



Figure 34. Location of surface-water stations in the Yakima River Basin.

12483940 NANEUM CREEK ABOVE GAME FARM ROAD, NEAR KITTITAS, WA

WATER-QUALITY RECORDS

LOCATION.--Lat 47°00'56", long 120°28'30", in SW¹/₄SW¹/₄, sec.28, T.18 N., R.19 E., Kittitas County, Hydrologic Unit 17030001, upstream of Game Farm Rd. bridge, 2 mi northwest of Kittitas.

DRAINAGE AREA.--72 mi².

PERIOD OF RECORD.--July to August 2003 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 degrees NTU (63675)	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 unfltrd 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)	Carbonate, wat flt incrm. titr., field, mg/L (00452)
JUL	22...	1520	--	717	7.7	93	8.0	165	29.3	21.7	--	--	--
AUG	12...	1550	1.6	3.8	717	8.0	91	167	27.4	18.5	71	85	.0
	15...	1000	--	--	--	--	--	--	--	--	--	--	--
	15...	1020	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Biomass periphyton, ashfree drymass g/m2 (49954)
JUL	22...	.79	E.03	.70	.034	--	.04	.083	1.5	--	--	--	--
AUG	12...	1.1	<.04	.43	.048	.22	.25	.36	1.6	1.9	<.1	1.9	9.5
	15...	--	--	--	--	--	--	--	--	--	--	--	9.1
	15...	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Biomass periphyton, ashfree dry wt, DTH, g/m2 (63766)	Biomass periphyton, ash weight, DTH, g/m2 (63765)	Periphyton biomass ash weight, DTH, g/m2 (00572)	Biomass periphyton, dry weight, DTH, g/m2 (63767)	Periphyton biomass dry weight, DTH, g/m2 (00573)	Chlorophyll a periphyton, DTH, CF meth mg/m2 (63763)	Pheophytin a periphyton, DTH, CF meth mg/m2 (63764)	Pheophytin a, periphyton, mg/m2 (62359)	Pheophytin a, phytoplankton, ug/L (62360)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
JUL	22...	--	--	--	--	--	--	--	--	--	--	--	--
AUG	12...	--	--	--	--	--	--	--	3.8	--	2.3	15	.06
	15...	--	--	200	--	204.7	--	6.5	--	20.6	--	--	--
	15...	144	1,190	--	1,340	--	E22.9	E44.0	--	--	--	--	--

12483995 COLEMAN CREEK BELOW TOWN CANAL, NEAR KITTITAS, WA

WATER-QUALITY RECORDS

LOCATION.--Lat 46°58'23", long 120°28'15", in NE $\frac{1}{4}$ SW $\frac{1}{4}$, sec.9, T.17 N., R.19 E., Kittitas County, Hydrologic Unit 17030001, at footbridge in Olmstead State Park, 3 mi southeast of Ellensburg.

DRAINAGE AREA.--47 mi².

PERIOD OF RECORD.--July to August 2003 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 degrees NTU (63675)	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 unfltrd 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 incm. titr., field, mg/L (00453)	Carbonate, wat flt incm. titr., field, mg/L (00452)
JUL 22...	1230	--	--	722	8.2	94	7.9	213	34.3	18.8	--	--	--
AUG 12...	0940	26	4.7	724	9.2	97	8.0	200	21.0	15.2	91	110	.0
14...	1100	--	--	--	--	--	--	--	--	--	--	--	--
14...	1120	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Biomass periphyton, ashfree drymass g/m2 (49954)
JUL 22...	.39	<.04	.72	.012	--	.08	.124	1.1	--	--	--	--	--
AUG 12...	.48	<.04	.50	E.005	.09	.07	.112	.98	.8	<.1	.8	4.1	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	22.4
14...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Biomass periphyton, ashfree dry wt, DTH, g/m2 (63766)	Biomass periphyton, ash weight, DTH, g/m2 (63765)	Periphyton biomass ash weight, DTH, g/m2 (00572)	Biomass periphyton, dry weight, DTH, g/m2 (63767)	Periphyton biomass dry weight, DTH, g/m2 (00573)	Chlorophyll a periphyton, DTH, CF meth mg/m2 (63763)	Pheophytin a periphyton, DTH, CF meth mg/m2 (63764)	Pheophytin a, periphyton, mg/m2 (62359)	Pheophytin a, phytoplankton, ug/L (62360)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
JUL 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 12...	--	--	--	--	--	--	--	--	2.5	--	1.2	17	1.2
14...	--	--	360	--	386.5	--	--	E28	--	E69.2	--	--	--
14...	57.0	983	--	1,040	--	E3.0	E4.7	--	--	--	--	--	--

465708120270500 CARIBOU CREEK AT S. FERGUSON ROAD, NEAR ELLENSBURG, WA

WATER-QUALITY RECORDS

LOCATION.--Lat 46°57'09", long 120°27'05", in NW¹/₄NW¹/₄, sec.22, T.17 N., R.19 E., Kittitas County, Hydrologic Unit 17030001, downstream of S. Ferguson Road, 4 mi southeast of Ellensburg.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--July to August 2003 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 degrees NTU (63675)	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 unfltrd 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)	Carbonate, wat flt incrm. titr., field, mg/L (00452)
JUL 22...	1000	--	--	724	8.8	95	7.9	369	26.0	16.6	--	--	--
AUG 11...	1620	29	8.2	725	8.7	100	8.0	290	25.5	19.2	127	154	.0
14...	1500	--	--	--	--	--	--	--	--	--	--	--	--
14...	1520	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Biomass periphyton, ashfree drymass g/m2 (49954)
JUL 22...	1.9	.50	3.78	.136	--	.22	.29	5.7	--	--	--	--	--
AUG 11...	.84	<.04	.95	.011	.16	.12	.20	1.8	1.4	<.1	1.4	6.1	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	11.9
14...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Biomass periphyton, ashfree dry wt, DTH, g/m2 (63766)	Biomass periphyton, ash weight, DTH, g/m2 (63765)	Periphyton biomass ash weight, DTH, g/m2 (00572)	Biomass periphyton, dry weight, DTH, g/m2 (63767)	Periphyton biomass dry weight, DTH, g/m2 (00573)	Chlorophyll a periphyton, DTH, CF meth mg/m2 (63763)	Pheophytin a periphyton, DTH, CF meth mg/m2 (63764)	Pheophytin a, periphyton, mg/m2 (62359)	Pheophytin a, phytoplankton, ug/L (62360)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
JUL 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	--	--	--	--	--	--	--	--	4.2	--	1.7	41	3.2
14...	--	--	290	--	306.4	--	--	E10	--	E32.8	--	--	--
14...	21.7	612	--	634	--	E3.3	E7.5	--	--	--	--	--	--

465647120265700 PARK CREEK AT S. FERGUSON ROAD, NEAR ELLENSBURG, WA

WATER-QUALITY RECORDS

LOCATION.--Lat 46°56'47", long 120°26'57", in NW¹/₄SW¹/₄, sec.22, T.17 N., R.19 E., Kittitas County, Hydrologic Unit 17030001, downstream of S. Ferguson Road bridge, 5 mi southeast of Ellensburg.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--July to August 2003 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 degrees NTU (63675)	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 unfltrd 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)	Carbonate, wat flt incrm. titr., field, mg/L (00452)
JUL 21...	1600	--	--	723	9.0	96	8.0	410	30.3	16.2	--	--	--
AUG 11...	1020	42	14	726	9.1	95	8.0	357	22.9	15.1	158	190	.0
13...	1400	--	--	--	--	--	--	--	--	--	--	--	--
13...	1420	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Biomass periphyton, ashfree drymass g/m2 (49954)
JUL 21...	.79	E.03	2.51	.033	--	.19	.33	3.3	--	--	--	--	--
AUG 11...	.52	<.04	1.50	<.008	.13	.14	.23	2.0	.9	<.1	.9	2.9	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	64.7
13...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Biomass periphyton, ashfree dry wt, DTH, g/m2 (63766)	Biomass periphyton, ash weight, DTH, g/m2 (63765)	Periphyton biomass ash weight, DTH, g/m2 (00572)	Biomass periphyton, dry weight, DTH, g/m2 (63767)	Periphyton biomass dry weight, DTH, g/m2 (00573)	Chlorophyll a periphyton, DTH, CF meth mg/m2 (63763)	Pheophytin a periphyton, DTH, CF meth mg/m2 (63764)	Pheophytin a, periphyton, mg/m2 (62359)	Pheophytin a, phytoplankton, ug/L (62360)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
JUL 21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	--	--	--	--	--	--	--	--	1.4	--	.7	73	8.2
13...	--	--	660	--	721.2	--	--	E2.6	--	E4.3	--	--	--
13...	35.8	569	--	604	--	E2.5	E4.5	--	--	--	--	--	--

12484500 YAKIMA RIVER AT UMTANUM, WA

LOCATION.--Lat 46°51'46", long 120°28'44", in SW¼NW¼, 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.--Records good, except for estimated daily discharges, which are poor. 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.--71 years (water years 1934-2004), 2,440 ft³/s, 1,768,000 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, 4,470 ft³/s, July 19, gage height, 32.98 ft; minimum daily discharge, 640 ft³/s, Jan. 6.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,200	965	1,900	859	2,160	1,500	2,430	1,750	1,630	3,500	4,180	2,830
2	1,310	966	1,680	852	1,890	1,470	2,360	1,930	1,450	3,510	4,220	2,710
3	1,220	952	1,520	850	1,720	1,440	2,300	2,210	1,510	3,590	4,220	2,610
4	1,170	928	1,380	824	1,570	1,450	2,400	2,240	1,750	3,630	4,220	2,460
5	1,170	908	1,320	e740	1,450	1,550	2,610	2,170	1,760	3,660	4,210	2,290
6	1,160	887	1,260	e640	1,370	1,530	2,720	1,980	1,710	3,650	4,250	2,190
7	1,110	879	1,210	e680	1,320	1,470	2,860	1,840	1,740	3,670	4,310	2,070
8	1,130	887	1,160	e700	1,260	1,660	3,060	1,820	1,700	3,700	4,150	1,840
9	1,130	877	1,100	e800	1,230	2,210	3,030	1,830	1,690	3,650	4,060	1,680
10	1,130	867	1,090	e800	1,200	3,060	2,950	1,750	1,850	3,650	3,950	1,550
11	1,160	932	1,070	906	1,160	2,970	2,960	1,640	1,800	3,710	3,830	1,450
12	1,190	1,250	1,040	918	1,120	2,820	3,040	1,600	1,740	3,770	3,760	1,380
13	1,190	1,120	1,050	862	1,100	2,800	3,250	1,610	1,780	3,860	3,710	1,340
14	1,180	1,020	1,040	846	1,130	2,650	3,250	1,590	1,890	3,910	3,650	1,330
15	1,180	975	1,010	880	1,120	2,700	2,800	1,580	1,820	3,980	3,690	1,390
16	1,350	948	983	971	1,110	2,650	2,390	1,740	1,840	4,040	3,630	1,490
17	1,450	992	964	1,030	1,110	2,800	2,100	1,930	2,010	4,100	3,550	1,500
18	1,330	1,310	931	1,010	1,110	3,010	1,970	1,980	2,120	4,120	3,480	1,530
19	1,180	3,160	915	1,000	1,170	2,910	1,630	1,950	2,230	4,300	3,430	1,520
20	1,140	2,570	939	979	1,200	2,620	1,510	2,070	2,300	4,260	3,390	1,480
21	1,340	1,980	927	970	1,180	2,390	1,480	1,980	2,400	4,100	3,370	1,410
22	1,410	1,610	914	957	1,140	2,310	1,340	1,910	2,440	3,980	3,480	1,380
23	1,240	1,420	910	963	1,140	2,620	1,270	1,950	2,680	3,990	3,500	1,370
24	1,100	1,320	926	973	1,190	2,930	1,300	1,950	2,840	4,060	3,510	1,330
25	1,030	1,240	923	970	1,310	2,920	1,340	1,810	2,930	4,100	3,640	1,310
26	991	1,190	902	954	1,450	2,900	1,390	1,700	2,970	4,110	3,500	1,300
27	964	1,130	868	955	1,560	2,650	1,550	1,760	2,970	4,070	3,280	1,290
28	924	1,070	886	968	1,530	2,510	1,900	1,810	3,090	4,170	3,230	1,280
29	950	1,420	882	1,160	1,530	2,430	1,880	1,720	3,260	4,140	3,150	1,260
30	986	2,110	851	2,280	---	2,490	1,750	1,710	3,410	4,090	3,070	1,230
31	970	---	839	2,560	---	2,510	---	1,740	---	4,110	2,960	---
TOTAL	35,985	37,883	33,390	30,857	38,530	73,930	66,820	57,250	65,310	121,180	114,580	49,800
MEAN	1,161	1,263	1,077	995	1,329	2,385	2,227	1,847	2,177	3,909	3,696	1,660
MAX	1,450	3,160	1,900	2,560	2,160	3,060	3,250	2,240	3,410	4,300	4,310	2,830
MIN	924	867	839	640	1,100	1,440	1,270	1,580	1,450	3,500	2,960	1,230
AC-FT	71,380	75,140	66,230	61,200	76,420	146,600	132,500	113,600	129,500	240,400	227,300	98,780

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2004, BY WATER YEAR (WY)

MEAN	1,159	1,075	1,705	1,609	1,849	2,137	3,201	3,924	3,848	3,297	3,343	2,100
MAX	3,197	3,596	9,214	7,166	8,547	8,355	8,831	8,215	9,077	4,485	4,221	3,235
(WY)	(1950)	(1960)	(1934)	(1934)	(1996)	(1972)	(1972)	(1997)	(1948)	(1985)	(1978)	(1950)
MIN	412	352	331	337	463	541	1,370	1,493	1,556	2,075	1,521	1,053
(WY)	(1974)	(1953)	(1953)	(1979)	(1944)	(1977)	(2001)	(2001)	(1941)	(1941)	(1979)	(1994)

YAKIMA RIVER BASIN

12484500 YAKIMA RIVER AT UMTANUM, WA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1934 - 2004	
ANNUAL TOTAL	833,030		725,515		2,440	
ANNUAL MEAN	2,282		1,982		4,204	1972
HIGHEST ANNUAL MEAN					1,335	1941
LOWEST ANNUAL MEAN					29,600	Dec 23, 1933
HIGHEST DAILY MEAN	8,330	Feb 1	4,310	Aug 7	217	Dec 31, 1978
LOWEST DAILY MEAN	839	Dec 31	640	Jan 6	4,350	
ANNUAL SEVEN-DAY MINIMUM	879	Dec 25	741	Jan 4	1,768,000	
ANNUAL RUNOFF (AC-FT)	1,652,000		1,439,000		646	
10 PERCENT EXCEEDS	4,010		3,680			
50 PERCENT EXCEEDS	2,060		1,620			
90 PERCENT EXCEEDS	977		932			

e Estimated

12484550 UMTANUM CREEK NEAR MOUTH, AT UMTANUM, WA

WATER-QUALITY RECORDS

LOCATION.--Lat 46°51'27", long 120°29'46", in NW¼SE¼, sec.19, T.16 N., R.19 E., Kittitas County, Hydrologic Unit 17030001, upstream of confluence with Yakima River, 1 mi south of Umtanum.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--May, June, and October 1989; September and November 1990; August 1999; June, July, September, and November 2000; July 2002; July and August 2003 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 degrees NTU (63675)	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 unfltrd 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)	Carbonate, wat flt incrm. titr., field, mg/L (00452)
JUL 21...	1800	--	--	727	7.7	95	8.4	200	28.6	23.8	--	--	--
AUG 13...	1600	--	--	--	--	--	--	--	--	--	--	--	--
13...	1620	--	--	--	--	--	--	--	--	--	--	--	--
14...	1340	.37	.9	729	8.9	103	8.3	208	36.7	20.3	101	120	.0

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Biomass periphyton, ashfree drymass g/m2 (49954)	Biomass periphyton, ashfree dry wt, DTH, g/m2 (63766)
JUL 21...	.17	<.04	<.06	<.008	--	.09	.104	--	--	--	--	--	--
AUG 13...	--	--	--	--	--	--	--	--	--	--	--	28.6	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	40.9
14...	.13	<.04	<.06	<.008	<.02	.09	.103	.2	<.1	.2	1.7	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Biomass periphyton, ash weight, DTH, g/m2 (63765)	Periphyton biomass ash weight, g/m2 (00572)	Biomass periphyton, dry weight, DTH, g/m2 (63767)	Periphyton biomass dry weight, g/m2 (00573)	Chlorophyll a periphyton, DTH, CF meth mg/m2 (63763)	Pheophytin a periphyton, DTH, CF meth mg/m2 (63764)	Pheophytin a periphyton, DTH, CF meth mg/m2 (62359)	Pheophytin a, phytoplankton, chromo-fluoro, ug/L (62360)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
JUL 21...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 13...	--	290	--	321.7	--	--	E34	--	E73.8	--	--	--
13...	460	--	501	--	E27.5	E27.8	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	1.5	--	1.0	2	.00

12485940 WENAS CREEK AT FLETCHER LANE, NEAR SELAH, WA

WATER-QUALITY RECORDS

LOCATION.--Lat 46°44'46", long 120°36'19", in SE $\frac{1}{4}$ NW $\frac{1}{4}$, sec.32, T.15 N., R.18 E., Yakima County, Hydrologic Unit 17030001, upstream of Fletcher Lane bridge, 6 mi northwest of Selah.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--July to August 2003 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 degrees NTU (63675)	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 unfltrd 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)	Carbonate, wat flt incrm. titr., field, mg/L (00452)
JUL 21...	1220	--	--	727	9.1	102	8.1	231	39.0	18.9	--	--	--
AUG 14...	1000	.79	3.0	727	8.8	93	8.0	273	23.0	15.7	131	158	.0
18...	1200	--	--	--	--	--	--	--	--	--	--	--	--
18...	1220	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Biomass periphyton, ashfree drymass g/m2 (49954)
JUL 21...	.33	<.04	1.28	E.007	--	.07	.105	1.6	--	--	--	--	--
AUG 14...	.36	<.04	1.45	.011	.08	.08	.121	1.8	.5	<.1	.5	3.2	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	24.8
18...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Biomass periphyton, ashfree dry wt, DTH, g/m2 (63766)	Biomass periphyton, ash weight, DTH, g/m2 (63765)	Periphyton biomass ash weight, DTH, g/m2 (00572)	Biomass periphyton, dry weight, DTH, g/m2 (63767)	Periphyton biomass dry weight, DTH, g/m2 (00573)	Chlorophyll a periphyton, DTH, CF meth mg/m2 (63763)	Pheophytin a periphyton, DTH, CF meth mg/m2 (63764)	Pheophytin a, periphyton, mg/m2 (62359)	Pheophytin a, phytoplankton, ug/L (62360)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
JUL 21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 14...	--	--	--	--	--	--	--	--	3.2	--	1.8	10	.02
18...	--	--	410	--	437.5	--	--	49	--	119	--	--	--
18...	122	1,510	--	1,630	--	58.9	52.9	--	--	--	--	--	--

12488500 AMERICAN RIVER NEAR NILE, WA

LOCATION.--Lat 46°58'40", long 121°10'03", in SE $\frac{1}{4}$ NW $\frac{1}{4}$, 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.--65 years (water years, 1940-2004), 234 ft³/s, 40.30 in/yr, 169,500 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 Jan. 5, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 858 ft³/s, May 4, gage height, 74.11 ft; minimum discharge, 15 ft³/s, Jan. 5, but may have been less during the period of ice effect Jan. 5.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	72	164	e70	192	80	251	554	432	228	68	67
2	33	70	152	e64	178	79	243	662	418	212	66	67
3	33	65	183	e50	165	78	246	787	461	201	65	65
4	32	58	176	e32	153	79	269	825	562	188	64	61
5	32	53	171	e21	143	77	301	743	636	175	62	58
6	32	55	175	e23	138	76	330	616	600	166	65	56
7	33	54	164	e34	130	75	367	573	512	170	80	54
8	40	57	151	e70	124	85	401	587	460	154	72	52
9	46	54	142	e68	118	113	410	569	441	144	68	51
10	44	55	136	e72	114	134	423	538	451	137	64	50
11	42	70	128	e72	111	141	458	488	410	132	61	59
12	48	67	125	e72	108	148	513	441	352	125	59	63
13	61	63	122	e72	106	156	609	408	371	122	56	65
14	58	60	118	e68	104	160	590	403	397	117	54	84
15	56	60	111	e76	102	171	541	430	344	113	54	83
16	80	63	107	e76	100	181	478	440	327	109	55	89
17	136	69	103	e84	99	206	427	439	342	104	63	87
18	120	130	98	e84	98	228	388	445	378	102	54	90
19	95	379	94	96	94	233	358	512	371	102	51	92
20	141	319	92	93	92	220	342	625	345	98	49	88
21	393	232	90	90	90	215	320	665	354	94	48	82
22	236	188	88	89	88	221	298	623	367	90	65	77
23	164	168	86	88	87	257	299	567	380	87	63	73
24	131	154	85	89	86	289	295	505	393	85	63	69
25	111	143	83	88	85	295	301	463	387	81	101	66
26	98	132	80	86	84	290	342	566	355	80	122	63
27	88	121	79	84	83	279	448	738	306	78	102	60
28	84	129	79	88	81	268	523	737	271	76	90	58
29	90	196	77	116	80	263	512	578	253	74	82	55
30	85	183	e70	245	---	268	506	497	244	72	76	53
31	77	---	e64	214	---	262	---	480	---	70	71	---
TOTAL	2,752	3,519	3,593	2,574	3,233	5,627	11,789	17,504	11,920	3,786	2,113	2,037
MEAN	88.8	117	116	83.0	111	182	393	565	397	122	68.2	67.9
MAX	393	379	183	245	192	295	609	825	636	228	122	92
MIN	32	53	64	21	80	75	243	403	244	70	48	50
AC-FT	5,460	6,980	7,130	5,110	6,410	11,160	23,380	34,720	23,640	7,510	4,190	4,040
CFSM	1.13	1.49	1.47	1.05	1.41	2.30	4.98	7.16	5.04	1.55	0.86	0.86
IN.	1.30	1.66	1.69	1.21	1.52	2.65	5.56	8.25	5.62	1.79	1.00	0.96

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

MEAN	70.3	130	166	138	155	157	300	629	631	279	92.5	57.9
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	189	67.8	41.1	34.5
(WY)	(1988)	(1994)	(1953)	(1979)	(1985)	(1977)	(1955)	(1977)	(1992)	(1977)	(1941)	(1987)

YAKIMA RIVER BASIN

12488500 AMERICAN RIVER NEAR NILE, WA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR			FOR 2004 WATER YEAR		WATER YEARS 1940 - 2004	
ANNUAL TOTAL	82,226			70,447			
ANNUAL MEAN	225			192		234	
HIGHEST ANNUAL MEAN						379	
LOWEST ANNUAL MEAN						94.2	
HIGHEST DAILY MEAN	1,260	Feb	1	825	May	4	1974
LOWEST DAILY MEAN	32	Oct	4	21	Jan	5	1977
ANNUAL SEVEN-DAY MINIMUM	33	Oct	1	33	Oct	1	3,070
ANNUAL RUNOFF (AC-FT)	163,100			139,700		24	
ANNUAL RUNOFF (CFSM)	2.86			2.44		169,500	
ANNUAL RUNOFF (INCHES)	38.77			33.21		40.30	
10 PERCENT EXCEEDS	449			462		584	
50 PERCENT EXCEEDS	136			106		122	
90 PERCENT EXCEEDS	43			56		46	

e Estimated

12498980 COWICHE CREEK AT WEIKEL, WA

WATER-QUALITY RECORDS

LOCATION.--Lat 46°37'46", long 120°39'44", in NE¹/₄SE¹/₄, sec.11, T.13 N., R.17 E., Yakima County, Hydrologic Unit 17030003, upstream of footbridge in Cowiche Canyon Recreation Area, 0.5 mi southeast of Weikel.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--July to August 2003 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 degrees NTU (63675)	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 unfltrd 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)	Carbonate, wat flt incrm. titr., field, mg/L (00452)
JUL 11...	1000	--	--	726	10.5	116	8.2	256	31.0	17.8	--	--	--
AUG 18...	0950	1.5	2.2	725	10.3	111	8.2	438	30.0	16.5	202	242	.0
20...	1000	--	--	--	--	--	--	--	--	--	--	--	--
20...	1020	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Biomass periphyton, ashfree drymass g/m2 (49954)
JUL 11...	.30	<.04	.69	<.008	--	.07	.111	1.0	--	--	--	--	--
AUG 18...	.37	<.04	1.21	.013	.07	.13	.171	1.6	.5	<.1	.5	3.1	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	39.0
20...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Biomass periphyton, ashfree dry wt, DTH, g/m2 (63766)	Biomass periphyton, ash weight, DTH, g/m2 (63765)	Periphyton biomass ash weight, g/m2 (00572)	Biomass periphyton, dry weight, DTH, g/m2 (63767)	Periphyton biomass dry weight, g/m2 (00573)	Pheophytin a, periphyton, mg/m2 (62359)	Pheophytin a, phytoplankton, ug/L (62360)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Suspended sediment concentration, mg/L (80154)	Suspended sediment discharge, tons/d (80155)
JUL 11...	--	--	--	--	--	--	--	--	--	--	--
AUG 18...	--	--	--	--	--	--	6.3	--	4.6	7	.03
20...	--	--	430	--	470.1	150	--	302	--	--	--
20...	130	1,600	--	1,730	--	93	--	140	--	--	--

