

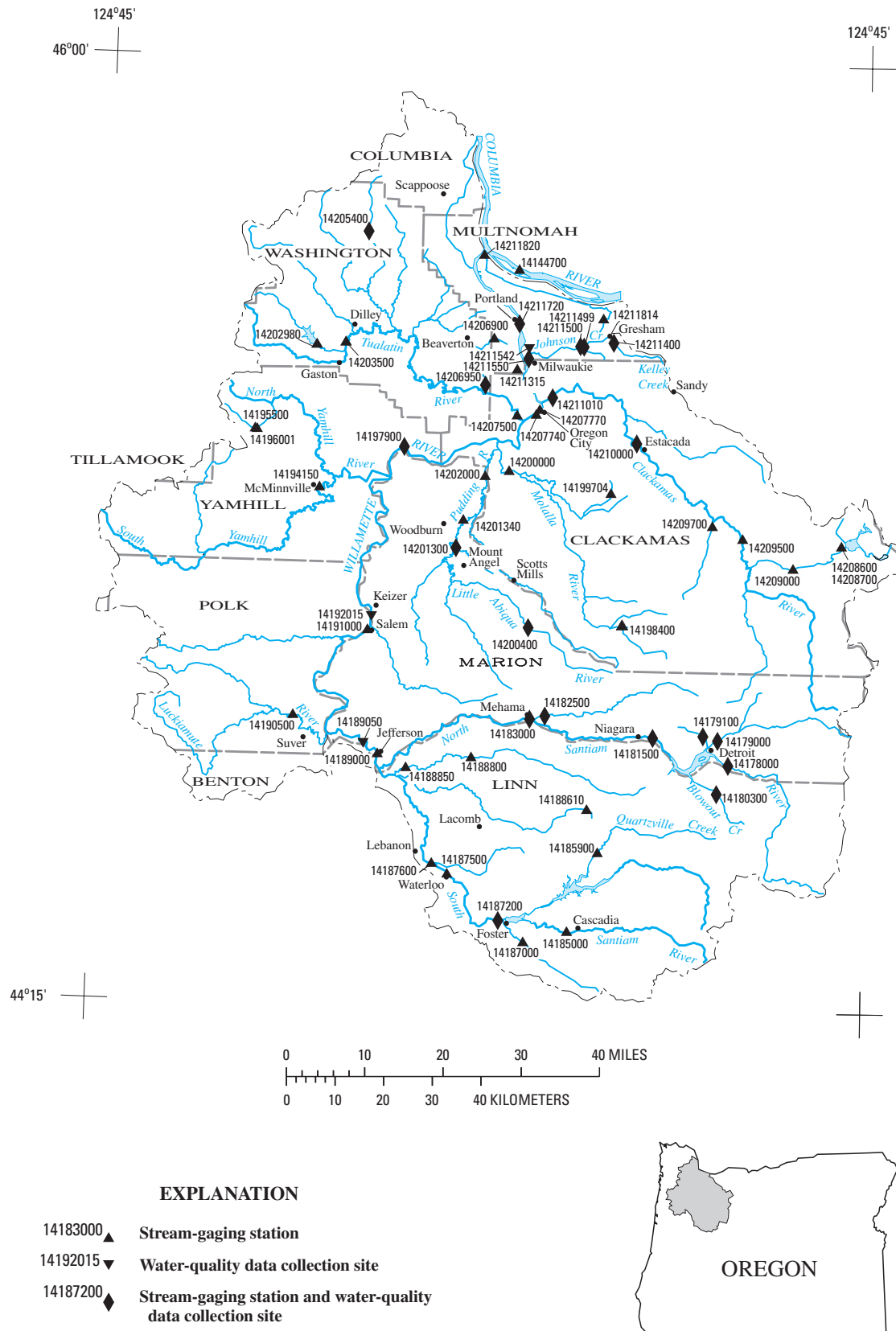


Figure 25. Location of surface-water and water-quality stations in the Willamette River Basin, downstream from the Luckiamute River.

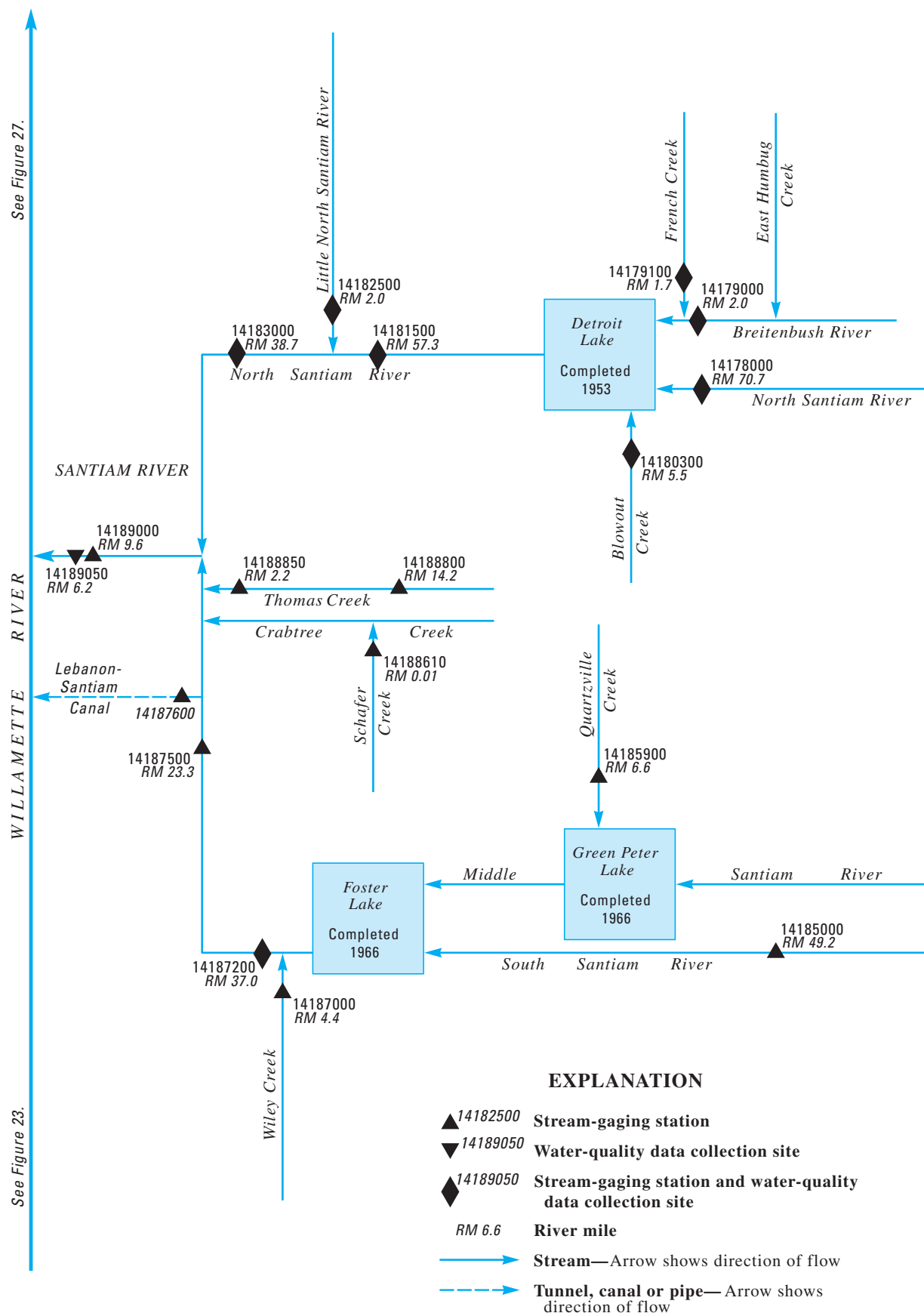


Figure 26. Schematic diagram showing gaging stations and diversions in the Santiam River Basin.

14178000 NORTH SANTIAM RIVER BELOW BOULDER CREEK, NEAR DETROIT, OR

LOCATION.--Lat 44°42'25", long 122°06'00", in SE ¼ NW ¼ sec.17, T.10 S., R.6 E., Marion County, Hydrologic Unit 17090005, on right bank 0.5 mi downstream from Boulder Creek, 3.0 mi southeast of Detroit, and at mile 70.7.

DRAINAGE AREA.--216 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1907 to October 1909, October 1928 to current year. Monthly discharge only January 1907, published in WSP 1318. Prior to October 1952, published as "at Detroit."

REVISED RECORDS.--WSP 814: Drainage area at former site. WSP 1248: 1931. WDR OR-85-2: 1982-82(P).

GAGE.--Water-stage recorder. Datum of gage is 1,590.07 ft above NGVD of 1929. See WSP 1738 for history of changes prior to Oct. 1, 1952.

REMARKS.--Records good. No regulation or diversion upstream from station. Continuous water-quality records for the period April 1951 to September 1987 and October 1998 to current year have been collected at this location.

AVERAGE DISCHARGE.--78 years (water years 1908, 1909, 1929-2004), 1,005 ft³/s, 63.21 in/yr, 728,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,700 ft³/s Dec. 22, 1964, on basis of slope-area measurement of peak flow, gage height, 13.76 ft, temporary backwater from debris; minimum discharge, 250 ft³/s Sept. 13, 1909.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 13	1800	*6,230	*7.02	Jan 29	2100	4,960	6.47

Minimum discharge, 329 ft³/s Nov. 4-10.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	344	337	1,200	738	2,260	1,060	1,180	1,160	1,130	625	449	448
2	344	340	1,070	704	1,980	1,010	1,100	1,200	1,040	609	448	440
3	342	335	1,300	676	1,750	974	1,100	1,230	993	601	440	432
4	341	332	1,180	654	1,530	1,030	1,170	1,200	962	594	438	422
5	340	329	1,570	622	1,360	1,040	1,200	1,110	950	578	438	417
6	338	329	2,040	610	1,310	1,070	1,190	1,020	1,060	568	447	413
7	380	329	1,590	702	1,310	1,020	1,210	982	1,100	573	455	409
8	367	330	1,290	830	1,200	1,070	1,170	1,030	1,260	555	435	409
9	402	331	1,100	997	1,120	1,210	1,170	957	1,330	544	431	409
10	396	338	982	1,030	1,050	1,250	1,190	947	1,360	535	433	404
11	412	413	884	997	1,000	1,220	1,240	993	1,280	526	431	451
12	541	389	1,090	970	961	1,230	1,290	946	1,160	523	432	436
13	445	366	3,610	979	923	1,240	1,320	885	1,090	526	431	477
14	402	354	3,390	1,090	906	1,230	1,420	848	1,050	524	434	521
15	433	359	2,120	1,420	972	1,250	1,350	837	978	524	426	518
16	451	469	1,620	1,580	1,160	1,210	1,200	841	919	517	420	499
17	408	730	1,390	1,450	1,570	1,210	1,120	845	878	515	416	531
18	383	720	1,230	1,350	1,990	1,260	1,080	968	854	511	411	669
19	377	765	1,110	1,460	1,870	1,250	1,030	1,030	834	523	409	641
20	388	687	1,100	1,430	1,610	1,150	1,200	934	796	509	411	665
21	394	590	1,080	1,280	1,420	1,130	1,300	892	769	494	406	587
22	369	519	1,020	e1,180	1,280	1,230	1,230	895	759	483	620	543
23	383	480	961	e1,770	1,180	1,350	1,160	1,010	753	482	536	513
24	359	481	1,040	2,710	1,140	1,400	1,090	908	731	482	508	490
25	349	480	1,020	2,180	1,120	1,360	1,070	848	710	480	651	473
26	347	489	937	1,760	1,100	1,360	1,120	885	687	466	706	462
27	341	454	890	1,690	1,120	1,560	1,260	1,080	667	460	611	453
28	354	456	886	2,060	1,130	1,420	1,290	1,800	652	462	525	444
29	385	1,570	866	4,160	1,080	1,330	1,170	1,780	645	460	488	435
30	369	1,410	779	4,290	---	1,400	1,130	1,470	635	454	465	425
31	347	---	754	2,940	---	1,300	---	1,260	---	450	451	---
TOTAL	11,831	15,511	41,099	46,309	38,402	37,824	35,750	32,791	28,032	16,153	14,602	14,436
MEAN	382	517	1,326	1,494	1,324	1,220	1,192	1,058	934	521	471	481
MAX	541	1,570	3,610	4,290	2,260	1,560	1,420	1,800	1,360	625	706	669
MIN	338	329	754	610	906	974	1,030	837	635	450	406	404
AC-FT	23,470	30,770	81,520	91,850	76,170	75,020	70,910	65,040	55,600	32,040	28,960	28,630
CFSM	1.77	2.39	6.14	6.92	6.13	5.65	5.52	4.90	4.33	2.41	2.18	2.23
IN.	2.04	2.67	7.08	7.98	6.61	6.51	6.16	5.65	4.83	2.78	2.51	2.49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 - 2004, BY WATER YEAR (WY)

	MEAN	505	975	1,374	1,329	1,299	1,204	1,362	1,412	1,085	625	473	436
MAX	1,215	2,167	3,840	2,991	3,552	2,865	2,241	2,762	2,759	1,101	723	595	
(WY)	(1951)	(1951)	(1965)	(1953)	(1996)	(1972)	(2002)	(1949)	(1933)	(1950)	(1999)	(1971)	
MIN	312	335	432	383	404	616	610	600	412	363	319	302	
(WY)	(1981)	(1994)	(1977)	(1937)	(1977)	(1941)	(1941)	(1992)	(1992)	(1992)	(1992)	(2001)	

14178000 NORTH SANTIAM RIVER BELOW BOULDER CREEK, NEAR DETROIT, OR—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1908 - 2004	
ANNUAL TOTAL	362,990		332,740			
ANNUAL MEAN	994		909		1,005	
HIGHEST ANNUAL MEAN					1,506	1974
LOWEST ANNUAL MEAN					569	1977
HIGHEST DAILY MEAN	5,330	Jan 31	4,290	Jan 30	19,400	Dec 22, 1964
LOWEST DAILY MEAN	329	Nov 5	329	Nov 5	250	Sep 13, 1909
ANNUAL SEVEN-DAY MINIMUM	331	Nov 3	331	Nov 3	273	Sep 7, 1909
ANNUAL RUNOFF (AC-FT)	720,000		660,000		728,000	
ANNUAL RUNOFF (CFSM)	4.60		4.21		4.65	
ANNUAL RUNOFF (INCHES)	62.51		57.31		63.21	
10 PERCENT EXCEEDS	1,940		1,420		1,800	
50 PERCENT EXCEEDS	866		885		786	
90 PERCENT EXCEEDS	364		395		401	

e Estimated



2004 Water Year
SANTIAM RIVER BASIN

14178000 NO SANTIAM R BLW BOULDER CR, NR DETROIT, OR

Latitude: 44° 42 ' 25"

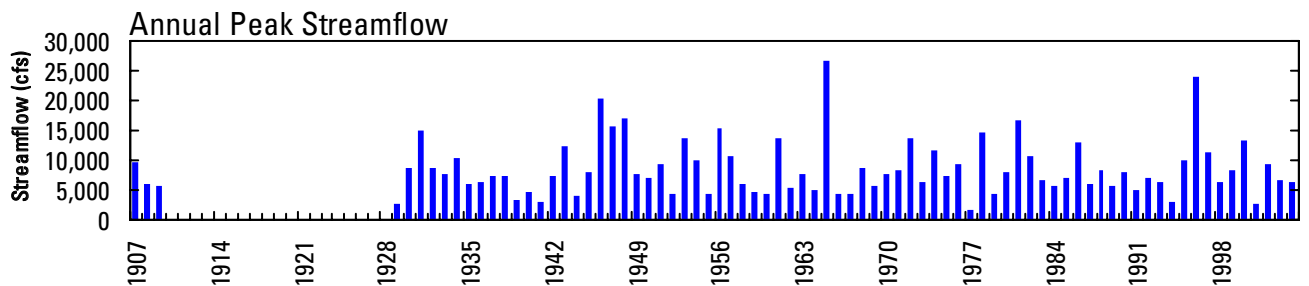
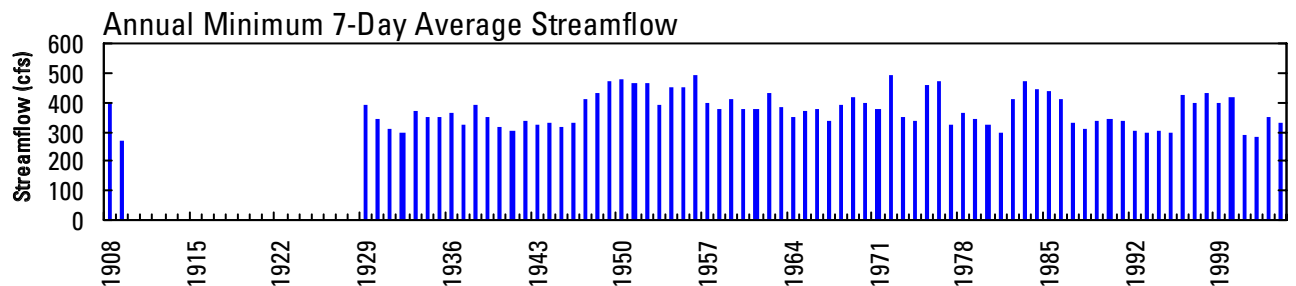
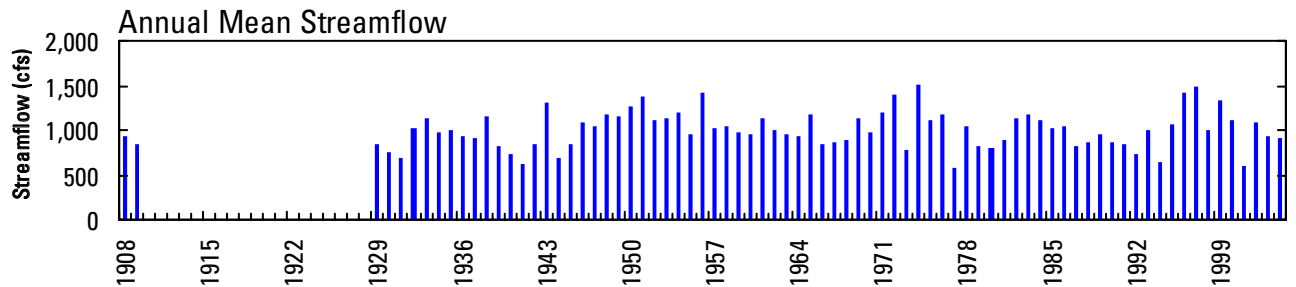
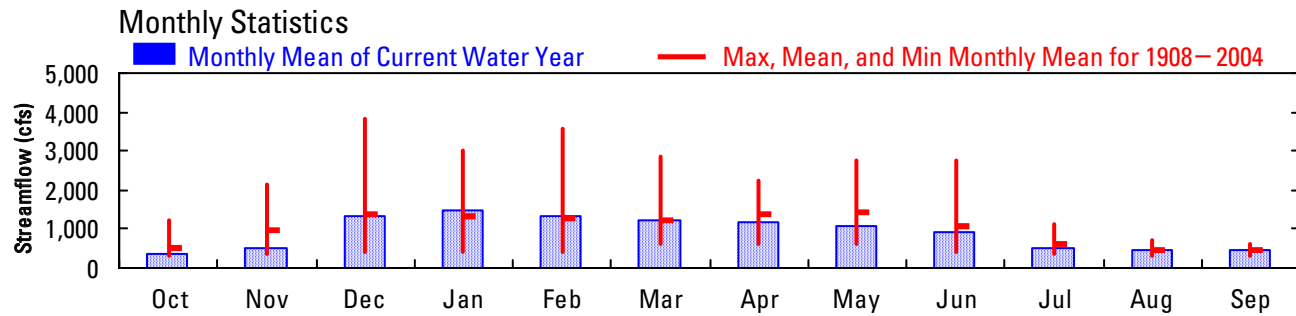
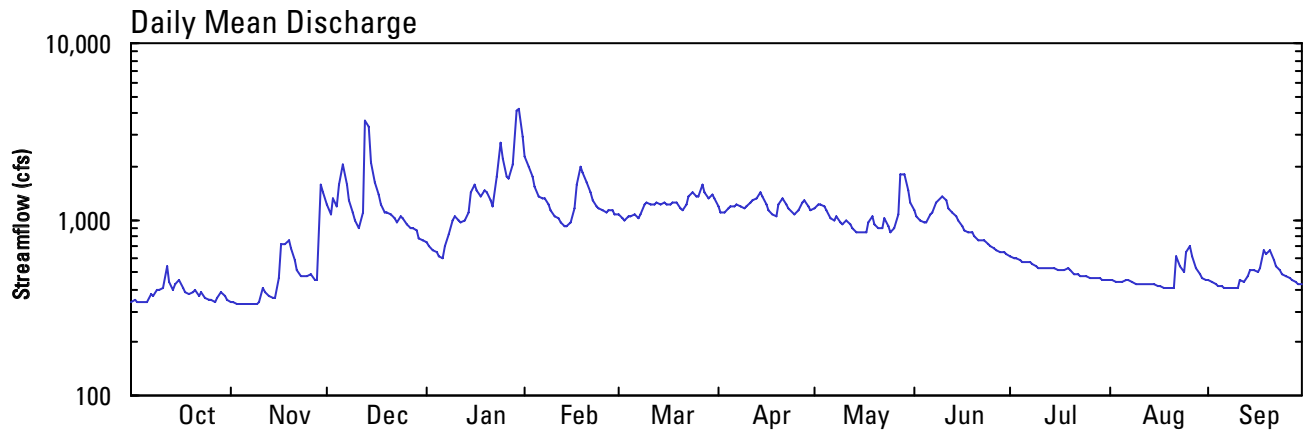
Longitude: 122° 06 ' 00"

Hydrologic Unit Code: 17090005

Marion County

Datum: 1,590.07 feet

Drainage Area: 216 square miles



14178000 NORTH SANTIAM RIVER BELOW BOULDER CREEK, NEAR DETROIT, OR—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1998 to current year.

pH: October 1998 to current year.

WATER TEMPERATURE: April 1951 to September 1987, October 1998 to current year.

TURBIDITY: October 1998 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--

SPECIFIC CONDUCTANCE: Records good except those for the period July 21 to Sept. 30, which are fair.

pH: Records excellent.

WATER TEMPERATURE: Records excellent.

TURBIDITY: Records excellent. Turbidity data are highly dependent on the instrumentation used for the measurement. See the "Definitions" section for turbidity in the front of this report.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 55 microsiemens Oct. 25, 2003; minimum, 18 microsiemens Apr. 14, 2002.

pH: Maximum recorded, 8.4 units Sept. 16, 1999, Sept. 14, 15, 2002; minimum recorded, 6.8 units Mar. 28, Apr. 30, May 1, 2001.

WATER TEMPERATURE: Maximum recorded, 19.0°C July 18, 19, 1970; minimum recorded, 0.0°C several days in Jan. 1974, Jan., Feb. 1979, Jan. 1980, Dec. 1998.

TURBIDITY: Maximum recorded, 1,770 FNU Oct. 1, 2000, but may have been higher when upper sensor range was exceeded; minimum, <1 FNU many days each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 55 microsiemens Oct. 25; minimum recorded, 25 microsiemens Dec. 13.

pH: Maximum, 8.0 units many days in Oct. July, Aug. Sept.; minimum, 7.2 units Dec. 13, 14, Jan. 29, 30.

WATER TEMPERATURE: Maximum, 17.1°C July 24; minimum, 0.5°C Jan. 6.

TURBIDITY: Maximum recorded, 1,310 FNU Oct. 21, but may have been higher when upper sensor range was exceeded, minimum recorded, <1 FNU on many days during year.

14178000 NORTH SANTIAM RIVER BELOW BOULDER CREEK, NEAR DETROIT, OR—Continued

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

Date	Time	Instantaneous discharge, cfs (00061)	Suspnd. sediment, sieve diameter percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
OCT					
20...	2302	400	--	15	16
21...	0102	405	--	68	74
21...	0202	405	--	43	47
21...	0302	405	--	36	39
21...	0402	405	--	33	36
21...	0502	405	--	40	44
21...	0602	405	--	632	691
21...	0632	405	--	1,020	1,120
21...	0702	405	--	954	1,040
21...	0732	405	--	1,160	1,270
21...	0802	405	>99	1,870	2,050
21...	0832	405	>99	2,520	2,750
21...	0902	405	>99	2,510	2,750
21...	0932	400	--	1,900	2,050
21...	1002	400	>99	1,340	1,440
21...	1032	400	--	881	951
21...	1102	395	--	659	703
21...	1132	395	--	519	554
21...	1202	395	--	441	470
21...	1231	395	95	415	443
21...	1232	395	--	392	418
21...	1302	395	--	330	352
21...	1332	395	--	285	304
21...	1402	390	--	240	253
21...	1432	390	--	212	223
21...	1502	390	--	179	188
21...	1516	390	>99	173	182
21...	1532	390	--	105	111
21...	1602	385	--	147	153
21...	1632	385	--	129	134
21...	1702	385	--	118	123
21...	1802	385	--	102	106
21...	1902	385	--	89	93
21...	2002	380	--	85	87
21...	2102	380	--	74	76
21...	2202	380	--	77	79
21...	2302	375	--	63	64
22...	0002	375	--	60	61
22...	0102	375	--	58	59
22...	0202	375	--	48	49
22...	0302	375	--	46	47
22...	0502	370	--	47	47
23...	1355	385	95	18	19
29...	0202	385	--	38	40
29...	0402	400	--	28	30
29...	0602	390	--	27	28
29...	0802	385	--	28	29
29...	1002	380	--	37	38
29...	1131	375	93	26	26
29...	1202	375	--	22	22

WILLAMETTE RIVER BASIN

14178000 NORTH SANTIAM RIVER BELOW BOULDER CREEK, NEAR DETROIT, OR—Continued

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

Date	Time	Instantaneous discharge, cfs (00061)	Suspnd. sediment, sieve diameter percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
NOV					
16...	2202	657	--	55	98
17...	0002	705	--	54	103
17...	0202	747	--	58	117
17...	0402	798	--	56	121
17...	0602	829	--	57	128
17...	0802	813	--	42	92
19...	1232	754	--	9	18
19...	1345	799	92	9	19
19...	1410	814	--	9	20
29...	0602	1,270	--	97	333
29...	0702	1,460	--	101	398
29...	0832	1,730	--	164	766
29...	0902	1,800	--	201	977
29...	0932	1,860	--	220	1,100
29...	1002	1,910	--	219	1,130
29...	1102	1,960	--	210	1,110
29...	1202	1,980	--	173	925
29...	1302	1,980	--	135	722
29...	1402	1,960	--	102	540
29...	1602	1,920	--	83	430
29...	1802	1,860	--	60	301
DEC					
06...	0802	2,340	--	45	284
11...	1043	888	--	69	165
11...	1044	887	--	7	17
11...	1105	883	--	4	9.5
13...	1700	6,080	--	418	6,860
JAN					
29...	0836	3,960	--	45	482
29...	0904	4,030	35	70	762
29...	0925	4,090	--	47	519
29...	1202	4,390	--	56	664
29...	2002	4,900	--	66	873
29...	2202	4,940	--	50	667
JUN					
23...	0902	762	--	26	53
23...	1102	762	--	42	86
23...	1202	754	--	49	100
23...	1302	754	--	47	96
23...	1502	747	--	40	81
23...	1702	740	--	30	60
23...	1902	733	--	24	47
24...	0502	747	--	25	50
24...	0702	747	--	26	52
24...	0902	740	--	25	50
24...	1102	740	--	21	42
24...	1302	733	--	16	32
25...	1541	702	--	10	19
25...	1602	698	92	11	21
25...	1616	698	--	9	17
JUL					
21...	0943	502	91	4	5.4
25...	0702	491	--	40	53
25...	0902	491	--	39	52
25...	1102	485	--	20	26
AUG					
25...	1124	673	90	18	33
25...	1508	785	--	28	59
25...	1532	791	84	29	62
25...	1550	791	--	28	60
SEP					
11...	1902	485	--	28	37
11...	2202	474	--	38	49
11...	2302	468	--	25	32
23...	2102	502	--	20	27

