

BEAVERHEAD COUNTY

SITE IDENTIFICATION.--450937112393701. Local number 08S09W01CCCC01.

LOCATION.--Lat 45°09'37", long 112°39'37" (NAD 27), Hydrologic Unit 10020002. Owner: U.S. Geological Survey.

HYDROGEOLOGIC UNIT.--Tertiary sediments.

WELL CHARACTERISTICS.--Drilled in 1966, casing diameter 6 in., depth 47 ft.

INSTRUMENTATION.--Graphical water-level recorder from April 1967 to January 1981. Digital water-level recorder set to record every hour from July 1991 to current year.

DATUM.--Elevation of land-surface is 5,240 ft (NGVD 29) (from topographic map.) Measuring point: top of casing, 2.15 ft above land-surface datum. Reference point is 1.34 ft below measure point on well casing. Reference point established May 16, 2003: rebar 20 ft west of well casing at base of power pole, 1.34 ft below measuring point.

REMARKS.--Water levels affected by irrigation. All water levels reported below land-surface datum.

PERIOD OF RECORD.--August 1966 to current year.

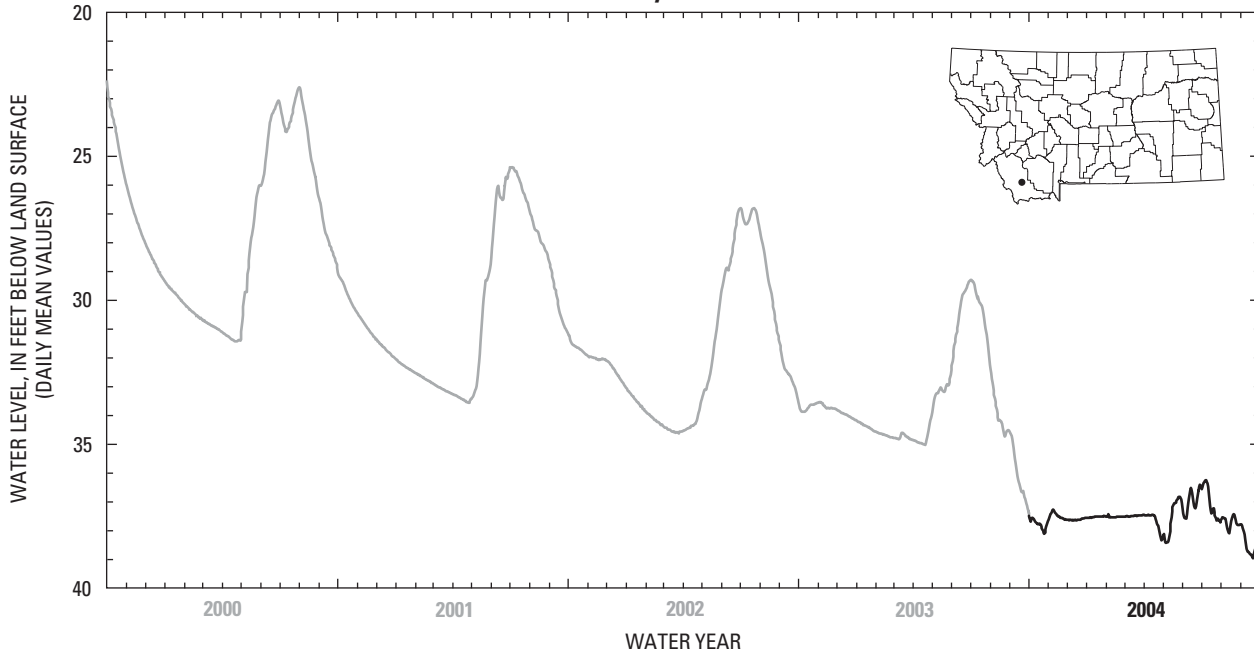
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.43 ft, Aug. 10, 1971 (from recorder); lowest, 38.96 ft, Sept. 20, 2004 (from recorder).

EXTREMES FOR CURRENT YEAR.--Highest water level, 36.23 ft, July 7 (from recorder); lowest, 38.96 ft, Sept. 20 (from recorder).

MEASURED WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM,
WATER YEAR OCTOBER 2003 THROUGH SEPTEMBER 2004

<u>DATE</u>	<u>WATER LEVEL</u>	<u>DATE</u>	<u>WATER LEVEL</u>
Oct. 13	37.73	Apr. 15	37.46
Dec. 16	37.69	May 5	38.43
Feb. 4	37.50	Aug. 26	37.77
Mar. 5	37.53	Sept. 30	38.28

08S09W01CCCC01 (BEAVERHEAD COUNTY)
Tertiary sediments



BEAVERHEAD COUNTY

SITE IDENTIFICATION.--450524112380701. Local number 08S08W31CCAA01.

LOCATION.--Lat 45°05'24", long 112°38'07" (NAD 27), Hydrologic Unit 10020002. Owner: Matador Cattle Company.

HYDROGEOLOGIC UNIT.--Tertiary sediments.

WELL CHARACTERISTICS.--Drilled in December 1992, casing diameter 5 in., depth 217 ft.

INSTRUMENTATION.--Digital water-level recorder set to record every 4 hours from November 1997 to Aug. 1, 2003. Pressure transducer, data logger, and satellite transmitter, with data recorded every hour and transmitted every 4 hours, from Aug. 1, 2003 to current year.

DATUM.--Elevation of land surface is 5,520.7 ft (NGVD 29). Measuring point: top of PVC cap, 2.00 ft above land-surface datum. Prior to Feb. 3, 2000, measuring point was top of PVC casing, 2.20 ft above land-surface datum. Reference point established May 20, 1999: top of steel rod near well casing along fence line, 8.71 ft below measuring point.

REMARKS.--All water levels reported below land-surface datum.

PERIOD OF RECORD.--Measured periodically December 1992 to November 1997 and continuously recorded every 4 hours from November 1997 to Aug. 1, 2003; data collected hourly from Aug. 1, 2003 to current year.

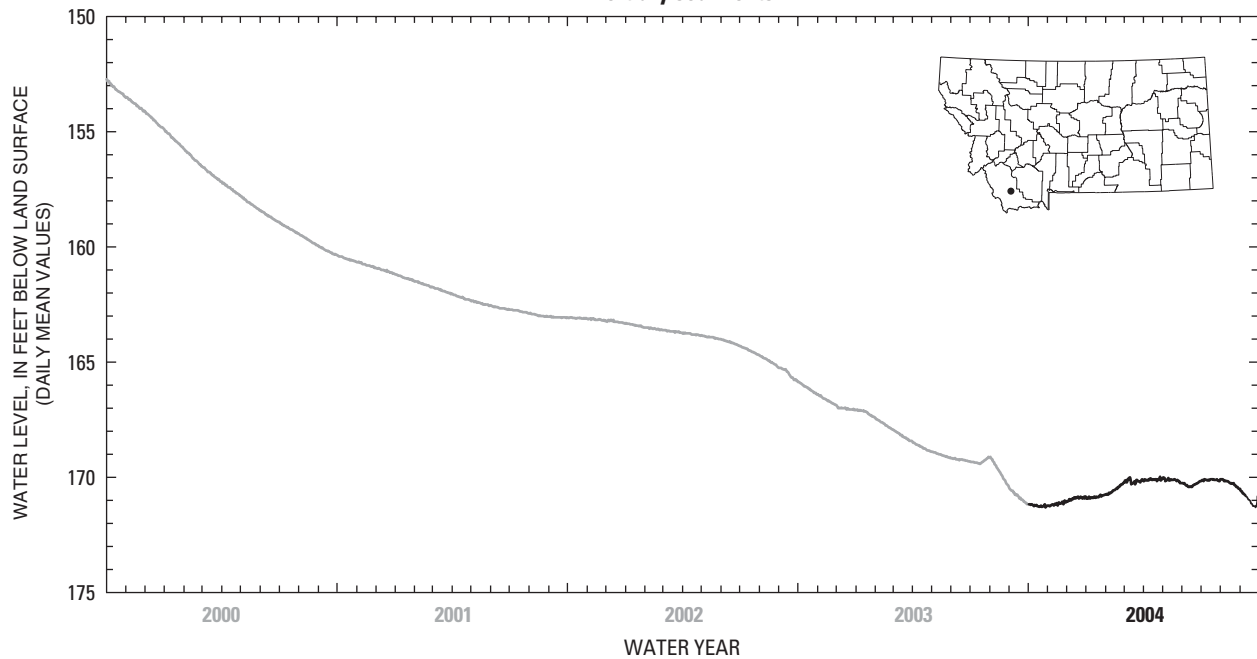
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 138.72 ft, Oct. 23, 1995 (measured); lowest, 171.50 ft, Oct. 29, 2003 (from recorder)

EXTREMES FOR CURRENT YEAR.--Highest water level 169.91 ft, Apr. 27 (from recorder); lowest 171.50 ft, Oct. 29 (from recorder).

MEASURED WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM,
WATER YEAR OCTOBER 2003 THROUGH SEPTEMBER 2004

<u>DATE</u>	<u>WATER LEVEL</u>	<u>DATE</u>	<u>WATER LEVEL</u>
Dec. 16	170.89	May 21	170.13
Feb. 4	170.79	July 14	170.18
Mar. 12	170.30	Aug. 26	170.44
May 5	170.10	Sept. 30	170.74

08S08W31CCAA01 (BEAVERHEAD COUNTY)
Tertiary sediments



CASCADE COUNTY

SITE IDENTIFICATION.--473031111185001. Local number 20N03E11ABAD01.

LOCATION.--Lat 47°30'30", long 111°18'50" (NAD 27), Hydrologic Unit 10030102. Owner: R. Volk.

HYDROGEOLOGIC UNIT.--Mississippian Madison Group.

WELL CHARACTERISTICS.--Drilled in October 1959, casing diameter 8 in. to depth of 206 ft and 6 in. to depth of 369 ft.

INSTRUMENTATION.--Digital water-level recorder set to record every 4 hours from Dec. 19, 2001 to current year.

DATUM.--Elevation of land surface is 3,320 ft (NGVD 29) (from topographic map). Measuring point: top of casing, 1.80 ft above land-surface datum.
Reference point established June 25, 2003: top of steel rod 10 ft north northeast of well casing, 2.16 ft below measuring point.

REMARKS.--All water levels reported below land-surface datum.