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.--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.--38 years (water years 1967-2004), 3,579 ft³/s, 2,593,000 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, 5,550 ft³/s, Apr. 14, elevation, 940.82 ft; maximum elevation, 942.59 ft, Jan. 5, backwater from ice; minimum daily discharge, 900 ft³/s, Jan. 5.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,190	1,570	2,740	1,330	3,210	2,160	3,330	3,050	2,870	3,230	3,130	2,590
2	2,150	1,580	2,470	e1,300	2,860	2,170	3,100	3,500	2,600	3,130	3,180	2,530
3	2,050	1,520	2,240	e1,150	2,650	2,120	3,010	4,110	2,630	3,170	3,280	2,550
4	1,930	1,470	2,130	e1,000	2,450	2,090	3,130	4,280	2,920	3,190	3,300	2,510
5	1,890	1,430	2,080	e900	2,290	2,230	3,540	4,350	3,220	3,200	3,350	2,390
6	1,900	1,380	2,070	e1,000	2,210	2,250	3,860	4,100	3,530	3,120	3,490	2,450
7	1,880	1,370	2,040	e1,150	2,140	2,140	4,140	3,710	3,650	3,100	3,730	2,430
8	1,910	1,400	1,970	e1,350	2,080	2,290	4,540	3,580	3,600	3,200	3,560	2,330
9	1,940	1,400	1,900	e1,700	2,010	2,990	4,690	3,570	3,530	3,100	3,370	2,390
10	1,880	1,380	1,900	e1,800	1,960	4,240	4,640	3,350	3,500	3,040	3,190	2,460
11	1,870	1,420	1,860	e1,700	1,920	4,330	4,690	3,010	3,500	3,090	3,210	2,540
12	1,860	1,740	1,810	e1,600	1,890	4,140	4,880	2,800	3,190	e3,100	3,130	2,590
13	1,850	1,720	1,830	e1,550	1,850	4,150	5,230	2,760	3,000	e3,100	3,110	2,530
14	1,790	1,490	1,820	1,540	1,870	4,020	5,430	2,680	3,140	e3,100	3,060	2,440
15	1,770	1,370	1,750	1,560	1,880	4,020	4,810	2,680	2,930	e3,100	3,200	2,420
16	1,780	1,440	1,710	1,660	1,850	4,020	4,140	2,910	2,970	e3,100	3,150	2,460
17	2,140	1,580	1,730	1,810	1,860	4,060	3,630	3,180	2,930	e3,150	3,060	2,420
18	1,840	1,740	1,710	1,790	1,870	4,350	3,270	3,240	2,910	e3,200	3,020	2,380
19	1,460	3,220	1,680	1,760	1,870	4,330	2,760	3,220	2,900	e3,350	3,040	2,280
20	1,430	3,720	1,700	1,720	1,910	3,960	2,480	3,740	2,860	e3,450	3,030	2,250
21	1,910	2,950	1,700	1,700	1,890	3,580	2,410	4,000	2,830	e3,300	3,060	2,230
22	2,230	2,460	1,680	1,660	e1,850	3,390	2,230	3,890	2,860	e3,150	3,260	2,190
23	1,960	2,210	1,600	1,600	e1,800	3,680	2,110	3,760	3,050	e3,050	3,390	2,210
24	1,790	2,050	1,570	1,600	1,880	4,230	2,140	3,590	3,160	e3,100	3,210	2,190
25	1,640	1,950	1,500	1,580	1,980	4,300	2,160	3,200	3,160	e3,200	3,530	2,180
26	1,550	1,880	1,460	1,560	2,100	4,310	2,220	2,920	3,130	e3,100	3,580	2,180
27	1,500	1,820	1,420	1,550	2,230	3,970	2,470	3,570	3,000	3,030	3,250	2,180
28	1,500	1,760	1,410	e1,500	2,200	3,690	3,170	3,870	2,940	3,140	3,070	2,200
29	1,530	1,880	1,420	e1,700	2,180	3,530	3,270	3,680	2,980	3,150	2,950	2,170
30	1,610	2,780	1,310	2,760	---	3,570	2,970	3,240	3,090	3,090	2,840	2,190
31	1,570	---	1,260	3,720	---	3,600	---	3,090	---	3,050	2,670	---
TOTAL	56,300	55,680	55,470	50,300	60,740	107,910	104,450	106,630	92,580	97,580	99,400	70,860
MEAN	1,816	1,856	1,789	1,623	2,094	3,481	3,482	3,440	3,086	3,148	3,206	2,362
MAX	2,230	3,720	2,740	3,720	3,210	4,350	5,430	4,350	3,650	3,450	3,730	2,590
MIN	1,430	1,370	1,260	900	1,800	2,090	2,110	2,680	2,600	3,030	2,670	2,170
AC-FT	111,700	110,400	110,000	99,770	120,500	214,000	207,200	211,500	183,600	193,500	197,200	140,600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2004, BY WATER YEAR (WY)

MEAN	1,715	1,899	2,825	2,878	3,529	3,890	4,676	5,999	5,787	3,763	3,340	2,665
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)	(1997)	(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)

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

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1967 - 2004	
ANNUAL TOTAL	1,176,960		957,900			
ANNUAL MEAN	3,225		2,617		3,579	
HIGHEST ANNUAL MEAN					6,622	1972
LOWEST ANNUAL MEAN					1,884	2001
HIGHEST DAILY MEAN	17,400	Feb 1	5,430	Apr 14	44,000	Feb 9, 1996
LOWEST DAILY MEAN	1,260	Dec 31	900	Jan 5	300	Jan 1, 1979
ANNUAL SEVEN-DAY MINIMUM	1,400	Nov 5	1,120	Jan 1	387	Dec 31, 1978
ANNUAL RUNOFF (AC-FT)	2,335,000		1,900,000		2,593,000	
10 PERCENT EXCEEDS	5,220		3,720		6,780	
50 PERCENT EXCEEDS	3,070		2,530		2,990	
90 PERCENT EXCEEDS	1,570		1,550		1,280	

e Estimated

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.--Records good, except for estimated daily discharges, which are poor. 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.--44 years (water years 1961-2004), 77.6 ft³/s, 56,210 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, 170 ft³/s, Mar. 19, Apr. 13, gage height, 4.35 ft; minimum discharge, 9.5 ft³/s, Oct. 29.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	18	29	16	33	52	91	110	97	25	23	21
2	25	23	31	e15	32	56	89	124	87	21	21	23
3	26	25	27	e14	31	57	89	149	86	19	21	25
4	25	25	27	e13	28	56	91	158	87	17	22	23
5	21	24	27	e12	26	65	101	160	93	17	22	22
6	21	26	22	15	26	73	111	147	96	17	25	21
7	22	24	22	16	26	68	121	130	92	19	28	21
8	26	26	20	18	25	74	132	123	101	19	27	20
9	24	26	21	22	24	96	134	122	101	19	25	21
10	25	26	24	27	23	126	132	115	90	18	23	22
11	26	26	24	29	27	127	133	110	83	19	21	23
12	26	29	24	29	28	126	143	97	81	25	19	22
13	27	27	24	29	25	128	157	92	75	26	18	23
14	23	27	24	29	32	125	161	81	68	25	19	25
15	23	27	22	30	36	132	147	82	59	22	20	27
16	28	27	23	31	36	132	125	96	50	21	20	27
17	25	28	23	26	38	145	109	92	41	20	19	26
18	16	28	23	25	40	158	101	107	37	20	19	28
19	14	32	22	24	40	163	89	104	35	25	18	28
20	14	37	23	24	42	149	91	130	35	27	18	28
21	14	33	23	24	41	137	80	148	31	23	18	28
22	13	23	23	24	36	130	72	147	28	18	22	28
23	12	24	24	25	36	133	64	145	26	16	25	29
24	11	29	25	26	39	137	66	142	30	15	24	29
25	12	28	25	26	49	134	65	132	28	13	28	30
26	12	28	22	25	45	144	88	129	26	13	31	29
27	14	27	18	27	50	130	81	146	23	12	29	28
28	13	27	18	26	50	115	109	140	21	14	26	26
29	10	28	21	28	48	110	109	128	22	14	25	25
30	14	29	17	40	---	105	107	116	20	17	23	24
31	16	---	16	40	---	100	---	110	---	22	22	---
TOTAL	600	807	714	755	1,012	3,483	3,188	3,812	1,749	598	701	752
MEAN	19.4	26.9	23.0	24.4	34.9	112	106	123	58.3	19.3	22.6	25.1
MAX	28	37	31	40	50	163	161	160	101	27	31	30
MIN	10	18	16	12	23	52	64	81	20	12	18	20
AC-FT	1,190	1,600	1,420	1,500	2,010	6,910	6,320	7,560	3,470	1,190	1,390	1,490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2004, BY WATER YEAR (WY)

MEAN	21.0	29.3	50.6	73.6	122	135	135	163	137	33.1	16.0	20.2
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)

12502500 AHTANUM CREEK AT UNION GAP, WA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1961 - 2004	
ANNUAL TOTAL	29,500		18,171			
ANNUAL MEAN	80.8		49.6		77.6	
HIGHEST ANNUAL MEAN					171	1974
LOWEST ANNUAL MEAN					20.2	1994
HIGHEST DAILY MEAN	875	Feb 1	163	Mar 19	2,560	Jan 16, 1974
LOWEST DAILY MEAN	10	Oct 29	10	Oct 29	3.5	Aug 7, 1978
ANNUAL SEVEN-DAY MINIMUM	12	Jul 25	12	Oct 23	5.1	Aug 6, 1978
ANNUAL RUNOFF (AC-FT)	58,510		36,040		56,210	
10 PERCENT EXCEEDS	185		128		196	
50 PERCENT EXCEEDS	29		27		35	
90 PERCENT EXCEEDS	16		18		12	

e Estimated

12502500 AHTANUM CREEK AT UNION GAP, WA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975-76, March and July 1988, June to October 1989, September to November 1990, August 1999, August and September 2000, July and August 2003 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light det ang 90+/-30 degrees NTU (63675)	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 unfltrd 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., mg/L (00453)	Carbonate, wat flt incrm. titr., mg/L (00452)
JUL 11...	1600	--	--	737	9.4	113	8.3	282	32.5	22.7	--	--	--
AUG 18...	1420	19	2.7	737	9.8	113	8.3	263	28.9	20.5	119	143	.0
20...	1630	--	--	--	--	--	--	--	--	--	--	--	--
20...	1650	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Biomass periphyton, ashfree drymass g/m2 (49954)
JUL 11...	.24	<.04	.26	<.008	--	.09	.113	.51	--	--	--	--	--
AUG 18...	.26	<.04	.43	<.008	.04	.08	.124	.69	.3	<.1	.3	2.1	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	14.0
20...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Biomass periphyton, ashfree dry wt, DTH, g/m2 (63766)	Biomass periphyton, ash weight, DTH, g/m2 (63765)	Periphyton biomass ash weight, g/m2 (00572)	Biomass periphyton, dry weight, DTH, g/m2 (63767)	Periphyton biomass dry weight, g/m2 (00573)	Chlorophyll a periphyton, DTH, CF meth mg/m2 (63763)	Pheophytin a periphyton, DTH, CF meth mg/m2 (63764)	Pheophytin a, periphyton, mg/m2 (62359)	Pheophytin a, phytoplankton, ug/L (62360)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
JUL 11...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 18...	--	--	--	--	--	--	--	--	4.8	--	2.9	10	.52
20...	--	--	360	--	369.7	--	--	23	--	62.3	--	--	--
20...	166	2,610	--	2,780	--	48.6	49.6	--	--	--	--	--	--

12504508 SUNNYSIDE CANAL DIVERSIONS ABOVE NORTH OUTLOOK ROAD, NEAR SUNNYSIDE, WA

WATER-QUALITY RECORDS

LOCATION.--Lat 46°22'05", long 120°06'13", and lat 46°21'58", long 120°05'41", in NE¼SW¼, sec.8, T.10 N., R.22 E., Yakima County, Hydrologic Unit 17030003, on right bank, 1.3 and 0.5 mi upstream from North Outlook Road, 4 mi northwest of Sunnyside.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--April 2003 to September 2004 (discontinued).

REMARKS.--Samples are composites taken from two head gate diversions (29.15 and 29.68) from the canal.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	UV absorbance, 254 nm, wat flt units /cm (50624)	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 unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
APR 28...	0800	.054	740	9.9	98	8.0	121	11.8	13.7	47	12.2	3.92	1.15
MAY 13...	0910	.048	743	10.2	98	7.8	101	15.7	12.4	40	10.6	3.32	.98
JUN 23...	0740	.047	735	8.8	99	7.7	95	20.4	19.2	36	9.26	3.11	.90
JUL 14...	0810	.046	737	8.7	97	7.6	98	20.5	19.0	38	9.02	3.68	.92
AUG 25...	0910	.045	730	8.5	95	7.7	110	19.9	18.3	45	11.1	4.18	1.05
SEP 22...	0840	.046	742	10.3	103	7.8	126	13.2	14.1	50	12.7	4.49	1.49

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., mg/L (00453)	Carbonate, wat flt incrm. titr., mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue on evap. at 180degC wat flt mg/L (70300)
APR 28...	.4	6.06	22	50	61	.0	2.84	<.2	14.8	3.8	76	.11	81
MAY 13...	.3	4.85	20	43	52	.0	2.12	<.2	15.2	3.7	68	.09	68
JUN 23...	.3	4.33	20	39	47	.0	1.97	<.2	13.8	2.4	60	.08	62
JUL 14...	.3	4.17	19	40	48	.0	2.11	<.2	11.6	3.2	60	.09	66
AUG 25...	.3	4.72	18	48	58	.0	2.09	<.2	14.3	3.1	70	.09	67
SEP 22...	.4	6.39	21	53	65	.0	2.65	<.2	16.3	3.9	82	.11	80

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	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)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unfltrd by analysis, mg/L (62855)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)
APR 28...	<.04	.25	E.005	.10	.027	.065	.43	.6	<.1	.6	2.1	24	7.4
MAY 13...	<.04	.21	E.004	.06	.028	.079	.42	.5	<.1	.5	2.0	23	7.5
JUN 23...	<.04	.15	<.008	.06	.028	.068	.33	.6	<.1	.6	1.8	25	2.6
JUL 14...	<.04	.27	E.005	.07	.030	.074	.46	.5	<.1	.5	2.0	24	2.2
AUG 25...	<.04	.17	<.008	.04	.028	.065	.31	.4	<.1	.4	2.0	26	1.4
SEP 22...	<.04	.33	<.008	.03	.049	.070	.45	.2	<.1	.2	1.9	21	2.2

12504508 SUNNYSIDE CANAL DIVERSIONS ABOVE NORTH OUTLOOK ROAD NEAR SUNNYSIDE, WA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	1-Naphthol, water, fltrd, 0.7u GF ug/L (49295)	2,6-Diethyl-aniline water fltrd, 0.7u GF ug/L (82660)	2-[(2-Ethyl-6methyl phenyl) amino]2 oxoESA ug/L (62850)	2Chloro -2,6-' diethyl acet-anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl -6-methyl-aniline water, fltrd, ug/L (61620)	3,4-Di-chloro-aniline water, fltrd, ug/L (61625)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Aceto-chlor ESA, water, fltrd, 0.7u GF ug/L (61029)	Aceto-chlor OA, water, fltrd, 0.7u GF ug/L (61030)	Aceto-chlor SAA, water, fltrd, ug/L (62847)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor ESA SA, water, fltrd, ug/L (62849)
APR 28...	M	<.006	<.02	<.005	<.006	<.004	<.004	<.006	<.02	<.02	<.02	<.006	<.02
MAY 13...		<.09	<.006	--	<.005	<.006	<.004	<.006	<.02	<.02	<.02	<.006	<.02
JUN 23...		<.09	<.006	<.02	<.005	<.006	<.004	<.006	<.02	<.02	<.02	<.006	<.02
JUL 14...		<.09	<.006	<.02	<.005	E.004	<.004	<.006	<.02	<.02	<.02	<.006	<.02
AUG 25...		<.09	<.006	<.02	<.005	<.006	<.004	<.006	<.02	<.02	<.02	<.006	<.02
SEP 22...		<.09	<.006	<.02	<.005	E.007	<.004	<.006	<.02	<.02	<.02	<.006	<.02

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ala-chlor ESA, water, fltrd, 0.7u GF ug/L (50009)	Ala-chlor OA, water, fltrd, 0.7u GF ug/L (61031)	Ala-chlor SAA, water, fltrd, ug/L (62848)	Ala-chlor, water, fltrd, ug/L (46342)	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)	Chlor-pyrifos oxon, water, fltrd, ug/L (61636)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd, 0.7u GF ug/L (82687)
APR 28...	<.02	<.02	<.02	<.005	82.1	E.003	<.02	E.006	<.010	E.026	<.06	<.007	<.006
MAY 13...	<.02	<.02	<.02	<.005	80.3	E.005	<.02	E.068	<.010	E.008	<.06	<.005	<.006
JUN 23...	<.02	<.02	<.02	<.005	91.3	<.007	<.02	E.067	<.010	E.017	<.06	<.005	<.006
JUL 14...	<.02	<.02	<.02	<.005	78.1	E.005	<.07	E.016	<.010	E.009	<.06	<.005	<.006
AUG 25...	<.02	<.02	<.02	<.005	83.7	E.004	<.07	<.050	<.010	<.041	<.06	<.005	<.006
SEP 22...	<.02	<.02	<.02	<.005	82.4	E.006	<.07	<.050	<.010	<.041	<.06	<.005	<.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Cyflu-thrin, water, fltrd, ug/L (61585)	Cyper-methrin water, fltrd, ug/L (61586)	DCPA, water fltrd, 0.7u GF ug/L (82682)	Desulf-inyl fipronil, water, fltrd, ug/L (62170)	Diaz-inon oxon, water, fltrd, ug/L (61638)	Diazi-non, water, fltrd, ug/L (39572)	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-enamid ESA, water, fltrd, ug/L (61951)	Dimeth-enamid OA, water, fltrd, ug/L (62482)	Dimeth-enamid water, fltrd, ug/L (61588)	Dimeth-oate, water, fltrd, 0.7u GF ug/L (82662)
APR 28...	<.008	<.009	<.003	<.012	<.01	<.005	91.9	<.08	<.009	<.02	<.02	<.02	<.006
MAY 13...	<.008	<.009	<.003	<.012	<.01	<.005	68.0	<.08	<.009	<.02	<.02	<.02	<.006
JUN 23...	<.008	<.009	<.003	<.012	<.01	<.005	136	<.08	<.009	<.02	<.02	<.02	<.006
JUL 14...	<.008	<.009	<.003	<.012	<.01	<.005	93.7	<.08	<.009	<.02	<.02	<.02	<.006
AUG 25...	<.008	<.009	<.003	<.012	<.01	<.005	87.5	<.08	<.009	<.02	<.02	<.02	<.006
SEP 22...	<.008	<.009	E.003	<.012	<.01	<.005	86.5	<.08	<.009	<.02	<.02	<.02	<.006

12504508 SUNNYSIDE CANAL DIVERSIONS ABOVE NORTH OUTLOOK ROAD NEAR SUNNYSIDE, WA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Fenami-phos sulfone water, fltrd, ug/L (61645)	Fenami-phos sulf-oxide, water, fltrd, ug/L (61646)	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)	Flufen-acet ESA, water, fltrd, ug/L (61952)	Flufe-nacet OA, water, fltrd, ug/L (62483)	Flufe-nacet, water, fltrd, ug/L (62481)	Fonofos oxon, water, fltrd, ug/L (61649)
APR 28...	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.002
MAY 13...	<.03	<.004	<.008	--	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.002
JUN 23...	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.002
JUL 14...	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003
AUG 25...	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003
SEP 22...	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	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)	Mala-oxon, water, fltrd, ug/L (61652)	Mala-thion, water, fltrd, ug/L (39532)	Meta-laxyl, water, fltrd, ug/L (61596)	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 ESA, water, fltrd 0.7u GF ug/L (61043)	Metola-chlor OA, water, fltrd 0.7u GF ug/L (61044)	Metola-chlor, water, fltrd, ug/L (39415)
APR 28...	<.003	<.013	<1	<.003	<.008	E.006	<.005	.011	<.03	<.015	<.02	<.02	<.013
MAY 13...	<.003	<.013	<1	<.003	<.008	<.027	<.005	.006	<.03	<.015	<.02	<.02	E.003
JUN 23...	<.003	<.013	<1	<.003	<.008	.049	<.005	<.006	<.03	<.015	<.02	<.02	<.013
JUL 14...	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	<.02	<.02	<.013
AUG 25...	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	<.02	<.02	<.013
SEP 22...	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	<.02	<.02	<.013

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Metri-buzin, water, fltrd, ug/L (82630)	Myclo-butanil water, fltrd, ug/L (61599)	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)	Prome-ton, water, fltrd, ug/L (04037)	Prome-tryn, water, fltrd, ug/L (04036)	Propy-zamide, water, fltrd 0.7u GF ug/L (82676)	Propa-chlor ESA, water, fltrd 0.7u GF ug/L (62766)	Propa-chlor OA, water, fltrd 0.7u GF ug/L (62767)	Simaz-ine, water, fltrd, ug/L (04035)
APR 28...	<.006	E.005	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.05	<.02	E.002
MAY 13...	.010	<.008	<.022	<.10	<.011	--	<.008	<.01	<.005	<.004	<.05	<.02	.007
JUN 23...	<.006	<.008	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.05	<.02	<.005
JUL 14...	<.006	<.008	<.022	<.10	<.011	<.05	<.008	<.01	<.005	<.004	<.05	<.02	<.005
AUG 25...	<.006	<.008	<.022	<.10	<.011	<.05	<.008	<.01	<.005	<.004	<.05	<.02	<.005
SEP 22...	<.006	<.008	<.022	<.02	<.011	<.05	<.008	<.01	<.005	<.004	<.05	<.02	<.005

12504508 SUNNYSIDE CANAL DIVERSIONS ABOVE NORTH OUTLOOK ROAD NEAR SUNNYSIDE, WA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Ter- bufos oxon sulfone water, fltrd, ug/L (61674)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Ter- buthyl- azine, water, fltrd, ug/L (04022)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Di- chlor- vos, water fltrd, ug/L (38775)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)
APR 28...	<.02	<.07	<.02	<.01	<.009	<.01	--	12
MAY 13...	<.02	<.07	<.02	<.01	<.009	<.01	86	33
JUN 23...	<.02	<.07	<.02	<.01	<.009	<.01	--	24
JUL 14...	<.02	<.07	<.02	<.01	<.009	<.01	--	29
AUG 25...	<.02	<.07	<.02	<.01	<.009	<.01	--	21
SEP 22...	<.02	<.07	<.02	<.01	<.009	<.01	--	7

462023120075200 DR2 AT YAKIMA VALLEY HIGHWAY, NEAR GRANGER, WA—Continued

SUMMARY STATISTICS	FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004	
ANNUAL TOTAL	1,803.7			
ANNUAL MEAN	4.93		4.93	
HIGHEST ANNUAL MEAN			4.93	2004
LOWEST ANNUAL MEAN			4.93	2004
HIGHEST DAILY MEAN	10	Aug 22	10	Aug 22, 2004
LOWEST DAILY MEAN	2.6	Oct 31	2.6	Oct 31, 2003
ANNUAL SEVEN-DAY MINIMUM	2.6	Oct 31	2.6	Oct 31, 2003
ANNUAL RUNOFF (AC-FT)	3,580		3,570	
10 PERCENT EXCEEDS	7.9		7.9	
50 PERCENT EXCEEDS	4.4		4.4	
90 PERCENT EXCEEDS	2.9		2.9	

462023120075200 DR2 AT YAKIMA VALLEY HIGHWAY, NEAR GRANGER, WA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 2003 to September 2004 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June to September 2004 (discontinued).

pH: June to September 2004 (discontinued).

WATER TEMPERATURE: June to November 2003, June to September 2004 (discontinued).

DISSOLVED OXYGEN: June to September 2004 (discontinued).

INSTRUMENTATION.--Water-quality monitor with 60-minute recording interval.

REMARKS.--Specific conductance records good, except July 1-6, 11-15, 17-19, 23-25, Aug. 18-20, 31, and Sept. 1-5, 22, which are fair, and July 7-8, 20-22, 26-31, Aug. 1-7, 21-28, and Sept. 6-14, which are poor. pH records are excellent, except July 6-8 and Sept. 9-14, which are good. Temperature records are excellent. Dissolved oxygen records are poor.

EXTREMES FOR JUNE TO SEPTEMBER 2004.--

SPECIFIC CONDUCTANCE: Maximum recorded, 546 microsiemens, July 27, but may have been higher during periods of missing record; minimum recorded, 203 microsiemens, Sept. 21, but may have been lower during periods of missing record.

PH: Maximum recorded, 8.1, July 8, but may have been higher during periods of missing record; minimum recorded, 7.2, Sept. 22, 30, but may have been lower during periods of missing record.

WATER TEMPERATURE: Maximum, 22.1°C, Aug. 1; minimum recorded, 13.4°C, Sept. 21, but may have been lower during periods of missing record.