14178000 NORTH SANTIAM RIVER BELOW BOULDER CREEK, NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	51	50	50	49	49	49	37	37	37	40	39	39
2	51	50	50	49	49	49	39	37	38	40	39	40
3	52	50	51	49	48	49	39	36	37	40	40	40
4	51	49	50	48	48	48	38	37	37	41	40	40
5	50	49	50	48	48	48	38	33	35	41	41	41
6	51	49	50	48	48	48	34	32	33	42	41	41
7	50	49	49	48	48	48	34	33	34	41	39	40
8	50	48	49	48	48	48	35	34	35	40	38	39
9	49	48	49	48	48	48	43	35	39	39	38	38
10	49	49	49	48	48	48	42	36	37	38	38	38
11	50	48	49	48	47	48	40	37	38	38	38	38
12	50	48	49	48	48	48	39	35	37	39	38	39
13	50	50	50	48	48	48	35	25	30	39	38	38
14	50	49	50	48	48	48	30	26	29	38	37	38
15	50	48	49	48	48	48	32	30	31	37	36	36
16	50	49	50	48	45	47	33	32	33	36	35	35
17	51	50	51	45	43	44	34	33	34	36	35	36
18	51	50	51	45	42	43	37	34	35	36	36	36
19	52	51	51	42	39	41	38	35	36	36	36	36
20	52	51	51	42	40	41	36	36	36	36	36	36
21	51	49	51	43	42	42	36	36	36	37	36	36
22	52	51	51	44	43	43	37	36	36	37	37	37
23	51	50	50	44	44	44	37	37	37	36	---	---
24	50	50	50	44	44	44	37	36	37	34	31	32
25	55	49	51	45	42	43	37	36	37	34	32	33
26	54	49	50	44	43	44	38	37	37	36	34	35
27	54	50	51	45	44	44	38	37	38	36	35	35
28	50	49	50	45	43	45	38	37	37	35	33	34
29	51	48	49	43	34	37	39	37	38	33	27	29
30	49	48	48	37	35	36	39	39	39	31	27	29
31	49	49	49	---	---	---	39	39	39	33	31	32
MONTH	55	48	50	49	34	45	43	25	36	42	27	37
FEBRUARY			MARCH			APRIL			MAY			
1	34	33	33	40	39	40	36	35	36	37	36	36
2	35	34	34	40	40	40	37	36	37	36	36	36
3	36	35	35	41	40	40	37	37	37	36	34	35
4	37	36	36	40	40	40	37	36	36	36	34	35
5	38	37	37	40	40	40	37	36	36	36	35	35
6	38	37	38	40	40	40	36	36	36	37	36	37
7	38	37	38	40	40	40	37	36	36	37	37	37
8	39	38	39	40	39	39	36	36	36	37	37	37
9	40	39	39	39	38	38	36	36	36	38	37	38
10	40	40	40	38	37	37	36	36	36	38	38	38
11	41	40	40	38	37	38	36	36	36	38	38	38
12	41	41	41	38	37	37	36	34	34	39	38	38
13	41	40	41	37	37	37	34	34	34	39	38	38
14	42	40	41	37	37	37	34	34	34	39	38	38
15	42	40	40	37	37	37	35	34	34	39	38	38
16	42	38	40	37	37	37	36	35	35	39	38	39
17	38	36	37	37	37	37	36	36	36	39	38	38
18	36	35	35	37	36	36	37	36	37	39	37	37
19	36	35	35	37	36	36	37	37	37	38	36	36
20	37	36	36	37	37	37	37	36	36	38	37	37
21	38	37	37	37	37	37	37	36	37	38	38	38
22	38	38	38	37	36	36	36	36	36	38	38	38
23	39	38	39	36	35	36	36	36	36	38	36	37
24	39	39	39	35	35	35	37	36	36	39	37	38
25	39	39	39	35	35	35	37	36	36	40	39	39
26	39	39	39	35	34	35	37	36	36	40	38	39
27	39	39	39	34	34	34	37	34	35	38	35	37
28	39	39	39	36	34	34	35	33	34	35	33	33
29	40	39	39	35	35	35	36	35	36	34	32	34
30	---	---	---	35	34	34	37	36	36	36	34	35
31	---	---	---	36	34	35	---	---	---	36	36	36
MONTH	42	33	38	41	34	37	37	33	36	40	32	37

14178000 NORTH SANTIAM RIVER BELOW BOULDER CREEK, NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	38	36	37	44	43	43	47	46	47	49	47	48
2	39	38	38	44	44	44	47	46	47	47	46	47
3	39	38	38	45	44	44	47	46	47	48	46	47
4	39	38	38	45	45	45	47	46	47	48	48	48
5	39	38	38	46	44	44	47	47	47	49	48	49
6	38	37	37	46	45	45	47	46	46	49	48	48
7	38	36	36	45	44	45	47	46	46	49	48	49
8	37	36	36	46	45	45	48	46	47	50	49	49
9	38	36	37	46	45	46	48	47	47	50	48	49
10	36	35	36	46	46	46	47	46	47	49	48	49
11	37	36	36	46	46	46	53	47	47	49	47	48
12	39	37	37	47	46	46	48	46	47	48	47	48
13	38	38	38	47	46	47	48	47	47	48	47	47
14	39	38	38	47	46	47	48	46	47	48	46	47
15	40	39	39	47	46	47	48	47	47	48	47	47
16	40	40	40	46	46	46	48	47	48	48	46	47
17	42	40	40	47	46	46	48	47	48	49	46	47
18	42	40	41	47	46	46	49	47	48	46	43	44
19	43	41	42	47	46	46	51	48	49	44	43	44
20	42	41	41	47	46	47	51	48	50	44	43	43
21	42	41	41	48	45	46	50	49	49	45	44	44
22	42	42	42	46	46	46	50	45	47	46	45	45
23	43	41	42	46	45	46	49	46	48	46	45	46
24	43	42	42	46	45	46	50	48	49	47	46	47
25	44	42	43	47	45	46	48	46	47	48	47	48
26	44	43	43	47	46	46	47	45	46	49	48	48
27	46	43	44	47	46	46	49	46	48	50	49	49
28	45	43	43	47	46	47	50	49	50	50	49	50
29	45	43	43	47	46	47	51	49	50	50	49	49
30	45	43	44	47	46	46	51	49	50	50	49	50
31	---	---	---	47	46	47	50	49	49	---	---	---
MONTH	46	35	40	48	43	46	53	45	48	50	43	47

14178000 NORTH SANTIAM RIVER BELOW BOULDER CREEK, NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	8.0	7.5	7.6	7.7	7.6	7.6	7.5	7.4	7.4	7.6	7.5	7.5
2	8.0	7.5	7.6	7.8	7.6	7.6	7.5	7.4	7.4	7.6	7.5	7.6
3	7.9	7.5	7.6	7.7	7.6	7.6	7.5	7.4	7.4	7.6	7.5	7.6
4	8.0	7.5	7.6	7.8	7.6	7.6	7.5	7.4	7.4	7.7	7.6	7.6
5	7.9	7.5	7.6	7.7	7.6	7.6	7.4	7.4	7.4	7.7	7.6	7.6
6	8.0	7.6	7.6	7.7	7.6	7.6	7.4	7.3	7.4	7.6	7.6	7.6
7	8.0	7.6	7.6	7.8	7.6	7.6	7.5	7.3	7.4	7.7	7.6	7.6
8	7.9	7.5	7.7	7.8	7.6	7.6	7.5	7.4	7.4	7.6	7.6	7.6
9	8.0	7.6	7.7	7.8	7.6	7.6	7.5	7.4	7.4	7.7	7.5	7.6
10	7.9	7.6	7.7	7.7	7.6	7.6	7.5	7.4	7.4	7.7	7.5	7.6
11	7.8	7.6	7.6	7.7	7.5	7.6	7.6	7.4	7.5	7.7	7.6	7.6
12	7.9	7.6	7.7	7.7	7.6	7.6	7.5	7.4	7.5	7.7	7.6	7.6
13	7.9	7.6	7.7	7.7	7.5	7.6	7.5	7.2	7.3	7.7	7.6	7.6
14	7.9	7.6	7.6	7.8	7.5	7.6	7.4	7.2	7.3	7.6	7.5	7.5
15	7.8	7.6	7.6	7.8	7.5	7.6	7.5	7.3	7.4	7.5	7.4	7.5
16	7.9	7.6	7.6	7.7	7.5	7.6	7.5	7.4	7.4	7.5	7.4	7.4
17	7.9	7.5	7.6	7.6	7.5	7.5	7.5	7.4	7.4	7.5	7.4	7.5
18	7.9	7.5	7.6	7.6	7.5	7.5	7.5	7.4	7.5	7.5	7.4	7.5
19	7.9	7.5	7.6	7.6	7.5	7.5	7.5	7.4	7.5	7.5	7.4	7.4
20	7.8	7.5	7.5	7.7	7.5	7.5	7.5	7.4	7.5	7.5	7.4	7.4
21	7.6	7.4	7.5	7.7	7.5	7.6	7.6	7.4	7.5	7.5	7.4	7.5
22	7.8	7.5	7.6	7.6	7.5	7.6	7.6	7.5	7.5	7.5	7.4	7.4
23	7.8	7.6	7.6	7.7	7.5	7.6	7.6	7.5	7.5	---	7.3	---
24	7.8	7.5	7.6	7.7	7.5	7.6	7.6	7.5	7.5	7.4	7.3	7.3
25	7.8	7.5	7.6	7.6	7.5	7.6	7.6	7.5	7.5	7.4	7.3	7.4
26	7.8	7.5	7.6	7.7	7.5	7.5	7.6	7.5	7.5	7.5	7.4	7.4
27	7.8	7.5	7.6	7.7	7.5	7.6	7.6	7.5	7.5	7.4	7.4	7.4
28	7.8	7.5	7.6	7.7	7.5	7.5	7.5	7.5	7.5	7.4	7.3	7.4
29	7.8	7.6	7.6	7.5	7.3	7.4	7.6	7.5	7.5	7.3	7.2	7.2
30	7.8	7.6	7.6	7.5	7.3	7.4	7.6	7.5	7.5	7.3	7.2	7.2
31	7.7	7.6	7.6	---	---	---	7.6	7.5	7.5	7.4	7.3	7.3
MAX	8.0	7.6	7.7	7.8	7.6	7.6	7.6	7.5	7.5	7.7	7.6	7.6
MIN	7.6	7.4	7.5	7.5	7.3	7.4	7.4	7.2	7.3	7.3	7.2	7.2
FEBRUARY			MARCH			APRIL			MAY			
1	7.4	7.3	7.3	7.6	7.5	7.5	7.6	7.4	7.5	7.6	7.4	7.5
2	7.4	7.3	7.3	7.6	7.5	7.5	7.6	7.4	7.5	7.6	7.4	7.4
3	7.4	7.3	7.3	7.6	7.5	7.5	7.6	7.4	7.5	7.6	7.4	7.5
4	7.5	7.3	7.4	7.6	7.5	7.5	7.6	7.4	7.5	7.6	7.4	7.5
5	7.5	7.5	7.5	7.6	7.5	7.5	7.6	7.4	7.5	7.6	7.4	7.5
6	7.5	7.5	7.5	7.6	7.5	7.5	7.6	7.4	7.5	7.6	7.4	7.5
7	7.5	7.5	7.5	7.6	7.4	7.5	7.6	7.4	7.5	7.6	7.4	7.5
8	7.5	7.5	7.5	7.6	7.4	7.5	7.6	7.5	7.5	7.6	7.4	7.5
9	7.5	7.5	7.5	7.6	7.4	7.5	7.6	7.5	7.5	7.6	7.4	7.5
10	7.5	7.5	7.5	7.6	7.4	7.5	7.6	7.5	7.5	7.5	7.4	7.5
11	7.6	7.5	7.5	7.6	7.4	7.5	7.6	7.4	7.5	7.6	7.4	7.5
12	7.6	7.5	7.5	7.6	7.4	7.5	7.6	7.4	7.5	7.6	7.4	7.5
13	7.6	7.5	7.5	7.6	7.4	7.5	7.6	7.5	7.5	7.6	7.4	7.5
14	7.6	7.5	7.5	7.6	7.4	7.5	7.5	7.4	7.5	7.6	7.4	7.5
15	7.6	7.5	7.5	7.6	7.4	7.5	7.6	7.4	7.5	7.6	7.4	7.5
16	7.5	7.5	7.5	7.6	7.4	7.5	7.6	7.4	7.5	7.6	7.4	7.5
17	7.5	7.4	7.5	7.6	7.4	7.5	7.6	7.4	7.5	7.6	7.4	7.5
18	7.5	7.4	7.4	7.6	7.5	7.5	7.6	7.4	7.5	7.6	7.4	7.4
19	7.5	7.4	7.4	7.6	7.5	7.5	7.6	7.4	7.5	7.7	7.4	7.5
20	7.5	7.4	7.4	7.6	7.5	7.5	7.5	7.4	7.5	7.7	7.5	7.6
21	7.5	7.4	7.4	7.6	7.5	7.5	7.5	7.4	7.4	7.7	7.5	7.6
22	7.5	7.4	7.5	7.6	7.4	7.5	7.6	7.4	7.4	7.7	7.5	7.6
23	7.6	7.4	7.5	7.6	7.4	7.5	7.5	7.4	7.4	7.7	7.5	7.5
24	7.5	7.4	7.5	7.6	7.4	7.5	7.6	7.4	7.5	7.7	7.5	7.5
25	7.6	7.5	7.5	7.6	7.5	7.5	7.6	7.4	7.4	7.7	7.5	7.5
26	7.6	7.5	7.5	7.6	7.5	7.5	7.6	7.3	7.4	7.7	7.5	7.6
27	7.5	7.4	7.5	7.5	7.4	7.5	7.5	7.3	7.4	7.6	7.5	7.5
28	7.6	7.5	7.5	7.5	7.4	7.5	7.6	7.3	7.5	7.5	7.4	7.5
29	7.6	7.5	7.5	7.6	7.4	7.5	7.6	7.4	7.5	7.6	7.4	7.5
30	---	---	---	7.5	7.4	7.5	7.6	7.4	7.5	7.6	7.4	7.5
31	---	---	---	7.6	7.4	7.5	---	---	---	7.6	7.4	7.5
MAX	7.6	7.5	7.5	7.6	7.5	7.5	7.6	7.5	7.5	7.7	7.5	7.6
MIN	7.4	7.3	7.3	7.5	7.4	7.5	7.5	7.3	7.4	7.5	7.4	7.4

14178000 NORTH SANTIAM RIVER BELOW BOULDER CREEK, NEAR DETROIT, OR—Continued

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

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

14178000 NORTH SANTIAM RIVER BELOW BOULDER CREEK, NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	11.2	9.7	10.5	3.8	2.0	2.9	5.3	4.8	5.0	3.2	1.6	2.3
2	12.0	10.2	11.1	4.2	3.8	4.0	5.5	5.0	5.2	3.1	1.6	2.5
3	11.4	9.8	10.7	4.2	3.5	3.8	5.3	4.6	5.1	3.0	2.3	2.6
4	11.7	9.8	10.8	4.3	3.5	3.9	5.4	4.4	4.9	2.8	2.1	2.5
5	12.0	10.7	11.3	4.2	2.9	3.6	5.6	5.4	5.5	2.6	1.6	2.0
6	11.3	9.7	10.7	4.5	3.5	4.0	5.5	4.8	5.3	1.6	0.5	1.0
7	11.4	10.4	11.0	5.7	4.4	5.0	4.8	4.2	4.6	3.1	1.4	2.7
8	10.4	8.8	9.4	5.8	4.7	5.3	5.1	4.2	4.6	3.8	3.1	3.5
9	9.6	8.8	9.2	5.7	4.9	5.3	5.0	4.4	4.7	4.3	3.6	3.9
10	9.0	7.9	8.5	6.2	5.4	5.7	5.0	4.3	4.7	4.3	4.0	4.1
11	8.2	7.4	7.8	6.8	6.1	6.4	5.2	4.7	5.0	4.3	3.7	4.0
12	8.9	8.0	8.4	6.5	5.3	6.0	5.2	4.7	5.0	4.4	3.6	4.0
13	8.8	7.6	8.3	5.3	4.2	4.7	5.2	3.8	4.8	4.5	4.1	4.3
14	9.2	8.4	8.7	5.8	4.5	5.1	4.4	3.9	4.3	4.6	4.3	4.5
15	8.4	7.2	7.7	6.2	5.4	5.8	4.7	4.3	4.5	4.8	4.4	4.6
16	8.8	7.9	8.3	6.0	5.4	5.5	4.5	4.2	4.3	4.8	4.4	4.6
17	9.8	8.5	9.2	5.9	5.3	5.6	4.8	4.3	4.6	4.7	4.2	4.4
18	9.2	7.6	8.4	6.8	5.9	6.3	4.4	4.0	4.2	4.9	4.4	4.6
19	9.4	8.4	8.9	6.6	4.0	5.5	4.8	4.0	4.4	4.9	4.4	4.6
20	10.2	9.1	9.7	4.6	4.0	4.2	5.4	4.8	5.1	4.5	3.9	4.3
21	10.4	9.7	10.1	4.3	3.6	4.0	5.5	4.6	5.1	3.9	3.2	3.5
22	10.1	9.2	9.7	3.8	3.1	3.2	4.8	4.0	4.4	---	---	---
23	9.9	8.1	9.1	3.7	2.9	3.3	5.2	4.3	4.7	---	---	---
24	8.1	6.5	7.2	3.8	3.1	3.5	5.3	4.5	5.1	4.3	3.3	3.9
25	7.6	6.2	7.0	3.7	2.1	2.9	4.6	4.0	4.3	4.0	3.3	3.7
26	8.2	6.8	7.6	3.4	2.4	2.9	4.1	3.4	3.9	4.4	3.9	4.1
27	8.5	7.3	8.0	3.7	3.1	3.5	4.0	2.4	3.4	4.5	4.1	4.3
28	9.4	8.5	8.9	4.4	3.6	4.0	2.8	2.2	2.4	4.5	4.3	4.4
29	9.3	6.7	7.9	4.3	3.8	4.1	2.8	1.2	1.9	4.4	4.1	4.2
30	6.7	4.6	5.7	5.0	4.3	4.6	2.4	1.4	1.9	4.3	3.5	3.8
31	4.6	3.1	3.5	---	---	---	3.1	2.2	2.7	4.2	3.6	3.9
MONTH	12.0	3.1	8.8	6.8	2.0	4.5	5.6	1.2	4.4	4.9	0.5	3.7
FEBRUARY			MARCH			APRIL			MAY			
1	4.4	3.7	4.1	5.6	4.4	5.0	6.6	3.7	5.0	10.5	6.8	8.6
2	4.8	4.0	4.4	5.5	4.1	4.7	7.2	3.6	5.4	11.2	7.2	9.0
3	4.5	3.7	4.1	4.4	3.3	3.8	8.2	4.9	6.4	11.2	7.5	9.2
4	4.8	4.2	4.4	4.5	3.6	4.1	8.0	5.1	6.4	9.2	7.6	8.4
5	4.4	3.6	4.1	4.8	4.0	4.3	7.2	5.4	6.3	9.2	7.1	8.1
6	4.7	4.0	4.4	5.3	3.9	4.6	8.2	5.6	6.7	9.8	6.7	8.1
7	4.6	3.9	4.3	6.4	4.6	5.4	7.5	5.2	6.3	9.1	7.4	8.3
8	4.8	3.9	4.3	6.2	4.1	5.2	8.1	5.2	6.5	9.1	7.4	8.2
9	4.2	3.6	4.0	6.0	4.5	5.2	8.2	4.7	6.4	9.9	7.2	8.4
10	4.1	3.1	3.6	6.0	4.3	5.1	8.5	4.9	6.7	8.4	7.2	7.7
11	4.4	3.2	3.8	6.1	3.8	5.0	8.8	5.2	6.9	8.4	6.5	7.3
12	4.0	3.0	3.5	6.4	4.2	5.2	8.6	5.7	7.1	9.4	6.8	7.9
13	4.1	3.0	3.6	6.2	3.9	5.1	7.4	6.2	6.8	10.6	6.3	8.3
14	5.0	4.0	4.5	6.6	4.9	5.7	6.4	5.3	5.8	11.3	7.1	8.9
15	4.9	4.0	4.4	6.1	4.2	5.2	6.2	4.8	5.5	9.1	7.8	8.5
16	4.8	4.2	4.5	6.5	3.8	5.1	6.9	5.0	5.9	9.9	7.6	8.6
17	4.8	4.2	4.5	6.6	4.1	5.4	7.1	5.2	6.1	9.3	7.1	8.3
18	5.0	4.4	4.7	5.9	4.4	5.2	6.9	5.2	6.0	9.2	7.8	8.4
19	5.0	4.0	4.4	5.6	4.2	4.8	6.7	5.1	6.0	10.7	7.6	8.9
20	4.7	3.6	4.1	6.3	3.5	4.9	6.2	5.0	5.4	10.9	8.0	9.3
21	5.1	3.7	4.3	7.0	4.5	5.7	6.7	4.7	5.5	11.2	8.4	9.7
22	5.5	4.2	4.7	7.4	4.8	6.0	8.5	5.1	6.5	9.8	8.0	8.6
23	5.5	4.4	4.9	7.1	5.3	6.1	6.8	5.1	5.9	9.1	7.3	8.1
24	5.2	4.3	4.7	5.8	4.9	5.3	8.7	5.6	6.9	11.1	7.3	8.9
25	5.1	4.0	4.5	5.6	4.7	5.1	9.6	5.3	7.3	12.0	7.4	9.5
26	5.2	4.1	4.7	5.2	4.2	4.7	10.4	6.2	8.2	10.4	8.9	9.3
27	5.2	4.4	4.8	5.6	4.4	5.0	10.2	6.6	8.3	9.1	8.4	8.7
28	5.3	4.1	4.7	6.7	4.1	5.3	8.9	6.0	7.4	8.4	7.2	7.7
29	5.3	4.2	4.8	7.5	4.4	5.9	9.6	5.4	7.3	7.8	6.7	7.2
30	---	---	---	6.3	4.9	5.6	10.4	6.1	8.1	8.7	7.2	7.9
31	---	---	---	5.9	4.1	4.9	---	---	---	10.8	7.4	8.8
MONTH	5.5	3.0	4.3	7.5	3.3	5.1	10.4	3.6	6.5	12.0	6.3	8.5

14178000 NORTH SANTIAM RIVER BELOW BOULDER CREEK, NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	11.2	7.2	9.1	15.5	10.8	13.0	16.6	12.1	14.4	13.6	11.8	12.5
2	12.4	7.7	9.9	14.9	10.9	12.9	15.0	12.3	14.0	11.8	10.3	10.9
3	13.4	8.8	10.8	14.4	11.4	12.7	15.1	12.1	13.4	13.0	9.9	11.4
4	13.4	9.0	11.1	15.3	10.6	12.7	15.4	11.4	13.4	13.3	10.2	11.7
5	11.5	9.3	9.8	15.3	10.2	12.7	14.1	12.1	13.2	12.9	10.1	11.5
6	9.3	8.3	8.7	15.3	10.9	13.1	12.8	11.1	11.6	12.4	9.3	11.0
7	9.1	7.8	8.4	13.8	11.5	12.6	14.8	10.3	12.4	12.6	9.7	11.2
8	8.4	7.8	8.1	14.5	9.4	11.8	15.2	10.7	13.0	12.9	9.8	11.4
9	9.1	7.9	8.4	14.1	10.1	12.1	15.8	11.2	13.5	12.1	10.5	11.2
10	8.9	8.1	8.5	13.2	10.4	11.7	16.4	12.0	14.2	12.6	9.6	11.1
11	8.8	7.6	8.2	14.6	9.4	11.9	16.4	12.3	14.4	12.6	11.3	11.9
12	10.5	7.5	8.9	15.6	10.5	12.9	16.5	12.6	14.6	11.9	10.7	11.4
13	10.6	8.5	9.3	15.8	11.3	13.6	17.0	12.9	15.0	11.4	10.3	10.8
14	11.8	8.2	9.6	16.3	11.5	13.8	15.8	13.2	14.6	11.4	9.8	10.6
15	11.9	7.8	9.7	15.8	11.6	13.7	16.9	12.6	14.7	11.5	10.2	10.9
16	12.8	7.7	10.1	16.0	10.9	13.4	16.5	12.9	14.8	11.0	9.8	10.5
17	13.4	8.3	10.6	15.6	11.8	13.8	15.9	12.4	14.2	10.6	9.8	10.2
18	13.8	9.1	11.2	14.7	12.0	13.5	15.6	11.9	13.9	9.8	8.8	9.3
19	11.9	9.1	10.7	15.0	12.0	13.4	16.1	12.1	14.2	9.3	8.2	8.9
20	13.5	8.9	11.1	16.4	11.8	13.9	15.9	12.5	14.3	9.8	8.3	9.0
21	14.4	9.4	11.7	15.9	11.4	13.6	14.3	11.8	13.2	9.8	7.6	8.8
22	15.2	10.5	12.6	16.2	11.5	13.8	13.5	11.9	12.6	10.6	7.9	9.3
23	14.9	10.9	12.8	16.6	11.5	14.0	12.1	11.1	11.6	10.9	8.7	9.9
24	15.4	11.0	12.9	17.1	12.1	14.5	11.7	11.1	11.4	11.0	8.8	10
25	15.6	11.2	13.2	16.8	12.4	14.6	11.6	10.8	11.2	11.7	9.2	10.5
26	14.5	10.8	12.5	15.8	11.2	13.6	11.9	10.7	11.3	12.2	10.5	11.4
27	15.0	10.1	12.4	16.4	11.5	13.9	14.2	10.9	12.3	11.9	10.0	11.1
28	15.2	10.2	12.6	16.6	12.1	14.3	14.2	11.1	12.6	11.9	9.6	10.9
29	13.9	10.9	12.5	16.4	12.1	14.3	14.1	10.8	12.5	12.3	10.8	11.6
30	15.6	10.7	12.8	16.5	12.0	14.3	14.4	11.0	12.7	11.4	10.0	10.8
31	---	---	---	16.4	12.1	14.3	14.6	11.4	13.0	---	---	---
MONTH	15.6	7.2	10.6	17.1	9.4	13.4	17.0	10.3	13.3	13.6	7.6	10.7

14178000 NORTH SANTIAM RIVER BELOW BOULDER CREEK, NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	1	<1	<1	3	<1	2	4	2	2	6	1	2
2	1	<1	<1	4	<1	2	5	2	2	5	<1	1
3	2	<1	<1	4	<1	1	3	<1	2	5	<1	1
4	<1	<1	<1	2	<1	1	3	<1	1	2	<1	<1
5	1	<1	<1	2	<1	1	4	<1	1	1	<1	<1
6	2	<1	<1	2	<1	1	4	<1	1	2	<1	<1
7	3	<1	<1	7	1	3	3	1	2	2	<1	<1
8	3	<1	<1	2	<1	1	2	<1	1	3	<1	<1
9	2	<1	<1	2	<1	1	3	<1	1	4	<1	1
10	5	<1	<1	4	<1	<1	6	1	2	2	<1	<1
11	1	<1	<1	2	<1	<1	4	2	2	59	<1	3
12	1	<1	<1	1	<1	<1	9	2	4	26	2	5
13	3	<1	<1	2	<1	1	7	2	4	5	2	3
14	2	<1	<1	3	<1	2	11	2	5	4	1	3
15	1	<1	<1	10	2	3	9	2	4	4	1	2
16	2	<1	<1	14	1	3	5	2	3	5	<1	2
17	<1	<1	<1	20	2	4	5	2	3	5	<1	2
18	2	<1	<1	11	2	4	4	1	2	11	1	3
19	9	<1	3	13	2	6	3	1	2	3	<1	2
20	3	<1	1	6	2	4	5	2	2	3	<1	1
21	4	<1	1	4	1	2	4	1	2	3	<1	<1
22	12	<1	5	4	1	2	178	2	29	5	<1	<1
23	69	3	20	4	1	2	36	8	16	10	<1	2
24	28	7	18	5	1	2	13	5	8	4	<1	<1
25	15	5	9	56	2	5	28	7	13	3	<1	<1
26	7	3	5	6	2	3	14	4	7	3	<1	<1
27	4	2	3	3	1	2	7	2	4	2	<1	<1
28	4	1	2	6	2	3	4	2	2	4	<1	1
29	7	<1	2	8	2	3	8	1	2	2	<1	1
30	7	<1	2	5	1	2	4	1	2	2	<1	<1
31	---	---	---	4	1	2	6	1	2	---	---	---
MAX	69	7	20	56	2	6	178	8	29	59	2	5
MIN	<1	<1	<1	1	<1	<1	2	<1	1	1	<1	<1

14179000 BREITENBUSH RIVER ABOVE FRENCH CREEK, NEAR DETROIT, OR

LOCATION.--Lat 44°45'10", long 122°07'40", in SE ¼ NE ¼ sec.36, T.9 S., R.5 E., Marion County, Hydrologic Unit 17090005, in Willamette National Forest, on left bank 600 ft upstream from Canyon Creek, 1.5 mi northeast of Detroit, and at mile 2.0.

DRAINAGE AREA.--108 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1932 to September 1987, October 1998 to current year. Monthly discharge only June 1932, published in WSP 1318. Published as "above Canyon Creek, near Detroit" from October 1952 to September 1984.

GAGE.--Water-stage recorder. Datum of gage is 1,573.95 ft above NGVD of 1929. Prior to Oct. 1, 1952, at site 0.2 mi downstream at datum 13.46 ft lower.

