

Figure 60. Location of surface-water stations in the Yakima River Basin.

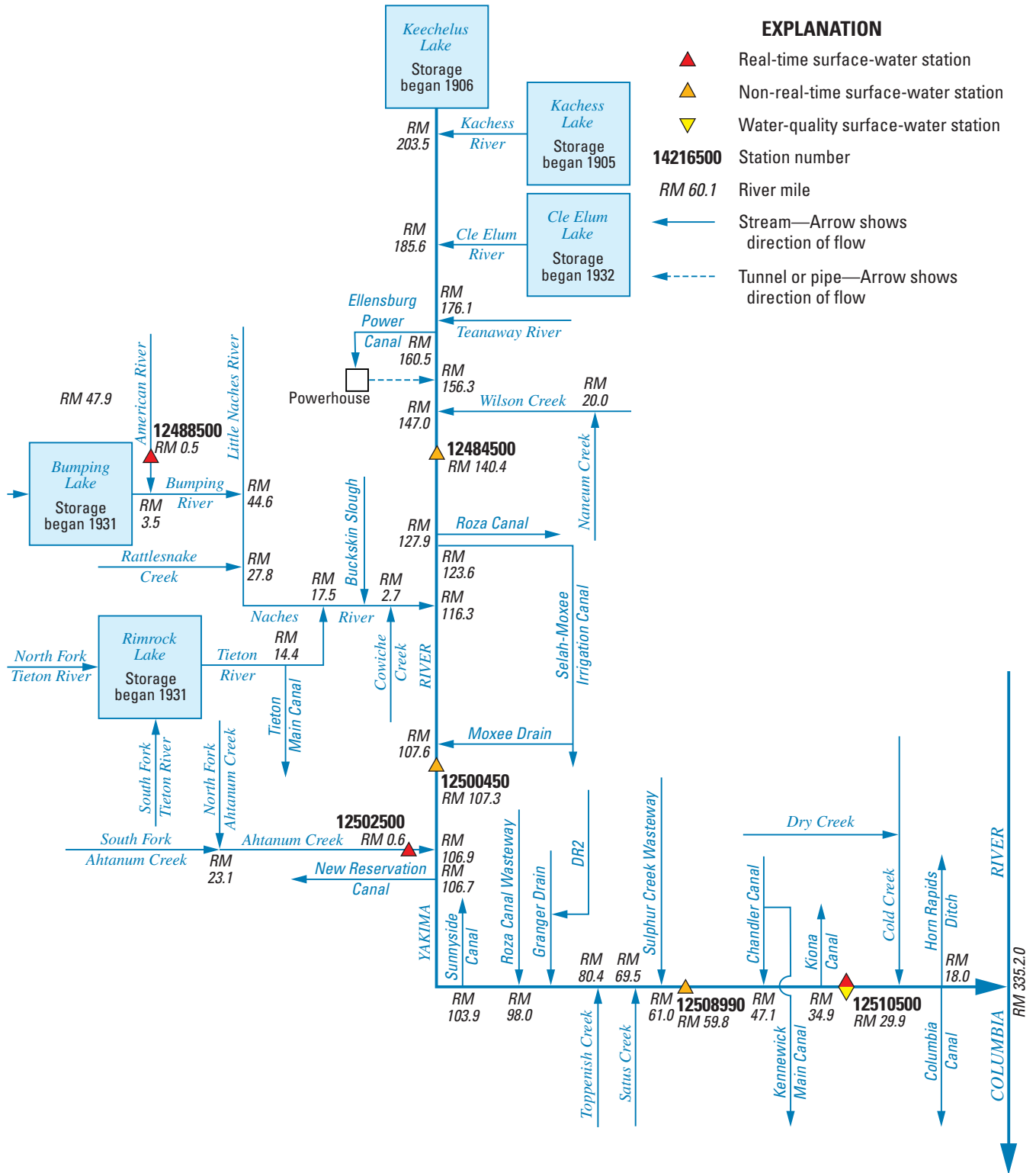


Figure 61. Schematic diagram showing surface-water stations in the Yakima River Basin.

12484500 YAKIMA RIVER AT UMTANUM, WA

LOCATION.--Lat 46°51'46", long 120°28'44", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.20, T.16 N., R.19 E., Kittitas County, Hydrologic Unit 17030001, on right bank at Umtanum railway siding, 0.5 mi upstream from Umtanum Creek, 4.2 mi upstream from McPherson Canyon, 10 mi south of Ellensburg, and at mile 140.4.

DRAINAGE AREA.--1,594 mi².

PERIOD OF RECORD.--August 1906 to current year. Monthly discharge for some months during the 1907, 1908, 1916-31 water years, published in WSP 1316.

REVISED RECORDS.--WSP 412: 1914. WSP 1286: 1910. WSP 1933: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,300.00 ft above NGVD of 1929. Prior to Sept. 28, 1911, nonrecording gage at approximately same site at various datums. Sept. 28, 1911, to Nov. 23, 1936, water-stage recorder at site about 300 ft upstream at datum 26.70 ft higher.

REMARKS.--No estimated daily discharges. Records good. Flow partly regulated by Keechelus, Kachess, and Cle Elum Lakes. Diversions upstream from station for irrigation of about 105,000 acres. Bureau of Reclamation satellite telemeter at station.

AVERAGE DISCHARGE.--72 years (water years 1934-2005), 2,430 ft³/s, 1,761,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,000 ft³/s, Nov. 15 or 16, 1906, gage height, 41.1 ft, from floodmarks, present datum; minimum recorded discharge, 138 ft³/s, Oct. 3, 1915, gage height, 2.86 ft, datum then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,130 ft³/s, Jan. 19, gage height, 33.28 ft; minimum discharge, 724 ft³/s, Jan. 15, 16.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,220	974	1,030	915	1,520	859	1,050	1,320	2,040	3,160	3,420	2,540
2	1,220	1,000	975	896	1,440	856	1,100	1,370	2,180	3,180	3,440	2,320
3	1,230	1,320	944	855	1,370	842	1,150	1,330	2,140	3,200	3,390	2,130
4	1,260	1,310	920	819	1,330	833	1,200	1,300	2,140	3,150	3,420	1,980
5	1,260	1,210	906	814	1,350	824	1,160	1,460	2,290	3,130	3,400	1,820
6	1,240	1,140	897	799	1,320	822	1,180	1,490	2,470	3,150	3,390	1,650
7	1,230	1,080	893	854	1,270	820	1,220	1,420	2,720	3,110	3,410	1,460
8	1,240	1,050	916	859	1,210	834	1,310	1,420	3,530	3,110	3,400	1,360
9	1,400	1,020	923	830	1,160	860	1,250	1,670	3,510	3,080	3,350	1,250
10	1,420	992	1,010	812	1,130	882	1,220	2,810	3,030	3,010	3,340	1,200
11	1,440	973	2,250	795	1,100	890	1,220	2,590	2,810	3,070	3,370	1,180
12	1,420	948	2,440	783	1,090	888	1,200	2,200	2,710	3,090	3,430	1,170
13	1,410	936	1,960	790	1,080	885	1,220	1,910	2,680	3,170	3,390	1,170
14	1,420	927	1,670	765	1,040	871	1,210	1,800	2,720	3,270	3,370	1,120
15	1,420	915	1,530	754	998	855	1,160	1,770	2,750	3,260	3,320	1,060
16	1,390	898	1,430	765	952	838	1,110	1,900	2,780	3,330	3,310	1,050
17	1,230	871	1,330	876	943	866	1,110	1,740	2,830	3,350	3,320	1,040
18	1,260	851	1,250	1,720	934	857	1,120	1,660	2,790	3,310	3,310	1,040
19	1,250	850	1,210	4,860	930	850	1,090	1,620	2,820	3,240	3,280	1,020
20	1,240	847	1,210	4,210	936	867	1,140	1,480	2,790	3,350	3,270	1,040
21	1,200	825	1,190	3,400	902	853	1,150	1,440	2,760	3,450	3,250	1,070
22	1,180	822	1,130	2,940	890	842	1,320	1,440	2,870	3,510	3,210	1,050
23	1,170	822	1,090	2,630	881	822	1,480	1,390	2,950	3,530	3,200	1,040
24	1,140	829	1,060	2,500	877	817	1,720	1,270	2,970	3,480	3,200	1,020
25	1,120	957	1,050	2,320	864	813	1,800	1,250	3,010	3,460	3,180	1,000
26	1,110	1,380	1,030	2,110	854	812	1,750	1,330	2,970	3,410	3,150	1,000
27	1,090	1,350	1,000	1,950	843	915	1,690	1,570	3,020	3,360	3,090	982
28	1,070	1,220	968	1,840	852	1,060	1,580	1,740	2,960	3,360	3,050	967
29	1,040	1,120	967	1,710	---	1,060	1,380	1,820	2,970	3,350	2,940	962
30	974	1,070	958	1,620	---	1,090	1,270	1,850	3,080	3,400	2,850	1,040
31	982	---	926	1,550	---	1,080	---	1,880	---	3,430	2,730	---
TOTAL	38,276	30,507	37,063	49,341	30,066	27,263	38,560	51,240	83,290	101,460	101,180	38,731
MEAN	1,235	1,017	1,196	1,592	1,074	879	1,285	1,653	2,776	3,273	3,264	1,291
MAX	1,440	1,380	2,440	4,860	1,520	1,090	1,800	2,810	3,530	3,530	3,440	2,540
MIN	974	822	893	754	843	812	1,050	1,250	2,040	3,010	2,730	962
AC-FT	75,920	60,510	73,510	97,870	59,640	54,080	76,480	101,600	165,200	201,200	200,700	76,820
CAL YR	2004	TOTAL 724,103	MEAN 1,978	MAX 4,310	MIN 640	AC-FT 1,436,000						
WTR YR	2005	TOTAL 626,977	MEAN 1,718	MAX 4,860	MIN 754	AC-FT 1,244,000						

12488500 AMERICAN RIVER NEAR NILE, WA

LOCATION.--Lat 46°58'40", long 121°10'03", in SE¼NW¼ sec.12, T.17 N., R.13 E., Yakima County, Hydrologic Unit 17030002, Snoqualmie National Forest, on right bank 300 ft upstream from Bumping Lake Road bridge, 4.9 mi downstream from Hall Creek, 16.0 mi northwest of Nile, and at mile 0.5.

DRAINAGE AREA.--78.9 mi².

PERIOD OF RECORD.--April 1909 to March 1912, July to September 1913, June to September 1914, June to September 1915, October 1939 to current year. Monthly discharge only for period 1909 to 1915, published in WSP 1316.

REVISED RECORDS.--WSP 982: 1940-42. WSP 1216: Drainage area. WSP 1286: 1911.

GAGE.--Water-stage recorder. Datum of gage is 2,700.00 ft above NGVD of 1929 (Washington State Highway Department benchmark). Prior to Sept. 12, 1915, nonrecording gage at site 300 ft downstream at different datum. Oct. 12 to Dec. 7, 1939, nonrecording gage at present site and datum.

REMARKS.--Records good except for those above 700 ft³/s, which are fair, and for estimated daily discharges, which are poor. No regulation or diversion. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--66 years (water years, 1940-2005), 233 ft³/s, 40.06 in/yr, 168,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,230 ft³/s, Dec. 26, 1980, gage height, 77.99 ft; minimum discharge, 15 ft³/s, Jan. 5, 2004, but may have been lower during period of ice effect that day.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,220 ft³/s, Jan. 18, gage height, 74.71 ft; minimum discharge, 29 ft³/s, Sept. 28, 29.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	75	76	103	203	80	129	387	287	97	52	33
2	50	114	73	98	190	80	132	363	248	94	51	33
3	48	153	70	91	179	80	128	355	225	92	50	32
4	47	127	68	89	172	78	126	368	213	88	48	32
5	45	115	66	e64	165	77	120	378	203	85	46	32
6	46	106	65	e68	156	76	122	373	191	84	45	32
7	45	99	64	e72	149	77	129	377	182	84	44	32
8	48	94	62	e74	140	81	133	347	169	83	43	32
9	66	89	67	e76	134	82	130	361	162	102	42	31
10	68	84	138	e68	128	86	127	570	157	97	42	35
11	63	80	525	e66	124	89	137	531	160	92	41	40
12	59	76	438	e74	120	94	134	482	167	88	41	37
13	56	73	302	e70	117	94	128	454	157	84	40	35
14	53	68	251	e68	111	92	124	443	151	82	39	35
15	51	67	222	e60	101	91	123	474	147	80	38	34
16	50	71	197	e62	97	90	177	482	140	78	38	33
17	81	67	179	e70	96	89	234	404	161	76	38	33
18	114	70	167	750	95	88	219	361	156	74	39	33
19	109	69	166	1,040	98	87	213	417	166	71	38	32
20	106	63	165	811	98	96	214	372	148	68	37	32
21	102	60	157	662	92	100	226	334	140	66	37	32
22	103	59	151	543	89	92	254	330	135	70	36	31
23	101	57	143	513	88	89	298	302	133	72	36	31
24	95	61	137	464	86	85	389	281	124	66	36	31
25	91	96	132	404	85	82	515	268	117	64	35	31
26	88	106	131	356	83	88	612	267	113	62	35	30
27	83	94	125	317	81	127	632	278	113	60	34	30
28	80	86	118	284	81	158	609	300	110	57	34	30
29	77	80	116	254	---	143	507	325	106	56	34	30
30	79	79	110	234	---	131	436	324	100	54	34	34
31	79	---	106	218	---	124	---	311	---	53	34	---
TOTAL	2,234	2,538	4,787	8,123	3,358	2,926	7,457	11,619	4,781	2,379	1,237	978
MEAN	72.1	84.6	154	262	120	94.4	249	375	159	76.7	39.9	32.6
MAX	114	153	525	1,040	203	158	632	570	287	102	52	40
MIN	45	57	62	60	81	76	120	267	100	53	34	30
AC-FT	4,430	5,030	9,500	16,110	6,660	5,800	14,790	23,050	9,480	4,720	2,450	1,940
CFSM	0.91	1.07	1.96	3.32	1.52	1.20	3.15	4.75	2.02	0.97	0.51	0.41
IN.	1.05	1.20	2.26	3.83	1.58	1.38	3.52	5.48	2.25	1.12	0.58	0.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2005, BY WATER YEAR (WY)

	70.3	130	166	140	155	156	300	625	623	276	91.7	57.5
MEAN	70.3	130	166	140	155	156	300	625	623	276	91.7	57.5
MAX	248	407	532	464	718	501	595	1,172	1,312	852	343	104
(WY)	(1948)	(1996)	(1976)	(1974)	(1996)	(1972)	(1943)	(1956)	(1974)	(1999)	(1999)	(1997)
MIN	28.4	30.3	33.2	31.2	37.7	46.6	103	203	159	67.8	39.9	32.6
(WY)	(1988)	(1994)	(1953)	(1979)	(1985)	(1977)	(1955)	(1977)	(2005)	(1977)	(2005)	(2005)

YAKIMA RIVER BASIN

12488500 AMERICAN RIVER NEAR NILE, WA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1940 - 2005	
ANNUAL TOTAL	70,142		52,417		233	
ANNUAL MEAN	192		144		379	
HIGHEST ANNUAL MEAN					1974	
LOWEST ANNUAL MEAN					1977	
HIGHEST DAILY MEAN	825	May 4	1,040	Jan 19	3,070	Dec 26, 1980
LOWEST DAILY MEAN	21	Jan 5	30	Sep 26	20	Jan 7, 1993
ANNUAL SEVEN-DAY MINIMUM	42	Jan 1	30	Sep 23	24	Nov 23, 1993
ANNUAL RUNOFF (AC-FT)	139,100		104,000		168,500	
ANNUAL RUNOFF (CFSM)	2.43		1.82		2.95	
ANNUAL RUNOFF (INCHES)	33.07		24.71		40.06	
10 PERCENT EXCEEDS	468		355		580	
50 PERCENT EXCEEDS	102		92		121	
90 PERCENT EXCEEDS	59		36		46	

e Estimated

12500450 YAKIMA RIVER ABOVE AHTANUM CREEK, AT UNION GAP, WA

LOCATION.--Lat 46°32'04", long 120°27'58", in NW¹/₄NE¹/₄ sec.17, T.12 N., R.19 E., Yakima County, Hydrologic Unit 17030003, on left bank 2,200 ft upstream from Ahtanum Creek, 0.8 mi upstream from Wapato Dam, 1.4 mi southeast of Union Gap, and at about mile 107.3.

DRAINAGE AREA.--3,479 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 900.00 ft above NGVD of 1929; gage readings have been reduced to elevations above NGVD of 1929. Prior to Apr. 4, 1967, at site 1,200 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records fair. Diversions upstream from station for irrigation of about 212,000 acres. Flow partly regulated by Keechelus, Kachess, Cle Elum, Bumping, and Rimrock Lakes. Records at this site plus those for Ahtanum Creek at Union Gap (station 12502500) are equivalent to discontinued station 12503000, Yakima River at Union Gap. Chemical analyses, water years 1969, 1971, March 1975 to September 1993. Water temperature, March 1981 to December 1981.