DISSOLVED OXYGEN: Maximum recorded, 9.2 mg/L, June 16, but may have been higher during periods of missing record; minimum recorded, 0.7 mg/L, Aug. 19-20, but may have been lower during periods of missing record.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	464	409	434	370	349	360	474	418	436
2	---	---	---	438	369	407	398	356	376	479	389	434
3	---	---	---	378	341	360	429	375	399	451	373	403
4	---	---	---	396	326	357	418	335	383	422	400	412
5	---	---	---	407	320	360	386	320	355	417	381	396
6	---	---	---	426	338	380	381	331	355	412	379	391
7	---	---	---	388	339	361	---	---	---	428	383	400
8	---	---	---	401	331	365	---	---	---	436	396	413
9	---	---	---	421	370	391	---	---	---	477	398	423
10	---	---	---	392	354	376	---	---	---	497	406	430
11	---	---	---	405	349	377	---	---	---	424	393	411
12	---	---	---	441	338	389	---	---	---	407	369	388
13	---	---	---	440	373	404	---	---	---	489	378	424
14	---	---	---	421	375	405	---	---	---	471	408	438
15	---	---	---	442	385	412	---	---	---	412	273	311
16	---	---	---	415	376	398	---	---	---	320	260	284
17	---	---	---	400	360	377	---	---	---	291	247	269
18	---	---	---	399	366	380	385	327	350	274	230	254
19	---	---	---	429	375	403	377	317	344	282	264	273
20	---	---	---	443	367	406	373	331	355	291	267	277
21	---	---	---	484	387	424	368	341	352	293	203	271
22	---	---	---	447	390	412	410	328	353	370	---	---
23	393	349	368	401	366	383	397	321	356	---	---	---
24	438	352	385	403	348	372	424	374	399	---	---	---
25	415	377	394	411	371	389	428	403	415	---	---	---
26	420	356	384	443	357	395	426	400	413	---	---	---
27	385	355	371	546	384	424	439	402	417	---	---	---
28	371	328	348	456	374	410	---	---	---	---	---	---
29	402	328	358	421	378	395	---	---	---	---	---	---
30	434	349	390	416	361	384	---	---	---	494	408	435
31	---	---	---	384	338	362	519	411	448	---	---	---
MONTH	---	---	---	546	320	390	---	---	---	---	---	---

YAKIMA RIVER BASIN

462023120075200 DR2 AT YAKIMA VALLEY HIGHWAY NEAR GRANGER, WA—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	464	409	434	370	349	360	474	418	436
2	---	---	---	438	369	407	398	356	376	479	389	434
3	---	---	---	378	341	360	429	375	399	451	373	403
4	---	---	---	396	326	357	418	335	383	422	400	412
5	---	---	---	407	320	360	386	320	355	417	381	396
6	---	---	---	426	338	380	381	331	355	412	379	391
7	---	---	---	388	339	361	---	---	---	428	383	400
8	---	---	---	401	331	365	---	---	---	436	396	413
9	---	---	---	421	370	391	---	---	---	477	398	423
10	---	---	---	392	354	376	---	---	---	497	406	430
11	---	---	---	405	349	377	---	---	---	424	393	411
12	---	---	---	441	338	389	---	---	---	407	369	388
13	---	---	---	440	373	404	---	---	---	489	378	424
14	---	---	---	421	375	405	---	---	---	471	408	438
15	---	---	---	442	385	412	---	---	---	412	273	311
16	---	---	---	415	376	398	---	---	---	320	260	284
17	---	---	---	400	360	377	---	---	---	291	247	269
18	---	---	---	399	366	380	385	327	350	274	230	254
19	---	---	---	429	375	403	377	317	344	282	264	273
20	---	---	---	443	367	406	373	331	355	291	267	277
21	---	---	---	484	387	424	368	341	352	293	203	271
22	---	---	---	447	390	412	410	328	353	370	---	---
23	393	349	368	401	366	383	397	321	356	---	---	---
24	438	352	385	403	348	372	424	374	399	---	---	---
25	415	377	394	411	371	389	428	403	415	---	---	---
26	420	356	384	443	357	395	426	400	413	---	---	---
27	385	355	371	546	384	424	439	402	417	---	---	---
28	371	328	348	456	374	410	---	---	---	---	---	---
29	402	328	358	421	378	395	---	---	---	---	---	---
30	434	349	390	416	361	384	---	---	---	494	408	435
31	---	---	---	384	338	362	519	411	448	---	---	---
MONTH	---	---	---	546	320	390	---	---	---	---	---	---

462023120075200 DR2 AT YAKIMA VALLEY HIGHWAY NEAR GRANGER, WA—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	8.0	7.7	7.8	7.7	7.6	7.6	---	---	---
2	---	---	---	7.9	7.7	7.8	7.6	7.6	7.6	---	---	---
3	---	---	---	7.8	7.6	7.7	7.7	7.4	7.6	7.8	7.5	7.7
4	---	---	---	7.9	7.7	7.8	7.6	7.4	7.5	7.8	7.7	7.8
5	---	---	---	7.8	7.6	7.7	7.6	7.3	7.5	7.9	7.8	7.8
6	---	---	---	7.8	7.6	7.7	7.6	7.3	7.5	7.8	7.7	7.8
7	---	---	---	7.8	7.6	7.7	7.6	7.4	7.5	7.8	7.5	7.6
8	---	---	---	8.1	7.6	7.7	7.6	7.4	7.5	7.7	7.5	7.6
9	---	---	---	7.8	7.6	7.7	7.6	7.4	7.5	7.7	7.3	7.5
10	---	---	---	7.8	7.7	7.7	7.6	7.3	7.5	7.6	7.3	7.5
11	---	---	---	7.8	7.6	7.7	7.5	7.3	7.4	7.6	7.5	7.5
12	---	---	---	7.8	7.6	7.7	7.5	7.4	7.5	7.7	7.6	7.6
13	---	---	---	7.7	7.6	7.7	7.6	7.4	7.5	7.8	7.5	7.6
14	---	---	---	7.7	7.6	7.6	7.6	7.5	7.6	7.7	7.5	7.6
15	---	---	---	7.7	7.6	7.6	7.6	7.6	7.6	7.7	7.6	7.7
16	8.0	7.7	7.8	7.7	7.6	7.6	7.6	7.4	7.5	7.7	7.3	7.6
17	8.0	7.6	7.8	7.7	7.6	7.6	7.6	7.3	7.5	7.7	7.4	7.6
18	8.0	7.7	7.8	7.7	7.5	7.6	7.6	7.4	7.5	7.7	7.6	7.6
19	8.0	7.7	7.8	7.6	7.5	7.6	7.6	7.3	7.4	7.8	7.6	7.7
20	8.0	7.6	7.8	7.6	7.4	7.5	7.5	7.4	7.4	7.7	7.5	7.6
21	8.0	7.6	7.8	7.6	7.4	7.5	7.5	7.5	7.5	7.7	7.6	7.7
22	8.0	7.6	7.8	7.7	7.5	7.5	7.5	7.4	7.5	7.7	7.2	---
23	8.0	7.6	7.8	7.6	7.5	7.6	7.6	7.4	7.5	---	---	---
24	8.0	7.6	7.7	7.7	7.6	7.6	7.5	7.4	7.5	---	---	---
25	7.9	7.6	7.7	7.7	7.6	7.7	7.4	7.3	7.4	---	---	---
26	7.8	7.7	7.7	7.7	7.5	7.6	7.5	7.4	7.4	---	---	---
27	7.9	7.6	7.7	7.7	7.3	7.6	7.5	7.4	7.4	---	---	---
28	7.8	7.6	7.7	7.6	7.4	7.5	7.5	7.4	7.4	---	---	---
29	8.0	7.6	7.8	7.6	7.4	7.5	7.5	7.5	7.5	---	---	---
30	8.0	7.8	7.9	7.6	7.4	7.5	---	---	---	7.7	7.2	7.6
31	---	---	---	7.6	7.6	7.6	---	---	---	---	---	---
MONTH	---	---	---	8.1	7.3	7.6	---	---	---	---	---	---

YAKIMA RIVER BASIN

462023120075200 DR2 AT YAKIMA VALLEY HIGHWAY NEAR GRANGER, WA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	20.7	16.6	18.5	22.1	18.1	20.0	18.8	17.2	18.0
2	---	---	---	20.4	16.1	18.3	21.3	18.4	19.8	18.0	16.1	17.0
3	---	---	---	21.5	16.9	18.9	21.7	18.1	19.6	17.9	15.6	16.6
4	---	---	---	20.8	16.3	18.4	21.2	17.7	19.4	17.8	15.3	16.5
5	---	---	---	20.6	16.4	18.4	20.6	18.7	19.5	17.9	14.9	16.3
6	---	---	---	20.4	17.0	18.6	19.4	17.8	18.5	17.9	14.6	16.1
7	---	---	---	20.0	16.3	17.9	19.4	16.6	18.0	18.1	14.6	16.3
8	---	---	---	19.6	14.7	17.1	19.7	16.4	18.0	18.4	15.0	16.5
9	---	---	---	19.5	14.8	17.0	20.4	17.0	18.6	17.6	15.7	16.5
10	---	---	---	19.0	15.0	16.9	20.8	17.4	19.0	18.0	14.7	16.2
11	---	---	---	19.6	14.9	17.1	21.2	17.9	19.5	17.8	16.4	16.9
12	---	---	---	19.8	15.2	17.4	21.4	18.0	19.7	17.9	15.8	16.6
13	---	---	---	20.6	16.3	18.3	21.0	18.1	19.6	16.9	15.2	15.9
14	---	---	---	21.4	16.9	19.1	19.8	18.3	19.1	16.9	14.5	15.6
15	17.5	---	---	21.4	17.5	19.3	20.8	17.9	19.3	16.8	14.9	15.7
16	17.7	14.0	15.8	22.0	17.0	19.4	21.0	17.9	19.4	16.6	14.3	15.3
17	18.2	14.5	16.3	21.2	17.8	19.6	20.8	18.4	19.7	16.2	14.9	15.4
18	18.3	15.5	16.7	21.2	18.6	20.0	20.8	18.4	19.7	16.0	14.2	14.9
19	18.4	15.4	16.8	20.9	18.1	19.3	21.1	18.5	19.7	15.7	13.9	14.7
20	19.1	15.4	17.1	21.1	17.0	18.9	21.5	18.5	19.7	15.8	14.0	14.7
21	18.9	15.2	17.1	20.8	16.5	18.6	20.8	18.3	19.5	16.2	13.4	14.5
22	19.2	15.9	17.5	21.1	16.6	18.8	19.7	18.3	19.1	16.4	13.6	14.8
23	20.5	16.8	18.5	21.5	17.0	19.1	19.0	16.7	17.9	---	---	---
24	20.5	17.4	18.9	21.2	17.7	19.4	17.9	16.9	17.4	---	---	---
25	21.1	17.3	19.2	21.5	18.0	19.6	18.3	16.7	17.3	---	---	---
26	20.8	17.1	18.9	21.4	17.5	19.2	18.6	16.0	17.2	---	---	---
27	21.4	16.6	18.8	20.8	17.3	18.9	18.7	16.1	17.3	---	---	---
28	21.2	16.6	18.9	20.9	17.2	19.0	18.9	16.2	17.6	---	---	---
29	20.5	17.1	18.8	21.4	17.5	19.4	19.3	16.6	17.8	16.7	---	---
30	19.8	17.8	18.6	21.8	18.1	19.8	19.5	16.4	17.9	16.5	14.9	15.5
31	---	---	---	21.8	18.0	19.9	19.8	17.0	18.3	---	---	---
MONTH	---	---	---	22.0	14.7	18.7	22.1	16.0	18.8	---	---	---

462023120075200 DR2 AT YAKIMA VALLEY HIGHWAY NEAR GRANGER, WA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	UV absorbance, 254 nm, wat flt units /cm (50624)	SUVA, 254 nm, abs units/mgC/L /meter (63162)	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)	Hardness, water, mg/L as CaCO3 (00900)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)
OCT													
02...	1615	--	--	--	--	--	--	--	442	--	--	180	--
15...	1530	4.7	.107	2.8	738	8.2	82	8.0	487	10.8	13.7	200	24
21...	0910	3.4	.047	2.2	746	7.9	80	8.0	666	18.2	14.8	270	29
28...	0900	3.2	.046	2.2	737	8.3	84	8.0	657	17.3	14.0	250	12
NOV													
04...	1000	2.5	.040	1.9	747	8.6	82	8.1	650	1.6	12.0	260	23
19...	1030	2.9	.052	1.8	736	8.1	80	8.1	649	8.0	13.2	260	28
DEC													
09...	1520	3.0	.043	1.3	743	8.4	80	8.1	650	4.1	12.0	260	28
JAN													
20...	1450	3.6	.155	3.1	752	8.4	79	8.1	702	7.7	11.7	280	31
FEB													
18...	1610	3.6	.159	3.1	743	8.6	81	8.1	708	10.6	11.7	280	36
MAR													
16...	1310	3.2	.041	2.1	745	10.6	107	8.4	667	22.5	14.8	260	32
30...	0800	4.0	.050	2.3	739	9.8	92	8.2	529	9.3	11.2	220	28
APR													
20...	1200	4.9	.081	2.3	740	9.8	97	8.2	484	13.8	13.2	180	20
27...	1210	4.7	.069	2.6	740	9.2	92	8.1	457	22.7	14.0	180	14
MAY													
04...	1250	4.9	.096	2.2	738	10.0	106	8.2	482	24.9	16.5	180	17
12...	1320	4.9	.091	2.8	745	8.6	85	8.0	429	21.1	13.6	170	14
18...	1150	6.6	.096	2.7	739	8.5	85	7.9	458	22.6	13.8	180	17
24...	1020	9.0	.093	2.9	744	9.1	92	7.9	352	18.2	14.4	140	10
JUN													
07...	1250	7.2	.128	2.2	743	9.8	103	7.9	357	25.0	16.3	140	13
15...	1310	6.5	.092	2.6	750	9.2	96	8.1	376	25.2	16.9	140	30
22...	1110	6.5	.110	2.8	740	7.9	86	7.8	380	28.4	17.5	150	15
29...	1130	7.8	.014	1.6	741	7.3	81	7.8	340	25.2	18.9	130	10
JUL													
06...	1230	8.2	.107	3.1	741	7.8	87	7.9	374	33.0	19.0	140	12
13...	1350	7.9	.114	2.7	737	7.3	82	7.8	409	33.2	19.3	160	14
20...	1340	8.2	.168	.8	744	6.6	75	7.6	436	30.2	20.0	160	16
27...	1250	7.0	.125	1.1	742	5.9	66	7.6	443	30.5	19.4	170	22
AUG													
10...	1230	7.9	--	--	745	4.9	55	7.5	392	34.3	19.5	150	6
17...	1130	8.4	.114	.8	743	5.1	57	7.6	409	34.1	20.0	150	10
24...	1310	8.1	.145	.9	736	4.6	50	7.6	462	26.3	17.6	170	10
30...	1010	6.4	.113	2.9	742	6.8	72	7.8	434	24.8	16.9	170	16
SEP													
07...	1500	5.9	.107	.8	745	5.5	60	7.7	446	28.6	18.2	170	17
14...	1050	5.9	.110	2.8	742	7.0	72	7.7	462	23.7	15.2	170	15
21...	1210	4.9	.088	2.6	750	7.0	71	7.8	483	15.4	14.9	190	17

462023120075200 DR2 AT YAKIMA VALLEY HIGHWAY NEAR GRANGER, WA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt inc tit field, mg/L as CaCO ₃ (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)
OCT													
02...	43.5	16.3	4.62	.8	25.4	23	--	--	--	10.2	.4	35.5	39.2
15...	48.0	18.6	6.23	1	30.7	25	173	210	.0	14.9	.4	38.1	47.4
21...	65.9	24.6	6.90	1	43.1	25	237	289	.0	16.5	.6	47.8	66.5
28...	61.4	23.3	6.14	1	40.7	26	237	289	.0	16.8	.6	45.7	68.1
NOV													
04...	62.9	23.9	6.11	1	41.0	25	234	283	.0	16.8	.6	46.2	67.0
19...	64.1	24.7	7.06	1	41.0	25	235	285	.0	17.4	.6	47.0	67.4
DEC													
09...	64.2	24.8	6.66	1	41.1	25	235	286	.0	17.2	.6	46.1	70.6
JAN													
20...	68.1	26.3	9.71	1	42.9	24	248	301	.0	21.0	.6	44.8	79.7
FEB													
18...	69.2	26.7	10.3	1	47.7	26	248	301	.0	21.5	.6	43.6	78.7
MAR													
16...	63.9	24.5	5.77	1	43.1	26	229	274	2	18.0	.6	43.7	67.6
30...	53.0	21.0	4.65	1	33.9	25	192	233	.0	14.4	.5	37.8	53.3
APR													
20...	45.0	16.9	4.94	.9	28.5	25	163	198	.0	13.4	.4	35.0	48.1
27...	44.5	16.6	4.43	.9	27.3	24	166	202	.0	11.2	.4	33.4	41.1
MAY													
04...	44.9	16.8	5.73	1	29.5	25	165	200	.0	11.6	.4	35.8	42.2
12...	41.4	15.7	4.71	.9	25.6	24	155	188	.0	10.6	.4	33.0	39.0
18...	44.1	17.1	5.06	.8	25.7	23	164	199	.0	11.2	.4	34.4	40.7
24...	33.8	12.3	4.14	.8	20.6	24	125	152	.0	8.83	.3	27.7	28.9
JUN													
07...	34.6	12.6	5.08	.8	21.4	24	126	153	.0	8.98	.3	28.9	30.5
15...	35.6	13.5	4.17	.8	21.8	24	115	140	.0	9.15	.3	30.7	34.9
22...	37.6	13.6	4.89	.8	23.6	25	136	165	.0	9.02	.3	30.6	32.2
29...	32.5	11.7	4.87	.8	20.3	25	120	145	.0	8.92	.3	25.4	26.4
JUL													
06...	34.7	12.6	5.51	.8	21.5	24	127	154	.0	8.82	.3	25.9	28.6
13...	39.7	14.4	5.27	.8	24.5	24	145	176	.0	9.86	.3	29.2	32.1
20...	40.6	14.4	6.29	.9	25.1	24	145	176	.0	12.3	.3	28.6	37.2
27...	43.3	15.9	6.03	.9	27.1	25	152	185	.0	12.7	.3	31.3	38.2
AUG													
10...	36.7	13.6	4.49	.8	23.1	25	142	173	.0	10.3	.3	27.1	32.6
17...	38.4	14.1	4.85	.8	23.0	24	145	176	.0	12.3	.3	28.4	32.9
24...	43.0	15.9	6.73	1	28.8	26	164	199	.0	12.7	.4	32.2	39.9
30...	42.3	15.8	5.20	.9	26.0	24	156	189	.0	9.48	.4	33.8	36.0
SEP													
07...	42.5	15.9	5.71	.9	26.8	25	155	188	.0	12.3	.4	33.3	38.9
14...	42.4	16.6	5.71	.9	27.2	25	160	194	.0	10.8	.4	35.4	41.1
21...	48.5	17.5	5.44	1	31.5	26	177	215	.0	12.3	.5	38.0	44.6

462023120075200 DR2 AT YAKIMA VALLEY HIGHWAY NEAR GRANGER, WA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unfltrd by analysis, mg/L (62855)	Total nitrogen, water, unfltrd mg/L (00600)
OCT													
02...	--	--	--	282	.53	E.02	2.70	.010	--	.097	.22	3.27	3.2
15...	322	.43	4.01	316	.67	<.04	3.22	.013	.23	.104	.26	3.63	3.9
21...	436	.58	3.93	428	.56	E.04	4.89	.019	.26	.088	.23	5.51	5.5
28...	428	.60	3.79	439	.55	.04	5.14	.017	.16	.092	.23	5.58	5.7
NOV													
04...	426	.59	2.92	433	.61	E.03	5.06	.013	.36	.082	.27	5.81	5.7
19...	433	.60	3.43	438	.57	E.03	5.33	.017	.17	.100	.22	5.60	5.9
DEC													
09...	436	.59	3.51	434	.62	E.04	5.37	.014	.18	.086	.24	5.77	6.0
JAN													
20...	467	.67	4.75	489	1.0	E.04	5.74	.016	.25	.165	.35	6.26	6.8
FEB													
18...	474	.65	4.66	480	--	E.03	6.18	.012	.20	.143	.30	7.27	--
MAR													
16...	431	.60	3.78	438	--	<.04	6.05	.011	.06	.087	.122	6.18	--
30...	353	.48	3.80	352	--	<.04	4.40	E.007	.04	.063	.115	4.48	--
APR													
20...	304	.42	4.12	311	--	.16	3.18	.011	.11	.056	.29	4.19	--
27...	292	.40	3.76	296	--	<.04	3.03	.008	.10	.065	.28	3.73	--
MAY													
04...	301	.41	3.97	300	--	<.04	3.36	.011	.08	.163	.33	3.86	--
12...	276	.39	3.78	286	--	E.02	2.95	.012	.16	.163	.37	3.42	--
18...	292	.41	5.40	303	--	E.02	3.44	.011	.15	.147	.29	4.60	--
24...	224	.31	5.52	227	--	E.03	2.65	.014	.20	.108	.35	3.08	--
JUN													
07...	228	.27	3.83	197	--	<.04	2.20	.029	.06	.204	.30	3.24	--
15...	230	.33	4.27	243	--	<.04	2.40	.012	.05	.084	.188	2.68	--
22...	246	.35	4.51	257	--	<.04	2.77	.014	.10	.148	.22	3.14	--
29...	214	.30	4.64	220	--	.04	2.60	.028	.11	.283	.31	2.67	--
JUL													
06...	232	.33	5.40	244	--	E.03	3.88	.027	.15	.218	.34	4.25	--
13...	262	.36	5.67	266	--	.04	4.31	.025	.15	.191	.33	4.65	--
20...	270	.40	6.46	292	--	.08	4.00	.053	.19	.252	.40	4.96	--
27...	285	.38	5.35	283	--	<.04	4.17	.059	.23	.212	.42	5.19	--
AUG													
10...	245	.35	5.50	258	--	<.04	2.63	.132	<.02	.077	.31	3.06	--
17...	251	.35	5.75	254	--	<.04	2.07	.051	.23	.135	.44	3.50	--
24...	290	.41	6.61	302	--	<.04	2.69	.119	.15	.187	E.35	4.18	--
30...	278	.38	4.85	281	--	.10	3.39	.026	.15	.148	.33	3.96	--
SEP													
07...	277	.39	4.53	285	--	<.04	1.72	.108	.16	.153	.36	3.01	--
14...	290	.40	4.70	295	--	.07	3.30	.021	.26	.174	.34	3.90	--
21...	320	.43	4.20	318	--	.04	3.41	.028	.17	.092	.33	4.14	--

462023120075200 DR2 AT YAKIMA VALLEY HIGHWAY NEAR GRANGER, WA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	1-Naphthol, water, fltrd, 0.7u GF ug/L (49295)	2,6-Diethyl-aniline water fltrd, 0.7u GF ug/L (82660)	2-[(2-Et-6-Me-Ph)-amino]propan-1-ol, ug/L (61615)	2-[(2-Ethyl-6methyl phenyl) amino]2 oxoESA ug/L (62850)	2Chloro-2,6-' diethyl acet-anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methyl-aniline water, fltrd, ug/L (61620)
OCT													
02...	--	--	--	--	41	65.0	--	--	--	--	--	--	--
15...	2.2	<.1	2.2	3.8	43	94.9	<.09	<.006	<.1	--	<.005	E.008	<.004
21...	2.5	<.1	2.5	2.2	14	151	<.09	<.006	<.1	--	<.005	E.012	<.004
28...	1.6	<.1	1.6	2.1	10	127	<.09	<.006	<.1	--	<.005	E.012	<.004
NOV													
04...	1.4	<.1	1.4	2.1	13	137	<.09	<.006	<.1	--	<.005	E.005	<.004
19...	1.7	<.1	1.7	2.9	18	108	<.09	<.006	<.1	--	<.005	<.006	<.004
DEC													
09...	1.7	<.1	1.6	3.4	13	96.2	<.09	<.006	<.1	<.02	<.005	<.006	<.004
JAN													
20...	2.3	<.1	2.3	5.0	48	124	<.09	<.006	<.1	<.02	<.005	E.011	<.004
FEB													
18...	1.9	<.1	1.9	5.1	48	95.8	<.09	<.006	<.1	<.02	<.005	E.013	<.004
MAR													
16...	.6	<.1	.5	2.0	10	70.7	<.09	<.006	--	<.02	<.005	E.009	<.004
30...	.4	<.1	.4	2.2	10	64.3	<.09	<.006	--	<.02	<.005	E.005	<.004
APR													
20...	1.1	<.1	1.0	3.5	24	68.8	M	<.006	--	<.02	<.005	E.006	<.004
27...	.9	<.1	.9	2.7	22	56.9	<.09	<.006	--	<.02	<.005	E.004	<.004
MAY													
04...	.7	<.1	.7	4.4	24	51.4	<.09	<.006	--	<.02	<.005	E.006	<.004
12...	1.5	<.1	1.5	3.2	21	44.1	<.09	<.006	--	--	<.005	E.006	<.004
18...	1.2	<.1	1.2	3.6	28	49.4	<.09	<.006	--	<.02	<.005	E.011	<.004
24...	2.0	<.1	2.0	3.2	20	47.4	<.09	<.006	--	<.02	<.005	E.015	<.004
JUN													
07...	.5	<.1	.5	5.7	39	39.6	<.09	<.006	--	<.02	<.005	E.014	<.004
15...	.8	<.1	.8	3.6	29	35.2	<.09	<.006	--	<.02	<.005	E.009	<.004
22...	.7	<.1	.6	3.9	30	31.6	<.09	<.006	--	<.02	<.005	E.005	<.004
29...	1.0	<.1	1.0	.9	30	32.8	<.09	<.006	--	<.02	<.005	E.010	<.004
JUL													
06...	1.2	<.1	1.2	3.5	19	28.2	<.09	<.006	--	<.02	<.005	E.029	<.004
13...	1.2	<.1	1.2	4.2	19	35.3	<.09	<.006	--	<.02	<.005	E.019	<.004
20...	1.5	<.1	1.5	20.9	75	153	E.04	<.006	--	<.02	<.005	E.022	<.004
27...	2.3	<.1	2.3	11.9	53	102	M	<.006	--	<.02	<.005	E.025	<.004
AUG													
10...	.4	<.1	.4	5.8	46	108	M	<.006	--	<.02	<.005	E.018	<.004
17...	2.1	<.1	2.1	15.1	72	111	E.01	<.006	--	<.02	<.005	E.017	<.004
24...	1.3	<.1	1.3	16.0	86	90.8	E.04	<.006	--	<.02	<.005	E.014	<.004
30...	1.4	<.1	1.4	3.9	42	73.7	<.09	<.006	--	<.02	<.005	E.010	<.004
SEP													
07...	1.5	<.1	1.5	13.9	93	137	<.09	<.006	--	<.02	<.005	E.007	<.004
14...	2.2	<.1	2.2	3.9	42	103	<.09	<.006	--	<.02	<.005	E.011	<.004
21...	1.8	<.1	1.8	3.4	42	116	M	<.006	--	<.02	<.005	E.009	<.004