REMARKS.--Records good except for estimated daily discharges and those above 1,000 ft³/s, which are fair. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--61 years, (water years 1933-87, 1999-2004), 572 ft³/s, 71.92 in/yr, 414,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,900 ft³/s Dec. 22, 1964, gage height, 14.55 ft; minimum discharge, 87 ft³/s Sept. 2, 1940, Sept. 24, 2001.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 13	1530	*5,420	*8.61	Jan 29	1130	4,690	8.08

Minimum discharge, 112 ft³/s, Aug. 20, 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	142	e775	367	1,320	635	578	571	594	292	142	167
2	117	140	694	353	1,100	586	525	625	539	279	140	163
3	118	136	993	337	945	553	519	671	525	283	141	157
4	117	133	753	323	820	615	e550	650	526	274	139	150
5	118	130	1,110	298	732	650	e570	567	538	257	139	144
6	120	129	1,490	304	704	682	560	492	615	247	148	140
7	138	127	1,060	350	726	623	560	475	609	258	151	137
8	140	128	829	417	671	704	546	506	703	237	138	134
9	177	127	700	586	606	851	530	461	741	227	134	132
10	200	134	601	656	558	840	536	442	731	225	131	131
11	202	211	528	650	536	773	568	450	655	215	129	152
12	320	191	822	604	519	773	604	409	561	211	126	147
13	233	170	3,080	602	495	755	621	386	545	211	125	237
14	187	159	2,130	778	486	735	654	382	539	207	124	345
15	219	163	1,210	1,160	586	737	606	391	480	204	124	305
16	234	308	885	1,190	802	700	541	406	446	197	122	310
17	207	612	767	987	1,140	686	494	408	430	193	120	344
18	185	557	685	893	1,400	705	466	428	433	189	119	575
19	168	579	615	1,030	1,240	683	448	466	413	189	118	481
20	160	461	602	971	994	615	590	446	379	182	116	397
21	152	340	607	805	831	e610	661	438	365	176	116	328
22	145	274	574	696	729	e650	607	514	374	170	241	289
23	150	238	528	1,060	664	e710	564	658	378	166	209	257
24	142	237	600	2,140	645	729	523	513	363	163	226	231
25	136	234	612	1,420	634	708	497	456	349	159	548	212
26	133	243	539	1,050	633	707	548	525	339	156	631	198
27	129	220	498	1,050	711	820	653	776	325	153	377	185
28	134	e220	486	1,580	730	731	663	1,140	306	151	266	176
29	172	e1,180	457	3,850	660	683	567	1,070	301	149	219	169
30	165	e1,020	395	3,110	---	702	536	803	293	147	193	164
31	149	---	378	1,850	---	650	---	674	---	145	175	---
TOTAL	5,083	8,943	26,003	31,467	22,617	21,601	16,885	17,199	14,395	6,312	5,827	6,957
MEAN	164	298	839	1,015	780	697	563	555	480	204	188	232
MAX	320	1,180	3,080	3,850	1,400	851	663	1,140	741	292	631	575
MIN	116	127	378	298	486	553	448	382	293	145	116	131
AC-FT	10,080	17,740	51,580	62,410	44,860	42,850	33,490	34,110	28,550	12,520	11,560	13,800
CFSM	1.52	2.76	7.77	9.40	7.22	6.45	5.21	5.14	4.44	1.89	1.74	2.15
IN.	1.75	3.08	8.96	10.84	7.79	7.44	5.82	5.92	4.96	2.17	2.01	2.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2004, BY WATER YEAR (WY)

MEAN	252	648	913	844	799	685	775	778	570	283	171	157
MAX	827	1,504	2,385	2,135	1,867	1,874	1,280	1,627	1,564	532	288	267
(WY)	(1948)	(1943)	(1965)	(1953)	(1982)	(1972)	(1949)	(1949)	(1933)	(1933)	(1999)	(1971)
MIN	104	106	163	142	176	289	295	344	202	129	98.4	97.6
(WY)	(1946)	(1937)	(1977)	(1937)	(1977)	(1941)	(1941)	(1934)	(1934)	(1940)	(1940)	(2001)

14179000 BREITENBUSH RIVER ABOVE FRENCH CREEK, NEAR DETROIT, OR—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1933 - 2004	
ANNUAL TOTAL	202,506		183,289			
ANNUAL MEAN	555		501		572	
HIGHEST ANNUAL MEAN					892	1974
LOWEST ANNUAL MEAN					276	1977
HIGHEST DAILY MEAN	3,790	Jan 31	3,850	Jan 29	12,800	Dec 22, 1964
LOWEST DAILY MEAN	112	Sep 5	116	Oct 1	89	Aug 31, 1940
ANNUAL SEVEN-DAY MINIMUM	115	Sep 1	119	Aug 15	91	Oct 23, 1944
ANNUAL RUNOFF (AC-FT)	401,700		363,600		414,200	
ANNUAL RUNOFF (CFSM)	5.14		4.64		5.29	
ANNUAL RUNOFF (INCHES)	69.75		63.13		71.92	
10 PERCENT EXCEEDS	1,140		834		1,130	
50 PERCENT EXCEEDS	449		461		409	
90 PERCENT EXCEEDS	127		138		137	

e Estimated



2004 Water Year
SANTIAM RIVER BASIN

14179000 BREITENBUSH R ABV FRENCH CR NR DETROIT, OR.

Latitude: 44° 45 ' 10"

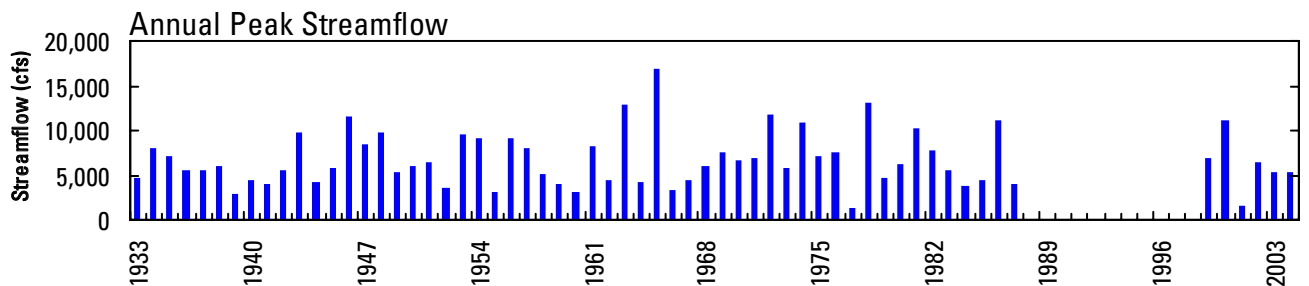
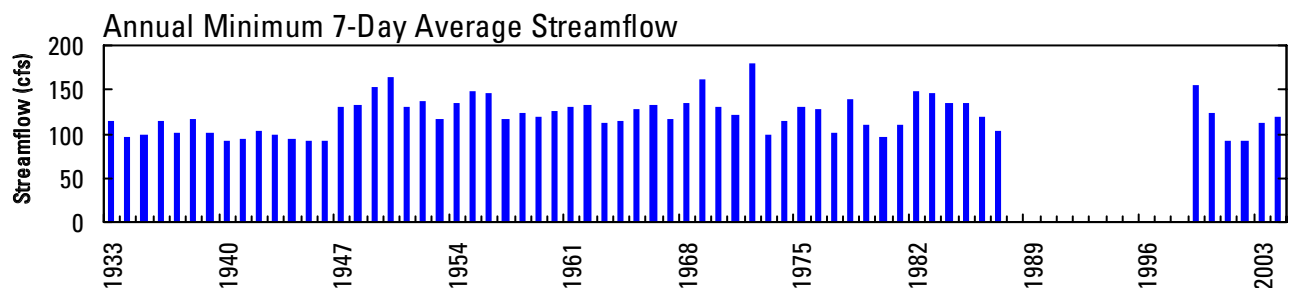
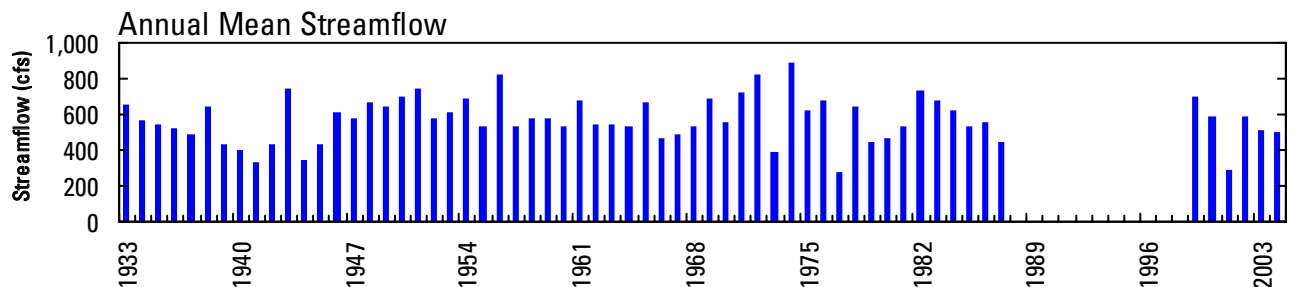
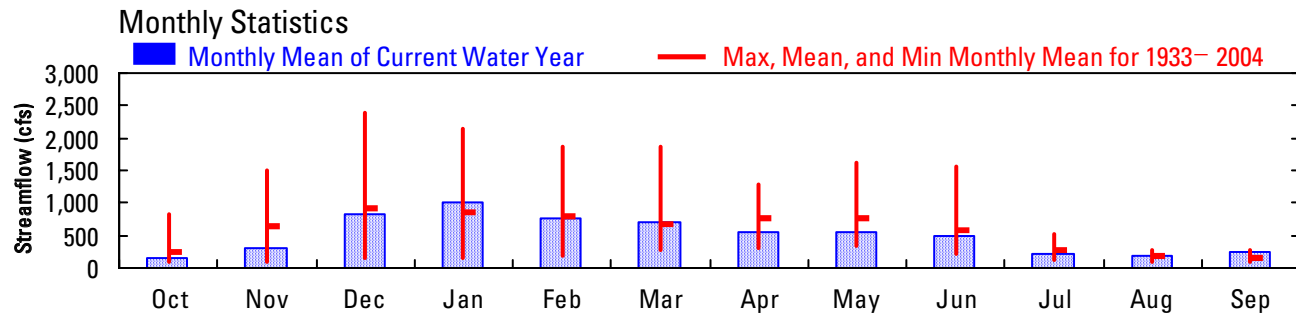
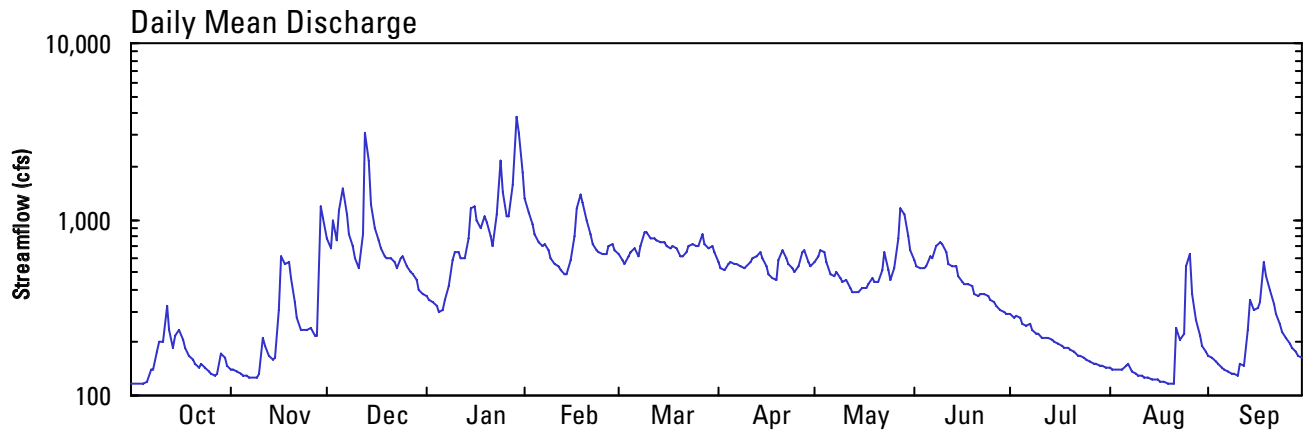
Longitude: 122° 07 ' 40"

Hydrologic Unit Code: 17090005

Marion County

Datum: 1,573.95 feet

Drainage Area: 108 square miles



14179000 BREITENBUSH RIVER ABOVE FRENCH CREEK, NEAR DETROIT, OR—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1998 to current year.

pH: October 1998 to current year.

WATER TEMPERATURE: December 1950 to July 1961, January 1962 to September 1987, October 1998 to current year.

TURBIDITY: October 1998 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--

SPECIFIC CONDUCTANCE: Records excellent.

pH: Records excellent except those for the periods Mar. 28 to Apr. 7, May 20-23, July 20, 21, which are good.

WATER TEMPERATURE: Records excellent except those for the period Sept. 2-22, which are good.

TURBIDITY: Records excellent. Turbidity data are highly dependent on the instrumentation used for the measurement. See the "Definitions" section for turbidity in the front of this report.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 100 microsiemens Sept. 28, 2001; minimum, 21 microsiemens Nov. 26, 1999.

pH: Maximum, 8.3 units Sept. 1, 3, 2001; minimum, 6.7 units Nov. 25, 26, 1999.

WATER TEMPERATURE: Maximum, 18.0°C July 27, 1973; minimum, 0.0°C several days in 1972-73, 1977-79, 1985, 1999.

TURBIDITY: Maximum, 1,160 FNU Nov. 25, 1999; minimum, <1 FNU many days during most years.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 99 microsiemens Oct. 4; minimum, 27 microsiemens Dec. 13.

pH: Maximum, 8.1 units Aug. 17 but may have been higher during period of missing record; minimum, 6.8 units Dec. 13.

WATER TEMPERATURE: Maximum, 16.5°C Aug. 13; minimum, 0.1°C Jan. 6, 7.

TURBIDITY: Maximum, 149 FNU Dec. 13; minimum, <1 FNU many days during year.

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

Date	Time	Instantaneous discharge, cfs (00061)	Suspnd. sediment, sieve diameter percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
DEC					
14...	1520	1,870	17	50	252
JAN					
29...	1104	4,480	29	245	2,960
AUG					
09...	1232	137	--	7	2.6
22...	1502	281	--	67	51
22...	1532	284	--	33	25
22...	1702	284	--	10	7.7
25...	0702	631	--	24	41
25...	0956	683	87	16	30
25...	1502	642	--	18	31
25...	1632	615	--	15	25
25...	1702	613	--	13	22
25...	1707	610	89	13	21
25...	1742	588	--	11	17

14179000 BREITENBUSH RIVER ABOVE FRENCH CREEK, NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	65	61	62	60	59	60	41	38	40	47	44	46
2	65	62	64	61	59	60	41	40	41	47	45	46
3	65	62	63	61	59	60	40	38	39	47	46	47
4	99	64	70	61	60	60	41	39	40	48	46	47
5	64	63	64	61	60	60	40	36	38	48	47	47
6	66	64	65	61	60	61	37	34	35	48	47	48
7	65	64	64	62	60	61	39	37	37	47	45	46
8	66	63	64	62	60	60	41	38	40	46	44	45
9	64	61	62	62	60	60	42	41	42	44	42	43
10	62	59	60	61	59	60	44	42	43	44	42	43
11	62	59	61	59	54	56	45	43	44	43	42	42
12	59	55	56	56	54	55	45	39	42	43	42	42
13	58	55	56	57	55	56	39	27	32	43	42	42
14	58	56	56	57	56	56	35	30	33	42	39	41
15	58	54	56	57	55	56	38	35	37	39	37	38
16	57	54	55	55	47	53	40	38	39	39	38	38
17	57	55	56	47	44	45	41	39	40	41	39	40
18	57	55	56	46	42	43	43	41	42	42	40	41
19	60	57	58	43	41	42	43	42	42	41	40	41
20	60	58	59	46	43	45	42	42	42	42	41	41
21	61	59	60	55	46	49	43	42	42	43	42	42
22	61	60	60	50	49	50	43	42	42	44	43	43
23	61	60	60	57	49	50	44	42	43	44	36	41
24	61	59	60	51	49	50	44	42	43	37	34	35
25	61	59	60	52	49	51	43	42	42	40	37	39
26	62	60	60	52	50	51	44	42	43	43	40	41
27	62	60	61	54	52	53	44	42	43	42	41	42
28	63	61	61	55	51	54	44	42	43	41	37	40
29	62	56	59	51	36	40	45	42	43	37	30	32
30	60	58	58	40	36	38	46	45	45	34	31	32
31	64	58	59	---	---	---	46	45	46	37	34	36
MONTH	99	54	60	62	36	53	46	27	41	48	30	42
	FEBRUARY			MARCH			APRIL			MAY		
1	39	37	38	44	42	43	41	39	40	39	36	38
2	40	39	40	44	42	44	41	40	41	36	34	35
3	41	40	40	44	42	43	42	40	41	34	32	33
4	42	39	41	43	42	42	40	39	40	34	33	33
5	43	42	42	45	42	43	44	39	39	36	34	35
6	44	42	43	43	42	42	39	39	39	38	36	37
7	44	43	43	44	43	43	39	39	39	51	38	40
8	44	42	44	43	41	42	40	39	39	39	37	38
9	44	43	43	41	39	40	40	39	39	39	37	38
10	45	43	44	40	39	39	40	38	39	39	38	39
11	45	44	44	41	40	40	39	37	38	40	38	39
12	45	44	45	40	40	40	37	36	37	41	39	40
13	46	44	45	40	39	39	37	36	36	42	40	41
14	46	44	45	40	39	39	37	36	36	42	41	41
15	45	43	44	40	39	39	38	36	37	42	40	41
16	44	40	42	40	39	39	40	38	38	41	39	40
17	40	38	39	40	39	39	41	39	40	40	39	39
18	38	38	38	41	39	39	41	40	40	40	38	39
19	40	38	38	40	39	39	42	41	41	39	37	38
20	40	39	40	41	40	40	41	40	41	39	37	38
21	42	40	41	41	39	41	42	41	41	39	38	38
22	43	42	42	41	39	40	43	42	43	38	35	37
23	43	42	42	39	38	38	43	42	42	37	34	35
24	43	42	43	38	37	38	43	41	42	40	36	38
25	43	42	43	39	37	38	43	41	42	40	38	39
26	43	42	43	39	38	38	42	39	40	40	35	38
27	43	41	42	39	38	38	39	35	37	35	32	33
28	43	41	42	40	38	39	38	35	36	35	32	33
29	44	42	43	40	38	40	39	36	38	38	35	37
30	---	---	---	39	38	38	39	38	38	40	38	39
31	---	---	---	39	38	38	---	---	---	39	38	38
MONTH	46	37	42	45	37	40	44	35	39	51	32	38

14179000 BREITENBUSH RIVER ABOVE FRENCH CREEK, NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	7.8	7.4	7.5	7.6	7.5	7.5	7.5	7.3	7.4	7.4	7.2	7.3
2	7.7	7.3	7.5	7.7	7.5	7.5	7.4	7.3	7.4	7.4	7.2	7.3
3	7.7	7.4	7.4	7.7	7.5	7.5	7.4	7.3	7.4	7.3	7.2	7.3
4	7.7	7.4	7.5	7.7	7.4	7.5	7.4	7.3	7.4	7.4	7.2	7.3
5	7.7	7.4	7.4	7.7	7.5	7.6	7.4	7.2	7.3	7.5	7.3	7.4
6	7.7	7.4	7.5	7.7	7.5	7.6	7.4	7.2	7.3	7.5	7.3	7.4
7	7.8	7.4	7.5	7.7	7.5	7.6	7.4	7.2	7.3	7.5	7.4	7.4
8	7.6	7.4	7.5	7.7	7.5	7.5	7.4	7.3	7.3	7.4	7.2	7.3
9	7.6	7.4	7.4	7.6	7.5	7.5	7.4	7.3	7.3	7.3	7.2	7.2
10	7.7	7.3	7.5	7.6	7.4	7.5	7.4	7.3	7.3	7.3	7.2	7.2
11	7.5	7.4	7.5	7.6	7.4	7.5	7.5	7.1	7.3	7.3	7.2	7.2
12	7.6	7.3	7.4	7.6	7.4	7.5	7.2	7.0	7.2	7.3	7.2	7.2
13	7.6	7.2	7.4	7.6	7.4	7.5	7.1	6.8	7.0	7.3	7.1	7.2
14	7.7	7.3	7.4	7.7	7.4	7.5	7.1	6.9	7.0	7.2	7.1	7.2
15	7.6	7.4	7.5	7.6	7.5	7.5	7.2	7.0	7.1	7.3	7.1	7.2
16	7.5	7.3	7.4	7.6	7.4	7.5	7.2	7.1	7.1	7.4	7.2	7.3
17	7.5	7.3	7.4	7.5	7.3	7.4	7.2	7.1	7.2	7.4	7.2	7.4
18	7.6	7.3	7.4	7.5	7.3	7.4	7.2	7.1	7.2	7.5	7.3	7.4
19	7.6	7.3	7.4	7.5	7.3	7.4	7.3	7.1	7.2	7.5	7.3	7.4
20	7.5	7.2	7.3	7.6	7.4	7.5	7.2	7.1	7.2	7.5	7.3	7.4
21	7.5	7.2	7.3	7.6	7.4	7.5	7.2	7.1	7.1	7.5	7.4	7.4
22	7.6	7.3	7.4	7.6	7.4	7.5	7.2	7.1	7.2	7.6	7.4	7.5
23	7.6	7.3	7.4	7.7	7.5	7.5	7.2	7.1	7.2	7.5	7.3	7.5
24	7.7	7.4	7.5	7.6	7.4	7.5	7.2	7.1	7.2	7.5	7.3	7.4
25	7.7	7.5	7.6	7.6	7.3	7.5	7.3	7.1	7.2	7.5	7.3	7.4
26	7.7	7.5	7.5	7.6	7.3	7.5	7.3	7.1	7.2	7.5	7.4	7.5
27	7.7	7.5	7.5	7.7	7.3	7.5	7.3	7.2	7.2	7.5	7.4	7.5
28	7.6	7.5	7.5	7.6	7.3	7.5	7.3	7.2	7.2	7.5	7.3	7.5
29	7.7	7.4	7.5	7.4	7.3	7.3	7.3	7.2	7.2	7.5	7.2	7.3
30	7.6	7.4	7.5	7.4	7.2	7.4	7.4	7.2	7.3	7.4	7.3	7.3
31	7.6	7.4	7.5	---	---	---	7.4	7.2	7.2	7.5	7.3	7.4
MAX	7.8	7.5	7.6	7.7	7.5	7.6	7.5	7.3	7.4	7.6	7.4	7.5
MIN	7.5	7.2	7.3	7.4	7.2	7.3	7.1	6.8	7.0	7.2	7.1	7.2
FEBRUARY			MARCH			APRIL			MAY			
1	7.5	7.4	7.5	7.6	7.3	7.5	7.8	7.5	7.6	7.7	7.3	7.5
2	7.6	7.5	7.5	7.6	7.4	7.5	7.8	7.5	7.6	7.7	7.3	7.5
3	7.6	7.5	7.5	7.7	7.4	7.5	7.8	7.5	7.6	7.7	7.3	7.5
4	7.6	7.1	7.5	7.6	7.4	7.5	7.8	7.5	7.7	7.7	7.3	7.5
5	7.4	7.2	7.2	7.5	7.4	7.5	8.0	7.6	7.7	7.8	7.3	7.5
6	7.3	7.2	7.2	7.6	7.4	7.5	7.9	7.7	7.8	7.7	7.3	7.5
7	7.3	7.2	7.2	7.6	7.4	7.5	7.9	7.4	7.7	7.7	7.4	7.5
8	7.4	7.1	7.2	7.7	7.4	7.5	7.8	7.5	7.6	7.7	7.3	7.5
9	7.4	7.1	7.3	7.6	7.4	7.5	7.8	7.5	7.6	7.7	7.4	7.5
10	7.4	7.2	7.3	7.6	7.4	7.5	7.8	7.5	7.7	7.8	7.4	7.6
11	7.4	7.2	7.3	7.6	7.4	7.5	7.9	7.5	7.6	7.7	7.5	7.6
12	7.5	7.2	7.4	7.7	7.4	7.5	7.8	7.5	7.6	7.8	7.5	7.6
13	7.5	7.3	7.4	7.7	7.4	7.5	7.7	7.5	7.6	7.9	7.4	7.6
14	7.5	7.2	7.3	7.7	7.4	7.5	7.8	7.5	7.6	7.8	7.4	7.6
15	7.4	7.3	7.4	7.6	7.4	7.5	7.8	7.6	7.7	7.8	7.4	7.6
16	7.4	7.2	7.3	7.7	7.4	7.5	7.8	7.6	7.7	7.8	7.5	7.6
17	7.4	7.3	7.3	7.6	7.4	7.5	7.8	7.5	7.7	7.8	7.5	7.6
18	7.3	7.2	7.3	7.7	7.2	7.4	7.8	7.6	7.7	7.8	7.5	7.6
19	7.4	7.2	7.3	7.5	7.3	7.3	7.7	7.6	7.7	7.8	7.5	7.6
20	7.5	7.3	7.4	7.5	7.3	7.4	7.7	7.6	7.7	---	---	---
21	7.5	7.2	7.4	7.5	7.3	7.4	7.8	7.5	7.7	7.7	7.5	7.6
22	7.5	7.2	7.3	7.5	7.2	7.3	7.8	7.5	7.6	7.6	7.5	7.5
23	7.5	7.3	7.4	7.4	7.3	7.3	7.8	7.5	7.6	7.5	7.4	7.5
24	7.5	7.3	7.4	7.5	7.3	7.4	7.8	7.5	7.6	7.6	7.4	7.5
25	7.5	7.3	7.5	7.5	7.3	7.4	7.8	7.2	7.6	7.6	7.4	7.5
26	7.5	7.3	7.4	7.5	7.4	7.5	7.5	7.0	7.2	7.5	7.4	7.5
27	7.5	7.3	7.4	7.6	7.4	7.5	7.5	7.1	7.2	7.5	7.4	7.4
28	7.5	7.4	7.4	7.6	7.4	7.5	7.5	7.1	7.3	7.5	7.4	7.4
29	7.6	7.3	7.4	7.7	7.4	7.5	7.8	7.4	7.6	7.5	7.4	7.5
30	---	---	---	7.6	7.4	7.5	7.8	7.4	7.5	7.5	7.3	7.4
31	---	---	---	7.7	7.5	7.6	---	---	---	7.5	7.4	7.4
MAX	7.6	7.5	7.5	7.7	7.5	7.6	8.0	7.7	7.8	---	---	---
MIN	7.3	7.1	7.2	7.4	7.2	7.3	7.5	7.0	7.2	---	---	---

14179000 BREITENBUSH RIVER ABOVE FRENCH CREEK, NEAR DETROIT, OR—Continued

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

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

14179000 BREITENBUSH RIVER ABOVE FRENCH CREEK, NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	11.1	10.0	10.6	3.9	2.3	3.0	5.6	5.1	5.4	3.6	1.5	2.5
2	12.1	10.6	11.1	4.4	3.9	4.1	6.0	5.3	5.6	3.5	1.9	2.6
3	11.5	10.6	11.1	4.3	3.5	3.9	5.7	5.0	5.5	3.4	2.6	2.9
4	11.4	10.1	10.7	4.3	3.6	4.0	5.6	4.9	5.2	2.9	2.0	2.5
5	12.0	10.9	11.2	4.1	3.0	3.6	5.9	5.5	5.7	2.2	0.7	1.2
6	11.3	10.0	10.7	4.1	3.4	3.7	6.0	5.5	5.8	0.7	0.1	0.2
7	11.5	10.7	11.1	5.1	3.9	4.5	5.5	4.8	5.1	2.0	0.1	0.5
8	10.7	9.9	10.2	5.2	4.4	4.9	5.6	4.8	5.2	3.2	2.0	2.6
9	9.9	9.2	9.5	5.4	4.5	4.9	5.7	5.0	5.2	4.1	3.1	3.7
10	9.6	8.6	9.0	6.1	5.0	5.4	5.4	4.8	5.1	4.3	4.0	4.2
11	8.8	7.9	8.2	6.8	6.1	6.4	5.8	4.9	5.3	4.6	4.1	4.3
12	9.3	8.5	8.8	6.6	5.5	6.0	5.8	4.9	5.4	4.5	4.0	4.2
13	9.2	8.2	8.7	5.5	4.4	4.8	5.8	5.0	5.5	4.6	4.3	4.4
14	9.4	8.7	9.0	5.8	4.6	5.1	5.2	5.0	5.1	4.8	4.4	4.6
15	8.8	7.6	8.0	6.2	5.6	5.8	5.3	5.0	5.2	5.0	4.5	4.8
16	9.0	8.1	8.4	6.1	5.8	5.9	5.2	4.8	5.0	5.0	4.7	4.9
17	9.7	8.7	9.1	6.7	6.0	6.3	5.5	4.8	5.1	5.1	4.5	4.8
18	9.4	7.6	8.4	7.3	6.6	7.0	5.1	4.6	4.8	5.2	4.7	4.9
19	9.4	8.5	8.9	7.2	4.8	6.2	5.3	4.5	4.9	5.3	4.8	5.0
20	10.4	9.3	9.7	5.2	4.7	5.0	5.8	5.1	5.4	5.0	4.4	4.7
21	10.5	9.8	10.2	5.0	4.3	4.7	5.9	5.2	5.6	4.4	3.8	4.2
22	10.2	9.4	9.8	4.3	3.6	3.9	5.3	4.6	4.9	4.3	3.4	3.8
23	9.9	8.4	9.1	4.4	3.6	3.9	5.4	4.5	4.9	4.8	4.2	4.5
24	8.4	6.7	7.4	4.2	3.6	3.8	5.6	5.1	5.4	4.7	3.9	4.4
25	7.6	6.7	7.2	4.7	2.3	3.2	5.3	4.6	4.9	4.6	3.8	4.2
26	8.0	7.0	7.5	4.0	2.7	3.3	4.6	4.1	4.3	4.7	4.2	4.4
27	8.1	7.3	7.8	4.6	3.8	4.2	4.4	2.0	3.7	4.9	4.2	4.6
28	9.6	8.1	8.9	4.7	4.2	4.5	3.3	1.9	2.6	5.0	4.7	4.8
29	9.6	7.4	8.3	5.1	4.3	4.7	3.1	1.0	2.2	5.1	4.7	4.9
30	7.4	5.0	6.2	5.4	4.9	5.2	2.8	1.7	2.2	5.0	4.1	4.4
31	5.0	3.2	3.9	---	---	---	3.5	2.2	2.8	4.6	3.9	4.3
MONTH	12.1	3.2	9.0	7.3	2.3	4.7	6.0	1.0	4.8	5.3	0.1	3.8
FEBRUARY			MARCH			APRIL			MAY			
1	4.6	4.1	4.3	5.6	4.4	5.0	6.4	3.7	4.9	9.9	6.5	8.1
2	5.0	4.2	4.5	5.4	4.2	4.7	6.8	3.9	5.3	10.5	6.8	8.5
3	4.8	3.9	4.3	4.5	3.3	4.0	7.9	5.2	6.4	10.4	6.9	8.5
4	5.1	4.4	4.6	5.1	4.1	4.5	7.8	5.1	6.4	8.4	7.1	7.7
5	4.8	4.0	4.4	5.0	4.4	4.7	7.4	5.5	6.4	8.9	6.7	7.6
6	4.9	4.2	4.5	5.5	4.3	4.9	8.0	5.8	6.7	9.2	6.2	7.6
7	5.1	4.3	4.7	6.1	4.8	5.3	7.5	5.5	6.5	8.6	6.9	7.7
8	5.1	4.3	4.7	6.0	4.3	5.1	7.8	5.0	6.4	8.7	7.0	7.8
9	4.7	3.9	4.2	5.8	4.6	5.1	7.9	4.6	6.2	9.5	6.9	8.0
10	4.3	3.4	3.9	5.8	4.6	5.0	8.3	5.2	6.7	8.1	7.0	7.4
11	4.5	3.5	4.0	5.9	4.0	4.9	8.6	5.3	6.9	8.1	6.4	7.2
12	4.1	3.0	3.6	6.2	4.3	5.1	8.4	5.8	7.0	9.2	6.7	7.8
13	4.3	3.0	3.7	6.1	4.0	5.0	7.4	6.3	6.8	10.1	6.2	8.1
14	5.0	4.1	4.5	6.5	4.8	5.5	6.6	5.5	6.0	10.7	6.9	8.7
15	4.7	3.4	4.1	6.3	4.8	5.4	6.6	5.0	5.7	9.4	7.6	8.3
16	4.8	4.2	4.5	6.3	4.0	5.1	6.8	5.1	5.9	9.5	7.4	8.3
17	5.0	4.6	4.8	6.4	4.2	5.2	7.4	5.4	6.2	9.2	6.8	8.0
18	5.4	4.8	5.0	5.8	4.4	5.2	7.0	5.5	6.2	9.0	7.6	8.2
19	5.2	4.4	4.7	5.7	4.4	4.9	6.8	5.3	6.1	10.2	7.4	8.6
20	4.8	4.0	4.4	6.3	3.8	4.9	6.3	5.2	5.6	10.5	7.3	8.7
21	5.1	4.0	4.5	6.9	4.5	5.6	6.6	4.8	5.6	10.3	7.9	9.1
22	5.3	4.3	4.8	7.1	4.7	5.9	8.3	5.3	6.5	9.2	7.5	8.0
23	5.5	4.5	4.9	6.9	5.4	6.0	6.9	5.2	6.0	8.4	6.8	7.4
24	5.3	4.5	4.8	5.9	5.1	5.5	8.3	5.5	6.8	10.0	6.8	8.2
25	5.1	4.2	4.6	5.6	4.8	5.2	9.3	5.3	7.2	10.7	6.9	8.8
26	5.2	4.3	4.7	5.4	4.4	4.9	9.9	6.2	7.9	9.7	8.2	8.5
27	5.2	4.6	4.9	5.9	4.7	5.2	9.6	6.4	7.9	8.4	7.5	7.9
28	5.4	4.4	4.9	6.6	4.6	5.5	8.6	5.9	7.1	7.6	6.6	7.0
29	5.3	4.6	4.9	7.2	4.4	5.7	9.2	5.3	7.1	7.4	6.4	6.8
30	---	---	---	6.2	5.2	5.8	9.9	5.8	7.7	8.0	6.8	7.4
31	---	---	---	5.5	4.3	4.9	---	---	---	10.0	7.1	8.2
MONTH	5.5	3.0	4.5	7.2	3.3	5.2	9.9	3.7	6.5	10.7	6.2	8.0

