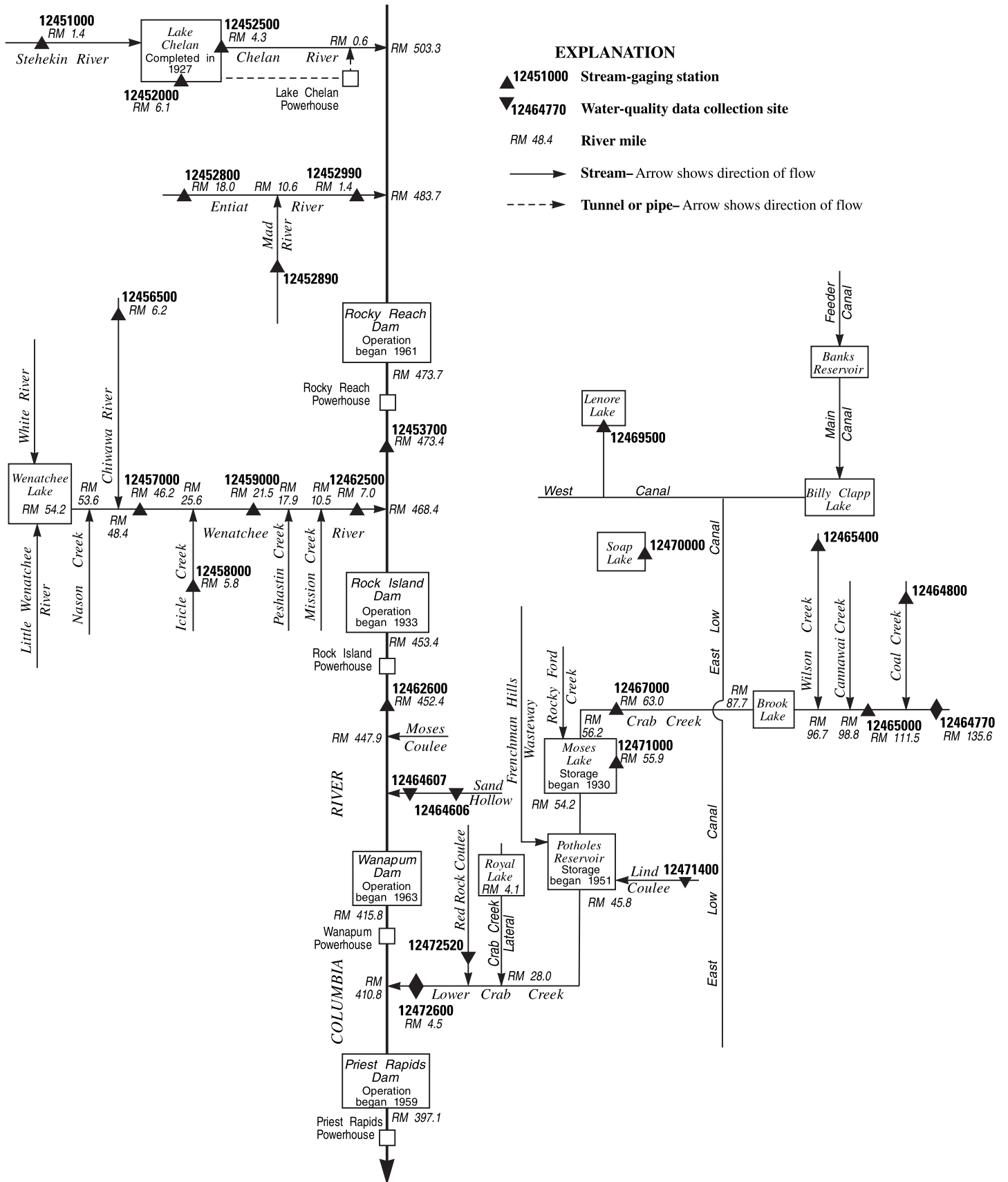


Figure 44. Location of surface-water and water-quality stations in the Columbia River Basin from Chelan to Priest Rapids Dam including Chelan River, Entiat River, Wenatchee River, and Crab Creek Basins



CHELAN RIVER BASIN

12451000 STEHEKIN RIVER AT STEHEKIN, WA

LOCATION.--Lat 48°19'47", long 120°41'26", in NE ¼ SE ¼ sec.26, T.33 N., R.17 E., Chelan County, Hydrologic Unit 17020009, Lake Chelan National Recreation Area, on left bank 1,100 ft upstream from Boulder Creek, 1.4 mi upstream from Lake Chelan, and 2.1 mi northwest of Stehekin.

DRAINAGE AREA.--321 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1910 to October 1915, October 1926 to current year. Monthly discharge only for some periods, published in WSP 1316.

REVISED RECORDS.--WSP 412: 1914. WSP 1316: 1911(M), 1914-15(M). WSP 1446: 1912(M). WSP 1933: Drainage area. WDR-80-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,098.5 ft above NGVD of 1912. To convert to NGVD of 1929, subtract 1.73 ft. Prior to Aug. 17, 1911, nonrecording gage 0.4 mi upstream from mouth at Lake Chelan at different datums (datum change made June 13, 1911). Aug. 17, 1911 to Oct. 31, 1915, nonrecording gage 0.2 mi downstream from Boulder Creek at different datum.

REMARKS.--Records good, except for estimated daily discharges, which are fair. No known regulation or diversion. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--82 years (water years 1911-14, 1927-2003), 1,409 ft<sup>3</sup>/s, 59.61 in/yr, 1,021,000 acre-ft/yr, includes monthly discharge values published in WSP 1316.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,900 ft<sup>3</sup>/s Nov. 29, 1995, gage height, 29.58 ft, from rating curve extended above 11,000 ft<sup>3</sup>/s on basis of slope-area measurement at 18,800 ft<sup>3</sup>/s; minimum discharge, 56 ft<sup>3</sup>/s Jan. 12, 1930.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 25	0315	6,640	23.57	Jun 8	0030	*7,090	*23.83

Minimum discharge, 109 ft<sup>3</sup>/s, Jan. 23, gage height, 18.86 ft.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e435	e180	270	176	475	318	1,750	2,220	5,180	2,550	1,310	573
2	e435	e170	266	125	454	316	1,440	2,460	4,470	2,050	1,110	580
3	e440	e160	256	180	441	312	1,220	2,450	4,210	1,870	1,030	619
4	e450	e165	251	216	421	309	1,060	2,240	4,220	1,890	931	658
5	e430	171	243	209	408	317	955	2,030	4,720	2,030	927	643
6	e410	171	236	197	395	325	873	1,830	5,650	2,090	1,030	612
7	e380	184	224	188	382	323	815	1,650	6,270	2,110	935	630
8	e360	186	217	181	373	313	790	1,510	6,480	2,090	871	575
9	e340	178	212	184	367	316	837	1,450	6,100	1,780	907	506
10	e315	174	216	184	361	311	866	1,510	5,570	1,880	893	469
11	e305	172	222	180	356	340	874	1,680	4,690	2,120	786	590
12	e295	221	221	187	354	420	969	1,900	4,350	2,240	735	609
13	e300	248	219	178	352	688	1,190	2,000	4,150	2,150	707	475
14	e300	221	250	177	350	974	1,330	2,260	3,730	1,730	671	445
15	e295	204	269	171	351	1,010	1,300	2,400	3,180	1,590	704	423
16	e285	206	300	169	352	970	1,250	2,110	3,160	1,520	789	393
17	e275	232	267	166	353	856	1,200	1,840	3,530	1,410	744	367
18	e265	213	245	165	349	770	1,130	1,620	4,200	1,360	750	351
19	e260	396	231	163	346	707	1,070	1,470	3,930	1,410	752	506
20	e255	668	221	162	348	680	1,060	1,380	3,290	1,410	699	434
21	e250	504	213	161	368	674	1,160	1,330	2,440	1,390	698	378
22	e240	454	207	142	374	830	1,470	1,570	2,000	1,440	707	397
23	e235	411	202	127	361	850	1,810	2,300	1,760	1,450	643	419
24	e230	369	197	196	343	769	2,200	4,540	1,790	1,310	577	388
25	e225	333	198	196	337	717	2,280	5,900	2,110	1,130	566	425
26	e218	316	200	481	339	677	2,030	4,760	2,750	1,150	615	508
27	e210	298	199	972	333	630	1,850	4,320	3,710	1,260	595	509
28	e205	287	196	653	326	598	1,750	5,190	3,640	1,250	557	512
29	e200	281	193	548	---	584	1,790	5,580	3,310	1,280	563	496
30	e195	275	190	507	---	734	1,920	5,160	3,260	1,320	587	466
31	e185	---	188	492	---	1,850	---	5,260	---	1,370	598	---
TOTAL	9,223	8,048	7,019	8,033	10,369	19,488	40,239	83,920	117,850	51,630	23,987	14,956
MEAN	298	268	226	259	370	629	1,341	2,707	3,928	1,665	774	499
MAX	450	668	300	972	475	1,850	2,280	5,900	6,480	2,550	1,310	658
MIN	185	160	188	125	326	309	790	1,330	1,760	1,130	557	351
AC-FT	18,290	15,960	13,920	15,930	20,570	38,650	79,810	166,500	233,800	102,400	47,580	29,670
CFSM	0.93	0.84	0.71	0.81	1.15	1.96	4.18	8.43	12.2	5.19	2.41	1.55
IN.	1.07	0.93	0.81	0.93	1.20	2.26	4.66	9.73	13.66	5.98	2.78	1.73

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 2003, BY WATER YEAR (WY)

MEAN	601	691	522	403	397	526	1,441	3,531	4,164	2,630	1,252	694
MAX	1,869	3,192	1,896	1,577	1,209	1,546	4,644	5,810	7,738	5,479	2,716	1,399
(WY)	(1960)	(1991)	(1976)	(1984)	(1971)	(1934)	(1934)	(1958)	(1950)	(1974)	(1959)	(1959)
MIN	230	148	125	86.0	115	194	549	1,475	1,680	1,157	681	409
(WY)	(1988)	(1930)	(1930)	(1930)	(1937)	(1937)	(1955)	(1977)	(1915)	(1977)	(1944)	(1942)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1911 - 2003

ANNUAL TOTAL	597,868	394,762	
ANNUAL MEAN	1,638	1,082	1,405
HIGHEST ANNUAL MEAN			2,008
LOWEST ANNUAL MEAN			864
HIGHEST DAILY MEAN	8,190	Jun 15	6,480
LOWEST DAILY MEAN	160	Nov 3	125
ANNUAL SEVEN-DAY MINIMUM	172	Nov 1	155
ANNUAL RUNOFF (AC-FT)	1,186,000		783,000
ANNUAL RUNOFF (CFSM)	5.10		3.37
ANNUAL RUNOFF (INCHES)	69.29		45.75
10 PERCENT EXCEEDS	4,980		2,440
50 PERCENT EXCEEDS	617		566
90 PERCENT EXCEEDS	221		196

e Estimated

12452000 LAKE CHELAN AT CHELAN, WA

LOCATION.--Lat 47°50'11", long 120°03'37", near center of sec.15, T.27 N., R.22 E., Chelan County, Hydrologic Unit 17020009, on south shore of Lake Chelan at Lakeside, 2.1 mi west of Chelan.

DRAINAGE AREA.--924 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1897 to December 1899, January to June 1905 and December 1910 to September 1911 (fragmentary gage heights only), October 1911 to current year. Records of change in contents prior to October 1911, published in WSP 482 and 492 in conjunction with records for Chelan River near Chelan, have been found to be unreliable and should not be used. Monthend contents October 1911 to September 1950 published in WSP 1316.

REVISED RECORDS.--WSP 1246: 1951. WSP 1286: 1952. WSP 1933: Drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1912. To convert to NGVD of 1929, subtract 1.73 ft. Prior to Jan. 1, 1900, nonrecording gage at Lakeside about 1 mi west of Chelan at datum 1,070.18 ft above NGVD of 1912. Jan. 1 to June 30, 1905, nonrecording gage at upper highway bridge at Chelan at different datum. Dec. 5, 1910, to Nov. 13, 1927, nonrecording gage at Forest Service boat landing at Chelan at datum 1,076.07 ft above NGVD of 1912.

REMARKS.--Reservoir is formed by low concrete dam at lake outlet completed Sept. 3, 1927. Usable capacity between elevations 1,079 ft and 1,100 ft, 677,400 acre-ft. Regulation between these elevations is allowed by stipulation of the Federal Power Commission. Water is used for power development. Elevation of lake maintained between 1,092 ft and 1,100 ft during period Aug. 16 to Sept. 15 for scenic effect and recreational purposes. Diversions for irrigation of about 6,280 acres with an annual depletion of about 11,000 acre-ft, 1946 estimate. Chemical analyses June 1971 to August 1972.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,100.16 ft June 30, 1981 (affected by seiche action); maximum contents, 679,300 acre-ft June 30, 1981, elevation, 1,100.06 ft, mean of seiche; minimum elevation since completion of dam in 1927, 1,079.68 ft Apr. 3, 4, 1937, Apr. 3, 1970, contents, 21,350 acre-ft; minimum elevation, 1,076.78 ft, Jan. 27, 28, Dec. 2-5, 1898.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 677,400 acre-ft July 12, elevation, 1,100.00 ft; minimum contents, 257,200 acre-ft Mar. 13, elevation, 1,087.09.

CAPACITY TABLE  
(Based on data by the Pacific Northwest Coordination Agreement)

Gage height (feet)	Contents (acre-feet)	Gage height (feet)	Contents (acre-feet)	Gage height (feet)	Contents (acre-feet)
1,080	31,540	1,090	350,900	1,100	677,400
1,085	190,200	1,095	513,300		

ELEVATION ABOVE NGVD 1929, FEET  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,098.11	1,094.47	1,091.19	1,089.98	1,088.87	1,087.73	1,087.95	1,088.34	1,092.98	1,099.75	1,099.58	1,099.17
2	1,098.01	1,094.33	1,091.08	1,090.02	1,088.87	1,087.69	1,087.97	1,088.41	1,093.31	1,099.80	1,099.60	1,099.14
3	1,097.90	1,094.22	1,090.97	1,090.01	1,088.87	1,087.66	1,087.99	1,088.51	1,093.61	1,099.83	1,099.64	1,099.11
4	1,097.78	1,094.09	1,090.87	1,089.97	1,088.87	1,087.60	1,087.99	1,088.59	1,093.85	1,099.88	1,099.67	1,099.08
5	1,097.71	1,093.96	1,090.76	1,089.93	1,088.83	1,087.56	1,087.97	1,088.70	1,094.13	1,099.92	1,099.67	1,099.04
6	1,097.61	1,093.85	1,090.65	1,089.90	1,088.79	1,087.52	1,087.93	1,088.81	1,094.48	1,099.89	1,099.68	1,099.03
7	1,097.48	1,093.74	1,090.54	1,089.83	1,088.74	1,087.46	1,087.90	1,088.90	1,094.95	1,099.85	1,099.68	1,099.04
8	1,097.36	1,093.66	1,090.42	1,089.76	1,088.69	1,087.38	1,087.88	1,088.99	1,095.48	1,099.88	1,099.66	1,099.03
9	1,097.25	1,093.55	1,090.31	1,089.68	1,088.64	1,087.30	1,087.84	1,089.05	1,095.99	1,099.82	1,099.66	1,098.97
10	1,097.15	1,093.43	1,090.19	1,089.62	1,088.62	1,087.22	1,087.79	1,089.10	1,096.45	1,099.79	1,099.70	1,098.92
11	1,096.98	1,093.31	1,090.10	1,089.52	1,088.58	1,087.16	1,087.76	1,089.10	1,096.80	1,099.82	1,099.72	1,098.92
12	1,096.85	1,093.22	1,090.03	1,089.45	1,088.53	1,087.11	1,087.72	1,089.15	1,097.07	1,099.89	1,099.68	1,098.88
13	1,096.74	1,093.13	1,090.02	1,089.43	1,088.47	1,087.10	1,087.74	1,089.25	1,097.32	1,099.91	1,099.65	1,098.78
14	1,096.63	1,093.03	1,090.07	1,089.37	1,088.42	1,087.17	1,087.79	1,089.38	1,097.55	1,099.86	1,099.60	1,098.72
15	1,096.51	1,092.90	1,090.10	1,089.31	1,088.36	1,087.29	1,087.78	1,089.56	1,097.73	1,099.83	1,099.56	1,098.67
16	1,096.40	1,092.78	1,090.23	1,089.24	1,088.35	1,087.42	1,087.78	1,089.71	1,097.88	1,099.84	1,099.60	1,098.57
17	1,096.28	1,092.69	1,090.21	1,089.17	1,088.36	1,087.48	1,087.78	1,089.79	1,098.03	1,099.82	1,099.53	1,098.48
18	1,096.16	1,092.57	1,090.18	1,089.10	1,088.34	1,087.54	1,087.79	1,089.83	1,098.29	1,099.77	1,099.52	1,098.39
19	1,096.05	1,092.46	1,090.15	1,089.03	1,088.28	1,087.59	1,087.76	1,089.84	1,098.54	1,099.75	1,099.53	1,098.35
20	1,095.94	1,092.37	1,090.13	1,089.00	1,088.23	1,087.64	1,087.73	1,089.85	1,098.71	1,099.77	1,099.48	1,098.32
21	1,095.83	1,092.30	1,090.12	1,088.94	1,088.22	1,087.69	1,087.72	1,089.86	1,098.80	1,099.73	1,099.40	1,098.27
22	1,095.70	1,092.20	1,090.10	1,088.91	1,088.16	1,087.75	1,087.73	1,089.88	1,098.87	1,099.69	1,099.38	1,098.25
23	1,095.58	1,092.10	1,090.07	1,088.90	1,088.09	1,087.84	1,087.74	1,089.92	1,098.91	1,099.70	1,099.38	1,098.23
24	1,095.47	1,092.00	1,090.04	1,088.85	1,088.06	1,087.93	1,087.80	1,090.07	1,098.93	1,099.69	1,099.34	1,098.21
25	1,095.35	1,091.89	1,090.00	1,088.80	1,088.00	1,087.99	1,087.95	1,090.45	1,098.97	1,099.62	1,099.30	1,098.23
26	1,095.23	1,091.77	1,090.00	1,088.77	1,087.94	1,088.05	1,088.04	1,090.89	1,099.06	1,099.55	1,099.27	1,098.22
27	1,095.10	1,091.66	1,090.02	1,088.81	1,087.87	1,088.08	1,088.11	1,091.12	1,099.18	1,099.53	1,099.25	1,098.20
28	1,094.98	1,091.54	1,090.02	1,088.82	1,087.79	1,088.04	1,088.16	1,091.42	1,099.35	1,099.49	1,099.17	1,098.22
29	1,094.83	1,091.44	1,090.00	1,088.80	---	1,087.98	1,088.21	1,091.83	1,099.48	1,099.47	1,099.12	1,098.23
30	1,094.70	1,091.32	1,089.98	1,088.80	---	1,087.93	1,088.26	1,092.21	1,099.65	1,099.51	1,099.13	1,098.16
31	1,094.59	---	1,090.00	1,088.84	---	1,087.93	---	1,092.59	---	1,099.55	1,099.13	---
MEAN	1,096.39	1,092.87	1,090.28	1,089.31	1,088.42	1,087.61	1,087.88	1,089.78	1,097.14	1,099.75	1,099.49	1,098.63
MAX	1,098.11	1,094.47	1,091.19	1,090.02	1,088.87	1,088.08	1,088.26	1,092.59	1,099.65	1,099.92	1,099.72	1,099.17
MIN	1,094.59	1,091.32	1,089.98	1,088.77	1,087.79	1,087.10	1,087.72	1,088.34	1,092.98	1,099.47	1,099.12	1,098.16
†	498,700	391,700	350,600	314,400	278,700	284,800	295,700	441,100	667,500	662,500	650,400	615,500
‡	-118,400	-107,000	-41,100	-36,200	-35,700	+6,100	+10,900	+145,400	+226,400	-5,000	-12,100	-34,900
CAL YR	2002	MEAN	1,092.46	MAX	1,099.94	MIN	1,084.43	AC-FT‡	-62,200			
WTR YR	2003	MEAN	1,093.16	MAX	1,099.92	MIN	1,087.10	AC-FT‡	-1,600			

† Contents, in acre-feet, at 2400, on last day of month.  
‡ Change in contents, in acre-feet.

CHELAN RIVER BASIN

12452500 CHELAN RIVER AT CHELAN, WA

LOCATION.--Lat 47°50'05", long 120°00'43", in SE 1/4 NE 1/4 sec.30, T.27 N., R.23 E., Chelan County, Hydrologic Unit 17020009, at Chelan River powerplant tailrace, 4.3 mi downstream from control dam at outlet of Lake Chelan, and 3.0 mi southeast of Chelan.

DRAINAGE AREA.--924 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1903 to current year. Published as "below Chelan Lake" 1904-05. Adjusted records for October 1903 to September 1911, published in WSP 482, 492, and 870 are unreliable and should not be used.

REVISED RECORDS.--WSP 482: 1904-13. WSP 612: 1924. WSP 1246: 1951. WSP 1286: 1952. WSP 1933: Drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder and watt-hour meters on each turbine. Datum of gage is 1,074.66 ft above NGVD of 1912. To convert to NGVD of 1929, subtract 1.62 ft. See WSP 1933 for history of changes prior to Mar. 20, 1939. Mar. 20, 1939, to Sept. 30, 1981, gage at site 1.7 mi downstream from the Lake Chelan gage, at same datum, and published as the gage of record, used to determine head and spill discharge.

REMARKS.--Daily discharge determined from flow through turbines computed from relation between loading and head, plus flow through two irrigation pipes which divert water from the penstock just above the turbines, plus spill discharge. Unmeasured water that is diverted for irrigation upstream from station is a small percentage of total runoff. Public Utility District No. 1 of Chelan County diverts water at Chelan to develop about 40,000 kW and to irrigate 900 acres near Chelan. This quantity is included in records of daily discharge. Diversions for irrigation of about 6,280 acres with an annual depletion of about 11,000 acre-ft, 1946 estimate. Flow regulated by Lake Chelan (station 12452000).

COOPERATION.--Records partially furnished by Public Utility District No. 1 of Chelan County.

AVERAGE DISCHARGE.--99 years (water years 1905-2003), 2,047 ft<sup>3</sup>/s, 30.08 in/yr, 1,483,000 acre-ft/yr, adjusted for storage since October 1911.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 18,400 ft<sup>3</sup>/s June 3, 1968; no flow part of day Jan. 30, 1917, when lake outlet was blocked with ice, and at other times owing to artificial regulation.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,860 ft<sup>3</sup>/s July 6; minimum daily discharge, 25.0 ft<sup>3</sup>/s Sept. 28.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,220	2,210	2,210	632	545	1,510	2,210	2,220	2,220	2,220	1,280	120
2	2,220	2,210	2,210	1,510	699	811	2,210	2,220	2,160	2,220	174	1,370
3	2,220	2,210	2,210	1,510	640	1,620	2,210	2,220	1,570	2,220	120	1,340
4	2,220	2,210	2,210	1,510	1,510	1,610	2,210	2,220	2,220	2,220	1,420	1,340
5	2,220	2,210	2,210	586	1,310	1,420	2,210	2,190	2,220	2,360	1,440	1,390
6	2,220	2,210	2,210	1,520	1,480	1,860	2,210	852	2,220	3,860	1,210	698
7	2,220	2,210	2,210	1,460	1,520	1,960	2,180	907	2,220	3,090	1,320	486
8	2,220	2,210	2,210	1,420	1,480	2,210	2,210	1,400	2,220	3,090	1,370	915
9	2,220	2,210	2,210	1,490	615	2,160	2,210	1,990	2,220	2,990	1,430	1,040
10	2,220	2,210	2,210	1,660	1,510	2,030	2,210	2,170	2,220	2,440	127	1,150
11	2,220	2,210	2,210	2,210	1,510	1,500	2,220	2,220	2,220	2,280	1,420	1,270
12	2,220	2,210	1,210	844	1,620	1,540	2,210	1,300	2,220	2,280	1,350	1,570
13	2,220	2,210	644	1,430	1,520	193	2,210	1,020	2,220	3,130	1,480	1,430
14	2,220	2,210	636	1,150	1,510	260	2,210	1,020	2,220	3,110	1,500	1,560
15	2,220	2,210	199	1,500	1,470	293	2,210	1,020	2,220	2,550	1,510	1,500
16	2,220	2,210	644	1,420	640	1,420	2,210	1,430	2,220	2,270	1,540	1,650
17	2,220	2,210	640	1,490	1,120	819	2,210	2,220	2,220	2,260	119	1,630
18	2,220	2,210	640	1,460	1,690	794	2,210	2,220	2,220	2,270	1,450	1,600
19	2,220	2,210	607	594	1,560	656	2,210	2,220	2,220	2,270	1,400	1,030
20	2,220	2,210	632	1,450	1,460	723	2,210	2,220	2,220	2,270	1,420	763
21	2,220	2,210	628	1,570	1,510	439	2,210	2,220	2,220	2,250	1,380	725
22	2,220	2,210	674	1,460	1,520	106	2,210	2,220	2,220	2,170	1,450	717
23	2,220	2,210	632	1,420	711	106	2,210	2,220	2,220	2,220	751	530
24	2,220	2,210	628	1,430	1,520	106	2,210	2,220	2,220	2,220	785	384
25	2,220	2,210	640	1,410	1,510	619	2,210	2,220	2,220	2,170	1,410	405
26	2,220	2,210	644	636	1,690	964	2,210	2,220	2,220	2,220	1,250	509
27	2,220	2,210	704	1,490	2,020	1,690	2,220	2,220	2,220	2,220	1,420	546
28	2,210	2,210	654	1,460	1,400	2,210	2,220	2,220	2,220	2,220	1,370	25
29	2,210	2,210	632	1,420	---	2,210	2,210	2,220	2,220	1,420	556	692
30	2,210	2,210	640	1,510	---	2,210	2,220	2,220	2,220	1,340	885	2,220
31	2,210	---	636	874	---	2,210	---	2,220	---	1,370	118	---
TOTAL	68,780	66,300	37,274	41,526	37,290	38,259	66,310	58,799	65,890	73,220	34,455	30,605
MEAN	2,219	2,210	1,202	1,340	1,332	1,234	2,210	1,897	2,196	2,362	1,111	1,020
MAX	2,220	2,210	2,210	2,210	2,020	2,210	2,220	2,220	2,220	3,860	1,540	2,220
MIN	2,210	2,210	199	586	545	106	2,180	852	1,570	1,340	118	25
AC-FT	136,400	131,500	73,930	82,370	73,960	75,890	131,500	116,600	130,700	145,200	68,340	60,710
MEAN†	293	412	534	751	689	1,333	2,394	4,260	6,003	2,280	914	434
CFSM†	0.32	0.45	0.58	0.81	0.75	1.44	2.59	4.61	6.50	2.47	0.99	0.47
IN.†	0.37	0.50	0.67	0.94	0.78	1.66	2.89	5.32	7.25	2.84	1.14	0.52
AC-FT†	18,000	24,500	32,830	46,170	38,260	81,990	142,400	262,000	357,100	140,200	56,240	25,810

CAL YR	2002	TOTAL	841,073	MEAN	2,304	MAX	8,740	MIN	122	AC-FT	1,668,000	MEAN†	2,218	CFSM†	2.40	IN.†	32.59	AC-FT†	1,606,000
WTR YR	2003	TOTAL	618,708	MEAN	1,695	MAX	3,860	MIN	25	AC-FT	1,227,000	MEAN†	1,692	CFSM†	1.83	IN.†	24.86	AC-FT†	1,225,000

† Adjusted for change in contents in Lake Chelan.

12452800 ENTIAT RIVER NEAR ARDENVOIR, WA

LOCATION.--Lat 47°49'07", long 120°25'19", in NE ¼ NE ¼ sec.27, T.27 N., R.19 E., Chelan County, Hydrologic Unit 17020010, on left bank 0.5 mi downstream from Stormy Creek, 6.0 mi northwest of Ardenvoir, and at mile 18.0.

DRAINAGE AREA.--203 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1957 to current year.

REVISED RECORDS.--WSP 1933: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,560.97 ft above NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges, which are fair. No regulation or diversion upstream from station. U.S. Geological Survey satellite telemeter at station. Water temperature July 1968 to September 1970.