462023120075200 DR2 AT YAKIMA VALLEY HIGHWAY NEAR GRANGER, WA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	3,4-Di-chloro-aniline water fltrd, ug/L (61625)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Aceto-chlor ESA, water, fltrd, 0.7u GF ug/L (61029)	Aceto-chlor OA, water, fltrd, 0.7u GF ug/L (61030)	Aceto-chlor SAA, water, fltrd, ug/L (62847)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor ESA SA, water, fltrd, ug/L (62849)	Ala-chlor ESA, water, fltrd, 0.7u GF ug/L (50009)	Ala-chlor OA, water, fltrd, 0.7u GF ug/L (61031)	Ala-chlor SAA, water, fltrd, ug/L (62848)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Atra-zine, water, fltrd, ug/L (39632)
OCT													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<.004	<.006	<.05	<.05	--	<.006	--	.06	<.05	--	<.005	90.0	.012
21...	<.004	<.006	<.05	<.05	--	<.006	--	.12	<.05	--	<.005	84.4	.016
28...	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.11	<.02	<.02	<.005	85.9	.015
NOV													
04...	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.15	.02	<.02	<.005	94.5	.014
19...	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.13	<.02	<.02	<.005	86.4	.012
DEC													
09...	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.13	<.02	<.02	<.005	89.9	.012
JAN													
20...	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.14	<.02	<.02	<.005	89.5	.015
FEB													
18...	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.16	<.02	<.02	<.005	85.5	.016
MAR													
16...	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.12	.03	<.02	<.005	73.3	.012
30...	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.08	<.02	<.02	<.005	84.9	.011
APR													
20...	E.004	<.006	<.02	<.02	<.02	<.006	<.02	.08	<.02	<.02	<.005	86.2	.011
27...	<.004	<.006	<.02	<.02	<.02	.019	<.02	.05	<.02	<.02	<.005	88.0	.013
MAY													
04...	E.003	<.006	<.02	<.02	<.02	.009	<.02	.05	<.02	<.02	<.005	84.6	.047
12...	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.10	<.02	<.02	.006	72.5	.022
18...	.007	<.006	<.02	<.02	<.02	.009	<.02	.10	<.02	<.02	<.005	90.5	.147
24...	E.004	<.006	<.02	<.02	<.02	E.005	<.02	.07	<.02	<.02	.108	88.5	.330
JUN													
07...	<.004	<.006	<.02	.02	<.02	.013	<.02	.07	.03	<.02	.080	93.5	.027
15...	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.08	.02	<.02	.006	96.9	.015
22...	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.08	.02	<.02	E.004	96.0	.010
29...	<.004	<.006	<.02	<.02	<.02	.008	<.02	.07	.02	<.02	.008	85.3	.033
JUL													
06...	.006	<.006	<.02	<.02	<.02	.009	<.02	.16	.05	<.02	.007	90.2	.088
13...	<.004	<.006	<.02	<.02	<.02	<.006	.03	.26	.09	<.02	E.005	97.2	.036
20...	<.004	<.006	<.02	<.02	<.02	<.008	<.02	.06	<.02	<.02	<.007	94.3	.041
27...	<.004	<.006	<.02	<.02	<.02	.008	<.02	.17	.06	<.02	.007	87.2	.032
AUG													
10...	<.004	<.006	<.02	<.02	<.02	.006	<.02	.13	.03	<.02	<.005	85.2	.024
17...	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.16	<.02	<.02	<.005	82.8	.022
24...	<.004	<.006	<.02	<.02	<.02	<.006	.02	.24	.04	<.02	<.005	78.8	.019
30...	<.004	<.006	<.02	<.02	<.02	<.006	.03	.09	.03	<.02	<.005	84.1	.013
SEP													
07...	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.09	.02	<.02	<.005	87.2	.010
14...	<.004	<.006	.04	<.02	<.02	<.007	<.02	.05	<.02	<.02	<.005	78.0	.011
21...	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.08	<.02	<.02	<.005	85.1	.012

462023120075200 DR2 AT YAKIMA VALLEY HIGHWAY NEAR GRANGER, WA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd 0.7u GF (82686)	Ben-flur-alin, water, fltrd 0.7u GF (82673)	Car-baryl, water, fltrd 0.7u GF (82680)	Chlor-pyrifos oxon, water, fltrd, ug/L (61636)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF (82687)	Cyflu-thrin, water, fltrd, ug/L (61585)	Cyper-methrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diaz-inon oxon, water, fltrd, ug/L (61638)	Diazi-non, water, fltrd, ug/L (39572)
OCT													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<.03	<.050	<.010	E.023	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
21...	<.03	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
28...	<.03	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
NOV													
04...	<.03	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
19...	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
DEC													
09...	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
JAN													
20...	<.03	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
FEB													
18...	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
MAR													
16...	<.02	<.050	<.010	<.041	<.06	E.003	<.006	<.008	<.009	<.003	<.012	<.01	<.005
30...	<.02	<.050	<.010	E.003	<.06	.017	<.006	<.008	<.009	E.002	<.012	<.01	<.005
APR													
20...	<.02	<.050	<.010	E.017	<.06	E.003	<.006	<.008	<.009	E.001	<.012	<.01	<.005
27...	<.02	<.050	<.010	E.004	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
MAY													
04...	<.02	<.050	<.010	E.008	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
12...	<.02	E.021	<.010	E.009	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
18...	<.02	E.014	<.010	E.008	<.06	<.005	<.006	<.008	<.009	.004	<.012	<.01	<.005
24...	<.02	E.012	<.010	E.006	<.06	E.001	<.006	<.008	<.009	<.003	<.012	<.01	<.005
JUN													
07...	--	E.007	<.010	E.015	<.06	<.005	<.006	<.008	<.009	.004	<.012	<.01	<.005
15...	<.02	E.012	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
22...	<.02	E.018	<.010	E.005	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
29...	<.02	E.011	<.010	E.001	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
JUL													
06...	<.07	E.008	<.010	E.007	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
13...	<.07	E.021	<.010	E.006	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
20...	<.07	E.035	<.010	E.471	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
27...	<.07	E.044	<.010	E.018	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
AUG													
10...	<.07	E.015	<.010	E.038	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
17...	<.07	E.011	<.010	E.093	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
24...	<.07	E.010	<.010	E.284	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
30...	<.07	<.050	<.010	E.018	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
SEP													
07...	<.07	<.050	<.010	E.039	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
14...	<.07	<.050	<.010	E.009	<.06	<.005	<.006	<.008	<.009	.003	<.012	<.01	<.005
21...	<.07	<.050	<.010	E.021	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005

462023120075200 DR2 AT YAKIMA VALLEY HIGHWAY NEAR GRANGER, WA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—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- enamid ESA, water, fltrd, ug/L (61951)	Dimeth- enamid OA, water, fltrd, ug/L (62482)	Dimeth- enamid water, fltrd, ug/L (61588)	Dimeth- oate, water, fltrd 0.7u GF ug/L (82662)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Fenami- phos sulfone water, fltrd, ug/L (61645)	Fenami- phos sulf- oxide, water, fltrd, ug/L (61646)	Fenami- phos, water, fltrd, ug/L (61591)	Desulf- inyl- fipronil amide, wat flt ug/L (62169)
OCT													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	102	<.08	<.009	<.05	<.05	--	<.006	<.03	<.004	<.008	<.03	<.03	<.029
21...	101	<.08	<.009	<.05	<.05	--	<.006	<.03	<.004	<.008	<.03	<.03	<.029
28...	97.2	<.08	<.009	<.05	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029
NOV													
04...	94.5	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029
19...	94.4	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029
DEC													
09...	89.4	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029
JAN													
20...	99.1	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029
FEB													
18...	95.5	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029
MAR													
16...	81.0	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029
30...	96.4	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029
APR													
20...	93.6	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029
27...	87.6	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029
MAY													
04...	93.6	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029
12...	61.7	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	--	<.03	<.029
18...	90.6	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029
24...	95.3	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029
JUN													
07...	109	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029
15...	96.0	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029
22...	98.1	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029
29...	84.0	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029
JUL													
06...	92.9	<.08	E.003	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03	<.029
13...	106	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03	<.029
20...	123	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03	<.029
27...	100	<.08	M	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03	<.029
AUG													
10...	88.4	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03	<.029
17...	87.9	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03	<.029
24...	88.0	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03	<.029
30...	89.3	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03	<.029
SEP													
07...	102	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03	<.029
14...	95.0	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03	<.029
21...	74.4	<.08	<.009	<.02	<.02	<.02	<.006	<.01	<.004	<.049	<.04	<.03	<.029

462023120075200 DR2 AT YAKIMA VALLEY HIGHWAY NEAR GRANGER, WA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Flufenacet ESA, water, fltrd, ug/L (61952)	Flufenacet OA, water, fltrd, ug/L (62483)	Flufenacet, water, fltrd, ug/L (62481)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexazinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofenphos, water, fltrd, ug/L (61594)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)
OCT 02...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<.013	<.024	<.016	<.05	<.05	--	<.002	<.003	<.013	<1	<.003	<.008	<.027
21...	<.013	<.024	<.016	<.05	<.05	--	<.002	<.003	<.013	<1	<.003	<.008	<.027
28...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003	<.008	<.027
NOV 04...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003	<.008	<.027
19...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003	<.008	<.027
DEC 09...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003	<.008	<.027
JAN 20...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003	<.008	<.027
FEB 18...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003	<.008	<.027
MAR 16...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003	<.008	<.027
30...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003	<.008	<.027
APR 20...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003	<.008	<.027
27...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003	<.008	<.027
MAY 04...	<.013	<.024	<.016	<.02	<.02	<.02	<.003	<.003	<.013	<1	<.003	<.008	<.027
12...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003	<.008	<.027
18...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003	<.008	<.027
24...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003	<.008	<.027
JUN 07...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003	<.008	<.027
15...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003	<.008	E.008
22...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003	<.008	.057
29...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003	<.008	<.027
JUL 06...	<.013	<.024	<.016	<.02	<.02	<.02	<.003	<.003	<.013	<.387	<.003	<.030	<.027
13...	<.013	<.024	<.016	<.02	<.02	<.02	<.003	<.003	<.013	<.387	<.003	<.030	<.027
20...	<.013	<.024	<.016	<.02	<.02	<.02	<.003	<.003	<.013	<.387	<.003	<.030	<.027
27...	<.013	<.024	<.016	<.02	<.02	<.02	<.003	<.003	<.013	<.387	<.003	<.030	E.022
AUG 10...	<.013	<.024	<.016	<.02	<.02	<.02	<.003	<.003	<.013	<.387	<.003	<.030	<.027
17...	<.013	<.024	<.016	<.02	<.02	<.02	<.003	<.003	<.013	<.387	<.003	<.030	E.008
24...	<.013	<.024	<.016	<.02	<.02	<.02	<.003	<.003	<.013	<.387	<.003	<.030	E.006
30...	<.013	<.024	<.016	<.02	<.02	<.02	<.003	<.003	<.013	<.387	<.003	<.030	<.027
SEP 07...	<.013	<.024	<.016	<.02	<.02	<.02	<.003	<.003	<.013	<.387	<.003	<.030	<.027
14...	<.013	<.024	<.016	<.02	<.02	<.02	<.003	<.003	<.013	<.387	<.003	<.030	<.027
21...	<.013	<.024	<.016	<.02	<.02	<.02	<.003	<.003	<.013	<.387	<.003	<.030	<.027

462023120075200 DR2 AT YAKIMA VALLEY HIGHWAY NEAR GRANGER, WA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Meta-laxyl, water, fltrd, ug/L (61596)	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 ESA, water, fltrd, 0.7u GF ug/L (61043)	Metola-chlor OA, water, fltrd, 0.7u GF ug/L (61044)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Myclo-butanil water, fltrd, ug/L (61599)	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)
OCT													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<.005	<.006	<.03	<.015	<.05	<.05	<.013	<.006	<.008	<.022	<.10	<.011	<.06
21...	<.005	<.006	<.03	<.015	<.05	<.05	<.013	<.006	<.008	<.022	<.10	<.011	<.06
28...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	<.06
NOV													
04...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	--
19...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	--
DEC													
09...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	--
JAN													
20...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	<.06
FEB													
18...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	<.06
MAR													
16...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	--
30...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	--
APR													
20...	<.005	E.006	<.03	<.015	<.02	<.02	<.013	.025	E.006	<.022	<.10	<.011	<.06
27...	<.005	E.005	<.03	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	<.06
MAY													
04...	<.005	E.004	<.03	<.015	<.02	<.02	<.013	<.006	E.005	<.022	<.10	<.011	--
12...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	E.007	<.022	<.10	<.011	<.06
18...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	.009	<.008	<.022	<.10	<.011	<.06
24...	<.005	<.006	<.03	<.015	<.02	<.02	E.002	<.006	E.004	<.022	<.10	<.011	--
JUN													
07...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	E.007	<.022	<.10	<.011	--
15...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	--
22...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	<.06
29...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	<.06
JUL													
06...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	<.05
13...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	<.05
20...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	.030	<.022	<.10	<.011	<.05
27...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	.008	<.022	<.10	<.011	<.05
AUG													
10...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	.009	<.022	<.10	<.011	--
17...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	E.006	<.022	<.10	<.011	<.05
24...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	E.006	<.022	<.10	<.011	<.05
30...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	<.05
SEP													
07...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	<.05
14...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	<.05
21...	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	<.008	<.022	<.10	<.011	<.05

462023120075200 DR2 AT YAKIMA VALLEY HIGHWAY NEAR GRANGER, WA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phosmet water, fltrd, ug/L (61601)	Prome- ton, water, fltrd, ug/L (04037)	Prome- tryn, water, fltrd, ug/L (04036)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor ESA, water, fltrd 0.7u GF ug/L (62766)	Propa- chlor OA, water, fltrd 0.7u GF ug/L (62767)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Ter- bufos oxon sulfone water, fltrd, ug/L (61674)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Ter- buthyl- azine, water, fltrd, ug/L (04022)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Di- chlor- vos, water fltrd, ug/L (38775)
OCT													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<.008	<.01	<.005	<.004	--	--	E.004	<.02	<.07	<.02	<.01	<.009	<.01
21...	<.008	<.01	<.005	<.004	--	--	E.004	<.02	<.07	<.02	<.01	<.009	<.01
28...	<.008	<.01	<.005	<.004	<.05	<.02	E.004	<.02	<.07	<.02	<.01	<.009	<.01
NOV													
04...	<.008	<.01	<.005	<.004	<.05	<.02	E.003	<.02	<.07	<.02	<.01	<.009	<.01
19...	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01
DEC													
09...	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01
JAN													
20...	<.008	<.01	<.005	<.004	<.05	<.02	E.002	<.02	<.07	<.02	<.01	<.009	<.01
FEB													
18...	<.008	<.01	<.005	<.004	<.05	<.02	E.003	<.02	<.07	<.02	<.01	<.009	<.01
MAR													
16...	--	<.01	<.005	<.004	<.05	<.02	E.004	<.02	<.07	<.02	<.01	<.009	<.01
30...	--	<.01	<.005	<.004	<.05	<.02	.007	<.02	<.07	<.02	<.01	E.006	<.01
APR													
20...	<.008	<.01	<.005	<.004	<.05	<.02	.013	<.02	<.07	<.02	<.01	<.009	<.01
27...	<.008	<.01	<.005	<.004	<.05	<.02	E.002	<.02	<.07	<.02	<.01	<.009	<.01
MAY													
04...	<.008	<.01	<.005	<.004	<.05	<.02	.036	<.02	<.07	<.02	<.01	<.009	<.01
12...	<.008	<.01	<.005	<.004	<.05	<.02	.016	<.02	<.07	<.02	<.01	E.005	<.01
18...	<.008	<.01	<.005	<.004	<.05	<.02	.125	<.02	<.07	<.02	<.01	E.009	<.01
24...	<.008	<.01	<.005	<.004	<.05	<.02	.136	<.02	<.07	<.02	<.01	E.007	<.01
JUN													
07...	<.008	<.03	<.005	<.004	<.05	<.02	.012	<.02	<.07	<.02	<.01	E.004	<.01
15...	<.008	<.01	<.005	<.004	<.05	<.02	.006	<.02	<.07	<.02	<.01	E.004	<.01
22...	<.008	<.01	<.005	<.004	<.05	<.02	E.004	<.02	<.07	<.02	<.01	.010	<.01
29...	<.008	<.01	<.005	<.004	<.05	<.02	.027	<.02	<.07	<.02	<.01	E.004	<.01
JUL													
06...	<.008	<.01	<.005	<.004	<.05	<.02	.118	<.02	<.07	<.02	<.01	E.004	<.01
13...	<.008	<.01	<.005	<.004	<.05	<.02	.013	<.02	<.07	<.02	<.01	E.004	<.01
20...	<.008	<.03	<.005	<.004	<.05	<.02	.033	<.02	<.07	<.02	<.01	<.009	<.01
27...	<.008	<.01	<.005	<.004	<.05	<.02	.009	<.02	<.07	<.02	<.01	.010	<.01
AUG													
10...	--	<.01	<.005	<.004	<.05	<.02	.005	<.02	<.07	<.02	<.01	E.005	<.01
17...	<.008	<.01	<.005	<.004	<.05	<.02	E.004	<.02	<.07	<.02	<.01	<.009	<.01
24...	<.008	M	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01
30...	<.008	<.01	<.005	<.004	<.05	<.02	E.003	<.02	<.07	<.02	<.01	<.009	<.01
SEP													
07...	<.008	<.03	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01
14...	<.008	<.01	<.005	<.004	<.05	<.02	.007	<.02	<.07	<.02	<.01	E.006	<.01
21...	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01

YAKIMA RIVER BASIN

462023120075200 DR2 AT YAKIMA VALLEY HIGHWAY NEAR GRANGER, WA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment dis- charge, tons/d (80155)
OCT			
02...	--	--	--
15...	82	122	1.5
21...	64	167	1.5
28...	91	172	1.5
NOV			
04...	72	182	1.2
19...	60	163	1.3
DEC			
09...	65	176	1.4
JAN			
20...	--	93	.90
FEB			
18...	--	90	.87
MAR			
16...	44	95	.82
30...	81	60	.65
APR			
20...	--	162	2.1
27...	--	183	2.3
MAY			
04...	--	124	1.6
12...	81	140	1.9
18...	73	126	2.2
24...	81	163	4.0
JUN			
07...	75	57	1.1
15...	--	52	.91
22...	--	36	.63
29...	--	70	1.5
JUL			
06...	--	57	1.3
13...	--	62	1.3
20...	--	64	1.4
27...	--	132	2.5
AUG			
10...	--	172	3.7
17...	--	211	4.8
24...	--	120	2.6
30...	--	121	2.1
SEP			
07...	--	110	1.8
14...	--	116	1.8
21...	--	141	1.9

YAKIMA RIVER BASIN

12505450 GRANGER DRAIN AT GRANGER, WA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL TOTAL	12,502		12,708			
ANNUAL MEAN	34.3		34.7		34.4	
HIGHEST ANNUAL MEAN					40.4	
LOWEST ANNUAL MEAN					27.6	
HIGHEST DAILY MEAN	59	Aug 7	65	Aug 23	66	Sep 4, 2000
LOWEST DAILY MEAN	17	Mar 21	17	Mar 23	15	Mar 27, 2002
ANNUAL SEVEN-DAY MINIMUM	18	Mar 17	18	Nov 21	16	Mar 25, 2002
ANNUAL RUNOFF (AC-FT)	24,800		25,210		24,950	
10 PERCENT EXCEEDS	51		53		56	
50 PERCENT EXCEEDS	37		37		29	
90 PERCENT EXCEEDS	19		19		19	

e Estimated

12505450 GRANGER DRAIN AT GRANGER, WA—Continued

(National Water-Quality Assessment Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1990 to September 1991, August 1999 to June 2000, November 2000 to September 2004 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: August 1999 to June 2000, October 2001 to September 2004 (discontinued).

WATER TEMPERATURE: August 1999 to June 2000, October 2001 to September 2004 (discontinued).

REMARKS.--Specific conductance records excellent except those for Oct. 13-15, Nov. 2-8, 26-30, Dec. 1-11, 15-25, Feb. 14-18, Jul. 24-27, Sept. 5-7, 14, which are good; Nov. 9-14, Dec. 26-31, Jan. 1-2, which are fair; Nov. 15-18, Jan. 3-20, which are poor. Water temperature records excellent. Interruptions in the record were caused by instrument malfunction.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 883 microsiemens, Nov. 29, 2001; minimum, 268 microsiemens, July 1, 2002.

WATER TEMPERATURE: Maximum, 24.7°C, July 13, 2002; minimum, 4.7°C, Jan. 5, 2004.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 847 microsiemens, Feb. 1; minimum recorded, 310 microsiemens, July 6, 17, but may have been less during periods of missing record in July and August.

WATER TEMPERATURE: Maximum recorded, 23.9°C, June 25, but may have been higher during period of missing record; minimum, 4.7°C, Jan. 5.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	384	344	375	705	686	696	747	712	728	682	665	675
2	391	359	376	704	690	697	742	725	731	681	673	677
3	400	361	379	699	687	692	756	720	727	677	674	675
4	415	373	391	702	673	684	757	723	733	678	668	672
5	411	378	392	693	680	685	747	734	739	673	665	667
6	436	354	388	691	676	683	755	725	737	672	666	668
7	427	381	403	691	678	684	739	714	725	672	664	668
8	424	394	413	695	686	690	724	700	709	675	669	672
9	424	382	402	696	688	692	709	697	702	680	671	674
10	439	401	416	715	688	696	726	701	710	680	674	677
11	445	428	436	715	688	702	727	706	717	685	679	681
12	436	411	420	722	692	702	724	707	713	688	683	685
13	437	415	424	717	695	702	797	703	746	699	688	690
14	437	416	428	713	703	708	795	735	765	700	695	697
15	448	415	434	716	703	709	736	704	714	709	700	705
16	445	420	427	720	709	714	721	702	709	709	705	707
17	446	410	422	720	706	713	717	698	708	715	709	711
18	455	420	438	780	691	721	714	691	697	752	714	721
19	456	427	437	706	686	696	715	692	700	752	742	746
20	525	421	456	705	692	698	713	697	703	761	732	745
21	527	451	477	705	688	697	712	702	706	769	749	757
22	531	471	514	705	688	696	708	698	703	774	759	764
23	614	484	543	710	691	699	706	694	698	803	763	781
24	649	569	589	715	701	707	708	693	700	808	786	795
25	649	587	594	720	703	709	708	693	697	797	758	771
26	645	591	610	733	702	711	700	691	695	768	754	759
27	699	644	665	716	697	704	697	689	693	767	754	760
28	698	674	685	725	709	715	697	691	694	792	747	762
29	706	685	693	730	720	724	696	687	690	791	766	778
30	716	691	699	726	710	716	688	677	682	784	766	774
31	704	687	696	---	---	---	685	678	681	771	759	764
MONTH	716	344	485	780	673	701	797	677	711	808	664	719

YAKIMA RIVER BASIN

12505450 GRANGER DRAIN AT GRANGER, WA—Continued
(National Water-Quality Assessment Station)

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	842	760	778	746	720	733	519	473	504	405	385	393
2	777	760	767	738	711	725	531	476	493	402	372	385
3	782	764	773	736	715	725	500	452	463	403	385	394
4	779	768	772	734	713	723	484	450	463	390	358	370
5	772	757	764	720	702	711	463	416	446	372	359	366
6	772	758	764	715	694	703	465	424	432	378	352	361
7	768	757	763	706	684	694	433	406	422	361	345	354
8	769	756	761	701	679	689	430	392	409	388	353	362
9	767	755	760	700	678	687	403	380	393	353	338	344
10	767	752	758	702	664	680	415	378	396	347	332	338
11	764	750	756	703	649	667	412	393	399	341	325	333
12	763	750	754	---	---	---	405	378	392	342	325	332
13	762	751	756	---	---	---	397	367	386	345	319	332
14	766	750	755	---	---	---	401	362	377	369	329	341
15	762	750	755	---	---	---	396	367	376	369	351	359
16	779	749	759	---	---	---	403	369	387	366	349	355
17	771	759	763	---	---	---	403	371	385	371	345	357
18	807	774	795	---	---	---	384	366	377	383	348	364
19	798	762	771	---	---	---	404	357	377	374	342	354
20	778	756	768	---	---	---	440	350	381	374	348	361
21	773	758	764	---	---	---	433	388	401	348	333	341
22	767	751	761	---	---	---	422	369	390	343	325	334
23	765	747	757	688	518	650	413	385	400	444	321	354
24	761	744	754	563	508	535	406	373	386	380	351	361
25	769	737	751	566	518	541	396	375	384	379	349	365
26	788	749	760	549	521	535	389	370	382	349	332	340
27	759	735	747	539	514	525	404	377	388	369	337	349
28	754	731	743	536	517	523	384	362	372	365	346	355
29	753	725	740	536	498	518	395	376	386	355	341	348
30	---	---	---	555	489	506	398	383	391	367	327	348
31	---	---	---	540	483	499	---	---	---	366	342	350
MONTH	842	725	761	---	---	---	531	350	405	444	319	355
	JUNE			JULY			AUGUST			SEPTEMBER		
1	375	338	354	383	347	363	351	329	341	401	380	389
2	381	360	369	369	348	360	348	327	336	433	383	393
3	376	352	364	360	333	345	359	316	332	409	376	384
4	363	326	342	362	320	340	---	---	---	388	378	383
5	346	325	335	354	317	331	---	---	---	390	377	383
6	327	310	318	380	324	343	364	336	349	383	364	373
7	331	319	324	369	332	351	352	334	344	389	370	377
8	379	324	343	374	341	359	347	325	337	396	372	383
9	350	327	336	372	345	358	388	341	359	404	364	381
10	382	348	368	381	---	---	380	350	360	412	377	393
11	361	337	344	---	---	---	376	336	358	392	360	373
12	352	329	338	---	---	---	370	335	351	369	352	362
13	350	326	337	390	346	361	369	345	358	382	351	364
14	348	317	327	393	358	372	368	342	351	378	363	370
15	367	342	350	389	344	366	353	336	345	414	377	391
16	356	319	337	386	354	367	391	336	360	416	379	397
17	345	310	327	364	342	353	395	369	380	400	382	391
18	358	328	341	368	330	347	396	379	388	392	379	384
19	359	330	346	---	---	---	397	373	387	386	373	379
20	360	345	350	---	---	---	399	347	373	389	369	377
21	378	349	357	385	343	362	389	351	364	419	386	398
22	377	338	350	392	359	373	429	348	373	433	390	401
23	359	333	346	392	352	369	368	335	353	402	381	391
24	360	329	345	407	374	386	388	346	363	407	377	391
25	375	352	362	407	373	389	385	365	376	409	385	396
26	381	352	367	---	---	---	389	361	376	405	371	386
27	364	311	329	401	363	382	397	363	375	405	383	393
28	354	326	334	394	358	377	383	363	371	404	382	391
29	378	327	352	393	356	373	371	359	363	400	367	381
30	388	361	372	379	349	361	410	361	378	390	349	364
31	---	---	---	363	346	355	414	397	404	---	---	---
MONTH	388	310	345	---	---	---	---	---	---	433	349	384