14179000 BREITENBUSH RIVER ABOVE FRENCH CREEK, NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	10.5	6.7	8.5	14.5	10.0	12.3	16.0	12.5	14.6	13.4	11.6	12.3
2	11.6	7.2	9.2	14.0	10.6	12.3	15.6	12.9	14.4	12.1	10.5	11.1
3	12.3	8.2	10	13.8	10.8	12.3	14.6	12.6	13.5	12.4	10.3	11.3
4	12.5	8.4	10.2	14.4	10.2	12.2	14.8	11.7	13.5	12.5	10.6	11.6
5	10.7	8.6	9.1	14.4	9.8	12.2	14.7	12.6	13.7	12.4	10.2	11.4
6	8.6	7.7	8.0	14.5	10.5	12.7	13.4	11.4	12.0	11.8	9.3	10.7
7	8.4	7.3	7.9	14.1	10.9	11.9	14.4	11.0	12.6	11.8	9.8	11.0
8	8.0	7.4	7.7	13.6	9.2	11.4	14.6	11.2	13.2	12.2	9.9	11.2
9	8.7	7.5	8.0	13.6	9.8	11.9	15.2	11.9	13.8	12.1	10.9	11.5
10	8.6	7.7	8.1	12.8	10.2	11.7	15.8	12.6	14.5	12.2	10.5	11.3
11	8.3	7.2	7.8	13.9	9.5	11.7	15.8	12.6	14.5	12.5	11.7	12.2
12	10.0	7.4	8.5	14.9	10.3	12.7	16.1	13.0	14.8	12.2	11.0	11.5
13	9.8	8.1	8.9	15.3	11.2	13.4	16.5	13.3	15.0	11.5	10.6	11.0
14	10.8	7.7	8.9	15.6	11.3	13.7	15.8	13.7	14.8	11.1	10.0	10.6
15	11.6	7.3	9.2	15.1	11.7	13.7	16.3	13.3	14.7	11.3	10.2	10.7
16	12.3	7.6	9.8	15.3	10.9	13.3	16.2	13.6	15.0	11.0	10.2	10.6
17	12.9	8.2	10.4	15.4	11.8	13.8	15.8	13.0	14.6	10.8	9.6	10.3
18	13.2	8.7	10.8	15.2	12.1	13.5	15.4	12.6	14.2	9.6	8.9	9.2
19	11.8	8.6	10.2	15.2	12.0	13.6	15.8	12.8	14.5	9.4	8.4	8.9
20	13.0	8.5	10.6	15.5	---	---	15.5	13.1	14.5	9.7	8.5	9.0
21	13.6	8.8	11.1	15.4	11.5	13.8	14.7	12.4	13.6	9.7	8.1	8.9
22	14.2	9.8	11.8	15.5	11.6	13.9	14.0	12.2	13.0	10.2	8.2	9.1
23	13.9	10.1	11.9	15.9	11.8	14.2	12.2	11.4	11.8	10.3	8.5	9.5
24	14.3	10.1	12.1	16.4	12.5	14.7	12.0	11.4	11.7	10.5	8.8	9.7
25	14.5	10.3	12.2	16.3	12.9	14.9	11.8	11.1	11.4	11.1	8.9	10.0
26	13.8	10.0	11.9	15.3	11.6	13.9	11.4	10.8	11.1	11.7	10.3	10.9
27	14.0	9.4	11.7	15.7	11.9	14.1	12.9	10.7	11.6	11.3	9.8	10.7
28	14.3	9.6	11.9	16.1	12.6	14.6	13.1	10.7	11.9	11.3	9.6	10.6
29	13.8	10.2	12.0	15.9	12.6	14.6	13.0	10.5	11.9	11.8	10.6	11.1
30	14.4	10.1	12.2	16.0	12.5	14.5	13.3	10.9	12.3	11.1	9.8	10.5
31	---	---	---	16.0	12.7	14.7	13.4	11.1	12.5	---	---	---
MONTH	14.5	6.7	10.0	16.4	---	---	16.5	10.5	13.4	13.4	8.1	10.6

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/- 2.5 DEGREES, FNU
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	<1	<1	<1	<1	<1	<1	2	<1	<1	<1	<1	<1
2	<1	<1	<1	<1	<1	<1	2	<1	<1	3	<1	<1
3	<1	<1	<1	<1	<1	<1	4	<1	1	<1	<1	<1
4	<1	<1	<1	<1	<1	<1	3	<1	<1	2	<1	<1
5	<1	<1	<1	<1	<1	<1	5	<1	2	<1	<1	<1
6	<1	<1	<1	<1	<1	<1	17	2	4	<1	<1	<1
7	<1	<1	<1	<1	<1	<1	2	<1	1	<1	<1	<1
8	<1	<1	<1	<1	<1	<1	3	<1	<1	2	<1	<1
9	1	<1	<1	<1	<1	<1	1	<1	<1	2	<1	1
10	1	<1	<1	1	<1	<1	<1	<1	<1	3	<1	1
11	<1	<1	<1	1	<1	<1	1	<1	<1	1	<1	<1
12	5	<1	1	<1	<1	<1	2	<1	1	1	<1	<1
13	1	<1	<1	<1	<1	<1	149	1	45	<1	<1	<1
14	<1	<1	<1	<1	<1	<1	42	6	11	6	<1	<1
15	3	<1	<1	1	<1	<1	6	2	3	8	2	3
16	<1	<1	<1	12	<1	<1	2	1	2	4	1	2
17	<1	<1	<1	6	<1	2	2	<1	1	6	<1	1
18	1	<1	<1	2	<1	<1	2	<1	<1	2	<1	<1
19	2	<1	<1	3	<1	1	2	<1	<1	2	<1	1
20	<1	<1	<1	1	<1	<1	4	<1	<1	1	<1	<1
21	<1	<1	<1	1	<1	<1	<1	<1	<1	1	<1	<1
22	<1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	<1
23	<1	<1	<1	3	<1	<1	<1	<1	<1	15	<1	1
24	<1	<1	<1	1	<1	<1	1	<1	<1	19	4	11
25	<1	<1	<1	<1	<1	<1	2	<1	<1	6	2	3
26	<1	<1	<1	<1	<1	<1	<1	<1	<1	3	<1	1
27	<1	<1	<1	4	<1	<1	<1	<1	<1	4	<1	1
28	<1	<1	<1	4	<1	<1	<1	<1	<1	25	2	2
29	<1	<1	<1	23	2	12	1	<1	<1	71	16	47
30	<1	<1	<1	7	<1	2	<1	<1	<1	56	10	21
31	<1	<1	<1	---	---	---	1	<1	<1	13	3	6
MAX	5	<1	1	23	2	12	149	6	45	71	16	47
MIN	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FEBRUARY			MARCH			APRIL			MAY			
1	4	2	3	<1	<1	<1	<1	<1	<1	1	<1	<1
2	4	1	2	<1	<1	<1	1	<1	<1	1	<1	<1
3	2	1	1	<1	<1	<1	<1	<1	<1	4	<1	<1
4	2	<1	<1	<1	<1	<1	<1	<1	<1	2	<1	<1
5	1	<1	<1	<1	<1	<1	4	<1	<1	<1	<1	<1
6	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7	1	<1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1
8	<1	<1	<1	<1	<1	<1	2	<1	<1	<1	<1	<1
9	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
11	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
12	<1	<1	<1	<1	<1	<1	3	<1	<1	2	<1	<1
13	<1	<1	<1	3	<1	<1	<1	<1	<1	<1	<1	<1
14	<1	<1	<1	<1	<1	<1	5	<1	<1	<1	<1	<1
15	<1	<1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1
16	3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
17	6	1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
18	4	2	2	<1	<1	<1	<1	<1	<1	2	<1	<1
19	2	<1	1	<1	<1	<1	1	<1	<1	<1	<1	<1
20	1	<1	<1	2	<1	<1	<1	<1	<1	<1	<1	<1
21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
22	1	<1	<1	<1	<1	<1	1	<1	<1	3	<1	<1
23	1	<1	<1	<1	<1	<1	<1	<1	<1	2	<1	<1
24	<1	<1	<1	<1	<1	<1	<1	<1	<1	2	<1	<1
25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
26	<1	<1	<1	2	<1	<1	<1	<1	<1	2	<1	<1
27	<1	<1	<1	2	<1	<1	<1	<1	<1	12	1	5
28	<1	<1	<1	<1	<1	<1	2	<1	<1	13	2	4
29	<1	<1	<1	<1	<1	<1	<1	<1	<1	5	<1	1
30	---	---	---	<1	<1	<1	<1	<1	<1	2	<1	<1
31	---	---	---	<1	<1	<1	---	---	---	6	<1	<1
MAX	6	2	3	3	<1	<1	5	<1	<1	13	2	5
MIN	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

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

[illegible]

14179100 FRENCH CREEK NEAR DETROIT, OR

LOCATION.--Lat 44°45'38", long 122°10'02", in NW ¼ SW ¼ sec.26, T.9 S., R.5 E. Marion County, Hydrologic Unit 17090005, on right bank 25 ft upstream from bridge over French Creek, 1.9 northeast of Detroit, and at mile 1.7.

DRAINAGE AREA.--9.9 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 2001 to current year.

GAGE.--Water-stage recorder. Datum of gage is approximately 1,800 ft above NGVD of 1929, from topographic map.

REMARKS.--Records poor. No regulation or diversion upstream from station. Water-quality records are available in the Environmental Quality Section of the USGS Oregon Water Science Center.

AVERAGE DISCHARGE.--3 years (water years 2002-04), 76.6 ft³/s, 105.11 in/yr, 55,480 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,530 ft³/s Jan. 29, 2004, gage height, 5.93 ft; minimum discharge, 2.7 ft³/s Sept. 25, 26, 2002.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 13	1530	1,120	4.94	Aug 26	1000	621	4.32
Jan 29	1300	*2,530	*5.93				

Minimum discharge, 5.2 ft³/s, Oct. 6, Aug. 19-21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	22	164	30	145	61	74	89	106	14	6.5	26
2	5.8	20	142	27	106	51	56	96	80	13	6.4	23
3	5.7	17	203	25	83	44	59	96	65	13	6.4	20
4	5.6	16	148	23	69	77	77	83	55	12	6.4	18
5	5.5	15	226	21	57	92	82	64	54	12	6.4	16
6	5.6	15	302	20	55	99	76	53	75	12	6.8	15
7	7.0	14	175	24	62	82	73	52	109	11	7.1	14
8	7.1	13	111	36	55	105	67	54	140	11	6.4	13
9	9.5	13	78	60	46	160	68	48	137	11	6.1	12
10	16	14	59	80	41	151	76	49	140	10	6.0	12
11	20	93	49	79	40	121	89	89	119	9.9	5.9	15
12	56	58	142	75	40	120	102	74	90	9.5	5.8	14
13	40	39	629	85	39	113	95	58	80	9.3	5.8	63
14	27	31	381	133	38	104	108	53	72	9.1	e5.7	115
15	31	28	176	225	47	104	94	50	59	8.9	e5.7	104
16	35	59	116	240	89	90	76	52	49	8.8	e5.6	102
17	26	172	91	171	161	88	68	48	43	8.6	e5.5	110
18	21	160	77	158	244	97	63	59	38	8.5	e5.5	193
19	18	144	69	194	200	90	62	76	34	8.4	e5.4	176
20	16	108	75	175	135	70	98	56	31	8.1	5.4	151
21	15	71	83	131	95	64	111	50	28	7.9	5.3	97
22	14	49	78	96	69	92	97	72	26	7.7	28	66
23	16	40	67	223	57	119	90	173	24	7.5	28	50
24	15	35	81	430	57	122	82	116	22	7.3	42	42
25	14	32	81	268	55	110	78	83	20	7.2	175	35
26	12	30	66	157	59	108	105	91	19	7.1	376	31
27	12	26	56	163	75	145	142	157	17	6.9	196	27
28	15	30	49	319	78	124	121	322	16	6.9	88	24
29	36	301	43	1,560	67	112	86	342	15	6.8	53	21
30	31	223	36	769	---	128	78	220	15	6.7	39	20
31	26	---	32	275	---	103	---	152	---	6.6	31	---
TOTAL	569.6	1,888	4,085	6,272	2,364	3,146	2,553	3,077	1,778	286.7	1,182.1	1,625
MEAN	18.4	62.9	132	202	81.5	101	85.1	99.3	59.3	9.25	38.1	54.2
MAX	56	301	629	1,560	244	160	142	342	140	14	376	193
MIN	5.5	13	32	20	38	44	56	48	15	6.6	5.3	12
AC-FT	1,130	3,740	8,100	12,440	4,690	6,240	5,060	6,100	3,530	569	2,340	3,220
CFSM	1.86	6.36	13.3	20.4	8.23	10.3	8.60	10.0	5.99	0.93	3.85	5.47
IN.	2.14	7.09	15.35	23.57	8.88	11.82	9.59	11.56	6.68	1.08	4.44	6.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

MEAN	18.9	67.0	116	163	79.7	127	132	104	61.5	10.3	15.8	22.0
MAX	33.9	108	154	202	87.0	197	210	131	105	14.6	38.1	54.2
(WY)	(2002)	(2002)	(2002)	(2004)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(2004)	(2004)
MIN	4.49	29.8	63.6	103	70.5	83.8	85.1	81.9	20.4	7.03	4.25	3.68
(WY)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2004)	(2003)	(2003)	(2003)	(2002)	(2002)

WILLAMETTE RIVER BASIN

14179100 FRENCH CREEK NEAR DETROIT, OR—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2002 - 2004	
ANNUAL TOTAL	27,635.9		28,826.4			
ANNUAL MEAN	75.7		78.8		76.6	
HIGHEST ANNUAL MEAN					85.0	2002
LOWEST ANNUAL MEAN					66.0	2003
HIGHEST DAILY MEAN	909	Jan 30	1,560	Jan 29	1,560	Jan 29, 2004
LOWEST DAILY MEAN	4.3	Sep 4	5.3	Aug 21	2.1	Oct 3, 2001
ANNUAL SEVEN-DAY MINIMUM	4.4	Aug 31	5.5	Aug 15	2.2	Oct 1, 2001
ANNUAL RUNOFF (AC-FT)	54,820		57,180		55,480	
ANNUAL RUNOFF (CFSM)	7.65		7.96		7.74	
ANNUAL RUNOFF (INCHES)	103.84		108.32		105.11	
10 PERCENT EXCEEDS	175		160		169	
50 PERCENT EXCEEDS	39		56		49	
90 PERCENT EXCEEDS	5.6		7.3		4.9	

e Estimated



2004 Water Year
SANTIAM RIVER BASIN

14179100 FRENCH CREEK NEAR DETROIT, OR

Latitude: 44° 45 ' 38"

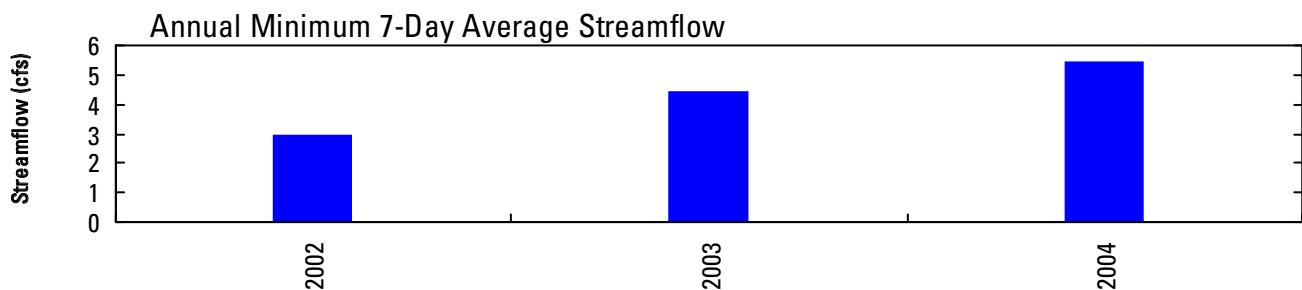
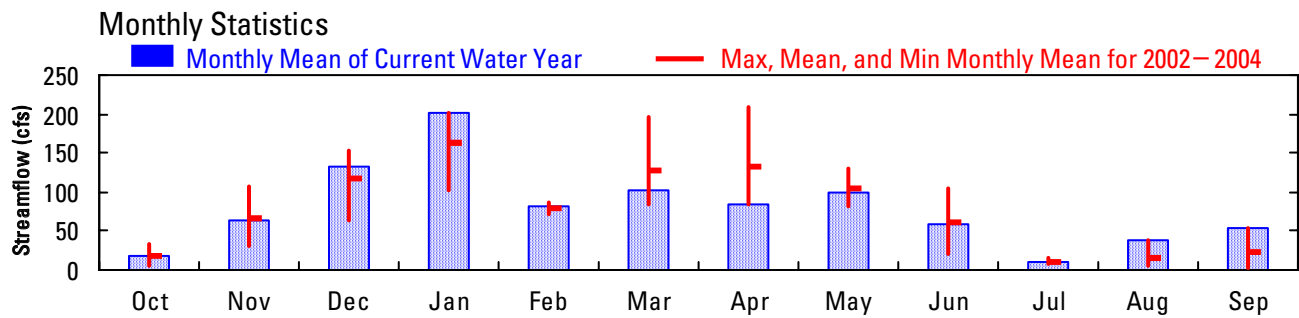
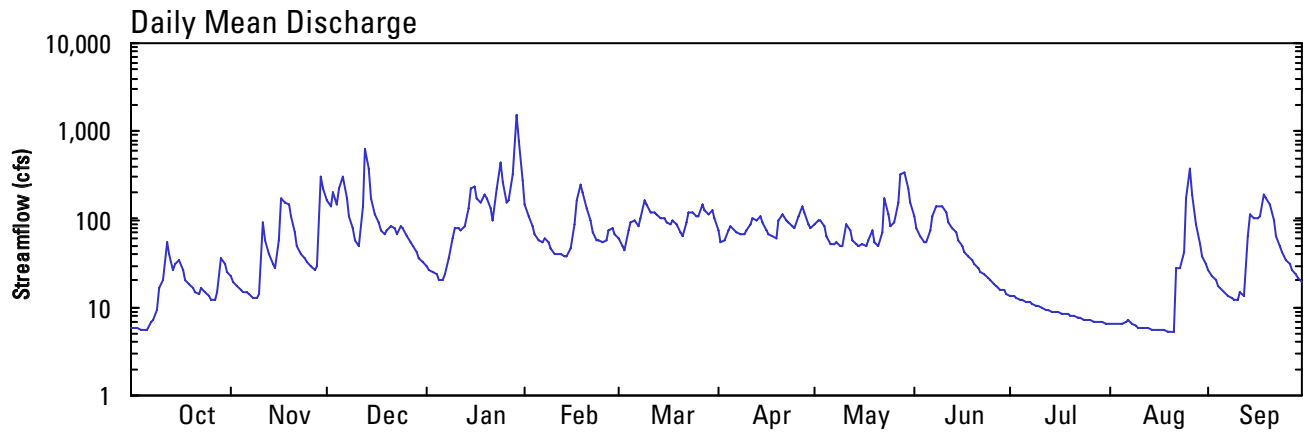
Longitude: 122° 10 ' 02"

Hydrologic Unit Code: 17090005

Marion County

Datum: 1800.00 feet

Drainage Area: 9.9 square miles



WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 2001 to current year.

pH: June 2001 to current year.

WATER TEMPERATURE: June 2001 to current year.

TURBIDITY: June 2001 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS: Water-quality data for the 2001 water year available in the files of the Portland field office.

SPECIFIC CONDUCTANCE: Records good

pH: Records excellent.

WATER TEMPERATURE: Records good.

TURBIDITY: Records good. Turbidity data are highly dependent on the instrumentation used for the measurement. See the "Definitions" section for turbidity in the front of this report.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 43 microsiemens Sept. 4-7, 2003; minimum, 15 microsiemens Apr. 14, 2002, Mar 14, 2003, Jan. 29, May 25, 26, June 3, 2004.

pH: Maximum, 7.6 units July 13, 15, 17, 2001, June 18, Aug. 7-11, 2002, Apr. 30, 2003; minimum, 6.1 units Apr. 15, 2002.

WATER TEMPERATURE: Maximum, 15.3°C Aug. 16, 2004; minimum, 0.1°C Jan. 22, 2002, Jan. 6, 2004.

TURBIDITY: Maximum, 589 FNU Jan. 31, 2003; minimum, <1 FNU many days each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 40 microsiemens Aug. 19-22; minimum, 15 microsiemens Jan. 29, May 25, 26, June 3.

pH: Maximum, 7.4 units many days October, January, March June, July; minimum, 7.0 units many days during year.

WATER TEMPERATURE: Maximum, 15.3°C Aug. 16; minimum, 0.1°C Jan. 6.

TURBIDITY: Maximum, 161 FNU May 28; minimum, <1 FNU many days during year.

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

Date	Time	Instantaneous discharge, cfs (00061)	Suspnd. sediment, sieve diameter percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
OCT 24...	1215	16	--	<1	--
DEC 13...	1416	1,080	52	176	515
13...	1436	1,100	--	194	574
14...	1434	345	29	6	5.6
JAN 30...	0940	776	25	13	27
MAY 28...	2025	426	38	9	10

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	36	35	36	26	25	26	22	22	22	25	24	25
2	37	35	36	25	24	24	22	22	22	25	25	25
3	37	35	36	24	24	24	22	21	21	26	25	25
4	37	36	36	25	23	24	22	21	22	26	25	25
5	37	36	36	24	22	23	22	20	20	28	26	26
6	37	35	36	24	22	23	21	20	20	26	25	26
7	36	34	35	24	23	23	22	20	21	26	25	25
8	36	34	35	24	22	23	22	22	22	26	25	25
9	35	33	34	24	22	23	23	22	22	25	24	25
10	34	31	32	24	22	23	23	22	23	24	24	24
11	32	28	31	26	20	23	24	23	23	24	24	24
12	28	28	28	24	21	23	23	21	22	24	24	24
13	28	28	28	24	22	24	21	17	19	24	24	24
14	29	28	28	25	22	24	21	19	20	24	22	23
15	29	26	28	25	22	24	22	21	22	22	21	22
16	28	28	28	25	22	24	22	22	22	22	21	21
17	28	28	28	23	22	22	23	22	23	22	21	22
18	29	28	28	22	21	21	24	23	23	21	21	21
19	30	28	29	22	20	21	24	23	23	21	20	21
20	30	29	30	26	21	22	24	23	23	21	21	21
21	31	30	30	24	23	23	23	23	23	22	21	21
22	31	30	31	24	23	24	23	23	23	22	21	22
23	31	29	30	24	24	24	24	23	23	22	18	20
24	31	29	30	25	24	24	24	23	23	19	18	18
25	31	29	30	25	23	24	23	23	23	20	19	20
26	32	30	31	25	24	24	24	23	23	21	20	20
27	32	31	31	25	24	25	24	23	23	21	20	21
28	33	30	32	25	24	25	24	23	23	20	17	19
29	30	26	29	24	20	21	24	23	24	17	15	16
30	28	24	26	22	21	22	26	24	24	18	16	17
31	26	26	26	---	---	---	25	24	25	19	18	19
MONTH	37	24	31	26	20	23	26	17	22	28	15	22
FEBRUARY			MARCH			APRIL			MAY			
1	20	19	20	---	---	---	22	21	21	19	18	19
2	21	20	21	---	---	---	22	21	22	20	18	18
3	21	21	21	---	---	---	22	21	22	19	19	19
4	22	21	21	---	---	---	21	21	21	20	19	19
5	22	21	22	---	---	---	21	21	21	20	18	20
6	22	21	22	---	---	---	21	21	21	20	20	20
7	22	22	22	---	---	---	---	---	---	20	20	20
8	22	22	22	---	---	---	---	---	---	20	18	20
9	23	22	22	---	---	---	---	---	---	21	20	20
10	23	22	23	21	21	21	---	---	---	22	20	21
11	23	23	23	22	21	21	---	---	---	21	20	20
12	23	23	23	21	20	21	---	---	---	21	19	21
13	23	23	23	21	19	21	---	---	---	22	21	21
14	23	22	23	21	19	21	20	19	19	22	18	21
15	23	22	23	21	19	21	21	19	20	22	18	20
16	23	21	22	21	19	20	21	20	21	21	20	20
17	21	20	21	21	19	20	21	21	21	23	20	22
18	20	20	20	21	21	21	22	21	21	23	20	23
19	21	20	20	21	21	21	22	21	22	22	20	21
20	22	21	22	22	21	22	22	21	21	22	19	20
21	22	22	22	22	21	22	22	22	22	20	19	20
22	23	22	23	22	20	21	22	22	22	21	18	20
23	23	23	23	20	20	20	22	22	22	19	18	18
24	23	23	23	20	20	20	22	22	22	19	17	18
25	---	---	---	21	20	20	22	21	22	19	15	18
26	---	---	---	21	20	21	21	20	21	19	15	17
27	---	---	---	21	20	21	20	18	19	18	17	18
28	---	---	---	21	21	21	19	18	19	18	16	17
29	---	---	---	22	21	21	20	19	19	18	16	18
30	---	---	---	21	20	20	20	19	19	20	18	19
31	---	---	---	21	20	21	---	---	---	20	18	19
MONTH	---	---	---	---	---	---	---	---	---	23	15	20

14179100 FRENCH CREEK NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	20	18	19	28	26	27	35	34	34	27	23	25
2	21	17	20	27	26	27	35	34	34	27	25	26
3	21	15	19	27	26	27	36	34	35	26	26	26
4	21	19	20	27	26	27	36	34	35	28	26	26
5	22	18	20	28	27	27	35	34	35	28	26	28
6	21	17	20	29	27	27	36	34	35	28	28	28
7	20	18	20	28	27	28	36	34	35	28	28	28
8	21	19	20	29	27	28	36	35	35	28	28	28
9	22	21	21	29	28	28	36	35	36	29	28	29
10	21	20	21	28	27	28	37	36	36	29	29	29
11	22	20	21	29	27	28	37	35	36	30	28	29
12	22	21	22	29	28	28	37	36	36	29	28	28
13	23	22	22	30	28	29	38	36	37	29	24	26
14	22	22	22	30	29	29	38	37	38	25	24	24
15	23	22	23	30	29	30	38	37	38	25	23	24
16	24	23	24	31	29	30	39	37	38	25	23	24
17	24	24	24	31	30	30	39	38	39	24	22	23
18	25	24	25	31	30	31	---	---	---	23	22	22
19	26	23	25	31	29	30	40	38	39	23	22	23
20	26	22	25	31	29	30	40	39	39	23	22	23
21	27	25	26	33	30	31	40	40	40	24	23	24
22	27	25	26	33	32	33	40	32	35	25	23	24
23	27	25	26	34	32	33	33	30	32	26	24	25
24	27	23	25	34	33	33	33	31	31	26	25	26
25	27	25	26	34	33	34	31	26	27	27	24	26
26	28	25	26	34	33	33	27	25	26	27	24	26
27	28	26	27	34	33	34	28	25	27	28	26	27
28	28	26	27	35	33	34	28	26	28	28	26	27
29	28	27	28	35	33	34	30	24	28	28	26	27
30	28	26	27	35	33	34	28	21	25	28	25	27
31	---	---	---	35	34	34	29	22	25	---	---	---
MONTH	28	15	23	35	26	30	---	---	---	30	22	26