AVERAGE DISCHARGE.--46 years (water years 1958-2003), 376 ft<sup>3</sup>/s, 25.18 in/yr, 272,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,430 ft<sup>3</sup>/s June 10, 1972, gage height, 8.98 ft; minimum discharge, 20 ft<sup>3</sup>/s Nov. 24, 25, 1993.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,750 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jun 1	0300	1,990	5.20	Jun 9	0030	*2,580	*5.83

Minimum discharge, 22 ft<sup>3</sup>/s, Nov. 1, 2.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	33	55	48	136	83	286	494	1,940	754	197	82
2	66	34	53	51	121	80	270	520	1,770	659	187	81
3	66	39	50	59	114	78	257	552	1,640	594	176	80
4	71	40	56	67	107	77	245	554	1,570	557	169	81
5	68	50	55	64	102	80	235	539	1,650	551	161	83
6	65	60	54	61	97	85	228	523	1,930	559	160	82
7	63	65	51	50	89	82	218	500	2,260	535	159	79
8	61	66	48	51	85	78	213	476	2,490	499	153	80
9	60	59	48	49	85	78	216	458	2,430	457	146	78
10	60	55	50	40	90	78	218	452	2,210	436	144	76
11	59	53	49	e46	87	84	218	459	1,870	436	141	75
12	59	62	52	e48	84	104	229	495	1,690	455	135	74
13	59	73	57	e50	85	149	273	558	1,560	444	129	72
14	59	63	63	e52	88	197	299	639	1,400	399	122	69
15	58	57	68	51	87	201	292	698	1,260	364	117	68
16	57	55	90	53	89	197	288	680	1,170	343	117	67
17	57	60	74	53	87	182	285	639	1,150	321	118	66
18	56	55	66	52	85	169	280	590	1,250	300	116	65
19	55	58	62	52	84	158	276	550	1,300	291	114	67
20	55	70	61	51	85	155	275	517	1,170	279	111	63
21	54	68	58	50	91	155	286	498	985	277	107	63
22	54	66	53	50	97	167	309	511	843	268	105	60
23	54	64	56	52	91	169	354	571	753	263	104	59
24	53	61	52	57	72	158	469	880	685	252	99	58
25	52	53	54	57	69	152	589	1,470	665	233	94	58
26	51	55	51	96	80	149	556	1,530	714	217	91	58
27	52	53	49	150	92	143	524	1,460	832	214	92	61
28	53	52	54	141	87	139	494	1,660	899	212	91	61
29	52	54	52	123	---	138	488	1,890	862	206	87	61
30	47	55	50	111	---	160	484	1,870	835	202	85	60
31	33	---	53	133	---	260	---	1,830	---	199	83	---
TOTAL	1,776	1,688	1,744	2,068	2,566	4,185	9,654	25,063	41,783	11,776	3,910	2,087
MEAN	57.3	56.3	56.3	66.7	91.6	135	322	808	1,393	380	126	69.6
MAX	71	73	90	150	136	260	589	1,890	2,490	754	197	83
MIN	33	33	48	40	69	77	213	452	665	199	83	58
AC-FT	3,520	3,350	3,460	4,100	5,090	8,300	19,150	49,710	82,880	23,360	7,760	4,140
CFSM	0.28	0.28	0.28	0.33	0.45	0.67	1.59	3.98	6.86	1.87	0.62	0.34
IN.	0.33	0.31	0.32	0.38	0.47	0.77	1.77	4.59	7.66	2.16	0.72	0.38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2003, BY WATER YEAR (WY)

	MEAN	127	124	106	114	149	326	1,059	1,439	637	217	112
MAX	292	468	506	308	321	437	753	1,862	2,793	1,589	577	210
(WY)	(1960)	(1996)	(1976)	(1981)	(1996)	(1972)	(1996)	(1958)	(1974)	(1999)	(1999)	(1978)
MIN	51.9	45.3	49.3	47.7	51.3	67.9	93.2	380	450	179	99.3	58.5
(WY)	(1988)	(1994)	(1994)	(1988)	(1993)	(1993)	(1967)	(1977)	(2001)	(1977)	(1994)	(1994)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1957 - 2003

ANNUAL TOTAL	141,073	108,300	
ANNUAL MEAN	387	297	376
HIGHEST ANNUAL MEAN			621
LOWEST ANNUAL MEAN			161
HIGHEST DAILY MEAN	2,760	2,490	5,100
LOWEST DAILY MEAN	33	33	22
ANNUAL SEVEN-DAY MINIMUM	39	39	32
ANNUAL RUNOFF (AC-FT)	279,800	214,800	272,500
ANNUAL RUNOFF (CFSM)	1.90	1.46	1.85
ANNUAL RUNOFF (INCHES)	25.85	19.85	25.18
10 PERCENT EXCEEDS	1,170	730	1,110
50 PERCENT EXCEEDS	132	91	143
90 PERCENT EXCEEDS	54	52	65

e Estimated

12452890 MAD RIVER AT ARDENVOIR, WA

LOCATION.--Lat 47°44'13", long 120°22'03", in NW ¼ SE ¼ sec.19, T.26 N., R.20 E., Chelan County, Hydrologic Unit 17020010, at Moe Ridge bridge, 0.35 mi. above mouth and about 100 ft. above concrete diversion at Ardenvoir.

DRAINAGE AREA.--92.4 mi<sup>2</sup>.

PERIOD OF RECORD.--April 2002 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,260 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--1 year (2003), 87.9 ft<sup>3</sup>/s, 63,680 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 698 ft<sup>3</sup>/s May 30, 2002, gage height 3.89 ft; minimum discharge 8.9 ft<sup>3</sup>/s Jan. 7, 2003, but may have been lower during period of ice effect Jan. 9-12, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 674 ft<sup>3</sup>/s June 7, gage height 3.83 ft; minimum discharge 8.9 ft<sup>3</sup>/s Jan. 7, but may have been lower during period of ice effect Jan. 9-12.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	e14	20	22	78	34	155	192	590	103	38	22
2	23	e15	19	25	62	33	136	199	546	97	37	22
3	24	e16	19	28	57	33	119	207	505	92	38	22
4	28	e16	20	26	52	32	108	208	482	89	38	21
5	25	e20	20	25	48	35	100	199	499	86	37	21
6	23	e24	19	23	45	36	95	193	550	83	37	20
7	23	e26	18	15	44	34	89	185	601	80	37	20
8	22	26	19	18	45	35	86	178	605	78	36	21
9	22	22	19	e16	51	34	90	173	555	75	35	22
10	22	21	20	e12	40	35	91	172	487	72	33	22
11	22	20	21	e17	38	46	95	173	413	69	32	23
12	22	25	23	e21	41	76	104	187	366	66	31	22
13	22	30	23	23	44	101	129	205	333	65	30	21
14	22	23	28	22	37	122	147	219	294	63	29	21
15	22	21	30	21	37	133	142	234	258	61	28	21
16	22	21	37	20	38	132	133	229	234	59	28	21
17	22	24	28	20	38	117	129	220	219	57	28	21
18	22	22	24	20	37	105	124	204	218	56	27	21
19	22	23	22	19	37	97	121	198	208	54	27	22
20	22	31	23	19	38	93	120	193	191	52	26	20
21	21	27	22	20	45	92	126	190	172	51	26	19
22	21	24	21	26	50	96	139	197	157	50	25	19
23	21	23	21	25	46	99	154	211	146	48	25	18
24	21	22	21	22	e35	95	205	284	137	46	25	18
25	21	20	20	22	e32	90	240	399	130	46	25	18
26	21	21	19	39	e37	87	221	466	125	45	24	18
27	21	20	e19	58	39	83	204	476	121	44	24	18
28	22	23	e22	42	36	81	193	526	116	42	24	18
29	21	24	21	38	---	82	191	580	112	41	24	17
30	e16	22	22	41	---	101	188	589	109	40	23	18
31	e14	---	23	75	---	154	---	576	---	39	23	---
TOTAL	676	666	683	820	1,227	2,423	4,174	8,462	9,479	1,949	920	607
MEAN	21.8	22.2	22.0	26.5	43.8	78.2	139	273	316	62.9	29.7	20.2
MAX	28	31	37	75	78	154	240	589	605	103	38	23
MIN	14	14	18	12	32	32	86	172	109	39	23	17
AC-FT	1,340	1,320	1,350	1,630	2,430	4,810	8,280	16,780	18,800	3,870	1,820	1,200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2003, BY WATER YEAR (WY)

	2003	2003	2003	2003	2003	2003	2003	2002	2002	2002	2002	2003
MEAN	21.8	22.2	22.0	26.5	43.8	78.2	139	276	349	79.4	34.8	22.4
MAX	21.8	22.2	22.0	26.5	43.8	78.2	139	278	382	96.0	39.9	24.6
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)
MIN	21.8	22.2	22.0	26.5	43.8	78.2	139	273	316	62.9	29.7	20.2
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS

	FOR 2003 WATER YEAR		WATER YEARS 2002 - 2003	
ANNUAL TOTAL	86			
ANNUAL MEAN	87.9			
HIGHEST ANNUAL MEAN			87.9	
LOWEST ANNUAL MEAN			87.9	2003
HIGHEST DAILY MEAN	05	Jun 8	659	May 30, 2002
LOWEST DAILY MEAN	12	Jan 10	12	Jan 10, 2003
ANNUAL SEVEN-DAY MINIMUM	16	Oct 30	16	Oct 30, 2002
ANNUAL RUNOFF (AC-FT)	40		63,680	
10 PERCENT EXCEEDS	06		206	
50 PERCENT EXCEEDS	36		36	
90 PERCENT EXCEEDS	20		20	

e Estimated

12452990 ENTIAT RIVER NEAR ENTIAT, WA

LOCATION.--Lat 47°39'48", long 120°14'58", in NW ¼ SE ¼ sec.18, T.25 N., R.21 E., Chelan County, Hydrologic Unit 17020010, on left bank 200 ft upstream from bridge, 1.2 mi west of Entiat High School, and at mile 1.4.

DRAINAGE AREA.--419 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1996 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 750 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. No regulation, but approximately 6 diversions and 50 small pumps divert water for agricultural irrigation upstream from station. U. S. Geological Survey telemeter at station.

AVERAGE DISCHARGE.--7 years (water years 1997-2003), 507 ft<sup>3</sup>/s, 367,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,600 ft<sup>3</sup>/s June 17, 1999, gage height, 11.20 ft; minimum discharge, 58 ft<sup>3</sup>/s, Nov. 1-2, 2002, gage height 6.39 ft; but may have been lower during period of ice effect Dec. 12-13, 2000.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,050 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jun 9	0130	*2,880	*9.82	No other peak greater than base discharge.			

Minimum discharge, 58 ft<sup>3</sup>/s, Nov. 1, 2, gage height, 6.39 ft.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e97	71	98	96	251	151	469	728	2,320	878	239	109
2	e96	69	97	93	221	147	429	759	2,140	783	231	106
3	e96	72	92	103	208	144	390	802	1,970	715	222	106
4	e101	74	95	114	194	142	362	810	1,870	669	214	106
5	e98	94	98	113	183	146	340	784	1,950	652	203	108
6	e95	104	96	108	176	159	324	756	2,240	657	197	108
7	e92	108	94	97	165	153	309	723	2,540	622	193	107
8	92	116	91	94	159	148	300	693	2,750	581	190	107
9	92	105	91	94	156	148	304	666	2,710	540	180	107
10	92	101	92	e80	160	146	308	657	2,510	517	177	107
11	92	97	95	e90	157	156	314	659	2,150	514	172	108
12	93	103	93	e100	152	202	334	699	1,900	524	167	104
13	94	117	100	105	154	262	403	775	1,760	515	160	102
14	94	113	115	104	157	345	469	862	1,630	482	151	101
15	92	104	116	97	155	375	458	947	1,490	442	145	99
16	91	100	148	99	162	379	442	938	1,390	415	144	99
17	90	104	131	98	157	348	433	894	1,340	397	150	98
18	91	101	115	98	154	318	422	829	1,420	372	146	99
19	91	100	109	98	154	298	414	773	1,480	356	140	98
20	90	113	108	96	154	285	410	732	1,360	347	138	99
21	89	118	104	99	167	280	424	705	1,190	346	133	97
22	88	111	97	100	183	294	462	718	1,040	338	129	95
23	88	109	100	98	175	307	526	776	917	326	132	92
24	88	106	96	102	153	292	691	1,090	836	317	129	90
25	88	100	96	104	140	277	898	1,770	805	296	124	87
26	88	96	96	121	152	268	849	1,870	835	281	119	84
27	89	97	95	214	166	258	794	1,800	942	270	119	87
28	90	93	98	204	158	251	742	1,970	1,020	266	120	89
29	91	97	98	185	---	248	728	2,280	998	253	116	89
30	88	98	93	176	---	272	719	2,270	961	249	114	89
31	77	---	97	218	---	403	---	2,180	---	243	113	---
TOTAL	2,833	2,991	3,144	3,598	4,723	7,602	14,467	32,915	48,464	14,163	4,907	2,977
MEAN	91.4	99.7	101	116	169	245	482	1,062	1,615	457	158	99.2
MAX	101	118	148	218	251	403	898	2,280	2,750	878	239	109
MIN	77	69	91	80	140	142	300	657	805	243	113	84
AC-FT	5,620	5,930	6,240	7,140	9,370	15,080	28,700	65,290	96,130	28,090	9,730	5,900
CFSM	0.22	0.24	0.24	0.28	0.40	0.59	1.15	2.53	3.86	1.09	0.38	0.24
IN.	0.25	0.27	0.28	0.32	0.42	0.67	1.28	2.92	4.30	1.26	0.44	0.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2003, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	153	194	159	164	169	253	603	1,398
MAX	301	412	316	235	202	385	1,090	2,277
(WY)	(1998)	(2000)	(2000)	(2000)	(1997)	(1997)	(1996)	(1998)
MIN	89.4	99.7	101	108	92.1	125	165	673
(WY)	(2002)	(2003)	(2003)	(2001)	(2001)	(2001)	(2001)	(2001)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1996 - 2003

ANNUAL TOTAL	175,772	142,784	
ANNUAL MEAN	482	391	507
HIGHEST ANNUAL MEAN			699
LOWEST ANNUAL MEAN			209
HIGHEST DAILY MEAN	3,090	2,750	4,810
LOWEST DAILY MEAN	69	69	58
ANNUAL SEVEN-DAY MINIMUM	77	77	76
ANNUAL RUNOFF (AC-FT)	348,600	283,200	367,300
ANNUAL RUNOFF (CFSM)	1.15	0.93	1.21
ANNUAL RUNOFF (INCHES)	15.61	12.68	16.44
10 PERCENT EXCEEDS	1,520	925	1,420
50 PERCENT EXCEEDS	181	154	211
90 PERCENT EXCEEDS	94	92	105

e Estimated



COLUMBIA RIVER MAIN STEM

12453700 COLUMBIA RIVER AT ROCKY REACH DAM, WA

LOCATION.--Lat 47°31'28", long 120°18'04", in SW ¼ NW ¼ sec.2, T.23 N., R.20 E., Chelan County, Hydrologic Unit 17020010, on right bank 0.5 mi downstream from Rocky Reach Dam, 1.5 mi downstream from Swakane Creek, 7.4 mi north of Wenatchee, and at mile 473.4.

DRAINAGE AREA.--87,800 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Daily discharge determined from flow through turbines plus spillway flow when present. Datum of gage is NGVD of 1929. Oct. 1, 1960, to July 22, 1988, water-stage recorder with auxiliary water-stage recorder 1.9 mi downstream from base gage at same datum.

REMARKS.--Flow regulated by numerous reservoirs. Feeder Canal diversion (station 12435500) for Columbia Basin project is used to irrigate approximately 600,000 acres in the United States. An additional 66,500 acres in Canada are irrigated by other diversions.

COOPERATION.--Discharge records provided by Public Utility District No. 1 of Chelan County at Rocky Reach Dam through the Corps of Engineers, North Pacific Division, Reservoir Control Center. The U.S. Geological Survey made 6 discharge measurements at this site during the year.

AVERAGE DISCHARGE.--43 years (water years 1961-2003), 114,700 ft<sup>3</sup>/s, 83,100,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 535,000 ft<sup>3</sup>/s June 10, 1961, elevation, about 635.50 ft; minimum daily discharge, 25,100 ft<sup>3</sup>/s Nov. 11, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 167,000 ft<sup>3</sup>/s May 22; minimum daily discharge, 34,800 ft<sup>3</sup>/s Sept. 7.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78,600	95,400	93,900	46,700	50,600	64,900	93,000	114,000	87,000	124,000	104,000	53,200
2	81,500	87,200	115,000	80,600	43,100	74,600	90,800	130,000	120,000	99,500	62,000	68,700
3	73,500	82,300	113,000	72,300	68,500	98,600	97,600	114,000	121,000	108,000	59,000	82,100
4	59,700	101,000	119,000	57,600	79,500	88,000	81,200	119,000	126,000	70,600	98,600	78,300
5	57,800	104,000	102,000	58,900	84,500	89,900	67,000	143,000	133,000	71,900	106,000	74,100
6	60,800	114,000	109,000	87,200	98,200	88,000	56,600	134,000	154,000	70,600	87,000	45,400
7	87,500	111,000	90,800	94,000	85,800	86,500	109,000	137,000	148,000	120,000	95,600	34,800
8	106,000	101,000	84,800	95,200	56,700	62,000	93,800	143,000	123,000	118,000	101,000	60,200
9	73,900	87,800	108,000	79,100	43,900	42,400	99,800	127,000	149,000	120,000	83,400	59,100
10	75,100	69,100	100,000	86,300	80,400	65,700	105,000	111,000	160,000	133,000	70,200	50,300
11	69,600	81,100	104,000	64,700	70,700	73,400	96,100	101,000	161,000	121,000	111,000	68,500
12	61,000	89,400	92,400	46,800	66,800	66,800	80,800	134,000	156,000	110,000	88,000	70,000
13	59,200	88,700	95,100	75,000	69,800	68,700	69,000	161,000	165,000	83,100	89,300	37,800
14	87,400	94,600	70,600	87,600	62,500	86,400	95,300	141,000	144,000	115,000	114,000	43,000
15	81,400	107,000	58,200	102,000	58,600	71,800	112,000	141,000	130,000	128,000	110,000	71,600
16	73,200	91,400	97,700	98,300	53,400	62,000	127,000	146,000	162,000	113,000	85,000	65,800
17	68,100	59,000	107,000	97,800	70,200	69,200	122,000	130,000	162,000	105,000	62,700	53,500
18	63,900	96,600	97,200	67,800	75,300	77,400	106,000	83,600	145,000	105,000	101,000	62,200
19	46,500	113,000	87,300	66,400	77,200	70,700	107,000	145,000	113,000	103,000	101,000	58,000
20	53,000	97,500	96,800	94,200	78,600	60,400	67,000	147,000	135,000	77,600	113,000	54,400
21	80,600	109,000	75,000	104,000	69,600	76,400	142,000	148,000	96,700	115,000	123,000	62,700
22	83,700	111,000	61,500	93,000	56,800	53,400	135,000	167,000	81,000	122,000	126,000	79,500
23	86,600	105,000	92,200	69,500	44,700	44,200	135,000	146,000	129,000	125,000	91,800	68,600
24	101,000	85,200	99,700	75,000	79,000	82,800	141,000	116,000	149,000	108,000	81,200	69,800
25	113,000	124,000	62,600	57,200	82,100	102,000	142,000	90,000	151,000	106,000	129,000	86,600
26	89,000	113,000	99,200	36,600	77,400	118,000	104,000	97,800	151,000	87,100	113,000	88,800
27	53,500	107,000	95,100	61,100	79,400	115,000	93,700	124,000	154,000	60,300	79,100	60,200
28	87,900	68,700	88,200	72,800	86,000	123,000	130,000	134,000	146,000	109,000	102,000	56,000
29	105,000	88,900	60,000	70,200	---	119,000	138,000	160,000	96,000	116,000	98,600	89,100
30	114,000	93,300	97,700	81,700	---	88,800	132,000	131,000	122,000	116,000	86,200	87,800
31	108,000	---	85,800	57,700	---	113,000	---	112,000	---	116,000	60,300	---
TOTAL	2,440,000	2,876,200	2,858,800	2,337,300	1,949,300	2,503,000	3,168,700	4,027,400	4,069,700	3,276,700	2,932,000	1,940,100
MEAN	78,710	95,870	92,220	75,400	69,620	80,740	105,600	129,900	135,700	105,700	94,580	64,670
MAX	114,000	124,000	119,000	104,000	98,200	123,000	142,000	167,000	165,000	133,000	129,000	89,100
MIN	46,500	59,000	58,200	36,600	43,100	42,400	56,600	83,600	81,000	60,300	59,000	34,800
AC-FT	4,840,000	5,705,000	5,670,000	4,636,000	3,866,000	4,965,000	6,285,000	7,988,000	8,072,000	6,499,000	5,816,000	3,848,000
CAL YR	2002	TOTAL 41,018,600	MEAN 112,400	MAX 254,000	MIN 30,100	AC-FT 81,360,000						
WTR YR	2003	TOTAL 34,379,200	MEAN 94,190	MAX 167,000	MIN 34,800	AC-FT 68,190,000						

12456500 CHIWAHA RIVER NEAR PLAIN, WA

LOCATION.--Lat 47°50'15", long 120°39'40", in SE 1/4 sec.13, T.27 N., R.17 E., Chelan County, Hydrologic Unit 17020011, on right bank 3/4 mi upstream from Goose Creek, 5.3 mi north of Plain, 6.2 mi upstream from mouth, 11 mi northeast of Chiwaukum, and at mile 6.2.

DRAINAGE AREA.--170 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1911 to October 1914 (published as Chiwawa Creek near Leavenworth), August 1936 to November 1949, August 1954 to September 1957, May 1991 to current year.

REVISED RECORDS.--WSP 1316: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,100 ft above NGVD of 1929 (from river-profile map). May 29, 1911 to Oct. 31, 1914, staff gage at site 3 miles downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. No regulation or diversion upstream from station. U. S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--31 years (water years 1912-14, 1937-49, 1955-57, 1992-2003), 514 ft<sup>3</sup>/s, 41.06 in/yr, 372,400 acre-ft/yr. Includes discharges for 1912 and 1913, which were estimated for WSP 1316.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,030 ft<sup>3</sup>/s Nov. 30, 1995, gage height, 9.36 ft; minimum daily discharge, 45 ft<sup>3</sup>/s Feb. 25, Mar. 2-5, 1993.

EXTREMES OUTSIDE PERIOD OF RECORD.--Peak Nov. 25, 1990, was 6,810 ft<sup>3</sup>/s, gage height, 9.26 ft, from rating curve extended beyond highest measurement of 5,570 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,950 ft<sup>3</sup>/s June 8, gage height, 7.18 ft, from inside high-water mark; minimum daily discharge, 66 ft<sup>3</sup>/s Nov. 4,

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	111	e71	98	87	290	102	601	906	2,410	1,010	287	116
2	107	e68	98	83	243	102	524	977	2,190	872	264	114
3	107	e67	96	103	224	106	470	1,020	2,050	788	246	112
4	121	e66	95	116	209	112	432	977	1,960	766	231	112
5	110	e76	92	113	191	113	403	932	e2,030	799	219	112
6	105	e80	91	107	175	122	378	872	e2,300	818	230	110
7	103	84	88	100	164	116	369	823	e2,640	766	217	109
8	100	87	87	95	157	111	370	783	e2,820	724	203	107
9	99	87	85	e92	151	114	400	758	e2,850	653	195	107
10	98	86	86	e85	144	112	414	758	e2,550	635	192	105
11	96	84	92	e87	139	118	417	792	e2,310	659	186	105
12	96	106	95	96	137	163	455	874	e2,040	698	179	110
13	96	154	89	92	134	246	539	941	1,900	658	173	109
14	95	127	93	91	132	336	617	1,040	1,690	563	166	101
15	93	110	110	e85	131	356	613	1,120	1,510	521	160	98
16	92	105	136	e84	132	352	604	1,070	1,430	494	158	96
17	90	151	132	e83	130	320	602	976	1,420	471	164	96
18	89	127	118	e81	126	293	581	886	1,590	436	158	94
19	87	142	110	e79	125	269	568	827	1,650	433	155	98
20	87	158	105	e78	126	254	566	788	1,440	415	150	97
21	87	160	100	e80	143	260	609	765	1,180	423	146	93
22	86	144	96	e84	149	323	676	807	994	407	143	90
23	85	135	94	93	140	340	765	913	881	399	139	89
24	85	125	91	98	127	301	948	1,410	827	383	133	89
25	84	116	90	99	121	282	1,020	2,150	888	343	128	88
26	83	111	90	218	e115	271	943	2,050	1,030	318	125	87
27	83	105	93	346	103	257	900	1,890	1,280	322	125	89
28	83	103	89	298	100	250	856	2,100	1,350	308	123	89
29	81	101	88	256	---	252	854	2,360	1,230	296	120	88
30	79	99	88	229	---	298	862	2,310	1,180	291	117	87
31	e76	---	89	305	---	525	---	2,270	---	286	117	---
TOTAL	2,894	3,235	3,004	3,943	4,258	7,176	18,356	37,145	51,620	16,955	5,349	2,997
MEAN	93.4	108	96.9	127	152	231	612	1,198	1,721	547	173	99.9
MAX	121	160	136	346	290	525	1,020	2,360	2,850	1,010	287	116
MIN	76	66	85	78	100	102	369	758	827	286	117	87
AC-FT	5,740	6,420	5,960	7,820	8,450	14,230	36,410	73,680	102,400	33,630	10,610	5,940
CFSM	0.55	0.63	0.57	0.75	0.89	1.36	3.60	7.05	10.1	3.22	1.01	0.59
IN.	0.63	0.71	0.66	0.86	0.93	1.57	4.02	8.13	11.30	3.71	1.17	0.66

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 2003, BY WATER YEAR (WY)

MEAN	167	231	183	149	143	191	610	1,570	1,617	840	284	160
MAX	395	973	768	356	602	488	1,266	2,683	2,840	2,175	899	359
(WY)	(1998)	(1996)	(1996)	(1996)	(1996)	(1992)	(1914)	(1956)	(1999)	(1999)	(1999)	(1954)
MIN	63.5	77.8	80.4	78.4	66.1	91.4	214	826	660	256	106	80.5
(WY)	(1943)	(1937)	(2001)	(1937)	(2001)	(1993)	(1937)	(1944)	(1941)	(1941)	(1941)	(1942)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1911 - 2003

ANNUAL TOTAL	216,193	156,932	
ANNUAL MEAN	592	430	507
HIGHEST ANNUAL MEAN			783
LOWEST ANNUAL MEAN			264
HIGHEST DAILY MEAN	3,350	2,850	6,050
LOWEST DAILY MEAN	66	66	45
ANNUAL SEVEN-DAY MINIMUM	72	72	46
ANNUAL RUNOFF (AC-FT)	428,800	311,300	367,600
ANNUAL RUNOFF (CFSM)	3.48	2.53	2.99
ANNUAL RUNOFF (INCHES)	47.31	34.34	40.56
10 PERCENT EXCEEDS	1,670	1,030	1,420
50 PERCENT EXCEEDS	206	146	200
90 PERCENT EXCEEDS	90	87	89

e Estimated

WENATCHEE RIVER BASIN

12457000 WENATCHEE RIVER AT PLAIN, WA

LOCATION.--Lat 47°45'47", long 120°39'54", in NE ¼ SW ¼ sec.12, T.26 N., R.17 E., Chelan County, Hydrologic Unit 17020011, on left bank 300 ft downstream from county road bridge at Plain, 0.3 mi downstream from Beaver Creek, 2.2 mi downstream from Chiwawa River, 11.3 mi north of Leavenworth, and at mile 46.2.

DRAINAGE AREA.--591 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1904 to November 1910 estimates of monthly mean discharges are published in Washington State Water-Supply Bulletin No. 5, December 1910 to September 1950 (monthly discharges only for some periods, published in WSP 1316), October 1950 to September 1979, October 1989 to current year. Published as "near Leavenworth" 1911-31.

REVISED RECORDS.--WSP 482: 1911-14. WSP 1316: 1914(M), 1916(M), 1919(M), 1921-23(M), 1927(M).