AVERAGE DISCHARGE.--39 years (water years 1967-2005), 3,542 ft³/s, 2,566,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 53,300 ft³/s, Feb. 9, 1996, elevation, 953.88 ft, from high-water mark, from rating curve extended above 18,000 ft³/s, on basis of discharge information provided by the Bureau of Reclamation for their station on the Yakima River near Parker; minimum daily discharge, 300 ft³/s, Jan. 1, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,610 ft³/s, Jan. 19, elevation, 942.69 ft; minimum discharge, 769 ft³/s, Mar. 25.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,220	1,530	1,660	1,520	2,550	1,390	1,120	2,250	2,480	2,560	2,710	2,490
2	2,070	1,530	1,570	1,480	2,440	1,370	1,170	2,240	2,490	2,600	2,750	2,390
3	1,980	1,830	1,490	1,410	2,340	1,340	1,290	2,150	2,400	2,660	2,680	2,290
4	1,960	1,960	1,470	1,340	2,270	1,310	1,340	2,070	2,350	2,620	2,670	2,310
5	1,910	1,860	1,440	1,210	2,240	1,300	1,260	2,140	2,400	2,580	2,680	2,350
6	1,920	1,790	1,390	1,090	2,190	1,290	1,400	2,200	2,590	2,630	2,680	2,300
7	1,890	1,730	1,350	1,360	2,140	1,290	1,550	2,090	2,630	2,650	2,730	2,240
8	1,850	1,670	1,410	1,490	2,050	1,310	1,630	2,010	3,450	2,620	2,770	2,200
9	1,950	1,640	1,390	1,470	2,000	1,350	1,640	2,320	3,630	2,690	2,700	2,220
10	1,930	1,590	1,450	1,400	1,970	1,390	1,590	3,880	3,130	2,640	2,710	2,250
11	1,830	1,560	2,690	1,350	1,900	1,410	1,700	4,490	2,760	2,610	2,720	2,290
12	1,730	1,530	3,890	1,280	1,880	1,400	1,670	4,000	2,600	2,580	2,780	2,280
13	1,550	1,510	3,150	1,300	1,880	1,390	1,560	3,540	2,510	2,610	2,790	2,240
14	1,500	1,480	2,620	1,260	1,810	1,180	1,540	3,080	2,490	2,670	2,750	2,190
15	1,780	1,450	2,360	1,160	1,720	1,030	1,720	3,000	2,540	2,660	2,680	2,140
16	1,640	1,440	2,220	1,090	1,590	1,060	1,890	3,240	2,530	2,690	2,700	2,170
17	1,420	1,410	2,060	1,170	1,560	1,040	2,030	3,020	2,610	2,760	2,670	2,190
18	1,500	1,400	1,970	2,210	1,550	1,020	1,970	2,780	2,590	2,750	2,670	2,210
19	1,470	1,390	1,920	7,590	1,550	1,000	1,900	2,790	2,550	2,620	2,600	2,200
20	1,590	1,370	1,910	7,540	1,600	1,050	1,920	2,840	2,620	2,670	2,590	2,090
21	1,820	1,340	1,890	6,230	1,530	941	1,910	2,750	2,430	2,750	2,580	2,140
22	1,800	1,330	1,850	5,510	1,460	892	2,050	2,730	2,510	2,840	2,510	2,100
23	1,820	1,340	1,810	5,050	1,440	859	2,270	2,650	2,620	3,000	2,540	2,100
24	1,750	1,380	1,750	4,830	1,440	828	2,710	2,320	2,590	2,890	2,690	2,100
25	1,700	1,470	1,730	4,410	1,420	790	3,230	2,210	2,620	2,820	2,660	2,060
26	1,710	1,810	1,710	4,080	1,380	808	3,400	2,140	2,580	2,730	2,600	2,040
27	1,690	1,860	1,670	3,600	1,360	933	3,610	2,260	2,630	2,700	2,540	2,050
28	1,640	1,850	1,620	3,240	1,390	1,220	3,580	2,350	2,620	2,650	2,600	2,070
29	1,620	1,700	1,610	2,970	---	1,230	3,080	2,370	2,540	2,640	2,630	2,110
30	1,570	1,650	1,600	2,790	---	1,150	2,420	2,430	2,520	2,700	2,640	2,240
31	1,530	---	1,540	2,670	---	1,130	---	2,440	---	2,750	2,590	---
TOTAL	54,340	47,400	58,190	85,100	50,650	35,701	60,150	82,780	79,010	83,340	82,610	66,050
MEAN	1,753	1,580	1,877	2,745	1,809	1,152	2,005	2,670	2,634	2,688	2,665	2,202
MAX	2,220	1,960	3,890	7,590	2,550	1,410	3,610	4,490	3,630	3,000	2,790	2,490
MIN	1,420	1,330	1,350	1,090	1,360	790	1,120	2,010	2,350	2,560	2,510	2,040
AC-FT	107,800	94,020	115,400	168,800	100,500	70,810	119,300	164,200	156,700	165,300	163,900	131,000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2005, BY WATER YEAR (WY)

MEAN	1,716	1,891	2,800	2,875	3,486	3,819	4,608	5,913	5,706	3,735	3,323	2,653
MAX	2,574	5,354	11,200	7,490	14,290	14,340	12,780	15,160	13,410	6,878	4,123	3,355
(WY)	(1998)	(1991)	(1976)	(1976)	(1996)	(1972)	(1972)	(1972)	(1974)	(1974)	(1974)	(1974)
MIN	896	710	882	540	889	752	1,608	2,475	2,480	2,650	2,351	1,411
(WY)	(1980)	(1988)	(1994)	(1979)	(1977)	(1977)	(1977)	(1977)	(2001)	(2001)	(1979)	(1979)

YAKIMA RIVER BASIN

12500450 YAKIMA RIVER ABOVE AHTANUM CREEK, AT UNION GAP, WA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1967 - 2005	
ANNUAL TOTAL	950,380		785,321			
ANNUAL MEAN	2,597		2,152		3,542	
HIGHEST ANNUAL MEAN					6,622	
LOWEST ANNUAL MEAN					1,884	
HIGHEST DAILY MEAN	5,430	Apr 14	7,590	Jan 19	44,000	Feb 9, 1996
LOWEST DAILY MEAN	900	Jan 5	790	Mar 25	300	Jan 1, 1979
ANNUAL SEVEN-DAY MINIMUM	1,120	Jan 1	864	Mar 21	387	Dec 31, 1978
ANNUAL RUNOFF (AC-FT)	1,885,000		1,558,000		2,566,000	
10 PERCENT EXCEEDS	3,730		2,790		6,700	
50 PERCENT EXCEEDS	2,520		2,090		2,950	
90 PERCENT EXCEEDS	1,530		1,340		1,280	

12502500 AHTANUM CREEK AT UNION GAP, WA

LOCATION.--Lat 46°32'10", long 120°28'20", in SE $\frac{1}{4}$ SW $\frac{1}{4}$, sec.8, T.12 N., R.19 E., Yakima County, Hydrologic Unit 17030003, on right downstream wingwall of Union Pacific Railway bridge at Union Gap, 1.0 mi south of town of Union Gap, and at mile 0.6.

DRAINAGE AREA.--173 mi².

PERIOD OF RECORD.--May to November 1904, August 1907 to July 1908, March to October 1910, April 1911 to September 1914, May 1951 to April 1953, August 1960 to current year. Published as "near Yakima" 1904, 1907-08, 1910-12. Records for water years 1913-14 are published in WSP 1286.

REVISED RECORDS.--WSP 1933: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 940 ft above NGVD of 1929, from topographic map. Prior to Sept. 30, 1914, nonrecording gage at approximately same site at various datums. May 12, 1951, to Sept. 30, 1972, water-stage recorder at present site at datum 3.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. Extreme high flows may include transbasin flow from Wide Hollow Creek. Diversions and ground-water withdrawals for irrigation of about 9,000 acres upstream from station. Return from transbasin irrigation flows contribute to base flow. Chemical data (irrigation seasons only) for 1975-76 water years. Water temperature records March to December 1981. Bureau of Reclamation satellite telemeter at station.

AVERAGE DISCHARGE.--45 years (water years 1961-2005), 76.5 ft³/s, 55,410 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,100 ft³/s, Jan. 16, 1974, gage height, 10.36 ft; maximum gage height, 13.5 ft, from high-water mark, backwater from Yakima River; no flow many days during September and October 1904.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 103 ft³/s, May 16, gage height, 4.04 ft; minimum discharge, 8.2 ft³/s, July 1.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	26	30	32	29	32	25	50	29	9.2	12	16
2	25	26	29	32	32	31	27	49	28	14	12	17
3	25	29	29	28	32	30	27	47	27	18	12	18
4	25	29	30	27	32	30	28	44	25	19	12	20
5	24	27	30	20	31	30	26	49	23	19	12	20
6	23	28	29	17	29	30	25	51	21	18	11	19
7	24	28	30	18	29	31	26	49	22	17	11	19
8	24	27	32	24	27	32	27	46	26	16	12	19
9	27	27	31	28	23	33	25	52	25	19	11	18
10	28	27	31	31	26	30	24	81	21	20	12	21
11	27	27	37	32	33	29	25	86	21	17	12	25
12	26	27	40	31	36	26	26	85	21	18	13	25
13	26	27	34	32	38	26	24	80	18	16	14	17
14	26	27	32	29	34	26	23	76	17	15	15	16
15	26	27	30	24	32	24	24	84	18	17	14	16
16	22	27	29	23	26	23	26	98	17	14	13	15
17	25	27	31	25	27	24	31	86	17	13	15	14
18	28	26	31	32	28	28	30	74	17	12	17	15
19	27	27	31	79	31	32	25	73	16	13	16	16
20	23	27	32	66	35	32	24	66	15	15	17	15
21	25	25	32	51	34	33	25	64	15	14	15	12
22	30	27	33	45	33	30	26	62	13	15	15	13
23	29	29	33	44	32	28	33	58	12	20	15	14
24	29	29	30	45	33	29	48	50	12	19	16	14
25	29	29	33	42	34	27	50	45	12	17	16	14
26	29	29	33	40	33	26	55	41	12	16	17	14
27	28	29	33	35	32	34	56	35	12	15	15	14
28	28	26	32	35	32	52	57	30	14	14	16	14
29	27	23	33	37	---	36	57	27	12	13	16	15
30	26	24	34	35	---	29	56	27	11	12	17	16
31	26	---	32	34	---	27	---	31	---	12	17	---
TOTAL	812	813	986	1,073	873	930	981	1,796	549	486.2	438	501
MEAN	26.2	27.1	31.8	34.6	31.2	30.0	32.7	57.9	18.3	15.7	14.1	16.7
MAX	30	29	40	79	38	52	57	98	29	20	17	25
MIN	22	23	29	17	23	23	23	27	11	9.2	11	12
AC-FT	1,610	1,610	1,960	2,130	1,730	1,840	1,950	3,560	1,090	964	869	994
CFSM	0.15	0.16	0.18	0.20	0.18	0.17	0.19	0.33	0.11	0.09	0.08	0.10
IN.	0.17	0.17	0.21	0.23	0.19	0.20	0.21	0.39	0.12	0.10	0.09	0.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2005, BY WATER YEAR (WY)

MEAN	21.1	29.3	50.2	72.7	120	133	133	160	134	32.7	15.9	20.1
MAX	34.4	96.7	210	413	564	408	270	383	438	124	26.7	31.8
(WY)	(1983)	(1963)	(1978)	(1974)	(1996)	(1972)	(1974)	(1995)	(1972)	(1974)	(1999)	(1978)
MIN	9.30	8.99	8.64	10.3	15.7	21.5	16.5	22.8	12.2	8.31	7.33	9.34
(WY)	(1978)	(1995)	(1989)	(1993)	(1994)	(1994)	(1977)	(1977)	(1992)	(1994)	(1977)	(1981)

YAKIMA RIVER BASIN

12502500 AHTANUM CREEK AT UNION GAP, WA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1961 - 2005	
ANNUAL TOTAL	18,661		10,238.2			
ANNUAL MEAN	51.0		28.0		76.5	
HIGHEST ANNUAL MEAN					171	1974
LOWEST ANNUAL MEAN					20.2	1994
HIGHEST DAILY MEAN	163	Mar 19	98	May 16	2,560	Jan 16, 1974
LOWEST DAILY MEAN	12	Jan 5	9.2	Jul 1	3.5	Aug 7, 1978
ANNUAL SEVEN-DAY MINIMUM	14	Jul 23	12	Aug 3	5.1	Aug 6, 1978
ANNUAL RUNOFF (AC-FT)	37,010		20,310		55,410	
ANNUAL RUNOFF (CFSM)	0.295		0.162		0.442	
ANNUAL RUNOFF (INCHES)	4.01		2.20		6.01	
10 PERCENT EXCEEDS	128		45		194	
50 PERCENT EXCEEDS	29		27		34	
90 PERCENT EXCEEDS	20		14		12	

12508990 YAKIMA RIVER AT MABTON, WA

LOCATION.--Lat 46°13'53", long 119°59'54", in SW¹/₄SW¹/₄ sec.30, T.9 N., R.23 E., Yakima County, Hydrologic Unit 17030003, on right bank at highway bridge, at east boundary of Yakama Nation Reservation, 1.1 mi north of Mabton, and at mile 59.8.

DRAINAGE AREA.--5,359 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 643 ft above NGVD of 1929, from topographic map. Prior to Oct. 1, 1976, at datum 10 ft higher.

REMARKS.--No estimated daily discharges. Records fair. Flow affected by storage in five reservoirs, by diversions upstream from station for irrigation upstream and downstream from station of about 424,000 acres, and by return flow. Water temperatures March 1981 to February 1982.

AVERAGE DISCHARGE.--35 years (water years 1971-2005), 3,311 ft³/s, 2,399,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49,500 ft³/s, Feb. 10, 1996, gage height, 28.18 ft, present datum from high-water mark; minimum daily discharge, 320 ft³/s, Mar. 25, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,180 ft³/s, Jan. 20, gage height, 14.58 ft; minimum discharge, 642 ft³/s, June 22.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,570	2,180	2,130	2,100	3,310	1,890	1,340	1,730	1,230	744	839	872
2	1,750	2,170	2,110	2,090	3,200	1,880	1,310	1,610	1,210	747	823	924
3	1,640	2,180	2,030	2,050	3,060	1,850	1,410	1,520	1,200	765	860	889
4	1,570	2,490	1,980	1,980	2,940	1,830	1,480	1,360	1,060	826	844	825
5	1,500	2,530	1,950	1,890	2,850	1,780	1,400	1,300	928	832	811	862
6	1,430	2,430	1,940	1,710	2,840	1,770	1,320	1,370	900	762	807	918
7	1,420	2,360	1,950	1,680	2,770	1,740	1,420	1,420	997	781	793	915
8	1,420	2,290	1,930	1,930	2,700	1,740	1,440	1,350	1,050	777	823	884
9	1,480	2,240	1,960	2,000	2,590	1,750	1,430	1,350	1,530	815	837	866
10	1,550	2,220	1,960	1,970	2,500	1,780	1,430	1,800	1,570	896	803	873
11	1,560	2,180	2,070	1,930	2,460	1,820	1,370	3,470	1,200	867	800	938
12	1,500	2,150	3,380	1,860	2,420	1,820	1,390	3,650	959	792	823	1,030
13	1,410	2,120	3,820	1,860	2,380	1,800	1,290	3,220	845	750	889	1,050
14	1,310	2,090	3,420	1,850	2,360	1,800	1,170	2,790	755	744	919	985
15	1,370	2,060	3,090	1,780	2,290	1,580	1,090	2,490	723	757	939	933
16	1,950	2,040	2,900	1,660	2,190	1,480	1,080	2,530	758	737	860	899
17	1,880	2,010	2,750	1,610	2,090	1,520	1,210	2,690	769	746	839	943
18	1,770	1,980	2,620	1,710	2,080	1,460	1,380	2,490	804	794	831	987
19	2,000	1,950	2,520	3,860	2,070	1,430	1,270	2,320	814	794	851	1,020
20	2,230	1,930	2,470	7,820	2,060	1,420	1,180	2,320	814	714	816	1,030
21	2,550	1,910	2,470	7,520	2,090	1,400	1,100	2,300	812	712	783	966
22	2,640	1,890	2,450	6,670	2,030	1,110	1,090	2,210	682	777	767	984
23	2,560	1,870	2,390	6,030	2,000	1,070	1,200	2,190	714	873	725	958
24	2,570	1,870	2,320	5,670	1,980	985	1,480	2,030	759	984	750	962
25	2,480	1,880	2,260	5,400	1,960	961	1,950	1,680	716	950	826	990
26	2,430	1,990	2,240	4,990	1,940	973	2,360	1,420	732	935	822	992
27	2,390	2,290	2,220	4,620	1,900	1,010	2,520	1,270	737	889	811	984
28	2,340	2,320	2,180	4,210	1,890	1,320	2,670	1,260	785	832	771	981
29	2,300	2,290	2,160	3,880	---	1,470	2,640	1,310	813	795	813	987
30	2,230	2,160	2,150	3,630	---	1,480	2,150	1,320	756	768	868	1,050
31	2,160	---	2,130	3,450	---	1,440	---	1,300	---	806	874	---
TOTAL	58,960	64,070	73,950	101,410	66,950	47,359	45,570	61,070	27,622	24,961	25,617	28,497
MEAN	1,902	2,136	2,385	3,271	2,391	1,528	1,519	1,970	921	805	826	950
MAX	2,640	2,530	3,820	7,820	3,310	1,890	2,670	3,650	1,570	984	939	1,050
MIN	1,310	1,870	1,930	1,610	1,890	961	1,080	1,260	682	712	725	825
AC-FT	116,900	127,100	146,700	201,100	132,800	93,940	90,390	121,100	54,790	49,510	50,810	56,520

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2005, BY WATER YEAR (WY)

MEAN	1,860	2,432	3,542	3,943	4,642	4,881	4,662	4,761	4,118	1,832	1,491	1,675
MAX	2,532	5,144	12,030	9,554	17,760	16,580	13,350	14,110	12,610	5,320	2,155	2,309
(WY)	(1973)	(1991)	(1976)	(1974)	(1996)	(1972)	(1972)	(1997)	(1972)	(1974)	(1976)	(1978)
MIN	856	1,333	1,427	1,214	1,019	543	607	936	921	658	755	814
(WY)	(1980)	(1988)	(1994)	(1979)	(1977)	(1977)	(1977)	(1977)	(2005)	(1994)	(1979)	(1979)

SUMMARY STATISTICS

FOR 2004 CALENDAR YEAR

FOR 2005 WATER YEAR

WATER YEARS 1971 - 2005

ANNUAL TOTAL	844,192	626,036										
ANNUAL MEAN	2,307	1,715								3,311		
HIGHEST ANNUAL MEAN										6,566		1972
LOWEST ANNUAL MEAN										1,215		1977
HIGHEST DAILY MEAN	5,610	Apr 14	7,820	Jan 20	44,000	Feb 10, 1996						
LOWEST DAILY MEAN	753	Jul 16	682	Jun 22	320	Mar 25, 1977						
ANNUAL SEVEN-DAY MINIMUM	811	Jul 26	732	Jun 22	344	Mar 23, 1977						
ANNUAL RUNOFF (AC-FT)	1,674,000		1,242,000		2,399,000							
10 PERCENT EXCEEDS	4,340		2,600		6,950							
50 PERCENT EXCEEDS	2,130		1,530		2,170							
90 PERCENT EXCEEDS	1,020		795		1,220							

12510500 YAKIMA RIVER AT KIONA, WA

LOCATION.--Lat 46°15'13", long 119°28'37", in SE¼NE¼ sec.19, T.9 N., R.27 E., Benton County, Hydrologic Unit 17030003, on left bank just upstream from abandoned highway bridge pier at Kiona, 0.1 mi upstream from highway bridge, 3.6 mi downstream from Corral Canyon Creek, 5.0 mi downstream from intake of Kiona Canal, and at mile 29.9.

DRAINAGE AREA.--5,615 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August to December 1895 (gage heights only, fragmentary), August 1896 to March 1915, February 1933 to current year. Monthly discharge only 1887 to 1933, published in WSP 1316 and are available at the Pasco, Washington, field office.

REVISED RECORDS.--WSP 214: 1905. WSP 1122: 1934(M). WSP 1216: 1949-50. WSP 1286: 1907(M), 1909, 1936. WSP 1933: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 454.41 ft above NGVD of 1929. Prior to Mar. 31, 1915, nonrecording gages at approximately same site and datum. Feb. 6, 1933, to July 26, 1934, nonrecording gage at present site and datum.

REMARKS.--Records poor. Diversion upstream from station for irrigation of about 424,000 acres. Flow affected by diversions and by Keechelus, Kachess, Cle Elum, Bumping, and Rimrock Lakes. The Kiona Canal bypasses station with a mean flow of approximately 23 ft³/s for irrigation of about 1,100 acres downstream from station. Diversion by the Kennewick Canal, which bypasses station, began in August 1956, and diverts about 96,000 acre-ft per year. Bureau of Reclamation satellite telemeter at station.