14179100 FRENCH CREEK NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	7.2	7.1	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.3	7.2	7.2
2	7.2	7.1	7.2	7.3	7.2	7.2	7.3	7.1	7.2	7.3	7.2	7.2
3	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.3	7.2	7.2
4	7.2	7.2	7.2	7.2	7.2	7.2	7.3	7.2	7.2	7.3	7.2	7.3
5	7.2	7.2	7.2	7.2	7.2	7.2	7.3	7.2	7.2	7.3	7.2	7.3
6	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.3	7.2	7.3
7	7.3	7.2	7.2	7.2	7.2	7.2	7.3	7.2	7.2	7.3	7.2	7.3
8	7.3	7.2	7.2	7.2	7.2	7.2	7.3	7.2	7.3	7.3	7.2	7.3
9	7.4	7.3	7.3	7.2	7.2	7.2	7.3	7.2	7.3	7.3	7.2	7.3
10	7.4	7.3	7.3	7.2	7.2	7.2	7.3	7.2	7.2	7.3	7.2	7.3
11	7.3	7.3	7.3	7.3	7.1	7.2	7.3	7.2	7.2	7.3	7.2	7.3
12	7.3	7.3	7.3	7.3	7.2	7.2	7.3	7.2	7.2	7.3	7.3	7.3
13	7.3	7.3	7.3	7.2	7.2	7.2	7.2	7.0	7.1	7.3	7.3	7.3
14	7.4	7.3	7.3	7.2	7.2	7.2	7.2	7.1	7.2	7.3	7.2	7.3
15	7.4	7.3	7.3	7.3	7.2	7.2	7.2	7.1	7.2	7.2	7.2	7.2
16	7.4	7.3	7.3	7.3	7.2	7.2	7.2	7.2	7.2	7.3	7.2	7.2
17	7.4	7.2	7.3	7.3	7.2	7.2	7.2	7.2	7.2	7.3	7.2	7.3
18	7.4	7.3	7.3	7.3	7.2	7.2	7.2	7.2	7.2	7.4	7.3	7.3
19	7.3	7.2	7.3	7.3	7.2	7.2	7.2	7.2	7.2	7.3	7.2	7.3
20	7.3	7.2	7.2	7.3	7.1	7.2	7.2	7.2	7.2	7.3	7.2	7.3
21	7.3	7.2	7.3	7.2	7.1	7.2	7.3	7.2	7.2	7.4	7.2	7.3
22	7.4	7.3	7.3	7.2	7.1	7.2	7.3	7.2	7.2	7.4	7.2	7.3
23	7.4	7.4	7.4	7.3	7.2	7.3	7.3	7.2	7.2	7.4	7.2	7.3
24	7.4	7.3	7.4	7.3	7.2	7.3	7.3	7.2	7.2	7.3	7.2	7.2
25	7.4	7.3	7.3	7.3	7.1	7.2	7.3	7.2	7.2	7.3	7.3	7.3
26	7.4	7.3	7.3	7.2	7.1	7.2	7.3	7.2	7.2	7.3	7.3	7.3
27	7.4	7.3	7.3	7.3	7.1	7.2	7.2	7.2	7.2	7.3	7.2	7.3
28	7.4	7.2	7.3	7.3	7.1	7.2	7.3	7.2	7.2	7.3	7.2	7.3
29	7.4	7.3	7.4	7.2	7.0	7.1	7.2	7.2	7.2	7.2	7.0	7.1
30	7.3	7.2	7.3	7.2	7.0	7.2	7.3	7.2	7.2	7.2	7.1	7.2
31	7.3	7.2	7.2	---	---	---	7.3	7.2	7.2	7.2	7.2	7.2
MAX	7.4	7.4	7.4	7.3	7.2	7.3	7.3	7.2	7.3	7.4	7.3	7.3
MIN	7.2	7.1	7.2	7.2	7.0	7.1	7.2	7.0	7.1	7.2	7.0	7.1
FEBRUARY			MARCH			APRIL			MAY			
1	7.3	7.2	7.2	7.3	7.2	7.3	7.2	7.2	7.2	7.2	7.1	7.2
2	7.3	7.2	7.3	7.4	7.3	7.3	7.3	7.2	7.2	7.2	7.1	7.2
3	7.3	7.2	7.3	7.4	7.3	7.3	7.3	7.2	7.2	7.2	7.1	7.2
4	7.3	7.1	7.2	7.4	7.3	7.3	7.3	7.2	7.2	7.2	7.1	7.2
5	7.2	7.2	7.2	7.3	7.3	7.3	7.3	7.2	7.2	7.2	7.2	7.2
6	7.2	7.2	7.2	7.4	7.3	7.3	7.3	7.2	7.2	7.2	7.2	7.2
7	7.2	7.2	7.2	7.4	7.3	7.3	7.3	7.2	7.2	7.3	7.2	7.2
8	7.2	7.1	7.2	7.4	7.3	7.4	7.2	7.2	7.2	7.2	7.2	7.2
9	7.2	7.2	7.2	7.4	7.2	7.3	7.2	7.1	7.2	7.2	7.2	7.2
10	7.2	7.2	7.2	7.2	7.1	7.2	7.2	7.1	7.2	7.3	7.2	7.2
11	7.2	7.2	7.2	7.3	7.2	7.2	7.2	7.1	7.1	7.2	7.1	7.1
12	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.1	7.1	7.2	7.1	7.2
13	7.3	7.2	7.2	7.2	7.2	7.2	7.2	7.1	7.2	7.3	7.1	7.2
14	7.3	7.2	7.2	7.2	7.1	7.2	7.2	7.1	7.1	7.3	7.2	7.2
15	7.3	7.2	7.2	7.2	7.2	7.2	7.3	7.1	7.2	7.3	7.2	7.2
16	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.1	7.2	7.3	7.2	7.2
17	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.1	7.2	7.3	7.2	7.2
18	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.1	7.2	7.3	7.2	7.2
19	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.1	7.2	7.2	7.1	7.2
20	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.1	7.2	7.3	7.1	7.2
21	7.2	7.2	7.2	7.3	7.2	7.2	7.2	7.1	7.2	7.2	7.1	7.2
22	7.3	7.2	7.2	7.2	7.2	7.2	7.2	7.1	7.2	7.2	7.2	7.2
23	7.2	7.2	7.2	7.2	7.1	7.2	7.2	7.1	7.2	7.2	7.1	7.2
24	7.3	7.2	7.2	7.2	7.1	7.2	7.2	7.1	7.2	7.2	7.1	7.2
25	7.3	7.2	7.3	7.2	7.2	7.2	7.2	7.1	7.1	7.2	7.1	7.2
26	7.3	7.2	7.3	7.3	7.2	7.2	7.2	7.1	7.1	7.2	7.1	7.2
27	7.3	7.2	7.2	7.2	7.2	7.2	7.2	7.0	7.1	7.2	7.1	7.1
28	7.3	7.2	7.3	7.2	7.2	7.2	7.2	7.0	7.1	7.2	7.1	7.1
29	7.3	7.2	7.3	7.3	7.2	7.2	7.2	7.1	7.2	7.2	7.0	7.1
30	---	---	---	7.2	7.2	7.2	7.2	7.1	7.2	7.2	7.0	7.1
31	---	---	---	7.2	7.2	7.2	---	---	---	7.2	7.1	7.1
MAX	7.3	7.2	7.3	7.4	7.3	7.4	7.3	7.2	7.2	7.3	7.2	7.2
MIN	7.2	7.1	7.2	7.2	7.1	7.2	7.2	7.0	7.1	7.2	7.0	7.1

WILLAMETTE RIVER BASIN

14179100 FRENCH CREEK NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.2	7.1	7.1	7.3	7.3	7.3	7.3	7.2	7.2	7.2	7.1	7.1
2	7.2	7.1	7.2	7.4	7.3	7.3	7.3	7.2	7.2	7.3	7.1	7.3
3	7.2	7.1	7.2	7.4	7.2	7.3	7.3	7.2	7.2	7.3	7.2	7.3
4	7.2	7.2	7.2	7.3	7.3	7.3	7.3	7.2	7.2	7.3	7.2	7.2
5	7.3	7.2	7.2	7.3	7.2	7.3	7.3	7.2	7.2	7.3	7.2	7.2
6	7.2	7.2	7.2	7.3	7.2	7.3	7.2	7.2	7.2	7.3	7.2	7.2
7	7.2	7.2	7.2	7.3	7.3	7.3	7.2	7.2	7.2	7.3	7.2	7.2
8	7.2	7.1	7.2	7.3	7.3	7.3	7.2	7.2	7.2	7.2	7.2	7.2
9	7.3	7.1	7.2	7.3	7.3	7.3	7.2	7.1	7.2	7.3	7.2	7.2
10	7.3	7.2	7.2	7.4	7.3	7.3	7.2	7.1	7.2	7.2	7.1	7.2
11	7.3	7.2	7.2	7.3	7.2	7.3	7.3	7.2	7.2	7.3	7.0	7.2
12	7.3	7.2	7.2	7.3	7.2	7.3	7.3	7.2	7.3	7.2	7.2	7.2
13	7.3	7.2	7.3	7.3	7.2	7.3	7.3	7.2	7.3	7.2	7.1	7.2
14	7.3	7.2	7.3	7.3	7.2	7.3	7.3	7.2	7.2	7.2	7.1	7.2
15	7.3	7.2	7.3	7.3	7.2	7.3	7.3	7.2	7.3	7.2	7.1	7.1
16	7.3	7.2	7.3	7.3	7.2	7.3	7.3	7.2	7.3	7.2	7.1	7.1
17	7.3	7.2	7.3	7.3	7.2	7.2	7.3	7.2	7.3	7.2	7.1	7.1
18	7.3	7.2	7.3	7.3	7.2	7.2	7.3	7.3	7.3	7.2	7.1	7.1
19	7.4	7.2	7.3	7.3	7.2	7.2	7.3	7.2	7.2	7.1	7.0	7.1
20	7.3	7.2	7.3	7.3	7.2	7.3	7.3	7.2	7.2	7.1	7.1	7.1
21	7.3	7.2	7.3	7.3	7.2	7.3	7.3	7.2	7.2	7.1	7.0	7.1
22	7.3	7.2	7.3	7.3	7.2	7.3	7.3	7.2	7.2	7.3	7.0	7.1
23	7.4	7.3	7.3	7.3	7.2	7.3	7.2	7.2	7.2	7.3	7.2	7.2
24	7.3	7.2	7.3	7.3	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
25	7.4	7.2	7.3	7.3	7.2	7.3	7.2	7.1	7.1	7.2	7.1	7.2
26	7.4	7.3	7.3	7.3	7.2	7.3	7.1	7.0	7.0	7.2	7.1	7.2
27	7.4	7.3	7.3	7.3	7.2	7.3	7.1	7.0	7.1	7.2	7.1	7.2
28	7.4	7.3	7.3	7.3	7.2	7.2	7.1	7.1	7.1	7.2	7.1	7.2
29	7.4	7.3	7.3	7.3	7.2	7.2	7.1	7.0	7.1	7.2	7.1	7.2
30	7.4	7.3	7.3	7.3	7.2	7.2	7.1	7.1	7.1	7.2	7.2	7.2
31	---	---	---	7.3	7.2	7.2	7.1	7.0	7.1	---	---	---
MAX	7.4	7.3	7.3	7.4	7.3	7.3	7.3	7.3	7.3	7.3	7.2	7.3
MIN	7.2	7.1	7.1	7.3	7.2	7.2	7.1	7.0	7.0	7.1	7.0	7.1

14179100 FRENCH CREEK NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	11.4	10.9	11.2	5.1	4.2	4.7	5.5	5.3	5.4	3.3	1.0	2.3
2	11.7	11.1	11.4	5.1	4.8	4.9	5.7	5.4	5.5	2.9	2.2	2.6
3	11.7	11.2	11.4	5.0	4.4	4.7	5.6	5.1	5.3	2.9	2.0	2.5
4	11.6	10.9	11.3	4.9	4.4	4.6	5.6	5.1	5.4	2.5	1.4	2.1
5	11.8	11.2	11.4	4.8	4.0	4.4	5.7	5.5	5.6	2.4	1.6	2.0
6	11.5	10.8	11.2	4.7	4.2	4.5	5.8	5.2	5.4	1.6	0.1	0.9
7	11.5	10.9	11.3	5.4	4.6	5.0	5.2	4.4	4.8	2.2	0.9	1.6
8	10.9	10.4	10.7	5.6	4.8	5.2	5.0	4.6	4.8	2.9	2.2	2.6
9	10.4	9.9	10.2	5.7	5.0	5.4	5.1	4.7	4.9	3.5	2.9	3.2
10	9.9	---	---	5.9	5.3	5.7	5.0	4.7	4.9	3.9	3.5	3.7
11	---	---	---	6.5	5.9	6.3	5.2	4.9	5.1	4.2	3.8	4.0
12	9.0	8.6	8.8	6.4	5.7	6.0	5.1	4.7	4.9	4.2	3.9	4.1
13	8.8	8.3	8.6	5.7	5.3	5.5	5.2	4.6	4.9	4.3	4.1	4.2
14	8.9	8.2	8.7	6.3	5.5	6.0	4.8	4.5	4.7	4.4	4.1	4.3
15	8.3	8.0	8.1	6.3	6.0	6.1	4.8	4.5	4.7	4.5	4.1	4.3
16	8.6	8.2	8.3	6.0	5.8	5.9	4.6	4.5	4.5	4.7	4.4	4.5
17	9.3	8.5	8.9	6.7	5.8	6.2	4.9	4.6	4.7	4.7	4.4	4.6
18	9.0	8.4	8.8	7.0	6.7	6.9	4.8	4.6	4.7	4.6	4.4	4.5
19	9.2	8.8	9.0	7.1	5.0	6.0	5.0	4.5	4.8	4.7	4.5	4.5
20	9.8	9.1	9.5	5.2	4.7	4.9	5.3	4.9	5.1	4.5	4.2	4.4
21	10.2	9.7	9.9	4.8	4.2	4.6	5.4	4.9	5.2	4.2	4.0	4.1
22	10.2	9.8	10	4.2	3.8	3.9	5.1	4.6	4.8	4.2	3.7	4.0
23	9.8	8.6	9.3	4.3	4.0	4.1	5.2	4.7	4.9	4.4	4.1	4.3
24	8.6	7.9	8.3	4.1	3.5	3.7	5.2	4.7	5.0	4.3	3.3	3.9
25	8.3	7.6	8.1	4.0	2.3	3.1	4.7	4.1	4.3	4.0	3.4	3.8
26	8.6	7.9	8.3	3.5	2.6	2.9	4.2	3.7	4.1	4.1	3.8	4.0
27	8.8	8.1	8.5	4.0	3.5	3.8	4.2	1.9	3.3	4.2	3.8	4.1
28	9.5	8.7	9.1	4.2	3.7	4.1	3.0	1.9	2.4	4.3	3.9	4.2
29	9.1	7.3	8.1	5.1	3.5	4.4	2.7	1.3	2.3	4.7	3.6	4.2
30	7.3	5.8	6.6	5.5	5.1	5.3	2.7	2.2	2.5	4.6	3.6	3.9
31	5.8	4.7	5.2	---	---	---	3.2	2.4	2.8	4.1	3.4	3.8
MONTH	---	---	---	7.1	2.3	5.0	5.8	1.3	4.6	4.7	0.1	3.6
FEBRUARY			MARCH			APRIL			MAY			
1	4.0	3.7	3.8	4.8	4.2	4.5	4.9	3.5	4.1	8.1	5.9	6.9
2	4.4	3.8	4.1	4.8	3.9	4.3	5.5	3.8	4.7	8.3	6.1	7.1
3	4.1	3.7	3.9	4.1	3.4	3.7	6.4	4.7	5.5	8.3	6.4	7.3
4	---	---	---	4.1	3.4	3.8	6.2	4.6	5.4	7.1	6.4	6.8
5	---	---	---	4.3	3.8	4.1	6.0	4.9	5.4	7.1	6.0	6.5
6	---	---	---	4.8	4.1	4.4	6.2	5.0	5.5	7.4	5.8	6.7
7	---	---	---	5.1	4.4	4.7	6.1	4.8	5.4	7.4	6.6	7.0
8	---	---	---	5.2	4.3	4.8	6.2	4.6	5.4	7.0	6.3	6.7
9	---	---	---	5.2	4.5	4.8	6.4	4.4	5.4	7.2	6.1	6.6
10	---	---	---	5.0	4.4	4.6	6.7	4.8	5.7	6.7	6.0	6.4
11	---	---	---	5.1	4.1	4.6	6.9	4.9	5.9	6.0	5.2	5.7
12	3.8	3.4	3.6	5.5	4.3	4.8	6.8	5.1	5.9	7.0	5.6	6.1
13	4.0	3.4	3.8	5.2	4.0	4.6	6.2	5.2	5.7	7.4	5.3	6.3
14	4.6	3.8	4.2	5.5	4.6	5.0	5.2	4.5	4.9	7.8	5.9	6.9
15	4.3	3.4	3.9	5.4	4.4	4.8	5.1	4.2	4.6	7.2	6.6	6.9
16	4.4	4.1	4.2	5.3	4.0	4.7	5.4	4.5	4.9	7.6	6.4	6.9
17	4.5	4.2	4.3	5.5	4.3	4.8	5.7	4.6	5.0	7.4	6.0	6.8
18	4.7	4.0	4.4	5.2	4.1	4.7	5.6	4.7	5.1	7.3	6.8	7.0
19	4.5	3.9	4.2	4.7	4.0	4.2	5.6	4.7	5.1	7.5	6.4	6.9
20	4.3	3.7	4.1	5.2	3.7	4.4	5.1	4.3	4.6	8.5	6.7	7.7
21	4.6	3.9	4.2	5.6	4.3	5.0	5.3	4.0	4.6	8.0	7.0	7.5
22	4.8	4.2	4.4	6.0	4.5	5.2	6.3	4.6	5.4	7.1	6.2	6.8
23	4.8	4.3	4.5	5.6	4.8	5.2	5.9	4.9	5.4	6.9	6.2	6.5
24	4.6	4.0	4.4	4.8	4.3	4.6	6.4	4.8	5.6	7.7	6.2	7.1
25	4.5	4.0	4.2	4.8	4.0	4.4	7.3	4.9	6.1	8.4	6.4	7.7
26	4.6	4.2	4.3	4.3	3.6	4.0	8.0	5.6	6.7	8.0	7.3	7.6
27	4.6	3.7	4.2	4.8	4.0	4.4	7.7	5.8	6.6	7.5	6.4	7.2
28	4.6	3.9	4.2	5.4	4.1	4.7	6.6	4.9	5.7	6.4	5.8	6.0
29	4.8	4.2	4.5	6.0	4.4	5.2	7.0	4.8	6.0	6.3	5.8	6.2
30	---	---	---	5.4	4.2	4.9	7.7	5.4	6.5	6.9	6.3	6.6
31	---	---	---	4.6	3.6	4.1	---	---	---	7.7	6.3	6.9
MONTH	---	---	---	6.0	3.4	4.6	8.0	3.5	5.4	8.5	5.2	6.8

WILLAMETTE RIVER BASIN

14179100 FRENCH CREEK NEAR DETROIT, OR—Continued

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

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

14179100 FRENCH CREEK NEAR DETROIT, OR—Continued

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/- 2.5 DEGREES, FNU
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	<1	<1	<1	<1	<1	<1	11	<1	2	4	<1	<1
2	<1	<1	<1	9	<1	<1	9	<1	2	2	<1	<1
3	<1	<1	<1	<1	<1	<1	11	<1	3	5	<1	<1
4	1	<1	<1	2	<1	<1	10	<1	2	2	<1	<1
5	2	<1	<1	10	<1	<1	16	<1	4	3	<1	<1
6	6	<1	<1	6	<1	<1	28	1	7	5	<1	<1
7	<1	<1	<1	4	<1	<1	10	<1	3	7	<1	<1
8	6	<1	<1	2	<1	<1	8	<1	2	3	<1	<1
9	<1	<1	<1	5	<1	<1	7	<1	<1	4	<1	1
10	1	<1	<1	4	<1	<1	9	<1	<1	11	<1	2
11	6	<1	<1	14	<1	3	13	<1	<1	6	<1	2
12	11	<1	<1	8	<1	<1	13	<1	3	9	<1	<1
13	2	<1	<1	2	<1	<1	106	4	27	9	<1	1
14	3	<1	<1	1	<1	<1	33	2	11	10	<1	4
15	4	<1	<1	2	<1	<1	14	<1	4	12	2	4
16	7	<1	<1	3	<1	<1	10	<1	2	9	<1	3
17	2	<1	<1	---	---	---	9	<1	1	12	<1	3
18	2	<1	<1	---	---	---	9	<1	<1	11	<1	2
19	<1	<1	<1	---	---	---	4	<1	<1	10	<1	2
20	<1	<1	<1	14	<1	<1	8	<1	<1	12	<1	2
21	<1	<1	<1	<1	<1	<1	12	<1	1	12	<1	1
22	2	<1	<1	<1	<1	<1	5	<1	<1	7	<1	1
23	2	<1	<1	<1	<1	<1	8	<1	<1	51	<1	4
24	<1	<1	<1	<1	<1	<1	6	<1	<1	36	2	17
25	<1	<1	<1	2	<1	<1	7	<1	<1	16	1	5
26	<1	<1	<1	2	<1	<1	4	<1	<1	15	<1	3
27	<1	<1	<1	4	<1	<1	4	<1	<1	11	<1	3
28	3	<1	<1	11	<1	<1	6	<1	<1	33	2	7
29	7	<1	<1	23	2	12	1	<1	<1	138	14	42
30	6	<1	<1	11	1	3	8	<1	<1	32	3	12
31	2	<1	<1	---	---	---	2	<1	<1	13	1	4
MAX	11	<1	<1	23	2	12	106	4	27	138	14	42
MIN	<1	<1	<1	<1	<1	<1	1	<1	<1	2	<1	<1
FEBRUARY			MARCH			APRIL			MAY			
1	12	<1	2	6	<1	<1	9	<1	<1	7	<1	<1
2	9	<1	1	3	<1	<1	11	<1	<1	5	<1	<1
3	6	<1	<1	8	<1	<1	10	<1	<1	5	<1	<1
4	7	<1	<1	4	<1	<1	4	<1	<1	7	<1	<1
5	6	<1	<1	6	<1	<1	7	<1	<1	2	<1	<1
6	8	<1	<1	8	<1	<1	10	<1	<1	4	<1	<1
7	8	<1	<1	5	<1	<1	5	<1	<1	6	<1	<1
8	5	<1	<1	8	<1	<1	8	<1	<1	3	<1	<1
9	5	<1	<1	8	<1	1	9	<1	<1	3	<1	<1
10	8	<1	<1	9	<1	1	9	<1	<1	4	<1	<1
11	11	<1	<1	5	<1	<1	8	<1	<1	4	<1	<1
12	10	<1	<1	14	<1	<1	10	<1	<1	5	<1	<1
13	5	<1	<1	9	<1	<1	7	<1	<1	5	<1	<1
14	9	<1	<1	8	<1	<1	6	<1	1	7	<1	<1
15	6	<1	<1	13	<1	<1	8	<1	<1	5	<1	<1
16	8	<1	1	5	<1	<1	3	<1	<1	5	<1	<1
17	12	<1	2	6	<1	<1	8	<1	<1	5	<1	<1
18	10	1	3	5	<1	<1	2	<1	<1	4	<1	<1
19	8	<1	2	12	<1	<1	8	<1	<1	4	<1	<1
20	6	<1	<1	5	<1	<1	3	<1	<1	1	<1	<1
21	7	<1	<1	3	<1	<1	9	<1	<1	2	<1	<1
22	3	<1	<1	8	<1	<1	7	<1	<1	5	<1	<1
23	6	<1	<1	11	<1	<1	8	<1	<1	9	<1	2
24	9	<1	<1	9	<1	1	4	<1	<1	6	<1	<1
25	2	<1	<1	10	<1	<1	6	<1	<1	9	<1	<1
26	8	<1	<1	8	<1	<1	4	<1	<1	4	<1	<1
27	6	<1	<1	14	<1	2	6	<1	<1	8	<1	<1
28	6	<1	<1	11	<1	<1	6	<1	<1	161	<1	6
29	6	<1	<1	11	<1	<1	2	<1	<1	---	---	---
30	---	---	---	9	<1	<1	5	<1	<1	---	---	---
31	---	---	---	11	<1	<1	---	---	---	---	---	---
MAX	12	1	3	14	<1	2	11	<1	1	161	<1	6
MIN	2	<1	<1	3	<1	<1	2	<1	<1	1	<1	<1

14179100 FRENCH CREEK NEAR DETROIT, OR—Continued

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

[illegible]

LOCATION.--44°39'11", long 122°07'47", in NW ¼ sec.6, T.11 S., R.6 E., Marion County, Hydrologic Unit 17090005, on left bank, 6.0 mi south of Detroit and at mile 5.5.

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,840 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--6 years (water years 1999-2004), 110 ft³/s, 57.40 in/yr, 79,570 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,400 ft³/s Dec. 28, 1998, gage height, 7.38 ft; minimum daily discharge, 2.1 ft³/s Sept. 3-5, 2003.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 13	1600	*1,810	*6.36	No other peak greater than base discharge.			

Minimum discharge, 2.6 ft³/s, Oct. 4.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	15	117	70	317	132	107	87	101	22	8.9	13
2	3.3	15	97	63	259	119	93	87	85	21	8.8	13
3	3.3	14	190	58	223	109	88	87	73	20	8.8	12
4	3.1	13	129	53	187	128	91	83	63	20	8.7	11
5	3.2	12	243	47	161	145	92	76	59	19	8.7	11
6	3.5	12	359	47	161	163	91	67	67	18	9.5	10
7	6.6	12	206	97	171	147	90	63	76	17	9.9	9.8
8	6.9	12	141	156	154	158	87	63	98	17	9.0	9.4
9	10	14	99	220	135	188	85	58	105	16	e8.5	9.3
10	13	16	76	226	120	187	86	60	105	16	e8.1	9.1
11	14	40	62	197	107	162	91	65	102	15	e7.8	11
12	37	36	117	172	97	155	94	60	92	14	7.6	11
13	21	28	918	170	91	148	96	55	86	14	7.5	16
14	14	24	652	219	91	140	118	52	77	13	7.3	19
15	24	24	334	320	119	140	111	49	67	13	7.3	18
16	28	60	224	322	210	130	95	50	60	12	7.1	17
17	21	89	187	264	368	125	86	48	55	12	6.9	22
18	17	65	157	230	438	129	84	59	50	12	6.8	53
19	16	78	137	264	367	127	82	60	45	12	6.6	52
20	15	65	139	254	272	111	127	56	42	11	6.5	53
21	13	45	140	208	211	102	164	54	38	11	6.5	38
22	13	34	130	169	170	113	146	52	36	10	29	30
23	18	27	117	238	147	123	126	57	34	10	18	24
24	15	26	138	548	138	130	113	51	32	10	15	21
25	13	26	139	374	131	129	103	45	30	10	33	19
26	12	e26	119	262	130	130	104	46	28	9.8	40	17
27	11	e23	106	240	147	195	114	63	26	9.6	28	16
28	11	e26	106	371	153	159	110	191	25	9.5	20	15
29	17	288	100	870	139	138	96	223	24	9.3	17	14
30	20	159	82	788	---	139	88	163	23	9.2	15	14
31	17	---	75	478	---	126	---	126	---	9.1	13	---
TOTAL	422.9	1,324	5,836	7,995	5,414	4,327	3,058	2,356	1,804	421.5	394.8	587.6
MEAN	13.6	44.1	188	258	187	140	102	76.0	60.1	13.6	12.7	19.6
MAX	37	288	918	870	438	195	164	223	105	22	40	53
MIN	3.0	12	62	47	91	102	82	45	23	9.1	6.5	9.1
AC-FT	839	2,630	11,580	15,860	10,740	8,580	6,070	4,670	3,580	836	783	1,170
CFSM	0.52	1.70	7.24	9.92	7.18	5.37	3.92	2.92	2.31	0.52	0.49	0.75
IN.	0.61	1.89	8.35	11.44	7.75	6.19	4.38	3.37	2.58	0.60	0.56	0.84

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

MEAN	10.5	110	227	213	197	181	162	127	64.3	16.5	7.75	7.12
MAX	15.6	226	425	301	308	333	311	222	135	33.9	12.7	19.6
(WY)	(2002)	(1999)	(1999)	(2003)	(2000)	(2003)	(2002)	(1999)	(1999)	(1999)	(2004)	(2004)
MIN	4.62	22.6	81.4	53.5	59.6	90.0	100	76.0	24.6	6.84	2.81	3.62
(WY)	(2003)	(2001)	(2001)	(2001)	(2001)	(2001)	(2001)	(2004)	(2003)	(2003)	(2003)	(2003)

WILLAMETTE RIVER BASIN

14180300 BLOWOUT CREEK NEAR DETROIT, OR—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	40,519.5		33,940.8		110	
ANNUAL MEAN	111		92.7		162	
HIGHEST ANNUAL MEAN					48.3	
LOWEST ANNUAL MEAN					2,440	
HIGHEST DAILY MEAN	1,110	Mar 22	918	Dec 13	2,440	Dec 28, 1998
LOWEST DAILY MEAN	2.1	Sep 3	3.0	Oct 1	2.1	Sep 3, 2003
ANNUAL SEVEN-DAY MINIMUM	2.2	Aug 30	3.7	Oct 1	2.2	Aug 30, 2003
ANNUAL RUNOFF (AC-FT)	80,370		67,320		79,570	
ANNUAL RUNOFF (CFSM)	4.27		3.57		4.22	
ANNUAL RUNOFF (INCHES)	57.97		48.56		57.40	
10 PERCENT EXCEEDS	274		207		247	
50 PERCENT EXCEEDS	65		60		64	
90 PERCENT EXCEEDS	3.1		9.7		4.9	

e Estimated



2004 Water Year
SANTIAM RIVER BASIN

14180300 BLOWOUT CREEK NEAR DETROIT, OR

Latitude: 44° 39' 11"