12505450 GRANGER DRAIN AT GRANGER, WA—Continued
(National Water-Quality Assessment Station)TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	17.3	14.3	15.7	10.9	8.9	9.9	10.9	10.6	10.7	8.8	6.3	7.8
2	17.3	14.2	15.6	10.7	10.2	10.5	11.2	10.6	10.9	8.3	7.6	8.0
3	17.1	13.8	15.3	11.1	10.0	10.5	11.3	9.6	10.8	9.0	7.7	8.4
4	17.0	14.0	15.4	10.8	9.3	10.0	10.4	9.2	9.7	8.2	5.1	7.1
5	17.2	14.6	15.8	10.5	8.8	9.7	10.9	10.0	10.5	7.0	4.7	5.8
6	17.0	14.4	15.6	10.3	8.1	9.1	11.1	9.8	10.4	6.8	6.0	6.3
7	16.4	14.8	15.5	10.7	8.5	9.7	11.1	9.4	10.3	8.1	6.0	6.9
8	16.2	13.7	14.7	11.8	10.5	11.1	10.8	10.0	10.4	8.4	7.0	7.7
9	15.1	12.8	13.9	12.2	10.2	11.1	10.5	9.7	10.2	9.5	8.2	8.8
10	14.7	12.1	13.4	11.7	9.6	10.7	10.3	9.4	9.8	9.7	8.2	8.9
11	14.1	12.6	13.3	12.7	11.1	11.7	10.9	9.8	10.2	10.1	9.0	9.5
12	14.3	12.2	13.1	11.5	9.8	10.6	10.7	9.8	10.2	10.2	9.5	9.8
13	14.4	12.0	13.1	11.0	9.0	10	9.9	9.6	9.8	10.3	9.5	9.8
14	14.8	12.9	13.6	11.0	8.9	10.1	10.2	9.3	9.8	10.5	9.6	9.9
15	13.4	12.0	12.7	11.8	10.3	11.0	10.3	8.9	9.6	10.3	9.4	9.8
16	14.1	12.8	13.4	11.5	9.7	10.6	10.6	9.7	10.0	10.3	9.4	9.8
17	15.3	13.2	14.1	11.9	10.0	10.9	10.3	9.1	9.6	10.7	9.6	10.0
18	14.8	12.0	13.3	13.4	11.6	12.5	9.9	8.7	9.3	10.8	9.4	10.0
19	15.5	13.4	14.3	12.6	10.4	11.9	10.0	8.7	9.4	10.8	9.7	10.1
20	15.3	13.8	14.5	10.8	9.3	10.1	10.2	9.6	9.9	11.1	9.6	10.2
21	16.4	14.4	15.3	10.0	8.5	9.3	10.4	9.8	10.1	10.7	9.7	10.1
22	16.1	14.0	15.0	9.7	7.8	8.7	10.3	10.0	10.2	10.7	9.7	10.0
23	14.9	12.9	13.8	10.1	8.2	9.2	10.7	10.1	10.4	10.0	9.5	9.7
24	13.7	11.9	12.8	9.9	8.6	9.4	11.0	10.1	10.4	10.6	8.6	9.6
25	13.1	11.0	12.1	10.7	9.7	10.1	10.8	9.3	10.1	10.3	7.9	9.1
26	13.4	11.2	12.2	10.3	8.9	9.6	9.7	8.4	9.0	10.4	8.9	9.5
27	14.0	11.5	12.6	10.7	8.7	9.7	9.7	8.4	9.1	10.6	8.7	9.5
28	15.6	12.6	13.9	11.5	10.1	10.8	9.7	9.3	9.5	11.1	9.3	10.1
29	13.4	11.4	12.4	12.7	10.9	11.9	9.5	7.8	8.9	11.8	9.9	10.8
30	11.7	9.9	10.9	11.3	9.7	10.6	8.7	7.2	7.9	11.1	9.0	9.8
31	10.5	9.0	9.6	---	---	---	8.8	7.9	8.4	10.5	8.8	9.5
MONTH	17.3	9.0	13.8	13.4	7.8	10.4	11.3	7.2	9.9	11.8	4.7	9.1
	FEBRUARY			MARCH			APRIL			MAY		
1	10.2	8.4	9.3	13.4	10.2	11.4	14.2	9.0	11.4	19.3	12.0	15.2
2	9.6	8.8	9.3	13.3	9.6	11.0	15.4	9.5	12.0	20.4	13.3	16.2
3	10.8	8.7	9.6	11.5	9.4	10.2	13.6	10.4	11.8	20.1	13.3	16.1
4	10.7	9.1	9.7	12.9	9.2	10.6	16.8	10.0	12.7	19.1	13.2	15.6
5	10.5	8.3	9.4	12.7	9.3	10.4	13.3	10.2	11.8	18.3	12.9	14.9
6	10.4	9.5	9.8	12.9	9.1	10.6	16.7	10.0	12.8	16.2	12.0	14.0
7	11.1	9.2	10	13.0	10.3	11.5	16.8	10.8	13.2	17.9	11.7	14.5
8	11.0	8.6	9.6	15.0	10.0	12.1	16.9	10.2	13.0	18.2	12.6	15.0
9	10.7	8.3	9.4	14.1	10.8	11.9	17.1	10.4	13.2	18.8	12.1	15.0
10	10.8	8.4	9.4	14.4	9.7	11.6	17.2	10.3	13.2	15.5	12.7	13.9
11	10.9	8.6	9.5	14.4	9.4	11.5	17.4	10.3	13.4	15.2	12.2	13.5
12	10.3	8.8	9.4	14.9	9.9	12.0	16.8	10.9	13.6	15.7	12.3	13.8
13	9.9	8.9	9.3	13.8	9.6	11.6	14.8	11.4	13.0	17.4	11.6	14.2
14	10.4	9.0	9.6	15.0	9.8	11.9	14.8	11.4	12.7	18.8	12.3	15.2
15	11.0	9.6	10.2	14.1	10.2	11.8	15.4	10.4	12.4	16.0	13.1	14.4
16	10.3	9.6	9.9	16.1	11.0	12.8	15.2	9.6	12.1	17.0	12.9	14.7
17	10.1	9.4	9.7	15.8	10.6	12.8	15.7	10.3	12.4	17.1	13.1	14.7
18	11.6	9.5	10.3	15.4	10.5	12.4	15.0	9.7	11.9	17.3	12.6	14.4
19	12.1	8.9	10.2	14.7	10.0	11.8	14.9	9.8	12.1	19.1	12.7	15.6
20	11.3	9.0	10.0	14.9	9.6	11.8	14.1	10.6	12.1	20.2	14.3	16.7
21	11.9	9.0	10.2	15.6	10.4	12.7	14.6	10.4	12.1	20.2	14.6	16.9
22	11.9	8.6	10.0	16.7	11.5	13.6	17.6	10.1	13.2	17.8	14.0	15.7
23	12.1	9.4	10.7	16.0	10.9	12.9	14.4	10.8	12.2	17.6	14.1	15.2
24	12.2	9.8	10.6	13.8	10.6	11.7	17.1	10.4	13.2	18.9	12.7	15.5
25	10.0	9.0	9.5	13.3	10.7	11.7	17.9	10.6	13.7	19.5	13.3	16.0
26	12.0	9.4	10.5	12.8	10.0	11.3	18.7	11.2	14.4	17.7	14.6	15.9
27	13.1	9.7	11.0	14.0	9.9	11.7	17.4	11.8	13.9	17.2	14.1	15.3
28	13.0	9.3	10.9	14.8	9.2	11.7	16.8	11.6	13.5	17.4	13.1	14.9
29	13.2	9.7	11.1	15.4	9.5	12.2	18.4	11.1	14.2	18.1	12.2	14.7
30	---	---	---	13.2	10.6	11.8	18.9	11.3	14.6	18.4	13.3	15.4
31	---	---	---	13.2	9.2	11.1	---	---	---	17.9	12.9	15.2
MONTH	13.2	8.3	9.9	16.7	9.1	11.7	18.9	9.0	12.9	20.4	11.6	15.1

YAKIMA RIVER BASIN

12505450 GRANGER DRAIN AT GRANGER, WA—Continued
(National Water-Quality Assessment Station)

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.8	13.0	16.0	22.8	17.4	19.9	23.2	18.5	20.8	19.6	17.5	18.6
2	20.7	13.7	16.7	21.8	17.1	19.4	22.6	19.0	20.8	19.0	16.2	17.5
3	21.0	14.5	17.4	22.6	17.5	19.7	22.6	18.9	20.6	19.0	15.8	17.2
4	22.1	15.4	18.3	22.3	16.7	19.3	---	---	---	18.8	15.7	17.1
5	18.6	15.6	17.1	22.4	16.9	19.5	---	---	---	18.7	15.1	16.8
6	19.0	14.6	16.3	22.1	17.5	19.6	20.0	18.0	19.0	18.5	14.9	16.7
7	18.5	13.4	15.7	20.8	16.8	18.7	20.9	16.9	18.8	18.8	15.2	16.9
8	15.6	14.1	14.8	---	15.3	---	21.1	16.7	18.9	19.0	15.3	17.0
9	16.4	12.9	14.5	21.0	15.4	18.1	21.7	17.2	19.4	18.1	16.0	17.0
10	19.1	14.1	16.0	---	15.6	---	22.2	17.7	20.0	18.3	15.0	16.7
11	18.8	13.6	15.9	---	15.4	---	22.8	18.4	20.5	18.5	16.9	17.4
12	18.7	14.0	16.1	---	15.8	---	23.1	18.5	20.7	18.5	16.0	17.0
13	19.1	14.3	16.3	22.5	16.9	19.4	23.0	18.9	20.9	17.5	15.1	16.1
14	19.3	14.0	16.3	23.1	17.7	20.3	21.1	19.1	20.1	17.4	14.5	15.8
15	19.9	14.4	16.7	23.0	18.3	20.6	22.4	18.6	20.4	17.3	15.0	16.0
16	20.4	14.1	16.9	23.1	17.8	20.3	22.3	18.8	20.5	16.7	14.2	15.5
17	21.0	14.9	17.6	22.6	18.4	20.5	22.5	19.3	20.8	16.7	15.0	15.6
18	20.9	15.7	18.0	22.0	19.4	20.8	22.3	18.9	20.6	16.2	14.1	15.0
19	21.4	15.7	18.3	---	---	---	22.4	18.9	20.6	16.0	13.1	14.5
20	22.1	15.6	18.5	---	---	---	22.6	19.2	20.8	16.3	13.5	14.6
21	22.4	15.9	18.8	22.3	17.4	19.7	21.9	19.1	20.4	16.2	12.8	14.4
22	22.9	16.5	19.4	22.5	17.4	19.9	20.2	18.8	19.5	16.5	13.2	14.8
23	23.3	17.4	20.0	23.0	17.7	20.3	20.2	17.1	18.6	17.2	14.1	15.5
24	22.9	18.0	20.3	23.4	18.4	20.8	18.7	17.6	18.0	17.3	14.0	15.5
25	23.9	18.1	20.7	23.5	18.9	21.0	19.2	17.2	17.9	17.5	14.2	15.7
26	23.3	17.6	20.2	---	---	---	19.4	16.5	17.8	17.7	14.5	16.0
27	23.1	17.3	19.9	22.2	---	---	19.8	16.4	18.1	17.9	14.6	16.1
28	23.2	17.3	20.0	22.7	17.8	20.1	20.2	16.6	18.3	17.8	14.7	16.1
29	22.4	17.5	19.8	22.9	18.3	20.5	20.6	17.1	18.7	17.4	14.6	15.9
30	21.9	18.1	19.7	23.2	18.8	20.8	20.8	17.1	18.8	17.1	14.7	15.7
31	---	---	---	23.0	18.4	20.6	21.1	17.3	19.0	---	---	---
MONTH	23.9	12.9	17.7	---	---	---	---	---	---	19.6	12.8	16.2

12505450 GRANGER DRAIN AT GRANGER, WA—Continued
(National Water-Quality Assessment Station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	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 unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Noncarb hardness, wat fltrd field, mg/L as CaCO3 (00904)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
OCT													
15...	1100	37	739	9.1	89	8.1	421	8.7	12.5	170	19	40.7	15.8
NOV													
18...	1010	18	740	8.9	87	8.2	696	16.7	12.6	270	31	66.2	25.5
DEC													
09...	1120	19	748	9.9	90	8.3	679	5.8	10.3	260	29	65.0	24.9
JAN													
20...	1000	21	755	9.4	84	8.1	736	4.1	10.0	280	29	68.3	26.3
FEB													
18...	1010	23	742	9.8	90	8.3	791	3.4	10.2	310	55	75.0	28.7
MAR													
16...	0810	18	748	9.6	91	8.3	697	14.1	12.2	270	29	65.3	25.4
22...	1020	19	744	14.4	148	8.5	660	24.3	15.2	250	30	62.0	24.1
APR													
05...	0810	28	740	9.3	86	8.2	463	7.1	10.2	180	18	43.7	17.3
20...	0740	44	739	9.3	87	8.1	521	9.0	10.8	180	46	43.3	17.3
27...	0820	40	742	9.1	88	8.0	390	12.2	12.5	150	14	36.7	13.5
MAY													
04...	0830	42	740	9.2	91	8.0	376	--	13.7	140	15	35.7	13.3
12...	0900	47	745	9.2	89	8.0	336	15.2	12.9	130	7	30.4	12.0
18...	0720	45	740	9.6	93	8.0	358	12.0	12.8	140	17	34.1	13.0
JUN													
01...	0750	47	744	9.3	91	7.9	346	9.2	13.2	140	14	33.8	12.5
07...	0810	49	739	9.5	94	7.9	330	15.6	13.7	130	13	31.3	11.5
15...	0750	50	750	9.0	90	7.9	313	13.1	14.5	120	7	28.3	10.9
22...	0720	48	739	8.0	86	7.8	357	19.1	17.1	130	13	33.2	12.0
29...	0740	52	741	7.7	83	7.8	346	20.0	17.6	130	14	32.1	11.7
JUL													
06...	0810	54	743	8.5	91	7.8	335	25.0	17.6	120	10	30.1	11.2
13...	1050	54	738	10.0	113	7.9	349	--	19.5	130	14	32.5	12.1
20...	0810	57	744	9.0	97	7.8	339	10.7	17.9	120	9	30.6	11.7
27...	0820	52	743	7.8	85	7.8	368	21.7	18.1	140	16	35.0	13.3
AUG													
04...	0840	54	741	7.8	86	7.8	347	22.1	18.5	130	16	30.8	12.1
10...	0850	53	745	7.9	85	7.8	362	18.3	17.9	130	9	32.7	12.9
17...	0830	54	744	7.4	82	7.9	374	27.1	19.3	140	10	34.1	13.4
24...	0840	62	735	7.8	85	7.7	350	16.5	17.6	140	15	34.0	12.6
30...	0710	55	742	7.4	79	7.9	369	13.9	17.3	140	13	33.9	13.2
SEP													
07...	1040	54	745	11.2	116	7.9	373	26.0	16.2	140	5	33.6	13.5
14...	0740	55	740	8.6	87	7.8	366	14.0	14.5	130	14	32.7	12.8
21...	0900	48	751	9.0	87	7.9	385	12.5	13.0	140	3	35.1	13.4

YAKIMA RIVER BASIN

12505450 GRANGER DRAIN AT GRANGER, WA—Continued
(National Water-Quality Assessment Station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Potas- sium, water, fltrd, mg/L (00935)	Sodium adsorp- tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alka- linity, wat flt inc tit field, mg/L as CaCO ₃ (39086)	Bicar- bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon- ate, wat flt incrm. titr., field, mg/L (00452)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti- tuents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)
OCT													
15...	4.57	.9	27.9	26	148	180	.0	10.6	.3	33.6	40.0	276	.37
NOV													
18...	8.62	1	47.6	27	240	292	.0	18.4	.6	47.4	78.1	465	.64
DEC													
09...	5.96	1	46.4	27	237	288	.0	18.4	.6	45.6	81.2	457	.63
JAN													
20...	7.77	1	48.0	27	251	305	.0	21.8	.6	44.2	91.5	488	.67
FEB													
18...	9.04	2	61.0	30	250	305	.0	26.0	.6	41.7	105	534	.74
MAR													
16...	5.96	1	49.8	28	239	291	.0	18.7	.6	41.5	80.8	460	.63
22...	6.09	1	45.2	27	224	266	3	17.5	.6	40.6	77.6	434	.59
APR													
05...	4.57	1	30.7	26	163	198	.0	12.1	.4	32.9	48.7	304	.42
20...	10.3	1	34.6	28	133	162	.0	17.5	.3	27.5	77.2	334	.48
27...	4.62	.9	24.5	26	134	163	.0	9.63	.3	28.2	36.9	247	.35
MAY													
04...	5.07	.9	25.2	27	129	156	.0	9.11	.3	29.1	36.4	244	.34
12...	4.16	.8	20.7	26	118	143	.0	8.12	.2	26.2	32.2	216	.31
18...	3.82	.8	21.1	24	123	148	.0	8.53	.3	28.0	33.0	226	.32
JUN													
01...	4.04	.8	21.7	25	122	147	.0	8.25	.3	28.0	30.8	223	.31
07...	3.58	.8	20.3	25	113	136	.0	7.99	.3	26.6	30.4	210	.30
15...	3.95	.8	19.9	26	109	132	.0	7.61	.2	24.0	27.9	198	.29
22...	3.85	.8	22.2	26	123	145	.0	8.66	.3	27.5	34.2	225	.33
29...	4.02	.8	21.0	26	114	138	.0	8.60	.3	25.2	31.0	214	.31
JUL													
06...	3.80	.8	19.8	25	111	135	.0	7.90	.2	23.9	29.5	205	.29
13...	4.41	.8	21.7	26	117	142	.0	8.68	.3	25.1	33.3	221	.30
20...	4.43	.8	19.8	25	116	140	.0	7.80	.2	24.5	30.4	210	.30
27...	4.48	.8	22.7	25	127	153	.0	8.84	.3	27.7	34.8	235	.30
AUG													
04...	4.41	.8	21.1	26	111	134	.0	7.90	.2	24.2	32.0	211	.29
10...	3.99	.8	21.9	25	126	152	.0	8.27	.3	26.2	34.0	228	.33
17...	4.58	.8	22.3	25	131	159	.0	9.26	.3	27.6	34.4	238	.32
24...	4.56	.8	21.6	25	122	148	.0	7.99	.3	26.2	31.3	224	.30
30...	4.11	.8	21.7	25	126	153	.0	8.09	.3	28.7	34.4	232	.32
SEP													
07...	3.97	.8	22.2	25	134	162	.0	8.54	.3	28.2	33.2	236	.32
14...	4.24	.8	21.5	25	121	146	.0	8.44	.3	29.3	33.6	227	.31
21...	4.48	.9	24.3	26	140	169	.0	8.93	.3	30.9	36.2	249	.34

12505450 GRANGER DRAIN AT GRANGER, WA—Continued
(National Water-Quality Assessment Station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)	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)	Particulate nitrogen, susp, water, mg/L (49570)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unfltrd by analysis, mg/L (62855)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
OCT 15...	27.7	276	E.02	2.99	.019	.12	.073	.24	3.23	1.3	<.1	1.3	2.1
NOV 18...	22.7	468	.71	6.19	.043	.25	.140	.28	7.59	2.0	<.1	1.9	3.4
DEC 09...	23.9	460	E.03	6.16	.037	.09	.087	.159	6.36	.9	<.1	.8	2.1
JAN 20...	28.1	495	.12	6.57	.041	.15	.118	.25	7.35	1.2	<.1	1.2	3.8
FEB 18...	33.7	543	<.04	8.17	.047	.17	.155	.28	9.39	1.1	<.1	1.1	5.1
MAR 16...	22.5	464	<.04	6.58	.039	.07	.076	.101	6.95	.5	<.1	.5	2.2
22...	22.2	437	<.04	5.93	.037	.10	.069	.104	6.10	.7	<.1	.7	--
APR 05...	23.6	312	E.03	3.49	.016	.25	.074	.22	4.06	2.2	<.1	2.2	--
20...	42.3	356	.11	5.67	.087	<.02	.314	.90	7.61	.2	<.1	.2	6.1
27...	27.8	257	E.02	2.70	.018	.24	.130	.42	3.31	2.1	<.1	2.1	--
MAY 04...	28.3	249	.05	2.72	.019	.14	.185	.44	3.63	1.3	<.1	1.3	--
12...	28.6	225	E.02	2.34	.019	.19	.157	.36	2.76	1.8	<.1	1.8	--
18...	28.5	234	E.02	2.48	.014	.10	.100	.28	2.97	.7	<.1	.7	3.4
JUN 01...	29.0	228	<.04	2.29	.011	.11	.106	.24	2.82	1.0	<.1	1.0	--
07...	28.9	219	<.04	2.33	.010	.11	.096	.21	2.62	.7	<.1	.7	--
15...	28.4	210	.22	2.19	.012	.19	.094	.191	2.78	1.5	<.1	1.5	--
22...	31.1	240	<.04	2.51	.017	.08	.092	.20	2.85	.9	<.1	.9	--
29...	32.0	228	<.04	2.55	.029	.12	.116	.23	2.90	.8	<.1	.8	--
JUL 06...	30.6	210	<.04	2.51	.019	.09	.118	.21	2.75	.9	<.1	.9	--
13...	32.5	223	<.04	2.79	.021	.06	.141	.22	3.06	.6	<.1	.6	--
20...	33.6	220	<.04	2.39	.023	.08	.148	.23	2.88	.9	<.1	.9	3.4
27...	31.4	224	E.04	2.76	.031	<.02	.155	.23	3.16	.6	<.1	.6	--
AUG 04...	31.2	214	E.03	2.54	.040	.07	.127	.20	2.96	.6	<.1	.6	--
10...	34.3	240	E.02	2.71	.020	.03	.114	.196	3.09	.6	<.1	.6	--
17...	34.4	236	E.02	3.01	.022	.08	.147	.25	3.32	.8	<.1	.8	3.2
24...	37.1	222	E.02	2.65	.019	.06	.141	E.29	2.85	.4	<.1	.3	--
30...	35.3	237	E.03	2.68	.020	.10	.111	.29	3.07	1.1	<.1	1.1	--
SEP 07...	34.0	234	E.02	2.67	.018	<.02	.101	.20	3.11	.5	<.1	.5	--
14...	34.4	231	E.02	2.55	.015	.16	.111	.24	3.03	1.4	<.1	1.4	--
21...	32.0	247	.05	2.60	.014	.06	.085	.22	3.00	.6	<.1	.6	2.1

12505450 GRANGER DRAIN AT GRANGER, WA—Continued
(National Water-Quality Assessment Station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	1-Naph- thol, water, fltrd 0.7u GF ug/L (49295)	2,6-Di- ethyl- aniline water fltrd 0.7u GF ug/L (82660)	2-[(2- Et-6-Me -Ph)- -amino] propan- 1-ol, ug/L (61615)	2-[(2- Ethyl- 6methyl phenyl) amino]2 oxoESA ug/L (62850)	2Chloro -2,6-' diethyl acet- anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl -6- methyl- aniline water, fltrd, ug/L (61620)	3,4-Di- chloro- aniline water fltrd, ug/L (61625)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Aceto- chlor ESA, water, fltrd 0.7u GF ug/L (61029)	Aceto- chlor OA, water, fltrd 0.7u GF ug/L (61030)
OCT 15...	22	45.7	--	<.006	--	--	--	E.005	--	--	--	<.05	<.05
NOV 18...	12	73.9	<.09	<.006	<.1	--	<.005	E.004	<.004	<.004	<.006	.08	.06
DEC 09...	7	65.6	--	<.006	--	.04	--	E.012	--	--	--	.10	.07
JAN 20...	24	84.5	<.09	<.006	<.1	<.02	<.005	E.010	<.004	<.004	<.006	.08	.08
FEB 18...	19	78.8	--	<.006	--	.04	--	E.012	--	--	--	.13	.15
MAR 16...	7	80.8	--	<.006	--	<.02	--	E.011	--	--	--	.07	.09
22...	9	78.4	<.09	<.006	--	<.02	<.005	E.006	<.004	<.004	<.006	.06	.08
APR 05...	12	75.4	<.09	<.006	--	<.02	<.005	E.003	<.004	<.004	<.006	<.02	.04
20...	32	84.3	--	<.006	--	<.02	--	E.006	--	--	--	.83	2.31
27...	24	44.5	M	<.006	--	<.02	<.005	E.003	<.004	<.004	<.006	<.02	<.02
MAY 04...	25	45.5	<.09	<.006	--	<.02	<.005	E.004	<.004	.026	<.006	<.02	.02
12...	24	33.2	<.09	<.006	--	--	<.005	<.006	<.004	.009	<.006	<.02	.02
18...	31	30.0	--	<.006	--	<.02	--	E.007	--	--	--	.02	.02
JUN 01...	26	27.1	E.01	<.006	--	<.02	<.005	E.012	<.004	.005	<.006	.03	.03
07...	27	24.2	<.09	<.006	--	<.02	<.005	E.012	<.004	.015	<.006	.03	.04
15...	19	20.3	--	<.006	--	<.02	--	<.006	--	--	--	.05	.05
22...	26	25.4	<.09	<.006	--	<.02	<.005	E.003	<.004	<.004	<.006	<.02	.03
29...	28	29.7	<.09	<.006	--	<.02	<.005	E.006	<.004	<.004	<.006	.04	.05
JUL 06...	22	18.7	<.09	<.006	--	<.02	<.005	E.012	<.004	<.004	<.006	.04	.05
13...	24	18.7	<.09	<.006	--	<.02	<.005	E.007	<.004	.009	<.006	.12	.11
20...	33	22.6	<.09	<.006	--	<.02	<.005	E.008	<.004	<.004	<.006	.06	.09
27...	31	20.7	<.09	<.006	--	<.02	<.005	E.011	<.004	.006	<.006	.06	.08
AUG 04...	24	27.6	<.09	<.006	--	<.02	<.005	E.008	<.004	<.004	<.006	.04	.04
10...	30	29.1	<.09	<.006	--	<.02	<.005	E.007	<.004	<.004	<.006	.05	.05
17...	36	35.5	--	<.006	--	<.02	--	E.010	--	--	--	.08	.06
24...	33	35.0	E.01	<.006	--	<.02	<.005	E.006	<.004	<.004	<.006	.08	.05
30...	38	40.6	<.09	<.006	--	<.02	<.005	E.005	<.004	<.004	<.006	.06	.05
SEP 07...	20	38.2	<.09	<.006	--	<.02	<.005	E.004	<.004	<.004	<.006	.05	.04
14...	26	48.0	<.09	<.006	--	<.02	<.005	E.008	<.004	<.004	<.006	.06	.04
21...	23	51.0	<.09	<.006	--	<.02	<.005	E.006	<.004	<.004	<.006	.04	.03