AVERAGE DISCHARGE.--72 years (water years 1934-2005), 3,493 ft³/s, 2,531,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 67,000 ft³/s, Dec. 23, 1933, gage height, 21.57 ft, from high-water marks; minimum discharge observed, 105 ft³/s, Sept. 11, 1906.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,000 ft³/s, Jan. 20, gage height, 9.98 ft; minimum discharge, 507 ft³/s, July 21, 22.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,910	2,630	2,460	2,230	3,710	1,900	1,450	1,590	908	753	620	1,280
2	2,070	2,650	2,460	2,200	3,570	1,940	1,230	1,410	870	767	709	1,300
3	2,160	2,620	2,380	2,120	3,410	1,920	1,270	1,290	951	766	786	1,420
4	2,040	2,800	2,280	2,060	3,290	1,910	1,450	1,110	935	822	834	1,310
5	1,880	3,130	2,230	1,970	3,130	1,850	1,350	949	803	900	792	1,190
6	1,760	3,020	2,200	1,760	3,070	1,820	1,200	902	750	924	772	1,360
7	1,730	2,900	2,200	1,620	3,030	1,820	1,210	963	820	841	737	1,640
8	1,700	2,780	2,190	1,840	2,940	1,810	1,320	935	1,090	817	753	1,400
9	1,790	2,690	2,180	2,010	2,830	1,830	1,370	849	1,350	846	819	1,240
10	1,930	2,630	2,200	2,010	2,690	1,860	1,310	970	e1,600	919	854	1,260
11	2,080	2,560	2,200	1,950	2,640	1,900	1,300	2,300	e1,620	1,070	828	1,300
12	2,060	2,490	3,320	1,900	2,570	1,910	1,260	3,510	e1,280	1,040	822	1,590
13	1,960	2,440	4,720	1,770	2,540	1,890	1,210	3,070	1,080	1,030	830	1,810
14	1,810	2,390	4,220	e1,700	2,490	1,910	1,020	2,620	985	888	1,030	1,600
15	1,880	2,360	3,740	e1,600	2,420	1,730	900	2,220	913	801	1,130	1,310
16	2,630	2,340	3,420	e1,500	2,350	1,550	810	2,160	794	736	1,170	1,200
17	3,050	2,280	3,220	1,460	2,210	1,600	880	2,290	777	728	1,010	1,190
18	2,710	2,230	3,010	1,500	2,150	1,590	1,110	2,270	810	723	955	1,320
19	2,850	2,220	2,870	2,660	2,130	1,500	1,150	2,090	832	685	937	1,410
20	3,240	2,190	2,770	8,860	2,130	1,460	1,000	2,020	872	753	965	1,500
21	3,350	2,160	2,740	9,330	2,130	1,450	867	2,030	937	629	903	1,390
22	3,720	2,130	2,720	8,080	2,120	1,180	819	1,990	802	563	882	1,260
23	3,480	2,120	2,660	7,230	2,070	939	774	1,920	732	716	909	1,270
24	3,380	2,130	2,580	6,660	2,020	941	1,080	1,850	724	906	883	1,200
25	3,240	2,130	2,490	6,320	2,000	886	1,480	1,410	749	1,120	858	1,190
26	3,190	2,180	2,460	5,810	1,990	813	2,090	1,060	755	1,100	980	1,220
27	3,110	2,490	2,430	5,380	1,950	885	2,300	834	759	1,050	1,030	1,150
28	3,020	2,690	2,370	4,890	1,930	1,110	2,470	741	763	947	1,050	1,130
29	2,940	2,620	2,340	4,460	---	1,570	2,540	745	825	768	1,040	1,070
30	2,870	2,520	2,300	4,120	---	1,780	2,210	807	830	678	1,250	1,200
31	2,720	---	2,280	3,890	---	1,600	---	855	---	599	1,290	---
TOTAL	78,260	74,520	83,640	110,890	71,510	48,854	40,430	49,760	27,916	25,885	28,428	39,710
MEAN	2,525	2,484	2,698	3,577	2,554	1,576	1,348	1,605	931	835	917	1,324
MAX	3,720	3,130	4,720	9,330	3,710	1,940	2,540	3,510	1,620	1,120	1,290	1,810
MIN	1,700	2,120	2,180	1,460	1,930	813	774	741	724	563	620	1,070
AC-FT	155,200	147,800	165,900	220,000	141,800	96,900	80,190	98,700	55,370	51,340	56,390	78,760
CFSM	0.45	0.44	0.48	0.64	0.45	0.28	0.24	0.29	0.17	0.15	0.16	0.24
IN.	0.52	0.49	0.55	0.73	0.47	0.32	0.27	0.33	0.18	0.17	0.19	0.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2005, BY WATER YEAR (WY)

MEAN	2,257	2,850	3,949	3,959	4,503	4,612	4,641	5,164	4,758	1,914	1,578	1,825
MAX	4,252	6,293	17,330	14,100	17,570	16,750	13,190	13,930	16,470	5,398	2,333	2,549
(WY)	(1950)	(1960)	(1934)	(1934)	(1996)	(1972)	(1956)	(1997)	(1948)	(1954)	(1976)	(1978)
MIN	1,021	1,462	1,546	1,335	1,163	486	493	902	869	598	751	784
(WY)	(1980)	(1988)	(1936)	(1937)	(1977)	(1977)	(1977)	(1977)	(1994)	(1994)	(1979)	(1979)

YAKIMA RIVER BASIN

12510500 YAKIMA RIVER AT KIONA, WA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1934 - 2005	
ANNUAL TOTAL	934,196		679,803			
ANNUAL MEAN	2,552		1,862		3,493	
HIGHEST ANNUAL MEAN					7,055 1956	
LOWEST ANNUAL MEAN					1,293 1977	
HIGHEST DAILY MEAN	5,940	Mar 12	9,330	Jan 21	59,400 Dec 24, 1933	
LOWEST DAILY MEAN	686	Jun 24	563	Jul 22	225 Apr 4, 1977	
ANNUAL SEVEN-DAY MINIMUM	861	Jun 20	685	Jul 17	263 Apr 19, 1977	
ANNUAL RUNOFF (AC-FT)	1,853,000		1,348,000		2,531,000	
ANNUAL RUNOFF (CFSM)	0.455		0.332		0.622	
ANNUAL RUNOFF (INCHES)	6.19		4.50		8.45	
10 PERCENT EXCEEDS	4,460		3,040		7,130	
50 PERCENT EXCEEDS	2,360		1,640		2,400	
90 PERCENT EXCEEDS	1,310		805		1,350	

e Estimated

12510500 YAKIMA RIVER AT KIONA, WA

National Water-Quality Assessment Station

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1953-94, 1999 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1952 to September 1969 (composite samples), October 1969 to September 1977, July 1999 to June 2000, February 2001 to current year.

pH: April 2001 to current year.

WATER TEMPERATURE: December 1952 to September 1980, March 1981 to February 1982, July 1999 to June 2000, October 2000 to current year.

DISSOLVED OXYGEN: April 2004 to current year.

CHLOROPHYLL: April 2004 to current year.

SUSPENDED SEDIMENT: June 1977 to October 1980.

TURBIDITY: April 2004 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1999. Electronic data logger, with 15-minute logging interval. Bureau of Reclamation satellite telemeter at station.

REMARKS.--Specific Conductance: Water year 2005--records excellent except for Nov. 5-9, Dec. 13-21, Dec. 29 to Feb. 3, Feb. 16 to Apr. 7, July 23-26, which are good; and Jan. 20-Feb.10, which are fair. pH: April to September 2004--records good; rating was downgraded due to insufficient quality-control checks. Water year 2005--records excellent except for Apr. 22-25 and July 15-23, which are good; Jan. 20-Feb. 10 and July 24-26, which are fair. Water Temperature: Water year 2005--records excellent. Dissolved Oxygen: April to September 2004--records good except for May 1-6, July 23-24, and Aug. 9-11, which are fair; May 7-13, July 25-Aug. 3, and Aug. 12-20, which are poor. Water year 2005--records good except for Oct. 4-7, 28-30, Nov. 11-12, Nov. 21-Dec. 1, Dec. 11-22, Jan. 3-19, Feb. 1-10, Mar. 2-11, 19-30, Apr. 1-3, 15-18, Apr. 26-May 1, May 18-22, June 14-15, July 3-9, 15-19, 29-31, Aug. 1-3, 13-18, 25-30, and Sept. 28-30, which are fair; Oct. 8-17, Oct. 31-Nov. 4, Apr. 4-13, 19-25, May 2-11, 23-31, June 16-19, July 10-13, 20-26, Aug. 4-10, 19-24, and Aug. 31-Sept. 12, which are poor. Turbidity: April to September 2004--records fair; rating was downgraded due to insufficient quality-control checks. Water year 2005--records good except Apr. 25-May 21 and July 14-Sept. 30, which are fair; and Jan. 20 and May 22-July 13, which are poor. Chlorophyll: April to September 2004--records are poor due to insufficient quality-control data and lack of laboratory chlorophyll data for post calibrations. Water year 2005--records are good except Oct. 1-Nov. 28, which are fair; and Jan. 20-Feb. 10, which are poor.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum observed, 675 microsiemens, Dec. 3, 1970; minimum recorded, 82 microsiemens, June 17, 2002.

pH: Maximum recorded, 9.7 units, May 30-31, June 2-3, July 24-25, 27-28, 2005; minimum recorded, 7.5 units, Jan. 20-22, 24, 2005.

WATER TEMPERATURE: Maximum, 30.8°C, July 20, 2001; minimum, 0.0°C, several days during winter months most years.

DISSOLVED OXYGEN: Maximum recorded, 15.8 mg/L, Jan. 16 and May 30, 2005; minimum recorded, 2.4 mg/L, July 6, 2004.

TURBIDITY: Maximum recorded, 420 FNU, Apr. 22, 24, 2004, but may have been greater during periods of missing record; minimum recorded, <1 FNU many days during period of record.

CHLOROPHYLL: Maximum recorded, 28 units, Jan. 20, 2005; minimum recorded, <0.1 units, June 26, 2004.

EXTREMES FOR CURRENT PERIOD.--

SPECIFIC CONDUCTANCE: Water year 2005--Maximum recorded, 312 microsiemens, Mar. 22; minimum recorded, 99 microsiemens, Jan. 21.

pH: April to September 2004--Maximum recorded, 9.2 units, June 2, 20-24; minimum recorded, 7.5 units, July 6, 21, and Aug. 9.

pH: Water year 2005--Maximum recorded, 9.7 units, May 30-31, June 2-3, July 24-25, 27-28; minimum recorded, 7.5 units, Jan. 20-22, 24.

WATER TEMPERATURE: Water year 2005--Maximum recorded, 28.1°C, July 31; minimum recorded, 0.0°C, Jan. 15-16.

DISSOLVED OXYGEN: April to September 2004--Maximum recorded, 14.8 mg/L, June 16; minimum recorded, 2.4 mg/L, July 6.

DISSOLVED OXYGEN: Water year 2005--Maximum recorded, 15.8 mg/L, Jan. 16 and May 30; minimum recorded, 3.0 mg/L, July 22 and Aug. 1.

TURBIDITY: April to September 2004--Maximum recorded, 420 FNU, Apr. 22, 24; minimum recorded, <1 FNU, many days throughout year.

TURBIDITY: Water year 2005--Maximum recorded, >250 FNU, Jan. 20, but may have been greater during periods of missing record; minimum recorded, <1 FNU, many days throughout year.

CHLOROPHYLL: April to September 2004--Maximum recorded, 11 units, Aug. 21; minimum recorded, <0.1 units, June 26.

CHLOROPHYLL: Water year 2005--Maximum recorded, 28 units, Jan. 20; minimum recorded, 0.3 units, Feb. 16.

YAKIMA RIVER BASIN

12510500 YAKIMA RIVER AT KIONA, WA—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR APRIL 2004 TO SEPTEMBER 2004

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	9.1	7.9	8.7
2	---	---	---	---	---	---	---	---	---	9.0	7.8	8.6
3	---	---	---	---	---	---	---	---	---	8.9	7.8	8.4
4	---	---	---	---	---	---	---	---	---	8.6	7.8	8.3
5	---	---	---	---	---	---	---	---	---	8.4	7.8	8.0
6	---	---	---	---	---	---	---	---	---	8.2	7.7	7.9
7	---	---	---	---	---	---	---	---	---	8.3	7.7	7.9
8	---	---	---	---	---	---	---	---	---	8.3	7.7	7.9
9	---	---	---	---	---	---	---	---	---	8.5	7.7	7.9
10	---	---	---	---	---	---	---	---	---	8.2	7.6	7.9
11	---	---	---	---	---	---	---	---	---	8.3	7.7	7.9
12	---	---	---	---	---	---	---	---	---	8.7	7.8	8.2
13	---	---	---	---	---	---	---	---	---	8.8	7.8	8.1
14	---	---	---	---	---	---	---	---	---	8.8	7.7	8.3
15	---	---	---	---	---	---	---	---	---	8.7	7.8	8.1
16	---	---	---	---	---	---	---	---	---	8.8	7.8	8.3
17	---	---	---	---	---	---	---	---	---	8.9	7.8	8.3
18	---	---	---	---	---	---	---	---	---	8.8	7.8	8.2
19	---	---	---	---	---	---	---	---	---	8.9	7.8	8.4
20	---	---	---	---	---	---	8.6	---	---	8.9	7.7	8.3
21	---	---	---	---	---	---	8.5	7.9	8.3	8.8	7.7	8.4
22	---	---	---	---	---	---	8.7	7.9	8.3	8.9	7.7	8.3
23	---	---	---	---	---	---	8.7	7.9	8.4	8.6	7.7	8.1
24	---	---	---	---	---	---	8.9	7.9	8.4	8.8	7.7	8.1
25	---	---	---	---	---	---	9.0	8.2	8.7	8.8	7.7	8.2
26	---	---	---	---	---	---	9.0	8.2	8.8	8.8	7.7	8.0
27	---	---	---	---	---	---	8.9	8.4	8.8	9.0	7.7	8.3
28	---	---	---	---	---	---	9.0	8.3	8.8	8.8	7.7	8.2
29	---	---	---	---	---	---	9.1	8.1	8.8	8.9	7.8	8.2
30	---	---	---	---	---	---	9.1	7.9	8.7	8.9	7.7	8.3
31	---	---	---	---	---	---	---	---	---	9.0	7.7	8.4
MAX	---	---	---	---	---	---	---	---	---	9.1	7.9	8.7
MIN	---	---	---	---	---	---	---	---	---	8.2	7.6	7.9
	JUNE			JULY			AUGUST			SEPTEMBER		
1	9.1	7.7	8.6	9.1	7.6	8.4	8.8	7.9	8.4	---	---	---
2	9.2	7.7	8.7	9.1	7.7	8.6	8.7	7.8	8.2	---	---	---
3	---	7.8	---	8.9	7.8	8.5	8.8	7.8	8.5	8.7	---	---
4	---	---	---	8.9	7.8	8.3	8.7	7.8	8.2	8.8	7.9	8.2
5	---	---	---	8.8	7.6	8.2	8.6	7.7	8.1	8.8	7.9	8.3
6	---	---	---	8.9	7.5	8.2	8.4	7.7	8.0	8.8	7.9	8.4
7	9.1	---	---	9.0	7.7	8.5	8.6	7.7	8.1	8.8	7.9	8.4
8	8.6	7.7	8.1	9.0	7.9	8.5	8.4	7.6	7.9	8.8	7.9	8.4
9	8.6	7.6	7.8	9.0	7.9	8.6	8.7	7.5	8.1	---	7.9	---
10	8.8	7.6	8.1	8.9	7.9	8.5	8.7	7.7	8.2	---	---	---
11	8.8	7.6	8.1	9.0	7.8	8.5	8.8	7.7	8.3	---	---	---
12	8.8	7.6	8.2	9.0	7.8	8.5	8.8	7.7	8.3	---	---	---
13	8.9	7.6	8.3	9.0	7.9	8.5	8.8	7.8	8.3	---	---	---
14	8.9	7.6	8.4	8.9	7.8	8.5	8.5	7.8	8.1	---	---	---
15	9.0	7.7	8.4	8.9	7.9	8.5	8.8	7.7	8.3	---	---	---
16	9.1	7.7	8.5	9.0	7.9	8.4	8.8	7.8	8.2	---	---	---
17	9.1	7.7	8.5	8.9	7.8	8.4	8.8	7.8	8.3	8.8	---	---
18	9.1	7.7	8.6	8.8	7.8	8.3	8.8	7.8	8.3	8.9	8.0	8.4
19	9.1	7.8	8.6	8.8	7.7	8.1	8.8	7.8	8.3	8.9	8.0	8.5
20	9.2	7.8	8.7	8.8	7.7	8.2	8.7	7.8	8.4	8.9	8.1	8.5
21	9.2	7.8	8.6	8.7	7.5	8.1	8.6	7.8	8.3	9.0	8.1	8.5
22	9.2	7.8	8.6	8.7	7.6	8.1	8.3	7.8	8.1	9.0	8.1	8.5
23	9.2	7.8	8.7	8.7	7.6	8.2	---	7.7	---	9.0	8.1	8.6
24	9.2	8.0	8.9	8.8	7.6	8.1	---	---	---	9.0	8.1	8.5
25	9.1	7.7	8.5	8.8	7.6	8.2	---	---	---	9.0	8.0	8.5
26	9.0	7.7	8.3	8.8	7.7	8.4	---	---	---	9.0	8.0	8.5
27	9.0	7.6	8.3	8.8	7.8	8.4	---	---	---	8.9	8.0	8.4
28	9.0	7.6	8.3	8.8	7.9	8.4	---	---	---	8.9	7.9	8.4
29	9.0	7.6	8.3	8.8	7.9	8.4	---	---	---	8.9	7.9	8.4
30	9.0	7.6	8.3	8.9	7.9	8.4	---	---	---	8.9	7.9	8.4
31	---	---	---	8.8	7.9	8.4	---	---	---	---	---	---
MAX	---	---	---	9.1	7.9	8.6	---	---	---	---	---	---
MIN	---	---	---	8.7	7.5	8.1	---	---	---	---	---	---

YAKIMA RIVER BASIN

12510500 YAKIMA RIVER AT KIONA, WA—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR APRIL 2004 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	13.8	8.6	10.6
2	---	---	---	---	---	---	---	---	---	12.9	7.7	10.1
3	---	---	---	---	---	---	---	---	---	12.1	7.5	9.5
4	---	---	---	---	---	---	---	---	---	11.0	7.7	9.0
5	---	---	---	---	---	---	---	---	---	10.8	8.1	9.2
6	---	---	---	---	---	---	---	---	---	10.5	8.6	9.4
7	---	---	---	---	---	---	---	---	---	10.9	8.8	9.6
8	---	---	---	---	---	---	---	---	---	11.3	8.7	9.7
9	---	---	---	---	---	---	---	---	---	11.6	8.7	9.9
10	---	---	---	---	---	---	---	---	---	10.6	8.2	9.3
11	---	---	---	---	---	---	---	---	---	10.9	8.6	9.6
12	---	---	---	---	---	---	---	---	---	12.1	9.1	10.5
13	---	---	---	---	---	---	---	---	---	12.8	8.6	10.4
14	---	---	---	---	---	---	---	---	---	12.6	8.0	10.1
15	---	---	---	---	---	---	---	---	---	12.2	7.5	9.4
16	---	---	---	---	---	---	---	---	---	13.0	7.8	10.0
17	---	---	---	---	---	---	---	---	---	12.8	7.7	10
18	---	---	---	---	---	---	---	---	---	12.3	7.6	9.5
19	---	---	---	---	---	---	---	---	---	13.0	7.8	10.1
20	---	---	---	---	---	---	11.9	---	---	13.0	7.5	9.7
21	---	---	---	---	---	---	12.1	10.1	11.0	12.3	7.3	9.5
22	---	---	---	---	---	---	12.5	9.9	11.1	11.8	7.1	9.1
23	---	---	---	---	---	---	12.4	9.5	10.9	11.0	7.4	8.9
24	---	---	---	---	---	---	13.2	9.8	11.3	11.9	7.8	9.4
25	---	---	---	---	---	---	13.2	9.4	11.2	12.2	7.8	9.5
26	---	---	---	---	---	---	13.4	9.0	11.0	12.4	7.4	9.2
27	---	---	---	---	---	---	13.1	8.2	10.3	13.5	7.4	9.9
28	---	---	---	---	---	---	13.5	8.7	11.0	12.7	7.4	9.7
29	---	---	---	---	---	---	13.3	9.0	10.9	12.7	7.9	10
30	---	---	---	---	---	---	13.0	8.8	10.7	12.4	8.0	9.9
31	---	---	---	---	---	---	---	---	---	13.6	8.0	10.4
MONTH	---	---	---	---	---	---	---	---	---	13.8	7.1	9.7
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.2	7.4	10.4	13.3	4.5	8.8	10.9	4.8	7.7	---	---	---
2	14.6	6.9	10.4	13.6	4.3	8.8	10.2	4.7	7.2	---	---	---
3	---	6.3	---	12.1	4.3	8.1	11.2	4.9	7.9	12.2	---	---
4	---	---	---	11.6	3.9	7.5	10.7	4.4	7.2	12.6	7.0	9.5
5	---	---	---	10.2	3.0	6.4	10.4	3.8	6.9	13.3	7.1	9.7
6	---	---	---	12.5	2.4	7.3	9.3	5.3	7.1	13.0	7.2	9.7
7	14.6	---	---	13.4	5.0	9.0	10.9	5.5	7.9	13.2	7.1	9.7
8	11.6	6.5	8.7	13.6	5.6	9.4	9.8	5.1	7.2	12.9	7.0	9.6
9	12.4	7.3	9.1	13.5	5.5	9.3	11.1	4.6	7.7	12.5	6.8	9.5
10	13.0	7.9	10.0	12.7	5.4	8.9	11.4	6.0	8.4	13.3	7.0	9.8
11	13.2	7.8	10	12.9	5.3	8.8	11.8	5.7	8.5	12.2	6.8	9.1
12	12.9	7.6	9.9	13.4	4.5	8.4	11.8	5.5	8.4	11.8	7.1	9.4
13	12.8	7.1	9.7	12.9	5.2	8.7	11.9	5.5	8.4	12.0	7.3	9.3
14	14.0	7.1	10.2	12.5	4.7	8.4	10.3	5.3	7.6	13.0	7.5	9.9
15	14.3	6.9	10.3	12.1	4.4	8.1	12.0	5.7	8.6	12.8	7.5	9.8
16	14.8	6.7	10.4	12.1	4.3	7.9	11.9	5.7	8.5	13.1	7.6	10.1
17	14.6	6.1	10.1	11.3	3.7	7.4	11.9	5.6	8.5	---	7.7	---
18	14.7	5.7	10.1	10.8	3.5	7.1	12.3	5.8	8.7	12.5	7.8	9.8
19	14.5	5.7	9.9	9.6	3.5	6.4	12.3	5.7	8.7	12.5	7.9	---
20	14.6	5.4	9.8	10	3.8	6.7	10.5	5.6	7.8	---	---	---
21	14.5	5.0	9.5	9.7	2.6	6.3	9.9	4.3	6.9	---	---	---
22	14.1	4.3	9.0	10.1	4.0	6.9	8.5	4.7	6.5	11.7	6.9	9.0
23	13.9	4.1	9.0	10.2	4.2	7.0	---	5.4	---	12.8	7.4	9.7
24	14.0	---	---	10.2	4.1	7.0	---	---	---	12.9	7.3	9.7
25	13.9	3.7	8.7	10.3	3.9	6.9	---	---	---	13.0	7.2	9.7
26	13.5	4.0	8.4	10.6	4.2	7.2	---	---	---	12.9	7.0	9.5
27	13.3	4.0	8.4	10.8	4.5	7.5	---	---	---	12.7	6.9	9.4
28	12.5	3.7	7.9	10.9	4.7	7.6	---	---	---	12.7	6.8	9.3
29	12.6	3.1	7.7	10.7	4.6	7.4	---	---	---	12.6	6.6	9.2
30	13.6	3.4	8.3	10.9	4.6	7.6	---	---	---	13.2	6.8	9.6
31	---	---	---	10.9	4.8	7.6	---	---	---	---	---	---
MONTH	---	---	---	13.6	2.4	7.8	---	---	---	---	---	---

