



Water-Data Report 2006

06324710 POWDER RIVER AT BROADUS, MT

Powder Basin
Middle Powder Subbasin

LOCATION.--Lat 45°25'37", long 105°24'05" referenced to North American Datum of 1927, in NE ¼ NE ¼ SE ¼ sec.3, T.5 S., R.51 E., Powder River County, MT, Hydrologic Unit 10090207, on right bank, 40 ft downstream from bridge on U.S. highway 212, 0.4 mi downstream from Doyle Creek, 1.0 mi south of Broadus, and 7.0 mi upstream from Little Powder River.

DRAINAGE AREA.--8,748 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to September 1992, June 1995, July 2005, August 2006.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: March 1976 to September 1979.

SUSPENDED-SEDIMENT DISCHARGE: October 1975 to September 1978, March 1979 to September 1992 (seasonal records only).

GAGE.--None. Elevation at sampling site is 3,016 ft, referenced to the National Geodetic Vertical Datum of 1929.

REMARKS.--Water-quality sample was collected in conjunction with biological sample (fish and aquatic macroinvertebrates) whose data are not yet available for publication.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum daily observed 34.0°C, July 12, 1976; minimum daily, 0.0°C, many days during winter.

SEDIMENT CONCENTRATION: Maximum daily mean, 44,100 mg/L, July 29, 1977; minimum daily mean, 16 mg/L, Sept. 27, 1981.

SEDIMENT LOAD: Maximum daily, 1,570,000 tons, May 31, 1978; minimum daily, 0.64 tons, Aug. 7, 1988.

WATER-QUALITY DATA

WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 1 of 2

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 corrctd NTRU (63676)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
Aug 02...	1715	1.1	3.3	684	9.5	136	8.1	4,750	32.0	27.0	1,400	304	162

06324710 POWDER RIVER AT BROADUS, MT—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 2 of 2

Date	Potas- sium, water, fltrd, mg/L (00935)	Sodium adsorp- tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alka- linity, wat flt end lab, mg/L as CaCO3 (29801)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti- tuents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, dis- solved, tons/d (70302)
Aug 02...	18.5	7	639	250	235	.33	11.4	2,220	3,740	5.09	11.1