12505450 GRANGER DRAIN AT GRANGER, WA—Continued
(National Water-Quality Assessment Station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Aceto- chlor SAA, water, fltrd, ug/L (62847)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor ESA SA, water, fltrd, ug/L (62849)	Ala- chlor ESA, water, fltrd 0.7u GF ug/L (50009)	Ala- chlor OA, water, fltrd 0.7u GF ug/L (61031)	Ala- chlor SAA, water, fltrd, ug/L (62848)	Ala- chlor, water, fltrd, ug/L (46342)	alpha- HCH, water, fltrd, ug/L (34253)	alpha- HCH-d6, surrog, wat flt percent recovry (99995)	alpha- HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	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)
OCT													
15...	--	<.006	--	.05	<.05	--	<.004	<.005	--	102	.009	--	<.050
NOV													
18...	<.02	<.006	<.02	.12	.03	<.02	<.005	--	87.6	--	.009	<.02	<.050
DEC													
09...	<.02	<.006	<.02	.14	.02	<.02	<.004	<.005	--	97.3	.012	--	<.050
JAN													
20...	<.02	<.006	<.02	.12	<.02	<.02	<.005	--	88.9	--	.009	<.03	<.050
FEB													
18...	<.02	<.006	<.02	.18	.07	<.02	<.004	<.005	--	98.2	.015	--	<.050
MAR													
16...	<.02	<.006	<.02	.11	.04	<.02	<.004	<.005	--	95.4	.013	--	<.050
22...	<.02	<.006	<.02	.10	.03	<.02	<.005	--	75.3	--	E.007	<.02	<.050
APR													
05...	<.02	<.006	<.02	.06	<.02	<.02	<.005	--	83.2	--	.007	<.02	<.050
20...	.36	.024	<.02	.14	.05	<.02	<.004	<.005	--	102	.024	--	<.050
27...	<.02	E.003	<.02	.03	<.02	<.02	<.005	--	82.8	--	.010	<.02	<.050
MAY													
04...	<.02	.015	<.02	.03	<.02	<.02	<.005	--	86.0	--	.023	<.02	<.050
12...	<.02	.009	<.02	.04	<.02	<.02	<.005	--	88.5	--	.011	<.02	E.011
18...	<.02	.008	<.02	.04	<.02	<.02	<.004	<.005	--	104	.061	--	E.033
JUN													
01...	<.02	.013	<.02	.06	<.02	<.02	.018	--	72.2	--	.031	<.02	E.010
07...	<.02	.017	<.02	.04	<.02	.03	.011	--	90.0	--	.054	--	E.011
15...	<.02	.023	<.02	.04	<.02	<.02	<.004	<.005	--	96.8	.009	--	<.050
22...	<.02	<.006	<.02	.03	<.02	<.02	<.005	--	97.5	--	.010	<.02	E.025
29...	<.02	.010	<.02	.05	<.02	<.02	.007	--	84.4	--	.016	<.02	E.014
JUL													
06...	<.02	.010	<.02	.05	.02	<.02	.006	--	91.0	--	.028	<.07	E.017
13...	<.02	.015	.03	.07	.03	<.02	<.005	--	102	--	.017	<.07	E.024
20...	<.02	.006	<.02	.06	.02	<.02	<.005	--	87.7	--	.015	<.07	E.032
27...	<.02	<.006	<.02	.04	.02	<.02	<.005	--	93.3	--	.015	<.07	E.019
AUG													
04...	<.02	<.006	<.02	.04	<.02	<.02	<.005	--	92.6	--	.009	<.07	E.017
10...	<.02	<.006	<.02	.05	<.02	<.02	<.005	--	88.9	--	.012	<.07	E.014
17...	<.02	<.006	<.02	.08	<.02	<.02	<.004	<.005	--	95.9	.017	--	<.050
24...	<.02	<.006	<.02	.07	<.02	<.02	<.005	--	111	--	.010	<.07	E.008
30...	<.02	<.006	.02	.06	.02	<.02	<.005	--	86.6	--	.008	<.07	<.050
SEP													
07...	<.02	<.006	<.02	.06	<.02	<.02	<.005	--	85.4	--	E.006	<.07	<.050
14...	<.02	<.007	<.02	<.02	<.02	<.02	<.005	--	79.6	--	.007	<.07	E.009
21...	<.02	<.006	<.02	.04	<.02	<.02	<.005	--	92.6	--	.008	<.07	<.050

12505450 GRANGER DRAIN AT GRANGER, WA—Continued
(National Water-Quality Assessment Station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	Butyl- ate, water, fltrd, ug/L (04028)	Car- baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- pyrifos oxon, water, fltrd, ug/L (61636)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	Cyana- zine, water, fltrd, ug/L (04041)	Cyflu- thrin, water, fltrd, ug/L (61585)	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)	Diaz- inon oxon, water, fltrd, ug/L (61638)
OCT 15...	<.010	<.002	<.041	<.020	--	<.005	<.006	<.018	--	--	<.003	<.004	--
NOV 18...	<.010	--	<.041	--	<.06	<.005	<.006	--	<.008	<.009	<.003	<.012	<.01
DEC 09...	<.010	<.002	<.041	<.020	--	<.005	<.006	<.018	--	--	<.003	<.004	--
JAN 20...	<.010	--	<.041	--	<.06	<.005	<.006	--	<.008	<.009	<.003	<.012	<.01
FEB 18...	<.010	<.002	<.041	<.020	--	<.005	<.006	<.018	--	--	<.003	<.004	--
MAR 16...	<.010	<.002	<.041	<.020	--	<.005	<.006	<.018	--	--	<.003	<.004	--
22...	<.010	--	<.041	--	<.06	.013	<.006	--	<.008	<.009	<.003	<.012	<.01
APR 05...	<.010	--	<.041	--	<.06	.014	<.006	--	<.008	<.009	E.001	<.012	<.01
20...	<.010	<.002	E.143	<.020	--	.009	<.006	<.018	--	--	<.003	<.004	--
27...	<.010	--	E.006	--	<.06	E.002	<.006	--	<.008	<.009	<.003	<.012	<.01
MAY 04...	<.010	--	E.009	--	<.06	E.002	<.006	--	<.008	<.009	<.003	<.012	<.01
12...	<.010	--	E.005	--	<.06	<.005	<.006	--	<.008	<.009	<.003	<.012	<.01
18...	<.010	<.002	<.041	<.020	--	<.005	<.006	<.018	--	--	.005	<.004	--
JUN 01...	<.010	--	E.006	--	<.06	.013	<.006	--	<.008	<.009	.004	<.012	<.01
07...	<.010	--	E.006	--	<.06	.006	<.006	--	<.008	<.009	.004	<.012	<.01
15...	<.010	<.002	<.041	<.020	--	<.005	<.006	<.018	--	--	<.003	<.004	--
22...	<.010	--	E.006	--	<.06	<.005	<.006	--	<.008	<.009	<.003	<.012	<.01
29...	<.010	--	E.003	--	<.06	<.005	<.006	--	<.008	<.009	<.003	<.012	<.01
JUL 06...	<.010	--	E.008	--	<.06	<.005	<.006	--	<.008	<.009	.004	<.012	<.01
13...	<.010	--	E.007	--	<.06	<.005	<.006	--	<.008	<.009	<.003	<.012	<.01
20...	<.010	--	<.041	--	<.06	<.005	<.006	--	<.008	<.009	<.003	<.012	<.01
27...	<.010	--	E.009	--	<.06	<.005	<.006	--	<.008	<.009	<.003	<.012	<.01
AUG 04...	<.010	--	<.041	--	<.06	<.005	<.006	--	<.008	<.009	<.003	<.012	<.01
10...	<.010	--	E.007	--	<.06	<.005	<.006	--	<.008	<.009	<.003	<.012	<.01
17...	<.010	<.002	<.041	<.020	--	<.005	<.006	<.018	--	--	<.003	<.004	--
24...	<.010	--	E.055	--	<.06	<.005	<.006	--	<.008	<.009	<.003	<.012	<.01
30...	<.010	--	E.008	--	<.06	<.005	<.006	--	<.008	<.009	<.003	<.012	<.01
SEP 07...	<.010	--	E.009	--	<.06	<.005	<.006	--	<.008	<.009	<.003	<.012	<.01
14...	<.010	--	E.008	--	<.06	<.005	<.006	--	<.008	<.009	<.003	<.012	<.01
21...	<.010	--	E.008	--	<.06	<.005	<.006	--	<.008	<.009	<.003	<.012	<.01

12505450 GRANGER DRAIN AT GRANGER, WA—Continued
(National Water-Quality Assessment Station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Diazi- non, water, fltrd, ug/L (39572)	Diazi- non-d10 surrog, Sch2003 wat flt percent recovry (99994)	Diazi- non-d10 surrog, wat flt 0.7u GF percent recovry (91063)	Dicro- tophos, water, fltrd, ug/L (38454)	Diel- drin, water, fltrd, ug/L (39381)	Dimeth- enamid ESA, water, fltrd, ug/L (61951)	Dimeth- enamid OA, water, fltrd, ug/L (62482)	Dimeth- enamid water, fltrd, ug/L (61588)	Dimeth- oate, water, fltrd 0.7u GF ug/L (82662)	Disul- foton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal- flur- alin, water, fltrd 0.7u GF ug/L (82663)	Ethion monoxon water, fltrd, ug/L (61644)
OCT													
15...	<.005	--	109	--	<.005	<.05	<.05	--	--	<.02	<.002	<.009	--
NOV													
18...	<.005	95.5	--	<.08	<.009	<.02	<.02	<.02	<.006	--	--	--	<.03
DEC													
09...	<.005	--	129	--	<.005	<.02	<.02	<.02	--	<.02	<.002	<.009	--
JAN													
20...	<.005	97.2	--	<.08	<.009	<.02	<.02	<.02	<.006	--	--	--	<.03
FEB													
18...	<.005	--	119	--	<.005	<.02	<.02	<.02	--	<.02	<.002	<.009	--
MAR													
16...	<.005	--	109	--	<.005	<.02	<.02	<.02	--	<.02	<.002	<.009	--
22...	<.005	88.9	--	<.08	<.009	<.02	<.02	<.02	<.006	--	--	--	<.03
APR													
05...	<.005	93.8	--	--	<.009	<.02	<.02	<.02	<.006	--	--	--	<.03
20...	<.005	--	103	--	<.005	<.02	<.02	<.02	--	<.02	<.002	<.009	--
27...	<.005	87.4	--	<.08	<.009	<.02	<.02	<.02	<.006	--	--	--	<.03
MAY													
04...	E.003	97.9	--	<.08	<.009	<.02	<.02	<.02	E.004	--	--	--	<.03
12...	<.005	94.4	--	<.08	<.009	<.02	<.02	<.02	<.006	--	--	--	<.03
18...	<.005	--	106	--	<.005	<.02	<.02	<.02	--	<.02	.023	<.009	--
JUN													
01...	.006	86.2	--	<.08	<.009	<.02	<.02	<.02	<.006	--	--	--	<.03
07...	<.005	106	--	<.08	<.009	<.02	<.02	<.02	<.006	--	--	--	<.03
15...	<.005	--	95.3	--	<.005	<.02	<.02	<.02	--	<.02	<.002	<.009	--
22...	<.005	97.0	--	<.08	<.009	<.02	<.02	<.02	<.006	--	--	--	<.03
29...	<.005	84.9	--	<.08	<.009	<.02	<.02	<.02	<.006	--	--	--	<.03
JUL													
06...	<.005	144	--	<.08	E.002	<.02	<.02	<.02	<.006	--	--	--	<.0020
13...	<.005	102	--	<.08	<.009	<.02	<.02	<.02	<.006	--	--	--	<.0020
20...	<.005	107	--	<.08	<.009	<.02	<.02	<.02	<.006	--	--	--	<.0020
27...	<.005	90.7	--	<.08	<.009	<.02	<.02	<.02	<.006	--	--	--	<.0020
AUG													
04...	<.005	96.7	--	<.08	<.009	<.02	<.02	<.02	<.006	--	--	--	<.0020
10...	<.005	92.3	--	<.08	<.009	<.02	<.02	<.02	<.006	--	--	--	<.0020
17...	<.005	--	107	--	<.005	<.02	<.02	<.02	--	<.02	<.002	<.009	--
24...	<.005	96.5	--	<.08	<.009	<.02	<.02	<.02	<.006	--	--	--	<.0020
30...	<.005	92.7	--	<.08	<.009	<.02	<.02	<.02	<.006	--	--	--	<.0020
SEP													
07...	<.005	105	--	<.08	<.009	<.02	<.02	<.02	<.006	--	--	--	<.0020
14...	<.005	85.6	--	<.08	<.009	<.02	<.02	<.02	<.006	--	--	--	<.0020
21...	<.005	75.6	--	<.08	<.009	<.02	<.02	<.02	<.006	--	--	--	<.0020

12505450 GRANGER DRAIN AT GRANGER, WA—Continued
(National Water-Quality Assessment Station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	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)	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)	Flufen- acet ESA, water, fltrd, ug/L (61952)	Flufe- nacet OA, water, fltrd, ug/L (62483)	Flufe- nacet, water, fltrd, ug/L (62481)	Fonofos oxon, water, fltrd, ug/L (61649)
OCT													
15...	--	<.005	--	--	--	<.009	<.005	<.005	<.007	<.05	<.05	--	--
NOV													
18...	<.004	--	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.002
DEC													
09...	--	<.005	--	--	--	<.009	<.005	<.005	<.007	<.02	<.02	<.02	--
JAN													
20...	<.004	--	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.002
FEB													
18...	--	<.005	--	--	--	<.009	<.005	<.005	<.007	<.02	<.02	<.02	--
MAR													
16...	--	<.005	--	--	--	<.009	<.005	<.005	<.007	<.02	<.02	<.02	--
22...	<.004	--	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.002
APR													
05...	<.004	--	<.008	--	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.002
20...	--	<.005	--	--	--	<.009	<.005	<.005	<.007	<.02	<.02	<.02	--
27...	<.004	--	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.002
MAY													
04...	<.004	--	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.002
12...	<.004	--	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.002
18...	--	<.005	--	--	--	<.009	<.005	<.005	<.007	<.02	<.02	<.02	--
JUN													
01...	<.004	--	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.002
07...	<.004	--	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.002
15...	--	<.005	--	--	--	<.009	<.005	<.005	<.007	<.02	<.02	<.02	--
22...	<.004	--	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.002
29...	<.004	--	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.002
JUL													
06...	<.004	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003
13...	<.004	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003
20...	<.004	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003
27...	<.004	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003
AUG													
04...	<.004	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003
10...	<.004	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003
17...	--	<.005	--	--	--	<.009	<.005	<.005	<.007	<.02	<.02	<.02	--
24...	<.004	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003
30...	<.004	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003
SEP													
07...	<.004	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003
14...	<.004	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003
21...	<.004	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003

12505450 GRANGER DRAIN AT GRANGER, WA—Continued
(National Water-Quality Assessment Station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	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)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- oxon, water, fltrd, ug/L (61652)	Mala- thion, water, fltrd, ug/L (39532)	Meta- laxyl, water, fltrd, ug/L (61596)	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 ESA, water, fltrd 0.7u GF ug/L (61043)
OCT 15...	<.003	--	--	--	<.004	<.035	--	<.027	--	--	--	<.006	<.05
NOV 18...	<.003	<.013	<1	<.003	--	--	<.008	<.027	<.005	<.006	<.03	<.015	.02
DEC 09...	<.003	--	--	--	<.004	<.035	--	<.027	--	--	--	<.006	<.02
JAN 20...	<.003	E.006	<1	<.003	--	--	<.008	<.027	<.005	<.006	<.03	<.015	.02
FEB 18...	<.003	--	--	--	<.004	<.035	--	<.027	--	--	--	<.006	<.02
MAR 16...	<.003	--	--	--	<.004	<.035	--	<.027	--	--	--	<.006	<.02
22...	<.003	E.004	<1	<.003	--	--	<.008	<.027	<.005	<.006	<.03	<.015	<.02
APR 05...	<.003	E.011	<1	<.003	--	--	<.008	<.027	<.005	<.006	<.03	<.015	<.02
20...	<.003	--	--	--	<.004	<.035	--	<.027	--	--	--	<.006	<.02
27...	<.003	E.008	<1	<.003	--	--	<.008	<.027	<.005	.006	<.03	<.015	<.02
MAY 04...	<.003	E.005	<1	<.003	--	--	<.008	<.027	<.005	E.005	<.03	<.015	<.02
12...	<.003	E.009	<1	<.003	--	--	<.008	<.027	<.005	<.006	<.03	<.015	<.02
18...	<.003	--	--	--	<.004	<.035	--	<.027	--	--	--	<.006	<.02
JUN 01...	<.003	.048	<1	<.003	--	--	<.008	<.027	<.005	<.006	<.03	<.015	<.02
07...	<.003	<.013	<1	<.003	--	--	<.008	<.027	<.005	<.006	<.03	<.015	<.02
15...	<.003	--	--	--	<.004	<.035	--	<.027	--	--	--	<.006	<.02
22...	<.003	<.013	<1	<.003	--	--	<.008	E.011	<.005	<.006	<.03	<.015	<.02
29...	<.003	<.013	<1	<.003	--	--	<.008	<.027	<.005	<.006	<.03	<.015	<.02
JUL 06...	<.003	<.013	<.387	<.003	--	--	<.030	<.027	<.005	<.006	<.03	<.015	<.02
13...	<.003	<.013	<.387	<.003	--	--	<.030	<.027	<.005	<.006	<.03	<.015	<.02
20...	<.003	<.013	<.387	<.003	--	--	<.030	<.027	<.005	<.006	<.03	<.015	<.02
27...	<.003	<.013	<.387	<.003	--	--	<.030	<.027	<.005	<.006	<.03	<.015	<.02
AUG 04...	<.003	<.013	<.387	<.003	--	--	<.030	<.027	<.005	<.006	<.03	<.015	<.02
10...	<.003	<.013	<.387	<.003	--	--	<.030	<.027	<.005	<.006	<.03	<.015	<.02
17...	<.003	--	--	--	<.004	<.035	--	<.027	--	--	--	<.006	<.02
24...	<.003	<.013	<.387	<.003	--	--	<.030	<.027	<.005	<.006	<.03	<.015	<.02
30...	<.003	<.013	<.387	<.003	--	--	<.030	<.027	<.005	<.006	<.03	<.015	<.02
SEP 07...	<.003	<.013	<.387	<.003	--	--	<.030	<.027	<.005	<.006	<.03	<.015	<.02
14...	<.003	<.013	<.387	<.003	--	--	<.030	<.027	<.005	<.006	<.03	<.015	<.02
21...	<.003	<.013	<.387	<.003	--	--	<.030	<.027	<.005	<.006	<.03	<.015	<.02

12505450 GRANGER DRAIN AT GRANGER, WA—Continued
(National Water-Quality Assessment Station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Metola- chlor OA, water, fltrd 0.7u GF ug/L (61044)	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)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	p,p-' DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	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)
OCT													
15...	<.05	<.013	<.006	<.002	--	<.007	<.003	<.010	<.004	<.022	--	<.011	--
NOV													
18...	<.02	<.013	<.006	--	<.008	--	--	--	--	<.022	<.10	<.011	--
DEC													
09...	<.02	<.013	<.006	<.002	--	<.007	<.005	<.010	<.004	<.022	--	<.011	--
JAN													
20...	<.02	<.013	<.006	--	<.008	--	--	--	--	<.022	<.10	<.011	<.06
FEB													
18...	<.02	<.013	<.006	<.002	--	<.007	<.010	<.010	<.004	<.022	--	<.011	--
MAR													
16...	<.02	<.013	<.006	<.002	--	<.007	<.005	<.010	<.004	<.022	--	<.011	--
22...	<.02	<.013	<.006	--	<.008	--	--	--	--	<.022	<.10	<.011	--
APR													
05...	<.02	<.013	<.006	--	E.003	--	--	--	--	<.022	<.10	<.011	--
20...	<.02	<.013	.018	<.002	--	<.007	<.005	<.010	<.004	<.022	--	<.011	--
27...	<.02	<.013	<.006	--	E.004	--	--	--	--	<.022	<.10	<.011	<.06
MAY													
04...	<.02	<.013	<.006	--	E.004	--	--	--	--	<.022	<.10	<.011	--
12...	<.02	<.013	E.005	--	E.004	--	--	--	--	<.022	<.10	<.011	<.06
18...	<.02	<.013	.007	<.002	--	<.007	<.005	<.010	<.004	<.022	--	<.011	--
JUN													
01...	<.02	<.013	<.006	--	<.008	--	--	--	--	<.022	<.10	<.011	<.06
07...	<.02	<.013	<.006	--	<.008	--	--	--	--	<.022	<.10	<.011	--
15...	<.02	<.013	<.006	<.002	--	<.007	<.005	<.010	<.004	<.022	--	<.011	--
22...	<.02	<.013	<.006	--	E.005	--	--	--	--	<.022	<.10	<.011	<.06
29...	<.02	<.013	<.006	--	<.008	--	--	--	--	<.022	<.10	<.011	<.06
JUL													
06...	<.02	<.013	<.006	--	E.004	--	--	--	--	<.022	<.10	<.011	<.05
13...	<.02	<.013	.032	--	<.008	--	--	--	--	<.022	<.10	<.011	<.05
20...	<.02	<.013	.018	--	<.008	--	--	--	--	<.022	<.10	<.011	<.05
27...	<.02	<.013	.009	--	<.008	--	--	--	--	<.022	<.10	<.011	<.05
AUG													
04...	<.02	<.013	<.006	--	<.008	--	--	--	--	<.022	<.10	<.011	<.05
10...	<.02	<.013	.007	--	<.008	--	--	--	--	<.022	<.10	<.011	--
17...	<.02	<.013	<.006	<.002	--	<.007	<.005	<.010	<.004	<.022	--	<.011	--
24...	<.02	<.013	<.006	--	<.008	--	--	--	--	<.022	<.10	<.011	<.05
30...	<.02	<.013	<.006	--	<.008	--	--	--	--	<.022	<.10	<.011	<.05
SEP													
07...	<.02	<.013	<.006	--	<.008	--	--	--	--	<.022	<.10	<.011	<.05
14...	<.02	<.013	<.006	--	<.008	--	--	--	--	<.022	<.10	<.011	<.05
21...	<.02	<.013	<.006	--	<.008	--	--	--	--	<.022	<.10	<.011	<.05

12505450 GRANGER DRAIN AT GRANGER, WA—Continued
(National Water-Quality Assessment Station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phosmet water, fltrd, ug/L (61601)	Promet- ton, water, fltrd, ug/L (04037)	Promet- ryn, water, fltrd, ug/L (04036)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor ESA, water, fltrd 0.7u GF ug/L (62766)	Propa- chlor OA, water, fltrd 0.7u GF ug/L (62767)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Ter- bufos oxon sulfone water, fltrd, ug/L (61674)
OCT													
15...	--	<.01	--	<.004	--	--	<.010	<.011	<.02	<.005	<.02	<.034	--
NOV													
18...	<.008	<.01	<.005	<.004	<.05	<.02	--	--	--	E.004	<.02	--	<.07
DEC													
09...	--	<.01	--	<.004	<.05	<.02	<.010	<.011	--	.008	<.02	<.034	--
JAN													
20...	<.008	.03	<.005	<.004	<.05	<.02	--	--	--	.006	<.02	--	<.07
FEB													
18...	--	.04	--	<.004	<.05	<.02	<.010	<.011	<.02	.010	<.02	<.034	--
MAR													
16...	--	<.03	--	<.004	<.05	<.02	<.010	<.011	<.02	<.005	<.02	<.034	--
22...	--	.02	<.005	<.004	<.05	<.02	--	--	--	.006	<.02	--	<.07
APR													
05...	--	<.01	<.005	<.004	<.05	<.02	--	--	--	.006	<.02	--	<.07
20...	--	.03	--	<.004	<.05	<.02	<.010	<.011	<.02	.030	<.02	E.033	--
27...	<.008	<.01	<.005	<.004	<.05	<.02	--	--	--	E.003	<.02	--	<.07
MAY													
04...	<.008	<.01	<.005	<.004	<.05	<.02	--	--	--	.016	<.02	--	<.07
12...	<.008	<.01	<.005	<.004	<.05	<.02	--	--	--	E.004	<.02	--	<.07
18...	--	<.01	--	<.004	<.05	<.02	<.010	<.011	<.02	.022	<.02	E.019	--
JUN													
01...	<.008	<.02	<.005	<.004	<.05	<.02	--	--	--	.015	<.02	--	<.07
07...	<.008	<.03	<.005	<.004	<.05	<.02	--	--	--	.013	<.02	--	<.07
15...	--	<.01	--	<.004	<.05	<.02	<.010	<.011	<.02	<.005	<.02	<.034	--
22...	<.008	<.01	<.005	<.004	<.05	<.02	--	--	--	E.003	<.02	--	<.07
29...	<.008	<.01	<.005	<.004	<.05	<.02	--	--	--	.007	<.02	--	<.07
JUL													
06...	<.008	<.01	<.005	<.004	<.05	<.02	--	--	--	.031	<.02	--	<.07
13...	<.008	<.01	<.005	<.004	<.05	<.02	--	--	--	.005	<.02	--	<.07
20...	<.008	<.01	<.005	<.004	<.05	<.02	--	--	--	.009	<.02	--	<.07
27...	<.008	<.01	<.005	<.004	<.05	<.02	--	--	--	.011	<.02	--	<.07
AUG													
04...	<.008	<.01	<.005	<.004	<.05	<.02	--	--	--	E.004	<.02	--	<.07
10...	--	<.01	<.005	<.004	<.05	<.02	--	--	--	E.005	<.02	--	<.07
17...	--	E.01	--	<.004	<.05	<.02	<.010	<.011	<.02	<.010	<.02	<.034	--
24...	<.008	<.01	<.005	<.004	<.05	<.02	--	--	--	<.005	<.02	--	<.07
30...	<.008	<.01	<.005	<.004	<.05	<.02	--	--	--	E.002	<.02	--	<.07
SEP													
07...	<.008	<.04	<.005	<.004	<.05	<.02	--	--	--	<.005	<.02	--	<.07
14...	<.008	<.01	<.005	<.004	<.05	<.02	--	--	--	.006	<.02	--	<.07
21...	<.008	<.01	<.005	<.004	<.05	<.02	--	--	--	<.005	<.02	--	<.07