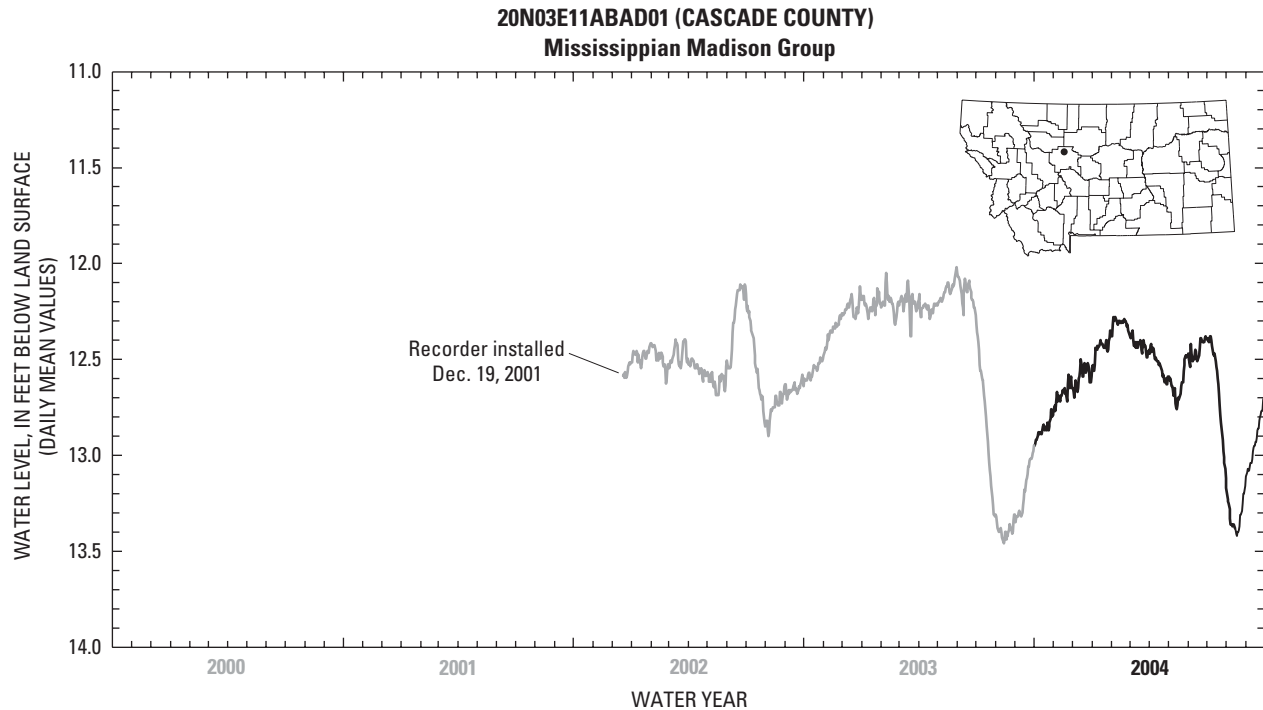
PERIOD OF RECORD.--December 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.00 ft, Mar. 15, 2003 (from recorder); lowest, 13.46 ft, at various times Aug. 13-15, 2003 (from recorder).

EXTREMES FOR CURRENT YEAR.--Highest water level, 12.26 ft, Feb. 4 (from recorder); lowest, 13.43 ft, Aug. 17 and 18 (from recorder).

MEASURED WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM,
WATER YEAR OCTOBER 2003 THROUGH SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 8	12.88	June 15	12.45
Feb. 3	12.27	Aug. 16	13.39
Apr. 20	12.51		



CASCADE COUNTY

SITE IDENTIFICATION.--47220311112602. Local number 19N04E26CACC02.

LOCATION.--Lat 47°22'03", long 111°11'26" (NAD 27), Hydrologic Unit 10030102. Owner: E. Chartier.

HYDROGEOLOGIC UNIT.--Lower Cretaceous Kootenai Formation.

WELL CHARACTERISTICS.--Drilled in December 1992, casing diameter 4 in., depth 198 ft.

INSTRUMENTATION.--Digital water-level recorder set to record every 4 hours from Dec. 16, 1998 to current year (Montana Bureau of Mines and Geology operated site from May 1987 to October 1998).

DATUM.--Elevation of land surface is 3,817 ft (NGVD 29) (from topographic map). Measuring point: top of casing, 1.10 ft above land-surface datum. Reference point established Apr. 26, 1999: top of steel rod near well casing, elevation 3,817.19 ft.

REMARKS.--All water levels reported below land-surface datum.

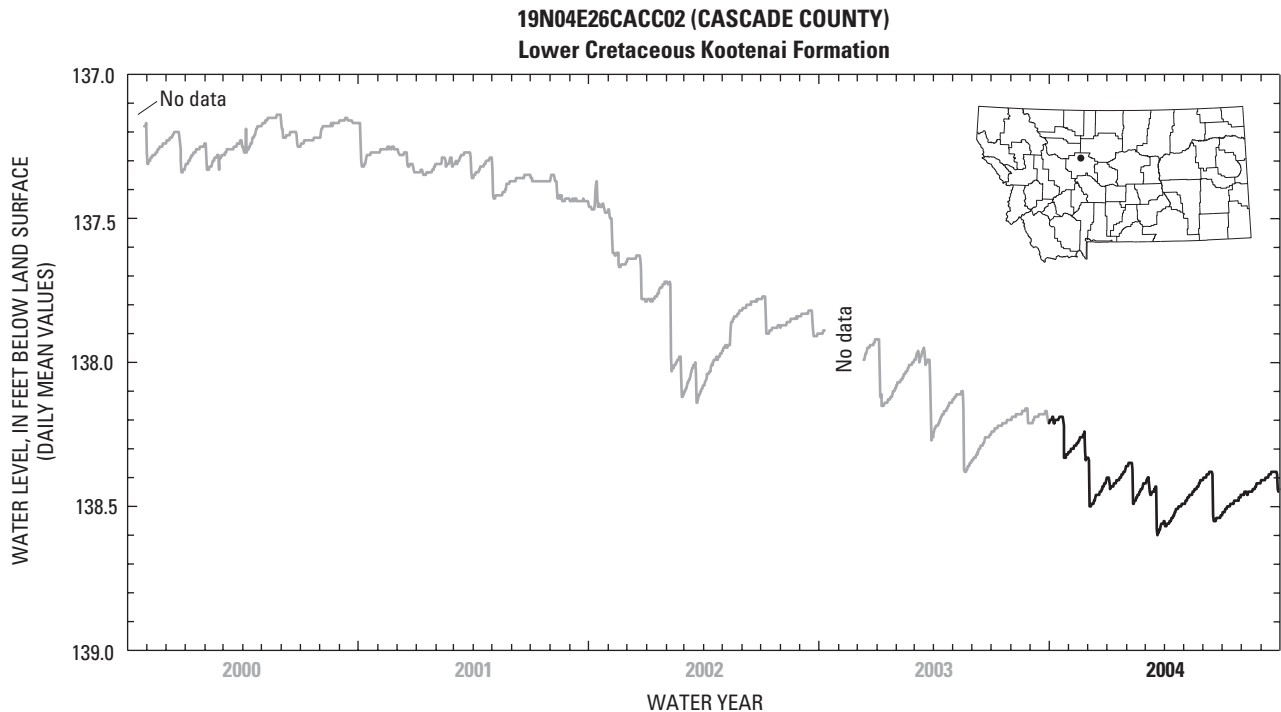
PERIOD OF RECORD.--August 1984 to May 1987 and December 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 137.03 ft, at various times Apr. 8-13, 1999 (from recorder); lowest, 138.60 ft, Mar. 20 and 22, 2004 (from recorder).

EXTREMES FOR CURRENT YEAR.--Highest water level, 138.19 ft, Oct. 5-24 (from recorder); lowest, 138.60 ft, Mar. 20 and 22 (from recorder).

MEASURED WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM,
WATER YEAR OCTOBER 2003 THROUGH SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 8	138.21	June 15	138.40
Feb. 3	138.37	Aug. 17	138.46
Apr. 20	138.50		



GALLATIN COUNTY

SITE IDENTIFICATION.--454809111095401. Local number 01N04E25DCDD01.

LOCATION.--Lat 45°48'09", long 111°09'54" (NAD 27), Hydrologic Unit 10020008. Owner: U.S. Geological Survey.

HYDROGEOLOGIC UNIT.--Quaternary alluvium.

WELL CHARACTERISTICS.--Drilled in August 1951, casing diameter 6 in. to depth of 400 ft. Well filled with gravel to within 101 ft of land surface.

INSTRUMENTATION.--Graphic recorder from May 1954 to August 1977. Digital water-level recorder set to record every hour from May 1991 to current year.

DATUM.--Elevation of land surface is 4,385 ft (NGVD 29) (from topographic map). Measuring point: top of casing 1.60 ft above land-surface datum.
Reference point established Sept. 17, 2003: top of steel rod, 2 ft southwest of well near east fence post, 1.05 ft below measuring point.

REMARKS.--All water levels reported below land-surface datum.

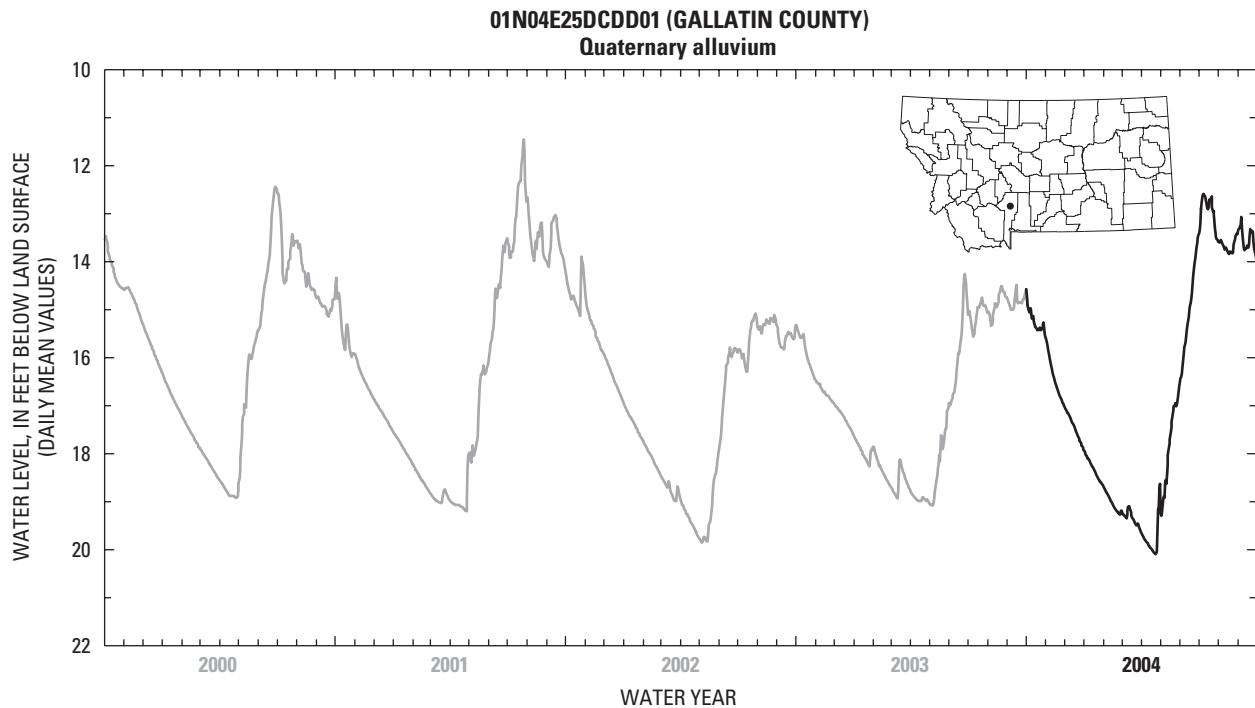
PERIOD OF RECORD.--1954 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 5.91 ft, Aug. 13, 1968 (from recorder); lowest, 20.10 ft, Apr. 23-25, 2004 (from recorder).

EXTREMES FOR CURRENT YEAR.--Highest water level, 12.55 ft, July 8 (from recorder); lowest, 20.10 ft, Apr. 23-25 (from recorder).

MEASURED WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM,
WATER YEAR OCTOBER 2003 THROUGH SEPTEMBER 2004

<u>DATE</u>	<u>WATER LEVEL</u>	<u>DATE</u>	<u>WATER LEVEL</u>
Oct. 15	15.34	May 19	17.30
Dec. 11	17.30	June 3	16.34
Jan. 16	18.27	July 6	12.64
Apr. 7	18.92		



GARFIELD COUNTY

SITE IDENTIFICATION.--470709106061401. Local number 16N44E25BBAC01.

LOCATION.--Lat 47°07'09", long 106°06'14" (NAD 27), Hydrologic Unit 10040104. Owner: Burlington Northern Santa Fe Railroad.

