



Water-Data Report 2006

12473520 COLUMBIA RIVER AT RICHLAND, WA

Upper Columbia Basin
Upper Columbia-Priest Rapids Subbasin

LOCATION.--Lat 46°18'46", long 119°15'28" referenced to North American Datum of 1927, in NW ¼ NW ¼ sec.36, T.10 N., R.28 E., Benton County, WA, Hydrologic Unit 17020016, at city of Richland pumping plant, 4.8 mi upstream from Yakima River, and at mile 340.2.

DRAINAGE AREA.--96,900 mi².

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: July 1974 to March 1993.

REMARKS.--Water temperatures as recorded for the period July 1974 to January 1977 did not represent mean stream temperatures (see previous state reports for correlation between thermal load measurements and recorded temperatures). Temperature probe, relocated January 1977, represents both horizontal and vertical cross section of the river. Unpublished records of stage at site 2.3 mi downstream are available in files of the U.S. Geological Survey and U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 22.0°C, July 21, Aug. 4, 5, 1985; minimum, 0.0°C, Feb. 3, 6-9, 1989.

WATER-QUALITY DATA

WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 1 of 3

[Remark codes: <, less than; E, estimated.]

Date	Time	Turbidity white light, det ang 90+/-30 corrctd NTRU (63676)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Noncarb hard- ness, wat flt field, mg/L as CaCO3 (00904)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)
Nov 18...	0930	<2.0	764	10.4	93	7.7	130	9.8	10.7	62	7	17.9	4.24
May 08...	0850	2.0	757	12.8	114	7.8	138	19.8	10.0	66	7	18.8	4.56
Aug 23...	1020	<2.0	753	8.9	101	7.8	132	20.8	20.7	59	6	17.0	4.11

12473520 COLUMBIA RIVER AT RICHLAND, WA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 2 of 3

[Remark codes: <, less than; E, estimated.]

Date	Potas- sium, water, fltrd, mg/L (00935)	Sodium adsorp- tion ratio (00931)	Sodium frac- tion of cations percent (00932)	Sodium, water, fltrd, mg/L (00930)	Alka- linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar- bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon- ate, wat flt incrm. titr., field, mg/L (00452)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti- tuents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue on evap. at 180degC wat flt mg/L (70300)
Nov 18...	.74	.1	7	2.10	56	67	.0	.89	E.06	9.62	69	.11	79
May 08...	.86	.1	8	2.64	57	71	.0	1.28	E.10	8.75	72	.12	91
Aug 23...	.62	.1	7	2.05	53	65	.0	.97	E.07	8.24	65	.11	82

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 3 of 3

[Remark codes: <, less than; E, estimated.]

Date	Residue total at 105 deg. C, sus- pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, wat unf by anal ysis, mg/L (62855)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	Chrom- ium, water, fltrd, ug/L (01030)	Iron, water, fltrd, ug/L (01046)	Sus- pended sedi- ment concen- tration mg/L (80154)
Nov 18...	<10	.12	<.04	.11	<.008	.21	<.09	<.04	1.0	.06	<6	4
May 08...	<10	.13	<.04	.13	<.008	.25	<.02	<.04	2.0	E.02	7	4
Aug 23...	<10	.11	<.010	.08	.002	.17	E.004	<.04	1.5	.08	<6	2