YAKIMA RIVER BASIN

12505450 GRANGER DRAIN AT GRANGER, WA—Continued
(National Water-Quality Assessment Station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Terbu- fos, water, fltrd 0.7u GF (82675)	Ter- buthyl- azine, water, fltrd, ug/L (04022)	Thio- bencarb water fltrd 0.7u GF (82681)	Tri- allate, water, fltrd 0.7u GF (82678)	Tri- flur- alin, water, fltrd 0.7u GF (82661)	Di- chlor- vos, water fltrd, ug/L (38775)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment dis- charge, tons/d (80155)
OCT									
15...	<.02	--	<.005	<.002	<.009	--	62	165	17
NOV									
18...	<.02	<.01	--	--	<.009	<.01	81	59	2.9
DEC									
09...	<.02	--	<.005	<.002	E.005	--	34	125	6.5
JAN									
20...	<.02	<.01	--	--	<.009	<.01	--	83	4.7
FEB									
18...	<.02	--	<.005	<.002	<.009	--	--	49	3.0
MAR									
16...	<.02	--	<.005	<.002	<.009	--	42	108	5.2
22...	<.02	<.01	--	--	<.009	<.01	58	93	4.7
APR									
05...	<.02	<.01	--	--	<.009	<.01	79	121	9.1
20...	<.02	--	<.005	<.002	E.007	--	--	460	55
27...	<.02	<.01	--	--	<.009	<.01	--	1,990	215
MAY									
04...	<.02	<.01	--	--	.029	<.01	--	399	45
12...	<.02	<.01	--	--	.010	<.01	62	180	23
18...	<.02	--	<.005	<.002	.009	--	75	149	18
JUN									
01...	<.02	<.01	--	--	E.001	<.01	76	101	13
07...	<.02	<.01	--	--	.010	<.01	83	79	10
15...	<.02	--	<.005	<.002	<.009	--	--	73	9.9
22...	<.02	<.01	--	--	.010	<.01	--	70	9.1
29...	<.02	<.01	--	--	<.009	<.01	--	45	6.3
JUL									
06...	<.02	<.01	--	--	.013	<.01	--	46	6.7
13...	<.02	<.01	--	--	E.008	<.01	--	36	5.2
20...	<.02	<.01	--	--	<.009	<.01	--	44	6.7
27...	<.02	<.01	--	--	E.005	<.01	--	45	6.3
AUG									
04...	<.02	<.01	--	--	<.009	<.01	--	42	6.1
10...	<.02	<.01	--	--	<.009	<.01	--	40	5.7
17...	<.02	--	<.005	<.002	<.009	--	--	64	9.3
24...	<.02	<.01	--	--	<.009	<.01	--	115	19
30...	<.02	<.01	--	--	E.004	<.01	--	123	18
SEP									
07...	<.02	<.01	--	--	<.009	<.01	--	83	12
14...	<.02	<.01	--	--	E.005	<.01	--	117	17
21...	<.02	<.01	--	--	<.009	<.01	--	109	14

12505450 GRANGER DRAIN AT GRANGER, WA—Continued
(National Water-Quality Assessment Station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	UV absorb- ance, 254 nm, wat flt units /cm (50624)	SUVA, 254 nm, abs units/ mgC/L /meter (63162)	Organic carbon, water, fltrd, mg/L (00681)
OCT				
15...	1105	.061	2.5	2.5
NOV				
18...	1015	.072	2.4	3.0
DEC				
09...	1125	.046	1.8	2.6
JAN				
20...	1005	.100	2.3	4.3
FEB				
18...	1015	.134	2.4	5.7
MAR				
16...	0815	.047	2.1	2.2
22...	1025	.046	1.8	2.5
APR				
05...	0815	.061	2.2	2.7
20...	0745	.191	2.9	6.7
27...	0825	.088	2.6	3.5
MAY				
04...	0835	.094	2.4	3.9
12...	0905	.089	2.9	3.0
18...	0725	.086	2.7	3.2
JUN				
01...	0755	.085	2.6	3.3
07...	0815	.078	2.4	3.3
15...	0755	.098	2.3	4.2
22...	0725	.090	2.7	3.4
29...	0745	.089	2.6	3.5
JUL				
06...	0815	.082	2.8	3.0
13...	1055	.109	2.9	3.8
20...	0815	.124	3.0	4.1
27...	0825	.107	2.6	4.1
AUG				
04...	0845	.094	2.7	3.5
10...	0855	.094	2.6	3.7
17...	0835	.111	3.1	3.6
24...	0845	.138	3.7	3.7
30...	0715	.095	2.7	3.5
SEP				
07...	1045	.069	2.4	2.9
14...	0745	.079	2.6	3.0
21...	0905	.071	2.6	2.7

YAKIMA RIVER BASIN

12506520 SIMCOE CREEK AT MEDICINE VALLEY ROAD, NEAR WHITE SWAN, WA

WATER-QUALITY RECORDS

LOCATION.--Lat 46°22'55", long 120°47'47", in NE¹/₄, sec.1, T.10 N., R.16 E., Yakima County, Hydrologic Unit 17030003, upstream of Medicine Valley bridge, 3 mi west of White Swan.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--July 2003 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	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 unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
JUL 11...	1350	734	10.3	126	8.6	194	34.7	23.6	.12	<.04	<.06	<.008	.06

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Phosphorus, water, unfltrd mg/L (00665)
JUL 11...	.072

12508400 SATUS CREEK ABOVE DRY CREEK, NEAR TOPPENISH, WA

WATER-QUALITY RECORDS

LOCATION.--Lat 46°15'08", long 120°23'54", in SW¼NW¼, sec.24, T.09 N., R.19 E., Yakima County, Hydrologic Unit 17030003, above the confluence of Dry Creek, 11 mi south of Toppenish.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--July to August 2003 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 degrees NTU (63675)	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 unfltrd 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)	Carbonate, wat flt incrm. titr., field, mg/L (00452)
JUL 10...	1800	--	--	738	7.8	101	8.7	103	33.4	27.1	--	--	--
AUG 20...	1020	15	1.1	742	9.7	107	8.2	117	17.2	19.1	60	72	.0
22...	1130	--	--	--	--	--	--	--	--	--	--	--	--
22...	1150	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Biomass periphyton, ashfree drymass g/m2 (49954)	Biomass periphyton, ashfree dry wt, DTH, g/m2 (63766)
JUL 10...	.12	<.04	<.06	<.008	--	.02	.032	--	--	--	--	--	--
AUG 20...	E.10	<.04	<.60	<.008	.02	<.18	.028	<.1	<.1	<.1	.9	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	14.7	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	87.7

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Biomass periphyton, ash weight, DTH, g/m2 (63765)	Periphyton biomass ash weight, g/m2 (00572)	Biomass periphyton, dry weight, DTH, g/m2 (63767)	Periphyton biomass dry weight, g/m2 (00573)	Chlorophyll a periphyton, DTH, CF meth mg/m2 (63763)	Pheophytin a periphyton, DTH, CF meth mg/m2 (63764)	Pheophytin a, periphyton, mg/m2 (62359)	Pheophytin a, phytoplankton, ug/L (62360)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
JUL 10...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 20...	--	--	--	--	--	--	--	1.4	--	.7	3	.12
22...	--	380	--	393.0	--	--	7.3	--	47.0	--	--	--
22...	1,180	--	1,270	--	110	65.3	--	--	--	--	--	--

12508480 DRY CREEK NEAR TOPPENISH, WA

WATER-QUALITY RECORDS

LOCATION.--Lat 46°15'13", long 120°24'28", in SW¹/₄NE¹/₄, sec.23, T.09 N., R.19 E., Yakima County, Hydrologic Unit 17030003, downstream of Hwy 97 bridge, 11 mi south of Toppenish.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--July to August 2003 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 degrees NTU (63675)	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 unfltrd 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)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	
JUL	10...	1610	--	--	738	10.2	129	8.5	159	35.7	25.6	--	--	--
AUG	20...	1500	.03	.5	740	9.1	117	8.4	187	34.9	26.6	90	106	1
	22...	0900	--	--	--	--	--	--	--	--	--	--	--	--
	22...	0920	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Biomass periphyton, ashfree drymass g/m2 (49954)	Biomass periphyton, ashfree dry wt, DTH, g/m2 (63766)
JUL	10...	.15	<.04	<.06	<.008	--	.02	.035	--	--	--	--	--
AUG	20...	.15	<.04	<.60	<.008	.04	<.18	.032	.2	<.1	.2	1.2	--
	22...	--	--	--	--	--	--	--	--	--	--	26.9	--
	22...	--	--	--	--	--	--	--	--	--	--	--	155

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Biomass periphyton, ash weight, DTH, g/m2 (63765)	Periphyton biomass ash weight, g/m2 (00572)	Biomass periphyton, dry weight, DTH, g/m2 (63767)	Periphyton biomass dry weight, g/m2 (00573)	Chlorophyll a periphyton, DTH, CF meth mg/m2 (63763)	Pheophytin a periphyton, DTH, CF meth mg/m2 (63764)	Pheophytin a, periphyton, mg/m2 (62359)	Pheophytin a, phytoplankton, ug/L (62360)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
JUL	10...	--	--	--	--	--	--	--	--	--	--	--
AUG	20...	--	--	--	--	--	--	.9	--	.4	4	.00
	22...	--	550	--	575.6	--	19	--	78.2	--	--	--
	22...	1,730	--	1,880	--	58.0	69.6	--	--	--	--	--

12508820 BLACK CANYON CREEK AT WANETA ROAD, NEAR SUNNYSIDE, WA

WATER-QUALITY RECORDS

LOCATION.--Lat 46°17'16", long 119°58'56", in SW $\frac{1}{4}$ SW $\frac{1}{4}$, sec.5, T.09 N., R.22 E., Yakima County, Hydrologic Unit 17030003, downstream of Waneta Rd. bridge, 2 mi southeast of Sunnyside.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--July to August 2003 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 degrees NTU (63675)	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 unfltrd 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)	Carbonate, wat flt incrm. titr., field, mg/L (00452)
JUL 10...	1110	--	--	747	10.6	115	8.3	381	30.3	18.2	--	--	--
AUG 21...	1500	16	10	741	9.3	105	8.2	388	33.5	19.6	146	175	.0
26...	1200	--	--	--	--	--	--	--	--	--	--	--	--
26...	1220	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Biomass periphyton, ashfree drymass g/m2 (49954)
JUL 10...	.41	<.04	4.69	.040	--	.08	.129	5.1	--	--	--	--	--
AUG 21...	.63	<.04	5.23	E.006	.17	<.18	.179	5.9	1.4	<.1	1.4	2.3	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	37.3
26...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Biomass periphyton, ashfree dry wt, DTH, g/m2 (63766)	Biomass periphyton, ash weight, DTH, g/m2 (63765)	Periphyton biomass ash weight, DTH, g/m2 (00572)	Biomass periphyton, dry weight, DTH, g/m2 (63767)	Periphyton biomass dry weight, DTH, g/m2 (00573)	Chlorophyll a periphyton, DTH, CF meth mg/m2 (63763)	Pheophytin a periphyton, DTH, CF meth mg/m2 (63764)	Pheophytin a, periphyton, mg/m2 (62359)	Pheophytin a, phytoplankton, ug/L (62360)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
JUL 10...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 21...	--	--	--	--	--	--	--	--	3.1	--	1.1	82	3.7
26...	--	--	910	--	944.0	--	--	32	--	121	--	--	--
26...	83.8	1,920	--	2,000	--	7.4	19.3	--	--	--	--	--	--

12508990 YAKIMA RIVER AT MABTON, WA

LOCATION.--Lat 46°13'53", long 119°59'54", in SW¼SW¼, 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.--Records fair, except for estimated daily discharges, which are poor. 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.--34 years (water years 1971-2004), 3,358 ft³/s, 2,435,000 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, 5,730 ft³/s, Apr. 14, gage height, 13.34 ft; minimum discharge, 734 ft³/s, July 16.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,150	2,030	3,260	1,890	4,440	3,230	4,610	2,100	2,090	944	805	1,540
2	1,320	2,040	3,170	e1,800	4,080	3,190	4,390	2,200	1,760	1,040	860	1,600
3	1,290	2,060	2,940	e1,600	3,810	3,160	4,210	2,650	1,450	938	934	1,560
4	1,230	2,020	2,780	e1,400	3,540	3,080	4,150	3,050	1,330	928	986	1,570
5	1,150	2,000	2,690	e1,300	3,350	3,020	4,320	3,180	1,420	1,000	1,210	1,540
6	1,120	1,950	2,650	e1,400	3,170	3,180	4,610	3,260	1,730	1,010	1,250	1,480
7	1,070	1,930	2,640	e1,600	3,050	3,170	4,570	2,970	1,980	924	1,370	1,510
8	1,040	1,930	2,590	e1,800	2,950	3,320	4,820	2,640	2,210	932	1,480	1,470
9	1,090	1,930	2,500	2,170	2,850	3,630	5,080	2,590	2,380	1,020	1,390	1,380
10	1,160	1,900	2,490	2,340	2,780	4,420	5,060	2,590	2,420	929	1,230	1,450
11	1,210	1,880	2,490	2,250	2,740	5,290	4,990	2,410	2,330	885	1,100	1,560
12	1,200	1,950	2,420	2,200	2,690	5,280	5,090	2,170	2,310	911	1,080	1,670
13	1,200	2,210	2,430	2,150	2,620	5,220	5,160	1,960	2,030	874	1,020	1,820
14	1,180	2,150	2,450	2,090	2,580	5,230	5,610	1,880	1,900	819	1,010	1,850
15	1,170	1,980	2,410	2,060	2,620	5,100	5,410	1,800	1,860	785	1,050	1,770
16	1,220	1,910	2,340	2,070	2,610	5,140	4,750	1,850	1,590	753	1,140	1,790
17	1,330	1,930	2,290	2,210	2,630	4,920	4,140	2,080	1,450	772	1,110	1,840
18	2,060	2,020	2,310	2,310	2,700	4,930	3,660	2,240	1,340	800	1,070	1,830
19	1,970	2,240	2,270	2,290	2,780	5,410	3,330	2,210	1,230	896	1,060	1,820
20	1,790	3,740	2,260	2,260	2,850	5,500	2,750	2,280	1,180	1,140	1,090	1,820
21	2,240	3,680	2,270	2,240	2,840	5,180	2,290	2,660	1,150	1,180	1,120	1,750
22	2,660	3,210	2,250	2,240	2,780	4,780	2,240	2,780	1,050	1,060	1,270	1,650
23	2,680	2,850	2,240	2,240	2,710	4,580	1,940	2,800	969	921	1,580	1,640
24	2,460	2,630	2,210	2,250	2,700	4,940	1,720	2,870	1,050	814	1,780	1,630
25	2,300	2,520	2,170	2,310	2,790	5,360	1,660	2,660	1,130	809	1,770	1,610
26	2,180	2,410	2,130	2,320	3,010	5,480	1,640	2,300	1,070	839	2,030	1,640
27	2,090	2,340	2,090	2,280	3,060	5,420	1,590	2,140	1,040	811	2,130	1,640
28	2,020	2,280	2,020	2,270	3,250	5,140	1,820	2,610	1,000	783	1,960	1,620
29	1,990	2,230	2,010	2,610	3,280	4,890	2,430	2,840	933	820	1,870	1,600
30	2,020	2,540	2,000	3,300	---	4,780	2,360	2,570	908	819	1,800	1,580
31	2,050	---	1,850	4,220	---	4,800	---	2,260	---	801	1,680	---
TOTAL	50,640	68,490	74,620	67,470	87,260	140,770	110,400	76,600	46,290	27,957	41,235	49,230
MEAN	1,634	2,283	2,407	2,176	3,009	4,541	3,680	2,471	1,543	902	1,330	1,641
MAX	2,680	3,740	3,260	4,220	4,440	5,500	5,610	3,260	2,420	1,180	2,130	1,850
MIN	1,040	1,880	1,850	1,300	2,580	3,020	1,590	1,800	908	753	805	1,380
AC-FT	100,400	135,800	148,000	133,800	173,100	279,200	219,000	151,900	91,820	55,450	81,790	97,650

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2004, BY WATER YEAR (WY)

MEAN	1,859	2,441	3,576	3,963	4,708	4,980	4,754	4,843	4,212	1,862	1,511	1,697
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)	(1997)	(1997)	(1972)	(1974)	(1976)	(1978)
MIN	856	1,333	1,427	1,214	1,019	543	607	936	1,014	658	755	814
(WY)	(1980)	(1988)	(1994)	(1979)	(1977)	(1977)	(1977)	(1977)	(1994)	(1994)	(1979)	(1979)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1971 - 2004	
ANNUAL TOTAL	1,058,590		840,962			
ANNUAL MEAN	2,900		2,298		3,358	
HIGHEST ANNUAL MEAN					6,566	
LOWEST ANNUAL MEAN					1,215	
HIGHEST DAILY MEAN	17,400	Feb 2	5,610	Apr 14	44,000	Feb 10, 1996
LOWEST DAILY MEAN	1,040	Oct 8	753	Jul 16	320	Mar 25, 1977
ANNUAL SEVEN-DAY MINIMUM	1,120	Oct 5	811	Jul 26	344	Mar 23, 1977
ANNUAL RUNOFF (AC-FT)	2,100,000		1,668,000		2,433,000	
10 PERCENT EXCEEDS	5,460		4,340		7,050	
50 PERCENT EXCEEDS	2,340		2,090		2,200	
90 PERCENT EXCEEDS	1,170		1,020		1,250	

461315119452400 JD 55.1 AT BETTINSON ROAD, NEAR PROSSER, WA

WATER-QUALITY RECORDS

LOCATION.--Lat 46°13'15", long 119°45'24", in NW¼SE¼, sec.36, T.09 N., R.24 E., Benton County, Hydrologic Unit 17030003, downstream of Interstate 82 crossing, 1 mi north of Prosser.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--July to August 2003 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 degrees NTU (63675)	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 unfltrd 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)	Carbonate, wat flt incrm. titr., field, mg/L (00452)
JUL 09...	1700	--	--	747	10.1	119	8.6	352	31.3	22.4	--	--	--
AUG 21...	1100	2.7	2.2	745	9.6	107	8.1	256	30.3	19.9	110	132	.0
26...	1630	--	--	--	--	--	--	--	--	--	--	--	--
26...	1650	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Biomass periphyton, ashfree drymass g/m2 (49954)
JUL 09...	.45	<.04	1.47	.018	--	.07	.109	1.9	--	--	--	--	--
AUG 21...	.34	<.04	.85	<.008	.05	<.18	.066	1.2	.3	<.1	.3	2.4	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	9.6
26...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Biomass periphyton, ashfree dry wt, DTH, g/m2 (63766)	Biomass periphyton, ash weight, DTH, g/m2 (63765)	Periphyton biomass ash weight, DTH, g/m2 (00572)	Biomass periphyton, dry weight, DTH, g/m2 (63767)	Periphyton biomass dry weight, DTH, g/m2 (00573)	Chlorophyll a periphyton, DTH, CF meth mg/m2 (63763)	Pheophytin a periphyton, DTH, CF meth mg/m2 (63764)	Pheophytin a, periphyton, mg/m2 (62359)	Pheophytin a, phytoplankton, ug/L (62360)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
JUL 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 21...	--	--	--	--	--	--	--	--	1.7	--	1.0	4	.03
26...	--	--	240	--	251.8	--	--	5.6	--	23.8	--	--	--
26...	143	1,890	--	2,040	--	26.8	30.4	--	--	--	--	--	--

12509698 SPRING CREEK AT MCCREADIE ROAD, NEAR PROSSER, WA

WATER-QUALITY RECORDS

LOCATION.--Lat 46°15'27", long 119°42'37", in NE $\frac{1}{4}$ NE $\frac{1}{4}$, sec.20, T.09 N., R.25 E., Benton County, Hydrologic Unit 17030003, downstream of McCreadie Road bridge, 2 mi north of Whistran.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--April 1997 to September 1998, July to August 2003 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 degrees NTU (63675)	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 unfltrd 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 incm. titr., field, mg/L (00453)	Carbonate, wat flt incm. titr., field, mg/L (00452)
JUL 09...	1210	--	--	747	8.8	94	8.1	293	30.0	17.6	--	--	--
AUG 19...	1020	10	1.8	740	7.1	78	8.0	356	23.4	18.2	132	159	.0
21...	1200	--	--	--	--	--	--	--	--	--	--	--	--
21...	1220	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Biomass periphyton, ashfree drymass g/m2 (49954)
JUL 09...	.30	<.04	1.25	<.008	--	.04	.091	1.6	--	--	--	--	--
AUG 19...	.26	<.04	<.06	<.008	.05	.04	.076	--	.5	<.1	.5	2.3	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	38.8
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Biomass periphyton, ashfree dry wt, DTH, g/m2 (63766)	Biomass periphyton, ash weight, DTH, g/m2 (63765)	Periphyton biomass ash weight, DTH, g/m2 (00572)	Biomass periphyton, dry weight, DTH, g/m2 (63767)	Periphyton biomass dry weight, DTH, g/m2 (00573)	Chlorophyll a periphyton, DTH, CF meth mg/m2 (63763)	Pheophytin a periphyton, DTH, CF meth mg/m2 (63764)	Pheophytin a, periphyton, mg/m2 (62359)	Pheophytin a, phytoplankton, ug/L (62360)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
JUL 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 19...	--	--	--	--	--	--	--	--	1.3	--	1.4	13	.36
21...	--	--	830	--	868.6	--	50	--	116	--	--	--	--
21...	77.4	2,650	--	2,720	--	8.7	16.4	--	--	--	--	--	--

461517119402500 SNIPES CREEK AT MCCREADIE ROAD, NEAR WHITSTRAN, WA

WATER-QUALITY RECORDS

LOCATION.--Lat 46°15'17", long 119°40'25", in NE¹/₄NW¹/₄, sec.22, T.09 N., R.25 E., Benton County, Hydrologic Unit 17030003, downstream of McCreadie Road bridge, 4 mi south of Whitstran.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--July to August 2003 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 degrees NTU (63675)	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 unfltrd 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)	Carbonate, wat flt incrm. titr., field, mg/L (00452)
JUL 09...	1530	--	--	746	9.8	115	8.4	267	--	22.4	--	--	--
AUG 19...	1330	5.6	1.0	740	7.1	84	8.3	360	28.0	22.4	128	152	.0
21...	1000	--	--	--	--	--	--	--	--	--	--	--	--
21...	1020	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Biomass periphyton, ashfree drymass g/m2 (49954)
JUL 09...	.26	<.04	.46	E.004	--	.03	.052	.72	--	--	--	--	--
AUG 19...	.22	<.04	1.62	<.008	.03	.04	.060	1.8	.2	<.1	.2	2.3	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	20.1
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Biomass periphyton, ashfree dry wt, DTH, g/m2 (63766)	Biomass periphyton, ash weight, DTH, g/m2 (63765)	Periphyton biomass ash weight, DTH, g/m2 (00572)	Biomass periphyton, dry weight, DTH, g/m2 (63767)	Periphyton biomass dry weight, DTH, g/m2 (00573)	Chlorophyll a periphyton, DTH, CF meth mg/m2 (63763)	Pheophytin a periphyton, DTH, CF meth mg/m2 (63764)	Pheophytin a, periphyton, mg/m2 (62359)	Pheophytin a, phytoplankton, ug/L (62360)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
JUL 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 19...	--	--	--	--	--	--	--	--	1.5	--	1.5	4	.06
21...	--	--	470	--	487.0	--	--	49	--	70.8	--	--	--
21...	138	2,460	--	2,600	--	168	129	--	--	--	--	--	--

12510500 YAKIMA RIVER AT KIONA, WA

LOCATION.--Lat 46°15'13", long 119°28'37", in SE $\frac{1}{4}$ NE $\frac{1}{4}$, 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.--71 years (water years 1934-2004), 3,516 ft³/s, 2,547,000 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, 6,020 ft³/s, Mar. 11, 12, gage height, 7.00 ft; maximum gage height, 7.63 ft, Aug. 27, backwater from vegetation; minimum discharge, 670 ft³/s, June 24.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,610	2,340	3,850	e2,050	5,400	3,330	4,630	1,770	1,780	1,000	1,320	2,380
2	1,790	2,350	3,980	e2,000	4,940	3,240	4,320	1,720	1,380	1,080	1,310	2,230
3	1,890	2,340	3,630	e1,800	4,470	3,230	4,130	1,990	1,040	1,330	1,450	2,290
4	1,790	2,340	3,330	e1,600	4,070	3,170	4,010	e2,400	796	1,330	1,730	2,210
5	1,610	2,270	3,160	e1,400	3,740	3,070	4,090	e2,600	771	1,360	1,950	2,220
6	1,530	2,240	3,030	e1,600	3,500	3,120	4,410	2,740	1,060	1,480	2,330	2,120
7	1,420	2,180	2,980	e1,800	3,300	3,240	4,460	2,630	1,470	1,510	2,280	2,060
8	1,340	2,190	2,950	e2,100	3,130	3,220	4,580	2,320	1,890	1,410	2,460	1,980
9	1,410	2,170	2,860	e2,400	2,990	3,590	4,960	2,130	2,090	1,410	2,470	1,850
10	1,500	2,170	2,800	e2,600	2,880	4,350	5,040	2,150	2,370	1,520	2,200	1,860
11	1,580	2,130	2,780	e2,550	2,790	5,740	4,900	2,050	2,220	1,390	1,860	2,020
12	1,610	2,100	2,720	2,500	2,740	5,940	4,950	1,820	2,270	1,330	1,680	2,210
13	1,760	2,400	2,710	2,420	2,670	5,700	5,010	e1,650	2,100	1,320	1,580	2,430
14	1,900	2,530	2,750	2,340	2,610	5,670	5,360	e1,550	1,850	1,220	1,550	2,620
15	1,840	2,310	2,690	2,320	2,600	5,450	5,560	e1,500	1,770	1,170	1,670	2,580
16	1,850	2,110	2,600	2,290	2,620	5,460	4,860	e1,550	1,520	1,120	1,830	2,460
17	2,030	2,140	2,550	2,390	2,620	5,230	4,090	e1,700	1,230	1,060	1,920	2,490
18	2,810	2,240	2,530	2,540	2,680	5,210	3,490	1,770	1,190	1,070	1,840	2,570
19	3,270	2,320	2,530	2,550	2,720	5,480	3,040	1,810	1,060	1,190	1,800	2,550
20	2,570	4,190	2,510	2,510	2,830	5,900	2,630	1,790	938	1,540	1,820	2,500
21	2,830	5,320	2,510	2,470	2,840	5,560	2,040	2,060	938	2,090	1,920	2,410
22	3,740	4,390	2,510	2,430	2,800	5,110	1,930	2,320	855	1,980	2,180	2,220
23	4,040	3,660	2,480	2,430	2,720	4,770	1,730	2,360	740	1,750	2,720	2,050
24	3,600	3,300	2,460	2,420	2,670	4,970	1,380	2,450	686	1,390	3,190	2,000
25	3,200	2,970	2,420	2,440	2,700	5,490	1,280	2,350	822	1,220	3,230	1,950
26	2,860	2,790	2,360	2,480	2,930	5,640	1,270	2,030	1,050	1,300	3,320	2,000
27	2,680	2,660	2,310	2,450	3,050	5,710	1,200	1,730	1,060	1,370	3,620	2,080
28	2,610	2,580	2,270	2,420	3,240	5,360	1,220	2,000	1,080	1,310	3,450	2,010
29	2,390	2,500	2,220	2,530	3,370	5,060	1,790	2,370	1,060	1,220	3,090	1,940
30	2,340	2,580	2,230	3,480	---	4,850	2,070	2,360	1,000	1,280	2,890	1,900
31	2,410	---	e2,000	4,550	---	4,740	---	1,970	---	1,300	2,640	---
TOTAL	69,810	79,810	84,710	73,860	91,620	146,600	104,430	63,640	40,086	42,050	69,300	66,190
MEAN	2,252	2,660	2,733	2,383	3,159	4,729	3,481	2,053	1,336	1,356	2,235	2,206
MAX	4,040	5,320	3,980	4,550	5,400	5,940	5,560	2,740	2,370	2,090	3,620	2,620
MIN	1,340	2,100	2,000	1,400	2,600	3,070	1,200	1,500	686	1,000	1,310	1,850
AC-FT	138,500	158,300	168,000	146,500	181,700	290,800	207,100	126,200	79,510	83,410	137,500	131,300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2004, BY WATER YEAR (WY)