HYDROGEOLOGIC UNIT.--Paleocene Tongue River Member of Fort Union Formation.

WELL CHARACTERISTICS.--Drilled in October 1980, casing diameter 4 in., depth 103 ft.

INSTRUMENTATION.--Digital water-level recorder set to record every 4 hours from Apr. 13, 1998 to current year.

DATUM.--Elevation of land surface is 2,645 ft (NGVD 29) (from topographic map). Measuring point: top of casing, 1.10 ft above land-surface datum.
Reference point established Oct. 12, 1999: top of steel rod near casing, 2.99 ft below measuring point.

REMARKS.--All water levels reported below land-surface datum.

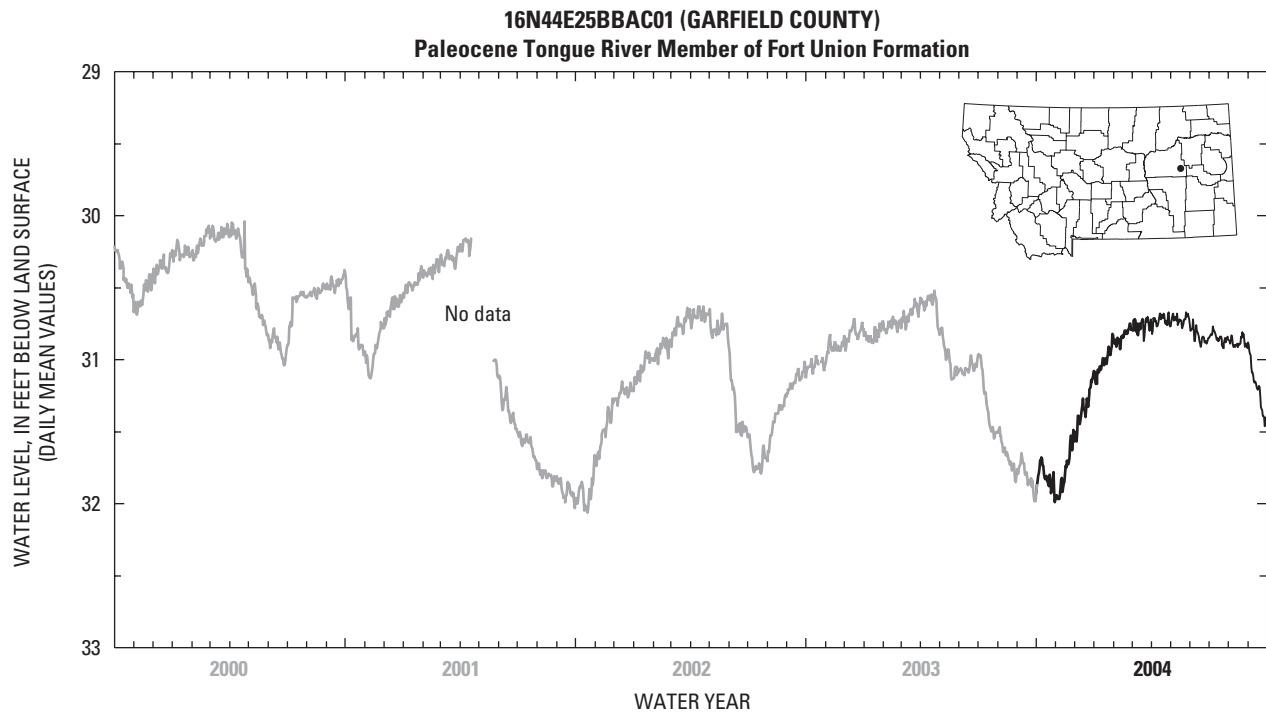
PERIOD OF RECORD.--Measured annually from 1984 to 1992 and recorded every 4 hours from Apr. 13, 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 29.73 ft, Apr. 13, 1999 (from recorder); lowest, 32.08 ft, Oct. 20, 2001 (from recorder).

EXTREMES FOR CURRENT YEAR.--Highest water level, 30.61 ft, Apr. 28 (from recorder); lowest, 32.00 ft, Oct. 31 (from recorder).

MEASURED WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM,
WATER YEAR OCTOBER 2003 THROUGH SEPTEMBER 2004

<u>DATE</u>	<u>WATER LEVEL</u>
Oct. 22	31.87
May 18	30.80



LAKE COUNTY

SITE IDENTIFICATION.--470946114013201. Local number 16N19W08ACBD01.

LOCATION.--Lat 47°09'46", long 114°01'32" (NAD 27), Hydrologic Unit 17010212. Owner: Makespace.

HYDROGEOLOGIC UNIT.--Pleistocene alluvium.

WELL CHARACTERISTICS.--Drilled in August 1988, casing diameter 6 in. to depth of 322 ft and 5 in. from 322 ft to 398 ft.

INSTRUMENTATION.--Digital water-level recorder set to record every hour from Sept. 13, 1990 to current year.

DATUM.--Elevation of land surface is 3,300 ft (NGVD 29) (from topographic map). Measuring point: top of casing, 1.50 ft above land-surface datum.
Reference point established July 14, 2003: top of steel rod 1.0 ft southeast of well casing, 1.12 ft below measuring point.

REMARKS.--All water levels reported below land-surface datum.

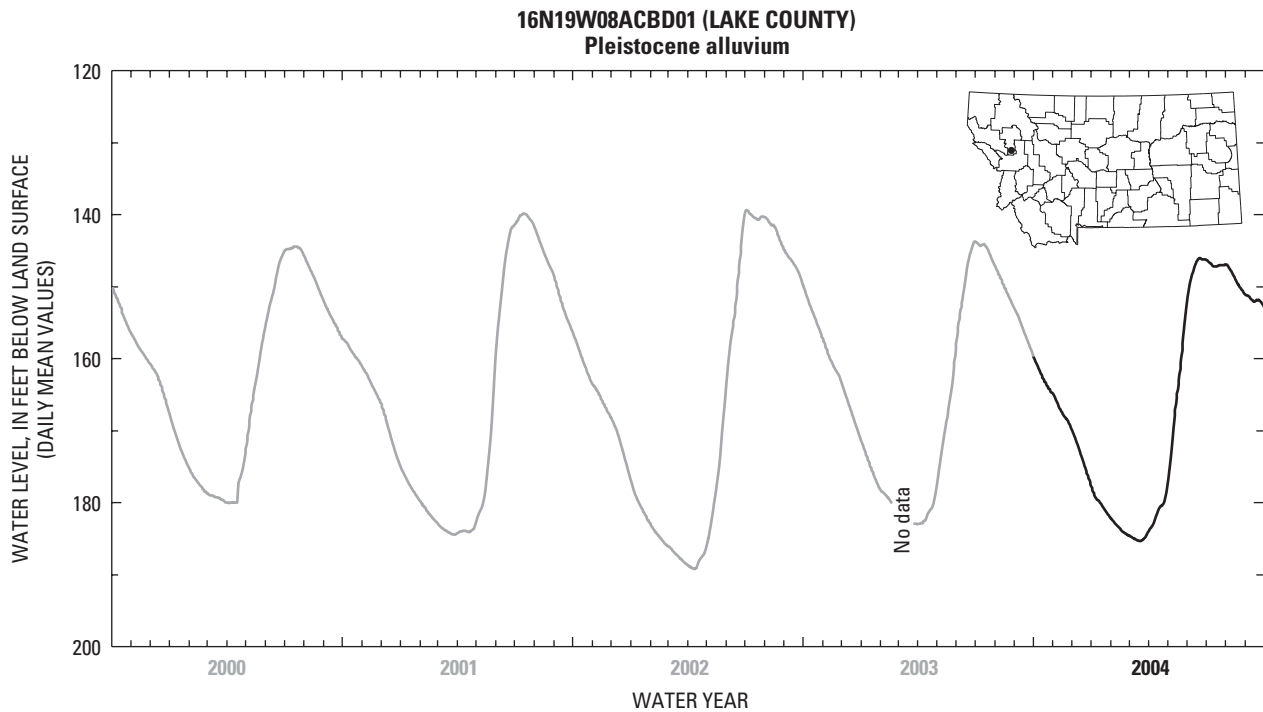
PERIOD OF RECORD.--Annually from 1988 to 1990 and recorded every hour from Sept. 13, 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 137.92 ft, July 14, 1993 (from recorder); lowest, 189.22 ft, Apr. 11 and 12, 2002 (from recorder).

EXTREMES FOR CURRENT YEAR.--Highest water level, 145.95 ft, June 21 (from recorder); lowest, 185.37 ft, Mar. 18-19 (from recorder).

MEASURED WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM,
WATER YEAR OCTOBER 2003 THROUGH SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL
Dec. 19	173.26	Apr. 21	180.37
Feb. 11	183.20	Aug. 26	150.36



MC CONE COUNTY

SITE IDENTIFICATION.--480034105195401. Local number 26N49E13ACAB01.

LOCATION.--Lat 48°00'34", long 105°19'54" (NAD 27), Hydrologic Unit 10060002. Owner: U.S. Geological Survey and Bureau of Land Management.

HYDROGEOLOGIC UNIT.--Upper Cretaceous Hell Creek Formation and Fox Hills Sandstone.

WELL CHARACTERISTICS.--Drilled in August 1981, casing diameter 4 in., depth 180 ft.

INSTRUMENTATION.--Digital water-level recorder set to record every 6 hours from April 1998 to Aug. 3, 1999. Electronic water-level recorder set to record every 4 hours from Aug. 3, 1999 to current year.

DATUM.--Elevation of land surface is 2,040 ft (NGVD 29) (from topographic map). Measuring point: top of casing, 1.60 ft above land-surface datum. Reference point established May 11, 1999: top of steel rod near well casing, 0.15 ft below measuring point.

REMARKS.--All water levels reported below land-surface datum.

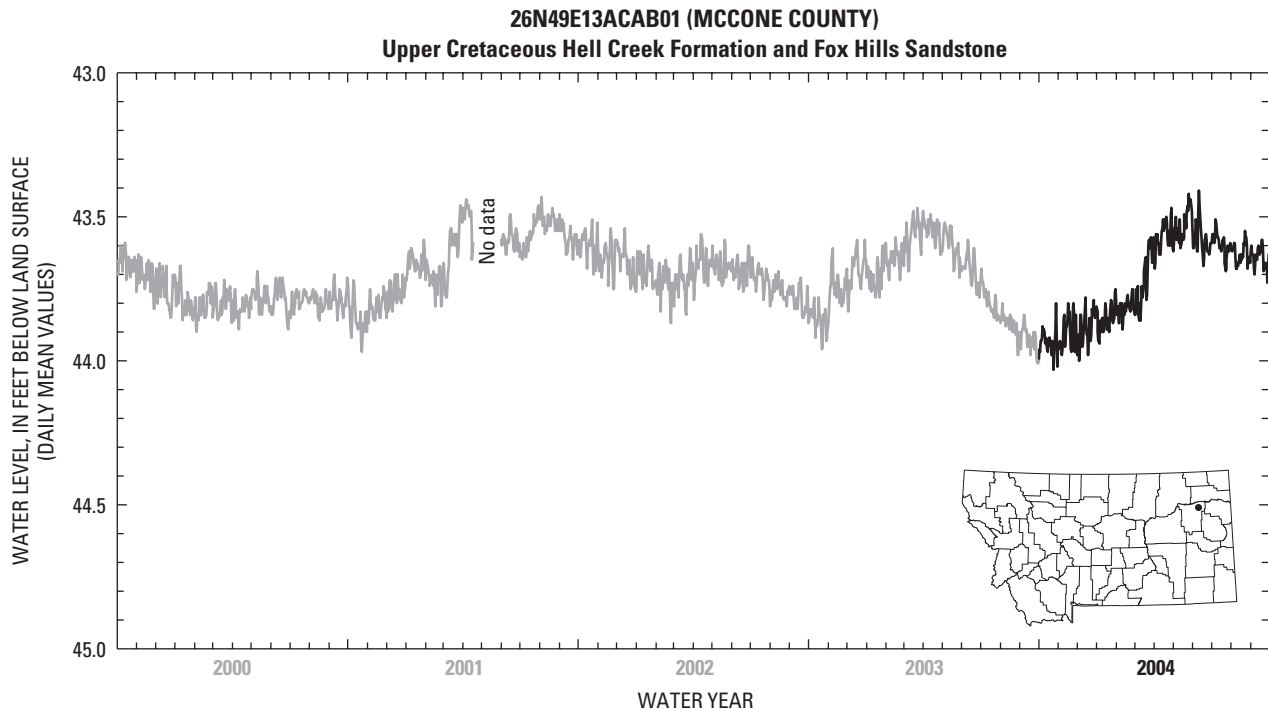
PERIOD OF RECORD.--Measured annually from 1982 to 1992, recorded every 6 hours from Apr. 14, 1998 to Aug. 3, 1999 and recorded every 4 hours from Aug. 3, 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 42.37 ft, Aug. 28, 1992 (measured); lowest, 44.12 ft, Oct. 31, 2003 (from recorder).