12510500 YAKIMA RIVER AT KIONA, WA—Continued

CHLOROPHYLL, TOTAL, WATER, FLUOROMETRIC, 650-700 NANOMETERS, IN-SITU SENSOR, MICROGRAMS PER LITER
WATER YEAR APRIL 2004 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	6.2	1.1	2.7
2	---	---	---	---	---	---	---	---	---	5.0	1.2	2.6
3	---	---	---	---	---	---	---	---	---	5.5	1.6	2.8
4	---	---	---	---	---	---	---	---	---	5.0	1.8	3.0
5	---	---	---	---	---	---	---	---	---	5.2	1.7	2.9
6	---	---	---	---	---	---	---	---	---	4.4	2.1	2.8
7	---	---	---	---	---	---	---	---	---	3.8	1.1	2.3
8	---	---	---	---	---	---	---	---	---	2.7	1.0	1.8
9	---	---	---	---	---	---	---	---	---	2.5	0.4	1.4
10	---	---	---	---	---	---	---	---	---	2.6	0.6	1.5
11	---	---	---	---	---	---	---	---	---	3.0	0.5	1.5
12	---	---	---	---	---	---	---	---	---	5.1	0.5	1.6
13	---	---	---	---	---	---	---	---	---	2.6	0.3	1.5
14	---	---	---	---	---	---	---	---	---	2.6	1.4	2.1
15	---	---	---	---	---	---	---	---	---	2.7	1.6	2.2
16	---	---	---	---	---	---	---	---	---	2.7	1.4	2.1
17	---	---	---	---	---	---	---	---	---	2.7	1.8	2.2
18	---	---	---	---	---	---	---	---	---	3.1	1.8	2.5
19	---	---	---	---	---	---	---	---	---	2.9	1.5	2.3
20	---	---	---	---	---	---	---	---	---	3.1	1.8	2.5
21	---	---	---	---	---	---	2.4	0.7	1.5	3.3	1.9	2.7
22	---	---	---	---	---	---	2.2	0.3	1.4	3.5	1.9	2.8
23	---	---	---	---	---	---	5.8	0.7	1.9	3.5	2.0	2.8
24	---	---	---	---	---	---	10	0.6	2.4	3.1	1.9	2.6
25	---	---	---	---	---	---	10	0.8	3.2	3.3	1.8	2.6
26	---	---	---	---	---	---	8.8	0.6	2.3	3.2	1.8	2.4
27	---	---	---	---	---	---	7.7	1.2	3.2	3.0	1.7	2.3
28	---	---	---	---	---	---	4.3	0.9	2.1	3.0	1.8	2.3
29	---	---	---	---	---	---	6.0	1.4	2.5	3.1	1.8	2.4
30	---	---	---	---	---	---	6.1	1.6	3.3	3.3	1.7	2.4
31	---	---	---	---	---	---	---	---	---	2.8	1.6	2.1
MONTH	---	---	---	---	---	---	---	---	---	6.2	0.3	2.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	2.8	1.4	2.2	3.2	0.7	2.0	3.6	2.0	2.9	---	---	---
2	2.9	1.5	2.2	3.4	1.5	2.3	4.1	2.0	3.0	---	---	---
3	---	---	---	3.4	1.5	2.5	4.1	1.8	2.9	---	---	---
4	---	---	---	3.3	1.8	2.6	4.8	1.8	2.9	---	---	---
5	---	---	---	3.3	1.4	2.5	7.3	1.9	3.3	---	---	---
6	---	---	---	3.1	1.3	2.4	5.0	1.8	3.2	---	---	---
7	---	---	---	3.5	1.7	2.4	4.7	1.7	3.0	---	---	---
8	3.6	1.4	2.4	3.2	1.5	2.4	4.2	1.8	2.7	---	---	---
9	3.6	1.3	2.6	3.4	1.5	2.3	6.1	1.9	2.7	---	---	---
10	4.0	1.4	2.6	4.1	1.5	2.6	4.4	1.5	2.6	---	---	---
11	3.2	1.2	2.3	3.4	1.6	2.5	6.7	1.5	2.5	---	---	---
12	4.6	1.1	2.2	4.0	1.6	2.6	3.3	1.0	2.2	---	---	---
13	3.3	0.9	1.9	3.2	1.4	2.3	3.1	1.4	2.2	---	---	---
14	2.4	0.6	1.7	3.8	1.2	2.3	2.8	1.2	2.0	---	---	---
15	2.4	0.8	1.6	3.3	1.5	2.3	3.6	1.0	2.1	---	---	---
16	2.8	0.5	1.6	3.0	1.3	2.3	3.3	1.2	2.1	---	---	---
17	2.2	0.5	1.3	7.3	1.4	2.4	4.8	1.0	2.1	---	---	---
18	2.2	0.4	1.3	3.3	1.4	2.3	2.8	1.1	1.9	---	---	---
19	3.4	0.5	1.4	3.6	1.6	2.6	2.7	0.9	1.8	---	---	---
20	2.3	0.6	1.4	8.1	1.6	3.2	3.3	1.3	2.0	---	---	---
21	2.7	0.5	1.4	9.0	1.8	3.5	11	---	---	---	---	---
22	2.4	0.4	1.5	3.8	1.4	2.8	7.7	2.0	4.2	---	---	---
23	---	---	---	3.7	1.7	2.5	---	---	---	---	---	---
24	---	---	---	3.6	1.5	2.6	---	---	---	---	---	---
25	4.2	0.6	1.5	3.5	1.0	2.5	---	---	---	---	---	---
26	3.2	<0.1	1.6	3.5	1.2	2.6	---	---	---	---	---	---
27	2.5	0.5	1.5	6.1	2.0	2.8	---	---	---	---	---	---
28	2.4	0.5	1.5	3.8	1.8	2.7	---	---	---	---	---	---
29	2.3	0.9	1.5	3.8	1.6	2.8	---	---	---	---	---	---
30	2.3	0.9	1.5	6.3	1.8	2.8	---	---	---	---	---	---
31	---	---	---	4.2	1.8	2.9	---	---	---	---	---	---
MONTH	---	---	---	9.0	0.7	2.6	---	---	---	---	---	---

< Actual value is known to be less than the value shown

YAKIMA RIVER BASIN

12510500 YAKIMA RIVER AT KIONA, WA—Continued

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/- 2.5 DEGREES, FNU
WATER YEAR APRIL 2004 TO SEPTEMBER 2004

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	---	---	---	---	---	---	---	---	---	7.0	<1.0	1.6
2	---	---	---	---	---	---	---	---	---	6.3	<1.0	1.9
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	5.1	1.6	2.5
15	---	---	---	---	---	---	---	---	---	4.4	1.6	2.4
16	---	---	---	---	---	---	---	---	---	3.8	1.3	1.8
17	---	---	---	---	---	---	---	---	---	5.1	1.3	2.5
18	---	---	---	---	---	---	---	---	---	6.5	2.2	3.2
19	---	---	---	---	---	---	---	---	---	8.4	2.3	3.3
20	---	---	---	---	---	---	---	---	---	6.8	1.7	2.8
21	---	---	---	---	---	---	4.3	<1.0	<1.0	7.5	2.4	4.0
22	---	---	---	---	---	---	420	<1.0	<1.0	5.7	2.0	3.6
23	---	---	---	---	---	---	340	1.5	38	4.8	2.2	3.6
24	---	---	---	---	---	---	420	42	110	5.9	2.7	4.1
25	---	---	---	---	---	---	290	<1.0	70	6.4	2.8	4.1
26	---	---	---	---	---	---	37	<1.0	<1.0	5.3	2.0	3.5
27	---	---	---	---	---	---	44	<1.0	<1.0	5.0	1.6	2.6
28	---	---	---	---	---	---	23	<1.0	<1.0	6.7	2.1	3.8
29	---	---	---	---	---	---	23	<1.0	2.0	7.1	3.0	4.7
30	---	---	---	---	---	---	8.8	<1.0	3.2	7.4	3.0	4.7
31	---	---	---	---	---	---	---	---	---	5.7	1.8	2.6
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	3.3	1.7	2.3	3.3	<1.0	2.0	<1.0	<1.0	<1.0	---	---	---
2	2.9	1.0	1.7	2.7	1.5	2.0	2.0	<1.0	<1.0	---	---	---
3	---	---	---	2.1	1.2	1.5	5.0	<1.0	1.4	---	---	---
4	---	---	---	2.4	1.1	1.3	1.8	<1.0	<1.0	7.2	1.5	3.1
5	---	---	---	2.3	1.1	1.3	6.1	<1.0	<1.0	6.7	1.5	3.0
6	---	---	---	3.8	1.0	2.1	4.9	1.6	3.3	4.2	<1.0	2.5
7	---	---	---	3.6	1.9	2.5	3.3	1.4	2.0	6.0	<1.0	2.1
8	4.1	1.8	2.8	3.1	1.9	2.3	4.5	1.2	1.9	3.5	<1.0	1.9
9	9.6	1.4	3.4	3.2	1.7	2.3	8.0	1.4	3.8	---	---	---
10	7.4	3.7	4.9	4.0	1.3	1.6	8.7	2.1	4.3	---	---	---
11	7.4	2.8	4.3	2.2	1.3	1.6	6.0	1.5	2.7	---	---	---
12	8.0	2.6	3.7	6.7	1.3	1.5	8.6	1.3	2.7	---	---	---
13	4.6	1.7	3.3	8.0	1.7	2.4	3.8	1.0	1.8	---	---	---
14	4.0	1.5	2.2	7.6	1.7	2.3	3.6	<1.0	1.4	---	---	---
15	3.4	1.7	2.3	10	1.6	2.5	4.7	<1.0	2.0	---	---	---
16	3.7	1.2	1.7	4.8	1.4	1.8	5.2	<1.0	2.0	---	---	---
17	1.8	<1.0	1.2	2.4	1.1	1.7	5.2	1.0	2.0	---	---	---
18	1.7	<1.0	1.1	2.3	1.2	1.7	11	<1.0	1.8	4.0	1.0	3.0
19	8.4	<1.0	<1.0	2.5	<1.0	<1.0	4.5	<1.0	1.8	3.6	<1.0	2.5
20	1.5	<1.0	<1.0	6.6	<1.0	<1.0	7.7	<1.0	1.4	4.0	1.2	3.0
21	3.1	<1.0	<1.0	11	<1.0	<1.0	4.3	<1.0	1.5	7.8	<1.0	2.6
22	1.8	<1.0	<1.0	2.2	<1.0	<1.0	5.6	<1.0	2.2	3.4	<1.0	2.1
23	3.3	<1.0	<1.0	2.3	<1.0	<1.0	---	---	---	4.3	<1.0	2.2
24	1.0	<1.0	<1.0	2.0	<1.0	<1.0	---	---	---	5.5	<1.0	1.4
25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	---	---	---	2.4	<1.0	1.2
26	1.6	<1.0	<1.0	1.0	<1.0	<1.0	---	---	---	2.3	<1.0	1.3
27	1.2	<1.0	<1.0	1.2	<1.0	<1.0	---	---	---	2.3	<1.0	1.3
28	1.2	<1.0	<1.0	1.0	<1.0	<1.0	---	---	---	4.4	<1.0	1.2
29	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	---	---	---	6.5	<1.0	1.0
30	1.8	<1.0	<1.0	1.5	<1.0	<1.0	---	---	---	8.8	<1.0	1.8
31	---	---	---	<1.0	<1.0	<1.0	---	---	---	---	---	---
MAX	---	---	---	11	1.9	2.5	---	---	---	---	---	---
MIN	---	---	---	1.0	1.0	1.0	---	---	---	---	---	---

< Actual value is known to be less than the value shown

12510500 YAKIMA RIVER AT KIONA, WA—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	289	283	287	262	259	261	228	218	223	221	218	219
2	289	282	286	263	260	262	234	227	230	224	220	221
3	286	279	283	262	260	261	236	233	234	226	223	225
4	281	272	277	275	258	262	239	235	236	229	226	228
5	281	271	274	273	240	252	243	239	241	233	229	230
6	290	281	284	240	230	233	246	242	243	240	233	236
7	295	288	291	234	229	232	246	244	245	253	240	248
8	299	293	296	236	233	235	247	243	245	253	246	251
9	300	294	297	243	236	240	248	245	247	256	246	253
10	298	291	295	245	243	244	250	245	247	248	230	237
11	293	287	290	245	243	244	249	244	246	231	226	229
12	287	282	284	251	245	248	245	231	240	230	227	228
13	283	278	281	253	251	252	231	162	192	233	229	232
14	291	282	285	255	252	254	162	149	154	238	233	236
15	295	289	292	256	254	255	168	153	160	243	235	239
16	299	294	296	256	254	255	179	168	173	240	236	238
17	296	281	288	258	256	257	185	179	182	244	239	242
18	281	263	269	259	256	257	191	185	188	251	243	247
19	274	263	268	260	257	259	196	191	193	254	240	250
20	290	274	284	260	257	259	201	196	198	241	101	157
21	287	267	274	261	259	260	206	201	203	104	99	100
22	267	256	262	260	258	259	208	205	207	127	103	111
23	256	249	252	262	258	260	210	207	208	134	112	120
24	255	253	255	266	260	262	211	208	209	134	123	130
25	255	253	254	266	258	263	212	210	211	140	129	132
26	256	254	255	260	256	258	215	212	213	151	132	139
27	257	254	256	257	248	253	216	214	215	179	138	153
28	256	254	255	248	227	239	216	215	215	161	143	149
29	259	255	258	229	220	224	217	214	216	161	146	154
30	258	256	257	221	218	220	219	216	217	170	158	163
31	259	255	258	---	---	---	220	218	219	205	167	184
MONTH	300	249	276	275	218	251	250	149	215	256	99	199
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	190	169	177	226	220	223	231	224	228	170	160	167
2	180	169	173	226	220	224	230	223	227	190	170	184
3	182	174	175	226	219	223	232	229	231	200	190	197
4	178	175	176	225	218	222	238	232	235	220	200	209
5	179	177	178	227	219	223	243	235	238	230	220	222
6	181	179	180	227	220	224	239	229	234	239	229	233
7	181	179	180	227	219	224	236	231	234	249	239	244
8	182	180	182	228	219	224	246	236	241	249	249	249
9	183	181	182	228	220	225	237	233	235	259	249	255
10	201	183	194	227	219	224	235	228	232	259	249	254
11	206	201	204	228	218	224	234	224	229	259	249	251
12	208	206	207	232	224	229	232	226	228	250	---	---
13	208	207	207	231	223	228	235	210	226	---	---	---
14	210	208	209	228	222	225	240	220	229	---	---	---
15	210	209	209	241	222	228	240	230	236	---	---	---
16	213	209	210	235	231	233	260	240	249	---	---	---
17	217	213	215	248	234	240	260	250	256	---	---	---
18	223	215	219	250	240	246	260	260	260	200	190	200
19	224	221	223	250	244	247	270	250	259	201	190	193
20	224	221	223	249	245	247	251	241	249	211	201	201
21	223	221	222	250	241	246	241	231	237	211	211	211
22	222	217	220	312	249	267	241	231	235	211	201	208
23	220	216	219	311	238	277	251	241	249	210	204	207
24	222	219	221	261	252	254	251	251	251	212	207	210
25	223	219	221	277	261	267	251	241	245	221	210	214
26	223	220	222	288	277	285	241	211	228	231	216	222
27	224	220	222	289	285	287	211	181	191	245	227	234
28	225	221	223	286	279	282	181	171	176	259	242	248
29	---	---	---	283	271	277	171	161	165	269	254	261
30	---	---	---	272	230	249	161	160	161	277	263	270
31	---	---	---	235	220	227	---	---	---	283	255	271
MONTH	225	169	203	312	218	242	270	160	230	---	---	---

YAKIMA RIVER BASIN

12510500 YAKIMA RIVER AT KIONA, WA—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	276	258	267	277	268	273	288	277	282	286	274	281
2	268	255	261	279	267	273	291	278	285	281	268	275
3	264	249	256	275	266	271	291	277	285	277	268	273
4	257	244	251	278	269	273	290	274	283	277	266	273
5	258	249	254	283	275	279	286	271	279	277	266	272
6	261	252	257	285	274	280	281	268	275	277	266	273
7	265	255	260	280	271	276	280	267	275	275	255	262
8	270	262	266	279	269	274	284	272	279	271	257	265
9	274	269	269	279	271	275	285	274	280	275	264	271
10	---	---	---	277	270	274	288	276	283	280	271	276
11	---	---	---	279	270	275	290	277	284	283	274	279
12	---	---	---	278	264	271	289	275	283	286	281	284
13	---	191	---	273	254	264	288	274	281	285	277	281
14	228	211	219	258	249	254	287	276	281	282	274	278
15	239	228	233	264	253	258	284	271	278	282	272	277
16	253	239	245	273	261	266	275	261	269	279	272	277
17	265	253	257	278	267	273	268	257	263	283	274	278
18	272	264	268	283	270	277	265	257	262	286	279	283
19	275	263	271	284	268	277	270	262	266	288	280	285
20	275	265	270	281	268	275	275	267	272	289	280	285
21	274	259	267	282	267	275	281	272	277	285	275	281
22	268	258	263	284	272	279	284	274	280	284	274	280
23	270	260	265	284	269	277	286	277	282	287	278	283
24	273	262	268	280	266	274	287	281	284	285	274	281
25	274	266	270	276	262	270	292	286	289	288	278	284
26	278	269	274	266	256	262	296	288	292	288	277	284
27	283	276	279	263	246	255	294	286	291	289	280	286
28	284	277	281	251	239	246	292	284	289	289	280	285
29	281	270	276	256	242	248	291	278	286	292	286	289
30	276	267	272	270	256	261	284	273	279	294	291	293
31	---	---	---	280	267	273	286	277	282	---	---	---
MONTH	---	---	---	285	239	270	296	257	280	294	255	279