GAGE.--Water-stage recorder. Elevation of gage is 1,805 ft above NGVD of 1929, from river-profile map. Prior to Jan. 8, 1932, nonrecording gages at site 0.2 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Wenatchee Park Land and Irrigation Company diverts water from the Chiwawa River, upstream from the station for irrigation of 1,400 acres near Plain. Natural regulation by Wenatchee Lake 8.0 mi upstream. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--83 years (water years 1911-79, 1990-2003), 2,246 ft<sup>3</sup>/s, 51.61 in/yr, 1,627,000 acre-ft/yr. Includes mean discharges for water years 1930 and 1931, which were estimated for WSP 1316.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,100 ft<sup>3</sup>/s Nov. 30, 1995, gage height, 14.97 ft; minimum discharge, 159 ft<sup>3</sup>/s Nov. 4, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,630 ft<sup>3</sup>/s June 9, gage height, 7.96 ft; minimum discharge, 159 ft<sup>3</sup>/s Nov. 4, gage height 1.12 ft.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	365	208	483	419	3,500	830	3,390	3,270	7,880	3,450	942	420
2	357	201	467	426	2,910	808	3,200	3,630	7,270	2,960	898	417
3	347	197	454	485	2,420	790	2,890	3,870	6,710	2,630	847	418
4	376	194	436	545	2,050	769	2,600	3,780	6,360	2,330	792	425
5	378	218	428	569	1,800	792	2,370	3,600	6,600	2,480	751	438
6	359	229	414	564	1,600	884	2,210	3,340	7,480	2,530	763	439
7	347	239	402	540	1,450	883	2,060	3,120	8,570	2,460	741	442
8	339	264	389	515	1,340	827	1,980	2,930	9,290	2,330	721	427
9	332	266	376	485	1,250	822	1,980	2,810	9,430	2,120	702	413
10	324	275	375	446	1,170	806	2,020	2,850	8,860	2,010	688	402
11	315	274	396	456	1,120	923	2,010	2,980	7,520	2,040	661	391
12	307	319	417	473	1,070	1,280	2,080	3,280	6,640	2,120	626	401
13	305	511	423	460	1,030	1,990	2,310	3,510	6,130	2,070	596	407
14	302	522	456	453	1,010	2,600	2,640	3,830	5,500	1,890	569	387
15	294	484	498	434	990	2,790	2,670	4,160	4,830	1,740	558	369
16	290	451	642	424	988	2,760	2,640	3,970	4,510	1,630	562	365
17	288	528	651	414	970	2,540	2,610	3,570	4,430	1,520	547	351
18	284	534	604	404	940	2,300	2,530	3,190	4,880	1,430	552	337
19	280	660	559	397	909	2,090	2,410	2,890	5,110	1,380	556	336
20	276	1,020	535	392	907	1,950	2,360	2,720	4,560	1,340	543	346
21	272	1,060	509	402	1,040	1,920	2,460	2,640	3,830	1,320	528	338
22	270	998	481	421	1,170	2,140	2,690	2,800	3,250	1,310	518	326
23	263	913	460	445	1,100	2,300	2,880	3,260	2,850	1,280	504	320
24	260	812	443	498	1,020	2,150	3,320	4,810	2,660	1,230	473	321
25	257	721	432	546	949	2,000	3,620	7,220	2,760	1,130	453	320
26	254	647	430	1,060	921	1,890	3,460	7,330	3,110	1,060	448	319
27	253	593	438	2,720	893	1,790	3,250	6,630	3,770	1,030	440	330
28	250	551	436	2,560	861	1,690	3,110	7,090	4,190	1,010	427	344
29	243	526	424	2,140	---	1,620	3,100	8,050	3,970	972	423	342
30	235	502	423	1,950	---	1,750	3,130	8,000	3,810	959	422	345
31	224	---	432	2,870	---	2,600	---	7,800	---	938	423	---
TOTAL	9,246	14,917	14,313	24,913	37,378	51,284	79,980	132,930	166,760	54,839	18,674	11,236
MEAN	298	497	462	804	1,335	1,654	2,666	4,288	5,559	1,769	602	375
MAX	378	1,060	651	2,870	3,500	2,790	3,620	8,050	9,430	3,450	942	442
MIN	224	194	375	392	861	769	1,980	2,640	2,660	938	422	319
AC-FT	18,340	29,590	28,390	49,410	74,140	101,700	158,600	263,700	330,800	108,800	37,040	22,290
CFSM	0.50	0.84	0.78	1.36	2.26	2.80	4.51	7.26	9.41	2.99	1.02	0.63
IN.	0.58	0.94	0.90	1.57	2.35	3.23	5.03	8.37	10.50	3.45	1.18	0.71

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 2003, BY WATER YEAR (WY)

MEAN	883	1,393	1,330	1,087	1,083	1,213	2,663	5,772	6,390	3,446	1,208	676
MAX	2,722	6,702	4,395	3,938	3,010	3,719	8,162	9,771	11,760	7,540	3,154	1,573
(WY)	(1960)	(1991)	(1976)	(1918)	(1924)	(1934)	(1934)	(1956)	(1974)	(1954)	(1974)	(1959)
MIN	251	236	296	335	306	487	913	2,613	1,861	886	456	312
(WY)	(1943)	(1937)	(1953)	(1929)	(1929)	(1917)	(1917)	(1915)	(1915)	(1941)	(1941)	(1942)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1911 - 2003

ANNUAL TOTAL	848,474	616,470	
ANNUAL MEAN	2,325	1,689	2,266
HIGHEST ANNUAL MEAN			3,344
LOWEST ANNUAL MEAN			1,133
HIGHEST DAILY MEAN	12,200	9,430	32,900
LOWEST DAILY MEAN	194	194	160
ANNUAL SEVEN-DAY MINIMUM	210	210	205
ANNUAL RUNOFF (AC-FT)	1,683,000	1,223,000	1,642,000
ANNUAL RUNOFF (CFSM)	3.93	2.86	3.83
ANNUAL RUNOFF (INCHES)	53.41	38.80	52.10
10 PERCENT EXCEEDS	6,360	3,790	5,840
50 PERCENT EXCEEDS	1,100	884	1,190
90 PERCENT EXCEEDS	344	321	480

12458000 ICICLE CREEK ABOVE SNOW CREEK, NEAR LEAVENWORTH, WA

LOCATION.--Lat 47°32'28", long 120°43'08", in SE ¼ SE ¼ sec.28, T.24 N., R.17 E., Chelan County, Hydrologic Unit 17020011, on right bank 1,000 ft upstream from Icicle Canal diversion dam, 0.4 mi upstream from Snow Creek, 4.8 mi southwest of Leavenworth, and at mile 5.8.

DRAINAGE AREA.--193 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1936 to September 1971, October 1993 to current year.

REVISED RECORDS.--WSP 1246: 1936-41. WSP 1286: 1948. WSP 1446: 1943(M).

GAGE.--Water-stage recorder. Elevation of gage is 1,450 ft above NGVD of 1929, from river-profile map.

REMARKS.--No estimated daily discharges. Records fair. No diversion. Some regulation in headwater lakes. Suspended sediment data are available from the district office.

AVERAGE DISCHARGE.--45 years (water years 1937-71, 1994-2003), 618 ft<sup>3</sup>/s, 43.51 in/yr, 447,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,800 ft<sup>3</sup>/s Nov. 29, 1995, gage height, 16.04 ft, from rating curve extended above 7,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; minimum daily discharge, 44 ft<sup>3</sup>/s Nov. 30, 1936.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 25	0230	*2,940	*9.23	Jun 7	2345	2,930	9.22
May 29	0115	2,730	9.00				

Minimum discharge, 56 ft<sup>3</sup>/s, Nov. 1, gage height, 2.22 ft.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	58	107	98	1,200	229	849	738	2,160	746	201	118
2	98	63	105	96	799	225	734	832	1,950	652	195	110
3	95	72	105	103	662	220	661	871	1,820	589	188	104
4	97	80	103	122	566	215	603	824	1,750	561	181	101
5	100	79	102	134	501	212	558	791	1,970	563	172	99
6	97	78	99	139	450	214	525	738	2,350	557	186	96
7	94	76	96	139	412	216	493	694	2,660	532	180	94
8	91	77	92	135	380	213	481	657	2,690	505	170	93
9	89	79	89	128	364	212	513	645	2,470	464	163	92
10	87	79	87	115	342	213	524	669	2,130	440	158	91
11	86	78	86	103	324	249	528	715	1,700	445	153	91
12	84	79	86	103	310	337	550	754	1,570	453	147	97
13	83	122	92	106	305	646	617	813	1,500	445	142	100
14	81	147	104	108	295	792	683	958	1,370	418	137	92
15	79	133	122	107	289	705	651	1,070	1,200	387	133	88
16	78	116	163	106	285	658	622	939	1,160	370	132	85
17	77	111	168	105	278	593	603	835	1,200	347	133	89
18	76	112	157	104	269	536	572	752	1,360	324	131	91
19	75	151	143	101	260	494	550	702	1,310	314	128	87
20	74	291	132	100	258	467	542	686	1,080	303	124	87
21	74	263	124	98	291	457	585	701	911	302	214	84
22	73	239	117	97	320	571	640	818	781	291	237	79
23	73	220	111	97	290	615	678	1,120	700	280	226	77
24	72	198	106	101	237	540	819	2,040	665	267	212	75
25	71	172	103	106	237	499	807	2,660	695	252	200	73
26	70	149	100	338	257	467	744	2,140	773	238	191	73
27	70	134	99	903	256	443	696	1,920	943	231	179	73
28	70	121	99	626	241	418	672	2,370	959	222	167	73
29	70	113	100	486	---	404	696	2,510	875	214	154	79
30	70	109	100	511	---	456	710	2,310	849	209	140	75
31	63	---	99	1,410	---	781	---	2,230	---	204	129	---
TOTAL	2,516	3,799	3,396	7,025	10,678	13,297	18,906	36,502	43,551	12,125	5,203	2,666
MEAN	81.2	127	110	227	381	429	630	1,177	1,452	391	168	88.9
MAX	100	291	168	1,410	1,200	792	849	2,660	2,690	746	237	118
MIN	63	58	86	96	237	212	481	645	665	204	124	73
AC-FT	4,990	7,540	6,740	13,930	21,180	26,370	37,500	72,400	86,380	24,050	10,320	5,290
CFSM	0.42	0.66	0.57	1.17	1.98	2.22	3.27	6.10	7.52	2.03	0.87	0.46
IN.	0.48	0.73	0.65	1.35	2.06	2.56	3.64	7.04	8.39	2.34	1.00	0.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2003, BY WATER YEAR (WY)

MEAN	238	374	338	277	294	285	661	1,696	1,925	892	269	158
MAX	703	1,992	1,062	813	994	669	1,099	2,798	3,429	2,292	764	380
(WY)	(1960)	(1996)	(1996)	(1968)	(1996)	(1997)	(1943)	(1956)	(1948)	(1954)	(1954)	(1959)
MIN	74.5	66.2	72.9	72.4	72.5	112	275	984	736	269	121	86.3
(WY)	(1994)	(1953)	(1953)	(1937)	(1937)	(1937)	(1967)	(1941)	(2001)	(1941)	(1941)	(2001)

SUMMARY STATISTICS

	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1937 - 2003
ANNUAL TOTAL	224,668	159,664	
ANNUAL MEAN	616	437	618
HIGHEST ANNUAL MEAN			905
LOWEST ANNUAL MEAN			299
HIGHEST DAILY MEAN	3,610	2,690	14,100
LOWEST DAILY MEAN	58	58	44
ANNUAL SEVEN-DAY MINIMUM	66	66	50
ANNUAL RUNOFF (AC-FT)	445,600	316,700	447,700
ANNUAL RUNOFF (CFSM)	3.19	2.27	3.20
ANNUAL RUNOFF (INCHES)	43.30	30.77	43.51
10 PERCENT EXCEEDS	1,760	922	1,630
50 PERCENT EXCEEDS	295	220	298
90 PERCENT EXCEEDS	87	79	115

WENATCHEE RIVER BASIN

12459000 WENATCHEE RIVER AT PESHASTIN, WA

LOCATION.--Lat 47°35'00", long 120°36'46", in SE ¼ SW ¼ sec.8, T.24 N., R.18 E., Chelan County, Hydrologic Unit 17020011, on right bank 1.0 mi northwest of Peshastin, 3.5 mi upstream from Peshastin Creek, 4.1 mi downstream from Icicle Creek, and at mile 21.5.

DRAINAGE AREA.--1,000 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--October 1928 to February 1929 (monthly discharge only), March 1929 to current year.

REVISED RECORDS.--WSP 1316: 1929-32(M).

GAGE.--Water-stage recorder. Datum of gage is 1,028.04 ft above NGVD of 1929. Prior to Mar. 24, 1932, nonrecording gage at site 1.2 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Numerous diversions upstream for irrigation of an estimated 3,200 acres upstream from station. Diversion from Icicle Creek 5.7 mi upstream from mouth is used for irrigation of a substantial part of the 22,000 acres irrigated downstream from station. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--75 years (water years 1929-2003), 3,070 ft<sup>3</sup>/s, 2,224,000 acre-ft/yr. Includes discharge for water year 1929 which was estimated for WSP 1316.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,300 ft<sup>3</sup>/s Nov. 30, 1995, gage height, 17.89 ft; minimum discharge, 183 ft<sup>3</sup>/s Oct. 14, 1939; minimum gage height, 1.22 ft Nov. 26, 1993; minimum daily discharge, 210 ft<sup>3</sup>/s Nov. 26, 1993.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 12,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jun 9	0230	*12,900	*9.24	No other peak greater than base discharge.			

Minimum discharge, 289 ft<sup>3</sup>/s, Nov. 3, 4, 5, gage height, 1.37 ft.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	570	318	666	613	5,550	1,260	4,850	4,500	10,900	4,720	1,190	531
2	547	313	651	611	4,430	1,220	4,590	4,950	10,100	4,080	1,150	514
3	537	311	640	687	3,680	1,190	4,150	5,280	9,370	3,610	1,100	500
4	549	309	620	798	3,130	1,170	3,760	5,200	8,880	3,370	1,040	504
5	574	333	607	832	2,730	1,170	3,450	4,960	9,210	3,350	968	524
6	546	361	587	822	2,420	1,290	3,210	4,640	10,400	3,390	984	524
7	527	371	567	777	2,190	1,320	3,000	4,340	11,800	3,300	966	525
8	512	415	551	739	2,020	1,250	2,870	4,080	12,600	3,140	919	514
9	504	411	535	698	1,890	1,230	2,900	3,910	12,600	2,880	877	499
10	487	419	534	635	1,780	1,220	2,950	3,950	11,800	2,690	852	489
11	474	415	551	638	1,670	1,340	2,950	4,130	10,100	2,680	836	480
12	465	440	582	679	1,600	1,830	3,040	4,470	9,000	2,790	792	485
13	456	629	624	678	1,560	3,010	3,350	4,830	8,390	2,750	756	494
14	451	741	698	665	1,510	3,990	3,800	5,300	7,650	2,560	722	475
15	443	680	731	633	1,490	4,230	3,810	5,790	6,760	2,330	697	462
16	437	630	970	622	1,490	4,150	3,720	5,560	6,320	2,190	697	450
17	431	666	936	609	1,470	3,800	3,650	5,040	6,220	2,050	688	445
18	423	717	857	597	1,430	3,440	3,530	4,530	6,740	1,890	684	449
19	418	768	791	584	1,390	3,130	3,380	4,110	7,080	1,810	682	436
20	414	1,330	757	575	1,370	2,910	3,290	3,880	6,360	1,750	680	448
21	409	1,400	721	586	1,510	2,840	3,410	3,790	5,410	1,720	705	447
22	402	1,320	687	616	1,780	3,140	3,710	4,050	4,610	1,690	750	424
23	397	1,220	661	633	1,690	3,470	4,000	4,830	4,030	1,660	732	410
24	389	1,090	639	684	1,530	3,210	4,720	7,180	3,720	1,600	696	407
25	384	969	626	746	1,420	2,970	5,140	10,400	3,780	1,500	662	404
26	379	875	616	1,250	1,400	2,800	4,850	10,400	4,180	1,390	636	405
27	377	805	630	3,800	1,370	2,650	4,550	9,410	5,040	1,330	625	404
28	377	749	633	3,640	1,310	2,490	4,330	10,100	5,650	1,290	594	418
29	376	713	619	3,020	---	2,390	4,310	11,300	5,380	1,250	559	431
30	363	689	613	2,800	---	2,540	4,350	11,200	5,160	1,220	549	438
31	336	---	624	4,500	---	3,670	---	10,800	---	1,190	542	---
TOTAL	13,954	20,407	20,524	35,767	56,810	76,320	113,620	186,910	229,240	73,170	24,330	13,936
MEAN	450	680	662	1,154	2,029	2,462	3,787	6,029	7,641	2,360	785	465
MAX	574	1,400	970	4,500	5,550	4,230	5,140	11,300	12,600	4,720	1,190	531
MIN	336	309	534	575	1,310	1,170	2,870	3,790	3,720	1,190	542	404
AC-FT	27,680	40,480	40,710	70,940	112,700	151,400	225,400	370,700	454,700	145,100	48,260	27,640

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2003, BY WATER YEAR (WY)

MEAN	1,114	1,899	1,798	1,509	1,588	1,845	3,752	7,904	8,708	4,447	1,483	816
MAX	3,654	8,800	6,202	3,760	4,677	5,607	11,250	13,800	16,180	10,350	4,003	1,997
(WY)	(1968)	(1991)	(1976)	(1968)	(1996)	(1972)	(1934)	(1956)	(1974)	(1954)	(1954)	(1959)
MIN	331	329	421	421	476	806	1,475	3,506	3,191	1,164	572	426
(WY)	(1988)	(1930)	(1953)	(1930)	(1937)	(1929)	(1929)	(1977)	(1941)	(1941)	(1931)	(1942)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1929 - 2003

ANNUAL TOTAL	1,171,812	864,988	
ANNUAL MEAN	3,210	2,370	3,086
HIGHEST ANNUAL MEAN			4,830
LOWEST ANNUAL MEAN			1,572
HIGHEST DAILY MEAN	16,200	Jun 16	38,900
LOWEST DAILY MEAN	309	Nov 4	210
ANNUAL SEVEN-DAY MINIMUM	326	Oct 31	255
ANNUAL RUNOFF (AC-FT)	2,324,000	1,716,000	2,236,000
10 PERCENT EXCEEDS	8,800	5,230	7,900
50 PERCENT EXCEEDS	1,590	1,230	1,650
90 PERCENT EXCEEDS	497	438	608

12462500 WENATCHEE RIVER AT MONITOR, WA

LOCATION.--Lat 47°29'58", long 120°25'24", in NE 1/4 SW 1/4 sec.11, T.23 N., R.19 E., Chelan County, Hydrologic Unit 17020011, on right bank 1.0 mi north of Monitor, 3.5 mi downstream from Mission Creek, and at mile 7.0.

DRAINAGE AREA.--1,301 mi<sup>2</sup>.

PERIOD OF RECORD.--August to November 1897, October 1962 to current year. Published as "near Wenatchee" 1897.

GAGE.--Water-stage recorder. Elevation of gage is 680 ft above NGVD of 1929, from topographic map. Aug. 7 to Nov. 7, 1897, nonrecording gage 1 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. No regulation. Diversions for irrigation of about 25,000 acres upstream from station. Chelan County Public Utility District No. 1 telemeter at station. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--41 years (water years 1963-2003), 3,264 ft<sup>3</sup>/s, 2,364,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,500 ft<sup>3</sup>/s Nov. 30, 1995, gage height, 30.02 ft; minimum discharge, 208 ft<sup>3</sup>/s Nov. 26, 1993, gage height, 16.45 ft, but may have been less during period of frozen intakes Nov. 27 to Dec. 11, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,900 ft<sup>3</sup>/s June 9, gage height, 23.22 ft; minimum discharge, 367 ft<sup>3</sup>/s Oct. 15-16, gage height, 16.74 ft.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	551	412	765	721	6,570	1,490	5,500	4,800	11,700	4,840	1,150	480
2	556	404	747	722	5,110	1,450	5,180	5,270	10,900	4,170	1,120	455
3	536	403	733	801	4,230	1,410	4,680	5,650	10,000	3,670	1,060	438
4	529	403	714	946	3,610	1,370	4,240	5,560	9,440	3,410	999	433
5	540	419	697	1,020	3,160	1,360	3,890	5,300	9,730	3,370	951	461
6	522	452	682	1,000	2,820	1,480	3,620	4,980	11,000	3,420	932	462
7	490	461	661	946	2,560	1,520	3,340	4,650	12,600	3,330	923	461
8	472	505	643	898	2,360	1,470	3,170	4,370	13,600	3,170	877	454
9	453	505	624	853	2,220	1,440	3,190	4,180	13,600	2,930	831	445
10	435	507	622	783	2,090	1,420	3,270	4,190	12,700	2,720	802	442
11	416	504	636	763	1,980	1,500	3,270	4,340	10,800	2,700	781	433
12	400	520	673	810	1,900	2,040	3,350	4,650	9,530	2,780	736	445
13	388	652	701	810	1,840	3,320	3,640	5,060	8,860	2,760	696	462
14	381	849	814	797	1,790	4,580	4,150	5,550	8,080	2,600	660	445
15	373	783	866	762	1,750	4,860	4,190	6,090	7,080	2,360	631	427
16	448	731	1,090	743	1,760	4,820	4,080	5,860	6,560	2,210	625	414
17	524	733	1,090	727	1,720	4,400	3,990	5,310	6,420	2,070	623	415
18	518	813	1,000	716	1,670	3,980	3,870	4,770	6,960	1,920	621	428
19	511	815	924	699	1,630	3,620	3,710	4,320	7,380	1,830	611	439
20	506	1,340	889	692	1,590	3,360	3,590	4,060	6,630	1,760	608	444
21	500	1,510	847	700	1,690	3,260	3,680	3,950	5,610	1,720	617	445
22	494	1,450	806	736	2,050	3,540	3,970	4,180	4,790	1,680	688	427
23	489	1,350	775	750	2,000	4,010	4,330	4,990	4,170	1,640	673	415
24	482	1,220	748	792	1,830	3,730	5,110	7,580	3,800	1,580	641	408
25	480	1,100	731	861	1,690	3,450	5,720	11,300	3,810	1,490	605	403
26	472	998	727	1,360	1,650	3,240	5,370	11,300	4,160	1,380	584	405
27	471	924	739	3,950	1,630	3,080	4,990	10,100	5,030	1,310	579	404
28	471	864	740	3,990	1,550	2,910	4,690	10,900	5,740	1,280	558	416
29	470	821	726	3,360	---	2,790	4,630	12,200	5,460	1,230	523	425
30	461	791	720	3,070	---	2,980	4,670	12,000	5,230	1,190	504	433
31	435	---	730	5,120	---	4,130	---	11,700	---	1,160	496	---
TOTAL	14,774	23,239	23,860	40,898	66,450	88,010	125,080	199,160	241,370	73,680	22,705	13,064
MEAN	477	775	770	1,319	2,373	2,839	4,169	6,425	8,046	2,377	732	435
MAX	556	1,510	1,090	5,120	6,570	4,860	5,720	12,200	13,600	4,840	1,150	480
MIN	373	403	622	692	1,550	1,360	3,170	3,950	3,800	1,160	496	403
AC-FT	29,300	46,090	47,330	81,120	131,800	174,600	248,100	395,000	478,800	146,100	45,040	25,910

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2003, BY WATER YEAR (WY)

MEAN	1,057	2,099	1,980	1,776	1,993	2,365	3,971	8,022	9,059	4,506	1,510	808
MAX	3,095	9,636	6,983	4,309	5,447	6,853	7,260	12,970	17,020	9,880	3,985	1,628
(WY)	(1998)	(1991)	(1976)	(1984)	(1996)	(1972)	(1990)	(1972)	(1974)	(1974)	(1999)	(1978)
MIN	346	426	556	527	518	995	1,678	3,565	3,898	1,135	576	362
(WY)	(1988)	(1988)	(2001)	(1988)	(2001)	(2001)	(1967)	(1977)	(2001)	(1977)	(1994)	(2001)

SUMMARY STATISTICS

	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1963 - 2003	
ANNUAL TOTAL	1,269,473		932,290			
ANNUAL MEAN	3,478		2,554		3,264	
HIGHEST ANNUAL MEAN					5,261	
LOWEST ANNUAL MEAN					1,589	
HIGHEST DAILY MEAN	17,600	Jun 16	13,600	Jun 8	45,200	Nov 30, 1995
LOWEST DAILY MEAN	373	Oct 15	373	Oct 15	221	Nov 26, 1993
ANNUAL SEVEN-DAY MINIMUM	406	Oct 10	406	Oct 10	271	Oct 4, 2001
ANNUAL RUNOFF (AC-FT)	2,518,000		1,849,000		2,364,000	
10 PERCENT EXCEEDS	9,360		5,550		8,080	
50 PERCENT EXCEEDS	1,760		1,360		1,830	
90 PERCENT EXCEEDS	521		450		641	

## 12462600 COLUMBIA RIVER BELOW ROCK ISLAND DAM, WA

LOCATION.--Lat 47°19'57", long 120°04'48", in NE ¼ NW ¼ sec.9, T.21 N., R.22 E., Douglas County, Hydrologic Unit 17020010, on left bank 1.0 mi downstream from Rock Island Dam, 2.0 mi downstream from Rock Island Creek, 12 mi southeast of Wenatchee, and at mile 452.4.

DRAINAGE AREA.--89,400 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--January to December 1910 (gage heights only), May 1913 to December 1916, October 1930 to current year. Published as "at Wenatchee" January 1910 to December 1916, and as "at Trinidad" October 1930 to May 1961.

GAGE.--Daily discharge determined from flow through turbines plus spillway flow when present. Datum of gage is NGVD of 1929. Prior to Jan. 1, 1916, nonrecording gage 1.2 mi upstream from highway bridge at Wenatchee, at mile 466.3, at datum 583 ft above NGVD of 1929. Jan. 1 to Dec. 31, 1916, nonrecording gage on pier of highway bridge at Wenatchee, at mile 465.1, at datum 579.30 ft above NGVD of 1929. Oct. 1, 1930, to May 31, 1961, water-stage recorder 0.5 mi southwest of Trinidad, at mile 441.7, at datum 499.3 ft above NGVD of 1929 (river-profile survey). June 1, 1961, to July 22, 1988, water-stage recorder at present site and datum; May 21, 1963, to July 22, 1988, auxiliary water-stage recorder 2.0 mi downstream at same datum.

REMARKS.--Flow regulated by numerous reservoirs. Feeder Canal diversion (station 12435500) for Columbia Basin project is used to irrigate approximately 600,000 acres in the United States. An additional 66,500 acres in Canada are irrigated by other diversions.

COOPERATION.--Discharge records provided by Public Utility District No. 1 of Chelan County at Rock Island Dam through the Corps of Engineers, North Pacific Division, Reservoir Control Center. The U.S. Geological Survey made 6 discharge measurements at this site during the year.