EXTREMES FOR CURRENT YEAR.--Highest water level, 43.39 ft, June 11 (from recorder); lowest, 44.12 ft, Oct. 31 (from recorder).

MEASURED WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM,
WATER YEAR OCTOBER 2003 THROUGH SEPTEMBER 2004

DATE	WATER LEVEL
Oct. 31	44.00
May 18	43.56



POWDER RIVER COUNTY

SITE IDENTIFICATION.--453107106110601. Local number 04S45E04BDDDB01.

LOCATION.--Lat 45°31'07", long 106°11'06" (NAD 27), Hydrologic Unit 10090102. Owner: U.S. Geological Survey.

HYDROGEOLOGIC UNIT.--Quaternary alluvium.

WELL CHARACTERISTICS.--Drilled in December 1979, casing diameter 4 in., depth 68 ft.

INSTRUMENTATION.--Graphical water-level recorder from April 1980 to October 1982. Digital water-level recorder set to record every 12 hours from October 1982 to November 1996, and reset to record every 4 hours from November 1996 to current year.

DATUM.--Elevation of land surface is 3,020 ft (NGVD 29) (from topographic map). Measuring point: top of casing, 1.70 ft above land-surface datum. Reference point established Sept. 16, 2003: top of steel rod 21 ft northeast of well casing, 1.66 ft below measuring point.

REMARKS.--All water levels reported below land-surface datum.

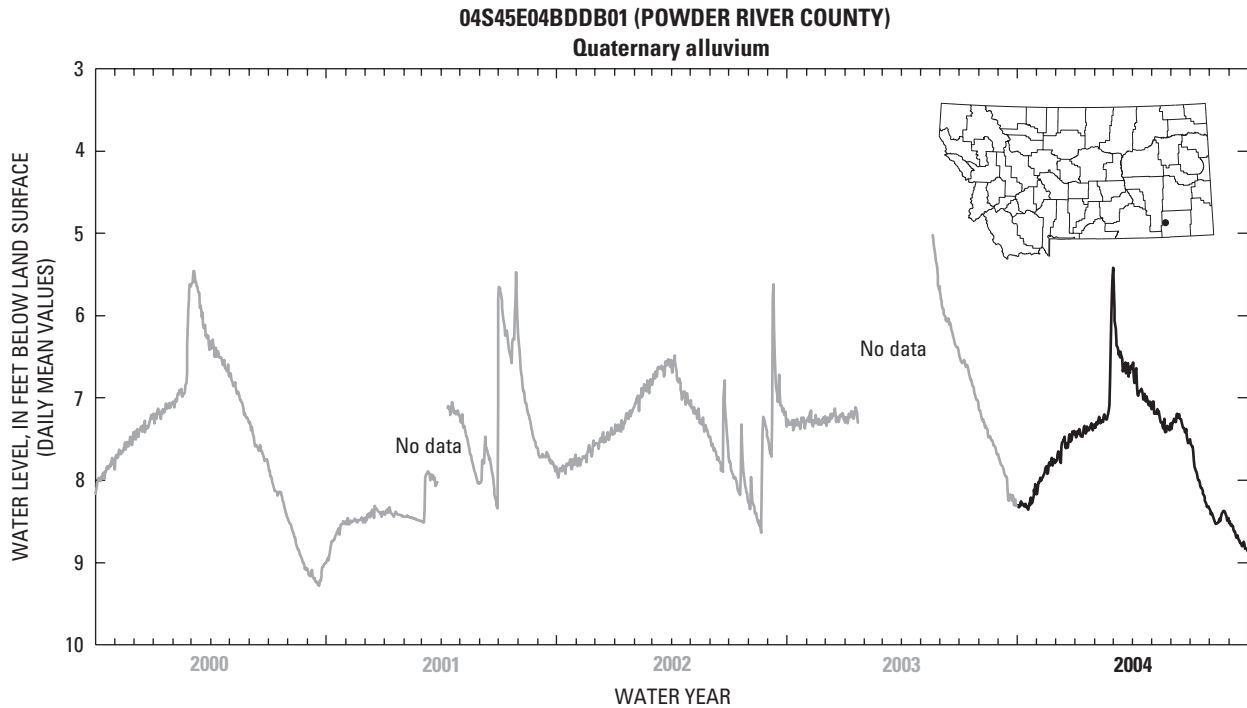
PERIOD OF RECORD.--Measured intermittently from December 1979 to April 1980 and recorded April 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.67 ft, Apr. 11, 1997 (from recorder); lowest, 11.45 ft, Oct. 5, 1992 (from recorder).

EXTREMES FOR CURRENT YEAR.--Highest water level, 5.27 ft, Mar. 1 (from recorder); lowest, 8.87 ft, Sept. 29 (from recorder).

MEASURED WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM,
WATER YEAR OCTOBER 2003 THROUGH SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 22	8.16	Mar. 23	6.57
Dec. 10	7.51	July 6	7.78



POWELL COUNTY

SITE IDENTIFICATION.--470049113035401. Local number 15N12W36BCDD01.

LOCATION.--Lat 47°00'49", long 113°03'54" (NAD 27), Hydrologic Unit 17010203. Owner: Montana Department of Transportation.

HYDROGEOLOGIC UNIT.--Cenozoic rocks.

WELL CHARACTERISTICS.--Drilled in September 1964, casing diameter 6 in., depth 206 ft.

INSTRUMENTATION.--Digital water-level recorder installed April 1991 and set to record every hour from April 1991 to current year.

DATUM.--Elevation of land surface is 4,278 ft (NGVD 29) (from topographic map). Measuring point: top of casing, 1.0 ft above land-surface datum.
Reference point established July 15, 2003: top of steel rod 40 ft northwest of well by fence corner, 3.14 ft above measuring point.

REMARKS.--All water levels reported below land-surface datum.

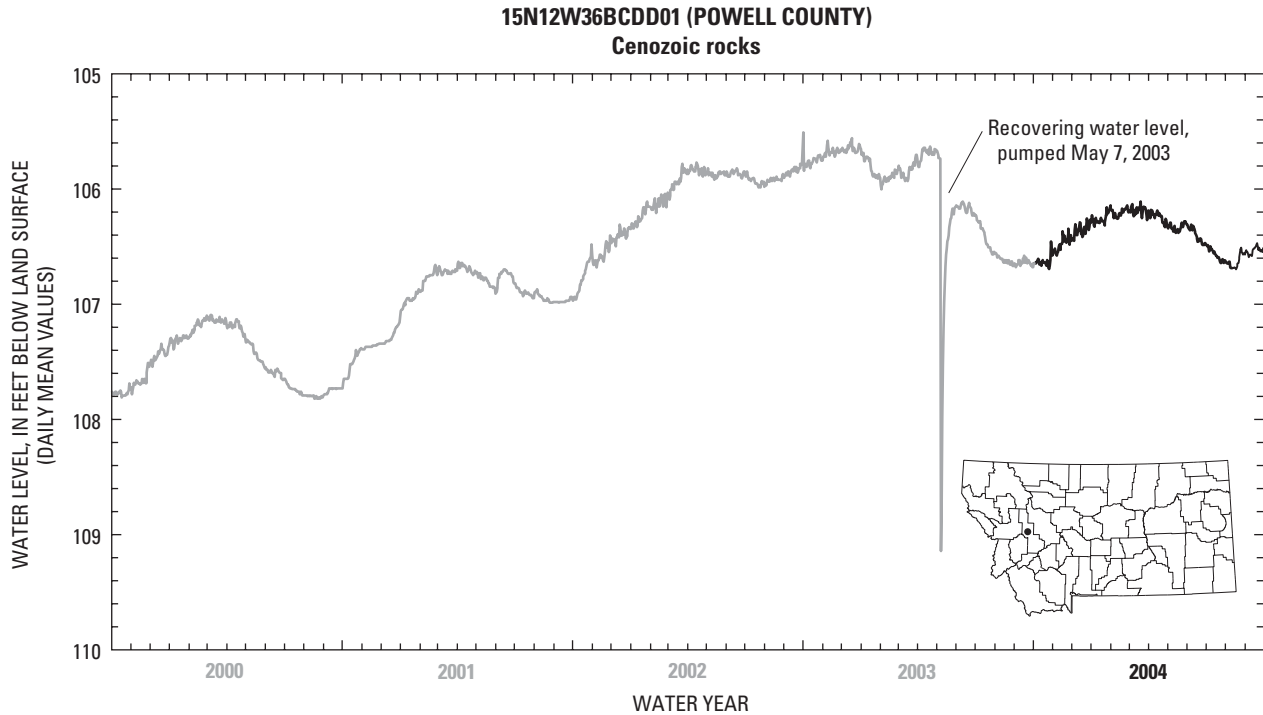
PERIOD OF RECORD.--Measured periodically from 1975 to 1991 and continuously recorded every hour from April 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 95.90 ft, Dec. 12, 1991 (measured); lowest, 126.72 ft, Oct. 11, 1984 (measured).

EXTREMES FOR CURRENT YEAR.--Highest water level, 106.07, Mar. 18 (from recorder); lowest, 106.72 ft, Oct. 24 (from recorder).

MEASURED WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM,
WATER YEAR OCTOBER 2003 THROUGH SEPTEMBER 2004

<u>DATE</u>	<u>WATER LEVEL</u>	<u>DATE</u>	<u>WATER LEVEL</u>
Oct. 1	106.67	June 30	106.51
Apr. 1	106.20	Sept. 30	106.52



RAVALLI COUNTY

SITE IDENTIFICATION.--463750114033001. Local number 10N20W13BBA 01.

LOCATION.--Lat 46°37'50", long 114°03'30" (NAD 27), Hydrologic Unit 17010205. Owner: Bonneville Power Administration.

HYDROGEOLOGIC UNIT.--Quaternary alluvium.

WELL CHARACTERISTICS.--Drilled in September 1959, casing diameter 6 in., depth 50 ft.

INSTRUMENTATION.--Digital water-level recorder set to record every hour from April 1991 to current year.

DATUM.--Elevation of land surface is 3,204 ft (NGVD 29) (from topographic map). Measuring point: top of casing, 2.00 ft above land-surface datum.
Reference point established July 14, 2003: top of steel rod 45 ft east of well in southwest corner of concrete pad, 0.58 ft below measuring point.

REMARKS.--All water levels reported below land-surface datum.