12510500 YAKIMA RIVER AT KIONA, WA—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.9	8.0	8.4	8.3	8.0	8.1	8.4	7.9	8.1	8.2	8.0	8.1
2	8.9	8.0	8.4	8.2	8.0	8.1	8.4	7.9	8.1	8.2	7.9	8.1
3	8.8	8.0	8.3	8.4	8.0	8.2	8.2	7.9	8.1	8.2	8.0	8.1
4	8.9	8.0	8.3	8.4	8.0	8.2	8.2	7.9	8.0	8.4	8.0	8.2
5	8.9	8.0	8.4	8.3	8.0	8.2	8.4	7.9	8.2	8.4	8.0	8.1
6	8.8	8.0	8.3	8.4	8.0	8.1	8.4	7.9	8.1	8.3	8.0	8.1
7	8.9	8.0	8.4	8.3	8.0	8.1	8.3	7.9	8.1	8.3	7.9	8.1
8	8.9	8.0	8.4	8.4	8.0	8.1	8.4	7.9	8.1	8.3	8.0	8.2
9	8.8	8.0	8.4	8.2	8.0	8.1	8.3	7.9	8.1	8.3	8.0	8.2
10	8.8	8.0	8.3	8.3	7.9	8.1	8.2	7.9	8.0	8.4	8.0	8.1
11	8.8	8.0	8.3	8.4	8.0	8.1	8.3	7.8	8.1	8.4	8.0	8.1
12	8.8	8.0	8.3	8.2	8.0	8.0	8.1	7.9	8.0	8.4	8.0	8.2
13	8.8	8.0	8.3	8.2	7.9	8.1	7.9	7.8	7.8	8.5	8.0	8.2
14	8.8	8.0	8.3	8.3	7.9	8.1	8.0	7.7	7.8	8.4	8.0	8.2
15	8.7	8.0	8.2	8.2	8.0	8.1	8.1	7.9	7.9	8.4	8.0	8.2
16	8.2	8.0	8.0	8.3	7.9	8.1	8.1	7.9	8.0	8.4	8.0	8.2
17	8.2	7.9	8.0	8.4	7.9	8.1	8.1	7.9	8.0	8.4	8.0	8.2
18	8.3	7.9	8.1	8.4	7.9	8.2	8.0	7.9	8.0	8.4	8.0	8.2
19	8.1	7.9	7.9	8.4	8.0	8.2	8.2	7.9	8.0	8.4	8.0	8.2
20	8.2	7.9	8.0	8.5	8.0	8.2	8.2	7.9	8.0	8.1	7.5	7.7
21	8.0	7.8	7.9	8.5	8.0	8.3	8.2	8.0	8.1	7.6	7.5	7.5
22	8.0	7.8	7.9	8.5	8.0	8.3	8.3	8.0	8.1	7.6	7.5	7.6
23	8.1	7.9	8.0	8.5	8.0	8.3	8.3	8.0	8.1	7.7	7.6	7.6
24	8.2	7.9	8.0	8.4	8.0	8.2	8.3	8.0	8.1	7.7	7.5	7.7
25	8.2	7.9	8.1	8.5	8.0	8.2	8.2	8.0	8.1	7.7	7.6	7.7
26	8.1	7.9	8.0	8.5	8.0	8.2	8.3	8.0	8.1	7.8	7.6	7.7
27	8.3	7.9	8.0	8.3	8.0	8.2	8.3	8.0	8.1	7.8	7.7	7.8
28	8.4	8.1	8.2	8.5	8.0	8.2	8.2	8.0	8.1	7.9	7.7	7.8
29	8.3	8.0	8.1	8.4	8.0	8.2	8.3	8.0	8.1	7.9	7.8	7.8
30	8.3	8.0	8.1	8.4	8.0	8.2	8.2	8.0	8.1	7.9	7.8	7.9
31	8.4	8.0	8.1	---	---	---	8.3	8.0	8.1	8.0	7.8	7.9
MAX	8.9	8.1	8.4	8.5	8.0	8.3	8.4	8.0	8.2	8.5	8.0	8.2
MIN	8.0	7.8	7.9	8.2	7.9	8.0	7.9	7.7	7.8	7.6	7.5	7.5
	FEBRUARY			MARCH			APRIL			MAY		
1	8.0	7.9	7.9	8.9	8.2	8.5	9.0	8.2	8.7	8.9	7.8	8.2
2	8.0	7.9	7.9	9.0	8.2	8.5	9.1	8.2	8.7	8.7	7.8	8.1
3	8.0	7.9	8.0	9.1	8.2	8.6	9.1	8.3	8.8	9.0	7.8	8.4
4	8.0	7.9	8.0	9.1	8.3	8.6	9.1	8.2	8.8	9.0	7.8	8.3
5	8.1	8.0	8.0	9.2	8.3	8.7	9.2	8.2	8.9	8.9	7.8	8.3
6	8.1	8.0	8.0	9.2	8.3	8.7	9.3	8.4	9.0	9.1	7.9	8.5
7	8.2	8.0	8.0	9.2	8.3	8.7	9.3	8.6	9.1	9.3	8.0	8.7
8	8.2	8.0	8.0	9.2	8.3	8.7	9.4	8.5	9.1	9.2	8.1	8.6
9	8.2	8.0	8.0	9.2	8.3	8.7	9.4	8.4	9.1	9.2	8.0	8.7
10	8.2	8.0	8.1	9.2	8.3	8.7	9.5	8.6	9.2	9.1	8.2	8.6
11	8.2	8.0	8.1	9.2	8.3	8.6	9.4	8.5	9.2	8.7	8.0	8.3
12	8.2	8.1	8.1	9.2	8.3	8.7	9.4	8.6	9.2	---	8.0	---
13	8.2	8.0	8.1	9.2	8.3	8.6	9.4	8.6	9.1	---	---	---
14	8.3	8.1	8.1	9.2	8.3	8.6	9.4	8.7	9.1	---	---	---
15	8.3	8.1	8.2	9.2	8.3	8.6	9.4	8.7	9.1	---	---	---
16	8.3	8.1	8.2	8.9	8.2	8.4	9.2	8.5	8.9	---	---	---
17	8.3	8.1	8.2	9.0	8.2	8.5	9.2	8.3	8.9	8.9	---	---
18	8.4	8.1	8.2	9.0	8.2	8.4	9.0	8.4	8.8	8.9	7.8	8.2
19	8.4	8.1	8.2	8.8	8.1	8.3	9.0	8.2	8.8	9.2	7.8	8.6
20	8.4	8.1	8.2	8.9	8.1	8.4	9.0	8.3	8.7	9.1	7.9	8.6
21	8.5	8.1	8.3	8.9	8.2	8.5	9.0	8.3	8.7	9.0	8.0	8.6
22	8.5	8.2	8.3	8.9	8.0	8.4	8.8	8.2	8.6	9.3	7.9	8.8
23	8.6	8.2	8.3	9.0	7.9	8.6	8.6	7.8	8.2	9.4	8.1	8.9
24	8.6	8.2	8.3	9.0	8.4	8.6	8.4	7.7	8.1	9.4	8.1	9.0
25	8.7	8.2	8.3	9.0	8.4	8.6	8.6	7.7	8.2	9.6	8.2	9.1
26	8.8	8.2	8.4	8.8	8.2	8.4	8.5	7.8	8.1	9.6	8.3	9.2
27	8.8	8.2	8.4	8.9	8.2	8.5	8.4	7.7	8.1	9.5	8.4	9.2
28	8.8	8.2	8.3	8.9	8.2	8.6	8.5	7.7	8.0	9.5	8.4	9.2
29	---	---	---	8.9	8.2	8.7	8.2	7.7	7.9	9.6	8.6	9.3
30	---	---	---	8.8	8.2	8.6	8.6	7.8	8.1	9.7	8.7	9.4
31	---	---	---	9.0	8.1	8.7	---	---	---	9.7	8.8	9.3
MAX	8.8	8.2	8.4	9.2	8.4	8.7	9.5	8.7	9.2	---	---	---
MIN	8.0	7.9	7.9	8.8	7.9	8.3	8.2	7.7	7.9	---	---	---

YAKIMA RIVER BASIN

12510500 YAKIMA RIVER AT KIONA, WA—Continued

PH. WATER, UNFILTERED, FIELD, STANDARD UNITS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	9.6	9.0	9.3	9.3	8.2	8.9	9.3	8.1	8.7	9.1	7.9	8.5
2	9.7	9.0	9.4	9.4	8.3	9.0	9.5	8.1	8.9	9.0	7.9	8.4
3	9.7	8.9	9.3	9.4	8.4	9.0	9.6	8.2	9.0	8.9	7.8	8.3
4	9.6	8.7	9.2	9.4	8.4	9.0	9.6	8.2	9.0	9.0	7.8	8.5
5	9.3	8.3	8.9	9.3	8.4	8.9	9.6	8.2	9.0	9.1	7.9	8.5
6	9.3	8.1	8.8	9.3	8.3	8.8	9.5	8.1	8.9	9.0	8.0	8.5
7	9.4	8.0	8.9	9.3	8.3	8.9	9.5	8.1	8.9	8.9	7.9	8.4
8	9.2	8.2	8.8	9.3	8.3	8.8	9.5	8.1	8.8	9.0	7.9	8.4
9	9.1	7.9	8.6	9.2	8.1	8.7	9.5	8.0	8.8	8.9	7.9	8.3
10	---	---	---	9.2	8.1	8.8	9.1	8.0	8.7	8.9	8.0	8.4
11	---	---	---	9.3	8.2	8.8	9.1	7.9	8.6	9.0	8.0	8.6
12	---	---	---	9.2	8.2	8.8	9.2	7.9	8.6	8.9	8.1	8.5
13	9.1	---	---	9.3	8.1	9.0	9.2	7.9	8.6	8.8	8.0	8.4
14	9.1	7.8	8.4	9.4	8.2	9.0	9.1	7.9	8.6	8.9	8.0	8.4
15	9.3	7.9	8.8	9.4	8.2	8.7	9.1	7.9	8.6	8.9	8.0	8.4
16	9.2	8.1	8.7	9.5	8.2	9.0	9.1	7.8	8.5	8.8	8.0	8.3
17	9.3	8.1	8.9	9.5	8.4	9.1	8.9	7.8	8.3	8.9	7.9	8.3
18	9.3	8.4	8.9	9.5	8.4	9.1	9.1	7.7	8.4	9.0	8.0	8.5
19	9.3	8.3	9.0	9.5	8.4	9.1	9.1	7.8	8.5	8.9	8.0	8.4
20	9.4	8.4	9.0	9.6	8.4	9.2	9.1	7.8	8.6	8.9	8.0	8.4
21	9.4	8.3	8.9	9.6	8.5	9.2	9.1	7.9	8.6	9.0	8.0	8.4
22	9.3	8.2	9.0	9.4	8.3	9.0	9.1	7.8	8.6	9.0	8.0	8.4
23	9.5	8.3	9.1	9.6	8.4	9.2	9.2	7.9	8.6	9.0	8.0	8.5
24	9.5	8.4	9.1	9.7	8.5	9.2	9.1	8.0	8.6	9.0	8.1	8.5
25	9.3	8.5	9.1	9.7	8.6	9.2	9.1	8.1	8.6	9.1	8.1	8.5
26	9.6	8.4	9.1	9.6	8.6	9.1	9.1	8.1	8.6	9.0	8.1	8.4
27	9.2	8.5	8.9	9.7	8.3	9.1	9.1	8.1	8.6	9.1	8.0	8.4
28	9.1	8.3	8.7	9.7	8.2	9.1	9.0	8.0	8.5	9.1	8.1	8.5
29	9.3	8.2	8.9	9.6	8.2	8.9	9.2	8.0	8.6	8.5	8.0	8.2
30	9.3	8.2	8.9	9.5	8.1	8.9	9.2	8.0	8.6	8.2	7.8	7.9
31	---	---	---	9.5	8.1	8.8	9.1	8.0	8.6	---	---	---
MAX	---	---	---	9.7	8.6	9.2	9.6	8.2	9.0	9.1	8.1	8.6
MIN	---	---	---	9.2	8.1	8.7	8.9	7.7	8.3	8.2	7.8	7.9

12510500 YAKIMA RIVER AT KIONA, WA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	18.2	16.7	17.4	9.4	8.8	9.1	4.4	3.7	4.1	4.3	3.7	4.0
2	17.9	16.0	16.9	9.5	9.0	9.2	4.2	3.4	3.8	4.0	3.7	3.9
3	17.3	15.7	16.5	9.7	8.6	9.2	3.9	3.5	3.7	3.7	3.2	3.4
4	17.1	15.4	16.2	8.8	7.8	8.3	3.8	3.6	3.7	3.2	2.4	2.8
5	17.0	15.2	16.1	8.3	7.4	7.9	4.4	3.7	4.0	2.4	1.6	2.0
6	17.6	15.7	16.5	7.6	6.7	7.2	4.6	3.9	4.3	1.7	0.9	1.2
7	17.3	15.6	16.5	7.4	6.7	7.1	5.4	4.5	4.9	1.0	0.2	0.6
8	17.2	15.4	16.3	7.7	6.6	7.1	6.3	5.4	5.8	1.3	0.3	0.8
9	17.0	15.4	16.1	7.6	7.0	7.3	6.4	5.5	6.0	2.1	1.2	1.6
10	16.4	14.9	15.6	8.0	7.3	7.7	7.6	6.2	6.9	2.2	1.3	1.8
11	15.9	14.5	15.2	8.7	7.8	8.2	8.1	7.3	7.7	2.6	2.0	2.2
12	15.9	14.4	15.1	8.2	7.9	8.0	7.3	6.3	6.6	3.4	2.0	2.7
13	15.9	14.3	15.1	8.4	7.9	8.1	6.7	5.3	6.2	3.0	1.4	2.2
14	16.2	14.4	15.2	8.5	8.0	8.2	5.3	4.7	5.0	1.4	0.4	1.1
15	16.2	14.6	15.4	8.2	7.6	7.9	4.9	4.3	4.6	0.4	0.0	0.0
16	15.6	15.0	15.2	9.1	8.2	8.5	4.8	4.3	4.5	0.4	0.0	0.1
17	15.0	14.2	14.8	8.6	7.7	8.2	4.8	4.4	4.6	0.9	0.1	0.4
18	14.2	13.1	13.4	8.4	7.5	7.8	5.1	4.8	5.0	2.0	0.7	1.2
19	13.1	12.5	12.7	7.6	6.8	7.2	5.7	5.0	5.2	4.5	2.0	3.5
20	13.0	11.9	12.5	7.0	6.1	6.5	5.1	4.6	4.9	3.6	2.0	2.7
21	12.8	12.1	12.4	6.6	5.8	6.2	4.8	4.0	4.4	4.1	2.4	3.2
22	12.1	11.4	11.6	6.5	5.7	6.0	4.7	3.8	4.2	4.8	4.0	4.3
23	11.8	11.1	11.4	5.9	5.2	5.6	4.0	3.1	3.5	5.3	4.6	5.0
24	11.3	10.2	10.8	7.3	5.9	6.7	3.7	2.8	3.3	5.6	5.3	5.4
25	10.7	9.9	10.3	8.4	7.3	7.7	3.4	3.0	3.2	5.7	5.5	5.6
26	10.0	9.4	9.7	7.3	6.6	7.0	3.5	2.7	3.1	5.5	5.2	5.4
27	---	9.0	---	6.7	6.2	6.5	3.5	2.5	3.1	5.5	5.2	5.4
28	10.1	8.8	9.6	6.3	5.1	5.7	3.2	2.5	2.7	5.8	5.2	5.5
29	10.5	9.4	10.1	5.1	4.4	4.7	3.4	2.4	2.9	6.2	5.3	5.8
30	10.9	9.9	10.3	4.5	4.0	4.3	3.8	3.2	3.5	6.1	5.7	5.8
31	10.1	9.2	9.7	---	---	---	4.0	3.5	3.8	6.1	5.6	5.8
MONTH	---	8.8	---	9.7	4.0	7.3	8.1	2.4	4.5	6.2	0.0	3.1
	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.5	5.5	5.9	9.0	7.0	7.9	11.6	10.0	10.7	17.7	14.2	16.0
2	6.5	5.5	6.0	9.8	7.8	8.6	11.2	9.5	10.4	17.5	15.6	16.5
3	6.4	5.3	5.9	10.6	8.1	9.3	12.9	10.3	11.4	19.0	15.4	17.3
4	6.3	5.5	5.8	11.1	8.6	9.7	12.8	10.6	11.9	20.9	17.3	18.8
5	5.6	4.8	5.2	11.2	8.9	9.9	13.3	10.5	11.9	19.4	18.2	18.8
6	6.1	4.9	5.4	11.7	9.1	10.3	14.8	11.9	13.2	20.1	17.6	18.6
7	6.0	4.8	5.4	12.4	9.9	11.0	14.4	12.8	13.6	20.8	16.6	18.4
8	5.9	4.6	5.2	13.0	10.3	11.6	14.6	11.5	13.0	20.5	17.8	18.8
9	5.7	4.3	4.9	13.6	11.0	12.3	14.6	11.8	13.3	19.1	17.8	18.4
10	5.2	3.9	4.5	14.4	11.9	12.9	14.4	11.8	13.1	17.8	16.3	17.1
11	5.0	3.5	4.3	14.3	11.7	13.0	14.7	12.6	13.6	20.0	16.7	18.3
12	4.9	3.7	4.4	14.2	12.2	13.1	14.2	12.4	13.2	---	17.1	---
13	5.6	4.1	4.8	13.6	11.2	12.2	13.9	11.3	12.6	---	---	---
14	5.4	3.9	4.7	12.8	10.3	11.5	14.2	11.0	12.6	---	---	---
15	5.3	3.8	4.5	12.3	10.6	11.4	13.7	11.5	12.7	---	---	---
16	5.0	3.3	4.1	11.5	9.1	10.4	13.2	11.9	12.5	---	---	---
17	4.9	3.1	3.9	11.3	8.4	9.8	14.4	11.1	12.6	18.3	---	---
18	4.8	3.0	3.8	11.7	9.1	10.2	14.7	11.4	13.1	18.1	16.3	17.0
19	5.0	3.2	4.0	10.3	9.7	9.9	15.1	12.1	13.6	18.4	15.4	16.9
20	4.6	3.9	4.2	12.4	9.3	10.6	15.8	12.1	13.9	17.8	16.1	16.9
21	5.6	3.6	4.5	11.0	8.9	9.9	17.0	13.9	15.3	16.7	15.3	16.2
22	5.9	3.8	4.8	9.6	8.7	9.0	19.0	14.3	16.4	18.7	15.5	16.9
23	6.1	4.0	4.9	11.5	8.2	9.2	18.6	15.9	16.8	19.0	15.6	17.2
24	6.5	4.2	5.2	10.5	8.3	9.1	18.2	14.7	16.3	19.9	16.2	18.1
25	6.9	4.6	5.6	11.6	8.8	10.1	19.8	16.1	17.7	21.6	17.2	19.3
26	7.3	5.0	6.1	10.4	9.7	9.9	20.5	17.2	18.9	22.9	17.8	20.2
27	7.7	5.4	6.5	11.9	9.8	10.7	19.6	17.6	18.5	24.4	18.7	21.4
28	7.9	6.5	7.1	11.6	9.5	10.4	18.4	15.6	17.0	25.9	19.8	22.8
29	---	---	---	11.6	8.8	10.1	17.5	15.6	16.2	26.7	21.2	23.7
30	---	---	---	11.5	8.5	10.3	17.0	14.2	15.6	26.3	21.2	23.6
31	---	---	---	11.5	9.1	10.5	---	---	---	23.6	21.0	22.2
MONTH	7.9	3.0	5.1	14.4	7.0	10.5	20.5	9.5	14.1	---	---	---