AVERAGE DISCHARGE.--76 years (water years 1914-16, 1931-2003), 119,000 ft<sup>3</sup>/s, 86,220,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 692,600 ft<sup>3</sup>/s June 12, 1948, gage height, 59.35 ft, site and datum then in use; minimum discharge, 4,120 ft<sup>3</sup>/s Feb. 10, 1932, gage height, 11.40 ft, site and datum then in use.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 7, 1894, reached a discharge of about 740,000 ft<sup>3</sup>/s, from floodmarks at Wenatchee.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 173,000 ft<sup>3</sup>/s June 13; minimum daily discharge, 35,700 ft<sup>3</sup>/s Sept. 7.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80,000	96,900	98,000	49,600	57,800	66,700	102,000	120,000	99,600	131,000	105,000	56,700
2	83,500	89,900	117,000	82,800	49,200	78,000	95,700	134,000	129,000	103,000	65,300	69,200
3	75,300	85,300	117,000	72,000	72,700	103,000	104,000	121,000	130,000	112,000	61,000	80,600
4	62,100	99,800	120,000	60,600	85,300	91,000	88,200	126,000	135,000	78,000	98,800	78,800
5	59,000	107,000	105,000	61,200	87,600	93,500	69,400	147,000	142,000	74,100	106,000	75,200
6	61,300	117,000	111,000	88,100	104,000	91,800	61,200	140,000	164,000	76,400	91,000	44,400
7	89,000	114,000	92,600	97,100	88,800	91,600	115,000	140,000	160,000	119,000	95,400	35,700
8	109,000	103,000	88,400	99,900	62,200	64,600	97,800	146,000	138,000	121,000	101,000	59,800
9	75,900	89,800	107,000	80,700	47,900	45,900	104,000	129,000	160,000	124,000	86,500	60,300
10	76,700	71,200	103,000	87,600	81,800	68,400	109,000	115,000	172,000	135,000	71,500	48,900
11	69,400	80,700	107,000	68,200	74,900	75,000	101,000	107,000	170,000	125,000	112,000	69,200
12	61,400	91,200	94,200	48,400	72,000	70,600	87,200	134,000	165,000	115,000	90,700	69,400
13	61,700	88,900	97,900	76,100	73,100	71,100	71,700	164,000	173,000	85,600	89,400	39,100
14	87,800	96,400	72,900	88,700	64,500	91,700	100,000	146,000	152,000	119,000	114,000	42,500
15	83,200	109,000	59,900	104,000	62,500	80,400	119,000	144,000	136,000	132,000	110,000	71,600
16	74,900	92,400	98,600	99,900	56,700	66,600	133,000	150,000	167,000	117,000	86,600	64,500
17	69,000	62,800	109,000	102,000	73,700	77,300	130,000	136,000	171,000	107,000	65,000	53,600
18	64,700	96,700	101,000	69,800	78,700	81,500	110,000	89,100	152,000	105,000	101,000	62,200
19	47,700	115,000	90,300	70,800	78,300	76,800	113,000	146,000	123,000	105,000	101,000	58,400
20	53,900	101,000	98,800	94,800	81,600	64,300	71,800	150,000	139,000	78,800	112,000	54,000
21	81,900	110,000	78,400	108,000	73,300	79,900	144,000	150,000	104,000	116,000	121,000	61,600
22	84,700	115,000	64,100	96,000	60,600	57,600	143,000	169,000	85,400	123,000	128,000	79,600
23	88,300	106,000	92,100	72,200	47,800	50,000	139,000	151,000	133,000	127,000	93,600	66,200
24	103,000	85,400	103,000	77,400	81,000	85,100	145,000	122,000	149,000	111,000	82,100	69,000
25	114,000	128,000	65,600	60,100	86,700	107,000	147,000	100,000	154,000	107,000	128,000	85,300
26	90,800	116,000	100,000	39,500	80,600	122,000	109,000	109,000	154,000	89,800	114,000	87,600
27	56,300	109,000	98,400	66,600	82,600	120,000	98,600	130,000	160,000	60,600	80,700	60,700
28	87,800	71,900	89,200	77,400	88,700	129,000	133,000	141,000	152,000	108,000	97,500	54,800
29	106,000	88,900	64,600	74,700	---	123,000	141,000	170,000	105,000	117,000	97,900	87,300
30	116,000	93,500	98,800	86,100	---	92,800	137,000	144,000	126,000	117,000	88,800	86,000
31	110,000	---	88,900	65,000	---	118,000	---	123,000	---	119,000	61,000	---
TOTAL	2,484,300	2,931,700	2,931,700	2,425,300	2,054,600	2,634,200	3,319,600	4,193,100	4,300,000	3,358,300	2,955,800	1,932,200
MEAN	80,140	97,720	94,570	78,240	73,380	84,970	110,700	135,300	143,300	108,300	95,350	64,410
MAX	116,000	128,000	120,000	108,000	104,000	129,000	147,000	170,000	173,000	135,000	128,000	87,600
MIN	47,700	62,800	59,900	39,500	47,800	45,900	61,200	89,100	85,400	60,600	61,000	35,700
AC-FT	4,928,000	5,815,000	5,815,000	4,811,000	4,075,000	5,225,000	6,584,000	8,317,000	8,529,000	6,661,000	5,863,000	3,833,000
CAL YR	2002	TOTAL 42,100,500	MEAN 115,300	MAX 251,000	MIN 31,300	AC-FT 83,510,000						
WTR YR	2003	TOTAL 35,520,800	MEAN 97,320	MAX 173,000	MIN 35,700	AC-FT 70,460,000						

## 12464606 SAND HOLLOW CREEK AT S ROAD SW, NEAR VANTAGE, WA

## WATER-QUALITY RECORDS

LOCATION.--Lat 46°55'46", long 119°53'55", in SE ¼ SE ¼ sec. 26, T. 17 N, R. 23 E., Grant County, Hydrologic Unit 17020010, on right bank at county road crossing, 3 mi east of junction of State Routes 243 and 26, 4 mi east of Vantage, and 3 mi upstream from mouth.

PERIOD OF RECORD.--March to July 1992, September 2002 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1993 to October 1994.

WATER TEMPERATURE: October 1993 to September 1995.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 955 microsiemens, Mar. 5, 1994; minimum recorded, 224 microsiemens June 27, 1994.

WATER TEMPERATURE: Maximum recorded, 25°C July 21, 24, 25, 1994, July 18, 1995; minimum recorded, 1.0°C Feb. 8, 1994.

REMARKS.--Unpublished water-quality data for 1993-97 is available in the Washington District office.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)
JUL 29...	1150	79	8.4	8.2	141	22.0	30.3	11.5	1.18	9.00	5.04	0.22	14.2

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt (70300)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	2,4,5-T surrog, water, fltrd, percent (99958)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF (38746)	2,6-Diethyl-aniline water fltrd 0.7u GF (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carb-uran, wat flt 0.7u GF (49308)
JUL 29...	16.9	170	<10	E2.5	60.9	<0.009	0.16	<0.02	<0.006	E.008	<0.04	<0.008	<0.006

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	3-Keto-carbo-furan, water, fltrd, ug/L (50295)	Aceto-chlor, water, fltrd, ug/L (49260)	Acifluorfen, water, fltrd 0.7u GF (49315)	Alachlor, water, fltrd, ug/L (46342)	Aldi-carb sulfone water, fltrd 0.7u GF (49313)	Aldi-carb sulf-oxide, wat flt 0.7u GF (49314)	Aldi-carb, water, fltrd, ug/L (49312)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovery (91065)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF (82686)	Barban, surrog, Sched. 2060/9060, wat flt pct rcv (90640)	Bendio-carb, water, fltrd, ug/L (50299)
JUL 29...	<2	<0.006	<0.007	E.004	<0.02	<0.008	<0.04	<0.005	103	0.009	E.014	E138	<0.03

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Ben-flu-alin, water, fltrd 0.7u GF (82673)	Benomyl water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd 0.7u GF (38711)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd 0.7u GF (49311)	Butyl-ate, water, fltrd, ug/L (04028)	Caf-feine, water, fltrd, ug/L (50305)	Caf-feine-13C, surrog, wat flt percent recovery (99959)	Car-baryl, water, fltrd 0.7u GF (49310)	Car-baryl, water, fltrd 0.7u GF (82680)	Carbo-furan, water, fltrd 0.7u GF (49309)	Carbo-furan, water, fltrd 0.7u GF (82674)
JUL 29...	<0.010	<0.004	<0.02	E.10	<0.03	<0.02	<0.002	<0.0096	E83.2	<0.03	E.005	<0.006	<0.020

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Chlor-amben methyl ester, water, fltrd, ug/L (61188)	Chlori-muron, water, fltrd, ug/L (50306)	Chloro-di-amino-s-tri-azine, wat flt ug/L (04039)	Chloro-thalo-nil, water, fltrd 0.7u GF (49306)	Chlor-pyri-fos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF (82687)	Clopyr-alid, water, fltrd 0.7u GF (49305)	Cyana-zine, water, fltrd, ug/L (04041)	Cyclo-ate, water, fltrd, ug/L (04031)	Dacthal mono-acid, water, fltrd 0.7u GF (49304)	DCPA, water fltrd ug/L (82682)	Diazi-non, water, fltrd, ug/L (39572)	Diazi-non-d10 surrog. wat flt 0.7u GF percent recovery (91063)
JUL 29...	<0.02	<0.010	<0.01	<0.04	0.009	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	0.007	102



12464606 SAND HOLLOW CREEK AT S ROAD SW, NEAR VANTAGE, WA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Dicamba water, fltrd, 0.7u GF (38442)	Di-chlor-prop, water, fltrd, 0.7u GF (49302)	Diel-drin, water, fltrd, ug/L (39381)	Dinoseb water, fltrd, 0.7u GF (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disul-foton, water, fltrd, 0.7u GF (82677)	Diuron, water, fltrd, 0.7u GF (49300)	EPTC, water, fltrd, 0.7u GF (82668)	Ethal-flur-alin, water, fltrd, 0.7u GF (82663)	Etho-prop, water, fltrd, 0.7u GF (82672)	Fenuron, water, fltrd, 0.7u GF (49297)	Flumet-sulam, water, fltrd, ug/L (61694)	Fluo-meturon water fltrd, 0.7u GF (38811)
JUL 29...	<0.01	<0.01	<0.005	M	<0.03	<0.02	E.02	0.002	<0.009	<0.005	<0.03	<0.01	<0.03

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Fonofos water, fltrd, ug/L (04095)	Imaza-quin, water, fltrd, ug/L (50356)	Imaze-thapyr, water, fltrd, ug/L (50407)	Imida-cloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd, 0.7u GF (38478)	Linuron water fltrd, 0.7u GF (82666)	Malathion, water, fltrd, ug/L (39532)	MCPA, water, fltrd, 0.7u GF (38482)	MCPB, water, fltrd, 0.7u GF (38487)	Meta-laxyl, water, fltrd, ug/L (50359)	Methio-carb, water, fltrd, 0.7u GF (38501)	Meth-omyl, water, fltrd, 0.7u GF (49296)
JUL 29...	<0.003	<0.02	<0.02	<0.007	0.018	<0.01	<0.035	<0.027	<0.02	<0.01	E.01	<0.008	<0.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Methyl para-thion, water, fltrd, 0.7u GF (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Metsul-furon, water, fltrd, ug/L (61697)	Moli-nate, water, fltrd, 0.7u GF (82671)	N-(4-Chloro-phenyl)-N'-methyl-urea, ug/L (61692)	Naprop-amide, water, fltrd, 0.7u GF (82684)	Neburon water, fltrd, 0.7u GF (49294)	Nico-sul-furon, water, fltrd, ug/L (50364)	Norflur-azon, water, fltrd, 0.7u GF (49293)	Ory-zalin, water, fltrd, 0.7u GF (49292)	Oxamyl, water, fltrd, 0.7u GF (38866)	p,p'-DDE, water, fltrd, ug/L (34653)
JUL 29...	<0.006	E.004	E.005	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd, 0.7u GF (82669)	Pendi-meth-alin, water, fltrd, 0.7u GF (82683)	Phorate water fltrd, 0.7u GF (82664)	Pic-loram, water, fltrd, 0.7u GF (49291)	Prome-ton, water, fltrd, ug/L (04037)	Pron-amide, 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)	Propham water fltrd, 0.7u GF (49236)	Propi-cona-zole, water, fltrd, ug/L (50471)	Pro-poxur, water, fltrd, 0.7u GF (38538)
JUL 29...	<0.010	<0.004	E.007	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Siduron water, fltrd, ug/L (38548)	Sima-zine, water, fltrd, ug/L (04035)	Sulfo-met-ruron, water, fltrd, ug/L (50337)	Tebu-thiuron water fltrd, 0.7u GF (82670)	Terba-cil, water, fltrd, 0.7u GF (82665)	Terba-cil, water, fltrd, ug/L (04032)	Terbu-fos, water, fltrd, 0.7u GF (82675)	Thio-bencarb water fltrd, 0.7u GF (82681)	Tri-allate, water, fltrd, 0.7u GF (82678)	Tri-clopyr, water, fltrd, 0.7u GF (49235)	Tri-flur-alin, water, fltrd, 0.7u GF (82661)
JUL 29...	<0.02	E.005	<0.009	<0.02	E.071	E.042	<0.02	<0.005	<0.002	<0.02	<0.009

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

Date	Time	Instan-taneous dis-charge, cfs (00061)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., mg/L (00453)	Carbon-ate, wat flt incrm. field, mg/L (00452)	Sus-pended sedi-ment concen-tration mg/L (80154)
JUL 08...	1420	--	740	9.5	8.7	324	27.6	19.7	--	--	--	--
AUG 13...	1030	96	742	9.6	8.3	356	24.4	17.8	127	152	0.0	33

12464607 SAND HOLLOW AT MOUTH NEAR VANTAGE, WA

## WATER-QUALITY RECORDS

LOCATION.--Lat. 46°55'46", long. 119°57'01", in SW ¼ SE ¼ sec. 28, T. 16 N., R. 26 E., Grant County, Hydrologic Unit 17020010, 0.4 mi east of junction of State Routes 243 and 26, 2 mi east of Vantage at mile 0.4.

PERIOD OF RECORD.--November 1991 to July 1992, July 2002 to current year.

DRAINAGE AREA.--Not determined.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)
SEP 23...	1100	101	9.2	8.4	387	14.4	36.9	14.0	1.50	11.3	9.13	0.25	18.8

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	2,4,5-T surrog, water, fltrd, percent recovery (99958)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd, 0.7u GF ug/L (38746)	2,6-Diethyl-aniline water fltrd, 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy-carbo-furan, wat flt 0.7u GF ug/L (49308)
SEP 23...	24.6	220	E8	E1.0	85.2	<0.009	0.04	<0.02	<0.006	E.013	<0.04	<0.008	<0.006

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	3-Ketocarbo-furan, water, fltrd, ug/L (50295)	Acetochlor, water, fltrd, ug/L (49260)	Acifluorfen, water, fltrd, 0.7u GF ug/L (49315)	Alachlor, water, fltrd, ug/L (46342)	Aldicarb sulfone water, fltrd, 0.7u GF ug/L (49313)	Aldicarb sulf-oxide, wat flt 0.7u GF ug/L (49314)	Aldicarb, water, fltrd, 0.7u GF ug/L (49312)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovery (91065)	Atrazine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd, 0.7u GF ug/L (82686)	Barban, surrog, Sched. 2060/9060, wat flt pct rcv (90640)	Bendiocarb, water, fltrd, ug/L (50299)
SEP 23...	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	106	0.013	<0.050	E154	<0.03

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Benfluralin, water, fltrd, 0.7u GF ug/L (82673)	Benomyl, water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Benazon, water, fltrd, 0.7u GF ug/L (38711)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd, 0.7u GF ug/L (49311)	Butylate, water, fltrd, ug/L (04028)	Caffeine, water, fltrd, ug/L (50305)	Caffeine-13C, surrog, wat flt percent recovery (99959)	Carbaryl, water, fltrd, 0.7u GF ug/L (49310)	Carbaryl, water, fltrd, 0.7u GF ug/L (82680)	Carbofuran, water, fltrd, 0.7u GF ug/L (49309)	Carbofuran, water, fltrd, 0.7u GF ug/L (82674)
SEP 23...	<0.010	<0.004	<0.02	E.09	<0.03	<0.02	<0.002	<0.0096	E103	<0.03	<0.041	<0.006	<0.020

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Chloramben methyl ester, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chlorodiminos-triazine, wat flt ug/L (04039)	Chlorothalonil, water, fltrd, 0.7u GF ug/L (49306)	Chlorpyrifos, water, fltrd, ug/L (38933)	cis-Permethrin, water, fltrd, 0.7u GF ug/L (82687)	Clopyralid, water, fltrd, 0.7u GF ug/L (49305)	Cyanazine, water, fltrd, ug/L (04041)	Cycloate, water, fltrd, ug/L (04031)	Dacthal mono-acid, water, fltrd, 0.7u GF ug/L (49304)	DCPA, water, fltrd, ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog, wat flt 0.7u GF percent recovery (91063)
SEP 23...	<0.02	<0.010	E.01	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.005	104

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Dicamba water fltrd, 0.7u GF ug/L (38442)	Dichloroprop, water, fltrd, 0.7u GF ug/L (49302)	Dieldrin, water, fltrd, ug/L (39381)	Dinoseb, water, fltrd, 0.7u GF ug/L (49301)	Diphenamid, water, fltrd, ug/L (04033)	Disulfoton, water, fltrd, 0.7u GF ug/L (82677)	Diuron, water, fltrd, 0.7u GF ug/L (49300)	EPTC, water, fltrd, 0.7u GF ug/L (82668)	Ethalfuralin, water, fltrd, 0.7u GF ug/L (82663)	Ethoprop, water, fltrd, 0.7u GF ug/L (82672)	Fenuron, water, fltrd, 0.7u GF ug/L (49297)	Flumetsulam, water, fltrd, ug/L (61694)	Fluometuron, water, fltrd, 0.7u GF ug/L (38811)
SEP 23...	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	E.01	<0.002	<0.009	<0.005	<0.03	<0.01	<0.03

## 12464607 SAND HOLLOW AT MOUTH NEAR VANTAGE, WA—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Fonofos water, fltrd, ug/L (04095)	Imazaquin, water, fltrd, ug/L (50356)	Imazethapyr, water, fltrd, ug/L (50407)	Imidacloprid, water, fltrd, ug/L (61695)	Lindane, water, fltrd, ug/L (39341)	Linuron water fltrd, 0.7u GF ug/L (38478)	Linuron water fltrd, 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	MCPA, water, fltrd, 0.7u GF ug/L (38482)	MCPB, water, fltrd, 0.7u GF ug/L (38487)	Metaxalyl, water, fltrd, ug/L (50359)	Methiocarb, water, fltrd, 0.7u GF ug/L (38501)	Methomyl, water, fltrd, 0.7u GF ug/L (49296)
SEP 23...	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Methyl parathion, water, fltrd, 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Metsulfuron, water, fltrd, ug/L (61697)	Molinate, water, fltrd, 0.7u GF ug/L (82671)	N-(4-Chlorophenyl)-N-methylurea, ug/L (61692)	Napropamide, water, fltrd, 0.7u GF ug/L (82684)	Neburon, water, fltrd, 0.7u GF ug/L (49294)	Nicosulfuron, water, fltrd, ug/L (50364)	Norflurazon, water, fltrd, 0.7u GF ug/L (49293)	Oryzalin, water, fltrd, 0.7u GF ug/L (49292)	Oxamyl, water, fltrd, 0.7u GF ug/L (38866)	p,p'-DDE, water, fltrd, ug/L (34653)
SEP 23...	<0.006	<0.013	0.007	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd, 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd, 0.7u GF ug/L (82683)	Phorate, water, fltrd, 0.7u GF ug/L (82664)	Picloram, water, fltrd, 0.7u GF ug/L (49291)	Prometon, water, fltrd, ug/L (04037)	Pronamide, water, fltrd, 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd, 0.7u GF ug/L (82679)	Propargite, water, fltrd, 0.7u GF ug/L (82685)	Propham, water, fltrd, 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd, 0.7u GF ug/L (38538)
SEP 23...	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Siduron, water, fltrd, ug/L (38548)	Simazine, water, fltrd, ug/L (04035)	Sulfometuron, water, fltrd, ug/L (50337)	Tebuthiuron, water, fltrd, 0.7u GF ug/L (82670)	Terbacil, water, fltrd, 0.7u GF ug/L (82665)	Terbacil, water, fltrd, ug/L (04032)	Terbufos, water, fltrd, 0.7u GF ug/L (82675)	Thiobencarb, water, fltrd, 0.7u GF ug/L (82681)	Triallate, water, fltrd, 0.7u GF ug/L (82678)	Triclopyr, water, fltrd, 0.7u GF ug/L (49235)	Trifluralin, water, fltrd, 0.7u GF ug/L (82661)
SEP 23...	<0.02	E.005	<0.009	<0.02	E.106	0.051	<0.02	<0.005	<0.002	<0.02	<0.009

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

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	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)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit mg/L as CaCO3 (39086)
FEB 04...	1050	23	758	11.7	8.5	707	8.7	9.1	76.1	36.1	2.51	28.9	--
APR 07...	1050	141	--	12.0	8.5	263	10.1	8.2	27.6	9.79	1.79	12.5	--
MAY 06...	1010	90	--	10.5	8.6	327	14.3	12.0	35.6	14.4	1.64	15.1	--
JUL 01...	1020	80	743	10.1	8.6	414	22.8	17.0	42.0	17.9	1.72	15.6	137

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

Date	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)	Residue on evap. at 180degC wat flt mg/L (70300)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	2,4,5-T surrog, water, fltrd, percent recovery (99958)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd, 0.7u GF ug/L (38746)
FEB 04...	--	--	26.8	0.50	42.6	66.1	491	<10	1.8	76.9	<0.009	<0.02	<0.02
APR 07...	--	--	6.98	0.17	9.80	20.5	167	E6	E1.1	79.6	<0.009	0.07	<0.02
MAY 06...	--	--	9.70	0.24	14.6	26.7	229	<10	E1.4	71.2	0.010	0.05	<0.02
JUL 01...	161	2	10.5	0.3	23.1	29.0	247	<8	1.1	106	<0.009	0.11	<0.02

## 12464607 SAND HOLLOW AT MOUTH NEAR VANTAGE, WA—Continued

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

Date	2,6-Diethyl-aniline water fltrd 0.7u GF (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy-carbo-furan, wat flt 0.7u GF (49308)	3-Keto-carbo-furan, water, fltrd, ug/L (50295)	Aceto-chlor, water, fltrd, ug/L (49260)	Aci-fluor-fen, water, fltrd 0.7u GF (49315)	Ala-chlor, water, fltrd, ug/L (46342)	Aldi-carb sulfone water, fltrd 0.7u GF (49313)	Aldi-carb sulf-oxide, wat flt 0.7u GF (49314)	Aldi-carb, water, fltrd 0.7u GF (49312)	alpha-HCH, water, fltrd, ug/L (34253)
FEB 04...	<0.006	E.036	M	<0.008	<0.006	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005
APR 07...	<0.006	E.005	<0.04	<0.008	<0.006	<2	<0.006	<0.007	E.004	<0.02	<0.008	<0.04	<0.005
MAY 06...	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005
JUL 01...	<0.006	E.012	<0.04	E.005	<0.006	<2	<0.006	<0.007	0.006	<0.02	<0.008	<0.04	<0.005

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

Date	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovery (91065)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF (82686)	Barban, surrog, Sched. 2060/9060, wat flt pct rcv (90640)	Bendio-carb, water, fltrd, ug/L (50299)	Ben-flur-alin, water, fltrd 0.7u GF (82673)	Benomyl water, fltrd, ug/L (50300)	Bensul-furon, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd 0.7u GF (38711)	Broma-cil, water, fltrd, ug/L (04029)	Brom-oxynil, water, fltrd 0.7u GF (49311)	Butyl-ate, water, fltrd, ug/L (04028)	Caf-feine, water, fltrd, ug/L (50305)
FEB 04...	103	0.029	<0.050	121	<0.03	<0.010	<0.004	<0.02	E.21	E.12	<0.02	<0.002	<0.0096
APR 07...	101	0.008	<0.050	105	<0.03	<0.010	<0.004	<0.02	E.04	E.02	E.01	<0.002	<0.0096
MAY 06...	95.5	<0.007	<0.050	117	<0.03	<0.010	<0.004	<0.02	E.16	E.02	M	<0.002	<0.0096
JUL 01...	87.4	0.014	E.021	134	<0.03	<0.010	<0.004	<0.02	E.25	E.02	<0.02	<0.002	E.0064

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

Date	Caf-feine-13C, surrog, wat flt percent recovery (99959)	Car-baryl, water, fltrd 0.7u GF (49310)	Car-baryl, water, fltrd 0.7u GF (82680)	Carbo-furan, water, fltrd 0.7u GF (49309)	Carbo-furan, water, fltrd 0.7u GF (82674)	Chlor-amben methyl ester, water, fltrd, ug/L (61188)	Chlori-muron, water, fltrd, ug/L (50306)	Chloro-di-amino-s-tri-azine, wat flt ug/L (04039)	Chloro-thalo-nil, water, fltrd 0.7u GF (49306)	Chlor-pyri-fos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF (82687)	Clopyr-alid, water, fltrd 0.7u GF (49305)	Cyana-zine, water, fltrd, ug/L (04041)
FEB 04...	66.8	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018
APR 07...	87.6	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01	<0.04	0.036	<0.006	<0.01	<0.018
MAY 06...	84.8	E.01	E.009	<0.006	<0.020	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018
JUL 01...	64.3	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018

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

Date	Cyclo-ate, water, fltrd, ug/L (04031)	Dacthal mono-acid, water, fltrd 0.7u GF (49304)	DCPA, water fltrd 0.7u GF (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Diazi-non-d10 surrog. wat flt 0.7u GF percent recovery (91063)	Dicamba water fltrd 0.7u GF (38442)	Di-chlor-prop, water, fltrd 0.7u GF (49302)	Diel-drin, water, fltrd, ug/L (39381)	Dinoseb water, fltrd 0.7u GF (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disul-foton, water, fltrd 0.7u GF (82677)	Diuron, water, fltrd 0.7u GF (49300)
FEB 04...	<0.01	<0.01	<0.003	<0.004	<0.005	107	<0.01	<0.01	<0.005	0.14	<0.03	<0.02	E.22
APR 07...	<0.01	<0.01	0.003	<0.004	<0.005	122	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	0.08
MAY 06...	<0.01	<0.01	<0.003	<0.004	<0.005	115	<0.01	<0.01	<0.005	0.02	<0.03	<0.02	0.07
JUL 01...	<0.01	<0.01	<0.003	<0.004	<0.005	117	0.01	<0.01	<0.005	0.02	<0.03	<0.02	0.02

## SAND HOLLOW BASIN

## 12464607 SAND HOLLOW AT MOUTH NEAR VANTAGE, WA—Continued

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

Date	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Desulf-inyl-fipro-nil amide, wat fltr 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)	Flumet-sulam, water, fltrd, ug/L (61694)	Fluo-meturon water fltrd 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Imaza-quin, water, fltrd, ug/L (50356)	Imaze-thapyr, water, fltrd, ug/L (50407)
FEB 04...	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02
APR 07...	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02
MAY 06...	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02
JUL 01...	0.085	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02

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

Date	Imida-cloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta-laxyl, water, fltrd, ug/L (50359)	Methio-carb, water, fltrd 0.7u GF ug/L (38501)	Meth-omyl, water, fltrd 0.7u GF ug/L (49296)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)
FEB 04...	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	0.019
APR 07...	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	0.052
MAY 06...	<0.007	<0.004	<0.01	<0.035	<0.027	E.03	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006
JUL 01...	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	E.016	<0.006	E.008	<0.006

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

Date	Metsul-furon, water, fltrd, ug/L (61697)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)	N-(4-Chloro-phenyl)-N'-methyl-urea, ug/L (61692)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico-sul-furon, water, fltrd, ug/L (50364)	Norflur azon, water, fltrd 0.7u GF ug/L (49293)	Ory-zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	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)
FEB 04...	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022
APR 07...	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	0.388
MAY 06...	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	0.110
JUL 01...	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	E.019

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

Date	Phorate water fltrd 0.7u GF ug/L (82664)	Pic-loram, water, fltrd 0.7u GF ug/L (49291)	Prome-ton, water, fltrd, ug/L (04037)	Pron-amide, water, fltrd 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)	Pro-pa-nil, water, fltrd 0.7u GF ug/L (82679)	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propi-cona-zole, water, fltrd, ug/L (50471)	Pro-poxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Sima-zine, water, fltrd, ug/L (04035)	Sulfo-met-ruron, water, fltrd, ug/L (50337)
FEB 04...	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009
APR 07...	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.010	<0.009
MAY 06...	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009
JUL 01...	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	E.006	<0.009

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

Date	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)	Terba-cil, water, fltrd, ug/L (04032)	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)	Thio-bencarb water fltrd 0.7u GF ug/L (82681)	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-clopyr, water, fltrd 0.7u GF ug/L (49235)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Suspnd, sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)
FEB 04...	<0.02	E.157	E.085	<0.02	<0.005	<0.002	<0.02	<0.009	--	--
APR 07...	<0.02	E1.01	E1.35	<0.02	<0.005	<0.002	<0.02	<0.009	32	147
MAY 06...	<0.02	E.070	E.069	<0.02	<0.005	<0.002	<0.02	<0.009	48	39
JUL 01...	<0.02	E.237	E.176	<0.02	<0.005	<0.002	<0.02	<0.009	--	6

12464770 CRAB CREEK AT ROCKY FORD ROAD, NEAR RITZVILLE, WA

LOCATION.--Lat 47°18'10", long 118°22'05", in NW ¼ NE ¼ sec.23, T.21 N., R.35 E., Lincoln County, Hydrologic Unit 17020013, on left bank, 100 ft downstream from Rocky Ford Road bridge crossing, 13 mi north of Ritzville.