PERIOD OF RECORD.--Measured periodically from 1959 to 1982 and recorded every hour from April 1991 to current year.

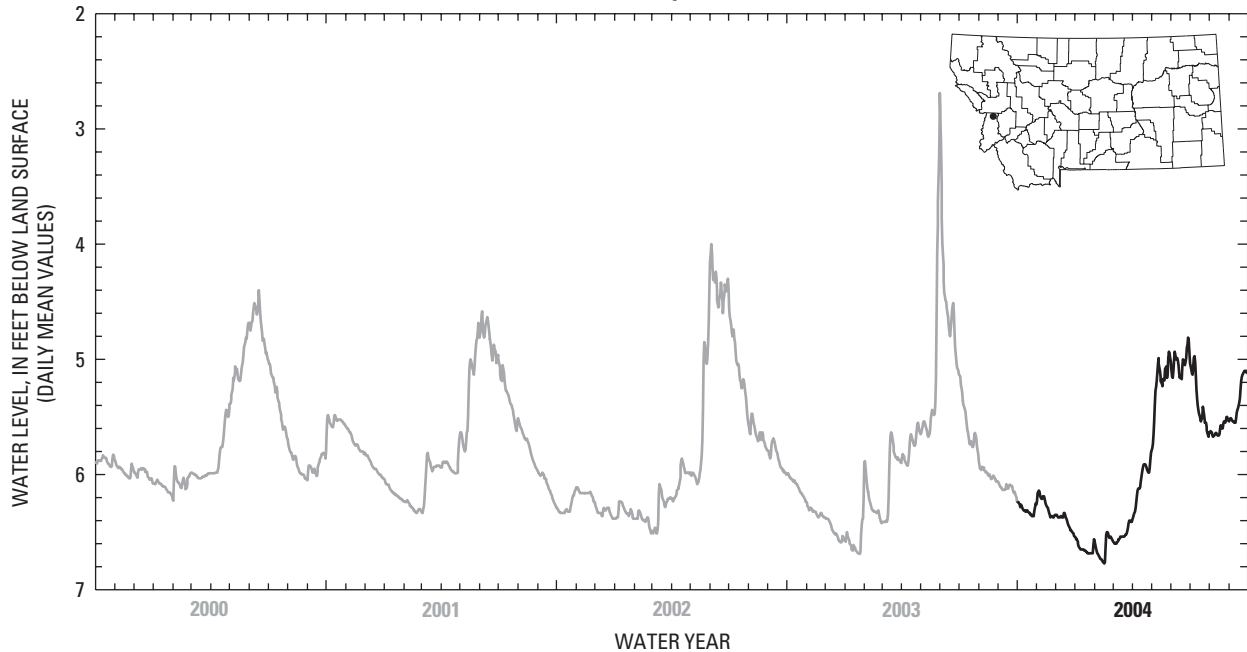
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.48 ft, June 15, 1959 (measured); lowest, 7.21 ft, Sept. 21, 1977 (measured).

EXTREMES FOR CURRENT YEAR.--Highest water level, 4.79 ft, June 28 (from recorder); lowest, 6.77 ft, Feb. 15-17 (from recorder).

MEASURED WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM,
WATER YEAR OCTOBER 2003 THROUGH SEPTEMBER 2004

<u>DATE</u>	<u>WATER LEVEL</u>	<u>DATE</u>	<u>WATER LEVEL</u>
Oct. 29	6.30	Apr. 21	5.89
Dec. 16	6.35	May 5	5.55
Feb. 2	6.66	June 23	5.06
Mar. 15	6.52	Sept. 8	5.50

10N20W13BBA01 (RAVALLI COUNTY)
Quaternary alluvium



RAVALLI COUNTY

SITE IDENTIFICATION.--461518114090802. Local number 06N20W19CCCC02.

LOCATION.--Lat 46°15'18", long 114°09'08" (NAD 27), Hydrologic Unit 17010205. Owner: Bonneville Power Administration.

HYDROGEOLOGIC UNIT.--Quaternary alluvium.

WELL CHARACTERISTICS.--Drilled in September 1970, casing diameter 6 in., depth 40 ft.

INSTRUMENTATION.--Graphic recorder from September 1970 to January 1985. Digital water-level recorder set to record every hour from January 1985 to current year.

DATUM.--Elevation of land surface is 3,558.3 ft (NGVD 29) (from levels taken in September 1970). Measuring point: top of casing, 1.30 ft above land-surface datum. Reference point established July 14, 2003: north plug of 4 in. round ring on fire hydrant, 0.57 ft below measuring point.

REMARKS.--All water levels reported below land-surface datum.

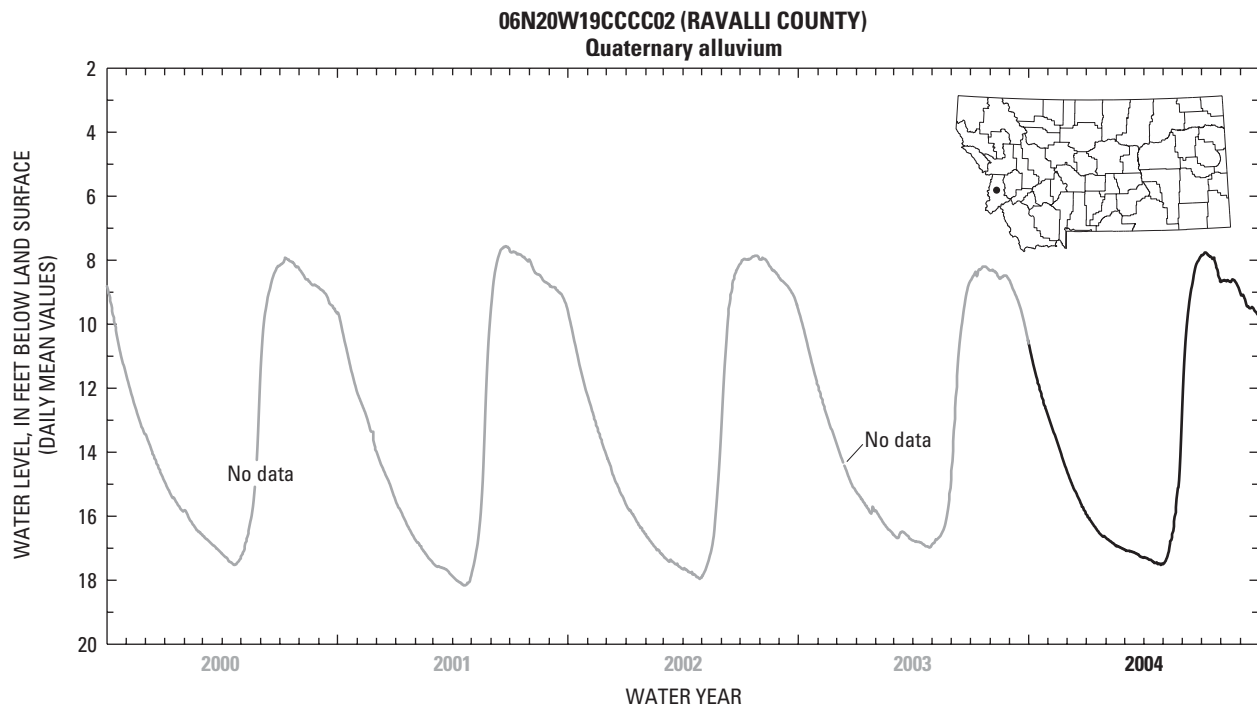
PERIOD OF RECORD.--September 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.48 ft, Sept. 2, 1979 (from recorder); lowest, 18.32 ft, May 1, 1985 (measured).

EXTREMES FOR CURRENT YEAR.--Highest water level, 7.74 ft, July 7 (from recorder); lowest, 17.53 ft, Apr. 27 and 28 (from recorder).

MEASURED WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM,
WATER YEAR OCTOBER 2003 THROUGH SEPTEMBER 2004

<u>DATE</u>	<u>WATER LEVEL</u>	<u>DATE</u>	<u>WATER LEVEL</u>
Oct. 27	12.62	Apr. 21	17.49
Dec. 16	15.33	May 5	17.44
Feb. 3	16.75	June 23	8.16
Mar. 16	17.17	Sept. 8	9.26



ROSEBUD COUNTY

SITE IDENTIFICATION.--451746106301101. Local number 06S43E19DDBA02.

LOCATION.--Lat 45°17'46", long 106°30'11" (NAD 27), Hydrologic Unit 10090101. Owner: U.S. Geological Survey and Art Hayes.

HYDROGEOLOGIC UNIT.--Quaternary alluvium.

WELL CHARACTERISTICS.--Drilled in October 1986, casing diameter 4 in., depth 67 ft.

INSTRUMENTATION.--Digital water-level recorder from April 1989 to current year.

DATUM.--Elevation of land surface is 3,170 ft (NGVD 29) (from topographic map). Measuring point: top of casing, 1.40 ft above land-surface datum.
Reference point established Sept. 16, 2003: top of steel rod 1.0 ft south of southwest corner of recorder box, 1.13 ft below measuring point.

REMARKS.--All water levels reported below land-surface datum.

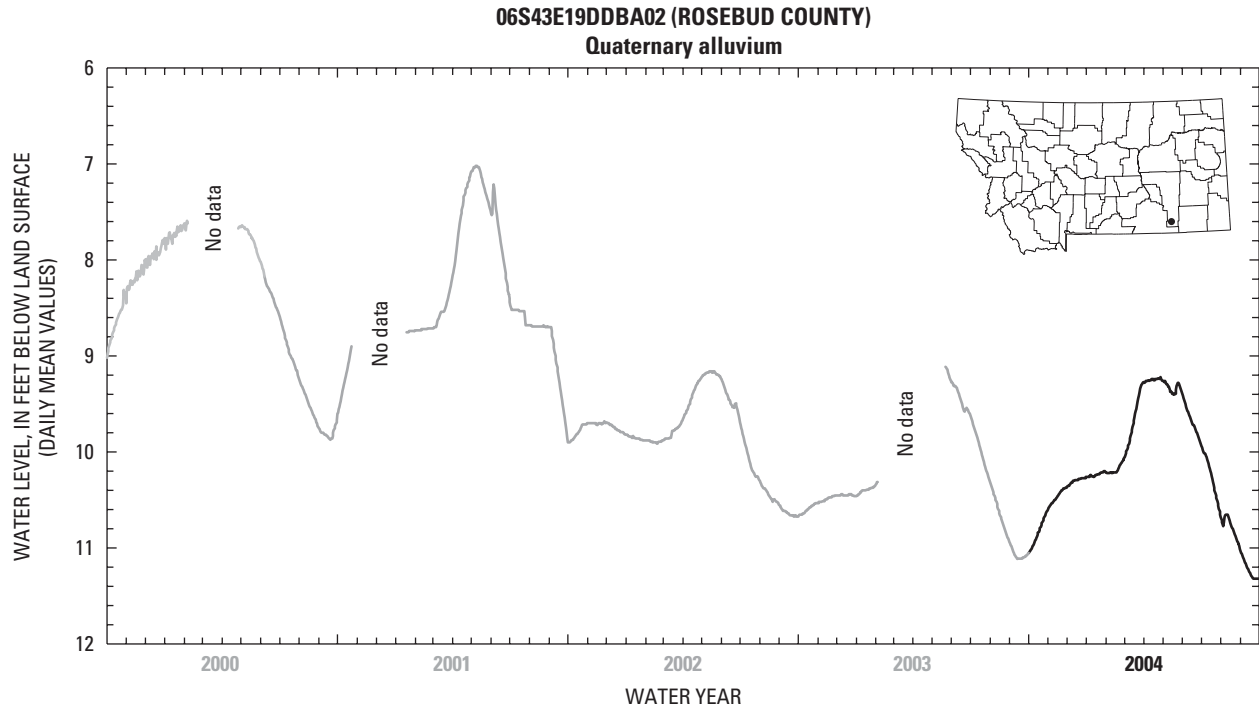
PERIOD OF RECORD.--April 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.47 ft, Apr. 7, 1987 (measured); lowest, 11.40 ft, Jan. 11, 1995 (measured).