YAKIMA RIVER BASIN

12510500 YAKIMA RIVER AT KIONA, WA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	22.6	20.1	21.3	25.9	23.0	24.4	27.3	25.6	26.3	23.4	20.7	22.0
2	22.3	19.4	20.7	25.1	22.6	23.9	26.3	24.0	25.3	22.5	20.9	21.7
3	23.2	19.1	21.0	25.5	21.9	23.7	25.8	23.2	24.6	21.6	20.3	21.0
4	23.3	19.5	21.3	26.1	22.5	24.3	25.9	22.8	24.4	20.8	19.4	20.2
5	21.0	18.6	19.8	26.3	23.4	24.9	26.6	23.4	25.0	20.9	18.5	19.8
6	19.5	16.9	18.2	25.0	23.3	24.1	27.4	24.3	25.8	20.8	18.4	19.7
7	20.6	16.2	18.5	25.6	22.3	23.9	27.3	24.6	26.1	21.2	18.7	19.9
8	21.7	17.8	19.6	24.4	21.8	23.1	27.4	24.7	26.1	21.7	19.2	20.4
9	22.1	18.9	20.4	23.5	21.5	22.4	27.7	24.8	26.3	20.8	18.9	19.7
10	---	---	---	23.1	20.8	21.8	26.9	24.6	25.9	19.1	17.8	18.5
11	---	---	---	24.9	21.1	22.9	26.1	23.8	25.1	18.9	17.2	18.1
12	---	---	---	25.8	22.3	24.0	26.0	22.9	24.6	19.2	17.5	18.4
13	22.2	---	---	25.6	23.2	24.4	25.1	23.0	24.1	20.0	17.9	18.9
14	21.6	19.8	20.6	26.1	22.7	24.4	24.8	21.9	23.4	20.3	18.0	19.1
15	22.6	18.8	20.7	---	---	---	25.1	22.2	23.7	20.2	18.2	19.2
16	22.1	19.5	20.7	26.1	23.7	24.9	25.4	23.0	24.2	19.4	18.1	18.7
17	22.1	18.6	20.3	26.5	23.5	25.1	24.4	22.5	23.5	19.5	17.7	18.5
18	22.2	18.4	20.3	26.7	23.6	25.2	25.0	22.6	23.8	19.4	17.3	18.3
19	23.4	19.0	21.2	27.7	24.3	26.0	25.0	22.2	23.6	19.5	17.2	18.3
20	24.9	20.6	22.7	27.8	24.8	26.3	25.1	22.1	23.6	19.4	17.4	18.4
21	25.5	22.2	23.6	27.8	24.8	26.3	25.8	22.7	24.3	18.8	16.9	17.8
22	24.0	21.6	22.9	26.9	25.2	26.0	25.9	23.8	24.9	18.2	16.3	17.3
23	24.6	20.8	22.7	26.9	24.1	25.5	24.8	23.1	23.9	18.2	16.7	17.3
24	25.1	21.4	23.2	26.8	24.2	25.6	23.6	21.3	22.6	17.7	15.6	16.6
25	24.9	22.7	23.8	26.5	24.0	25.3	23.6	20.7	22.2	17.3	15.2	16.2
26	25.3	22.5	23.7	26.6	23.7	25.2	23.8	20.7	22.3	17.6	15.2	16.3
27	22.8	20.8	21.5	27.0	23.8	25.5	24.2	21.5	22.9	17.8	15.7	16.6
28	21.5	20.4	21.1	27.1	24.3	25.8	24.5	21.8	23.2	18.0	15.8	16.7
29	24.4	19.9	22.0	27.4	24.7	26.1	23.2	21.2	22.3	16.8	15.9	16.4
30	26.0	22.1	24.0	28.0	24.9	26.5	22.4	20.3	21.4	17.5	16.7	17.1
31	---	---	---	28.1	25.4	26.8	22.9	20.1	21.5	---	---	---
MONTH	---	---	---	---	---	---	27.7	20.1	24.1	23.4	15.2	18.6

12510500 YAKIMA RIVER AT KIONA, WA—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.4	7.2	9.8	11.6	10.4	10.9	14.4	12.6	13.2	12.9	12.0	12.3
2	13.3	7.5	9.9	11.2	10.3	10.7	14.3	12.5	13.2	13.0	11.9	12.5
3	13.3	7.8	10.0	11.3	10	10.5	13.4	12.4	12.8	13.5	12.3	12.8
4	13.4	8.0	10.3	10.8	9.6	10.1	13.3	12.2	12.6	14.1	12.4	13.2
5	13.6	8.1	10.4	---	---	---	13.8	12.0	12.6	14.6	12.9	13.6
6	13.4	8.0	10.1	---	---	---	13.6	11.8	12.5	14.6	13.3	13.8
7	13.7	8.0	10.3	---	---	---	13.1	11.5	12.1	14.4	13.0	13.7
8	13.2	8.0	10	---	---	---	12.8	11.1	11.6	14.6	13.1	13.8
9	13.3	7.9	10.1	---	---	---	12.9	10.9	11.7	14.6	13.3	13.7
10	13.1	8.3	10.2	12.3	10.8	11.4	12.4	10.8	11.4	14.7	13.3	13.8
11	12.6	8.6	10.2	12.7	10.9	11.6	12.3	10.3	11.1	14.5	13.1	13.5
12	12.4	8.5	10.1	11.8	10.9	11.2	11.7	10.7	11.2	14.6	13.0	13.5
13	12.2	8.6	10.0	12.1	10.7	11.2	11.6	10.8	11.4	15.1	12.9	13.8
14	11.8	8.4	9.7	12.5	10.7	11.4	12.2	11.6	11.9	15.3	13.6	14.3
15	11.3	8.0	9.3	12.2	10.8	11.3	12.7	11.9	12.3	15.7	14.0	14.7
16	8.5	7.9	8.2	12.5	10.6	11.3	12.5	12.1	12.2	15.8	14.3	14.8
17	8.9	7.8	8.3	12.9	10.6	11.5	12.6	12.0	12.2	15.5	14.1	14.6
18	---	---	---	12.9	10.8	11.6	12.2	11.8	12.0	15.4	13.7	14.4
19	---	---	---	13.4	11.0	12.0	12.3	11.5	11.8	14.7	13.0	13.6
20	---	---	---	13.8	11.3	12.3	12.6	11.5	11.9	---	---	---
21	---	---	---	14.0	11.5	12.5	13.1	11.7	12.3	---	---	---
22	---	---	---	14.0	11.6	12.5	13.3	12.2	12.5	---	---	---
23	---	---	---	14.2	11.7	12.7	13.5	12.3	12.8	---	---	---
24	---	---	---	13.3	11.4	12.1	13.5	12.4	12.8	---	---	---
25	---	---	---	13.4	11.0	11.9	13.0	12.3	12.6	---	---	---
26	---	---	---	13.7	11.0	12.0	13.4	12.2	12.7	---	---	---
27	11.4	3.9	6.3	12.9	11.1	11.9	13.7	12.4	12.9	---	---	---
28	11.6	10.1	10.7	13.9	11.5	12.5	13.2	12.4	12.8	---	---	---
29	11.5	9.9	10.5	14.2	12.2	13.1	13.6	12.4	12.8	---	---	---
30	11.4	9.9	10.5	14.3	12.5	13.3	13.1	12.1	12.5	---	---	---
31	12.0	10.1	10.8	---	---	---	13.3	12.1	12.5	---	---	---
MONTH	---	---	---	---	---	---	14.4	10.3	12.3	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12.8	12.2	12.5	13.6	10.9	12.0	13.6	9.6	11.2	11.7	7.9	9.5
2	12.8	12.2	12.5	13.6	10.7	11.8	14.2	9.6	11.6	11.4	7.4	9.0
3	12.8	12.2	12.5	13.5	10.5	11.6	14.4	9.3	11.2	12.6	7.5	9.7
4	12.5	12.2	12.3	13.6	10.3	11.5	13.8	9.0	11.1	12.8	6.9	9.3
5	12.9	12.3	12.6	13.9	10.2	11.5	14.6	9.2	11.4	12.1	6.6	9.2
6	12.8	12.3	12.6	13.9	9.9	11.4	14.5	8.7	11.3	13.8	7.0	10
7	13.0	12.3	12.6	13.9	9.6	11.2	13.8	7.8	10.6	14.7	7.0	10.5
8	13.1	12.5	12.8	13.7	9.4	11.0	14.7	8.3	11.2	14.8	6.6	10
9	13.3	12.6	12.9	13.5	9.0	10.7	14.5	8.0	10.8	14.1	6.6	10.1
10	13.5	12.4	12.9	13.2	8.8	10.4	14.7	8.2	11.1	14.0	7.3	10.3
11	13.1	12.3	12.7	13.8	8.7	10.6	14.0	7.7	10.7	11.7	7.2	9.3
12	13.0	12.3	12.6	13.1	8.7	10.4	13.5	7.6	10.5	---	6.7	---
13	12.9	12.2	12.5	13.2	8.9	10.6	14.9	8.1	11.0	---	---	---
14	13.0	12.2	12.5	13.4	9.1	10.7	15.2	7.6	11.0	---	---	---
15	13.2	12.3	12.7	13.0	8.9	10.6	15.3	7.5	11.1	---	---	---
16	13.4	12.5	12.9	12.6	8.7	9.9	13.7	7.5	10.4	---	---	---
17	13.5	12.6	13.0	13.1	9.4	10.7	15.0	8.0	11.0	---	---	---
18	13.5	12.5	13.0	12.9	9.2	10.5	14.6	8.0	11.0	12.3	7.8	9.7
19	13.4	12.4	12.8	12.0	9.1	10.1	14.1	7.8	10.8	13.8	8.0	10.6
20	13.1	12.3	12.6	12.9	9.2	10.5	14.3	7.8	10.8	13.9	7.9	10.6
21	13.5	12.3	12.8	12.8	9.2	10.7	13.8	7.2	10.3	13.5	8.1	10.5
22	13.5	12.3	12.8	12.9	8.8	10.4	12.8	7.2	9.8	14.9	8.1	11.2
23	13.6	12.3	12.8	14.4	8.3	11.0	11.5	6.1	8.3	15.2	7.9	11.2
24	13.6	12.1	12.7	13.7	9.9	11.4	11.7	7.2	9.2	15.4	7.5	11.1
25	13.6	11.9	12.6	13.2	9.7	11.3	10.3	6.8	8.3	15.6	6.8	10.9
26	13.6	11.8	12.5	12.5	9.4	10.6	9.9	6.2	7.8	15.1	6.0	10.3
27	13.6	11.6	12.4	13.2	9.4	10.8	9.4	6.3	7.7	14.9	5.2	9.7
28	13.5	11.3	12.0	13.0	9.1	10.9	9.9	7.1	8.3	14.6	4.3	9.4
29	---	---	---	12.9	9.6	11.0	9.3	7.3	8.3	15.1	3.7	9.4
30	---	---	---	13.0	9.6	11.1	10.6	8.0	9.2	15.8	3.4	9.5
31	---	---	---	13.9	9.8	11.5	---	---	---	15.0	3.4	9.2
MONTH	13.6	11.3	12.6	14.4	8.3	10.9	15.3	6.1	10.2	---	---	---

YAKIMA RIVER BASIN

12510500 YAKIMA RIVER AT KIONA, WA—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	JUNE			JULY			AUGUST			SEPTEMBER		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.6	5.4	9.8	12.5	4.5	8.4	10.0	3.0	6.3	11.7	5.2	8.1			
2	14.9	5.7	10.2	12.4	4.6	8.5	11.2	3.7	7.2	11.1	5.1	7.9			
3	14.0	5.6	9.5	12.3	4.9	8.5	11.5	4.3	7.7	11.4	5.5	8.1			
4	12.8	4.9	8.6	11.9	4.6	8.2	11.6	4.5	7.8	11.9	5.8	8.6			
5	13.1	4.6	8.4	11.7	4.4	7.9	11.5	4.5	7.7	12.3	6.2	9.0			
6	14.3	5.8	9.4	11.1	4.2	7.6	11.4	4.0	7.5	12.2	6.3	9.1			
7	15.6	5.8	9.9	11.7	4.5	8.0	11.4	3.9	7.4	11.7	6.4	8.8			
8	14.4	6.1	9.9	11.5	4.7	7.6	11.5	3.9	7.4	12.2	6.2	8.9			
9	13.9	5.3	9.4	11.5	4.5	7.9	11.6	3.8	7.5	12.1	5.9	8.6			
10	---	---	---	11.8	5.2	8.5	11.3	4.0	7.3	12.2	6.8	9.2			
11	---	---	---	11.8	5.4	8.4	11.7	3.7	7.3	13.1	7.1	9.9			
12	---	---	---	11.3	4.8	8.0	11.9	4.0	7.5	11.6	7.2	9.1			
13	---	---	---	12.3	4.2	8.2	11.9	3.9	7.6	11.6	6.5	8.7			
14	13.4	5.6	9.0	12.0	5.0	8.4	11.8	4.5	7.9	11.8	6.4	8.8			
15	14.2	6.4	10.1	11.4	4.8	7.2	11.8	4.6	7.9	11.8	6.3	8.7			
16	13.9	6.1	9.7	11.5	4.1	7.6	11.5	4.5	7.8	11.3	6.2	8.2			
17	13.9	6.3	10.0	11.2	4.3	7.6	10.9	4.5	7.1	12.0	6.2	8.6			
18	13.9	6.8	10.1	10.9	4.3	7.4	11.9	4.7	8.1	12.1	6.4	8.9			
19	13.7	6.7	10.0	10.6	3.8	7.0	12.2	4.8	8.2	11.8	6.4	8.7			
20	---	---	---	10.6	3.7	7.0	12.3	5.0	8.4	11.6	6.3	8.6			
21	---	---	---	10.4	3.7	6.8	12.3	4.8	8.3	11.7	6.3	8.7			
22	---	---	---	9.4	3.0	5.9	11.7	4.3	8.0	11.7	6.4	8.6			
23	---	---	---	10.9	3.9	7.2	12.5	4.5	8.2	11.6	6.3	8.7			
24	---	---	---	10.9	4.2	7.3	9.6	5.2	7.3	11.7	6.6	8.8			
25	---	---	---	11.2	4.2	7.5	10.0	4.6	6.5	11.7	6.7	8.8			
26	---	---	---	10.5	4.3	7.3	9.8	4.5	6.6	11.4	6.6	8.7			
27	---	---	---	10.7	4.1	7.1	10.6	4.2	6.6	11.6	6.4	8.7			
28	---	---	---	10.8	3.9	7.1	10.7	4.3	6.8	11.8	6.8	8.9			
29	12.9	5.8	9.2	10.7	3.6	6.9	12.7	4.5	7.6	9.3	6.6	7.8			
30	12.3	4.8	8.4	10.6	3.3	6.7	11.8	5.2	8.2	8.9	6.6	7.5			
31	---	---	---	10.5	3.1	6.6	11.7	5.4	8.3	---	---	---			
MONTH	---	---	---	12.5	3.0	7.6	12.7	3.0	7.5	13.1	5.1	8.7			

12510500 YAKIMA RIVER AT KIONA, WA—Continued

CHLOROPHYLL, TOTAL, WATER, FLUOROMETRIC, 650-700 NANOMETERS, IN-SITU SENSOR, MICROGRAMS PER LITER
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	2.9	1.1	2.0	2.4	0.8	1.6	8.9	3.8	6.2	3.8	1.4	2.4
2	6.6	1.2	2.4	2.6	0.9	1.8	8.6	3.1	4.6	3.6	1.7	2.6
3	14	1.5	3.1	2.4	0.6	1.8	7.8	2.6	4.4	3.4	1.5	2.4
4	12	1.1	2.1	3.2	1.1	1.9	13	2.3	4.5	3.6	1.3	2.2
5	3.0	1.1	1.9	3.3	1.3	2.2	5.3	1.5	3.0	3.4	1.0	2.0
6	3.8	1.1	1.9	4.4	1.2	2.1	11	1.5	2.9	2.9	1.0	1.9
7	2.6	0.9	1.7	3.2	1.1	2.1	6.5	1.9	3.2	3.4	1.2	1.9
8	2.5	1.1	1.8	3.5	1.2	2.1	6.3	2.0	3.6	4.3	1.3	2.0
9	3.1	1.1	2.0	---	---	---	6.4	2.8	4.0	3.0	1.4	2.1
10	3.1	1.5	2.2	---	---	---	7.4	2.4	4.0	3.0	1.5	2.1
11	3.1	1.5	2.3	---	---	---	6.6	2.3	3.7	3.7	1.6	2.2
12	3.6	1.3	2.2	---	---	---	14	2.7	8.2	2.9	1.5	2.2
13	2.8	1.0	2.0	2.8	1.3	1.8	19	6.7	11	3.0	1.4	2.1
14	2.8	1.1	1.8	2.4	0.8	1.6	12	3.6	7.0	3.2	1.6	2.3
15	6.0	1.0	2.0	2.4	1.0	1.7	5.0	2.4	3.6	6.5	1.5	2.4
16	4.9	1.5	3.3	2.5	1.0	1.7	4.0	2.1	3.0	3.4	1.1	2.1
17	4.2	1.7	2.8	2.4	0.9	1.7	5.5	1.9	2.8	3.3	1.6	2.2
18	3.1	1.3	2.1	2.7	0.9	1.7	5.4	1.8	2.7	3.3	1.4	2.3
19	4.9	1.8	2.6	2.4	0.8	1.6	4.5	1.5	2.3	15	1.9	4.8
20	6.3	1.5	2.4	2.2	0.7	1.6	3.0	1.5	2.2	28	12	20
21	2.9	1.3	1.9	2.3	0.9	1.6	2.9	1.4	2.2	25	8.7	15
22	3.9	1.3	2.2	2.7	0.9	1.6	2.7	1.3	2.0	18	6.7	10
23	2.7	1.2	1.9	7.4	0.9	1.7	7.8	1.1	2.0	16	5.2	8.2
24	3.0	1.0	1.7	2.9	1.2	1.9	6.4	0.8	2.0	18	5.0	8.3
25	3.1	0.8	1.6	2.9	1.2	2.1	2.8	1.2	2.0	18	4.1	8.3
26	2.8	0.8	1.6	6.1	1.2	2.2	2.9	1.3	2.0	15	3.8	6.1
27	---	---	---	4.6	1.3	3.0	2.7	0.9	1.9	9.5	3.3	5.0
28	---	---	---	4.2	1.9	3.1	2.7	1.4	2.0	12	2.6	4.0
29	3.0	1.0	1.8	4.8	1.9	3.1	3.2	1.0	2.0	5.0	2.5	3.4
30	3.6	1.0	2.0	7.4	2.6	4.2	4.4	1.4	2.0	12	2.3	3.3
31	2.5	0.8	1.7	---	---	---	3.1	1.5	2.1	9.8	2.0	3.3
MONTH	---	---	---	---	---	---	19	0.8	3.5	28	1.0	4.5
	FEBRUARY			MARCH			APRIL			MAY		
1	4.1	1.6	2.8	3.9	1.3	2.2	10	3.0	5.2	5.8	1.5	3.5
2	4.3	1.4	2.3	3.9	1.4	2.4	7.6	2.9	4.3	5.3	1.4	3.8
3	11	1.3	2.5	4.0	1.5	2.5	9.0	2.7	4.9	4.9	1.1	3.3
4	5.3	1.5	2.3	3.6	1.8	2.6	12	4.7	6.4	4.5	1.1	3.0
5	5.5	1.0	2.1	4.0	1.5	2.6	11	2.7	5.2	4.4	1.7	3.2
6	3.9	1.0	1.9	6.6	1.3	2.5	8.3	2.0	4.2	4.5	1.6	3.1
7	2.5	1.0	1.8	4.3	2.0	2.8	11	3.9	6.6	5.0	1.4	3.1
8	2.4	1.0	1.7	8.2	2.0	3.1	13	3.1	6.5	5.5	2.1	3.6
9	4.6	0.8	1.7	7.1	2.5	3.5	24	5.2	8.4	5.4	2.5	3.7
10	7.7	0.8	1.6	6.0	3.0	4.0	12	3.2	5.9	5.3	2.7	4.1
11	2.4	0.8	1.5	6.3	3.0	4.3	14	4.7	7.0	13	4.1	8.5
12	2.4	0.7	1.5	7.6	3.0	4.7	14	4.7	8.1	---	---	---
13	2.2	0.7	1.4	7.8	2.9	4.4	---	---	---	---	---	---
14	2.1	0.5	1.4	6.1	2.8	4.4	12	3.2	6.3	---	---	---
15	5.3	0.4	1.5	6.3	3.1	4.3	10	4.0	6.5	---	---	---
16	2.0	0.3	1.3	8.6	3.2	5.1	13	5.2	7.7	---	---	---
17	2.0	0.4	1.3	6.3	2.4	3.8	12	3.5	6.5	---	---	---
18	2.2	0.4	1.3	6.4	2.0	3.5	10	3.1	6.5	6.1	1.9	4.2
19	2.1	0.4	1.2	5.6	2.6	3.6	11	3.0	6.8	6.0	1.5	3.8
20	2.3	0.7	1.4	6.8	2.2	3.3	9.0	2.5	6.0	6.1	2.2	3.6
21	2.3	0.4	1.4	8.5	1.9	3.1	9.4	3.3	6.3	5.5	1.6	3.7
22	2.2	0.5	1.4	5.7	0.4	3.0	10	2.7	6.3	5.0	1.7	3.3
23	6.4	0.5	1.5	4.2	1.3	2.7	9.6	3.5	6.7	9.1	1.7	3.2
24	4.9	0.4	1.5	3.4	1.4	2.4	8.4	3.6	6.2	4.5	2.1	3.3
25	2.5	0.5	1.5	3.4	0.9	2.4	12	3.6	7.0	4.9	1.4	3.1
26	2.4	0.9	1.7	3.6	1.9	2.7	18	6.5	9.9	4.6	2.1	3.1
27	2.8	0.8	1.8	3.9	1.6	2.8	11	5.5	8.3	4.8	1.6	3.4
28	4.3	1.3	2.5	5.6	1.7	3.5	9.9	5.7	8.0	4.9	2.3	3.5
29	---	---	---	8.7	3.6	5.5	9.8	5.6	7.3	5.6	2.6	3.7
30	---	---	---	10	3.1	7.0	7.9	3.4	5.3	5.9	2.3	4.1
31	---	---	---	9.2	3.4	5.5	---	---	---	6.0	3.0	4.5
MONTH	11	0.3	1.7	10	0.4	3.6	---	---	---	---	---	---