DRAINAGE AREA.--384 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1993 to September 1995, August 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,660 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Several diversions for irrigation upstream from station. No regulation.

AVERAGE DISCHARGE.--8 years (water years 1994-95, 1998-2003), 50.6 ft<sup>3</sup>/s, 1.79 in/yr, 36,630 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,530 ft<sup>3</sup>/s Feb. 1, 1995, gage height, 6.72 ft; minimum discharge, 1.5 ft<sup>3</sup>/s Nov. 1, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 72 ft<sup>3</sup>/s Apr. 17, gage height, 1.75 ft; minimum discharge, 1.5 ft<sup>3</sup>/s Nov. 1.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	10	14	18	51	53	51	51	29	18	14	10
2	12	12	14	18	57	52	50	49	29	18	14	10
3	12	12	14	18	57	51	52	51	28	18	13	10
4	12	12	14	18	57	50	53	47	28	18	12	9.6
5	12	12	14	19	56	51	53	46	28	19	12	9.2
6	12	12	14	21	55	50	54	45	26	19	12	9.1
7	12	12	14	22	55	48	52	44	26	19	11	9.5
8	12	13	14	23	55	48	52	43	27	19	11	11
9	12	12	14	24	56	47	52	42	27	19	11	11
10	12	13	14	25	55	46	52	42	28	19	11	10
11	12	12	15	25	55	46	51	41	28	19	11	10
12	12	12	15	27	54	46	53	40	27	20	11	10
13	12	12	15	27	54	46	54	45	27	20	11	10
14	12	13	15	28	54	44	59	47	26	19	11	10
15	12	13	15	28	55	45	57	45	25	19	11	10
16	12	13	15	29	55	48	64	40	22	19	11	10
17	12	13	15	29	56	50	67	39	21	19	11	10
18	12	13	15	29	58	51	66	41	22	18	10	10
19	12	13	15	30	58	50	67	42	21	18	10	10
20	12	13	15	30	57	50	64	41	20	17	9.7	10
21	12	13	15	31	57	50	64	39	20	17	10	10
22	12	13	15	32	57	51	62	39	19	16	10	9.9
23	12	13	16	32	57	54	58	38	18	16	10	10
24	12	13	16	33	56	52	56	37	18	15	10	10
25	12	13	16	34	56	51	55	36	17	15	9.9	9.9
26	12	13	16	35	55	54	56	35	17	14	9.7	9.9
27	12	13	17	37	53	54	55	34	17	14	9.1	9.9
28	12	13	17	41	52	52	54	32	17	14	8.9	10
29	12	13	17	41	---	51	52	32	18	14	9.0	10
30	12	13	17	42	---	53	51	31	18	14	9.0	10
31	11	---	18	45	---	51	---	31	---	14	9.6	---
TOTAL	371	377	470	891	1,553	1,545	1,686	1,265	694	537	332.9	299.0
MEAN	12.0	12.6	15.2	28.7	55.5	49.8	56.2	40.8	23.1	17.3	10.7	9.97
MAX	12	13	18	45	58	54	67	51	29	20	14	11
MIN	11	10	14	18	51	44	50	31	17	14	8.9	9.1
AC-FT	736	748	932	1,770	3,080	3,060	3,340	2,510	1,380	1,070	660	593
CFSM	0.03	0.03	0.04	0.07	0.14	0.13	0.15	0.11	0.06	0.05	0.03	0.03
IN.	0.04	0.04	0.05	0.09	0.15	0.15	0.16	0.12	0.07	0.05	0.03	0.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2003, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	
MEAN	14.2	17.1	40.0	125	124	105	70.4	46.9	27.1	21.4	14.9	12.7
MAX	24.5	31.4	155	373	266	213	113	77.7	47.0	47.6	27.3	23.7
(WY)	(1998)	(1998)	(1999)	(1998)	(1999)	(1999)	(2000)	(2000)	(2000)	(1997)	(1997)	(1997)
MIN	3.63	4.09	8.75	28.7	22.2	16.7	14.7	11.5	11.4	8.87	4.69	3.72
(WY)	(1995)	(1995)	(1995)	(2003)	(1994)	(1994)	(1994)	(1994)	(1994)	(1994)	(1994)	(1994)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1993 - 2003

ANNUAL TOTAL	12,315	10,020.9	
ANNUAL MEAN	33.7	27.5	50.6
HIGHEST ANNUAL MEAN			88.2
LOWEST ANNUAL MEAN			13.7
HIGHEST DAILY MEAN	127	Feb 8	67
LOWEST DAILY MEAN	10	Nov 1	8.9
ANNUAL SEVEN-DAY MINIMUM	11	Sep 9	9.3
ANNUAL RUNOFF (AC-FT)	24,430		19,880
ANNUAL RUNOFF (CFSM)	0.088		0.071
ANNUAL RUNOFF (INCHES)	1.19		0.97
10 PERCENT EXCEEDS	71		54
50 PERCENT EXCEEDS	22		18
90 PERCENT EXCEEDS	12		10

CRAB CREEK BASIN

12464770 CRAB CREEK AT ROCKY FORD ROAD, NEAR RITZVILLE, WA  
(National Water-Quality Assessment station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1992 to September 1995, June 1997 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1993 to September 1994, February 2002 to current year.

WATER TEMPERATURE: October 1993 to September 1995, July 1997 to current year.

INSTRUMENTATION.-- Water-quality monitor.

REMARKS.--Temperature record excellent. Specific conductance record excellent. In June 1997, station became a Central Columbia Plateau National Water-Quality Assessment Program (NAWQA) surface-water quality trend site.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum observed, 392 microsiemens Sept. 2, 2003, but may have been higher during periods of missing record; minimum recorded, 140 microsiemens Feb. 9, 2002.

WATER TEMPERATURE: Maximum recorded, 20.5°C (rounded) July 24, 25, 1994; May 24, 1999; minimum, 0.0 (rounded) Jan. 9, 10, 1995.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum observed, 392 microsiemens Sept. 2, but may have been higher during periods of missing record; minimum recorded, 341 microsiemens June 5, but may have been lower during periods of missing record.

WATER TEMPERATURE: Maximum observed, 17.2°C May 24, June 8, 17, but may have been higher during missing period in the summer; minimum recorded, 3.5°C Feb. 24, 25.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	377	365	371	---	---	---	381	379	380	375	369	373
2	371	363	367	---	---	---	381	379	380	374	371	372
3	---	---	---	---	---	---	381	379	381	376	372	374
4	---	---	---	---	---	---	381	379	380	377	373	375
5	---	---	---	---	---	---	382	380	381	376	373	375
6	---	---	---	---	---	---	382	381	382	376	374	376
7	---	---	---	382	377	381	382	380	381	376	373	375
8	---	---	---	386	382	384	382	380	381	376	374	375
9	---	---	---	386	380	384	382	379	381	375	372	374
10	---	---	---	386	380	384	381	378	380	374	371	373
11	---	---	---	386	379	383	380	378	379	375	372	374
12	---	---	---	386	381	383	382	379	380	374	370	372
13	---	---	---	384	378	382	382	379	381	375	373	374
14	---	---	---	384	378	382	382	377	379	374	371	373
15	---	---	---	383	376	381	382	380	381	374	371	---
16	---	---	---	383	378	381	381	377	379	374	372	373
17	---	---	---	383	377	381	382	379	381	374	372	374
18	---	---	---	383	377	381	382	379	381	374	372	373
19	---	---	---	383	380	382	381	373	377	374	372	373
20	---	---	---	383	378	382	376	373	375	374	372	373
21	---	---	---	384	374	381	376	373	375	374	365	369
22	---	---	---	384	381	383	376	374	376	372	365	368
23	---	---	---	384	380	382	376	373	375	373	368	371
24	---	---	---	382	378	380	375	372	374	373	370	372
25	---	---	---	381	376	379	375	373	374	374	371	373
26	---	---	---	381	377	379	375	373	374	374	371	373
27	---	---	---	381	377	379	375	372	373	375	371	373
28	---	---	---	381	377	379	376	373	374	373	369	371
29	---	---	---	381	376	379	374	368	371	372	368	370
30	---	---	---	381	377	380	374	370	373	371	368	370
31	---	---	---	---	---	---	375	370	372	370	366	368
MONTH	377	363	369	386	374	381	382	368	378	377	365	373





## CRAB CREEK BASIN

12464770 CRAB CREEK AT ROCKY FORD ROAD, NEAR RITZVILLE, WA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.5	8.0	9.9	---	---	---	7.3	7.0	7.2	8.1	7.1	7.5
2	11.7	7.4	9.7	---	---	---	7.6	7.0	7.3	9.3	7.8	8.6
3	11.3	9.9	10.6	---	---	---	8.0	7.6	7.8	9.3	8.3	9.0
4	---	---	---	---	---	---	8.1	7.5	7.8	9.4	8.8	9.1
5	---	---	---	---	---	---	8.5	7.9	8.2	9.2	8.0	8.6
6	---	---	---	8.6	---	---	8.7	8.4	8.5	8.5	7.4	7.9
7	---	---	---	9.4	7.9	8.6	8.7	8.3	8.5	8.3	7.2	7.8
8	---	---	---	9.9	8.8	9.3	8.6	8.2	8.4	8.4	8.0	8.2
9	---	---	---	9.4	8.0	8.6	8.2	7.7	8.0	8.2	7.0	7.6
10	---	---	---	9.7	7.9	8.7	8.3	7.5	7.9	8.0	6.5	7.3
11	---	---	---	9.2	7.1	8.2	8.1	6.9	7.5	8.7	7.9	8.3
12	---	---	---	9.4	8.4	8.9	9.1	8.0	8.6	9.4	8.6	9.0
13	---	---	---	9.7	8.2	8.9	9.5	8.8	9.1	9.2	8.7	8.9
14	---	---	---	10.0	8.4	9.1	9.8	9.1	9.4	9.2	8.8	9.0
15	---	---	---	9.0	7.4	8.2	9.7	8.8	9.2	9.2	8.4	8.8
16	---	---	---	8.9	7.5	8.2	9.3	8.0	8.7	8.8	8.1	8.5
17	---	---	---	9.0	7.4	8.1	8.0	6.9	7.5	8.8	8.3	8.4
18	---	---	---	9.2	7.8	8.4	8.3	7.5	7.9	8.5	8.2	8.3
19	---	---	---	10.1	8.9	9.5	7.7	6.4	7.0	8.5	8.1	8.3
20	---	---	---	10.4	8.9	9.7	7.8	6.4	7.0	8.4	8.0	8.2
21	---	---	---	10.4	8.7	9.5	7.3	6.0	6.7	8.1	7.2	7.7
22	---	---	---	10.2	9.7	9.9	8.2	7.3	7.8	8.3	7.5	8.0
23	---	---	---	10.0	8.1	9.5	8.6	7.1	7.9	9.2	7.8	8.4
24	---	---	---	8.2	6.6	7.3	7.4	6.3	6.9	9.4	7.9	8.6
25	---	---	---	7.6	5.6	6.6	8.2	7.2	7.7	9.4	8.4	8.9
26	---	---	---	7.8	6.2	7.0	8.5	7.7	8.1	10.9	9.4	10.0
27	---	---	---	7.6	5.9	6.7	8.5	7.9	8.1	9.8	8.7	9.2
28	---	---	---	7.6	5.8	6.7	8.3	7.8	8.0	8.7	7.7	8.2
29	---	---	---	7.4	5.9	6.7	8.0	7.1	7.5	8.4	7.5	8.0
30	---	---	---	7.4	6.5	7.0	8.3	6.9	7.7	9.4	8.3	8.8
31	---	---	---	---	---	---	8.8	7.3	8.2	9.7	9.1	9.3
MONTH	11.7	7.4	10.1	10.4	5.6	8.3	9.8	6.0	7.9	10.9	6.5	8.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.2	7.8	8.6	8.0	5.7	6.8	10.6	8.0	9.3	12.6	9.3	11.0
2	8.2	6.3	7.4	7.3	5.6	6.5	9.7	7.7	8.7	14.8	9.4	12.1
3	8.1	7.1	7.7	8.7	5.9	7.2	9.2	6.2	7.7	12.8	9.2	11.1
4	7.7	6.1	7.0	8.6	6.1	7.4	10.2	5.8	7.9	11.8	9.2	10.6
5	8.0	6.4	7.0	7.7	6.1	6.8	9.0	6.2	7.6	13.0	8.5	10.7
6	7.5	5.3	6.5	7.4	5.2	6.4	10.4	6.2	7.9	11.3	7.8	9.7
7	7.6	5.3	6.5	7.6	5.7	6.5	11.2	6.8	8.9	12.2	7.2	9.8
8	7.8	6.0	6.9	7.8	5.1	6.5	13.5	8.4	10.8	12.4	8.0	10.4
9	7.7	5.6	6.7	9.1	6.7	7.9	12.9	9.2	10.9	13.5	8.9	11.2
10	7.8	5.5	6.7	9.6	7.0	8.4	13.6	8.6	10.9	14.4	8.9	11.8
11	7.9	5.4	6.8	8.8	7.4	8.3	12.7	9.9	11.2	14.1	9.4	12.1
12	8.1	5.7	7.0	9.0	7.7	8.3	11.4	8.7	9.9	13.8	10.5	12.2
13	8.0	6.2	7.1	10.0	8.5	9.2	13.0	9.2	10.9	15.2	9.6	12.5
14	8.1	7.0	7.4	10.3	8.3	9.3	11.2	8.7	9.6	14.7	10.3	12.7
15	8.5	6.4	7.5	9.4	8.3	8.9	12.4	7.3	9.7	13.5	10.1	11.9
16	8.6	7.7	8.1	10.6	7.6	9.1	11.4	7.6	9.5	13.2	8.3	10.7
17	8.8	6.7	7.7	10.5	6.5	8.5	11.4	8.3	9.7	11.6	8.4	10.1
18	8.1	6.9	7.5	10.3	6.1	8.3	12.6	7.2	9.8	11.8	8.3	10.1
19	8.4	6.3	7.3	10.6	6.3	8.5	12.5	7.3	9.9	13.6	8.2	11.0
20	8.0	7.0	7.4	10.8	8.1	9.4	13.7	7.7	10.7	12.3	9.7	11.2
21	8.6	6.5	7.6	9.5	7.7	8.7	14.5	9.3	11.8	12.8	10.1	11.5
22	8.2	6.3	7.4	9.7	7.9	8.9	13.4	10.4	12.0	13.6	10.3	12.1
23	7.1	4.8	5.9	10.3	6.2	8.2	13.7	9.4	11.5	15.3	10.8	13.2
24	6.3	3.5	4.9	10.3	5.9	8.2	11.6	9.3	10.1	17.2	11.5	14.4
25	6.9	3.5	5.3	9.2	7.2	8.2	12.0	8.0	9.8	15.6	12.4	13.4
26	7.5	4.2	5.8	10.0	7.3	8.5	11.0	8.4	9.6	15.2	11.0	13.1
27	8.0	5.1	6.5	10.7	6.4	8.4	12.8	7.6	10.2	16.6	11.6	14.3
28	7.0	5.4	6.2	10.7	6.3	8.5	13.6	8.0	10.8	17.0	12.8	14.9
29	---	---	---	11.6	7.3	9.4	12.4	9.3	10.8	16.5	11.8	14.3
30	---	---	---	11.4	8.2	9.8	12.3	9.0	10.7	14.9	12.1	12.9
31	---	---	---	11.7	9.3	10.3	---	---	---	15.8	11.4	13.3
MONTH	9.2	3.5	6.9	11.7	5.1	8.2	14.5	5.8	10.0	17.2	7.2	11.9

12464770 CRAB CREEK AT ROCKY FORD ROAD, NEAR RITZVILLE, WA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	JUNE			JULY			AUGUST			SEPTEMBER		
										MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	15.0	11.4	13.3	---	---	---	---	---	---	---	15.6	10.8	13.3								
2	15.6	11.3	13.5	---	---	---	---	---	---	---	15.7	10.8	13.3								
3	15.8	11.1	13.5	---	---	---	---	---	---	---	15.5	10.9	13.3								
4	16.1	11.3	13.7	---	---	---	---	---	---	---	15.7	11.5	13.6								
5	16.3	11.6	14.0	---	---	---	---	---	---	---	15.8	11.3	13.6								
6	16.8	12.1	14.5	---	---	---	---	---	---	---	15.5	11.4	13.4								
7	17.0	12.3	14.6	---	---	---	---	---	---	---	14.6	12.0	13.4								
8	17.2	12.6	14.9	---	---	---	---	---	---	---	13.3	11.2	11.9								
9	16.2	13.2	14.6	---	---	---	---	---	---	---	13.2	10.0	11.7								
10	16.1	12.4	14.1	---	---	---	---	---	---	---	13.9	10.2	12.2								
11	15.7	11.5	13.6	---	---	---	---	---	---	---	14.0	11.7	12.9								
12	16.6	11.2	13.9	---	---	---	16.4	---	---	---	14.0	10.6	12.3								
13	15.9	12.6	14.2	---	---	---	16.2	11.1	13.8	---	14.0	9.4	11.7								
14	16.2	12.0	13.9	---	---	---	16.7	11.2	14.0	---	13.7	9.8	11.9								
15	16.2	11.3	13.7	---	---	---	16.1	12.2	14.3	---	13.0	10.4	12.0								
16	16.6	11.2	13.9	---	---	---	15.3	12.7	14.2	---	12.2	9.3	10.9								
17	17.2	11.9	14.5	---	---	---	16.4	11.4	13.9	---	13.0	9.3	11.2								
18	16.1	12.8	14.5	---	---	---	16.8	11.4	14.2	---	13.0	9.2	11.2								
19	16.6	12.7	14.5	---	---	---	16.7	11.9	14.4	---	14.3	10.6	12.3								
20	14.0	11.2	12.4	---	---	---	15.5	11.4	13.6	---	13.5	9.5	11.6								
21	12.5	10.0	11.4	---	---	---	15.6	10.9	13.4	---	13.4	9.2	11.4								
22	14.0	9.8	11.9	---	---	---	14.2	12.3	12.8	---	13.9	9.4	11.7								
23	14.9	10.2	12.6	---	---	---	15.9	11.4	13.4	---	14.1	10.1	12.1								
24	---	10.8	---	---	---	---	15.6	10.8	13.2	---	14.2	10.1	12.2								
25	---	---	---	---	---	---	16.1	11.2	13.7	---	15.1	11.6	13.2								
26	---	---	---	---	---	---	16.0	11.4	13.8	---	14.5	10.9	12.8								
27	---	---	---	---	---	---	15.9	11.7	13.8	---	14.3	10.3	12.3								
28	---	---	---	---	---	---	15.6	10.8	13.3	---	14.4	10.5	12.5								
29	---	---	---	---	---	---	15.7	11.0	13.4	---	14.2	10.9	12.5								
30	---	---	---	---	---	---	15.2	10.6	13.0	---	13.8	10.4	12.1								
31	---	---	---	---	---	---	15.5	10.6	13.1	---	---	---	---								
MONTH	17.2	9.8	13.7	---	---	---	16.8	10.6	13.6	---	15.8	9.2	12.3								
YEAR	17.2	3.5	10.0																		

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

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 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)	Chloride, water, fltrd, mg/L (00940)
OCT 01...	1150	12	724	12.6	118	8.1	378	21.1	10.0	155	188	1	12.5
NOV 06...	1010	12	720	11.8	104	8.1	383	9.9	7.2	152	183	0.0	13.6
DEC 01...	1210	14	723	10.7	93	7.9	387	2.1	7.2	151	183	0.0	13.8
JAN 06...	1240	21	731	11.3	100	8.3	372	5.7	8.2	143	173	0.0	12.9
FEB 04...	0950	57	722	12.1	104	8.2	367	5.1	6.4	143	173	1	11.7
MAR 04...	1150	50	715	12.2	108	8.3	373	9.8	7.4	144	174	1	12.8
APR 01...	1330	55	709	12.8	122	8.6	363	13.9	10.1	149	177	2	10.6
MAY 06...	1330	45	716	13.2	124	8.7	366	8.1	9.9	152	175	5	12.3
JUN 02...	1250	29	722	13.0	135	8.9	369	24.2	14.6	154	178	5	11.8
30...	1320	18	719	14.5	155	8.7	379	23.6	15.6	150	178	3	12.2
AUG 04...	1130	12	721	10.3	104	8.1	388	26.6	13.2	156	188	1	13.1
SEP 02...	1030	11	721	9.0	89	8.1	392	23.3	12.0	155	188	1	12.8





12464770 CRAB CREEK AT ROCKY FORD ROAD, NEAR RITZVILLE, WA—Continued

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

Date	Phorate water fltrd 0.7u GF (82664)	Promet- on, water, fltrd, ug/L (04037)	Pron- amide, 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)	Tri- flur- alin, water, fltrd 0.7u GF (82661)
OCT 01...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 01...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 06...	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
FEB 04...	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
MAR 04...	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
APR 01...	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	E.003
MAY 06...	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	0.003	<0.009
JUN 02...	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
JUN 30...	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
AUG 04...	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
SEP 02...	--	--	--	--	--	--	--	--	--	--	--	--	--

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

Date	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment load, tons/d (80155)
OCT 01...	1	0.03
NOV 06...	1	0.03
DEC 01...	3	0.11
JAN 06...	2	0.11
FEB 04...	7	1.1
MAR 04...	3	0.41
APR 01...	2	0.30
MAY 06...	1	0.12
JUN 02...	1	0.08
JUN 30...	2	0.10
AUG 04...	6	0.19
SEP 02...	2	0.06

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

Date	Time	Biomass peri- phyton biomass ashfree drymass g/m2 (49954)	Peri- phyton biomass ash weight, g/m2 (00572)	Peri- phyton biomass dry weight, g/m2 (00573)	Biomass chloro- phyll ratio, peri- phyton, number (70950)	Pheo- phytin a, peri- phyton, mg/m2 (62359)	Chloro- phyll a peri- phyton, chromo- fluoro, mg/m2 (70957)
SEP 10...	1000	59.4	960	1,019	207	140	287
SEP 10...	1020	121.3	2,000	2,113	1,430	120	84.5

12464800 COAL CREEK AT MOHLER, WA

LOCATION.--Lat 47°24'25", long 118°19'04", in SE ¼ SE ¼ sec.7, T.22 N., R.36 E., Lincoln County, on left bank 25 ft upstream from bridge on county road, 0.3 mi east of Mohler, and 15 mi upstream from mouth.

DRAINAGE AREA.--64.7 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1963 to September 1974, October 2002 to September 2003.

GAGE.--Water-stage recorder. Elevation of gage is 2,000 ft above NGVD of 1929, from topographic map.

REMARKS.--Records poor. No known regulation. Some diversion for irrigation above station.

AVERAGE DISCHARGE.--12 years (water years 1964-74, 2003), 4.18 ft<sup>3</sup>/s, 3,030 acre-ft yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 698 ft<sup>3</sup>/s Jan. 16, 1971, gage height, 3.28 ft; no flow for long periods most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 3, 1963, reached a stage of 4.42 ft, discharge, 1,060 ft<sup>3</sup>/s, by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14 ft<sup>3</sup>/s Feb. 1, gage height, 1.36 ft; maximum gage height 1.59 ft Feb. 24, backwater from ice; minimum daily discharge, 0.18 ft<sup>3</sup>/s Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.30	e0.28	e0.60	1.7	13	7.7	e7.6	4.3	e1.6	e0.31	e0.21	e0.20
2	e0.30	e0.28	e0.62	1.9	13	7.7	e7.4	4.3	e1.5	e0.31	e0.21	e0.21
3	e0.30	e0.28	e0.62	2.2	13	7.8	e7.6	4.2	e1.4	e0.32	e0.20	e0.21
4	e0.32	e0.29	e0.64	2.2	e12	8.0	e7.8	3.9	e1.3	e0.32	e0.20	e0.21
5	e0.32	e0.30	e0.66	2.5	e12	8.0	e8.0	3.9	e1.2	e0.32	e0.20	e0.21
6	e0.30	e0.30	e0.68	2.3	e11	8.0	e8.0	3.7	e1.1	e0.32	e0.20	e0.20
7	e0.30	e0.30	e0.70	2.5	e10	8.0	e7.8	3.4	e1.0	e0.33	e0.20	e0.20
8	e0.30	e0.31	e0.72	2.5	e10	7.8	e7.6	3.4	e0.95	e0.33	e0.20	e0.22
9	e0.30	e0.32	e0.74	2.2	e10	7.7	e7.8	3.3	e0.90	e0.33	e0.20	e0.22
10	e0.32	e0.32	e0.76	2.2	e9.6	7.8	e7.8	3.2	e0.90	e0.33	e0.20	e0.22
11	e0.32	e0.32	e0.78	2.1	e9.2	8.0	e7.6	3.0	e0.90	e0.33	e0.20	e0.22
12	e0.30	e0.33	e0.80	3.6	e9.0	8.0	e8.0	3.0	e0.80	e0.34	e0.20	e0.22
13	e0.29	e0.35	e0.80	4.2	e8.6	8.4	e8.2	3.0	e0.70	e0.34	e0.20	e0.22
14	e0.29	e0.35	e0.82	5.0	8.3	8.7	e8.0	2.8	e0.60	e0.33	e0.20	e0.22
15	e0.29	e0.37	e0.84	5.1	8.3	8.3	e8.0	2.6	e0.55	e0.32	e0.20	e0.22
16	e0.29	e0.39	e0.86	4.8	8.9	9.1	e8.0	2.4	e0.52	e0.30	e0.20	e0.22
17	e0.29	e0.40	e0.88	4.6	10	7.7	e8.0	2.3	e0.47	e0.29	e0.19	e0.22
18	e0.29	e0.40	e0.92	4.7	10	e8.0	e7.0	2.4	e0.45	e0.28	e0.19	e0.22
19	e0.30	e0.40	0.95	5.2	9.9	e8.0	e6.4	2.4	e0.43	e0.28	e0.19	e0.22
20	e0.30	e0.42	0.95	4.9	9.5	e7.6	e6.0	2.3	e0.40	e0.27	e0.19	e0.22
21	e0.30	e0.43	0.93	5.2	9.3	e7.6	e5.6	2.3	e0.36	e0.26	e0.19	e0.22
22	e0.30	e0.45	0.98	5.3	9.1	e7.8	e5.0	2.1	e0.33	e0.25	e0.20	e0.22
23	e0.29	e0.49	1.1	5.9	8.9	e8.0	e5.0	2.0	e0.32	e0.25	e0.20	e0.22
24	e0.29	e0.50	1.1	6.5	e7.0	e7.8	e5.0	1.8	e0.32	e0.25	e0.20	e0.22
25	e0.30	e0.52	1.1	6.8	e7.0	e7.6	e4.8	1.5	e0.30	e0.24	e0.20	e0.22
26	e0.32	e0.52	1.2	7.3	7.7	e8.0	e4.5	1.5	e0.30	e0.24	e0.19	e0.22
27	e0.32	e0.54	1.2	8.7	7.6	e8.0	e4.5	1.5	e0.30	e0.23	e0.19	e0.22
28	e0.30	e0.56	1.1	9.5	7.7	e7.6	e4.5	1.6	e0.30	e0.23	e0.19	e0.22
29	e0.30	e0.56	1.3	9.7	---	e7.6	e4.3	1.6	e0.30	e0.23	e0.19	e0.22
30	e0.29	e0.58	1.3	10	---	e7.8	4.3	1.5	e0.31	e0.22	e0.19	e0.18
31	e0.28	---	1.5	11	---	e7.6	---	1.6	---	e0.22	e0.20	---
TOTAL	9.31	11.86	28.15	152.3	269.6	245.7	200.1	82.8	20.81	8.92	6.12	6.46
MEAN	0.30	0.40	0.91	4.91	9.63	7.93	6.67	2.67	0.69	0.29	0.20	0.22
MAX	0.32	0.58	1.5	11	13	9.1	8.2	4.3	1.6	0.34	0.21	0.22
MIN	0.28	0.28	0.60	1.7	7.0	7.6	4.3	1.5	0.30	0.22	0.19	0.18
AC-FT	18	24	56	302	535	487	397	164	41	18	12	13
CFSM	0.00	0.01	0.01	0.08	0.15	0.12	0.10	0.04	0.01	0.00	0.00	0.00
IN.	0.01	0.01	0.02	0.09	0.16	0.14	0.12	0.05	0.01	0.01	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2003, BY WATER YEAR (WY)

MEAN	0.098	0.21	2.36	13.3	11.4	15.9	4.83	1.63	0.49	0.14	0.034	0.052
MAX	0.30	0.45	16.1	46.3	42.0	102	14.8	3.71	0.73	0.29	0.20	0.22
(WY)	(2003)	(1966)	(1974)	(1971)	(1970)	(1969)	(1969)	(1969)	(1967)	(2003)	(2003)	(2003)
MIN	0.000	0.030	0.19	0.000	1.16	3.45	1.15	0.42	0.080	0.000	0.000	0.000
(WY)	(1964)	(1964)	(1964)	(1969)	(1964)	(1973)	(1973)	(1973)	(1963)	(1963)	(1963)	(1963)

SUMMARY STATISTICS

FOR 2003 WATER YEAR

WATER YEARS 1963 - 2003

ANNUAL TOTAL	1042.13	
ANNUAL MEAN	2.86	4.18
HIGHEST ANNUAL MEAN		10.9
LOWEST ANNUAL MEAN		0.93
HIGHEST DAILY MEAN	13 Feb 1	419 Mar 18, 1969
LOWEST DAILY MEAN	0.18 Sep 30	0.00 Jun 19, 1963
ANNUAL SEVEN-DAY MINIMUM	0.19 Aug 15	0.00 Jun 19, 1963
ANNUAL RUNOFF (AC-FT)	2070	3,030
ANNUAL RUNOFF (CFSM)	0.044	0.065
ANNUAL RUNOFF (INCHES)	0.60	0.88
10 PERCENT EXCEEDS	8.0	8.0
50 PERCENT EXCEEDS	0.80	0.35
90 PERCENT EXCEEDS	0.21	0.00

e Estimated

## CRAB CREEK BASIN

## 12465000 CRAB CREEK AT IRBY, WA

LOCATION.--Lat 47°21'38", long 118°50'56", in NW ¼ NW ¼ sec.31, T.22 N., R.32 E., Lincoln County, Hydrologic Unit 17020013, on right bank 8 ft upstream from highway bridge at Irby, 5.4 mi downstream from Lake Creek, 7.5 mi west of Odessa, and at mile 111.5.