EXTREMES FOR CURRENT YEAR.--Highest water level, 9.21 ft, Apr. 27 (from recorder); lowest, 11.32 ft, Sept. 20-30 (from recorder).

MEASURED WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM,
WATER YEAR OCTOBER 2003 THROUGH SEPTEMBER 2004

<u>DATE</u>	<u>WATER LEVEL</u>	<u>DATE</u>	<u>WATER LEVEL</u>
Nov. 3	10.53	Feb. 5	10.22
Nov. 14	10.47	Mar. 23	9.48
Dec. 10	10.29	July 6	10.04



SANDERS COUNTY

SITE IDENTIFICATION.--474251114385201. Local number 23N24W34ADAA01.

LOCATION.--Lat 47°42'51", long 114°38'52" (NAD 27), Hydrologic Unit 17010212. Owner: Bureau of Indian Affairs.

HYDROGEOLOGIC UNIT.--Quaternary alluvium.

WELL CHARACTERISTICS.--Drilled in February 1941, casing diameter 20 in. from 1.00 ft above land surface to 300 ft below land surface, and 18 in. from 300 ft to 377 ft.

INSTRUMENTATION.--Graphical water-level recorder from January 1971 to January 1985. Digital water-level recorder set to record every hour from January 1985 to current year.

DATUM.--Elevation of land surface is 2,878.57 ft (NGVD 29). Measuring point: top of casing, 1.00 ft above land-surface datum. Reference point established Oct. 29, 2003: rebar 3 ft northeast of well shelter outside of northeast corner of shelter fence, 1.79 ft below measuring point.

REMARKS.--Water levels affected by pumpage. Well located near Lonepine. All water levels reported below land-surface datum. No data from Feb. 1 through Mar. 9. No data Sept. 13-20 while Montana Bureau of Mines and Geology collected water-quality samples.

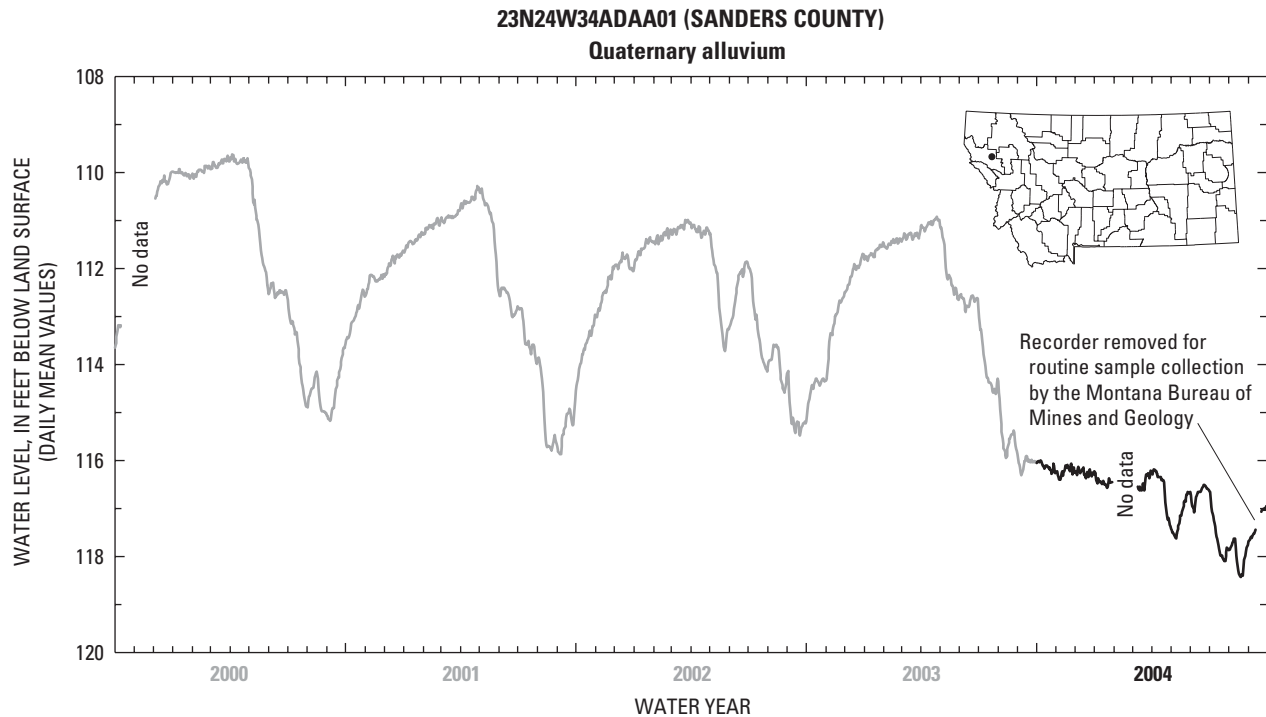
PERIOD OF RECORD.--March to May 1943, October 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 102.43 ft, Mar. 20, 1981 (from recorder); lowest, 119.96 ft, Sept. 6, 1995 (from recorder).

EXTREMES FOR CURRENT YEAR.--Highest water level, 115.94 ft, Oct. 28 (from recorder); lowest, 118.45 ft, Aug. 20 (from recorder).

MEASURED WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM,
WATER YEAR OCTOBER 2003 THROUGH SEPTEMBER 2004

<u>DATE</u>	<u>WATER LEVEL</u>	<u>DATE</u>	<u>WATER LEVEL</u>
Oct. 6	116.00	May 4	117.53
Dec. 18	116.36	July 19	117.98
Mar. 9	116.40	Sept. 13	117.45
Apr. 6	116.22	Sept. 20	117.00



SHERIDAN COUNTY

SITE IDENTIFICATION.--483650104084001. Local number 33N58E17ADDD01.

LOCATION.--Lat 48°36'50", long 104°08'40" (NAD 27), Hydrologic Unit 10060006. Owner: Vern Guenther.

HYDROGEOLOGIC UNIT.--Pleistocene outwash.

WELL CHARACTERISTICS.--Drilled in 1984, casing diameter 4 in., depth 130 ft.

INSTRUMENTATION.--Digital water-level recorder set to record every hour from April to Oct. 18 1985, every 12 hours from Oct. 19, 1985 to Apr. 7, 1993, and every 4 hours from Apr. 8, 1993 to current year.

DATUM.--Elevation of land surface is 1,992 ft (NGVD 29) (from topographic map). Measuring point: top of casing, 2.10 ft above land-surface datum. Reference point established Sept. 15, 2003: top of steel rod 3 ft north of well, 0.77 ft below measuring point.

REMARKS.--All water levels reported below land-surface datum.

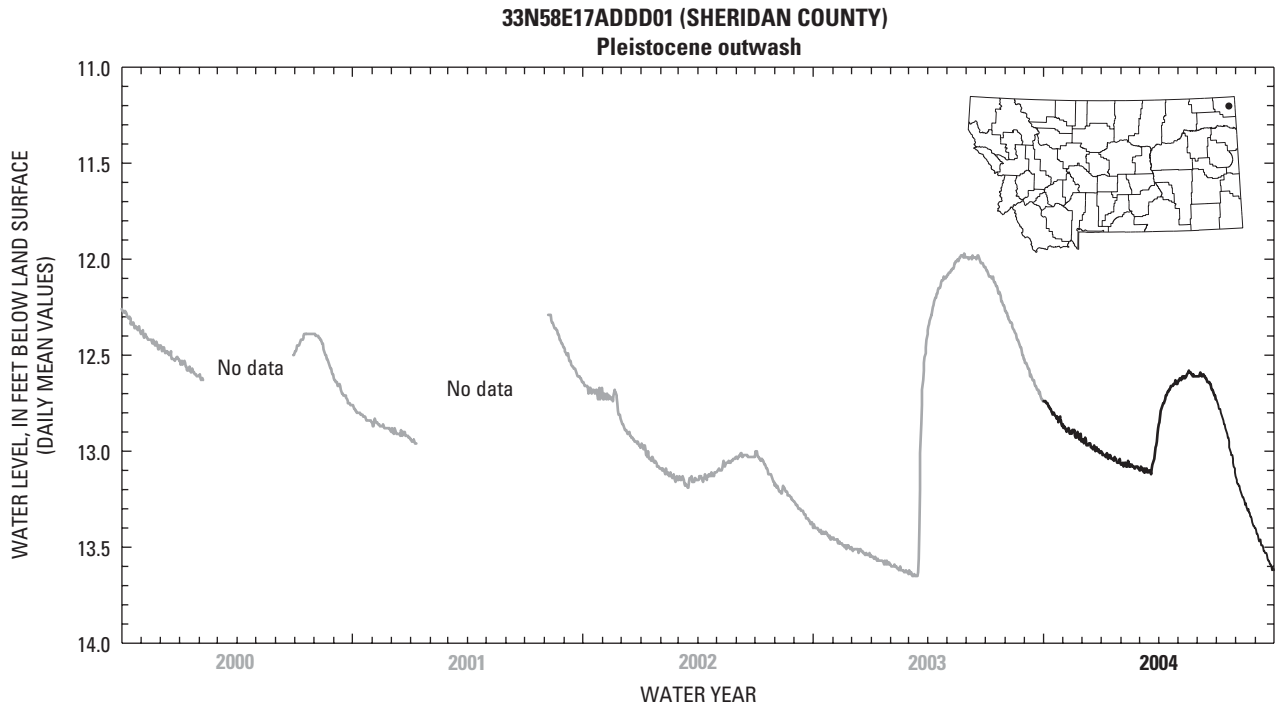
PERIOD OF RECORD.--August 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.73 ft, June 19-26, 1999 (from recorder); lowest, 15.51 ft, Aug. 20-23, 1992 (from recorder).

EXTREMES FOR CURRENT YEAR.--Highest water level, 12.56 ft, May 19 (from recorder); lowest, 13.63 ft, Sept. 30 (from recorder).

MEASURED WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM,
WATER YEAR OCTOBER 2003 THROUGH SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 28	12.81	May 19	12.59
Mar. 4	13.08	Aug. 3	13.17



SHERIDAN COUNTY

SITE IDENTIFICATION.--483318104105402. Local number 32N58E04DBBD02.

LOCATION.--Lat 48°33'18", long 104°10'54" (NAD 27), Hydrologic Unit 10060006. Owner: U.S. Fish and Wildlife Service.

HYDROGEOLOGIC UNIT.--Pleistocene outwash.

WELL CHARACTERISTICS.--Drilled in July 1984, casing diameter 4 in., depth 143 ft.

INSTRUMENTATION.--Graphical water-level recorder from August 1984 through May 1985. Digital water-level recorder set to record every 24 hours from May 1985 to April 1996. Digital recorder set to record every 4 hours from April 1996 to current year.

DATUM.--Elevation of land surface is 1,977 ft (NGVD 1929) (from topographic map). Measuring point: top of recorder shelf, 2.20 ft above land-surface datum. From August 1984 to April 1994, measuring point was top of PVC casing, 1.50 ft above land-surface datum. Reference point established Sept. 15, 2003: top of steel rod 4 ft north of northeast fence post, 1.37 ft below measuring point.

REMARKS.--All water levels reported below land-surface datum.