YAKIMA RIVER BASIN

12510500 YAKIMA RIVER AT KIONA, WA—Continued

CHLOROPHYLL, TOTAL, WATER, FLUOROMETRIC, 650-700 NANOMETERS, IN-SITU SENSOR, MICROGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.9	2.5	4.8	4.1	1.6	2.9	25	3.4	8.4	9.8	1.7	4.0
2	6.6	2.9	4.8	4.4	1.3	3.0	18	3.4	7.5	12	2.0	4.2
3	7.0	2.9	5.1	4.5	1.5	3.1	20	3.4	7.2	14	2.0	4.3
4	7.5	3.4	5.3	4.2	1.5	3.2	19	3.1	7.2	8.5	1.6	3.5
5	7.3	3.4	5.0	4.8	2.0	3.3	13	2.9	6.0	6.8	1.6	3.2
6	6.1	3.2	4.6	4.5	2.1	3.3	14	2.3	6.2	12	1.8	4.0
7	11	3.0	4.4	4.3	2.2	3.2	15	2.7	6.1	14	1.9	5.6
8	8.6	3.5	5.6	4.8	2.0	3.3	16	2.7	6.5	20	1.5	3.8
9	---	---	---	4.4	2.0	3.1	18	2.7	6.5	7.3	1.7	3.4
10	---	---	---	4.4	1.9	3.3	19	2.2	6.0	7.0	1.3	3.1
11	---	---	---	4.2	2.0	3.1	11	2.5	5.0	8.4	1.5	3.0
12	---	---	---	10	1.9	3.2	11	1.7	4.9	10	2.2	4.8
13	---	---	---	4.1	1.9	2.9	13	2.1	5.2	15	2.7	5.5
14	5.4	2.3	3.8	4.3	1.9	3.0	18	2.7	6.0	18	2.0	4.3
15	5.1	2.0	3.6	---	---	---	12	2.6	5.2	9.2	1.4	3.6
16	4.9	2.4	3.7	4.4	2.3	3.2	12	2.3	4.8	9.5	1.6	3.7
17	5.2	2.1	3.6	4.8	2.1	3.3	13	2.2	4.9	9.2	1.4	3.3
18	5.2	2.1	3.8	4.5	2.0	3.4	7.8	1.8	3.8	9.2	1.8	3.8
19	5.2	2.0	3.7	4.6	2.1	3.3	6.9	2.3	3.8	11	2.2	4.1
20	5.0	2.2	3.5	6.5	1.8	3.4	8.4	2.1	4.2	11	1.9	4.7
21	5.3	1.9	3.5	7.0	2.5	3.4	10	1.7	4.4	10	2.1	4.2
22	5.1	2.0	3.5	5.8	2.5	3.5	11	1.2	4.7	15	1.7	3.9
23	5.3	2.1	3.4	4.7	2.2	3.2	13	2.3	4.9	9.8	2.5	4.2
24	4.3	1.8	3.1	6.7	2.0	3.4	12	1.8	4.9	15	1.8	4.0
25	4.8	1.8	3.4	9.7	2.0	3.5	12	1.3	3.5	8.9	2.3	3.9
26	4.3	1.9	3.3	6.8	1.7	3.8	10	1.6	3.7	13	2.3	4.4
27	7.1	2.5	3.7	7.4	2.5	4.2	7.4	1.6	3.6	12	2.4	4.2
28	4.6	1.9	3.3	6.9	3.2	4.8	9.7	1.7	3.5	11	2.2	4.3
29	4.6	1.4	3.0	15	3.2	6.9	15	2.0	3.8	12	2.1	5.1
30	4.1	1.1	2.9	19	3.5	8.4	16	2.2	4.9	12	2.3	5.1
31	---	---	---	19	3.4	8.1	12	2.2	4.5	---	---	---
MONTH	---	---	---	---	---	---	25	1.2	5.2	20	1.3	4.1

12510500 YAKIMA RIVER AT KIONA, WA—Continued

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/- 2.5 DEGREES, FNU
 WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	3.0	1.3	2.2	5.2	1.0	1.8	16	2.0	4.6	2.3	1.1	1.4
2	4.5	1.6	2.4	3.7	<1.0	1.8	3.7	1.4	2.4	6.5	1.3	1.8
3	6.3	2.1	3.5	5.4	<1.0	2.8	2.7	1.1	1.5	3.7	1.3	1.8
4	4.8	1.7	2.8	4.9	1.5	3.0	7.5	<1.0	1.4	11	1.2	1.8
5	3.0	1.5	2.4	6.6	3.3	4.7	1.7	<1.0	1.2	3.7	1.1	1.6
6	11	1.6	2.3	5.3	2.1	3.0	1.8	<1.0	1.1	5.5	1.3	1.8
7	4.9	1.0	1.9	4.1	1.4	2.4	11	<1.0	1.2	6.8	1.6	1.9
8	2.9	1.2	2.0	5.9	1.3	2.2	3.3	1.0	2.0	5.0	2.0	2.4
9	5.8	1.5	2.6	6.6	1.2	2.5	3.7	1.0	2.2	7.6	2.0	2.4
10	5.0	1.8	2.9	4.0	1.4	2.8	4.5	1.1	2.4	3.7	1.7	2.3
11	5.7	2.1	3.7	4.9	1.7	3.5	4.5	1.6	3.1	3.4	1.8	2.1
12	11	2.2	3.6	9.8	1.2	2.3	36	3.9	10	4.1	2.4	2.7
13	4.3	1.7	3.1	3.7	<1.0	1.1	34	20	25	4.8	2.0	2.5
14	10	1.6	2.6	1.9	<1.0	<1.0	27	9.5	18	4.2	2.5	3.0
15	5.2	1.5	2.6	3.4	<1.0	<1.0	11	5.0	7.1	4.4	2.5	2.9
16	11	4.1	6.8	2.5	<1.0	1.0	6.2	3.9	4.8	5.6	2.4	2.8
17	9.2	3.3	5.2	3.9	<1.0	1.9	7.2	3.0	3.8	12	2.6	3.0
18	9.8	2.6	3.4	3.1	<1.0	1.8	9.7	2.7	3.5	4.1	2.9	3.3
19	8.5	3.6	6.5	2.9	<1.0	1.1	11	2.4	3.2	34	3.3	4.4
20	9.0	3.6	5.8	1.5	<1.0	<1.0	4.8	2.8	3.4	>250	---	---
21	7.3	2.8	4.3	3.4	<1.0	<1.0	12	1.6	2.6	---	---	---
22	13	3.6	6.4	1.7	<1.0	<1.0	9.0	1.4	2.0	---	---	---
23	16	5.1	6.2	1.6	<1.0	<1.0	3.0	1.5	2.0	---	---	---
24	10	4.3	5.7	2.6	<1.0	<1.0	7.9	1.5	1.9	---	---	---
25	9.0	3.9	5.0	5.0	<1.0	2.2	2.3	1.3	1.7	---	---	---
26	8.3	4.3	5.3	12	<1.0	2.1	4.9	1.0	1.6	---	---	---
27	6.9	1.9	5.4	4.7	1.8	2.5	2.5	1.0	1.4	---	---	---
28	5.3	1.5	3.3	6.5	1.9	2.7	2.6	<1.0	1.3	---	---	---
29	7.4	2.8	4.7	6.5	1.8	2.4	9.2	1.0	1.4	---	---	---
30	11	3.5	5.8	7.8	1.4	2.7	2.0	1.1	1.4	---	---	---
31	6.1	1.4	2.6	---	---	---	4.4	1.0	1.4	---	---	---
MAX	16	5.1	6.8	12	3.3	4.7	36	20	25	---	---	---
MIN	2.9	1.0	1.9	1.5	1.0	1.0	1.7	1.0	1.1	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	8.5	<1.0	2.1	7.7	1.1	3.2	7.7	<1.0	3.5
2	---	---	---	11	<1.0	2.2	4.0	<1.0	1.9	8.1	1.8	4.0
3	---	---	---	11	1.2	2.5	6.8	<1.0	2.5	5.7	<1.0	1.6
4	---	---	---	9.7	1.9	3.6	6.8	1.9	4.5	7.0	<1.0	1.5
5	---	---	---	---	---	---	7.6	<1.0	2.2	5.0	<1.0	<1.0
6	---	---	---	---	---	---	4.1	<1.0	1.7	14	<1.0	<1.0
7	---	---	---	---	---	---	5.6	<1.0	2.9	9.7	<1.0	1.1
8	---	---	---	---	---	---	5.1	<1.0	2.2	7.0	<1.0	<1.0
9	---	---	---	---	---	---	6.0	1.7	3.5	2.6	<1.0	<1.0
10	---	---	---	---	---	---	6.5	<1.0	2.7	2.9	<1.0	<1.0
11	3.3	1.5	2.0	---	---	---	6.5	1.0	3.2	18	2.1	8.4
12	3.5	1.2	1.6	10	<1.0	2.9	14	<1.0	3.8	---	---	---
13	2.7	1.1	1.5	11	<1.0	1.6	11	<1.0	1.4	---	---	---
14	3.7	1.6	2.0	11	<1.0	2.1	3.4	<1.0	<1.0	---	---	---
15	5.0	1.4	2.1	9.2	<1.0	2.5	2.2	<1.0	<1.0	---	---	---
16	3.2	1.3	2.0	14	<1.0	2.5	2.2	<1.0	<1.0	---	---	---
17	10	<1.0	1.6	6.8	<1.0	1.6	5.2	<1.0	<1.0	---	---	---
18	12	<1.0	2.0	9.9	<1.0	1.6	3.5	<1.0	1.2	16	2.1	4.7
19	8.4	<1.0	1.9	11	<1.0	1.5	4.9	<1.0	1.8	9.2	<1.0	3.0
20	6.0	<1.0	1.9	7.4	<1.0	1.9	2.7	<1.0	<1.0	6.0	<1.0	2.4
21	9.6	<1.0	2.0	8.8	<1.0	1.3	1.3	<1.0	<1.0	5.6	<1.0	2.0
22	13	<1.0	1.7	16	<1.0	1.5	7.1	<1.0	<1.0	4.9	<1.0	1.3
23	14	<1.0	1.7	7.1	<1.0	<1.0	<1.0	<1.0	<1.0	3.8	<1.0	<1.0
24	8.3	<1.0	1.4	1.5	<1.0	<1.0	2.4	<1.0	1.0	1.0	<1.0	<1.0
25	6.4	<1.0	1.3	<1.0	<1.0	<1.0	59	2.2	4.0	1.4	<1.0	<1.0
26	12	<1.0	1.3	<1.0	<1.0	<1.0	45	8.6	13	<1.0	<1.0	<1.0
27	10	<1.0	1.4	1.8	<1.0	<1.0	15	9.0	12	<1.0	<1.0	<1.0
28	11	<1.0	1.1	7.2	<1.0	1.3	14	11	13	<1.0	<1.0	<1.0
29	---	---	---	12	3.2	5.6	13	9.4	11	<1.0	<1.0	<1.0
30	---	---	---	16	3.8	6.6	11	4.6	6.5	<1.0	<1.0	<1.0
31	---	---	---	10	2.1	4.7	---	---	---	<1.0	<1.0	<1.0
MAX	---	---	---	---	---	---	59	11	13	---	---	---
MIN	---	---	---	---	---	---	1.0	1.0	1.0	---	---	---

YAKIMA RIVER BASIN

12510500 YAKIMA RIVER AT KIONA, WA—Continued

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/- 2.5 DEGREES, FNU—
CONTINUED

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	1.0	<1.0	<1.0	1.0	<1.0	<1.0
2	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	1.6	<1.0	<1.0	4.0	<1.0	<1.0
3	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	5.2	<1.0	<1.0	3.3	<1.0	<1.0
4	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	4.9	<1.0	<1.0	2.6	<1.0	<1.0
5	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	1.4	<1.0	<1.0	3.7	<1.0	<1.0
6	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	1.2	<1.0	<1.0	2.6	<1.0	<1.0
7	1.9	<1.0	<1.0	1.3	<1.0	<1.0	1.3	<1.0	<1.0	7.6	<1.0	1.9
8	2.6	<1.0	<1.0	1.2	<1.0	<1.0	7.2	<1.0	<1.0	1.9	<1.0	<1.0
9	---	---	---	1.2	<1.0	<1.0	2.0	<1.0	<1.0	3.9	<1.0	<1.0
10	---	---	---	1.3	<1.0	<1.0	12	<1.0	<1.0	7.9	<1.0	<1.0
11	---	---	---	1.3	<1.0	<1.0	3.9	<1.0	<1.0	7.7	<1.0	<1.0
12	---	---	---	1.4	<1.0	<1.0	2.4	<1.0	<1.0	11	<1.0	2.2
13	---	---	---	1.3	<1.0	<1.0	3.4	<1.0	<1.0	3.7	<1.0	1.7
14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	10	<1.0	<1.0	3.7	<1.0	<1.0
15	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.2	<1.0	1.2	<1.0	<1.0	<1.0
16	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	15	<1.0	1.2	1.8	<1.0	<1.0
17	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	8.1	<1.0	<1.0	4.4	<1.0	<1.0
18	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.9	<1.0	<1.0	5.4	<1.0	<1.0
19	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	3.8	<1.0	<1.0	6.2	<1.0	<1.0
20	6.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.2	<1.0	<1.0	2.7	<1.0	1.2
21	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	3.8	<1.0	<1.0	3.6	<1.0	<1.0
22	<1.0	<1.0	<1.0	1.0	<1.0	<1.0	9.4	<1.0	<1.0	4.6	<1.0	<1.0
23	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.8	<1.0	<1.0	2.0	<1.0	<1.0
24	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	12	<1.0	<1.0	2.9	<1.0	<1.0
25	<1.0	<1.0	<1.0	1.0	<1.0	<1.0	4.4	<1.0	<1.0	1.9	<1.0	<1.0
26	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	8.4	<1.0	<1.0	4.4	<1.0	<1.0
27	<1.0	<1.0	<1.0	1.8	<1.0	<1.0	3.1	<1.0	<1.0	5.0	<1.0	<1.0
28	1.1	<1.0	<1.0	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	4.4	<1.0	<1.0
29	1.1	<1.0	<1.0	2.8	<1.0	<1.0	1.4	<1.0	<1.0	7.3	<1.0	<1.0
30	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	3.0	<1.0	<1.0	5.9	<1.0	1.2
31	---	---	---	<1.0	<1.0	<1.0	3.0	<1.0	<1.0	---	---	---
MAX	---	---	---	2.8	1.0	1.0	15	1.0	1.2	11	1.0	2.2
MIN	---	---	---	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

> Actual value is known to be greater than the value shown
 < Actual value is known to be less than the value shown

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Station number	Time	Instantaneous discharge, cfs (00061)	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 uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)
OCT 19...	12510500	0850	2,820	738	9.1	88	7.8	266	7.3	12.6	106	129
DEC 13...	12510500	1010	4,800	757	11.4	93	8.0	185	12.3	6.2	72	88
FEB 14...	12510500	1100	2,490	755	13.3	104	7.8	201	7.0	4.4	71	87
MAY 17...	12510500	1040	2,260	743	9.5	101	7.8	195	21.1	16.9	80	97
JUN 15...	12510500	0850	941	750	8.3	91	8.3	237	22.3	19.0	90	110
AUG 15...	12510500	1010	1,120	747	10.6	125	8.2	279	21.7	22.7	114	138

12510500 YAKIMA RIVER AT KIONA, WA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	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 nitrogen, wat unfltrd, mg/L (62855)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)	2,6-Diethyl-aniline water fltrd 0.7u GF ug/L (82660)	2Chloro-2',6'-diethyl acet-anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)
OCT 19...	.0	6.45	14.0	.05	1.42	.016	1.89	.120	.178	<.09	<.006	<.005	E.005
DEC 13...	.0	4.86	8.7	E.02	.87	.009	1.45	.053	.185	<.09	<.006	<.005	E.008
FEB 14...	.0	5.46	10.3	<.04	.97	.008	1.06	.080	.104	<.09	<.006	<.005	<.006
MAY 17...	.0	4.52	9.8	<.04	.86	.021	1.20	.113	.163	M	<.006	<.005	E.006
JUN 15...	.0	5.56	13.4	<.04	.73	.021	1.01	.068	.105	<.09	<.006	<.005	E.007
AUG 15...	.0	6.87	15.2	<.04	.66	E.004	.98	.132	.179	<.09	<.006	<.005	E.009

