
23. Used by State of Montana for water-rights administration.
25. Water-use studies by Montana Department of Health and Environmental Sciences.
29. Water-quality-monitoring station, other.
31. Hydrologic activities - U.S. Bureau of Indian Affairs.
49. Operation of upper Columbia River system.
56. Bonneville Power Administration.
57. Small drainage basin index station - Bonneville Power Administration.
58. Washington Water and Power Company.