DRAINAGE AREA.--1,042 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1942 to current year.

REVISED RECORDS.--WSP 1446: 1949-51. WSP 1933: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,386.30 ft above NGVD of 1929. Gage moved to left bank and established at same datum on Sept. 29.

REMARKS.--Records good except for estimated daily discharges, which are fair. Pumpage from ground-water wells for irrigation has been on the increase upstream from station since 1964. U.S. Geological Survey satellite telemeter at station. Some diversions for irrigation upstream from station. No regulation.

AVERAGE DISCHARGE.--61 years (water years 1943-2003), 65.5 ft<sup>3</sup>/s, 47,450 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,370 ft<sup>3</sup>/s Feb. 27, 1957, gage height, 11.94 ft; no flow several days during 1969, 1977, 1978, 1979, 1980, 1989, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
unknown	unknown	unknown	unknown	No other peak greater than base discharge.			

Minimum discharge, 1.1 ft<sup>3</sup>/s part of each day Dec. 9 and 19-23.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	e4.3	1.4	2.3	5.1	45	e51	45	22	e14	e10	e5.0
2	2.0	e4.2	1.4	2.6	5.1	45	e54	45	21	e14	e10	e5.0
3	2.1	e4.0	1.4	2.4	5.6	45	e54	42	20	e14	e9.0	e5.0
4	2.4	3.2	1.4	2.3	8.4	44	e56	41	e19	e14	e9.0	e5.0
5	2.4	3.1	1.4	2.3	12	43	e56	40	e19	e14	e9.0	e5.0
6	2.4	3.3	1.4	2.3	15	43	e58	40	e19	e14	e9.0	e5.0
7	2.3	3.0	1.4	2.3	18	44	e56	41	e19	e14	e9.0	e5.0
8	2.5	4.0	1.4	2.3	20	46	e55	40	e19	e14	e9.0	e5.0
9	2.7	2.2	1.3	2.3	22	47	e55	39	e20	e14	e8.0	e5.0
10	2.8	2.0	1.4	2.3	23	46	e55	37	e20	e13	e8.0	e5.0
11	2.8	1.9	1.5	2.4	24	45	e54	36	e20	e13	e8.0	e4.0
12	3.0	2.0	1.7	3.4	25	46	e55	35	e19	e13	e7.0	e4.0
13	3.1	1.8	1.4	2.9	26	48	e56	33	e19	e13	e7.0	e4.0
14	3.1	1.6	2.0	2.7	28	49	e57	30	e19	e13	e7.0	e4.0
15	3.1	1.6	1.6	2.7	29	50	e56	28	e18	e12	e6.0	e4.0
16	3.2	1.5	1.4	2.7	33	50	e57	29	e17	e12	e6.0	e4.0
17	3.2	1.5	1.4	2.7	31	49	e58	30	e17	e12	e6.0	e4.0
18	3.1	1.6	1.4	2.7	32	49	e59	29	e17	e12	e6.0	e4.0
19	3.4	1.6	1.3	2.7	34	49	e58	28	e17	e12	e5.0	e4.0
20	3.5	1.6	1.2	2.7	35	50	e57	27	e17	e12	e5.0	e4.0
21	3.5	1.6	1.2	3.3	35	50	e57	27	e17	e12	e5.0	e3.0
22	3.9	1.6	1.4	3.7	36	53	e56	27	e16	e11	e5.0	e3.0
23	5.0	1.5	1.2	3.7	e36	53	53	26	e16	e11	e5.0	e3.0
24	5.5	1.5	1.4	3.4	e32	52	55	27	e15	e11	e5.0	e3.0
25	5.8	1.4	1.4	3.3	e32	52	55	27	e14	e11	e5.0	e3.0
26	5.0	1.6	1.4	3.6	e40	e54	53	25	e14	e10	e5.0	e3.0
27	5.1	1.4	1.8	3.6	44	e55	53	23	e14	e10	e5.0	e3.0
28	4.7	1.4	1.7	3.6	44	e55	50	23	e14	e10	e5.0	e3.0
29	4.8	1.4	1.9	4.0	---	e56	48	23	e14	e10	e5.0	e3.0
30	e4.7	1.4	2.0	4.4	---	e52	46	23	e14	e10	e5.0	e3.0
31	e4.4	---	2.8	5.5	---	e51	---	21	---	e10	e5.0	---
TOTAL	107.4	64.8	47.0	93.1	730.2	1,516	1,643	987	526	379	208.0	120.0
MEAN	3.46	2.16	1.52	3.00	26.1	48.9	54.8	31.8	17.5	12.2	6.71	4.00
MAX	5.8	4.3	2.8	5.5	44	56	59	45	22	14	10	5.0
MIN	1.9	1.4	1.2	2.3	5.1	43	46	21	14	10	5.0	3.0
AC-FT	213	129	93	185	1,450	3,010	3,260	1,960	1,040	752	413	238

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2003, BY WATER YEAR (WY)

	7.65	7.94	18.4	107	223	202	103	49.6	35.4	20.1	12.7	8.84
MEAN	7.65	7.94	18.4	107	223	202	103	49.6	35.4	20.1	12.7	8.84
MAX	34.7	47.8	295	1,163	744	1,141	441	189	451	109	61.2	41.9
(WY)	(1949)	(1998)	(1956)	(1956)	(1949)	(1956)	(1969)	(1997)	(1948)	(1948)	(1948)	(1948)
MIN	0.33	0.58	0.27	0.26	0.63	4.26	8.61	5.46	3.06	1.49	0.54	0.27
(WY)	(1993)	(1993)	(1993)	(1993)	(1992)	(1992)	(1992)	(1990)	(1992)	(1990)	(1992)	(1992)

SUMMARY STATISTICS

	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1942 - 2003
ANNUAL TOTAL	10,411.6	6,421.5	
ANNUAL MEAN	28.5	17.6	65.5
HIGHEST ANNUAL MEAN			299
LOWEST ANNUAL MEAN			2.73
HIGHEST DAILY MEAN	138	59	7,470
LOWEST DAILY MEAN	1.2	1.2	0.00
ANNUAL SEVEN-DAY MINIMUM	1.3	1.3	0.00
ANNUAL RUNOFF (AC-FT)	20,650	12,740	47,450
10 PERCENT EXCEEDS	79	51	145
50 PERCENT EXCEEDS	11	9.0	17
90 PERCENT EXCEEDS	1.6	1.6	2.7

e Estimated

12465400 WILSON CREEK BELOW CORBETT DRAW, NEAR ALMIRA, WA

LOCATION.--Lat 47°39'47", long 118°55'46", in SW 1/4 NW 1/4 sec.16, T.25 N., R.31 E., Lincoln County, Hydrologic Unit 17020013, on left bank, 65 feet downstream from Corbett Draw, 3.5 mi south of Almira, and at mile 22.9.

DRAINAGE AREA.--327 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1969 to June 1971, 1972 to 1979 (annual peaks only), April 1991 to September 1994, October 2002 to September 2003.

GAGE.--Water-stage recorder. Datum/Elevation of gage is 1,670 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair, except for estimated daily discharge, which are poor. No regulation. Suspended Sediment data are available from district office.

AVERAGE DISCHARGE.--5 years (water years 1970, 1992-94, 2003), 9.26 ft<sup>3</sup>/s, 6,710 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,220 ft<sup>3</sup>/s Jan. 16, 1973, gage height, 7.68 ft; minimum discharge, 0.08 ft<sup>3</sup>/s May 30, June 16, 17, 19, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12.1 ft<sup>3</sup>/s, occurred sometime during the period Apr. 17-19, gage height 3.96 ft, from peak stage indicator; minimum discharge 0.59 ft<sup>3</sup>/s, Aug. 20 and 21.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.0	e2.5	0.99	1.3	2.7	4.5	9.0	e10	7.5	6.9	1.0	1.5
2	e1.1	e2.3	0.99	1.3	2.7	4.3	8.9	e10	7.4	6.9	1.1	1.7
3	e1.1	e1.9	0.99	1.3	2.7	4.5	9.2	e10	7.1	6.7	1.7	1.7
4	e1.2	e1.5	0.99	1.3	2.9	4.6	9.3	e10	7.1	6.4	2.3	1.7
5	e1.3	e1.4	0.99	1.4	2.9	4.8	9.6	e10	7.2	6.5	1.2	1.7
6	e1.3	e1.4	0.99	1.4	2.9	4.9	9.8	e10	7.4	6.7	1.2	1.9
7	e1.2	e1.3	0.99	1.4	2.9	4.9	9.6	e10	7.3	6.7	1.3	2.1
8	e1.3	e1.2	0.99	1.4	2.7	4.9	e10	e10	7.4	6.6	1.1	2.4
9	e1.4	1.1	0.99	1.3	2.7	4.9	e10	e10	7.5	6.4	1.0	2.3
10	e1.4	1.1	0.99	1.3	2.8	4.8	e10	e10	7.6	6.0	1.4	1.9
11	e1.4	1.1	0.99	1.3	2.9	4.6	e10	e9.0	7.6	4.9	1.5	1.4
12	e1.5	1.1	0.99	1.4	3.1	4.6	e10	e9.0	7.6	4.5	1.4	1.3
13	e1.6	0.99	1.0	1.4	3.2	4.9	e11	e9.0	7.6	4.6	1.3	1.3
14	e1.6	0.99	1.3	1.4	3.2	5.1	e11	e9.0	7.6	4.3	1.2	1.3
15	e1.6	0.99	1.2	1.4	3.2	5.5	e11	e9.0	7.6	4.1	1.1	1.2
16	e1.6	0.99	1.3	1.4	4.5	5.6	e11	e9.0	7.5	3.7	1.2	1.1
17	e1.6	0.99	1.1	1.4	4.3	6.0	e12	e9.0	7.1	3.5	1.3	0.99
18	e1.6	0.99	1.1	1.3	4.3	6.9	e12	e9.0	7.1	3.4	1.1	0.99
19	e1.7	0.97	1.1	1.3	4.3	7.2	e12	e9.0	7.1	3.2	0.77	1.1
20	e1.7	0.88	1.1	1.3	4.2	7.1	e11	e9.0	7.1	3.1	0.65	1.1
21	e1.8	0.88	1.1	1.3	4.2	7.4	e11	e9.0	7.4	3.0	1.1	1.0
22	e1.9	0.88	1.1	1.3	4.3	7.8	e11	8.5	7.6	2.5	1.4	1.0
23	e2.2	0.88	1.0	1.3	4.5	8.2	e11	8.2	7.6	2.5	1.4	0.99
24	e2.4	0.88	0.99	1.3	4.6	8.0	e11	7.7	7.1	2.3	1.3	0.99
25	e2.5	0.88	0.99	1.3	4.3	8.0	e11	7.7	7.1	2.2	1.2	0.99
26	e2.3	0.88	1.1	1.4	4.4	8.5	e11	7.8	7.0	2.1	1.1	0.95
27	e2.2	0.88	1.2	1.4	4.6	8.7	e11	7.5	6.8	2.1	1.2	0.99
28	e2.2	0.93	1.1	1.5	4.6	8.5	e11	7.5	6.7	2.4	1.3	0.98
29	e2.1	0.99	0.99	1.6	---	8.5	e10	7.5	6.8	2.7	1.3	0.99
30	e2.3	0.99	1.0	1.8	---	8.5	e10	7.5	6.9	2.3	1.5	1.0
31	e2.5	---	1.3	2.7	---	8.5	---	7.6	---	1.3	1.5	---
TOTAL	52.6	34.76	32.95	43.9	100.6	195.2	314.4	276.5	218.4	130.5	39.12	40.56
MEAN	1.70	1.16	1.06	1.42	3.59	6.30	10.5	8.92	7.28	4.21	1.26	1.35
MAX	2.5	2.5	1.3	2.7	4.6	8.7	12	10	7.6	6.9	2.3	2.4
MIN	1.0	0.88	0.99	1.3	2.7	4.3	8.9	7.5	6.7	1.3	0.65	0.95
AC-FT	104	69	65	87	200	387	624	548	433	259	78	80

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2003, BY WATER YEAR (WY)

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003			
MEAN	1.37	2.01	2.90	15.9	32.9	62.6	26.0	9.53	4.66	11.4	1.96	0.94																										
MAX	2.05	3.62	6.12	39.9	157	254	82.9	24.7	8.98	64.0	4.32	1.82																										
(WY)	(1994)	(1971)	(1994)	(1970)	(1970)	(1969)	(1969)	(1969)	(1969)	(1993)	(1993)	(1970)																										
MIN	0.36	0.43	0.32	0.33	0.51	0.62	0.71	0.24	0.30	0.80	0.34	0.30																										
(WY)	(1993)	(1993)	(1993)	(1993)	(1993)	(1992)	(1992)	(1992)	(1992)	(1994)	(1992)	(1992)																										

SUMMARY STATISTICS

ANNUAL TOTAL  
ANNUAL MEAN  
HIGHEST ANNUAL MEAN  
LOWEST ANNUAL MEAN  
HIGHEST DAILY MEAN  
LOWEST DAILY MEAN  
ANNUAL SEVEN-DAY MINIMUM  
ANNUAL RUNOFF (AC-FT)  
10 PERCENT EXCEEDS  
50 PERCENT EXCEEDS  
90 PERCENT EXCEEDS

FOR 2003 WATER YEAR

79.49  
4.05  
  
  
12 Apr 17  
0.65 Aug 20  
0.88 Nov 20  
2930  
9.4  
2.3  
0.99

WATER YEARS 1969 - 2003

9.26  
26.8 1970  
0.57 1992  
1,400 Feb 16, 1970  
0.00 Mar 13, 2002  
0.13 May 18, 1991  
6,710  
13  
1.5  
0.34

e Estimated



CRAB CREEK BASIN

12467000 CRAB CREEK NEAR MOSES LAKE, WA

LOCATION.--Lat 47°11'22", long 119°15'53", in NW ¼ NE ¼ sec.35, T.20 N., R.28 E., Grant County, Hydrologic Unit 17020015, on left bank at downstream side of highway bridge, 3.0 mi upstream from Parker Horn, 4.0 mi north of town of Moses Lake, and at mile 63.0.

DRAINAGE AREA.--2,228 mi<sup>2</sup>, of which 219 mi<sup>2</sup> in the vicinity of Long Lake Reservoir is noncontributing.

PERIOD OF RECORD.--September 1942 to current year.

REVISED RECORDS.--WSP 1933: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,070.39 ft above NGVD of 1929 (Bureau of Reclamation datum). Prior to July 14, 1956, at site 300 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records fair. Numerous small diversions for irrigation and domestic use upstream from station. Most natural flow from upper basin passes this station underground. No known regulation. Since 1952, return flow from irrigation on Columbia Basin project has increased runoff during summer months. Bureau of Reclamation satellite telemeter at station.

AVERAGE DISCHARGE.--52 years (water years 1952-2003), 69.2 ft<sup>3</sup>/s, 50,140 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft<sup>3</sup>/s Feb. 28, 1957, gage height, 6.81 ft; no flow for several months each year prior to 1952 and part of each day Jan. 14, 15, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 57 ft<sup>3</sup>/s, Sept. 10, gage height, 3.02 ft; maximum gage height, 3.31 ft Oct.1; minimum discharge, 5.8 ft<sup>3</sup>/s, Apr. 4, 5.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	31	17	22	17	10	6.4	10	29	35	45	50
2	45	30	17	24	17	10	6.2	12	28	36	46	50
3	45	30	17	22	15	9.5	6.2	15	29	35	51	50
4	45	29	18	18	12	9.8	6.2	15	30	35	52	50
5	44	29	18	17	11	9.2	6.1	37	29	36	51	49
6	44	29	18	13	11	8.9	7.0	26	30	35	52	50
7	44	30	17	14	11	8.5	7.3	20	29	35	53	49
8	42	34	17	13	11	8.4	9.1	19	30	36	52	52
9	42	32	16	13	11	9.4	9.1	18	32	36	51	53
10	42	29	16	12	11	8.7	9.0	19	33	37	50	55
11	41	27	17	12	10	8.3	9.6	20	34	37	48	53
12	42	28	21	20	11	8.4	10	21	34	39	49	51
13	42	28	18	18	10	9.1	11	22	32	39	49	50
14	42	26	26	16	11	8.5	14	23	25	39	49	49
15	42	25	23	14	11	8.4	12	23	24	37	49	49
16	43	24	20	13	27	8.4	11	22	25	38	50	49
17	43	24	16	12	17	7.6	10	22	27	39	51	49
18	42	23	16	12	13	7.2	10	26	29	40	50	48
19	42	23	15	11	12	6.9	10	26	29	40	50	48
20	42	23	15	11	12	7.5	11	28	30	40	49	48
21	42	22	14	12	11	7.4	10	28	30	40	50	48
22	41	22	13	15	11	7.3	8.7	28	30	42	53	48
23	41	21	13	24	10	6.9	8.9	27	30	42	55	48
24	40	19	13	23	9.9	6.5	9.2	28	31	42	55	47
25	36	19	13	20	9.8	6.8	10	29	32	41	54	45
26	35	19	14	19	9.6	8.0	11	29	31	42	54	45
27	35	19	19	16	9.9	7.6	12	29	31	43	53	46
28	34	18	18	13	10	7.4	12	27	32	41	54	45
29	35	18	19	13	---	7.1	10	27	33	41	53	46
30	33	17	18	15	---	7.0	11	27	35	43	51	45
31	32	---	32	19	---	6.9	---	28	---	45	50	---
TOTAL	1,264	748	544	496	342.2	251.6	284.0	731	903	1,206	1,579	1,465
MEAN	40.8	24.9	17.5	16.0	12.2	8.12	9.47	23.6	30.1	38.9	50.9	48.8
MAX	46	34	32	24	27	10	14	37	35	45	55	55
MIN	32	17	13	11	9.6	6.5	6.1	10	24	35	45	45
AC-FT	2,510	1,480	1,080	984	679	499	563	1,450	1,790	2,390	3,130	2,910

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2003, BY WATER YEAR (WY)

	59.0	36.0	23.2	60.0	122	157	83.4	49.6	47.2	57.8	67.7	70.2
MEAN	59.0	36.0	23.2	60.0	122	157	83.4	49.6	47.2	57.8	67.7	70.2
MAX	111	68.9	43.8	779	490	1,012	582	222	163	113	130	136
(WY)	(1975)	(1974)	(1974)	(1959)	(1970)	(1956)	(1969)	(1997)	(1997)	(1974)	(1972)	(1971)
MIN	0.28	0.19	0.13	0.029	4.31	3.60	6.30	13.4	16.7	25.4	35.2	35.6
(WY)	(1952)	(1952)	(1952)	(1952)	(1953)	(1953)	(1964)	(1962)	(1960)	(1959)	(1957)	(1957)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1952 - 2003

ANNUAL TOTAL	9,732.0		9,813.8	
ANNUAL MEAN	26.7		26.9	
HIGHEST ANNUAL MEAN				69.2
LOWEST ANNUAL MEAN				183
HIGHEST DAILY MEAN	50	Aug 4	55	Aug 23
LOWEST DAILY MEAN	4.2	Apr 8	6.1	Apr 5
ANNUAL SEVEN-DAY MINIMUM	4.6	Apr 4	6.4	Mar 30
ANNUAL RUNOFF (AC-FT)	19,300		19,470	50,140
10 PERCENT EXCEEDS	46		49	117
50 PERCENT EXCEEDS	28		26	42
90 PERCENT EXCEEDS	7.7		9.1	13



## CRAB CREEK BASIN

## 12470000 SOAP LAKE NEAR SOAP LAKE, WA

LOCATION.--Lat 47°24'11", long 119°29'11", in NW ¼ SW ¼ sec.18, T.22 N., R.27 E., Grant County, Hydrologic Unit 17020014, on east shore 0.9 mi north of town of Soap Lake.

DRAINAGE AREA.--413 mi<sup>2</sup>, of which 281 mi<sup>2</sup> in the vicinity of Banks Lake is noncontributing.

PERIOD OF RECORD.--May to August 1936, March 1938 to February 1957 (fragmentary), March 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929, adjustment of 1937 (Bureau of Reclamation datum). Prior to Feb. 4, 1953, nonrecording gage at site 0.2 mi uplake. Feb. 4, 1953, to June 8, 1954, nonrecording gage at site 1.5 mi uplake and June 9, 1954, to June 21, 1957, water-stage recorder at site 0.2 mi uplake.

REMARKS.--Some diversion from tributaries for irrigation. During extreme high stages of Soap Lake, water is pumped from Soap Lake into Lenore Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 1,079.20 ft Jan. 28, 1953; minimum observed, 1,070.87 ft Oct. 21, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known, 1,083.1 ft, from well-defined alkali line at gage, date unknown.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1073.10 ft May 5; minimum, 1,071.45 ft Oct. 29 and Sept. 25.

ELEVATION ABOVE NGVD 1929, FEET, USBR DATUM  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,071.58	1,071.48	1,071.74	1,072.28	1,072.75	1,072.92	1,073.00	1,073.06	1,072.88	1,072.47	1,072.01	1,071.66
2	1,071.58	1,071.48	1,071.75	1,072.30	1,072.75	1,072.93	1,072.99	1,073.06	1,072.87	1,072.45	1,071.99	1,071.65
3	1,071.58	1,071.48	1,071.75	1,072.33	1,072.75	1,072.94	1,072.99	1,073.05	1,072.85	1,072.44	1,071.98	1,071.64
4	1,071.59	1,071.48	1,071.76	1,072.35	1,072.76	1,072.94	1,072.98	1,073.04	1,072.85	1,072.42	1,071.97	1,071.65
5	1,071.59	1,071.48	1,071.77	1,072.36	1,072.76	1,072.93	1,072.98	1,073.03	1,072.85	1,072.40	1,071.96	1,071.64
6	1,071.59	1,071.49	1,071.78	1,072.37	1,072.77	1,072.94	1,072.99	1,073.01	1,072.84	1,072.39	1,071.95	1,071.64
7	1,071.58	1,071.49	1,071.79	1,072.38	1,072.77	1,072.93	1,072.99	1,073.01	1,072.84	1,072.38	1,071.94	1,071.63
8	1,071.57	1,071.52	1,071.80	1,072.38	1,072.78	1,072.94	1,073.00	1,073.00	1,072.83	1,072.36	1,071.94	1,071.64
9	1,071.57	1,071.53	1,071.81	1,072.39	1,072.79	1,072.95	1,073.00	1,073.00	1,072.82	1,072.34	1,071.93	1,071.64
10	1,071.54	1,071.54	1,071.82	1,072.39	1,072.79	1,072.95	1,073.00	1,072.99	1,072.81	1,072.33	1,071.91	1,071.63
11	1,071.52	1,071.55	1,071.84	1,072.40	1,072.80	1,072.96	1,073.01	1,072.99	1,072.79	1,072.33	1,071.89	1,071.62
12	1,071.52	1,071.56	1,071.87	1,072.43	1,072.80	1,072.96	1,073.01	1,072.99	1,072.78	1,072.31	1,071.86	1,071.61
13	1,071.51	1,071.58	1,071.88	1,072.45	1,072.81	1,072.97	1,073.02	1,072.98	1,072.77	1,072.30	1,071.86	1,071.60
14	1,071.51	1,071.60	1,071.94	1,072.47	1,072.81	1,072.98	1,073.06	1,072.97	1,072.74	1,072.27	1,071.84	1,071.60
15	1,071.51	1,071.61	1,071.97	1,072.48	1,072.82	1,072.99	1,073.06	1,072.96	1,072.72	1,072.27	1,071.83	1,071.58
16	1,071.51	1,071.61	1,072.00	1,072.48	1,072.87	1,073.00	1,073.06	1,072.94	1,072.72	1,072.26	1,071.82	1,071.56
17	1,071.51	1,071.61	1,072.01	1,072.49	1,072.88	1,072.99	1,073.06	1,072.94	1,072.72	1,072.22	1,071.81	1,071.55
18	1,071.51	1,071.62	1,072.02	1,072.49	1,072.89	1,073.00	1,073.06	1,072.95	1,072.71	1,072.22	1,071.80	1,071.55
19	1,071.52	1,071.63	1,072.03	1,072.51	1,072.89	1,073.00	1,073.05	1,072.94	1,072.68	1,072.20	1,071.80	1,071.55
20	1,071.52	1,071.64	1,072.04	1,072.51	1,072.91	1,073.00	1,073.05	1,072.93	1,072.65	1,072.19	1,071.77	1,071.53
21	1,071.52	1,071.66	1,072.04	1,072.54	1,072.91	1,073.00	1,073.06	1,072.93	1,072.63	1,072.16	1,071.75	1,071.53
22	1,071.53	1,071.67	1,072.04	1,072.59	1,072.91	1,073.00	1,073.05	1,072.93	1,072.60	1,072.16	1,071.75	1,071.53
23	1,071.52	1,071.68	1,072.05	1,072.62	1,072.91	1,073.00	1,073.05	1,072.93	1,072.58	1,072.15	1,071.75	1,071.51
24	1,071.52	1,071.69	1,072.06	1,072.63	1,072.90	1,073.00	1,073.06	1,072.93	1,072.57	1,072.11	1,071.74	1,071.52
25	1,071.51	1,071.69	1,072.07	1,072.64	1,072.90	1,073.00	1,073.07	1,072.93	1,072.56	1,072.08	1,071.73	1,071.51
26	1,071.51	1,071.70	1,072.08	1,072.65	1,072.91	1,073.00	1,073.06	1,072.93	1,072.56	1,072.07	1,071.73	1,071.50
27	1,071.51	1,071.71	1,072.13	1,072.66	1,072.92	1,073.00	1,073.06	1,072.93	1,072.53	1,072.07	1,071.71	1,071.50
28	1,071.51	1,071.72	1,072.15	1,072.67	1,072.92	1,072.99	1,073.06	1,072.93	1,072.52	1,072.06	1,071.69	1,071.51
29	1,071.50	1,071.72	1,072.16	1,072.69	---	1,073.00	1,073.05	1,072.92	1,072.51	1,072.05	1,071.69	1,071.51
30	1,071.49	1,071.73	1,072.19	1,072.70	---	1,073.00	1,073.05	1,072.91	1,072.50	1,072.04	1,071.68	1,071.49
31	1,071.49	---	1,072.26	1,072.73	---	1,073.01	---	1,072.90	---	1,072.02	1,071.68	---
MEAN	1,071.53	1,071.60	1,071.95	1,072.49	1,072.84	1,072.97	1,073.03	1,072.97	1,072.71	1,072.24	1,071.83	1,071.58
MAX	1,071.59	1,071.73	1,072.26	1,072.73	1,072.92	1,073.01	1,073.07	1,073.06	1,072.88	1,072.47	1,072.01	1,071.66
MIN	1,071.49	1,071.48	1,071.74	1,072.28	1,072.75	1,072.92	1,072.98	1,072.90	1,072.50	1,072.02	1,071.68	1,071.49
WTR YR	2003	MEAN	1,072.31	MAX	1,073.07	MIN	1,071.48					



## 12471400 LIND COULEE WASTEWAY AT STATE ROUTE 17, NEAR WARDEN, WA

## WATER-QUALITY RECORDS

LOCATION.--Lat 47°20'00", long. 119°08'57", in NW ¼ SW ¼ sec. 35, T. 18 N., R. 29 E., Grant County, Hydrologic Unit 17020015, on left bank, 0.6 mi downstream from state route 17 road crossing, and 5 mi northwest of Warden.