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	2-Ethyl-6-methyl-aniline water, fltrd, ug/L (61620)	3,4-Di-chloro-aniline water, fltrd, ug/L (61625)	3,5-Di-chloro-aniline water, fltrd, ug/L (61627)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-Endo-sulfan, water, fltrd, ug/L (34362)	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)
OCT 19...	<.004	<.004	--	<.006	<.006	<.005	--	101	E.006	<.07	<.050	<.010	<.041
DEC 13...	<.004	<.004	--	<.006	<.006	<.005	--	79.8	.007	<.07	<.050	<.010	<.041
FEB 14...	<.004	<.004	--	<.006	<.006	<.005	--	85.6	<.007	<.07	<.050	<.010	<.041
MAY 17...	<.004	E.003	--	<.006	.010	.007	--	105	.009	<.07	E.020	<.010	E.008
JUN 15...	<.004	<.004	<.004	<.006	<.006	<.005	<.005	107	.008	<.07	E.011	<.010	E.011
AUG 15...	<.004	<.004	<.004	<.006	<.010	<.005	<.005	97.9	.008	<.07	E.013	<.010	<.041

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	Chlor-pyrifos oxon, water, fltrd, ug/L (61636)	Chloro-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)	cis-Propi-cona-zole, water, fltrd, ug/L (79846)	Cyana-zine, water, fltrd, ug/L (04041)	Cyflu-thrin, water, fltrd, ug/L (61585)	lambda-Cyhalo-thrin, water, fltrd, ug/L (61595)	Cyper-methrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non oxon, water, fltrd, ug/L (61638)	Diazi-non, water, fltrd, ug/L (39572)
OCT 19...	--	<.06	E.004	<.006	--	--	<.008	--	<.009	<.003	<.012	<.01	<.005
DEC 13...	--	<.06	<.005	<.006	--	--	<.008	--	<.009	<.003	<.012	<.01	<.005
FEB 14...	--	<.06	<.005	<.006	--	--	<.027	--	<.009	E.003	<.012	<.01	<.005
MAY 17...	--	<.06	E.005	<.006	--	--	<.027	--	<.009	<.003	<.012	<.01	.008
JUN 15...	<.020	<.06	<.005	<.006	<.008	<.018	<.027	<.009	<.009	E.002	<.012	--	<.005
AUG 15...	<.020	<.06	<.005	<.006	<.008	<.018	<.027	<.009	<.009	<.005	<.012	--	<.005

12510500 YAKIMA RIVER AT KIONA, WA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Diazi- non-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicro- tophos, water fltrd, ug/L (38454)	Diel- drin, water, fltrd, ug/L (39381)	Dimeth- oate, water, fltrd 0.7u GF ug/L (82662)	Disulf- oton sulfone water, fltrd, ug/L (61640)	Disul- foton, water, fltrd 0.7u GF ug/L (82677)	Endo- sulfan sulfate water, fltrd, ug/L (61590)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Fenami- phos sulfone water, fltrd, ug/L (61645)	Fenami- phos sulf- oxide, water, fltrd, ug/L (61646)
OCT 19...	87.2	<.08	<.009	<.006	--	--	--	--	<.0020	<.004	--	<.049	<.04
DEC 13...	58.5	<.08	<.009	<.006	--	--	--	--	<.0020	<.004	--	<.049	<.04
FEB 14...	96.1	<.08	<.009	<.006	--	--	--	--	<.0020	<.004	--	<.049	<.04
MAY 17...	110	<.08	<.009	<.006	--	--	--	--	<.0020	<.004	--	<.049	<.04
JUN 15...	111	<.08	<.009	<.006	<.01	<.02	<.014	<.004	<.002	<.004	<.005	<.049	<.04
AUG 15...	101	<.08	<.009	<.006	<.01	<.02	<.014	<.004	<.002	<.004	<.005	<.049	<.04

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Fenami- phos, water, fltrd, ug/L (61591)	Desulf- inyl- fipro- nil amide, wat flt ug/L (62169)	Fipro- nil sulfide water, fltrd, ug/L (62167)	Fipro- nil sulfone water, fltrd, ug/L (62168)	Fipro- nil, water, fltrd, ug/L (62166)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexa- zinone, water, fltrd, ug/L (04025)	Ipro- dione, water, fltrd, ug/L (61593)	Isofen- phos, water, fltrd, ug/L (61594)	Malax- on, water, fltrd, ug/L (61652)	Malax- on, water, fltrd, ug/L (39532)	Meta- laxyl, water, fltrd, ug/L (61596)
OCT 19...	<.03	<.029	<.013	<.024	<.016	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005
DEC 13...	<.03	<.029	<.013	<.024	<.016	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005
FEB 14...	<.03	<.029	<.013	<.024	<.016	--	<.003	<.013	<.538	<.003	<.030	<.027	<.005
MAY 17...	<.03	<.029	<.013	<.024	<.016	--	<.003	<.013	<.538	<.003	<.030	<.027	<.005
JUN 15...	<.03	<.029	<.013	<.024	<.016	--	<.003	<.013	<.538	<.003	<.030	<.027	<.005
AUG 15...	<.03	<.029	<.013	<.024	<.016	--	<.003	<.013	<.538	<.003	<.030	<.027	<.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Methi- althion water, fltrd, ug/L (61598)	Methyl para- oxon, water, fltrd, ug/L (61664)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Myclo- butanil water, fltrd, ug/L (61599)	Oxy- fluor- fen, water, fltrd, ug/L (61600)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)
OCT 19...	<.006	<.03	<.015	<.006	<.006	--	<.008	--	<.022	<.10	<.011	<.05	<.008
DEC 13...	<.006	<.03	<.015	<.006	<.006	--	<.008	--	<.022	<.10	<.011	<.05	<.008
FEB 14...	<.006	<.03	<.015	<.006	<.006	--	<.008	--	<.022	<.10	<.011	<.05	<.008
MAY 17...	<.006	<.03	<.015	E.002	<.006	--	E.007	--	<.022	<.10	<.011	<.05	<.008
JUN 15...	<.006	<.03	<.015	<.006	<.006	<.003	E.006	<.007	<.022	<.10	<.011	--	--
AUG 15...	<.006	<.03	<.015	<.006	<.006	<.003	<.010	<.007	<.022	<.10	<.011	<.05	<.008

12510500 YAKIMA RIVER AT KIONA, WA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propyzamide, water, fltrd, 0.7u GF ug/L (82676)	Propanil, water, fltrd, 0.7u GF ug/L (82679)	Propargite, water, fltrd, 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebu-thiuron water fltrd, 0.7u GF ug/L (82670)	Teflu-thrin, water, fltrd, ug/L (61606)	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbufos, water, fltrd, 0.7u GF ug/L (82675)	Terbutylazine, water, fltrd, ug/L (04022)	Thiobencarb water fltrd, 0.7u GF ug/L (82681)	trans-Propiconazole, water, fltrd, ug/L (79847)
OCT 19...	<.01	<.005	<.004	--	--	<.005	<.02	--	<.07	<.02	<.01	--	--
DEC 13...	<.01	<.005	<.004	--	--	<.005	<.02	--	<.07	<.02	<.01	--	--
FEB 14...	<.05	<.005	<.004	--	--	<.005	<.02	--	<.07	<.02	<.01	--	--
MAY 17...	.02	<.005	<.004	--	--	.008	<.02	--	<.07	<.02	<.01	--	--
JUN 15...	<.01	<.005	<.004	<.011	<.02	E.006	<.02	<.008	<.07	<.02	<.01	<.010	<.01
AUG 15...	<.03	<.005	<.004	<.011	<.02	E.007	<.02	<.008	<.07	<.02	<.01	<.010	<.01

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Tribu-phos, water, fltrd, ug/L (61610)	Tri-fluor-alin, water, fltrd, 0.7u GF ug/L (82661)	Di-chlor-vo, water fltrd, ug/L (38775)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment dis-charge, tons/d (80155)
OCT 19...	--	<.009	<.01	23	175
DEC 13...	--	<.009	<.01	71	920
FEB 14...	--	<.009	<.01	7	47
MAY 17...	--	<.009	<.01	16	98
JUN 15...	<.004	E.005	<.01	6	15
AUG 15...	<.004	.013	<.01	10	30

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Station number	Time	Biomass peri-phyton, ashfree drymass g/m2 (49954)	Peri-phyton biomass ash weight, g/m2 (00572)	Peri-phyton biomass dry weight, g/m2 (00573)	Pheo-phytin a, peri-phyton, mg/m2 (62359)	Chloro-phyll a peri-phyton, chromo-fluoro, mg/m2 (70957)
OCT 06...	12510500	1500	18.9	220	239.4	34	130

12513000 ESQUATZEL COULEE AT CONNELL, WA

LOCATION.--Lat 46°39'49", long 118°51'44", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.25, T.14 N., R.31 E., Franklin County, Hydrologic Unit 17020016, on right bank, at Clark Street Bridge in Connell, and 7.8 mi downstream from Hatton Coulee.

DRAINAGE AREA.--234 mi², approximately.

PERIOD OF RECORD.--October 1952 to current year. Records published for period August 1959 to September 1964 include effluent from sewage treatment plant 0.8 mi downstream; records adjusted to exclude effluent October 1964 to June 1967.

REVISED RECORDS.--WSP 1933: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 820 ft above NGVD of 1929, from topographic map. Prior to Aug. 7, 1959, at site 0.4 mi downstream at different datum, Aug. 7, 1959, to July 8, 1967, at site 0.9 mi downstream at different datum, July 9, 1967, to Oct. 28, 1981, at site 0.7 mi downstream at different datum, and Oct. 29, 1981, to Sept. 30, 1984 at datum 10 ft lower.

REMARKS.--No estimated daily discharges. Records poor. No diversion upstream from station. Most flow for October, and April through September is return and waste from water imported for irrigation, entering about 3 mi upstream on the right bank. U.S. Geological Survey satellite telemeter at gage.

AVERAGE DISCHARGE.--33 years (water years 1953-85), 1.73 ft³/s, 1,253 acre-ft/yr, adjusted for effluent from sewage treatment plant 1959-64. Average discharge is not computed after the 1985 water year because of ground-water withdrawals and return flows from irrigation occurring during the summer months upstream from the gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,560 ft³/s, Feb. 21, 1956, gage height, 12.68 ft, site and datum then in use; no flow at times during most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 477 ft³/s, Jan. 19, gage height, 15.28 ft; minimum discharge, no flow on most days November through March.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	0.00	0.00	0.00	0.00	0.00	5.0	3.9	4.9	9.0	3.1	6.6
2	3.0	0.00	0.00	0.00	0.00	0.00	8.9	2.3	3.0	10	7.0	3.0
3	5.9	0.00	0.00	0.00	0.00	0.00	5.3	4.8	2.3	4.6	5.6	2.9
4	5.3	0.00	0.00	0.00	0.00	0.00	2.9	4.3	1.1	1.6	4.1	3.5
5	2.8	0.00	0.00	0.00	0.00	0.00	4.2	1.8	2.2	3.5	4.1	5.4
6	2.7	0.00	0.00	0.00	0.00	0.00	8.1	2.6	5.6	5.6	3.8	4.0
7	7.2	0.00	0.00	0.00	0.00	0.00	7.5	2.4	0.73	6.3	2.8	4.6
8	5.5	0.00	0.00	0.00	0.00	0.00	4.5	6.4	1.9	4.9	2.1	2.2
9	3.8	0.00	0.00	0.00	0.00	0.00	4.0	5.1	1.9	8.9	2.8	2.7
10	4.8	0.00	0.00	0.00	0.00	0.00	2.9	9.2	2.4	12	3.9	5.9
11	4.7	0.00	0.00	0.00	0.00	0.00	3.7	13	1.5	13	5.3	11
12	3.2	0.00	0.00	0.00	0.00	0.00	7.0	9.3	4.0	8.3	5.3	13
13	5.7	0.00	0.00	0.00	0.00	0.00	8.7	4.5	7.5	5.4	4.9	7.0
14	4.3	0.00	0.00	0.00	0.00	0.00	5.2	10	5.4	8.3	3.5	5.3
15	5.0	0.00	0.00	0.00	0.00	0.00	3.2	5.3	4.2	9.6	2.2	8.4
16	5.4	0.00	0.00	0.00	0.00	0.00	2.1	5.4	8.0	6.1	3.5	6.9
17	5.5	0.00	0.00	0.00	0.00	0.00	3.1	4.8	17	9.0	6.0	3.5
18	7.3	0.00	0.00	0.00	0.00	0.00	1.8	3.8	11	10	5.4	8.5
19	7.4	0.00	0.00	108	0.00	0.00	6.7	6.0	12	8.1	7.0	7.4
20	7.7	0.00	0.00	157	0.00	0.37	2.5	3.9	9.6	7.6	9.3	3.9
21	8.4	0.00	0.00	62	0.00	0.26	2.0	3.3	3.8	14	5.7	3.3
22	5.3	0.00	0.00	21	0.00	0.18	1.7	3.1	2.2	9.1	6.4	4.6
23	4.0	0.00	0.00	1.5	0.00	0.10	1.4	17	1.8	4.9	8.4	10
24	6.9	0.00	0.00	0.46	0.00	0.00	5.6	6.8	0.58	1.2	6.7	7.1
25	8.2	0.00	0.00	0.00	0.00	0.00	5.5	2.3	0.56	3.5	3.9	9.4
26	2.4	0.00	0.00	0.00	0.00	0.34	0.79	2.4	2.2	7.6	4.5	5.8
27	0.12	0.00	0.00	0.00	0.00	1.6	0.42	2.4	11	5.6	6.5	6.0
28	0.04	0.00	0.00	0.00	0.00	3.4	0.80	3.8	24	3.8	4.0	7.5
29	0.00	0.00	0.00	0.00	---	6.6	1.0	2.3	9.8	4.7	6.6	5.3
30	0.00	0.00	0.00	0.00	---	5.8	11	0.84	5.7	2.4	6.4	9.6
31	0.00	---	0.00	0.00	---	8.0	---	0.35	---	2.5	5.2	---
TOTAL	133.96	0.00	0.00	349.96	0.00	26.65	127.51	153.39	167.87	211.1	156.0	184.3
MEAN	4.32	0.00	0.00	11.3	0.00	0.86	4.25	4.95	5.60	6.81	5.03	6.14
MAX	8.4	0.00	0.00	157	0.00	8.0	11	17	24	14	9.3	13
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.35	0.56	1.2	2.1	2.2
AC-FT	266	0.00	0.00	694	0.00	53	253	304	333	419	309	366
CAL YR	2004	TOTAL	1,421.09	MEAN	3.88	MAX	33	MIN	0.00	AC-FT	2,820	
WTR YR	2005	TOTAL	1,510.74	MEAN	4.14	MAX	157	MIN	0.00	AC-FT	3,000	

12514500 COLUMBIA RIVER ON CLOVER ISLAND, AT KENNEWICK, WA

LOCATION.--Lat 46°13'00", long 119°06'29", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.31, T.9 N., R.30 E., Benton County, Hydrologic Unit 17020016, on east end of U.S. Coast Guard wharf on south side of Clover Island, at the north city limit of Kennewick, 6.6 mi downstream from mouth of Yakima River, 4.4 mi upstream from mouth of Snake River, and at mile 328.6.

DRAINAGE AREA.--104,000 mi², approximately.

PERIOD OF RECORD.-- November 1987 to current year. Records for October 1963 to September 1966 (discharge) and October 1979 to February 1988 (elevations), published as Columbia River at Pasco (station 12514000) 1.4 mi upstream, are not equivalent for elevations because of fall between sites.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (Corps of Engineers' benchmark).

REMARKS.--Gage is within the pool formed by McNary Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 343.71 ft, June 13, 1997; minimum, 335.17 ft, Mar. 12, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 341.08 ft, May 28; minimum elevation, 337.12 ft, Aug. 3.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	338.20	338.89	338.87	339.03	339.50	337.93	338.85	339.72	339.64	339.68	339.71	339.79
2	338.78	338.38	338.89	338.76	339.12	338.39	339.41	339.02	339.90	339.31	339.31	339.83
3	338.97	338.65	339.05	338.07	339.19	338.69	339.01	338.94	339.89	339.23	337.67	339.44
4	338.15	338.67	339.34	337.81	339.31	339.24	338.84	339.01	339.29	339.43	337.41	338.93
5	337.66	338.61	339.48	337.92	339.59	338.63	339.51	339.34	339.05	339.07	337.87	338.46
6	337.82	338.99	338.93	337.90	339.25	338.49	339.83	339.58	339.01	337.97	338.11	338.21
7	338.48	339.04	339.33	338.31	338.63	338.43	339.48	339.69	338.34	338.03	338.15	338.89
8	338.37	338.63	339.71	338.47	338.57	338.22	339.28	339.47	338.75	338.79	338.02	339.62
9	337.87	338.60	338.85	338.32	339.08	338.48	338.82	339.69	338.91	338.94	338.78	339.77
10	338.07	338.65	338.73	338.14	339.19	338.91	339.35	339.38	339.35	338.56	339.25	339.73
11	338.30	338.25	338.72	338.40	338.81	339.01	339.44	340.13	338.69	338.08	339.33	339.79
12	337.77	338.47	338.75	338.60	338.75	338.51	339.28	339.61	337.99	338.54	339.34	339.72
13	338.25	339.13	338.57	339.30	338.89	338.33	338.96	339.26	338.23	338.60	339.26	339.78
14	338.27	339.44	338.54	338.96	338.96	337.93	339.36	339.82	338.59	338.97	338.68	339.59
15	338.69	339.22	338.72	---	339.33	338.26	339.40	339.63	338.09	339.15	338.40	339.57
16	338.42	339.16	339.11	---	339.45	338.75	339.20	339.27	338.22	338.78	338.65	339.67
17	338.61	339.00	339.85	338.59	339.49	339.51	338.83	339.90	339.13	338.02	338.90	339.83
18	339.11	338.95	339.58	338.40	339.16	339.70	338.78	339.37	338.77	337.80	338.97	339.66
19	339.54	338.67	339.52	338.75	339.03	338.83	338.82	339.40	338.57	338.25	339.26	339.41
20	339.44	338.85	339.83	338.98	338.16	338.84	338.96	340.25	338.29	339.04	339.63	339.62
21	339.22	339.16	339.54	339.27	338.23	339.09	339.64	340.39	338.26	339.37	339.84	339.70
22	339.01	338.91	339.81	339.36	338.68	338.88	339.05	340.05	338.81	339.68	339.38	339.60
23	338.38	338.89	339.11	339.43	338.49	338.75	339.06	339.94	338.99	339.67	339.49	339.78
24	338.35	339.44	338.26	339.14	338.57	339.05	338.77	339.60	339.34	339.49	339.23	339.67
25	337.75	339.69	338.70	339.24	338.95	339.48	339.29	339.30	338.56	338.50	338.86	339.58
26	338.32	339.21	338.86	339.44	339.31	339.61	339.58	339.55	338.79	338.04	339.18	339.34
27	338.73	338.12	338.63	339.22	338.70	339.59	339.48	340.35	338.39	338.26	339.79	339.14
28	338.93	338.14	338.40	339.12	338.10	339.64	339.54	340.34	338.02	339.04	339.82	338.84
29	339.15	338.36	338.45	339.30	---	339.76	339.31	338.77	338.83	339.92	339.60	339.08
30	339.21	338.93	338.62	339.19	---	339.72	339.07	338.24	339.85	340.08	339.73	338.73
31	339.44	---	338.73	339.25	---	338.97	---	338.89	---	340.11	339.31	---
MAX	339.54	339.69	339.85	---	339.59	339.76	339.83	340.39	339.90	340.11	339.84	339.83
MIN	337.66	338.12	338.26	---	338.10	337.93	338.77	338.24	337.99	337.80	337.41	338.21