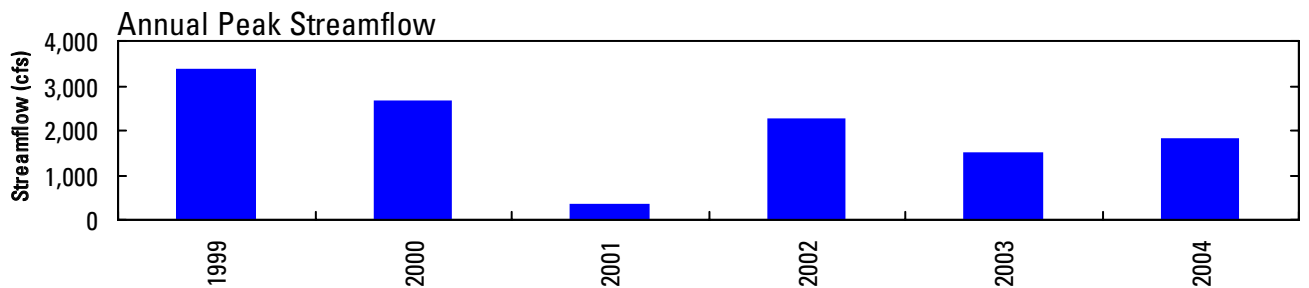
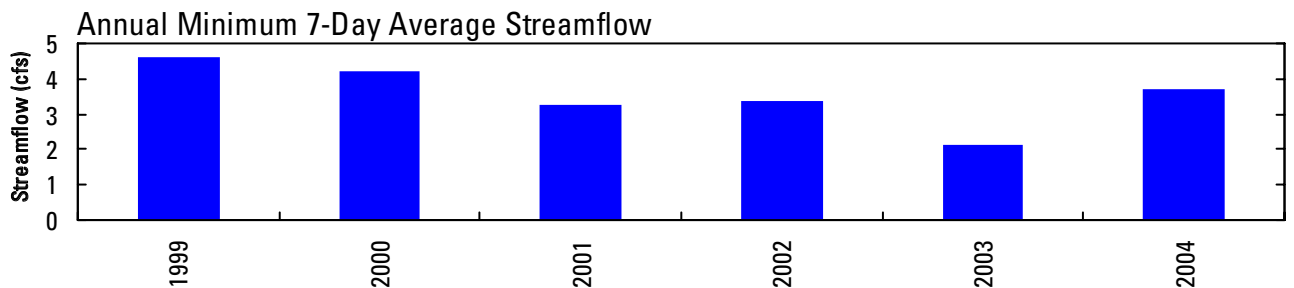
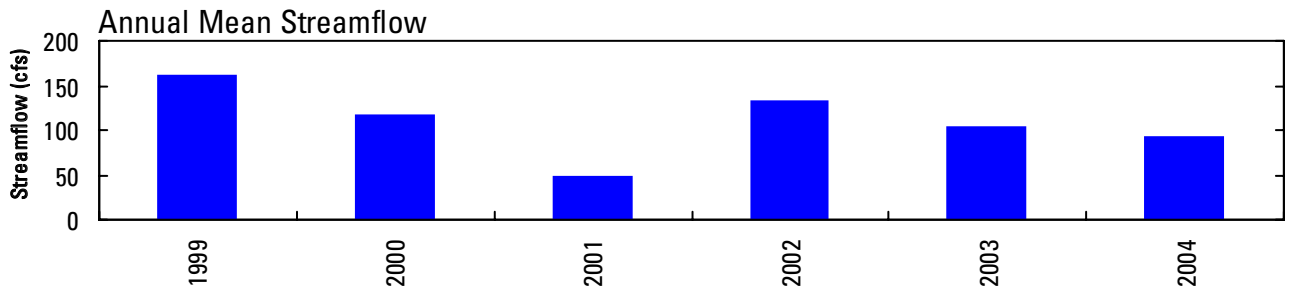
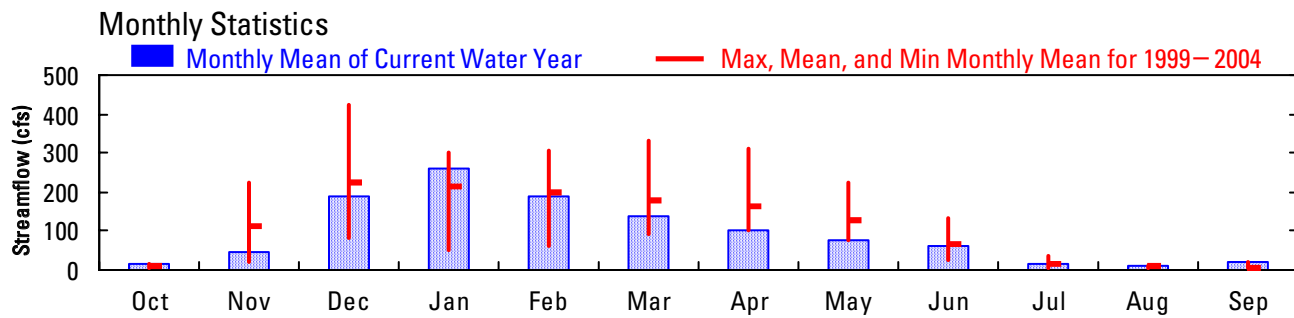
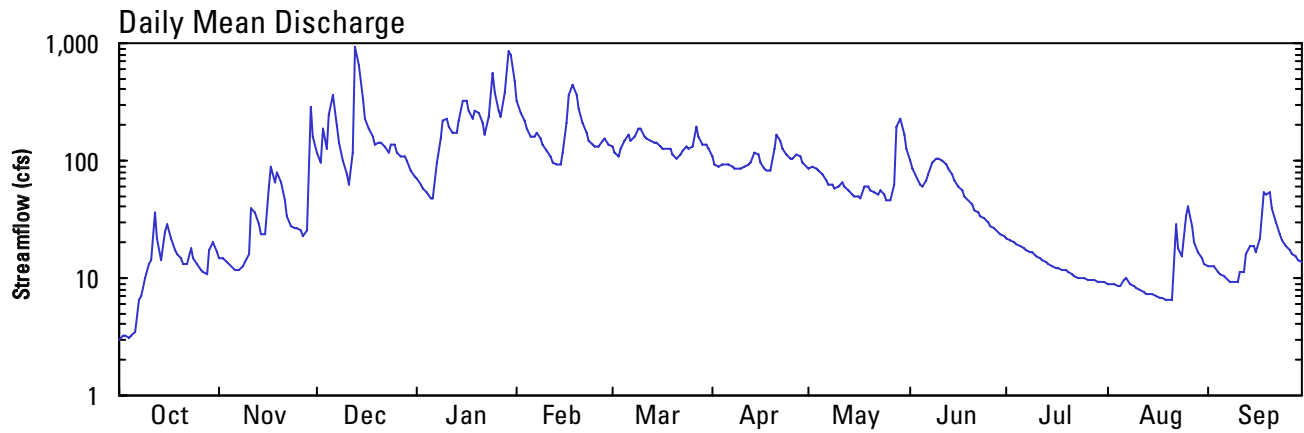
Longitude: 122° 07' 47"

Hydrologic Unit Code: 17090005

Linn County

Datum: 1,840 feet

Drainage Area: 26 square miles



14180300 BLOWOUT CREEK NEAR DETROIT, OR—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1998 to current year.

pH: October 1998 to current year.

WATER TEMPERATURE: October 1998 to current year.

TURBIDITY: October 1998 to current year.

INSTRUMENTATION.-- Water-quality monitor and data logger.

REMARKS.--Water-quality data for the 2001 water year available in the files of the Portland field office.

SPECIFIC CONDUCTANCE: Records excellent.

pH: Records excellent except for the periods Dec. 9, 10, Jan. 30 to Feb. 12, June 8-10, July 3-21, which are good.

WATER TEMPERATURE: Records excellent.

TURBIDITY: Records excellent except those for the period Dec. 3-10, which are good. Turbidity data are highly dependent on the instrumentation used for the measurement. See the "Definitions" section for turbidity in the front of this report.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 55 microsiemens Oct. 20, 2003; minimum recorded, 17 microsiemens Dec. 17, 2001.

pH: Maximum recorded, 8.3 units Aug. 3, 20, 2003; minimum recorded, 6.5 units Dec. 17, 2001.

WATER TEMPERATURE: Maximum recorded, 21.7°C August 13, 2004; minimum recorded, 0.0°C Dec. 20-23, 1998, Jan. 6, 2004.

TURBIDITY: Maximum recorded 1,370 FNU Dec. 17, 2001, Jan. 26, 27, 30, 31, 2003; minimum, <1 FNU many days during each year.

EXTREMES FOR CURRENT YEAR:

SPECIFIC CONDUCTANCE: Maximum recorded, 55 microsiemens Oct. 20; minimum recorded, 22 microsiemens, Dec. 13.

pH: Maximum recorded, 8.1 units Aug. 14, 16, 20, 21; minimum recorded, 6.9 units July 16-21.

WATER TEMPERATURE: Maximum recorded, 21.7°C Aug. 13; minimum recorded, 0.0° Jan. 6.

TURBIDITY: Maximum recorded, 161 FNU Dec. 13; minimum, <1 FNU many days during year.

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

Date	Time	Instantaneous discharge, cfs (00061)	Suspnd. sediment, sieve diameter percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
OCT					
23...	1737	17	--	1	.05
NOV					
25...	1342	28	59	5	.38
DEC					
13...	1550	1,810	66	344	1,680
13...	1611	1,770	99	482	2,310
JAN					
29...	1604	878	22	101	239
MAY					
28...	1820	231	86	11	6.9
AUG					
25...	1317	48	52	11	1.4

14180300 BLOWOUT CREEK NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	49	47	48	48	47	48	35	34	35	36	35	35
2	49	47	48	48	46	47	35	34	35	36	35	36
3	49	48	48	48	47	47	34	32	33	36	36	36
4	49	48	48	47	46	47	33	32	33	37	36	36
5	50	48	49	47	46	47	33	31	31	37	37	37
6	49	48	48	47	46	47	32	29	30	37	36	37
7	49	48	48	47	46	47	33	31	32	36	32	33
8	48	47	48	47	46	46	34	33	33	33	33	33
9	48	46	47	47	46	46	34	33	33	33	32	33
10	49	46	47	46	45	46	34	33	34	34	33	34
11	47	45	46	45	42	43	34	34	34	35	34	34
12	46	45	45	44	44	44	34	32	32	35	35	35
13	47	46	47	44	44	44	32	22	27	35	34	35
14	49	46	47	44	43	44	30	26	28	35	33	34
15	50	44	47	43	42	43	32	30	31	33	33	33
16	49	47	47	42	38	40	32	31	32	33	33	33
17	51	47	48	40	38	39	33	32	32	34	33	33
18	50	47	47	40	38	39	34	33	33	34	34	34
19	51	47	48	38	35	37	34	33	34	34	33	33
20	55	48	51	37	37	37	34	33	33	34	33	33
21	51	49	50	38	37	38	34	33	34	35	33	34
22	49	48	49	38	38	38	34	34	34	35	34	34
23	49	48	49	38	38	38	34	34	34	35	30	33
24	51	49	49	38	38	38	34	33	33	30	29	29
25	49	48	49	39	38	39	34	33	34	32	30	31
26	49	48	49	---	---	---	35	34	34	32	31	32
27	49	48	49	---	---	---	35	34	34	32	32	32
28	50	48	49	---	34	---	35	34	34	32	29	31
29	49	47	48	36	32	34	36	34	35	29	26	27
30	49	48	48	36	34	35	36	36	36	29	26	27
31	49	48	48	---	---	---	36	35	36	30	29	29
MONTH	55	44	48	---	---	---	36	22	33	37	26	33
FEBRUARY			MARCH			APRIL			MAY			
1	31	30	31	35	34	34	34	32	32	32	32	32
2	31	31	31	35	34	35	34	33	33	32	32	32
3	32	31	31	35	34	35	33	33	33	32	32	32
4	33	32	32	35	34	34	33	33	33	32	32	32
5	33	33	33	35	33	34	33	33	33	33	32	33
6	33	32	33	34	33	34	33	33	33	33	33	33
7	33	32	33	35	34	35	33	32	32	34	33	34
8	34	33	33	35	33	34	32	32	32	34	34	34
9	35	34	34	34	32	33	32	32	32	34	34	34
10	35	34	34	33	31	33	32	32	32	35	34	34
11	35	34	35	33	32	32	32	32	32	34	33	34
12	36	35	36	32	32	32	32	30	31	34	34	34
13	36	36	36	32	32	32	30	30	30	34	34	34
14	37	35	36	32	32	32	30	30	30	34	34	34
15	36	35	36	32	32	32	31	30	31	35	34	34
16	36	33	35	32	32	32	31	31	31	34	34	34
17	34	32	33	34	32	32	32	31	32	35	33	34
18	33	32	32	33	31	32	32	32	32	35	34	34
19	34	32	33	32	31	31	33	31	32	36	35	35
20	34	33	34	32	32	32	32	31	31	36	35	36
21	34	34	34	32	32	32	33	32	32	36	35	36
22	35	33	34	32	31	32	33	33	33	36	35	36
23	35	34	35	31	31	31	34	33	33	35	35	35
24	35	34	35	31	30	31	34	33	33	36	35	36
25	35	34	35	31	31	31	34	33	34	36	36	36
26	35	34	34	32	31	31	33	32	32	36	35	35
27	34	31	33	32	31	31	32	31	31	36	34	35
28	34	33	33	33	32	32	32	31	31	34	32	33
29	34	34	34	33	33	33	32	32	32	33	32	32
30	---	---	---	33	32	32	33	32	32	34	33	34
31	---	---	---	33	32	33	---	---	---	35	34	35
MONTH	37	30	34	35	30	33	34	30	32	36	32	34

14180300 BLOWOUT CREEK NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	36	35	35	43	42	42	44	44	44	46	45	45
2	37	36	36	43	43	43	45	44	44	47	45	45
3	38	37	37	43	43	43	44	43	44	46	45	45
4	38	37	37	44	43	43	43	42	43	46	45	45
5	37	36	37	44	43	43	43	43	43	46	45	46
6	37	36	36	44	43	44	43	42	43	47	45	46
7	37	36	36	44	43	44	44	43	43	47	45	46
8	37	35	36	44	42	43	44	42	43	48	45	46
9	37	36	37	44	42	44	---	---	---	47	46	46
10	37	36	37	44	42	43	---	---	---	47	46	46
11	37	37	37	43	43	43	47	43	46	48	45	46
12	38	37	37	44	43	43	48	47	47	48	46	46
13	38	37	38	44	43	44	48	47	47	47	44	45
14	38	38	38	46	44	44	48	47	47	47	45	46
15	39	38	38	44	44	44	48	47	48	47	45	45
16	39	39	39	44	44	44	48	47	48	47	45	46
17	40	39	39	45	44	44	48	46	47	47	42	44
18	40	40	40	45	44	44	48	46	46	44	41	42
19	40	40	40	45	44	45	48	46	47	45	41	42
20	40	40	40	46	44	45	47	46	47	44	41	42
21	40	40	40	46	44	45	47	46	46	44	42	42
22	41	40	41	46	45	46	46	41	44	44	42	42
23	41	41	41	46	45	46	47	45	46	45	42	42
24	41	41	41	46	44	45	46	46	46	47	42	43
25	42	41	42	45	45	45	46	42	44	46	43	44
26	43	41	42	46	44	45	44	42	43	46	44	45
27	44	42	42	45	44	45	45	43	44	46	44	44
28	42	42	42	46	44	45	46	44	45	49	44	46
29	43	42	42	45	44	44	46	44	45	45	44	45
30	42	42	42	44	43	44	45	44	45	47	44	45
31	---	---	---	44	43	44	46	44	45	---	---	---
MONTH	44	35	39	46	42	44	---	---	---	49	41	45

14180300 BLOWOUT CREEK NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	8.0	7.4	7.5	7.7	7.4	7.5	7.4	7.4	7.4	7.5	7.5	7.5
2	7.9	7.4	7.4	7.6	7.4	7.5	7.5	7.4	7.4	7.5	7.5	7.5
3	7.9	7.4	7.5	7.7	7.4	7.5	7.5	7.4	7.4	7.5	7.5	7.5
4	7.9	7.4	7.5	7.7	7.4	7.5	7.5	7.4	7.4	7.5	7.5	7.5
5	7.8	7.4	7.4	7.7	7.4	7.5	7.4	7.3	7.3	7.5	7.5	7.5
6	7.8	7.4	7.5	7.6	7.4	7.5	7.4	7.3	7.4	7.5	7.5	7.5
7	7.9	7.4	7.5	7.7	7.4	7.5	7.4	7.4	7.4	7.5	7.5	7.5
8	7.9	7.4	7.5	7.7	7.4	7.5	7.4	7.4	7.4	7.5	7.5	7.5
9	7.9	7.4	7.5	7.6	7.4	7.4	7.4	7.4	7.4	7.5	7.5	7.5
10	7.8	7.5	7.5	7.6	7.4	7.4	7.6	7.4	7.5	7.5	7.4	7.5
11	7.7	7.5	7.5	7.6	7.4	7.5	7.6	7.5	7.5	7.5	7.5	7.5
12	7.7	7.5	7.5	7.6	7.5	7.5	7.6	7.5	7.6	7.5	7.5	7.5
13	7.8	7.4	7.5	7.6	7.4	7.5	7.6	7.4	7.5	7.5	7.4	7.5
14	7.9	7.4	7.5	7.6	7.4	7.5	7.5	7.4	7.5	7.5	7.4	7.5
15	7.7	7.4	7.5	7.7	7.4	7.5	7.5	7.5	7.5	7.5	7.4	7.5
16	7.8	7.5	7.5	7.5	7.4	7.5	7.5	7.5	7.5	7.5	7.4	7.5
17	7.8	7.4	7.5	7.5	7.4	7.4	7.5	7.5	7.5	7.5	7.4	7.5
18	7.9	7.4	7.5	7.5	7.4	7.4	7.5	7.5	7.5	7.5	7.4	7.4
19	8.0	7.3	7.4	7.5	7.3	7.4	7.5	7.5	7.5	7.5	7.4	7.4
20	8.0	7.3	7.4	7.5	7.4	7.4	7.5	7.5	7.5	7.5	7.4	7.4
21	7.8	7.4	7.4	7.5	---	---	7.6	7.5	7.5	7.5	7.4	7.4
22	8.0	7.4	7.5	---	---	---	7.6	7.5	7.5	7.5	7.4	7.4
23	7.8	7.4	7.5	---	---	---	7.6	7.5	7.5	7.5	7.4	7.4
24	7.8	7.4	7.5	---	---	---	7.6	7.5	7.5	7.5	7.4	7.4
25	7.8	7.4	7.5	---	---	---	7.6	7.5	7.5	7.5	7.4	7.4
26	7.7	7.4	7.5	---	---	---	7.5	7.5	7.5	7.5	7.4	7.4
27	7.8	7.4	7.5	---	---	---	7.5	7.5	7.5	7.5	7.4	7.4
28	7.9	7.4	7.4	7.5	7.3	7.5	7.5	7.5	7.5	7.5	7.4	7.4
29	7.8	7.4	7.4	7.4	7.3	7.4	7.5	7.5	7.5	7.5	7.4	7.3
30	7.7	7.4	7.5	7.4	7.4	7.4	7.5	7.5	7.5	7.5	7.4	7.4
31	7.7	7.4	7.4	---	---	---	7.5	7.5	7.5	7.5	7.4	7.4
MAX	8.0	7.5	7.5	---	---	---	7.6	7.5	7.6	7.5	7.5	7.5
MIN	7.7	7.3	7.4	---	---	---	7.4	7.3	7.3	7.4	7.3	7.3
FEBRUARY			MARCH			APRIL			MAY			
1	7.4	7.4	7.4	7.6	7.5	7.5	7.4	7.2	7.2	7.5	7.2	7.3
2	7.4	7.4	7.4	7.5	7.5	7.5	7.4	7.2	7.2	7.5	7.2	7.2
3	7.4	7.4	7.4	7.5	7.5	7.5	7.4	7.2	7.2	7.5	7.2	7.2
4	7.4	7.4	7.4	7.5	7.5	7.5	7.4	7.2	7.2	7.5	7.2	7.3
5	7.5	7.4	7.4	7.6	7.5	7.5	7.4	7.2	7.2	7.5	7.2	7.3
6	7.4	7.4	7.4	7.5	7.5	7.5	7.4	7.2	7.2	7.5	7.2	7.3
7	7.4	7.4	7.4	7.5	7.4	7.5	7.5	7.1	7.3	7.5	7.2	7.3
8	7.4	7.4	7.4	7.5	7.5	7.5	7.5	7.2	7.3	7.5	7.3	7.3
9	7.4	7.4	7.4	7.5	7.5	7.5	7.5	7.2	7.3	7.5	7.3	7.3
10	7.4	7.4	7.4	7.5	7.5	7.5	7.5	7.2	7.3	7.4	7.3	7.3
11	7.4	7.4	7.4	7.6	7.5	7.5	7.5	7.2	7.3	7.5	7.3	7.3
12	7.6	7.4	7.4	7.6	7.5	7.5	7.5	7.2	7.3	7.5	7.2	7.3
13	7.6	7.5	7.5	7.6	7.5	7.5	7.5	7.3	7.3	7.5	7.2	7.3
14	7.6	7.5	7.5	7.6	7.5	7.5	7.5	7.2	7.3	7.5	7.2	7.3
15	7.6	7.5	7.6	7.6	7.5	7.5	7.5	7.3	7.3	7.5	7.2	7.3
16	7.6	7.5	7.5	7.6	7.5	7.5	7.5	7.3	7.3	7.5	7.2	7.3
17	7.5	7.5	7.5	7.6	7.2	7.5	7.5	7.3	7.3	7.5	7.2	7.3
18	7.5	7.5	7.5	7.5	7.2	7.3	7.5	7.3	7.3	7.5	7.3	7.3
19	7.5	7.5	7.5	7.5	7.2	7.3	7.5	7.3	7.3	7.6	7.3	7.4
20	7.5	7.5	7.5	7.5	7.2	7.3	7.4	7.3	7.3	7.6	7.2	7.3
21	7.6	7.5	7.5	7.5	7.2	7.3	7.4	7.3	7.3	7.6	7.3	7.4
22	7.6	7.5	7.5	7.5	7.2	7.3	7.5	7.2	7.3	7.5	7.3	7.4
23	7.6	7.5	7.5	7.5	7.2	7.3	7.5	7.2	7.3	7.5	7.3	7.4
24	7.6	7.5	7.5	7.4	7.2	7.3	7.5	7.2	7.3	7.6	7.2	7.3
25	7.6	7.5	7.5	7.4	7.2	7.3	7.5	7.2	7.3	7.5	7.2	7.3
26	7.6	7.5	7.5	7.4	7.2	7.3	7.5	7.2	7.3	7.5	7.2	7.4
27	7.6	7.5	7.5	7.4	7.2	7.2	7.5	7.2	7.2	7.5	7.3	7.3
28	7.6	7.5	7.5	7.4	7.2	7.2	7.5	7.2	7.3	7.3	7.2	7.3
29	7.6	7.5	7.5	7.4	7.2	7.2	7.5	7.2	7.2	7.3	7.2	7.3
30	---	---	---	7.4	7.2	7.2	7.5	7.2	7.3	7.4	7.2	7.2
31	---	---	---	7.4	7.2	7.2	---	---	---	7.5	7.2	7.3
MAX	7.6	7.5	7.6	7.6	7.5	7.5	7.5	7.3	7.3	7.6	7.3	7.4
MIN	7.4	7.4	7.4	7.4	7.2	7.2	7.4	7.1	7.2	7.3	7.2	7.2

WILLAMETTE RIVER BASIN

14180300 BLOWOUT CREEK NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.5	7.2	7.3	7.7	7.2	7.3	7.9	7.2	7.3	7.9	7.3	7.4
2	7.5	7.1	7.2	7.7	7.2	7.3	8.0	7.2	7.4	7.8	7.3	7.3
3	7.5	7.1	7.2	7.6	7.2	7.3	8.0	7.2	7.4	7.8	7.3	7.3
4	7.5	7.1	7.2	7.6	7.2	7.3	7.9	7.2	7.4	7.8	7.2	7.3
5	7.5	7.1	7.2	7.6	7.2	7.2	8.0	7.2	7.4	7.8	7.2	7.3
6	7.4	7.2	7.3	7.6	7.2	7.2	7.8	7.2	7.4	7.8	7.2	7.3
7	7.4	7.2	7.3	7.6	7.1	7.3	7.8	7.2	7.4	7.8	7.2	7.3
8	7.4	7.2	7.3	7.5	7.1	7.2	7.8	7.2	7.2	7.8	7.2	7.3
9	7.4	7.2	7.2	7.5	7.1	7.2	7.9	7.2	7.3	7.8	7.2	7.3
10	7.5	7.2	7.3	7.5	7.1	7.2	7.9	7.2	7.3	7.8	7.2	7.3
11	7.5	7.3	7.4	7.5	7.0	7.2	8.0	7.1	7.5	7.8	7.2	7.3
12	7.5	7.3	7.3	7.5	7.0	7.2	8.0	7.1	7.3	7.8	7.3	7.3
13	7.5	7.3	7.3	7.5	7.0	7.1	8.0	7.2	7.3	7.7	7.3	7.4
14	7.5	7.2	7.3	7.5	7.0	7.1	8.1	7.2	7.3	7.7	7.3	7.4
15	7.5	7.2	7.3	7.5	7.0	7.1	8.0	7.2	7.3	7.7	7.3	7.3
16	7.5	7.2	7.3	7.5	6.9	7.1	8.1	7.2	7.3	7.7	7.3	7.3
17	7.6	7.2	7.3	7.5	6.9	7.1	8.0	7.2	7.3	7.7	7.3	7.3
18	7.6	7.2	7.3	7.5	6.9	7.1	8.0	7.2	7.3	7.5	7.3	7.3
19	7.6	7.2	7.3	7.5	6.9	7.0	8.0	7.2	7.3	7.5	7.3	7.3
20	7.6	7.2	7.3	7.4	6.9	7.1	8.1	7.2	7.3	7.6	7.2	7.3
21	7.6	7.2	7.3	7.8	6.9	7.2	8.1	7.1	7.4	7.6	7.2	7.3
22	7.6	7.2	7.3	7.8	7.2	7.3	7.6	7.2	7.3	7.6	7.2	7.3
23	7.6	7.2	7.3	7.8	7.2	7.3	7.8	7.3	7.4	7.7	7.2	7.3
24	7.6	7.2	7.3	7.8	7.2	7.3	7.9	7.3	7.4	7.7	7.2	7.3
25	7.6	7.2	7.4	7.8	7.2	7.3	7.7	7.3	7.4	7.8	7.2	7.3
26	7.6	7.2	7.3	7.8	7.2	7.3	7.7	7.3	7.4	7.8	7.3	7.4
27	7.6	7.2	7.3	7.8	7.2	7.3	7.8	7.2	7.4	7.8	7.3	7.3
28	7.6	7.2	7.3	7.9	7.2	7.4	7.8	7.2	7.4	7.8	7.3	7.4
29	7.6	7.2	7.3	7.9	7.2	7.4	8.0	7.2	7.4	7.8	7.3	7.4
30	7.6	7.2	7.3	7.9	7.2	7.4	7.9	7.3	7.3	7.8	7.3	7.4
31	---	---	---	7.9	7.2	7.4	8.0	7.3	7.4	---	---	---
MAX	7.6	7.3	7.4	7.9	7.2	7.4	8.1	7.3	7.5	7.9	7.3	7.4
MIN	7.4	7.1	7.2	7.4	6.9	7.0	7.6	7.1	7.2	7.5	7.2	7.3