PERIOD OF RECORD.--November 1991 to March 2001, July 2002 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: April 1994 to September 1995. July 1997 to June 1998, January 1999 to March 2001.

INSTRUMENTATION.--Temperature recorder.

REMARKS.--Station was a Central Columbia Plateau National Water-Quality Assessment Program (NAWQA) surface-water quality trend site from April 1997 to March 2001.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 24.5°C July 24, 1994; minimum recorded, 1.0°C Jan. 10, 1995.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)
JUL 30...	1345	253	10.9	8.2	289	19.8	28.6	10.0	2.56	16.7	5.12	0.29	20.6
SEP 24...	1400	211	11.5	8.4	332	14.8	32.4	12.2	3.00	22.5	6.54	0.33	26.4

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	2,4,5-T surrog, water, fltrd, percent recovery (99958)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd, 0.7u GF (38746)	2,6-Diethyl-aniline water fltrd 0.7u GF (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carb-furan, wat flt 0.7u GF (49308)
JUL 30...	22.1	189	15	17.9	62.3	<0.009	0.10	<0.02	<0.006	E.005	<0.04	E.004	<0.006
SEP 24...	28.0	216	E8	5.9	71.4	<0.009	0.02	<0.02	<0.006	E.006	<0.04	<0.008	<0.006

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	3-Keto-carbo-furan, water, fltrd, ug/L (50295)	Aceto-chlor, water, fltrd, ug/L (49260)	Acifluorfen, water, fltrd, 0.7u GF (49315)	Ala-chlor, water, fltrd, ug/L (46342)	Aldi-carb sulfone water, fltrd, 0.7u GF (49313)	Aldi-carb sulf-oxide, wat flt 0.7u GF (49314)	Aldi-carb, water, fltrd, 0.7u GF (49312)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, surrog, wat flt 0.7u GF (91065)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd, 0.7u GF (82686)	Barban, surrog, Sched. 2060/9060, wat flt pct rcv (90640)	Bendio-carb, water, fltrd, ug/L (50299)
JUL 30...	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	100	0.008	E.012	116	<0.03
SEP 24...	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	102	0.009	E.009	94.4	<0.03

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Ben-flu-alin, water, fltrd, 0.7u GF (82673)	Benomyl water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd, 0.7u GF (38711)	Bromacil, water, fltrd, ug/L (04029)	Brom-oxynil, water, fltrd, 0.7u GF (49311)	Butyl-ate, water, fltrd, ug/L (04028)	Caf-feine, water, fltrd, ug/L (50305)	Caf-feine-13C, surrog, wat flt percent recovery (99959)	Car-baryl, water, fltrd, 0.7u GF (49310)	Car-baryl, water, fltrd, 0.7u GF (82680)	Carbo-furan, water, fltrd, 0.7u GF (49309)	Carbo-furan, water, fltrd, 0.7u GF (82674)
JUL 30...	<0.010	0.082	<0.02	E.01	<0.03	<0.02	<0.002	<0.0096	83.8	<0.03	<0.041	<0.006	<0.020
SEP 24...	<0.010	<0.004	<0.02	E.01	M	<0.02	<0.002	<0.0096	77.9	<0.03	<0.041	<0.006	<0.020

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Chlor-amben methyl ester, water, fltrd, ug/L (61188)	Chlori-muron, water, fltrd, ug/L (50306)	Chloro-di-amino-s-tri-azine, wat flt ug/L (04039)	Chloro-thalonil, water, fltrd, 0.7u GF (49306)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF (82687)	Clopyr-alid, water, fltrd, 0.7u GF (49305)	Cyana-zine, water, fltrd, ug/L (04041)	Cyclo-ate, water, fltrd, 0.7u GF (04031)	Dacthal mono-acid, water, fltrd, 0.7u GF (49304)	DCPA, water fltrd 0.7u GF (82682)	Diazi-non, water, fltrd, 0.7u GF (39572)	Diazi-non-d10 surrog, wat flt 0.7u GF percent recovery (91063)
JUL 30...	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	0.006	<0.005	99.2
SEP 24...	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.005	105

## 12471400 LIND COULEE WASTEWAY AT STATE ROUTE 17, NEAR WARDEN, WA—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Dicamba water fltrd, 0.7u GF ug/L (38442)	Di- chlor- prop, water, fltrd, 0.7u GF ug/L (49302)	Diel- drin, water, fltrd, 0.7u GF ug/L (39381)	Dinoseb water, fltrd, 0.7u GF ug/L (49301)	Diphen- amid, water, fltrd, 0.7u GF ug/L (04033)	Disul- foton, water, fltrd, 0.7u GF ug/L (82677)	Diuron, water, fltrd, 0.7u GF ug/L (49300)	EPTC, water, fltrd, 0.7u GF ug/L (82668)	Ethal- flur- alin, water, fltrd, 0.7u GF ug/L (82663)	Etho- prop, water, fltrd, 0.7u GF ug/L (82672)	Fenuron water, fltrd, 0.7u GF ug/L (49297)	Flumet- sulam, water, fltrd, 0.7u GF ug/L (61694)	Fluo- meturon water fltrd 0.7u GF ug/L (38811)
JUL 30...	0.02	<0.01	<0.005	<0.01	<0.03	<0.02	0.02	0.004	<0.009	<0.005	<0.03	<0.01	<0.03
SEP 24...	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	E.01	<0.002	<0.009	<0.005	<0.03	<0.01	<0.03

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Fonofos water, fltrd, ug/L (04095)	Imaza- quin, water, fltrd, ug/L (50356)	Imaze- thapyr, water, fltrd, ug/L (50407)	Imida- cloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- thion, water, fltrd, ug/L (39532)	MCPA, water, fltrd, ug/L (38482)	MCPB, water, fltrd, ug/L (38487)	Meta- laxyl, water, fltrd, ug/L (50359)	Methio- carb, water, fltrd 0.7u GF ug/L (38501)	Meth- omyl, water, fltrd 0.7u GF ug/L (49296)
JUL 30...	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004
SEP 24...	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	E.006	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Metsul- furon, water, fltrd, ug/L (61697)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	N-(4- chloro- phenyl) -N'- methyl- urea, ug/L (61692)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico- sul- furon, water, fltrd, ug/L (50364)	Norflur azon, water, fltrd 0.7u GF ug/L (49293)	Ory- zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	p,p'- DDE, water, fltrd, ug/L (34653)
JUL 30...	<0.006	E.005	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003
SEP 24...	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	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 water fltrd 0.7u GF ug/L (82664)	Pic- loram, water, fltrd 0.7u GF ug/L (49291)	Prome- ton, water, fltrd, ug/L (04037)	Pron- amide, water, fltrd 0.7u GF ug/L (82676)	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)	Propham water fltrd 0.7u GF ug/L (49236)	Propi- cona- zole, water, fltrd, ug/L (50471)	Pro- poxur, water, fltrd 0.7u GF ug/L (38538)
JUL 30...	<0.010	<0.004	E.013	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	E.01	<0.008
SEP 24...	<0.010	<0.004	E.006	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Siduron water, fltrd, ug/L (38548)	Simaz- ine, water, fltrd, ug/L (04035)	Sulfo- met- ruron, water, fltrd, ug/L (50337)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Terba- cil, water, fltrd, ug/L (04032)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- clopyr, water, fltrd 0.7u GF ug/L (49235)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)
JUL 30...	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010	<0.02	<0.005	<0.002	<0.02	<0.009
SEP 24...	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010	<0.02	<0.005	<0.002	<0.02	<0.009

## 12471400 LIND COULEE WASTEWAY AT STATE ROUTE 17, NEAR WARDEN, WA—Continued

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

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
FEB 05...	1440	62	758	14.5	8.8	505	12.1	9.1	46.9	19.6	6.00	51.8	--
APR 09...	1520	313	--	10.6	8.5	214	16.2	11.3	22.5	6.56	1.65	9.36	--
MAY 07...	1320	280	--	11.0	8.4	241	21.9	11.6	25.2	8.01	2.12	13.1	--
JUL 02...	1430	335	748	10.9	8.4	265	--	19.1	25.5	8.50	2.19	12.5	102

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

Date	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)	Residue on evap. at 180degC wat flt mg/L (70300)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	2,4,5-T surrog, water, fltrd, percent recovry (99958)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)
FEB 05...	--	--	14.3	0.69	42.6	64.9	391	15	9.9	73.9	<0.009	<0.02	<0.02
APR 09...	--	--	2.95	0.19	9.77	16.2	127	E6	13.3	67.8	<0.009	E.01	<0.02
MAY 07...	--	--	5.61	0.23	13.2	20.1	157	<10	12.3	E53.5	<0.009	E.02	<0.02
JUL 02...	124	0.0	4.36	0.2	15.8	19.2	167	12	21.5	93.2	<0.009	0.17	<0.02

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

Date	2,6-Diethyl-aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy-carbo-furan, wat flt 0.7u GF ug/L (49308)	3-Keto-carbo-furan, water, fltrd, ug/L (50295)	Aceto-chlor, water, fltrd, ug/L (49260)	Acifluorfen, water, fltrd 0.7u GF ug/L (49315)	Ala-chlor, water, fltrd, ug/L (46342)	Aldi-carb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldi-carb sulf-oxide, wat flt 0.7u GF ug/L (49314)	Aldi-carb, water, fltrd 0.7u GF ug/L (49312)	alpha-HCH, water, fltrd, ug/L (34253)
FEB 05...	<0.006	E.008	<0.0018	<0.008	<0.044	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005
APR 09...	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005
MAY 07...	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005
JUL 02...	<0.006	E.004	<0.04	E.006	<0.006	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005

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

Date	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Barban, surrog, Sched. 2060/9060, wat flt pct rcv (90640)	Bendio-carb, water, fltrd, ug/L (50299)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Benomyl water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd 0.7u GF ug/L (38711)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd 0.7u GF ug/L (49311)	Butyl-ate, water, fltrd, ug/L (04028)	Caf-feine, water, fltrd, ug/L (50305)
FEB 05...	91.9	0.011	<0.050	102	<0.03	<0.010	<0.004	<0.02	<0.01	E.01	<0.02	<0.002	<0.0096
APR 09...	81.6	<0.007	<0.050	98.8	<0.03	<0.010	<0.004	<0.02	<0.01	<0.03	<0.02	<0.002	<0.0096
MAY 07...	97.2	<0.007	<0.050	E107	<0.03	<0.010	<0.004	<0.02	E.01	<0.03	M	<0.002	<0.0096
JUL 02...	102	0.009	<0.050	105	<0.03	<0.010	<0.004	<0.02	M	<0.03	<0.02	<0.002	E.0052

## 12471400 LIND COULEE WASTEWAY AT STATE ROUTE 17, NEAR WARDEN, WA—Continued

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

Date	Caffeine-13C, surrog. wat flt percent recovry (99959)	Carbaryl, water, fltrd 0.7u GF ug/L (49310)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (49309)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chloramben methyl ester, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chloro-di-aminos-triazine, wat flt ug/L (04039)	Chloro-thaloni, water, fltrd 0.7u GF ug/L (49306)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin, water, fltrd 0.7u GF ug/L (82687)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cyanazine, water, fltrd, ug/L (04041)
FEB 05...	66.0	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018
APR 09...	52.2	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01	<0.04	E.005	<0.006	<0.01	<0.018
MAY 07...	E101	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018
JUL 02...	55.9	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018

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

Date	Cycloate, water, fltrd, ug/L (04031)	Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water, fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog. wat flt 0.7u GF percent recovry (91063)	Dicamba water fltrd 0.7u GF ug/L (38442)	Di-chlor-prop, water, fltrd 0.7u GF ug/L (49302)	Diel-drin, water, fltrd, ug/L (39381)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	Diuron, water, fltrd 0.7u GF ug/L (49300)
FEB 05...	<0.01	<0.01	<0.003	<0.004	<0.005	101	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	E.01
APR 09...	<0.01	<0.01	0.044	<0.004	<0.005	105	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	0.12
MAY 07...	<0.01	<0.01	0.015	<0.004	<0.005	117	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	0.03
JUL 02...	<0.01	<0.01	0.004	<0.004	<0.005	102	0.06	<0.01	<0.005	<0.01	<0.03	<0.02	0.02

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

Date	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Desulf-inyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Flumet-sulam, water, fltrd, ug/L (61694)	Fluo-meturon water fltrd 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Imaza-quin, water, fltrd, ug/L (50356)	Imaze-thapyr, water, fltrd, ug/L (50407)
FEB 05...	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02
APR 09...	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02
MAY 07...	0.051	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02
JUL 02...	0.014	E.005	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02

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

Date	Imida-cloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta-laxyl, water, fltrd, ug/L (50359)	Methio-carb, water, fltrd 0.7u GF ug/L (38501)	Meth-omyl, water, fltrd 0.7u GF ug/L (49296)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)
FEB 05...	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006
APR 09...	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	E.01	<0.008	<0.004	<0.006	<0.013	0.012
MAY 07...	<0.007	<0.004	<0.01	<0.035	<0.027	M	<0.01	<0.02	<0.008	<0.004	<0.006	E.009	<0.006
JUL 02...	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	E.003	<0.006	E.007	<0.006



## 12471400 LIND COULEE WASTEWAY AT STATE ROUTE 17, NEAR WARDEN, WA—Continued

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

Date	Metsulfuron, water, fltrd, ug/L (61697)	Molinate, water, fltrd, 0.7u GF ug/L (82671)	N-(4-Chlorophenyl)-N'-methylurea, ug/L (61692)	Napropamide, water, fltrd, 0.7u GF ug/L (82684)	Neburon water, fltrd, 0.7u GF ug/L (49294)	Nicosulfuron, water, fltrd, ug/L (50364)	Norflurazon, water, fltrd, 0.7u GF ug/L (49293)	Oryzalin, water, fltrd, 0.7u GF ug/L (49292)	Oxamyl, water, fltrd, 0.7u GF ug/L (38866)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd, 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd, 0.7u GF ug/L (82683)
FEB 05...	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022
APR 09...	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022
MAY 07...	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022
JUL 02...	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	0.03	<0.003	<0.010	<0.004	0.030

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

Date	Phorate water fltrd, 0.7u GF ug/L (82664)	Picloram, water, fltrd, 0.7u GF ug/L (49291)	Prometon, water, fltrd, ug/L (04037)	Pronamide, water, fltrd, 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd, 0.7u GF ug/L (82679)	Propargite, water, fltrd, 0.7u GF ug/L (82685)	Propham water fltrd, 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd, 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Simazine, water, fltrd, ug/L (04035)	Sulfometuron, water, fltrd, ug/L (50337)
FEB 05...	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009
APR 09...	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009
MAY 07...	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009
JUL 02...	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009

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

Date	Tebu-thiuron water fltrd, 0.7u GF ug/L (82670)	Terbacil, water, fltrd, 0.7u GF ug/L (82665)	Terbacil, water, fltrd, ug/L (04032)	Terbufos, water, fltrd, 0.7u GF ug/L (82675)	Thio-bencarb water fltrd, 0.7u GF ug/L (82681)	Tri-allate, water, fltrd, 0.7u GF ug/L (82678)	Tri-clopyr, water, fltrd, 0.7u GF ug/L (49235)	Tri-flur-alin, water, fltrd, 0.7u GF ug/L (82661)	Suspnd. sedi-ment, sieve diametr <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)
FEB 05...	<0.02	<0.034	<0.010	<0.02	<0.005	<0.002	<0.02	<0.009	--	--
APR 09...	<0.02	<0.034	<0.010	<0.02	<0.005	<0.002	<0.02	<0.009	65	76
MAY 07...	<0.02	<0.034	<0.010	<0.02	<0.005	<0.002	<0.02	<0.009	69	51
JUL 02...	<0.02	<0.034	<0.010	<0.02	<0.005	<0.002	<0.02	<0.009	83	38

## 12472520 RED ROCK COULEE NEAR SMYRNA, WA

## WATER-QUALITY RECORDS

LOCATION.--Lat. 46°51'20", long. 119°35'48", in SW ¼ sec.20 T.16 N., R.26 E., Grant County, Hydrologic Unit 17020015, on downstream side of county road crossing at mile 0.8, 3 miles northeast of Smyrna.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--July 2002 to September 2003.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)
JUL 29...	1450	55	8.3	8.4	425	23.1	31.3	17.0	2.44	19.8	9.03	0.36	19.9
SEP 23...	1310	91	9.5	8.6	412	18.5	36.7	16.6	2.57	18.7	10.0	0.35	23.8

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	2,4,5-T surrog, water, fltrd, percent (99958)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd, 0.7u GF (38746)	2,6-Diethyl-aniline water, fltrd, 0.7u GF (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbonyl, water, fltrd, 0.7u GF (49308)
JUL 29...	35.0	242	E6	3.4	68.2	E.080	0.59	<0.02	<0.006	E.011	<0.04	<0.008	<0.006
SEP 23...	32.8	254	E6	E1.7	79.2	E.057	0.24	<0.02	<0.006	E.011	E.01	<0.008	<0.006

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	3-Keto-carbofuran, water, fltrd, ug/L (50295)	Aceto-chlor, water, fltrd, ug/L (49260)	Acifluorfen, water, fltrd, 0.7u GF ug/L (49315)	Ala-chlor, water, fltrd, ug/L (46342)	Aldi-carb sulfone water, fltrd, 0.7u GF ug/L (49313)	Aldi-carb sulf-oxide, wat flt, 0.7u GF ug/L (49314)	Aldi-carb, water, fltrd, 0.7u GF ug/L (49312)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, surrog, wat flt, 0.7u GF percent recovery (91065)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd, 0.7u GF ug/L (82686)	Barban, surrog, Sched. 2060/9060, wat flt pct rcv (90640)	Bendiocarb, water, fltrd, ug/L (50299)
JUL 29...	<2	<0.006	<0.007	0.012	<0.02	<0.008	<0.04	<0.005	97.4	0.018	E.008	E143	<0.03
SEP 23...	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	102	0.017	<0.050	E174	<0.03

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Ben-fluor-alin, water, fltrd, 0.7u GF ug/L (82673)	Benomyl water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd, 0.7u GF ug/L (38711)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd, 0.7u GF ug/L (49311)	Butylate, water, fltrd, ug/L (04028)	Caf-feine, water, fltrd, ug/L (50305)	Caf-feine-13C, surrog, wat flt, percent recovery (99959)	Car-baryl, water, fltrd, 0.7u GF ug/L (49310)	Car-baryl, water, fltrd, 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd, 0.7u GF ug/L (49309)	Carbo-furan, water, fltrd, 0.7u GF ug/L (82674)
JUL 29...	<0.010	<0.004	<0.02	E.03	<0.03	<0.02	<0.002	<0.0096	E85.2	<0.03	<0.041	<0.006	<0.020
SEP 23...	<0.010	E.017	<0.02	E.03	<0.03	<0.02	<0.002	<0.0096	E88.8	<0.03	<0.041	<0.006	<0.020

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Chloramben methyl ester, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chloro-di-amino-s-triazine, wat flt, ug/L (04039)	Chloro-thalonil, water, fltrd, 0.7u GF ug/L (49306)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water, fltrd, 0.7u GF ug/L (82687)	Clopyralid, water, fltrd, 0.7u GF ug/L (49305)	Cyana-zine, water, fltrd, ug/L (04041)	Cyclo-ate, water, fltrd, ug/L (04031)	Dacthal mono-acid, water, fltrd, 0.7u GF ug/L (49304)	DCPA, water, fltrd, 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog, wat flt, 0.7u GF percent recovery (91063)
JUL 29...	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	0.006	0.030	104
SEP 23...	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.005	103

## 12472520 RED ROCK COULEE NEAR SMYRNA, WA—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Dicamba water, fltrd, 0.7u GF ug/L (38442)	Di- chlor- prop, water, fltrd, 0.7u GF ug/L (49302)	Diel- drin, water, fltrd, 0.7u GF ug/L (39381)	Dinoseb water, fltrd, 0.7u GF ug/L (49301)	Diphen- amid, water, fltrd, 0.7u GF ug/L (04033)	Disul- foton, water, fltrd, 0.7u GF ug/L (82677)	Diuron, water, fltrd, 0.7u GF ug/L (49300)	EPTC, water, fltrd, 0.7u GF ug/L (82668)	Ethal- flur- alin, water, fltrd, 0.7u GF ug/L (82663)	Etho- prop, water, fltrd, 0.7u GF ug/L (82672)	Fenuron water, fltrd, 0.7u GF ug/L (49297)	Flumet- sulam, water, fltrd, 0.7u GF ug/L (61694)	Fluo- meturon water, fltrd, 0.7u GF ug/L (38811)
JUL 29...	0.02	<0.01	<0.005	<0.01	<0.03	<0.02	E.03	0.008	<0.009	<0.005	<0.03	<0.01	<0.03
SEP 23...	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	E.01	0.003	<0.009	<0.005	<0.03	<0.01	<0.03

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Fonofos water, fltrd, ug/L (04095)	Imaza- chin, water, fltrd, ug/L (50356)	Imaze- thapyr, water, fltrd, ug/L (50407)	Imida- clopid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- thion, water, fltrd, ug/L (39532)	MCPA, water, fltrd, ug/L (38482)	MCPB, water, fltrd, ug/L (38487)	Meta- laxyl, water, fltrd, ug/L (50359)	Methio- carb, water, fltrd, 0.7u GF ug/L (38501)	Meth- omyl, water, fltrd, 0.7u GF ug/L (49296)
JUL 29...	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004
SEP 23...	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Methyl para- thion, water, fltrd, 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Metsul- furon, water, fltrd, ug/L (61697)	Moli- nate, water, fltrd, 0.7u GF ug/L (82671)	N-(4- chloro- phenyl) -N'- methyl- urea, ug/L (61692)	Naprop- amide, water, fltrd, 0.7u GF ug/L (82684)	Neburon water, fltrd, 0.7u GF ug/L (49294)	Nico- sul- furon, water, fltrd, ug/L (50364)	Norflur azon, water, fltrd, 0.7u GF ug/L (49293)	Ory- zalin, water, fltrd, 0.7u GF ug/L (49292)	Oxamyl, water, fltrd, 0.7u GF ug/L (38866)	p,p'- DDE, water, fltrd, ug/L (34653)
JUL 29...	<0.006	E.005	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003
SEP 23...	<0.006	E.005	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	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 water fltrd 0.7u GF ug/L (82664)	Pic- loram, water, fltrd, 0.7u GF ug/L (49291)	Prome- ton, water, fltrd, ug/L (04037)	Pron- amide, water, fltrd, 0.7u GF ug/L (82676)	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)	Propham water fltrd 0.7u GF ug/L (49236)	Propi- cona- zole, water, fltrd, ug/L (50471)	Pro- poxur, water, fltrd, 0.7u GF ug/L (38538)
JUL 29...	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008
SEP 23...	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Siduron water, fltrd, ug/L (38548)	Simaz- ine, water, fltrd, ug/L (04035)	Sulfo- met- ruron, water, fltrd, ug/L (50337)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd, 0.7u GF ug/L (82665)	Terba- cil, water, fltrd, ug/L (04032)	Terbu- fos, water, fltrd, 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd, 0.7u GF ug/L (82678)	Tri- clopyr, water, fltrd, 0.7u GF ug/L (49235)	Tri- flur- alin, water, fltrd, 0.7u GF ug/L (82661)
JUL 29...	<0.02	0.010	<0.009	<0.02	<0.034	<0.010	<0.02	<0.005	<0.002	<0.02	<0.009
SEP 23...	<0.02	0.010	<0.009	<0.02	E.014	<0.010	<0.02	<0.005	<0.002	<0.02	<0.009

## 12472520 RED ROCK COULEE NEAR SMYRNA, WA—Continued

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

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat fltrd inc tit field, mg/L as CaCO3 (39086)
FEB 04...	1350	60	758	12.1	8.6	660	--	6.8	53.8	29.8	3.24	37.4	--
APR 09...	1150	43	--	11.1	8.9	532	19.0	13.2	43.7	24.7	3.06	34.6	--
MAY 06...	1310	84	752	10.1	8.6	409	18.0	15.0	37.1	19.1	2.98	25.6	156
JUL 02...	1020	60	748	9.4	8.6	389	21.8	19.6	31.7	17.9	2.62	21.4	137

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

Date	Bicarbonate, wat fltrd incrm. titr., field, mg/L (00453)	Carbonate, wat fltrd 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)	Residue on evap. at 180degC wat fltrd mg/L (70300)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	2,4,5-T surrog, water, fltrd, percent recovry (99958)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)
FEB 04...	--	--	18.5	0.56	40.8	63.9	411	<10	<2.0	73.0	<0.009	E.01	<0.02
APR 09...	--	--	17.1	0.46	27.6	59.1	331	<10	1.9	63.2	<0.009	E.02	<0.02
MAY 06...	185	3	13.2	0.37	19.7	42.2	277	<10	1.9	52.4	0.025	0.09	<0.02
JUL 02...	163	2	10.7	0.3	19.3	36.7	247	E5	2.5	104	0.077	0.77	<0.02

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

Date	2,6-Diethyl-aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbofuran, wat fltrd 0.7u GF ug/L (49308)	3-Keto-carbofuran, water, fltrd, ug/L (50295)	Aceto-chlor, water, fltrd, ug/L (49260)	Acifluorfen, water, fltrd 0.7u GF ug/L (49315)	Alachlor, water, fltrd, ug/L (46342)	Aldi-carb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldi-carb sulf-oxide, wat fltrd 0.7u GF ug/L (49314)	Aldi-carb, water, fltrd 0.7u GF ug/L (49312)	alpha-HCH, water, fltrd, ug/L (34253)
FEB 04...	<0.006	E.015	M	<0.008	<0.006	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005
APR 09...	<0.006	E.015	M	<0.008	<0.006	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005
MAY 06...	<0.006	E.008	<0.04	<0.008	<0.006	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005
JUL 02...	<0.006	E.009	E.01	E.006	<0.006	<2	<0.006	<0.007	0.010	<0.02	<0.008	<0.04	<0.005