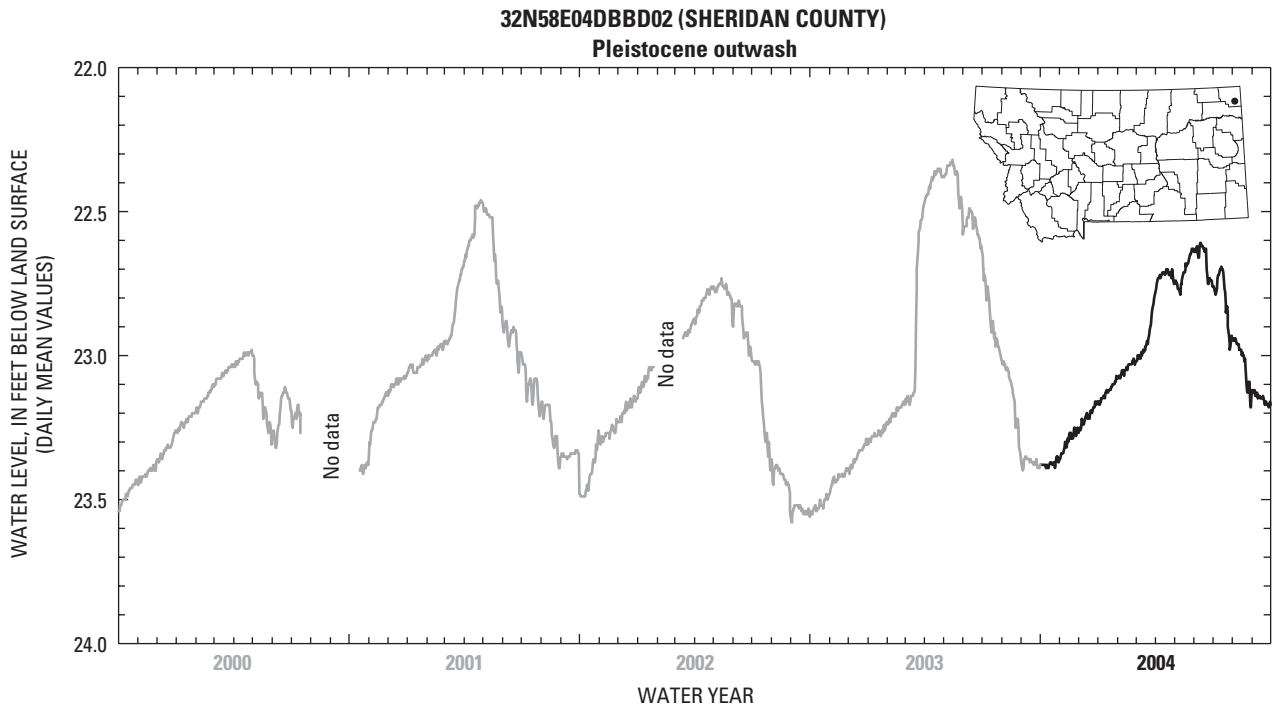
PERIOD OF RECORD.--August 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 22.32 ft, at various times May 13-16, 2003 (from recorder); lowest, 25.90 ft, Aug. 18 and 19, 1992 (from recorder).

EXTREMES FOR CURRENT YEAR.--Highest water level, 22.61 ft, June 10-20 (from recorder); lowest, 23.39 ft, Oct. 1-25 (from recorder).

MEASURED WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM,
WATER YEAR OCTOBER 2003 THROUGH SEPTEMBER 2004

<u>DATE</u>	<u>WATER LEVEL</u>	<u>DATE</u>	<u>WATER LEVEL</u>
Oct. 28	23.35	May 19	22.69
Mar. 4	23.00	July 26	22.92



TETON COUNTY

SITE IDENTIFICATION.--474005111583803. Local number 22N03W15BAAD03.

LOCATION.--Lat 47°40'05", long 111°58'38" (NAD 27), Hydrologic Unit 10030104. Owner: Marvin Klinker.

HYDROGEOLOGIC UNIT.--Pleistocene terrace deposits.

WELL CHARACTERISTICS.--Drilled in 1991, casing diameter 4 in., depth 47 ft.

INSTRUMENTATION.--Digital water-level recorder set to record every hour from November 1991 to current year.

DATUM.--Elevation of land surface is 5,240 ft (NGVD 29) (from topographic map). Measuring point: top of casing, 1.90 ft above land-surface datum from November 1991 to Mar. 12, 2001 and 1.80 ft above land-surface datum from Mar. 12, 2001 to current year. Reference point established June 14, 2003: top of steel rod at base of large stump 36 ft northwest of well, 1.24 ft below measuring point.

REMARKS.--Water levels affected by irrigation. All water levels reported below land-surface datum.

PERIOD OF RECORD.--November 1991 to current year.

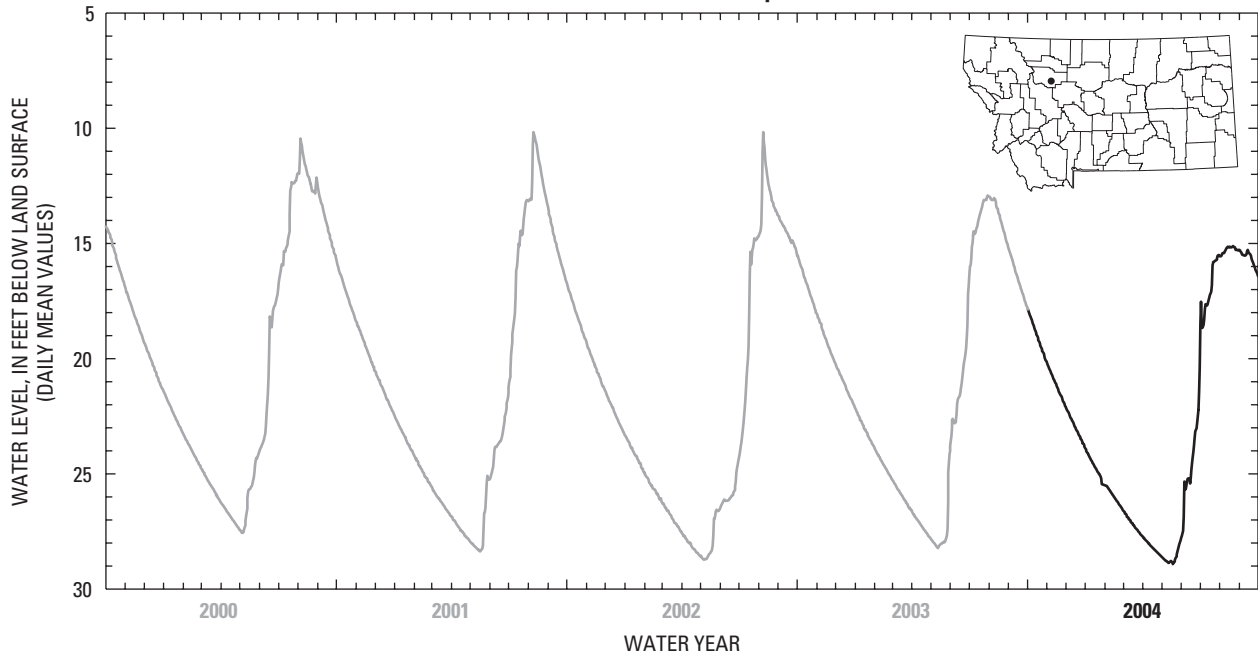
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.69 ft, Aug. 8, 2002 (from recorder); lowest, 28.92 ft, May 19, 2004 (from recorder).

EXTREMES FOR CURRENT YEAR.--Highest water level, 15.03 ft, Aug. 17 (from recorder); lowest, 28.92 ft, May 19 (from recorder).

MEASURED WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM,
WATER YEAR OCTOBER 2003 THROUGH SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 8	18.30	June 15	25.58
Feb. 3	25.45	Aug. 17	15.15
Apr. 20	28.29		

22N03W15BAAD03 (TETON COUNTY)
Pleistocene terrace deposits



PERIODIC WATER LEVELS IN SELECTED OBSERVATION WELLS IN MONTANA, WATER YEAR 2004

[Local number--composed of township, range, section, position within a section, and a sequence number. Depth of well--in feet below land surface. Water level--in feet below or above (+) land surface. --, no data]

Local number	Depth of well	Hydrogeologic unit	Date of measurement	Water level			
BEAVERHEAD COUNTY							
08S09W01CCCC01	47	Tertiary sediments	10-13-03	37.73			
			12-16-03	37.69			
			02-04-04	37.50			
			03-05-04	37.53			
			04-15-04	37.46			
			05-05-04	38.43			
			08-26-04	37.77			
			09-30-04	38.28			
08S08W31CCAA01	217	Tertiary sediments	12-16-03	170.89			
			02-04-04	170.79			
			03-12-04	170.30			
			05-05-04	170.10			
			05-21-04	170.13			
			07-14-04	170.18			
			08-26-04	170.44			
			09-30-04	170.74			
CASCADE COUNTY							
20N03E11ABAD01	369	Mississippian Madison Group	10-08-03	12.88			
			02-03-04	12.27			
			04-20-04	12.51			
			06-15-04	12.45			
			08-16-04	13.39			
19N04E26CACC02	198	Lower Cretaceous Kootenai Formation	10-08-03	138.21			
			02-03-04	138.37			
			04-20-04	138.50			
			06-15-04	138.40			
			08-17-04	138.46			
GALLATIN COUNTY							
01N04E25DCDD01	101	Quaternary alluvium	10-15-03	15.34			
			12-11-03	17.30			
			01-16-04	18.27			
			04-07-04	18.92			
			05-19-04	17.30			
			06-03-04	16.34			
			07-06-04	12.64			
GARFIELD COUNTY							
16N44E25BBAC01	103	Paleocene Tongue River Member of Fort Union Formation	10-22-03	31.87			
			05-18-04	30.80			
JEFFERSON COUNTY							
09N03W14DACC01	145	Upper Cambrian Hasmark Formation	10-27-03	24.65			
			11-25-03	25.65			
			12-29-03	25.48			
			02-02-04	27.18			
			02-25-04	22.98			
			03-29-04	25.59			
			04-27-04	27.43			
			05-25-04	21.35			
			06-30-04	22.32			
			07-29-04	22.26			
			09N03W17DBC 01	207	Upper Cretaceous Boulder batholith intrusives	10-27-03	37.28
						11-25-03	39.53
						12-29-03	37.64
02-02-04	37.34						
02-25-04	37.68						
03-29-04	37.65						
04-27-04	37.25						
05-25-04	37.37						
06-30-04	37.59						
07-29-04	38.97						
LAKE COUNTY							
16N19W08ACBD01	398	Pleistocene alluvium	12-19-03	173.26			
			02-11-04	183.20			
			04-21-04	180.37			
			08-26-04	150.36			