14180300 BLOWOUT CREEK NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	13.8	11.3	12.5	4.4	2.1	3.4	5.4	4.9	5.2	3.1	0.9	1.8
2	15.7	11.9	13.2	4.3	3.6	4.0	5.6	5.1	5.3	2.7	1.5	2.2
3	15.5	12.3	13.5	4.9	3.2	3.9	5.5	4.8	5.3	2.6	2.0	2.4
4	15.2	11.5	13.1	4.9	3.2	3.8	5.7	4.7	5.2	2.6	1.9	2.3
5	15.8	12.2	13.5	4.5	2.4	3.6	6.0	5.6	5.8	2.2	0.9	1.6
6	15.1	11.6	13.2	4.6	2.7	3.6	6.0	5.1	5.6	0.9	0.0	0.3
7	14.3	11.9	13.1	5.7	3.7	4.5	5.1	4.7	4.9	2.5	0.6	1.6
8	12.6	11.2	11.8	5.2	3.7	4.5	5.4	4.8	5.0	3.2	2.5	2.9
9	11.7	10.0	10.6	5.4	3.9	4.8	5.3	4.4	5.0	3.9	3.2	3.7
10	11.0	9.1	9.9	5.8	4.4	5.1	5.1	4.4	4.7	4.2	3.8	4.0
11	9.4	8.5	9.0	6.6	5.8	6.1	5.5	4.7	5.1	4.4	3.8	4.0
12	10.2	8.9	9.5	6.6	4.9	6.0	5.6	4.8	5.2	4.4	3.7	4.0
13	9.9	7.9	9.1	5.0	3.9	4.5	5.8	4.7	5.3	4.3	4.1	4.2
14	10.7	8.7	9.7	5.7	4.1	4.9	5.0	4.7	4.9	4.5	4.1	4.3
15	8.9	7.9	8.4	6.6	5.2	5.8	5.0	4.5	4.8	4.8	4.3	4.5
16	9.9	8.7	9.2	6.0	5.5	5.7	4.7	4.4	4.6	4.8	4.4	4.6
17	11.3	9.1	9.8	6.5	5.8	6.2	5.0	4.1	4.5	4.8	4.3	4.5
18	10.4	7.9	9.2	7.8	6.4	7.0	4.5	4.1	4.2	5.0	4.5	4.6
19	11.0	9.1	9.9	---	---	---	4.7	4.2	4.6	5.0	4.5	4.7
20	12.3	10.3	11.3	5.0	---	---	5.3	4.6	5.0	4.6	4.1	4.4
21	12.7	10.5	11.4	---	---	---	5.5	4.1	4.9	4.2	3.6	3.9
22	12.2	10.1	11.0	---	---	---	4.8	4.1	4.4	4.0	3.2	3.6
23	11.0	8.7	10.1	---	---	---	5.1	4.3	4.9	4.5	4.0	4.3
24	9.2	7.0	8.1	---	---	---	5.3	4.5	5.0	4.5	4.0	4.3
25	9.1	6.7	7.9	---	---	---	4.7	3.8	4.3	4.5	3.9	4.2
26	9.4	6.9	8.1	---	---	---	4.2	3.7	4.0	4.7	4.2	4.4
27	9.7	7.3	8.4	---	---	---	4.0	2.7	3.5	4.9	4.2	4.5
28	11.4	8.8	10.1	---	---	---	3.3	2.7	3.0	4.7	4.4	4.6
29	10.2	7.1	8.6	4.8	3.8	4.7	2.9	1.0	1.9	5.2	4.7	4.9
30	7.5	5.2	6.5	5.2	4.8	5.0	2.5	1.7	2.2	5.0	4.2	4.4
31	5.2	3.2	4.2	---	---	---	2.9	1.9	2.5	4.6	4.0	4.3
MONTH	15.8	3.2	10.1	---	---	---	6.0	1.0	4.5	5.2	0.0	3.7
FEBRUARY			MARCH			APRIL			MAY			
1	4.7	4.2	4.4	5.5	4.2	4.7	6.3	3.3	4.6	10.4	6.4	8.2
2	4.9	4.0	4.5	5.3	3.7	4.4	7.0	3.2	4.9	11.2	7.0	8.7
3	4.6	3.9	4.2	5.0	3.1	3.7	8.2	4.5	6.0	11.3	7.3	8.8
4	4.8	4.2	4.4	4.7	3.8	4.1	8.1	4.6	6.1	9.7	7.5	8.3
5	4.4	3.8	4.1	5.1	3.9	4.3	7.2	5.2	6.0	9.4	7.0	7.9
6	4.7	4.0	4.3	---	3.8	---	8.2	5.6	6.6	9.6	6.2	7.9
7	4.8	4.0	4.3	6.3	4.6	5.1	7.6	5.0	6.2	8.9	7.4	8.0
8	4.7	3.9	4.2	6.2	4.2	5.1	8.6	5.5	6.6	9.5	7.2	8.1
9	4.0	3.4	3.7	6.1	4.5	5.2	8.6	4.5	6.3	9.8	6.9	8.2
10	4.0	3.0	3.5	6.1	4.5	5.2	9.0	4.7	6.6	7.9	6.8	7.4
11	4.2	3.1	3.6	6.1	4.0	4.9	9.3	5.1	6.9	8.2	6.3	7.1
12	3.6	2.6	3.1	6.3	4.3	5.1	9.0	5.6	7.1	9.2	6.5	7.6
13	3.7	2.6	3.2	6.2	3.8	5.0	7.9	6.0	6.8	10.5	5.8	7.9
14	4.8	3.7	4.1	6.7	4.9	5.7	7.1	5.3	5.9	11.3	6.7	8.6
15	4.6	3.5	4.0	6.5	4.6	5.4	7.2	4.7	5.6	8.9	7.4	8.1
16	4.6	3.8	4.2	6.5	3.8	5.0	7.1	4.8	5.7	10.4	7.4	8.5
17	4.8	4.2	4.5	6.7	4.0	5.1	7.1	5.0	5.8	10.4	7.3	8.4
18	5.2	4.4	4.8	6.0	4.4	5.1	7.4	5.1	6.0	8.7	7.8	8.2
19	5.1	4.1	4.5	5.4	3.8	4.5	6.8	4.7	5.8	10.9	7.6	8.9
20	4.7	3.8	4.2	6.2	3.3	4.7	5.8	4.7	5.2	11.7	7.4	9.2
21	5.1	3.8	4.4	7.3	4.2	5.6	6.5	4.6	5.4	11.3	8.4	9.4
22	5.5	4.1	4.6	7.5	4.6	5.9	8.3	4.9	6.1	9.7	8.0	8.7
23	5.5	4.4	4.8	7.3	5.2	6.0	7.1	4.9	5.9	9.2	7.2	8.1
24	5.2	4.0	4.6	6.1	4.8	5.4	8.6	5.4	6.7	11.2	7.2	8.9
25	5.0	3.9	4.4	5.8	4.3	5.0	9.6	5.0	7.0	12.2	7.1	9.4
26	5.1	4.0	4.5	5.3	4.1	4.6	10.6	6.0	7.9	10.0	8.8	9.4
27	5.5	4.0	4.7	6.0	4.5	5.1	10.4	6.5	8.1	9.6	8.4	9.0
28	---	4.0	---	6.5	4.1	5.1	9.1	5.8	7.2	8.4	6.9	7.7
29	5.2	4.1	4.6	7.6	4.3	5.8	9.6	5.2	7.1	7.6	6.5	7.0
30	---	---	---	6.0	4.6	5.5	10.4	5.6	7.7	8.7	7.0	7.7
31	---	---	---	5.8	4.0	4.8	---	---	---	10.4	7.2	8.4
MONTH	---	2.6	---	---	3.1	---	10.6	3.2	6.3	12.2	5.8	8.3

WILLAMETTE RIVER BASIN

14180300 BLOWOUT CREEK NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	10.3	6.9	8.4	17.0	11.1	13.8	20.7	14.4	17.3	15.4	13.3	14.5
2	12.2	7.7	9.5	15.7	11.7	13.7	19.5	14.6	16.8	14.1	11.9	12.8
3	13.2	8.4	10.4	16.1	12.4	13.7	18.7	14.8	16.4	15.8	11.8	13.4
4	13.8	8.8	10.9	17.0	11.5	13.8	18.4	13.5	15.9	16.1	11.9	13.6
5	11.4	9.3	10.1	17.1	10.7	13.7	17.5	14.5	15.8	16.2	11.8	13.5
6	9.8	8.4	9.0	17.1	11.6	14.1	15.5	13.6	14.5	15.6	10.8	13.0
7	9.0	7.9	8.5	15.9	12.3	13.7	18.6	12.4	15.1	15.4	10.9	13.0
8	8.5	7.9	8.2	16.4	10.2	13.0	19.4	12.5	14.7	16.0	11.1	13.3
9	9.1	8.0	8.4	15.5	10.7	13.0	20.0	13.1	16.6	14.4	12.7	13.4
10	8.9	8.0	8.4	14.9	11.0	12.6	20.8	14.2	17.3	16.6	---	---
11	8.6	7.6	8.1	16.7	10.0	13.1	---	---	---	15.9	13.8	14.6
12	10.4	7.2	8.7	18.1	11.5	14.4	21.3	15.4	18.1	14.9	12.9	13.6
13	10.5	8.4	9.2	18.6	12.5	15.1	21.7	15.8	18.4	13.2	12.2	12.7
14	11.5	8.1	9.3	19.3	12.7	15.6	21.2	16.4	18.4	13.6	11.5	12.5
15	12.2	7.4	9.4	18.9	13.2	15.6	21.2	15.8	18.3	14.0	12.0	12.8
16	12.8	7.2	9.7	19.1	12.2	15.3	21.2	16.0	18.3	13.9	11.4	12.4
17	13.5	7.9	10.4	19.3	13.4	15.9	20.6	14.9	17.5	12.9	10.8	12.0
18	13.7	8.8	11.0	16.9	13.8	15.5	20.5	14.5	17.3	11.0	9.8	10.4
19	12.4	8.9	10.6	18.7	13.9	15.8	20.8	14.7	17.6	10.3	9.1	9.7
20	14.4	8.9	11.3	19.8	14.2	16.3	20.5	15.1	17.6	10.9	9.1	9.9
21	15.2	9.3	12.0	19.4	13.0	15.9	18.2	14.4	16.4	11.0	8.5	9.6
22	15.3	10.8	12.6	20.0	13.3	16.3	16.4	13.9	15.1	11.6	8.8	10.1
23	15.3	11.1	12.7	20.4	13.2	16.5	14.8	13.1	13.9	12.1	9.1	10.5
24	15.9	11.4	13.1	20.9	14.0	17.2	14.7	13.4	14.0	12.8	9.7	11.0
25	16.3	11.6	13.5	20.8	14.6	17.2	14.1	12.8	13.4	13.0	9.7	11.2
26	15.4	11.0	12.8	19.8	13.0	16.1	13.7	12.3	12.9	13.7	11.2	12.0
27	16.1	10.6	12.9	20.2	13.3	16.4	15.8	12.6	13.8	13.2	9.9	11.5
28	16.4	10.5	13.2	20.6	14.0	17.0	16.6	12.5	14.1	13.4	10.1	11.7
29	16.1	11.2	13.4	20.4	14.2	17.0	16.9	12.9	14.6	14.0	11.5	12.3
30	16.8	11.3	13.8	20.5	14.3	17.0	17.6	12.6	14.8	13.4	10.9	11.9
31	---	---	---	20.6	14.3	17.1	17.7	13.0	15.1	---	---	---
MONTH	16.8	6.9	10.7	20.9	10.0	15.2	---	---	---	16.6	---	---

14180300 BLOWOUT CREEK NEAR DETROIT, OR—Continued

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/- 2.5 DEGREES, FNU
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	<1	<1	<1	<1	<1	<1	8	2	3	<1	<1	<1
2	<1	<1	<1	<1	<1	<1	7	1	2	<1	<1	<1
3	<1	<1	<1	<1	<1	<1	12	2	4	1	<1	<1
4	<1	<1	<1	<1	<1	<1	8	2	2	<1	<1	<1
5	<1	<1	<1	<1	<1	<1	13	2	6	<1	<1	<1
6	<1	<1	<1	<1	<1	<1	25	4	9	2	<1	<1
7	<1	<1	<1	<1	<1	<1	10	2	4	3	<1	2
8	<1	<1	<1	<1	<1	<1	9	1	2	4	1	2
9	<1	<1	<1	<1	<1	<1	7	1	2	4	2	2
10	<1	<1	<1	<1	<1	<1	5	<1	<1	2	2	2
11	2	<1	<1	2	<1	<1	2	<1	<1	4	<1	1
12	4	<1	2	<1	<1	<1	3	<1	2	2	<1	<1
13	2	<1	<1	<1	<1	<1	161	1	38	1	<1	<1
14	<1	<1	<1	<1	<1	<1	30	5	11	6	<1	2
15	5	<1	<1	<1	<1	<1	7	2	3	6	3	4
16	1	<1	<1	23	<1	<1	4	2	2	4	2	2
17	2	<1	<1	12	1	3	2	<1	1	3	1	2
18	<1	<1	<1	2	<1	1	2	<1	<1	2	1	1
19	<1	<1	<1	8	<1	2	2	<1	<1	4	1	2
20	<1	<1	<1	3	1	2	1	<1	<1	3	<1	1
21	<1	<1	<1	---	---	---	1	<1	<1	2	<1	<1
22	<1	<1	<1	---	---	---	<1	<1	<1	2	<1	<1
23	<1	<1	<1	---	---	---	1	<1	<1	20	<1	2
24	<1	<1	<1	---	---	---	2	<1	1	16	4	9
25	<1	<1	<1	---	---	---	3	<1	<1	4	2	3
26	<1	<1	<1	---	---	---	1	<1	<1	2	1	1
27	<1	<1	<1	---	---	---	<1	<1	<1	6	1	1
28	<1	<1	<1	---	---	---	2	<1	<1	19	2	4
29	4	<1	<1	36	5	10	1	<1	<1	27	14	19
30	<1	<1	<1	11	3	4	<1	<1	<1	20	5	8
31	<1	<1	<1	---	---	---	2	<1	<1	6	2	4
MAX	5	<1	2	---	---	---	161	5	38	27	14	19
MIN	<1	<1	<1	---	---	---	<1	<1	<1	<1	<1	<1
FEBRUARY			MARCH			APRIL			MAY			
1	5	2	2	1	<1	<1	4	<1	<1	2	<1	<1
2	6	1	1	1	<1	<1	1	<1	<1	<1	<1	<1
3	2	<1	1	2	<1	<1	<1	<1	<1	<1	<1	<1
4	3	<1	<1	2	<1	1	<1	<1	<1	<1	<1	<1
5	3	<1	<1	8	<1	<1	2	<1	<1	<1	<1	<1
6	2	<1	1	3	<1	<1	1	<1	<1	<1	<1	<1
7	3	<1	<1	2	<1	<1	2	<1	<1	1	<1	<1
8	2	<1	<1	4	<1	<1	1	<1	<1	2	<1	<1
9	4	<1	<1	2	<1	<1	<1	<1	<1	4	<1	<1
10	2	<1	<1	2	<1	1	<1	<1	<1	2	<1	<1
11	1	<1	<1	4	<1	<1	2	<1	<1	<1	<1	<1
12	1	<1	<1	1	<1	<1	1	<1	<1	<1	<1	<1
13	1	<1	<1	1	<1	<1	2	<1	<1	<1	<1	<1
14	3	<1	<1	1	<1	<1	3	<1	<1	<1	<1	<1
15	3	<1	<1	1	<1	<1	1	<1	<1	<1	<1	<1
16	8	<1	3	1	<1	<1	2	<1	<1	<1	<1	<1
17	8	---	---	---	<1	---	<1	<1	<1	12	<1	<1
18	6	3	3	---	<1	---	1	<1	<1	4	<1	<1
19	4	2	2	2	<1	<1	6	<1	<1	---	<1	---
20	2	1	1	1	<1	<1	16	<1	2	---	<1	---
21	2	<1	1	3	<1	<1	5	<1	2	<1	<1	<1
22	1	<1	<1	4	<1	<1	1	<1	<1	1	<1	<1
23	2	<1	<1	1	<1	<1	2	<1	<1	<1	<1	<1
24	4	<1	<1	4	<1	<1	<1	<1	<1	2	<1	<1
25	5	<1	<1	8	<1	<1	3	<1	<1	2	<1	<1
26	2	<1	<1	5	<1	<1	2	<1	<1	<1	<1	<1
27	7	<1	1	6	<1	2	1	<1	<1	7	<1	<1
28	4	<1	<1	2	<1	<1	3	<1	<1	12	3	6
29	2	<1	<1	2	<1	<1	1	<1	<1	7	1	3
30	---	---	---	2	<1	<1	2	<1	<1	4	<1	1
31	---	---	---	---	<1	---	---	---	---	2	<1	<1
MAX	8	---	---	---	<1	---	16	<1	2	---	3	---
MIN	1	---	---	---	<1	---	<1	<1	<1	---	<1	---

14180300 BLOWOUT CREEK NEAR DETROIT, OR—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	2	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	<1
2	2	<1	<1	<1	<1	<1	<1	<1	<1	3	<1	<1
3	3	<1	<1	1	<1	<1	<1	<1	<1	2	<1	<1
4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
5	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
6	8	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7	7	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	<1
8	3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
9	2	<1	<1	<1	<1	<1	<1	<1	<1	---	<1	---
10	2	<1	<1	3	<1	<1	<1	<1	<1	---	<1	---
11	2	<1	<1	17	<1	<1	---	<1	---	<1	<1	<1
12	2	<1	<1	17	<1	<1	<1	<1	<1	<1	<1	<1
13	<1	<1	<1	1	<1	<1	<1	<1	<1	1	<1	<1
14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
15	<1	<1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1
16	<1	<1	<1	2	<1	<1	<1	<1	<1	5	<1	<1
17	2	<1	<1	<1	<1	<1	<1	<1	<1	5	<1	<1
18	1	<1	<1	<1	<1	<1	<1	<1	<1	7	<1	2
19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
20	<1	<1	<1	<1	<1	<1	2	<1	<1	<1	<1	<1
21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
22	<1	<1	<1	<1	<1	<1	21	<1	2	1	<1	<1
23	<1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	<1
24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
25	2	<1	<1	<1	<1	<1	5	<1	<1	<1	<1	<1
26	<1	<1	<1	<1	<1	<1	3	<1	<1	<1	<1	<1
27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
28	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
29	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
30	<1	<1	<1	5	<1	<1	<1	<1	<1	<1	<1	<1
31	---	---	---	<1	<1	<1	<1	<1	<1	---	---	---
MAX	8	<1	<1	17	<1	<1	---	<1	---	---	<1	---
MIN	<1	<1	<1	<1	<1	<1	---	<1	---	---	<1	---

14181500 NORTH SANTIAM RIVER AT NIAGARA, OR

LOCATION.--Lat 44°45'10", long 122°17'50", in NE ¼ NE ¼ sec.34, T.9 S., R.4 E., Linn County, Hydrologic Unit 17090005, on left bank 0.1 mi downstream from Little Sardine Creek, 0.8 mi downstream from Big Cliff Dam, 2.1 mi east of Niagara, and at mile 57.3.

DRAINAGE AREA.--453 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1908 to January 1920, October 1921 to March 1922, October 1938 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as "North Fork of Santiam River near Niagara" prior to October 1913, and as "above Mayflower Creek, near Detroit" October 1938 to September 1952.

REVISED RECORDS.--WSP 1288: 1914-18, 1920. WSP 1718: 1953-54.

GAGE.--Water-stage recorder. Datum of gage is 1,093.78 ft above NGVD of 1929 (Federal Highway Administration bench mark). See WSP 1738 for history of changes prior to Oct. 1, 1952.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since 1953 by Detroit Lake (station 14180500) and Big Cliff Reservoir, usable capacity for reregulating purposes, 2,930 acre-ft. No diversion upstream from station.

AVERAGE DISCHARGE.--75 years (water years 1910, 1912-19, 1939-2004), 2,318 ft³/s, 69.49 in/yr, 1,679,000 acre-ft/yr, adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 63,200 ft³/s Nov. 22, 1909, gage height, 16.4 ft, from floodmark, site and datum then in use, from rating curve extended above 35,000 ft³/s; minimum discharge, 19 ft³/s Aug. 21, 1963; minimum daily, 395 ft³/s Mar. 25, 26, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,040 ft³/s Feb. 4, gage height, 6.05 ft; minimum discharge, 861 ft³/s Aug. 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,980	2,020	3,270	1,710	5,930	1,170	2,990	1,380	2,030	1,200	989	1,020
2	1,990	2,030	3,230	1,650	5,980	1,130	2,940	1,390	2,200	1,200	991	1,160
3	1,990	2,050	3,160	1,620	5,980	1,130	2,900	1,380	1,780	1,200	993	1,310
4	2,020	2,050	3,660	1,700	6,000	1,690	3,020	1,370	1,760	1,200	993	1,430
5	2,010	2,050	5,510	1,510	6,000	1,730	2,990	1,370	1,740	1,200	995	1,490
6	2,020	2,060	5,620	1,490	6,000	1,130	2,720	1,370	2,070	1,200	996	1,490
7	1,990	2,060	5,460	1,510	5,490	1,090	1,450	1,370	2,730	1,200	995	1,500
8	1,990	2,070	5,420	1,530	4,490	1,100	1,370	1,370	2,790	1,200	994	1,490
9	1,990	2,060	4,430	2,140	3,540	1,140	1,380	1,380	3,140	1,210	928	1,520
10	1,990	2,060	3,550	2,970	2,500	1,170	1,380	1,370	3,210	1,220	891	1,790
11	1,990	2,060	4,250	2,890	2,650	1,210	1,380	1,390	2,520	1,210	897	1,780
12	2,000	2,080	4,440	2,910	1,810	1,270	1,380	1,370	2,490	1,200	897	1,780
13	2,010	2,100	2,580	2,930	1,330	1,280	1,370	1,370	2,170	1,190	899	1,790
14	2,010	2,100	1,990	2,980	1,170	1,240	1,370	1,370	2,180	1,160	902	1,840
15	2,020	2,110	5,100	3,190	1,140	1,240	1,370	1,360	2,130	1,070	900	1,870
16	2,010	2,160	5,220	3,300	1,160	1,320	1,370	1,360	1,790	992	901	1,870
17	2,020	2,170	5,200	3,040	1,180	1,320	1,370	1,400	1,690	990	898	1,890
18	2,020	2,470	5,220	2,950	1,190	1,410	1,370	1,500	1,620	1,000	903	2,020
19	2,020	3,130	5,250	2,940	1,610	1,490	1,380	1,500	1,690	1,000	899	1,900
20	2,020	3,490	5,310	2,940	1,630	1,330	1,380	1,500	1,450	1,010	898	1,960
21	2,050	3,260	5,360	3,130	1,470	1,290	1,400	1,490	1,360	1,000	900	1,960
22	2,040	3,330	5,390	3,230	1,220	1,330	1,400	1,490	1,360	1,000	909	1,960
23	2,060	3,260	5,310	3,240	1,150	1,330	1,420	1,490	1,260	988	930	2,080
24	2,060	3,280	4,160	2,810	1,140	1,300	1,430	1,490	1,210	986	927	2,100
25	1,980	3,300	3,290	3,830	1,150	1,300	1,390	1,490	1,200	988	914	2,100
26	1,980	3,300	2,440	5,250	1,150	1,270	1,370	1,490	1,210	993	913	2,090
27	2,010	3,370	1,750	4,450	1,160	1,280	1,370	1,660	1,200	995	962	2,090
28	2,000	3,210	1,740	2,100	1,210	1,350	1,370	3,250	1,200	1,000	996	2,100
29	2,010	2,520	1,760	1,370	1,200	1,970	1,370	4,670	1,200	996	997	2,100
30	2,000	3,180	1,740	1,820	---	2,400	1,380	4,010	1,200	992	995	2,100
31	2,010	---	1,710	4,770	---	2,490	---	2,480	---	991	997	---
TOTAL	62,290	76,390	122,520	83,900	77,630	42,900	50,780	52,880	55,580	33,781	29,199	53,580
MEAN	2,009	2,546	3,952	2,706	2,677	1,384	1,693	1,706	1,853	1,090	942	1,786
MAX	2,060	3,490	5,620	5,250	6,000	2,490	3,020	4,670	3,210	1,220	997	2,100
MIN	1,980	2,020	1,710	1,370	1,140	1,090	1,370	1,360	1,200	986	891	1,020
AC-FT	123,600	151,500	243,000	166,400	154,000	85,090	100,700	104,900	110,200	67,000	57,920	106,300
MEAN†	745	1,380	3,610	4,405	3,248	2,724	2,316	2,111	1,836	782	789	1,012
CFSM†	1.64	3.05	7.97	9.72	7.17	6.01	5.11	4.66	4.05	1.73	1.74	2.23
IN.†	1.90	3.40	9.19	11.21	7.74	6.93	5.70	5.37	4.52	1.99	2.01	2.49
AC-FT†	45,800	82,100	222,000	270,900	186,900	167,500	137,800	129,800	109,200	48,100	48,520	60,200

CAL YR2003 TOTAL 836450 MEAN 2292 MAX 9160 MIN 841 AC-FT 1659000 MEAN† 2275 CFSM† 5.02 IN.† 68.17 AC-FT† 1647000
WTR YR2004 TOTAL 741430 MEAN 2026 MAX 6000 MIN 891 AC-FT 1471000 MEAN† 2079 CFSM† 4.59 IN.† 62.46 AC-FT† 1509000

† Adjusted for change in contents, in Detroit Lake.



2004 Water Year
SANTIAM RIVER BASIN

14181500 NORTH SANTIAM RIVER AT NIAGARA, OR

Latitude: 44° 45 ' 10"

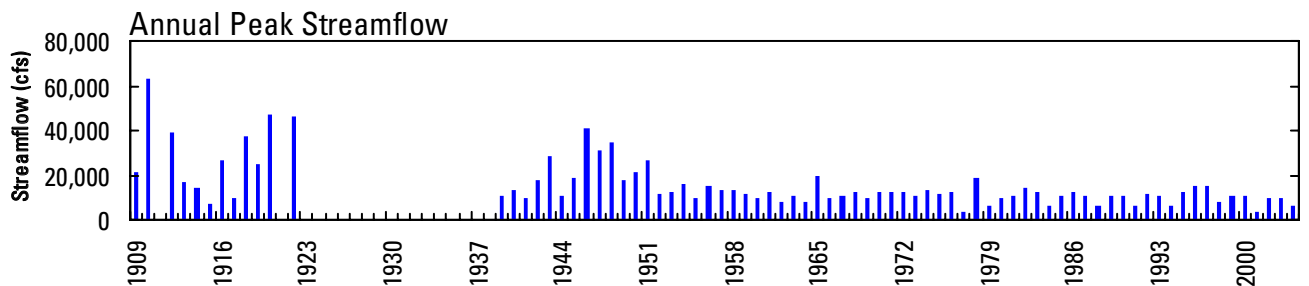
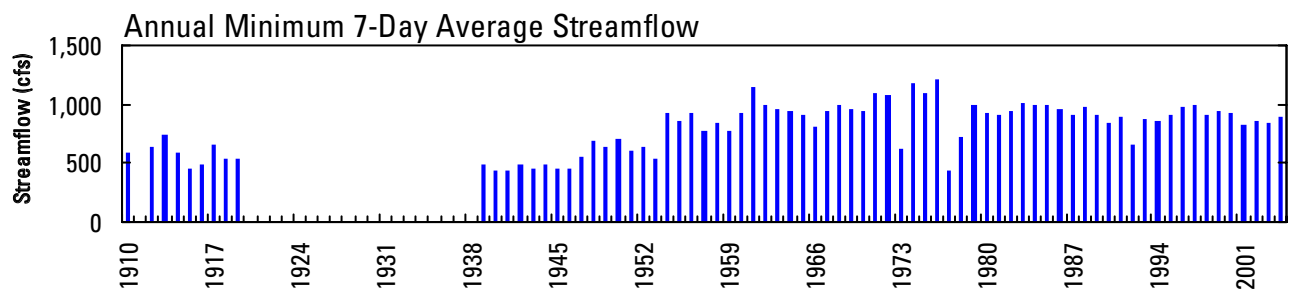
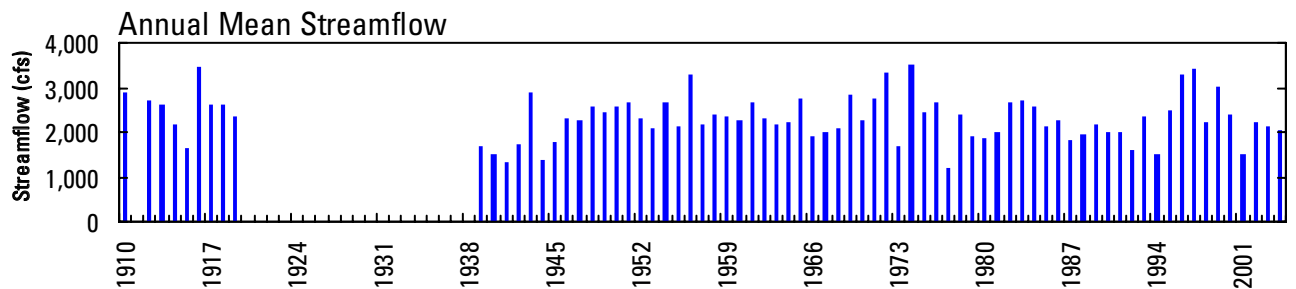
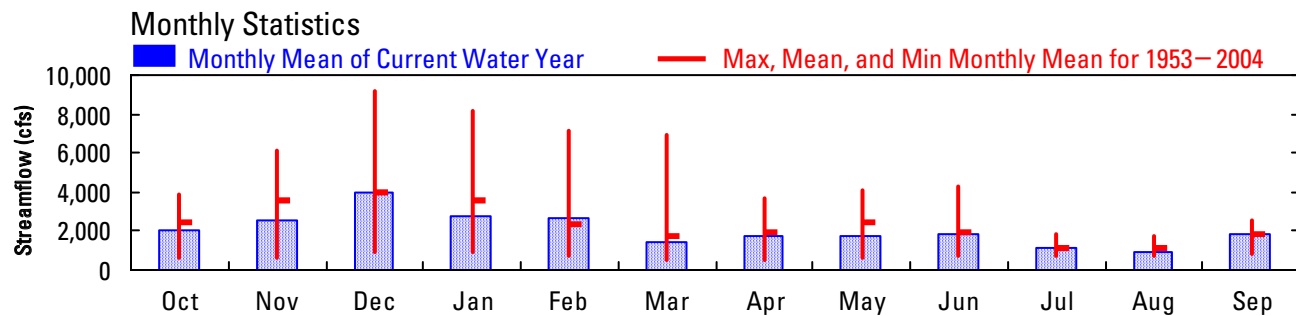
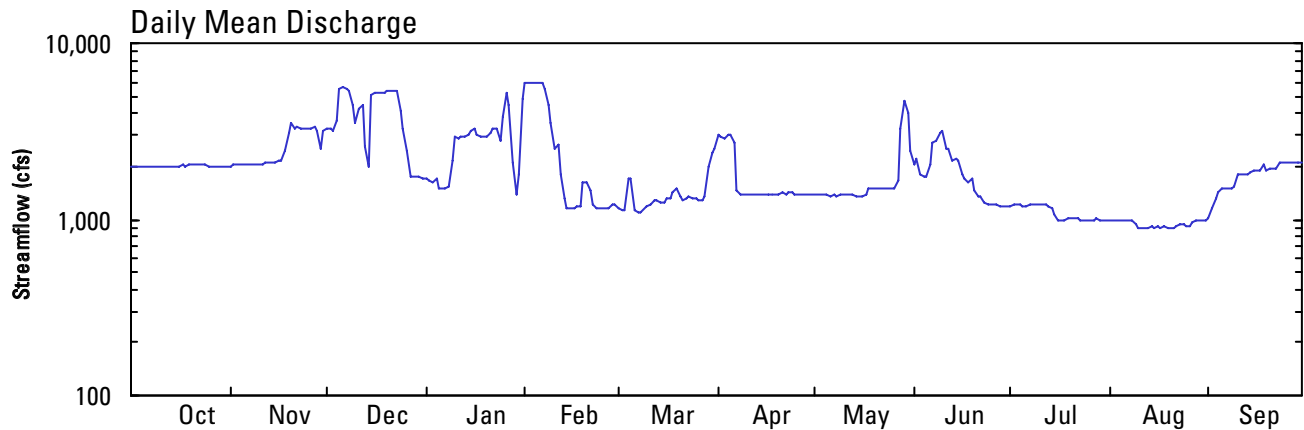
Longitude: 122° 17 ' 50"

Hydrologic Unit Code: 17090005

Marion County

Datum: 1,093.78 feet

Drainage Area: 453 square miles



14181500 NORTH SANTIAM RIVER AT NIAGARA, OR—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 2000 to current year.

pH: August 2000 to current year.

WATER TEMPERATURE: January 1953 to September 1997, October 1999 to current year.

TURBIDITY: April 2000 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--

SPECIFIC CONDUCTANCE: Records excellent.

pH: Records excellent except those for the periods Oct. 1 to Mar. 17, Apr. 15-27, which are good.

WATER TEMPERATURE: Records excellent.

TURBIDITY: Records excellent. Turbidity data are highly dependent on the instrumentation used for the measurement. See the "Definitions" section for turbidity in the front of this report.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 51 microsiemens Nov. 24, 2003; minimum, 21 microsiemens Jan. 29, 30, 2004.

pH: Maximum, 7.7 units Apr. 16, 2001; minimum, 6.8 units Sept. 17, 2001, many days during July, August, September, October 2003, and January, 2004.

WATER TEMPERATURE: Maximum, 19.5°C Aug. 21, 1997; minimum, 1.0°C Jan. 30 to Feb. 4, 1979.