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

Date	alpha-HCH-d6, surrog, wat fltrd 0.7u GF percent recovry (91065)	Atrazine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Barban, surrog, Sched. 2060/9060, wat fltrd pct rcv (90640)	Bendio-carb, water, fltrd, ug/L (50299)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Benomyl water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd 0.7u GF ug/L (38711)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd 0.7u GF ug/L (49311)	Butyl-ate, water, fltrd, ug/L (04028)	Caf-feine, water, fltrd, ug/L (50305)
FEB 04...	101	0.019	<0.050	113	<0.03	<0.010	<0.004	<0.02	E.06	E.01	<0.02	<0.002	<0.0096
APR 09...	87.1	0.021	<0.050	68.2	<0.03	<0.010	<0.004	<0.02	E.02	E.01	<0.02	<0.002	<0.0096
MAY 06...	94.8	0.032	<0.050	E107	<0.03	<0.010	<0.004	<0.02	E.04	<0.03	<0.02	<0.002	<0.0096
JUL 02...	103	0.019	<0.050	127	<0.03	<0.010	<0.004	<0.02	E.04	E.03	<0.02	<0.002	E.0089

## 12472520 RED ROCK COULEE NEAR SMYRNA, WA—Continued

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

Date	Caffeine-13C, surrog. wat flt percent recovry (99959)	Carbaryl, water, fltrd 0.7u GF ug/L (49310)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (49309)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chloramben methyl ester, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chloro-di-aminos-triazine, wat flt ug/L (04039)	Chloro-thaloni, water, fltrd 0.7u GF ug/L (49306)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water, fltrd 0.7u GF ug/L (82687)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cyanazine, water, fltrd, ug/L (04041)
FEB 04...	63.9	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018
APR 09...	44.9	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01	<0.04	0.016	<0.006	<0.01	<0.018
MAY 06...	E93.6	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018
JUL 02...	58.7	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018

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

Date	Cycloate, water, fltrd, ug/L (04031)	Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water, fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog. wat flt 0.7u GF percent recovry (91063)	Dicamba water fltrd 0.7u GF ug/L (38442)	Di-chlor-prop, water, fltrd 0.7u GF ug/L (49302)	Diel-drin, water, fltrd, ug/L (39381)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	Diuron, water, fltrd 0.7u GF ug/L (49300)
FEB 04...	<0.01	<0.01	<0.003	<0.004	<0.005	106	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	E.02
APR 09...	<0.01	<0.01	<0.003	<0.004	<0.005	112	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	0.11
MAY 06...	<0.01	0.02	0.169	<0.004	<0.005	117	0.01	<0.01	<0.005	<0.01	<0.03	<0.02	0.05
JUL 02...	<0.01	<0.01	0.012	<0.004	<0.005	99.1	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	0.02

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

Date	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Desulf-inyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Flumet-sulam, water, fltrd, ug/L (61694)	Fluo-meturon water fltrd 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Imaza-quin, water, fltrd, ug/L (50356)	Imaze-thapyr, water, fltrd, ug/L (50407)
FEB 04...	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02
APR 09...	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02
MAY 06...	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02
JUL 02...	0.020	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02

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

Date	Imida-cloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta-laxyl, water, fltrd, ug/L (50359)	Methio-carb, water, fltrd 0.7u GF ug/L (38501)	Metho-nyl, water, fltrd 0.7u GF ug/L (49296)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)
FEB 04...	<0.007	<0.004	E.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006
APR 09...	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006
MAY 06...	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006
JUL 02...	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004	<0.006	E.002	<0.006

## 12472520 RED ROCK COULEE NEAR SMYRNA, WA—Continued

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

Date	Metsulfuron, water, fltrd, ug/L (61697)	Molinate, water, fltrd, 0.7u GF ug/L (82671)	N-(4-Chlorophenyl)-N'-methylurea, ug/L (61692)	Napropamide, water, fltrd, 0.7u GF ug/L (82684)	Neburon water, fltrd, 0.7u GF ug/L (49294)	Nicosulfuron, water, fltrd, ug/L (50364)	Norflurazon, water, fltrd, 0.7u GF ug/L (49293)	Oryzalin, water, fltrd, 0.7u GF ug/L (49292)	Oxamyl, water, fltrd, 0.7u GF ug/L (38866)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd, 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd, 0.7u GF ug/L (82683)
FEB 04...	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022
APR 09...	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	M	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022
MAY 06...	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	M	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022
JUL 02...	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022

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

Date	Phorate water fltrd, 0.7u GF ug/L (82664)	Picloram, water, fltrd, 0.7u GF ug/L (49291)	Prometon, water, fltrd, ug/L (04037)	Pronamide, water, fltrd, 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd, 0.7u GF ug/L (82679)	Propargite, water, fltrd, 0.7u GF ug/L (82685)	Propham water fltrd, 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd, 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Simazine, water, fltrd, ug/L (04035)	Sulfometuron, water, fltrd, ug/L (50337)
FEB 04...	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.020	<0.009
APR 09...	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	0.022	<0.009
MAY 06...	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	0.022	<0.009
JUL 02...	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	0.011	<0.009

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

Date	Tebu-thiuron water fltrd, 0.7u GF ug/L (82670)	Terbacil, water, fltrd, 0.7u GF ug/L (82665)	Terbacil, water, fltrd, ug/L (04032)	Terbufos, water, fltrd, 0.7u GF ug/L (82675)	Thio-bencarb water fltrd, 0.7u GF ug/L (82681)	Tri-allate, water, fltrd, 0.7u GF ug/L (82678)	Tri-clopyr, water, fltrd, 0.7u GF ug/L (49235)	Tri-fluralin, water, fltrd, 0.7u GF ug/L (82661)	Suspnd. sedi-ment, sieve diametr <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)
FEB 04...	<0.02	<0.034	E.005	<0.02	<0.005	<0.002	<0.02	<0.009	--	--
APR 09...	<0.02	E.044	E.020	<0.02	<0.005	<0.002	<0.02	<0.009	70	178
MAY 06...	<0.02	E.075	E.090	<0.02	<0.005	<0.002	<0.02	<0.009	60	15
JUL 02...	<0.02	E.020	E.010	<0.02	<0.005	<0.002	<0.02	<0.009	53	31

CRAB CREEK BASIN

12472600 CRAB CREEK NEAR BEVERLY, WA

LOCATION.--Lat 46°49'48", long 119°49'48", in NW ¼ SW ¼ sec. 33, T.16 N., R.24 E., Grant County, Hydrologic Unit 17020015, on right bank 4.9 mi east of Beverly, and at mile 4.5.

DRAINAGE AREA.--4,842 mi<sup>2</sup>, of which 665 mi<sup>2</sup> in the vicinity of Soap Lake is noncontributing.

PERIOD OF RECORD.--February 1959 to July 2000, September 2000 to current year.

REVISED RECORDS.--WSP 1933: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 500 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair except those below 130 ft<sup>3</sup>/s, which are poor. Many diversions upstream from station for irrigation. Flow largely regulated by Potholes Reservoir 41.3 mi upstream. A major portion of flow is return flows, including transbasin diversions, from parts of the Columbia Basin project. Chemical analyses water years 1959-72, 1975-80. Daily water temperatures August 1959 to September 1962, July 1968 to August 1970.

AVERAGE DISCHARGE.--43 years (water years 1960-99, 2001-2003), 201 ft<sup>3</sup>/s, 145,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 936 ft<sup>3</sup>/s Mar. 3, 1980, gage height, 6.46 ft; minimum discharge, 10 ft<sup>3</sup>/s Jan. 10, 1963, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 330 ft<sup>3</sup>/s Sept. 15, gage height, 3.67 ft; minimum discharge, 20 ft<sup>3</sup>/s June 20.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	286	195	168	261	237	174	275	284	120	121	107	238
2	298	202	171	255	235	177	280	290	123	113	112	259
3	291	191	175	241	227	176	278	284	144	120	126	259
4	276	184	182	236	211	170	279	282	153	109	156	259
5	266	186	181	238	211	168	257	286	160	103	186	239
6	267	161	177	226	240	166	247	286	126	101	204	243
7	263	171	172	215	202	168	264	279	101	123	219	247
8	271	189	171	206	193	169	272	257	83	109	248	249
9	271	194	170	216	187	170	264	217	96	107	271	263
10	280	196	172	204	182	170	268	174	104	128	265	263
11	284	195	176	187	177	170	268	164	93	128	250	273
12	284	187	177	179	176	169	270	183	97	96	251	299
13	282	185	178	189	169	172	272	223	104	101	238	276
14	288	184	197	217	177	167	284	227	118	123	178	298
15	297	187	218	237	192	166	299	218	119	139	145	326
16	297	186	227	196	227	173	322	213	120	131	154	311
17	275	187	219	189	248	166	326	196	76	103	166	297
18	247	186	204	188	233	154	323	202	63	105	173	305
19	225	187	194	181	217	138	317	204	46	84	177	295
20	219	186	192	176	208	133	306	184	25	99	176	290
21	217	183	189	175	204	130	296	175	36	111	185	293
22	214	178	183	185	199	130	291	169	106	114	174	292
23	185	166	179	204	193	128	285	178	136	78	184	296
24	180	156	177	222	187	120	285	206	160	71	219	295
25	205	157	179	221	177	121	269	190	162	66	237	281
26	219	144	181	219	175	130	247	184	153	84	247	271
27	237	162	194	217	175	171	245	186	98	92	235	266
28	222	164	206	252	175	216	251	160	109	100	215	261
29	209	166	214	219	---	243	266	144	146	146	185	261
30	196	167	212	208	---	260	272	130	134	156	208	247
31	194	---	253	226	---	269	---	135	---	120	235	---
TOTAL	7,745	5,382	5,888	6,585	5,634	5,234	8,378	6,510	3,311	3,381	6,126	8,252
MEAN	250	179	190	212	201	169	279	210	110	109	198	275
MAX	298	202	253	261	248	269	326	290	162	156	271	326
MIN	180	144	168	175	169	120	245	130	25	66	107	238
AC-FT	15,360	10,680	11,680	13,060	11,180	10,380	16,620	12,910	6,570	6,710	12,150	16,370

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2003, BY WATER YEAR (WY)

MEAN	263	202	184	181	187	169	195	189	180	179	210	253
MAX	365	310	274	307	358	409	335	297	301	284	303	364
(WY)	(1996)	(1974)	(1974)	(1997)	(1984)	(1980)	(1984)	(1997)	(1997)	(1997)	(1997)	(1997)
MIN	64.4	64.8	58.4	61.9	71.8	55.0	51.6	50.8	48.4	32.5	48.9	66.9
(WY)	(1961)	(1961)	(1961)	(1961)	(1962)	(1960)	(1959)	(1960)	(1959)	(1959)	(1959)	(1961)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1959 - 2003

ANNUAL TOTAL	75,831	72,426		
ANNUAL MEAN	208	198		201
HIGHEST ANNUAL MEAN				293
LOWEST ANNUAL MEAN				62.2
HIGHEST DAILY MEAN	336	Sep 25	326	Apr 17
LOWEST DAILY MEAN	103	Jul 16	25	Jun 20
ANNUAL SEVEN-DAY MINIMUM	118	Mar 18	67	Jun 16
ANNUAL RUNOFF (AC-FT)	150,400		143,700	145,500
10 PERCENT EXCEEDS	280		283	301
50 PERCENT EXCEEDS	197		190	204
90 PERCENT EXCEEDS	154		114	80

## 12472600 CRAB CREEK NEAR BEVERLY, WA

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959-72, 1975-76, 1978, 1980, July 2002 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: August 1959 to September 1962, July 1968 to August 1970, October 1995 to September 1996. Published as 12472500 "near Smyrna", 1959-62.

INSTRUMENTATION.--Temperature recorder from November 1994 to September 1996.

REMARKS.--Unpublished temperature data for portions of the 1994 and 1997 water year are available in the Spokane, Washington field office. Unpublished water-quality data for 1981 and 1993-96 are available in the Washington District office.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum 31.0°C July 27-28, 1968; minimum 0.0°C for Nov. 15-16, Dec. 31, 1959, several days in Jan., Feb. and Dec. 1960, several days in Jan. and Dec. 1961, several days in Jan. 1962, several days in Dec. 1968, several days in Jan. and Feb. 1969, several days in Jan. and Feb. 1995, and several days in Jan. and Feb. 1996.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)
JUL 30...	1020	200	8.6	8.5	525	20.4	35.8	20.8	6.84	43.0	13.1	0.49	21.1
SEP 24...	1100	331	10.2	8.1	535	15.1	39.1	20.7	6.27	42.6	12.9	0.48	23.3

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt (70300)	Iron, water, fltrd, mg/L (01046)	Manganese, water, fltrd, mg/L (01056)	2,4,5-T surrog, water, fltrd, percent (99958)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd, 0.7u GF (38746)	2,6-Diethyl-aniline water fltrd (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbonyl, wat flt 0.7u GF (49308)
JUL 30...	51.8	328	E7	E3.2	70.7	E.027	0.23	<0.02	<0.006	E.019	<0.04	E.006	<0.006
SEP 24...	46.8	327	11	3.9	75.0	<0.009	0.08	<0.02	<0.006	E.013	<0.04	<0.008	<0.006

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	3-Ketocarbo-furan, water, fltrd, ug/L (50295)	Acetochlor, water, fltrd, ug/L (49260)	Acifluorfen, water, fltrd, 0.7u GF (49315)	Alachlor, water, fltrd, ug/L (46342)	Aldicarb sulfone, water, fltrd, 0.7u GF (49313)	Aldicarb sulf-oxide, wat flt (49314)	Aldicarb, water, fltrd, 0.7u GF (49312)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent (91065)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd, 0.7u GF (82686)	Barban, surrog, Sched. 2060/9060, wat flt pct rcv (90640)	Bendiocarb, water, fltrd, ug/L (50299)
JUL 30...	<2	<0.006	<0.007	0.005	<0.02	<0.008	<0.04	<0.005	95.8	0.021	E.006	E140	<0.03
SEP 24...	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	108	0.014	<0.050	98.4	<0.03

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Benfluralin, water, fltrd, 0.7u GF (82673)	Benomyl, water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Benfluron, water, fltrd, 0.7u GF (38711)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd, 0.7u GF (49311)	Butylate, water, fltrd, ug/L (04028)	Caffeine, water, fltrd, ug/L (50305)	Caffeine-13C, surrog, wat flt percent (99959)	Carbaryl, water, fltrd, 0.7u GF (49310)	Carbaryl, water, fltrd, 0.7u GF (82680)	Carbofuran, water, fltrd, 0.7u GF (49309)	Carbofuran, water, fltrd, 0.7u GF (82674)
JUL 30...	<0.010	<0.004	<0.02	E.02	<0.03	<0.02	<0.002	<0.0096	E89.8	<0.03	E.005	<0.006	<0.020
SEP 24...	<0.010	<0.004	<0.02	E.02	<0.03	<0.02	<0.002	<0.0096	76.2	<0.03	<0.041	<0.006	<0.020

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Chloramben methyl ester, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chlorodimino-s-triazine, wat flt (04039)	Chlorothalonil, water, fltrd, 0.7u GF (49306)	Chlorpyrifos, water, fltrd, ug/L (38933)	cis-Permethrin, water, fltrd, 0.7u GF (82687)	Clopyralid, water, fltrd, 0.7u GF (49305)	Cyanazine, water, fltrd, ug/L (04041)	Cycloate, water, fltrd, ug/L (04031)	Dacthal monoacid, water, fltrd, 0.7u GF (49304)	DCPA, water, fltrd, 0.7u GF (82682)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog, wat flt 0.7u GF percent (91063)
JUL 30...	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	0.004	0.008	98.3
SEP 24...	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	E.003	<0.005	104



## CRAB CREEK BASIN

12472600 CRAB CREEK NEAR BEVERLY, WA—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Dicamba water, fltrd, 0.7u GF ug/L (38442)	Di- chlor- prop, water, fltrd, 0.7u GF ug/L (49302)	Diel- drin, water, fltrd, 0.7u GF ug/L (39381)	Dinoseb water, fltrd, 0.7u GF ug/L (49301)	Diphen- amid, water, fltrd, 0.7u GF ug/L (04033)	Disul- foton, water, fltrd, 0.7u GF ug/L (82677)	Diuron, water, fltrd, 0.7u GF ug/L (49300)	EPTC, water, fltrd, 0.7u GF ug/L (82668)	Ethal- flur- alin, water, fltrd, 0.7u GF ug/L (82663)	Etho- prop, water, fltrd, 0.7u GF ug/L (82672)	Fenuron water, fltrd, 0.7u GF ug/L (49297)	Flumet- sulam, water, fltrd, 0.7u GF ug/L (61694)	Fluo- meturon water, fltrd, 0.7u GF ug/L (38811)
JUL 30...	E.01	<0.01	<0.005	<0.01	<0.03	<0.02	E.01	0.006	<0.009	<0.005	<0.03	<0.01	<0.03
SEP 24...	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	M	E.002	<0.009	<0.005	<0.03	<0.01	<0.03

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Fonofos water, fltrd, 0.7u GF ug/L (04095)	Imaza- quin, water, fltrd, 0.7u GF ug/L (50356)	Imaze- thapyr, water, fltrd, 0.7u GF ug/L (50407)	Imida- cloprid water, fltrd, 0.7u GF ug/L (61695)	Lindane water, fltrd, 0.7u GF ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- thion, water, fltrd, 0.7u GF ug/L (39532)	MCPA, water, fltrd, 0.7u GF ug/L (38482)	MCPB, water, fltrd, 0.7u GF ug/L (38487)	Meta- laxyl, water, fltrd, 0.7u GF ug/L (50359)	Methio- carb, water, fltrd, 0.7u GF ug/L (38501)	Meth- omyl, water, fltrd, 0.7u GF ug/L (49296)
JUL 30...	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004
SEP 24...	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Methyl para- thion, water, fltrd, 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, 0.7u GF ug/L (39415)	Metri- buzin, water, fltrd, 0.7u GF ug/L (82630)	Metsul- furon, water, fltrd, 0.7u GF ug/L (61697)	Moli- nate, water, fltrd, 0.7u GF ug/L (82671)	N-(4- chloro- phenyl) -N'- methyl- urea, ug/L (61692)	Naprop- amide, water, fltrd, 0.7u GF ug/L (82684)	Neburon water, fltrd, 0.7u GF ug/L (49294)	Nico- sul- furon, water, fltrd, 0.7u GF ug/L (50364)	Norflur azon, water, fltrd, 0.7u GF ug/L (49293)	Ory- zalin, water, fltrd, 0.7u GF ug/L (49292)	Oxamyl, water, fltrd, 0.7u GF ug/L (38866)	p,p'- DDE, water, fltrd, 0.7u GF ug/L (34653)
JUL 30...	<0.006	E.006	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003
SEP 24...	<0.006	E.004	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Para- thion, water, fltrd, 0.7u GF 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 water fltrd 0.7u GF ug/L (82664)	Pic- loram, water, fltrd, 0.7u GF ug/L (49291)	Prome- ton, water, fltrd, 0.7u GF ug/L (04037)	Pron- amide, water, fltrd, 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, 0.7u GF ug/L (04024)	Pro- panil, water, fltrd, 0.7u GF ug/L (82679)	Propar- gite, water, fltrd, 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propi- cona- zole, water, fltrd, 0.7u GF ug/L (50471)	Pro- poxur, water, fltrd, 0.7u GF ug/L (38538)
JUL 30...	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008
SEP 24...	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Siduron water, fltrd, 0.7u GF ug/L (38548)	Simaz- ine, water, fltrd, 0.7u GF ug/L (04035)	Sulfo- met- ruron, water, fltrd, 0.7u GF ug/L (50337)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd, 0.7u GF ug/L (82665)	Terba- cil, water, fltrd, 0.7u GF ug/L (04032)	Terbu- fos, water, fltrd, 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd, 0.7u GF ug/L (82678)	Tri- benuron water, fltrd, 0.7u GF ug/L (61159)	Tri- clopyr, water, fltrd, 0.7u GF ug/L (49235)	Tri- flur- alin, water, fltrd, 0.7u GF ug/L (82661)
JUL 30...	<0.02	0.007	<0.009	<0.02	<0.034	<0.010	<0.02	<0.005	<0.002	--	<0.02	<0.009
SEP 24...	<0.02	0.006	<0.009	<0.02	<0.034	<0.010	<0.02	<0.005	<0.002	<0.009	<0.02	<0.009

## 12472600 CRAB CREEK NEAR BEVERLY, WA—Continued

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

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat fltr inc tit field, mg/L as CaCO3 (39086)
FEB 05...	1120	212	759	12.4	8.4	885	10.0	5.3	50.4	32.6	11.7	84.9	--
APR 09...	0930	260	--	8.9	8.4	665	13.3	12.4	38.5	23.4	7.37	61.8	--
MAY 07...	0940	281	--	10.7	8.2	505	15.1	12.9	35.6	21.1	7.20	48.6	--
JUL 01...	1400	129	743	9.9	8.4	531	26.4	21.4	33.1	20.4	8.01	46.9	195

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

Date	Bicarbonate, wat fltr incrm. titr., field, mg/L (00453)	Carbonate, wat fltr 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)	Residue on evap. at 180degC wat fltr mg/L (70300)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	2,4,5-T surrog, water, fltrd, percent recovry (99958)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)
FEB 05...	--	--	29.6	0.83	33.5	100	560	E9	5.7	73.5	<0.009	E.01	<0.02
APR 09...	--	--	18.2	0.59	20.8	67.3	397	E9	5.8	64.2	<0.009	0.02	<0.02
MAY 07...	--	--	15.0	0.49	15.6	52.1	334	E8	4.4	69.2	0.021	0.12	<0.02
JUL 01...	232	3	14.8	0.5	19.3	50.9	326	E6	2.5	90.6	0.041	0.29	<0.02

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

Date	2,6-Diethyl-aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy-carbo-furan, wat fltr 0.7u GF ug/L (49308)	3-Keto-carbo-furan, water, fltrd, ug/L (50295)	Aceto-chlor, water, fltrd, ug/L (49260)	Acifluorfen, water, fltrd 0.7u GF ug/L (49315)	Ala-chlor, water, fltrd, ug/L (46342)	Aldi-carb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldi-carb sulf-oxide, wat fltr 0.7u GF ug/L (49314)	Aldi-carb, water, fltrd 0.7u GF ug/L (49312)	alpha-HCH, water, fltrd, ug/L (34253)
FEB 05...	<0.006	E.014	<0.04	<0.008	<0.006	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005
APR 09...	<0.006	E.009	<0.04	<0.008	<0.006	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005
MAY 07...	<0.006	E.007	E.01	<0.008	<0.006	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005
JUL 01...	<0.006	E.011	<0.04	E.007	<0.006	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005

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

Date	alpha-HCH-d6, surrog, wat fltr 0.7u GF percent recovry (91065)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Barban, surrog, Sched. 2060/9060, wat fltr pct rcv (90640)	Bendio-carb, water, fltrd, ug/L (50299)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Benomyl water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd 0.7u GF ug/L (38711)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd 0.7u GF ug/L (49311)	Butyl-ate, water, fltrd, ug/L (04028)	Caf-feine, water, fltrd, ug/L (50305)
FEB 05...	104	0.016	<0.050	113	<0.03	<0.010	<0.004	<0.02	E.03	E.01	<0.02	<0.002	<0.0096
APR 09...	83.1	0.015	<0.050	80.8	<0.03	<0.010	<0.004	<0.02	E.01	<0.03	<0.02	<0.002	<0.0096
MAY 07...	91.7	0.023	<0.050	121	<0.03	<0.010	<0.004	<0.02	E.02	<0.03	<0.02	<0.002	<0.0096
JUL 01...	87.7	0.019	<0.050	104	<0.03	<0.010	<0.004	<0.02	E.02	<0.03	<0.02	<0.002	<0.0096

## 12472600 CRAB CREEK NEAR BEVERLY, WA—Continued

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

Date	Caffeine-13C, surrog. wat flt percent recovry (99959)	Carbaryl, water, fltrd 0.7u GF ug/L (49310)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (49309)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chloramben methyl ester, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chloro-di-aminos-triazine, wat flt ug/L (04039)	Chloro-thaloni, water, fltrd 0.7u GF ug/L (49306)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water, fltrd 0.7u GF ug/L (82687)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cyanazine, water, fltrd, ug/L (04041)
FEB 05...	66.6	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018
APR 09...	51.0	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01	<0.04	0.011	<0.006	<0.01	<0.018
MAY 07...	81.4	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018
JUL 01...	52.6	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018

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

Date	Cycloate, water, fltrd, ug/L (04031)	Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water, fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog. wat flt 0.7u GF percent recovry (91063)	Dicamba water fltrd 0.7u GF ug/L (38442)	Di-chlor-prop, water, fltrd 0.7u GF ug/L (49302)	Diel-drin, water, fltrd, ug/L (39381)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	Diuron, water, fltrd 0.7u GF ug/L (49300)
FEB 05...	<0.01	<0.01	<0.003	<0.004	<0.005	109	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	E.03
APR 09...	<0.01	<0.01	<0.003	<0.004	<0.005	117	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	0.10
MAY 07...	<0.01	0.02	0.050	<0.004	<0.005	122	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	0.04
JUL 01...	<0.01	<0.01	0.006	<0.004	<0.005	128	0.01	<0.01	<0.005	<0.01	<0.03	<0.02	E.01

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

Date	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Desulf-inyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Flumet-sulam, water, fltrd, ug/L (61694)	Fluo-meturon water fltrd 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Imaza-quin, water, fltrd, ug/L (50356)	Imaze-thapyr, water, fltrd, ug/L (50407)
FEB 05...	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02
APR 09...	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02
MAY 07...	0.075	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02
JUL 01...	0.008	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02

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

Date	Imida-cloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta-laxyl, water, fltrd, ug/L (50359)	Methio-carb, water, fltrd 0.7u GF ug/L (38501)	Metho-myl, water, fltrd 0.7u GF ug/L (49296)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)
FEB 05...	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006
APR 09...	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006
MAY 07...	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006
JUL 01...	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006

## 12472600 CRAB CREEK NEAR BEVERLY, WA—Continued

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

Date	Metsulfuron, water, fltrd, ug/L (61697)	Molinate, water, fltrd, 0.7u GF ug/L (82671)	N-(4-Chlorophenyl)-N'-methylurea, ug/L (61692)	Napropamide, water, fltrd, 0.7u GF ug/L (82684)	Neburon water, fltrd, 0.7u GF ug/L (49294)	Nicosulfuron, water, fltrd, ug/L (50364)	Norflurazon, water, fltrd, 0.7u GF ug/L (49293)	Oryzalin, water, fltrd, 0.7u GF ug/L (49292)	Oxamyl, water, fltrd, 0.7u GF ug/L (38866)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd, 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd, 0.7u GF ug/L (82683)
FEB 05...	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022
APR 09...	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022
MAY 07...	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022
JUL 01...	<0.03	<0.002	<0.02	<0.007	<0.01	E.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022

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

Date	Phorate water fltrd, 0.7u GF ug/L (82664)	Picloram, water, fltrd, 0.7u GF ug/L (49291)	Prometon, water, fltrd, ug/L (04037)	Pronamide, water, fltrd, 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd, 0.7u GF ug/L (82679)	Propargite, water, fltrd, 0.7u GF ug/L (82685)	Propham water fltrd, 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd, 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Simazine, water, fltrd, ug/L (04035)	Sulfometuron, water, fltrd, ug/L (50337)
FEB 05...	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009
APR 09...	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	0.017	<0.009
MAY 07...	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	0.009	<0.009
JUL 01...	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	0.007	<0.009

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

Date	Tebu-thiuron water fltrd, 0.7u GF ug/L (82670)	Terbacil, water, fltrd, 0.7u GF ug/L (82665)	Terbacil, water, fltrd, ug/L (04032)	Terbufos, water, fltrd, 0.7u GF ug/L (82675)	Thio-bencarb water fltrd, 0.7u GF ug/L (82681)	Tri-allate, water, fltrd, 0.7u GF ug/L (82678)	Tri-clopyr, water, fltrd, 0.7u GF ug/L (49235)	Tri-flur-alin, water, fltrd, 0.7u GF ug/L (82661)	Suspnd. sedi-ment, sieve diametr <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)
FEB 05...	<0.02	<0.034	<0.010	<0.02	<0.005	<0.002	<0.02	<0.009	--	--
APR 09...	<0.02	E.061	E.031	<0.02	<0.005	<0.002	<0.02	<0.009	70	67
MAY 07...	<0.02	E.033	E.025	<0.02	<0.005	<0.002	<0.02	<0.009	63	70
JUL 01...	<0.02	E.026	<0.010	<0.02	<0.005	<0.002	<0.02	<0.009	88	97