MEAN	2,253	2,855	3,967	3,965	4,530	4,655	4,688	5,215	4,812	1,929	1,587	1,832
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)

12510500 YAKIMA RIVER AT KIONA, WA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1934 - 2004	
ANNUAL TOTAL	1,153,351		932,106			
ANNUAL MEAN	3,160		2,547		3,516	
HIGHEST ANNUAL MEAN					7,055	
LOWEST ANNUAL MEAN					1,293	
HIGHEST DAILY MEAN	17,500	Feb 2	5,940	Mar 12	59,400	Dec 24, 1933
LOWEST DAILY MEAN	827	Jul 12	686	Jun 24	225	Apr 4, 1977
ANNUAL SEVEN-DAY MINIMUM	940	Jul 12	861	Jun 20	263	Apr 19, 1977
ANNUAL RUNOFF (AC-FT)	2,288,000		1,849,000		2,547,000	
10 PERCENT EXCEEDS	5,780		4,460		7,160	
50 PERCENT EXCEEDS	2,570		2,350		2,410	
90 PERCENT EXCEEDS	1,230		1,310		1,360	

e Estimated

12510500 YAKIMA RIVER AT KIONA, WA—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	203	182	194	214	210	212	172	158	163	182	172	178
2	190	175	182	214	210	212	163	158	160	184	176	180
3	230	190	209	214	211	212	165	161	163	189	184	187
4	240	227	225	213	211	212	168	165	166	188	176	184
5	---	---	---	214	212	213	167	166	167	176	166	171
6	---	---	---	212	210	211	166	161	164	167	160	163
7	---	---	---	211	202	206	161	156	158	163	159	160
8	---	---	---	202	198	199	156	152	155	169	163	166
9	---	---	---	200	186	194	153	142	149	180	169	174
10	---	---	---	187	184	186	144	139	143	184	180	182
11	---	---	---	184	163	173	143	138	142	189	184	186
12	---	---	---	164	153	156	144	141	143	193	187	190
13	---	---	---	166	154	160	142	140	141	200	193	197
14	---	---	---	166	153	164	141	136	139	206	200	204
15	---	---	---	165	162	164	136	130	132	---	---	---
16	---	---	---	162	161	162	139	130	135	---	---	---
17	---	---	---	164	160	162	148	139	143	---	---	---
18	---	---	---	166	164	165	160	148	153	---	---	---
19	---	---	---	165	163	164	170	160	164	---	---	---
20	221	218	220	163	156	160	178	170	173	220	215	218
21	219	215	217	156	151	154	186	175	180	224	220	222
22	223	218	220	154	150	153	175	170	172	225	208	217
23	227	223	225	161	154	158	181	172	179	208	196	201
24	228	225	227	164	156	163	188	180	185	197	193	195
25	228	225	227	160	146	150	198	188	194	199	194	197
26	226	220	223	150	146	148	206	198	203	203	199	201
27	220	216	218	146	143	145	212	206	209	213	203	206
28	219	214	217	162	143	151	214	207	211	220	213	216
29	215	212	213	192	162	175	214	197	209	223	205	216
30	---	---	---	230	192	213	201	180	193	205	191	197
31	---	---	---	230	172	202	---	---	---	198	191	194
MONTH	---	---	---	230	143	177	214	130	166	---	---	---
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	207	198	201	280	267	273	---	---	---	260	252	256
2	219	207	212	285	274	280	---	---	---	266	260	263
3	232	219	223	288	278	283	---	---	---	272	265	269
4	247	232	237	286	271	279	---	---	---	276	268	273
5	262	247	253	279	264	272	---	---	---	276	268	273
6	265	256	261	270	258	265	---	---	---	277	269	273
7	266	240	255	268	257	264	---	---	---	277	268	273
8	240	216	226	268	259	264	---	---	---	279	273	275
9	216	204	209	270	262	267	---	---	---	284	278	281
10	207	202	205	273	265	269	---	---	---	286	275	281
11	211	201	205	273	264	269	---	---	---	284	277	281
12	214	205	210	274	265	270	261	247	253	286	276	281
13	216	209	213	276	266	272	272	261	265	278	269	275
14	226	216	219	278	268	273	278	272	276	269	258	265
15	234	225	228	284	275	280	280	274	278	260	255	257
16	240	231	234	288	278	284	281	275	278	261	257	258
17	242	233	238	294	286	290	279	274	277	263	260	262
18	246	236	240	300	291	296	281	275	278	263	258	261
19	259	246	251	303	295	300	282	272	277	261	257	260
20	263	253	258	301	289	295	284	275	279	262	259	260
21	266	255	261	291	267	279	287	279	284	264	260	262
22	273	259	265	---	---	---	286	273	280	271	263	265
23	284	266	273	---	---	---	276	270	273	278	271	274
24	294	276	285	---	---	---	274	262	271	282	276	279
25	298	281	290	---	---	---	262	242	250	285	278	282
26	298	280	289	---	---	---	244	240	243	286	280	284
27	287	265	275	---	---	---	249	239	244	284	278	282
28	275	260	268	---	---	---	239	230	234	282	276	280
29	273	259	267	---	---	---	238	234	236	287	280	283
30	273	261	268	---	---	---	246	238	242	288	283	286
31	---	---	---	---	---	---	253	246	250	---	---	---
MONTH	298	198	244	---	---	---	---	---	---	288	252	272

YAKIMA RIVER BASIN

12510500 YAKIMA RIVER AT KIONA, WA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.1	17.1	18.1	---	---	---	---	---	---	1.2	0.0	0.5
2	19.0	17.0	18.0	---	---	---	---	---	---	---	0.0	---
3	18.4	16.6	17.5	---	---	---	---	---	---	---	---	---
4	18.4	16.3	17.4	6.4	5.3	5.7	---	---	---	---	---	---
5	18.9	17.1	17.9	5.8	4.6	5.1	---	---	---	---	---	---
6	18.7	16.9	17.8	5.2	4.0	4.6	---	---	---	---	---	---
7	17.9	16.9	17.3	4.8	4.0	4.4	---	---	---	---	---	---
8	16.9	15.0	16.2	6.0	4.7	5.3	---	---	---	---	---	---
9	15.6	13.9	14.7	6.0	5.3	5.5	---	---	---	---	---	---
10	14.8	13.3	14.1	6.5	5.2	5.8	---	---	---	---	---	---
11	14.0	13.2	13.6	7.6	6.5	7.0	5.0	4.5	4.7	---	---	---
12	13.2	11.9	12.5	7.5	6.3	6.9	4.9	4.5	4.7	---	---	---
13	13.6	11.6	12.6	7.3	6.1	6.7	4.8	4.4	4.6	---	---	---
14	14.2	12.8	13.4	6.6	5.9	6.3	5.0	4.4	4.7	---	---	---
15	13.2	12.1	12.5	6.6	6.0	6.3	4.7	3.9	4.3	---	---	---
16	---	---	---	6.3	5.8	6.0	4.6	4.1	4.4	---	---	---
17	---	---	---	6.6	5.7	6.1	4.3	3.6	4.0	---	---	---
18	---	13.1	---	8.8	6.6	8.0	3.7	2.8	3.3	---	---	---
19	---	---	---	8.4	7.2	8.0	3.2	2.8	3.0	---	---	---
20	---	---	---	7.2	6.4	6.7	3.5	2.9	3.1	---	---	---
21	---	---	---	---	---	---	3.5	3.2	3.4	---	---	---
22	---	---	---	---	---	---	3.9	3.4	3.6	5.2	4.7	4.9
23	---	---	---	---	---	---	4.1	3.8	4.0	5.2	4.8	4.9
24	---	---	---	---	---	---	4.8	4.0	4.4	5.3	4.5	4.8
25	---	---	---	---	---	---	5.3	4.5	4.8	4.8	3.9	4.4
26	---	---	---	---	---	---	4.6	3.8	4.2	5.2	4.2	4.6
27	---	---	---	---	---	---	4.0	3.1	3.4	4.7	3.9	4.3
28	---	---	---	---	---	---	3.5	2.7	3.1	5.2	4.0	4.6
29	---	---	---	---	---	---	3.0	1.8	2.4	6.8	5.1	6.0
30	---	---	---	---	---	---	1.8	1.1	1.4	6.7	5.4	6.2
31	---	---	---	---	---	---	1.2	0.4	0.8	5.6	5.1	5.3
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	5.1	3.6	4.4	7.6	7.0	7.3	10.6	9.0	9.8	19.4	15.1	17.3
2	3.6	3.2	3.3	8.5	6.7	7.5	10.7	8.7	9.7	20.6	16.6	18.6
3	4.1	3.3	3.7	7.5	6.8	7.1	11.0	9.9	10.4	20.9	17.6	19.3
4	4.6	3.6	4.1	8.3	6.7	7.3	12.9	10.6	11.7	20.1	17.9	19.0
5	4.5	3.6	4.1	7.8	6.5	7.0	12.0	11.2	11.5	18.7	16.6	17.6
6	4.2	3.9	4.1	7.5	6.2	6.8	13.5	11.4	12.3	17.3	15.5	16.4
7	5.1	3.9	4.5	8.7	6.8	7.7	13.6	11.7	12.7	17.6	14.8	16.2
8	5.1	4.1	4.6	9.9	7.7	8.8	14.3	12.2	13.2	17.4	15.1	16.3
9	5.0	3.9	4.4	9.3	8.3	8.7	14.2	12.3	13.3	18.3	14.7	16.5
10	5.4	4.0	4.6	9.9	8.1	8.9	14.2	12.2	13.3	17.6	15.7	16.4
11	5.4	4.0	4.6	9.8	8.7	9.2	14.3	12.2	13.3	15.7	14.6	15.0
12	4.7	4.2	4.5	9.4	8.0	8.8	14.5	12.5	13.6	17.0	14.3	15.4
13	4.5	4.0	4.2	9.2	7.9	8.7	14.2	12.9	13.7	17.7	14.0	15.8
14	4.2	3.7	3.9	9.6	8.0	8.8	13.6	12.4	13.0	19.3	14.9	17.1
15	4.6	3.6	4.0	9.0	7.9	8.4	12.5	10.9	11.6	18.0	16.3	16.9
16	4.3	3.6	4.0	10.4	8.5	9.4	12.0	10.3	11.1	18.0	15.6	16.8
17	4.8	4.1	4.5	10.6	9.4	10	12.0	10.6	11.3	20.1	16.4	18.1
18	6.2	4.6	5.2	11.1	9.9	10.4	12.6	10.9	11.7	18.7	16.5	17.5
19	6.3	4.6	5.5	10.8	9.3	10.0	13.6	10.9	12.2	19.8	16.2	18.0
20	6.4	5.2	5.7	9.9	8.6	9.4	13.5	11.8	12.6	20.5	17.1	18.8
21	6.7	5.2	5.9	10.0	8.2	9.2	12.9	11.0	12.0	21.3	17.8	19.4
22	6.9	5.2	6.0	11.1	9.1	10.1	15.2	11.2	13.1	21.0	18.5	19.6
23	7.2	5.6	6.4	12.0	10.3	11.1	14.6	12.9	13.7	19.5	17.5	18.3
24	7.3	6.3	6.7	11.6	11.1	11.4	16.3	11.9	14.0	19.3	16.4	17.7
25	6.5	5.7	6.0	11.3	10.4	10.8	17.4	12.9	15.1	19.4	16.6	18.0
26	6.9	5.6	6.1	10.4	9.0	9.8	18.6	14.1	16.4	19.6	17.1	18.1
27	7.3	5.5	6.4	10.2	8.4	9.3	17.8	14.5	16.4	19.3	17.0	18.1
28	7.8	6.5	7.2	10.5	8.4	9.5	16.4	13.5	14.7	18.7	16.5	17.5
29	8.1	6.8	7.4	11.5	9.1	10.3	18.0	13.8	16.0	18.7	15.5	17.0
30	---	---	---	11.3	10.6	11.0	18.5	14.4	16.5	18.5	15.7	17.0
31	---	---	---	11.0	9.8	10.5	---	---	---	18.6	15.5	17.2
MONTH	8.1	3.2	5.0	12.0	6.2	9.1	18.6	8.7	13.0	21.3	14.0	17.4

12510500 YAKIMA RIVER AT KIONA, WA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.1	16.5	18.4	27.3	23.6	25.4	27.7	24.9	26.3	22.9	21.3	22.4
2	21.9	17.7	19.7	26.1	23.5	24.9	27.0	25.5	26.3	21.3	19.7	20.6
3	22.9	18.9	20.9	26.3	23.5	25.0	26.0	23.8	25.0	20.7	19.3	19.9
4	24.9	20.2	22.5	26.4	23.1	24.7	26.2	23.9	25.0	21.0	19.1	19.9
5	22.9	19.3	21.4	26.8	23.2	25.0	25.0	23.6	24.4	20.6	18.8	19.6
6	21.0	17.6	19.2	26.0	24.0	25.0	23.7	22.2	23.0	20.7	18.5	19.6
7	21.2	17.5	19.3	24.9	22.5	23.8	23.3	20.9	22.1	21.0	18.7	19.8
8	19.8	17.4	18.2	24.1	21.2	22.6	23.8	21.6	22.6	21.3	19.0	20.0
9	17.9	16.5	17.1	24.3	21.4	22.8	24.1	21.7	22.9	20.5	19.3	19.9
10	19.2	16.0	17.5	23.8	21.3	22.5	25.1	22.5	23.7	20.6	18.5	19.5
11	18.7	15.8	17.5	24.1	20.7	22.3	26.1	23.2	24.6	20.2	19.1	19.6
12	19.8	16.7	18.3	24.8	21.4	23.1	26.6	23.7	25.1	19.4	18.6	19.0
13	20.2	17.8	19.1	25.5	22.4	23.9	27.0	24.1	25.5	18.9	18.0	18.4
14	20.3	17.2	18.9	26.7	23.1	24.8	26.0	24.3	25.0	18.9	17.2	18.0
15	21.4	18.0	19.6	27.3	23.9	25.6	25.5	23.4	24.4	18.5	17.3	17.9
16	22.4	18.6	20.5	27.8	24.2	25.9	26.1	23.9	24.9	17.8	16.7	17.3
17	23.2	19.7	21.5	27.8	25.1	26.5	26.0	24.4	25.2	17.6	16.7	17.0
18	23.2	20.4	21.8	27.5	25.8	26.7	26.3	24.2	25.3	16.8	15.5	16.1
19	23.8	20.5	22.2	26.8	24.9	25.8	26.7	24.6	25.6	16.3	15.1	15.7
20	25.3	20.8	23.0	26.0	23.5	24.8	26.7	24.7	25.7	16.5	15.2	15.8
21	26.2	22.0	24.0	25.9	23.5	24.8	25.8	24.0	24.9	16.7	15.0	15.8
22	27.4	22.8	25.0	26.0	23.6	24.9	24.0	21.5	22.8	17.2	15.2	16.1
23	28.3	23.4	25.8	26.7	24.0	25.3	22.3	20.4	21.5	18.0	15.9	16.8
24	28.3	23.8	25.9	27.7	24.5	26.0	22.1	20.4	21.1	18.5	16.4	17.4
25	28.3	23.8	25.8	27.8	25.2	26.4	20.4	18.9	19.5	18.7	16.5	17.6
26	26.8	24.0	25.3	27.3	24.4	25.9	20.4	18.7	19.5	19.1	16.9	17.9
27	27.5	23.7	25.6	26.7	24.5	25.7	21.2	19.2	20.2	19.3	17.3	18.3
28	27.7	23.9	25.7	27.1	24.3	25.7	21.7	19.7	20.8	19.5	17.6	18.5
29	27.5	24.4	25.9	27.3	24.8	26.0	22.5	20.3	21.4	19.5	17.7	18.6
30	26.8	23.4	25.1	27.0	24.8	25.9	23.0	21.0	22.0	18.9	17.3	18.1
31	---	---	---	27.3	24.6	25.9	23.5	21.5	22.5	---	---	---
MONTH	28.3	15.8	21.7	27.8	20.7	25.0	27.7	18.7	23.5	22.9	15.0	18.4

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	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 ftr inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat ftr incm. titr., field, mg/L (00453)	Carbonate, wat ftr incm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)
OCT													
17...	1040	1,980	749	10.8	104	8.2	300	--	12.9	122	145	.0	7.71
NOV													
20...	1100	4,260	750	11.8	98	8.2	240	3.9	6.6	99	120	.0	6.05
DEC													
10...	1220	2,790	748	12.4	98	8.1	206	5.1	4.5	85	102	.0	5.48
JAN													
21...	1050	2,490	764	13.9	108	8.1	229	4.0	4.8	96	116	.0	6.45
FEB													
19...	0950	2,690	757	12.8	101	8.2	225	7.5	5.1	90	109	.0	6.57
MAR													
17...	0840	5,270	751	10.7	95	8.1	161	11.0	9.6	66	80	.0	4.60
APR													
21...	0810	2,090	746	10.3	95	8.1	180	7.8	10.7	74	90	.0	4.56
MAY													
19...	0830	1,810	748	8.5	89	8.0	224	20.1	16.5	89	107	1	5.41
JUN													
16...	0820	1,640	756	8.5	92	8.1	232	18.2	18.7	99	111	.0	5.47
JUL													
21...	0920	2,100	752	7.2	87	8.0	277	17.1	23.7	108	130	.0	6.85
AUG													
18...	0840	1,840	751	6.0	73	8.1	283	29.2	24.4	112	134	1	6.78
SEP													
15...	0810	2,620	745	7.5	80	8.0	257	14.8	17.4	99	119	.0	5.81

YAKIMA RIVER BASIN

12510500 YAKIMA RIVER AT KIONA, WA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Pendi- meth- alin, water, fltrd 0.7u GF (82683)	Phorate water fltrd 0.7u GF (82664)	Prome- ton, water, fltrd, ug/L (04037)	Propy- zamide, water, fltrd 0.7u GF (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF (82679)	Propar- gite, water, fltrd 0.7u GF (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF (82670)	Terba- cil, water, fltrd 0.7u GF (82665)	Terbu- fos, water, fltrd 0.7u GF (82675)	Thio- bencarb water fltrd 0.7u GF (82681)	Tri- allate, water, fltrd 0.7u GF (82678)
OCT 17...	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005	<.02	E.015	<.02	<.005	<.002
NOV 20...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 10...	<.022	<.011	E.01	<.004	<.010	<.011	<.50	.008	<.02	<.034	<.02	<.005	<.002
JAN 21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 19...	<.022	<.011	E.01	<.004	<.010	<.011	<.02	<.010	<.02	<.034	<.02	<.005	<.002
MAR 17...	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002
APR 21...	<.022	<.011	<.01	<.004	<.010	<.011	<.02	.010	<.02	E.010	<.02	<.005	<.002
MAY 19...	<.022	<.011	<.01	<.004	<.010	<.011	<.02	.009	<.02	E.100	<.02	<.005	<.002
JUN 16...	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005	<.02	E.032	<.02	<.005	<.002
JUL 21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 18...	<.022	<.011	E.01	<.004	<.010	<.011	<.02	<.010	<.02	<.034	<.02	<.005	<.002
SEP 15...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Tri- flur- alin, water, fltrd 0.7u GF (82661)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment dis- charge, tons/d (80155)
OCT 17...	<.009	--	10	53
NOV 20...	--	93	25	288
DEC 10...	<.009	--	8	60
JAN 21...	--	--	5	34
FEB 19...	<.009	--	6	44
MAR 17...	<.009	--	71	1,010
APR 21...	<.009	--	9	51
MAY 19...	E.004	92	24	117
JUN 16...	<.009	--	11	49
JUL 21...	--	--	10	57
AUG 18...	<.009	--	7	35
SEP 15...	--	--	10	71

12513000 ESQUATZEL COULEE AT CONNELL, WA

LOCATION.--Lat 46°39'49", long 118°51'44", in SW¼SE¼, 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.--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, 69 ft³/s, Jan. 30, gage height, 12.49 ft; maximum gage height, 12.68 ft, Sept. 18; minimum discharge, no flow on most days Nov. through Mar.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	0.00	0.00	0.00	0.00	0.00	2.9	4.5	5.4	7.1	1.2	4.0
2	0.76	0.00	0.00	0.00	0.00	0.00	4.7	4.8	4.9	7.1	1.5	4.0
3	2.6	0.00	0.00	0.00	0.00	0.00	2.9	5.8	4.1	5.2	0.58	5.0
4	3.8	0.00	0.00	0.00	0.00	0.00	2.4	1.8	1.7	14	0.43	2.7
5	8.1	0.00	0.00	0.00	0.00	0.00	1.4	0.21	0.58	11	9.1	2.6
6	4.8	0.00	0.00	0.00	0.00	0.00	7.9	1.3	1.1	4.9	6.4	6.2
7	9.2	0.00	0.00	0.00	0.00	0.00	4.5	4.8	1.3	3.1	18	3.4
8	13	0.00	0.00	0.00	0.00	0.00	8.2	1.1	4.4	9.7	11	4.3
9	2.7	0.00	0.00	0.00	0.00	0.00	7.5	4.5	14	22	6.1	5.0
10	2.3	0.00	0.00	0.00	0.00	0.00	5.3	4.0	6.5	12	2.8	5.4
11	12	0.00	0.00	0.00	0.00	0.00	1.0	7.6	9.4	11	3.3	8.2
12	16	0.00	0.00	0.00	0.00	0.00	0.04	7.7	9.0	13	5.8	15
13	13	0.00	0.00	0.00	0.00	0.00	0.09	18	5.6	8.3	12	22
14	13	0.00	0.00	0.00	0.00	0.00	1.4	11	4.9	7.2	18	25
15	11	0.00	0.00	0.00	0.00	0.00	2.5	7.0	3.7	e5.5	6.8	14
16	6.6	0.00	0.00	0.00	0.00	0.00	1.0	3.7	2.2	3.8	3.3	11
17	9.2	0.00	0.00	0.00	0.00	0.00	9.5	4.0	1.1	5.6	4.8	11
18	15	0.00	0.00	0.00	0.00	0.00	6.0	2.2	3.5	4.3	14	21
19	16	0.00	0.00	0.00	0.00	0.00	5.7	4.2	3.5	8.5	9.3	12
20	21	0.00	0.00	0.00	0.00	0.00	11	4.1	3.6	7.8	2.8	12
21	14	0.00	0.00	0.00	0.00	0.00	13	8.0	6.6	3.8	12	13
22	11	0.00	0.00	0.00	0.00	0.00	13	5.0	7.5	1.7	14	6.3
23	3.5	0.00	0.00	0.00	0.00	0.00	11	6.7	1.4	3.4	33	7.7
24	1.4	0.00	0.00	0.00	0.00	0.00	12	12	1.1	4.4	17	5.0
25	0.41	0.00	0.00	0.00	0.00	0.00	4.4	5.4	2.3	5.4	30	4.3
26	0.26	0.00	0.00	0.00	0.00	0.00	2.2	9.1	5.9	7.5	25	6.9
27	0.28	0.00	0.00	0.00	0.00	0.00	2.4	8.1	2.9	6.3	12	5.9
28	0.26	0.00	0.00	0.00	0.00	0.00	10	8.6	2.6	3.0	6.5	4.3
29	0.22	0.00	0.00	6.6	0.00	0.00	0.69	16	3.6	3.3	2.8	5.9
30	0.17	0.00	0.00	13	---	0.01	3.0	12	12	2.0	7.0	3.9
31	0.08	---	0.00	0.00	---	3.1	---	6.3	---	3.2	2.3	---
TOTAL	215.64	0.00	0.00	19.60	0.00	3.11	157.62	199.51	136.38	215.1	298.81	257.0
MEAN	6.96	0.00	0.00	0.63	0.00	0.10	5.25	6.44	4.55	6.94	9.64	8.57
MAX	21	0.00	0.00	13	0.00	3.1	13	18	14	22	33	25
MIN	0.08	0.00	0.00	0.00	0.00	0.00	0.04	0.21	0.58	1.7	0.43	2.6
AC-FT	428	0.00	0.00	39	0.00	6.2	313	396	271	427	593	510

WTR YR 2004 TOTAL 1,502.77 MEAN 4.11 MAX 33 MIN 0.00 AC-FT 2,980

e Estimated