PERIODIC WATER LEVELS IN SELECTED OBSERVATION WELLS IN MONTANA, WATER YEAR 2004--CONTINUED

Local number	Depth of well	Hydrogeologic unit	Date of measurement	Water level
LEWIS AND CLARK COUNTY				
12N06W36BCDD01	70	Upper Cretaceous Marysville intrusives	10-27-03	20.49
			11-25-03	20.77
			12-29-03	21.50
			02-03-04	21.74
			02-26-04	21.73
			03-29-04	20.67
			04-27-04	17.78
			06-01-04	17.49
			06-29-04	17.75
11N05W14DDDD01	500	Middle Proterozoic Helena Formation	10-27-03	32.09
			11-25-03	32.00
			12-29-03	32.24
			02-03-04	32.37
			02-25-04	32.47
			03-29-04	32.39
			04-27-04	32.06
			06-01-04	32.21
			06-29-04	32.13
11N04W09ADAD01	250	Middle Proterozoic Spokane Formation	10-27-03	32.06
			11-25-03	32.42
			12-29-03	33.08
			02-03-04	34.13
			02-26-04	34.10
			03-30-04	34.17
			04-27-04	34.49
			06-01-04	34.91
			06-30-04	35.31
11N04W12CDDD01	176	Middle Proterozoic Spokane Formation	10-27-03	151.15
			11-26-03	151.55
			12-30-03	145.03
			02-03-04	139.74
			02-26-04	139.07
			03-30-04	141.36
			04-27-04	145.82
			06-01-04	149.73
			06-30-04	151.76
11N04W34DCBA01	125	Upper Cretaceous Scratchgravel Hills intrusives	10-27-03	17.48
			11-04-03	17.57
			11-25-03	17.37
			12-18-03	17.38
			12-30-03	17.25
			02-02-04	17.82
			02-26-04	17.29
			03-30-04	17.35
			04-29-04	17.16
11N03W05CCBC01	110	Middle Proterozoic Spokane Formation	04-27-04	65.38
			06-01-04	65.62
			06-30-04	66.32
			07-29-04	67.75
11N03W08BBBD01	208	Middle Proterozoic Spokane Formation	10-27-03	59.23
			11-26-03	58.91
			12-30-03	58.63
			02-03-04	58.27
			02-26-04	58.07
			03-30-04	57.87
			04-27-04	57.83
			06-01-04	58.79
			06-30-04	59.69
11N03W11BBBA01	350	Middle Proterozoic Spokane Formation	10-27-03	165.24
			11-26-03	165.82
			12-29-03	164.56
			02-03-04	164.12
			02-26-04	163.31
03-30-04	165.30			

PERIODIC WATER LEVELS IN SELECTED OBSERVATION WELLS IN MONTANA, WATER YEAR 2004--CONTINUED

Local number	Depth of well	Hydrogeologic unit	Date of measurement	Water level
LEWIS AND CLARK COUNTY--Continued				
11N03W11BBBA01 Continued	350	Middle Proterozoic Spokane Formation--Continued	04-27-04	165.60
			06-01-04	164.25
			06-29-04	170.84
			07-29-04	167.05
10N05W03ABDD01	140	Middle Cambrian Wolvey Shale	10-27-03	22.07
			11-25-03	21.60
			12-29-03	21.64
			02-03-04	22.20
			02-25-04	21.95
			03-29-04	21.75
			04-27-04	21.80
			06-01-04	22.94
			06-29-04	23.42
07-30-04	24.22			
10N05W09BDBC01	280	Upper Cretaceous Boulder batholith intrusives	10-27-03	43.55
			11-25-03	40.62
			12-29-03	50.26
			02-03-04	44.74
			02-25-04	48.71
			03-29-04	32.85
			04-27-04	26.04
			06-01-04	39.33
			07-28-04	57.95
10N05W25DBDA02	100	Upper Cretaceous Boulder batholith intrusives	10-27-03	77.20
			11-26-03	77.40
			12-29-03	77.57
			02-02-04	77.70
			02-25-04	77.68
			03-29-04	77.21
			04-29-04	77.41
			05-25-04	77.48
			06-29-04	77.66
07-28-04	78.69			
10N05W33CDCD01	135	Upper Cretaceous Boulder batholith intrusives	10-27-03	15.60
			11-26-03	15.88
			12-29-03	16.11
			02-02-04	16.44
			02-25-04	16.27
			03-29-04	14.41
			04-29-04	13.57
			05-25-04	13.72
			06-29-04	14.26
			07-28-04	15.28
10N04W02CBAA01	110	Upper Cretaceous Scratchgravel Hills intrusives	10-27-03	36.78
			11-25-03	36.14
			12-30-03	36.13
			01-30-04	36.13
			02-26-04	36.40
			03-30-04	36.70
			04-29-04	37.05
			05-26-04	36.59
			06-01-04	37.10
			06-29-04	36.80
08-03-04	37.33			
09-08-04	38.82			
10N04W03CDBA01	206	Upper Cretaceous Scratchgravel Hills intrusives	10-27-03	26.99
			11-25-03	27.04
			12-30-03	26.89
			02-02-04	24.77
			02-26-04	27.68
			03-30-04	27.59
			04-29-04	28.19
			06-01-04	28.37
			06-29-04	28.57
07-29-04	31.71			
10N04W08DCAC01	120	Middle Proterozoic Helena Formation	10-27-03	51.66
			11-26-03	50.58
			12-29-03	50.03
			02-02-04	49.17
			02-25-04	48.87
			03-29-04	47.98
			04-29-04	48.12
06-01-04	52.06			

PERIODIC WATER LEVELS IN SELECTED OBSERVATION WELLS IN MONTANA, WATER YEAR 2004--CONTINUED

Local number	Depth of well	Hydrogeologic unit	Date of measurement	Water level
LEWIS AND CLARK COUNTY--Continued				
10N04W08DCAC01 Continued	120	Middle Proterozoic Helena Formation--Continued	06-29-04	56.03
			07-28-04	57.45
10N04W15BDAC01	260	Middle Proterozoic Spokane Formation	10-27-03	45.16
			11-26-03	43.76
			12-29-03	43.72
			02-02-04	42.11
			02-25-04	41.68
			03-29-04	41.26
			04-29-04	41.05
			06-01-04	42.50
			06-29-04	43.88
			07-28-04	46.11
10N04W23CADD01	130	Middle Proterozoic Helena Formation	10-27-03	61.95
			11-25-03	60.65
			12-29-03	61.38
			02-02-04	61.73
			02-25-04	61.90
			03-29-04	61.83
			04-27-04	61.82
			05-25-04	61.07
			06-29-04	61.75
			07-28-04	62.91
10N03W20CCAA01	100	Middle Proterozoic Helena Formation	10-27-03	38.12
			11-25-03	39.56
			12-29-03	40.34
			02-02-04	40.33
			02-25-04	41.50
			03-29-04	41.52
			04-27-04	40.86
			05-25-04	39.77
			06-30-04	38.83
			07-29-04	39.46
10N03W32BCBD01	140	Middle Proterozoic Helena Formation	10-27-03	40.83
			11-25-03	42.10
			12-29-03	43.55
			02-02-04	39.64
			02-25-04	42.66
			03-29-04	44.45
			04-27-04	44.22
			05-25-04	42.60
			06-29-04	41.04
			07-28-04	41.22
09N05W12CCDA01	260	Upper Cretaceous Boulder batholith intrusives	10-27-03	41.16
			11-26-03	33.58
			12-29-03	35.18
			02-02-04	40.70
			02-25-04	32.70
			03-29-04	33.56
			04-29-04	34.15
			05-25-04	31.41
			06-29-04	31.89
			07-28-04	40.51
09N04W11CCCB01	122	Upper Cretaceous Boulder batholith intrusives	10-27-03	26.18
			11-25-03	26.52
			12-29-03	26.95
			02-02-04	27.21
			02-25-04	26.70
			03-29-04	25.46
			04-27-04	23.60
			05-25-04	22.95
			06-29-04	20.85
			07-28-04	22.29
09N04W11CDBD01	124	Upper Cretaceous Boulder batholith intrusives	10-27-03	71.58
			11-25-03	74.25
			12-29-03	76.81
			02-02-04	77.22
			02-25-04	77.38
			03-29-04	77.55
			04-27-04	77.38
			05-25-04	77.63
			06-29-04	77.99
			07-28-04	78.66

PERIODIC WATER LEVELS IN SELECTED OBSERVATION WELLS IN MONTANA, WATER YEAR 2004--CONTINUED

Local number	Depth of well	Hydrogeologic unit	Date of measurement	Water level
MC CONE COUNTY				
26N49E13ACAB01	180	Upper Cretaceous Hell Creek Formation and Fox Hills Sandstone	10-31-03 05-18-04	44.00 43.56
MINERAL COUNTY				
18N28W24DCBA01	199	Quaternary alluvium	11-18-03 03-03-04 05-27-04 07-29-04	+23.71 +23.02 +23.25 +16.79
18N27W19CBBD01	58	Quaternary alluvium	11-18-03 02-19-04 05-27-04 07-29-04	12.46 12.67 8.70 11.96
18N27W30ABBA01	192	Quaternary alluvium	11-18-03 02-19-04 05-27-04 07-29-04	146.48 146.54 141.60 145.38
17N26W30DAAD01	318	Quaternary alluvium	11-18-03 03-03-04 05-27-04 08-31-04	192.18 192.08 189.88 189.61
POWDER RIVER COUNTY				
04S45E04BDD01	68	Quaternary alluvium	10-22-03 12-10-03 03-23-04 07-06-04	8.16 7.51 6.57 7.78
POWELL COUNTY				
15N12W36BCDD01	206	Cenozoic rocks	10-01-03 04-01-04 06-30-04 09-30-04	106.67 106.20 106.51 106.52
RAVALLI COUNTY				
10N20W13BBA 01	50	Quaternary alluvium	10-29-03 12-16-03 02-02-04 03-15-04 04-21-04 05-05-04 06-23-04 09-08-04	6.30 6.35 6.66 6.52 5.89 5.55 5.06 5.50
06N20W19CCCC02	40	Quaternary alluvium	10-27-03 12-16-03 02-03-04 03-16-04 04-21-04 05-05-04 06-23-04 09-08-04	12.62 15.33 16.75 17.17 17.49 17.44 8.16 9.26
ROSEBUD COUNTY				
06S43E19DDBA02	67	Quaternary alluvium	11-03-03 11-14-03 12-10-03 02-05-04 03-23-04 07-06-04	10.53 10.47 10.29 10.22 9.48 10.04
SANDERS COUNTY				
26N34W03BDAD01	400	Quaternary alluvium	11-12-03 02-18-04 05-20-04 08-17-04	242.30 227.57 223.60 226.75
25N31W30DCCC01	282	Quaternary alluvium	11-12-03 02-18-04 05-20-04 08-17-04	223.33 223.43 224.20 223.15
23N24W34ADAA01	377	Quaternary alluvium	10-06-03 12-18-03 03-09-04 04-06-04 05-04-04 07-19-04 09-13-04 09-20-04	116.00 116.36 116.40 116.22 117.53 117.98 117.45 117.00

PERIODIC WATER LEVELS IN SELECTED OBSERVATION WELLS IN MONTANA, WATER YEAR 2004--CONTINUED

Local number	Depth of well	Hydrogeologic unit	Date of measurement	Water level
SANDERS COUNTY--Continued				
22N29W32ACDD01	308	Quaternary alluvium	05-25-04	217.62
20N26W22CBBA01	50	Quaternary alluvium	11-12-03	18.38
			02-19-04	18.20
			05-25-04	17.58
			08-25-04	17.71
19N25W07CDDA01	--	Quaternary alluvium	11-12-03	+14.80
			05-25-04	+11.11
19N25W28BABB01	369	Middle Proterozoic Belt Supergroup	11-12-03	19.00
			02-19-04	20.51
			05-25-04	9.62
			08-25-04	18.95
SHERIDAN COUNTY				
33N58E17ADDD01	130	Pleistocene outwash	10-28-03	12.81
			03-04-04	13.08
			05-19-04	12.59
			07-26-04	12.30
			08-03-04	13.17
32N58E04DBBD02	143	Pleistocene outwash	10-28-03	23.35
			03-04-04	23.00
			05-19-04	22.69
			07-26-04	22.92
TETON COUNTY				
22N03W15BAAD03	47	Pleistocene terrace deposits	10-08-03	18.30
			02-03-04	25.45
			04-20-04	28.29
			06-15-04	25.58
			08-17-04	15.15