TURBIDITY: Maximum recorded, 45 FNU Apr. 14, 2002; minimum, <1 FNU many days each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 51 microsiemens Nov. 24; minimum, 21 microsiemens Jan. 29, 30.

pH: Maximum, 7.5 units many days in March and April, but may have been higher during period of missing record; minimum, 6.8 units many days during October, November, December and January.

WATER TEMPERATURE: Maximum, 14.1°C Oct. 20-22, 27, 28; minimum, 3.5°C Jan. 6.

TURBIDITY: Maximum recorded, 14 FNU Dec. 13; minimum, <1 FNU many days during year.

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

Date	Time	Instantaneous discharge, cfs (00061)	Suspnd. sediment, sieve diameter percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
OCT 24...	1040	2,070	--	1	5.6
DEC 16...	1735	5,240	56	16	227
18...	1226	5,200	83	4	56
JAN 29...	1254	1,490	81	24	96
29...	1320	1,440	42	111	432
29...	1650	1,100	90	29	87

14181500 NORTH SANTIAM RIVER AT NIAGARA, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	39	38	39	42	41	42	40	39	40	36	36	36
2	39	39	39	42	41	41	40	39	39	36	35	36
3	39	39	39	42	42	42	40	38	39	36	35	36
4	39	39	39	42	41	42	41	39	40	36	36	36
5	40	39	40	42	42	42	40	38	39	37	36	37
6	40	40	40	42	42	42	39	38	38	37	36	37
7	40	40	40	42	42	42	39	38	39	37	36	36
8	41	40	40	42	41	42	39	38	38	36	36	36
9	41	40	40	41	41	41	39	38	39	36	35	36
10	41	41	41	41	41	41	39	38	38	36	35	35
11	41	41	41	41	40	41	38	38	38	36	35	35
12	41	41	41	42	41	41	38	37	38	35	35	35
13	42	41	41	41	41	41	37	28	34	36	35	35
14	42	41	41	41	41	41	32	28	29	35	34	35
15	42	41	42	42	41	41	37	32	36	35	34	34
16	42	41	41	42	41	41	36	36	36	35	33	34
17	42	42	42	42	40	40	36	35	35	36	34	35
18	42	42	42	41	41	41	36	36	36	35	35	35
19	42	42	42	41	40	41	36	36	36	35	34	34
20	42	42	42	42	40	41	36	35	36	35	34	35
21	43	42	42	42	41	41	35	35	35	35	34	35
22	43	42	43	42	41	41	35	35	35	35	35	35
23	43	43	43	50	41	42	35	35	35	35	33	34
24	43	43	43	51	41	45	35	35	35	33	29	31
25	43	42	43	41	41	41	36	35	35	36	31	34
26	43	42	42	41	40	41	36	35	36	36	35	36
27	43	42	43	42	41	41	36	36	36	36	34	35
28	43	43	43	42	41	41	36	35	35	34	30	32
29	43	43	43	41	36	39	36	35	36	31	21	25
30	43	42	43	40	37	39	36	36	36	24	21	22
31	42	41	42	---	---	---	36	36	36	35	22	32
MONTH	43	38	41	51	36	41	41	28	37	37	21	34
FEBRUARY			MARCH			APRIL			MAY			
1	35	34	34	33	28	31	35	34	34	35	34	35
2	34	32	33	33	28	31	35	34	35	35	34	35
3	33	32	33	32	28	30	35	34	34	35	34	35
4	32	31	32	32	28	31	35	35	35	35	35	35
5	33	31	32	33	28	31	35	35	35	35	35	35
6	33	32	32	33	28	31	35	34	34	35	34	35
7	33	32	33	33	28	31	34	34	34	35	35	35
8	34	31	33	33	28	31	34	34	34	35	35	35
9	34	31	33	32	26	30	34	34	34	35	35	35
10	34	32	33	31	26	29	34	34	34	35	34	35
11	34	33	33	32	26	31	35	34	34	34	34	34
12	34	30	32	32	28	31	35	34	34	34	34	34
13	34	34	34	33	28	31	34	34	34	34	34	34
14	34	33	33	34	28	31	34	34	34	34	34	34
15	33	32	32	34	28	30	34	34	34	34	34	34
16	33	31	32	33	32	32	35	34	34	34	34	34
17	34	30	32	34	33	33	34	34	34	35	34	34
18	34	32	33	35	33	34	35	34	34	35	34	34
19	33	32	32	35	34	35	35	34	34	34	33	34
20	34	30	33	35	34	35	34	34	34	34	32	33
21	35	31	34	34	34	34	34	32	34	34	34	34
22	35	30	33	34	34	34	34	33	33	34	34	34
23	35	32	34	34	34	34	34	32	33	34	33	34
24	35	30	34	35	33	34	34	33	33	35	33	34
25	34	30	32	35	34	35	34	33	33	35	34	34
26	32	28	30	35	34	35	34	33	34	35	34	35
27	32	28	30	35	34	34	35	33	34	35	34	34
28	32	28	29	34	33	34	34	34	34	34	33	34
29	32	28	30	34	34	34	34	34	34	34	34	34
30	---	---	---	34	34	34	35	34	34	34	34	34
31	---	---	---	35	34	34	---	---	---	35	34	34
MONTH	35	28	32	35	26	32	35	32	34	35	32	34

WILLAMETTE RIVER BASIN

14181500 NORTH SANTIAM RIVER AT NIAGARA, OR—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	6.8	6.8	6.8	7.2	7.1	7.2	7.0	6.8	7.0	6.9	6.9	6.9
2	6.8	6.8	6.8	7.2	7.0	7.1	6.8	6.8	6.8	6.9	6.9	6.9
3	6.9	6.8	6.8	7.1	7.0	7.0	6.8	6.8	6.8	6.9	6.9	6.9
4	6.8	6.8	6.8	7.1	7.0	7.0	7.1	6.8	7.0	6.9	6.9	6.9
5	6.9	6.8	6.8	7.1	7.0	7.0	7.1	6.9	7.0	7.0	6.9	7.0
6	6.9	6.8	6.9	7.1	7.0	7.1	6.9	6.8	6.9	7.0	7.0	7.0
7	6.9	6.8	6.8	7.1	7.0	7.1	7.0	6.8	6.9	7.0	7.0	7.0
8	6.9	6.8	6.8	7.1	7.0	7.1	6.9	6.8	6.9	7.0	6.9	7.0
9	6.9	6.8	6.8	7.1	7.0	7.1	7.0	6.8	7.0	7.0	6.9	6.9
10	6.9	6.9	6.9	7.1	7.0	7.0	7.0	6.8	6.9	6.9	6.9	6.9
11	6.9	6.9	6.9	7.0	7.0	7.0	7.0	6.9	6.9	7.0	6.9	6.9
12	6.9	6.9	6.9	7.0	7.0	7.0	7.0	6.9	6.9	7.0	6.9	6.9
13	7.0	6.9	6.9	7.1	7.0	7.1	6.9	6.8	6.9	7.0	6.9	6.9
14	6.9	6.9	6.9	7.1	7.0	7.0	6.9	6.8	6.9	7.0	6.9	6.9
15	6.9	6.9	6.9	7.0	7.0	7.0	7.0	6.9	6.9	6.9	6.9	6.9
16	7.0	6.9	6.9	7.0	7.0	7.0	7.0	6.9	6.9	6.9	6.9	6.9
17	7.0	6.9	6.9	7.0	6.9	6.9	7.0	6.9	7.0	7.0	6.9	6.9
18	7.0	6.9	7.0	7.0	6.9	6.9	7.0	6.9	7.0	7.0	6.9	6.9
19	7.0	7.0	7.0	6.9	6.8	6.9	7.0	7.0	7.0	7.0	6.9	6.9
20	7.0	7.0	7.0	7.0	6.8	6.8	7.0	6.9	7.0	6.9	6.9	6.9
21	7.0	7.0	7.0	7.0	6.9	7.0	7.0	6.9	7.0	7.0	6.9	6.9
22	7.0	7.0	7.0	7.0	6.9	6.9	7.0	6.9	7.0	7.0	6.9	6.9
23	7.0	7.0	7.0	7.0	6.9	7.0	7.0	7.0	7.0	7.0	6.9	6.9
24	7.1	7.0	7.1	7.0	6.9	7.0	7.0	6.9	6.9	6.9	6.8	6.9
25	7.1	7.0	7.1	7.0	6.9	7.0	7.0	6.9	6.9	6.9	6.9	6.9
26	7.2	7.1	7.1	7.0	6.9	6.9	6.9	6.9	6.9	7.0	6.9	6.9
27	7.2	7.1	7.1	7.1	6.9	6.9	6.9	6.9	6.9	7.1	6.9	7.0
28	7.2	7.1	7.1	7.1	7.0	7.1	6.9	6.9	6.9	7.0	6.9	7.0
29	7.1	7.1	7.1	7.0	7.0	7.0	6.9	6.9	6.9	7.0	6.8	6.9
30	7.2	7.0	7.1	7.0	6.9	6.9	6.9	6.9	6.9	6.9	6.8	6.8
31	7.1	7.0	7.1	---	---	---	6.9	6.8	6.9	7.0	6.8	7.0
MAX	7.2	7.1	7.1	7.2	7.1	7.2	7.1	7.0	7.0	7.1	7.0	7.0
MIN	6.8	6.8	6.8	6.9	6.8	6.8	6.8	6.8	6.8	6.9	6.8	6.8
FEBRUARY			MARCH			APRIL			MAY			
1	7.0	7.0	7.0	7.1	7.0	7.0	7.5	7.4	7.4	7.4	7.3	7.3
2	7.0	7.0	7.0	7.1	7.0	7.1	7.5	7.4	7.4	7.4	7.3	7.4
3	7.0	7.0	7.0	7.1	7.0	7.1	7.5	7.5	7.5	7.4	7.3	7.3
4	7.0	7.0	7.0	7.1	7.0	7.0	7.5	7.4	7.4	7.4	7.3	7.3
5	7.1	6.9	7.0	7.1	7.0	7.0	---	---	---	7.4	7.3	7.3
6	7.1	7.0	7.0	7.1	7.0	7.0	---	---	---	7.4	7.3	7.3
7	7.1	7.0	7.0	7.1	7.0	7.0	---	---	---	7.4	7.3	7.3
8	7.1	7.0	7.1	7.1	7.0	7.0	---	---	---	7.4	7.3	7.3
9	7.1	7.0	7.1	7.1	7.0	7.0	---	---	---	7.4	7.3	7.3
10	7.1	7.0	7.1	7.1	7.0	7.0	7.5	7.4	7.4	7.4	7.3	7.3
11	7.1	7.0	7.1	7.1	7.0	7.0	7.5	7.4	7.4	7.4	7.3	7.3
12	7.1	7.0	7.0	7.1	7.0	7.0	7.5	7.4	7.4	7.4	7.3	7.3
13	7.1	7.0	7.1	7.1	7.0	7.0	7.5	7.4	7.4	7.4	7.3	7.3
14	7.1	7.0	7.1	7.1	7.0	7.0	7.5	7.4	7.4	7.4	7.3	7.3
15	7.1	7.0	7.0	7.1	7.0	7.0	7.5	7.4	7.4	7.4	7.3	7.3
16	7.1	7.0	7.0	7.0	6.9	7.0	7.4	7.3	7.4	7.4	7.3	7.3
17	7.1	7.0	7.0	7.0	6.9	6.9	7.5	7.3	7.4	7.4	7.3	7.3
18	7.1	7.0	7.0	7.4	6.9	7.0	7.5	7.4	7.4	7.3	7.3	7.3
19	7.1	7.0	7.0	7.4	7.4	7.4	7.5	7.4	7.4	7.4	7.3	7.3
20	7.1	7.0	7.0	7.4	7.4	7.4	7.4	7.3	7.4	7.4	7.3	7.3
21	7.1	7.0	7.0	7.5	7.4	7.5	7.4	7.3	7.3	7.3	7.3	7.3
22	7.1	7.0	7.0	7.5	7.4	7.5	7.4	7.3	7.4	7.3	7.3	7.3
23	7.1	7.0	7.0	7.5	7.4	7.4	7.4	7.3	7.4	7.3	7.2	7.3
24	7.1	7.0	7.1	7.4	7.4	7.4	7.4	7.3	7.4	7.4	7.2	7.3
25	7.1	7.0	7.1	7.5	7.4	7.4	7.4	7.3	7.3	7.4	7.3	7.3
26	7.2	7.1	7.1	7.5	7.4	7.4	7.5	7.3	7.4	7.3	7.3	7.3
27	7.1	7.1	7.1	7.5	7.4	7.4	7.4	7.3	7.4	7.3	7.2	7.3
28	7.1	7.0	7.1	7.4	7.4	7.4	7.4	7.3	7.4	7.3	7.2	7.3
29	7.1	7.0	7.0	7.5	7.4	7.4	7.5	7.3	7.4	7.3	7.3	7.3
30	---	---	---	7.4	7.4	7.4	7.5	7.3	7.4	7.3	7.3	7.3
31	---	---	---	7.4	7.3	7.4	---	---	---	7.3	7.3	7.3
MAX	7.2	7.1	7.1	7.5	7.4	7.5	---	---	---	7.4	7.3	7.4
MIN	7.0	6.9	7.0	7.0	6.9	6.9	---	---	---	7.3	7.2	7.3

14181500 NORTH SANTIAM RIVER AT NIAGARA, OR—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.3	7.3	7.3	7.3	7.2	7.2	7.3	7.2	7.2	7.2	7.0	7.1
2	7.3	7.3	7.3	7.3	7.2	7.2	7.3	7.2	7.2	7.1	7.0	7.0
3	7.4	7.3	7.3	7.3	7.2	7.2	7.3	7.1	7.2	7.1	7.0	7.0
4	7.3	7.3	7.3	7.3	7.2	7.2	7.3	7.1	7.2	7.1	7.0	7.0
5	7.3	7.2	7.3	7.3	7.2	7.2	7.3	7.1	7.2	7.1	7.0	7.0
6	7.3	7.2	7.3	7.2	7.2	7.2	7.2	7.1	7.2	7.1	7.0	7.0
7	7.3	7.2	7.3	7.2	7.1	7.2	7.3	7.1	7.2	7.1	7.0	7.0
8	7.3	7.3	7.3	7.2	7.1	7.2	7.3	7.1	7.2	7.1	7.0	7.0
9	7.3	7.3	7.3	7.2	7.1	7.2	7.3	7.1	7.2	7.0	7.0	7.0
10	7.3	7.3	7.3	7.2	7.1	7.1	7.3	7.1	7.2	7.0	7.0	7.0
11	7.3	7.2	7.3	7.2	7.1	7.1	7.3	7.1	7.2	7.0	7.0	7.0
12	7.3	7.3	7.3	7.2	7.1	7.1	7.3	7.1	7.2	7.0	7.0	7.0
13	7.3	7.2	7.3	7.2	7.1	7.1	7.3	7.1	7.2	7.3	7.0	7.2
14	7.3	7.2	7.2	7.2	7.1	7.1	7.3	7.1	7.2	7.3	7.1	7.2
15	7.3	7.2	7.3	7.2	7.1	7.1	7.3	7.1	7.2	7.2	7.1	7.2
16	7.3	7.2	7.3	7.2	7.1	7.1	7.3	7.1	7.2	7.2	6.9	7.1
17	7.3	7.2	7.2	7.2	7.1	7.1	7.3	7.1	7.2	7.0	6.9	7.0
18	7.3	7.2	7.2	7.2	7.1	7.1	7.4	7.1	7.2	7.0	6.9	6.9
19	7.3	7.2	7.2	7.2	7.1	7.1	7.2	7.1	7.1	7.0	6.9	6.9
20	7.3	7.2	7.2	7.2	7.1	7.1	7.2	7.1	7.1	7.0	6.9	6.9
21	7.3	7.2	7.2	7.2	7.1	7.1	7.3	7.1	7.2	7.0	6.9	6.9
22	7.3	7.2	7.2	7.3	7.1	7.1	7.2	7.1	7.1	7.0	6.9	6.9
23	7.3	7.2	7.2	7.3	7.1	7.2	7.4	7.1	7.1	7.0	6.9	6.9
24	7.3	7.2	7.2	7.3	7.1	7.2	7.2	7.1	7.1	7.0	6.9	6.9
25	7.3	7.2	7.2	7.3	7.1	7.2	7.2	7.1	7.1	7.0	6.9	7.0
26	7.3	7.2	7.2	7.3	7.1	7.2	7.2	7.1	7.1	7.0	6.9	6.9
27	7.3	7.2	7.2	7.5	7.1	7.3	7.2	7.1	7.1	7.0	6.9	6.9
28	7.3	7.2	7.2	7.5	7.3	7.3	7.2	7.1	7.1	7.0	6.9	6.9
29	7.3	7.2	7.2	7.5	7.1	7.3	7.2	7.1	7.1	7.0	6.9	6.9
30	7.3	7.2	7.2	7.3	7.1	7.2	7.2	7.1	7.1	7.0	6.9	6.9
31	---	---	---	7.3	7.1	7.2	7.2	7.1	7.1	---	---	---
MAX	7.4	7.3	7.3	7.5	7.3	7.3	7.4	7.2	7.2	7.3	7.1	7.2
MIN	7.3	7.2	7.2	7.2	7.1	7.1	7.2	7.1	7.1	7.0	6.9	6.9

14181500 NORTH SANTIAM RIVER AT NIAGARA, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	12.7	12.5	12.6	13.8	13.3	13.4	8.7	8.4	8.5	5.2	5.0	5.1
2	13.0	12.6	12.7	13.4	12.7	13.0	8.4	8.3	8.3	5.1	4.9	5.0
3	13.0	12.9	12.9	12.9	12.7	12.8	8.3	7.7	8.0	5.0	4.8	4.9
4	13.2	12.8	12.9	12.7	12.2	12.4	8.4	7.7	8.1	4.8	4.3	4.5
5	13.3	13.0	13.2	12.4	12.2	12.3	8.4	7.9	8.1	4.3	3.9	4.1
6	13.3	13.0	13.2	12.4	12.1	12.2	7.9	7.5	7.7	3.9	3.5	3.7
7	13.5	13.1	13.3	12.3	12.1	12.1	7.7	7.5	7.6	4.0	3.6	3.8
8	13.5	13.4	13.4	12.1	11.8	11.9	7.6	7.4	7.5	4.2	4.0	4.1
9	13.4	13.4	13.4	12.0	11.8	11.9	7.6	7.3	7.5	4.3	4.2	4.3
10	13.6	13.4	13.5	11.9	11.6	11.7	7.5	7.3	7.3	4.4	4.3	4.3
11	13.6	13.3	13.5	11.6	11.2	11.4	7.3	7.2	7.2	4.4	4.3	4.3
12	13.6	13.5	13.6	11.3	11.1	11.2	7.2	7.0	7.1	4.3	4.2	4.3
13	13.9	13.6	13.8	11.4	11.2	11.3	7.1	6.5	6.9	4.3	4.2	4.3
14	13.9	13.7	13.8	11.4	11.1	11.3	6.5	6.4	6.4	4.3	4.3	4.3
15	13.7	13.6	13.6	11.2	11.1	11.1	6.6	6.5	6.5	4.4	4.3	4.3
16	13.7	13.5	13.6	11.2	10.9	11.0	6.5	6.4	6.5	4.4	4.2	4.3
17	14.0	13.7	13.8	10.9	10.2	10.5	6.5	6.4	6.4	4.3	4.2	4.2
18	13.9	13.7	13.8	10.6	10.3	10.5	6.5	6.4	6.4	4.3	4.1	4.2
19	13.9	13.7	13.8	10.5	9.8	10.3	6.4	6.3	6.3	4.2	4.1	4.1
20	14.1	13.9	14.0	10.2	9.8	10	6.3	6.2	6.3	4.2	4.1	4.1
21	14.1	14.0	14.1	10.2	9.9	10	6.2	6.1	6.1	4.1	4.0	4.1
22	14.1	13.9	14.0	9.9	9.5	9.6	6.2	6.0	6.1	4.1	4.0	4.0
23	13.9	13.7	13.9	9.8	9.5	9.6	6.1	6.1	6.1	4.3	4.0	4.2
24	13.9	13.7	13.8	9.8	9.2	9.5	6.1	6.0	6.1	4.5	4.3	4.4
25	13.9	13.6	13.8	9.3	9.0	9.1	6.0	5.7	5.9	4.3	4.2	4.2
26	14.0	13.8	13.9	9.3	8.9	9.0	5.8	5.6	5.6	4.2	4.2	4.2
27	14.1	13.8	13.9	9.2	8.8	9.0	5.6	5.4	5.6	4.4	4.2	4.3
28	14.1	13.8	14.0	9.2	8.9	9.0	5.5	5.4	5.4	4.6	4.4	4.5
29	13.8	13.5	13.7	8.9	8.3	8.6	5.4	5.3	5.4	5.5	4.6	5.0
30	13.7	13.4	13.5	8.7	8.3	8.5	5.3	5.0	5.1	5.5	4.9	5.2
31	13.8	13.6	13.6	---	---	---	5.2	5.0	5.1	4.9	4.3	4.5
MONTH	14.1	12.5	13.6	13.8	8.3	10.8	8.7	5.0	6.7	5.5	3.5	4.3
FEBRUARY			MARCH			APRIL			MAY			
1	4.4	4.3	4.3	5.0	4.8	4.9	6.2	5.4	5.7	7.1	6.6	6.9
2	4.5	4.4	4.4	5.1	4.8	5.0	6.3	5.6	5.8	7.4	6.9	7.2
3	4.5	4.4	4.4	5.2	5.0	5.1	7.2	6.3	6.8	7.4	7.0	7.3
4	4.6	4.5	4.5	5.1	4.9	5.0	6.7	5.6	5.9	7.2	7.0	7.1
5	4.6	4.5	4.5	4.9	4.7	4.8	---	---	---	7.1	6.9	7.0
6	4.6	4.6	4.6	4.9	4.7	4.8	---	---	---	7.3	6.9	7.1
7	4.6	4.6	4.6	5.2	4.9	5.0	---	---	---	7.2	6.9	7.0
8	4.6	4.5	4.6	5.4	5.0	5.2	---	---	---	7.1	7.0	7.1
9	4.5	4.4	4.5	5.6	5.3	5.4	---	---	---	7.1	6.8	7.0
10	4.5	4.4	4.5	5.6	5.4	5.5	6.6	6.2	6.4	7.0	6.8	7.0
11	4.6	4.5	4.5	5.5	5.3	5.4	6.6	6.2	6.4	6.9	6.8	6.8
12	4.6	4.4	4.5	5.7	5.4	5.5	6.3	6.1	6.2	7.1	6.9	7.0
13	4.4	4.4	4.4	5.7	5.1	5.4	6.5	6.3	6.4	7.2	6.9	7.0
14	4.6	4.4	4.5	5.8	5.1	5.4	6.6	6.4	6.5	7.6	7.2	7.4
15	4.7	4.5	4.6	5.8	5.3	5.6	6.4	6.1	6.3	7.5	7.2	7.4
16	4.8	4.6	4.7	5.4	5.1	5.3	6.1	6.0	6.0	7.3	7.1	7.2
17	5.0	4.7	4.9	5.5	5.2	5.4	6.4	6.0	6.3	7.5	7.2	7.3
18	5.0	4.9	5.0	5.5	5.2	5.4	6.5	6.2	6.4	7.3	7.1	7.2
19	5.0	4.9	5.0	5.2	5.0	5.1	6.6	6.3	6.4	7.3	7.0	7.2
20	4.9	4.7	4.8	5.2	4.9	5.0	6.5	6.1	6.4	7.6	7.2	7.4
21	4.9	4.7	4.8	6.1	5.2	5.6	6.3	6.0	6.1	7.4	7.2	7.3
22	5.1	4.9	5.0	6.5	6.1	6.3	6.8	6.3	6.5	7.2	7.1	7.2
23	5.2	5.0	5.1	6.2	5.7	6.0	6.7	6.4	6.6	7.2	6.9	7.1
24	5.1	5.0	5.1	5.8	5.4	5.6	6.7	6.3	6.5	7.5	7.1	7.3
25	5.1	5.0	5.1	5.5	5.4	5.4	7.0	6.5	6.7	7.8	7.3	7.6
26	5.2	5.0	5.1	5.8	5.4	5.6	7.2	6.9	7.0	7.7	7.3	7.6
27	5.2	5.1	5.1	5.8	5.5	5.6	7.2	6.7	7.0	7.4	7.0	7.2
28	5.2	5.0	5.1	5.7	5.4	5.5	7.2	6.8	7.0	7.3	7.0	7.1
29	5.1	4.9	5.0	6.2	5.5	5.9	7.5	6.9	7.2	7.5	7.3	7.4
30	---	---	---	6.3	5.3	5.8	7.4	6.7	7.1	7.6	7.3	7.4
31	---	---	---	5.4	5.1	5.2	---	---	---	7.7	7.1	7.3
MONTH	5.2	4.3	4.7	6.5	4.7	5.4	---	---	---	7.8	6.6	7.2

14181500 NORTH SANTIAM RIVER AT NIAGARA, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.1	7.4	7.7	9.1	8.9	9.0	10.4	9.9	10.2	10.6	10.3	10.5
2	8.8	8.1	8.4	9.2	8.9	9.1	10.3	9.9	10.1	10.6	10.4	10.5
3	8.9	8.0	8.4	9.2	8.9	9.0	10.2	9.9	10.0	10.8	10.6	10.7
4	8.4	7.6	8.1	9.2	9.0	9.1	10.3	9.8	10.0	10.8	10.7	10.7
5	8.2	7.8	8.0	9.5	9.1	9.3	10.4	9.9	10.1	11.0	10.6	10.8
6	8.0	7.2	7.6	9.4	9.1	9.3	10.0	9.8	9.9	10.8	10.6	10.7
7	8.8	7.6	8.0	9.4	8.8	9.1	10.3	9.8	10	10.8	10.5	10.6
8	9.0	8.8	8.8	9.4	8.9	9.1	10.5	9.9	10.3	11.1	10.7	10.8
9	9.6	8.9	9.2	9.6	9.2	9.3	10.5	10.0	10.3	11.1	10.9	11.0
10	9.6	9.2	9.4	9.6	8.8	9.0	10.6	10.0	10.3	11.2	11.0	11.1
11	9.2	8.5	8.8	9.5	9.0	9.2	10.9	10.2	10.5	11.3	11.0	11.2
12	9.0	8.6	8.7	9.5	9.1	9.3	10.7	10.2	10.5	11.4	11.1	11.2
13	9.0	8.5	8.8	9.6	8.9	9.2	10.7	10.3	10.5	11.6	11.3	11.5
14	8.7	8.0	8.3	9.7	9.2	9.4	10.9	10.4	10.6	11.8	11.4	11.6
15	9.0	8.5	8.7	9.7	9.3	9.5	10.6	10.3	10.5	11.7	11.4	11.5
16	9.0	8.6	8.9	10.0	9.4	9.6	10.8	10.3	10.6	11.9	11.6	11.7
17	8.9	8.4	8.6	10.2	9.5	9.9	10.9	10.4	10.7	11.8	11.5	11.6
18	9.0	8.4	8.7	10.0	9.5	9.7	11.3	10.4	10.8	11.7	11.5	11.6
19	8.6	8.3	8.5	9.8	9.4	9.5	10.9	10.4	10.7	11.8	11.6	11.7
20	9.0	8.5	8.8	9.9	9.4	9.6	11.0	10.5	10.8	12.0	11.7	11.8
21	9.1	8.7	8.9	10.2	9.7	10	11.3	10.5	10.9	12.1	11.7	11.9
22	9.0	8.3	8.7	10.5	10.0	10.2	10.6	10.3	10.5	12.3	12.0	12.2
23	8.8	8.4	8.6	10.4	9.8	10.1	10.7	10.3	10.5	12.5	12.2	12.3
24	8.7	8.2	8.5	10.2	9.4	9.9	10.4	10.3	10.4	12.6	12.3	12.5
25	8.8	8.4	8.6	10.4	9.7	9.9	10.4	10.2	10.3	12.8	12.4	12.6
26	8.9	8.6	8.8	10.4	9.7	10.0	10.6	10.3	10.5	12.9	12.6	12.8
27	9.0	8.7	8.8	10.4	9.8	10.1	10.8	10.5	10.6	12.9	12.6	12.8
28	9.1	8.6	8.9	10.5	9.9	10.2	11.1	10.6	10.8	13.1	12.6	12.8
29	9.0	8.6	8.9	10.4	9.7	10.1	11.2	10.6	10.9	13.2	13.0	13.1
30	9.0	8.8	8.9	10.1	9.7	9.9	11.2	10.6	10.9	13.1	12.8	13.0
31	---	---	---	10.3	9.8	10.1	11.0	10.5	10.7	---	---	---
MONTH	9.6	7.2	8.6	10.5	8.8	9.6	11.3	9.8	10.5	13.2	10.3	11.6

14181500 NORTH SANTIAM RIVER AT NIAGARA, OR—Continued

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/- 2.5 DEGREES, FNU
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	<1	<1	<1	1	<1	<1	1	<1	<1	2	2	2
2	<1	<1	<1	1	<1	<1	1	<1	<1	4	2	2
3	<1	<1	<1	2	<1	1	2	<1	1	2	2	2
4	<1	<1	<1	1	<1	1	2	<1	1	2	2	2
5	<1	<1	<1	1	<1	1	2	1	1	2	2	2
6	<1	<1	<1	2	<1	<1	3	1	2	3	2	2
7	<1	<1	<1	2	<1	<1	2	1	1	2	1	2
8	<1	<1	<1	2	<1	<1	2	<1	1	2	1	1
9	<1	<1	<1	2	<1	<1	2	<1	1	3	1	2
10	<1	<1	<1	1	<1	<1	1	<1	<1	2	1	2
11	<1	<1	<1	1	<1	<1	1	<1	1	2	1	2
12	1	<1	<1	2	<1	<1	1	<1	1	2	1	1
13	<1	<1	<1	1	<1	<1	14	<1	3	2	1	1
14	<1	<1	<1	1	<1	<1	13	3	6	2	1	1
15	<1	<1	<1	1	<1	<1	7	1	2	3	1	1
16	<1	<1	<1	1	<1	<1	10	6	7	1	<1	1
17	<1	<1	<1	1	<1	<1	8	6	7	1	<1	1
18	<1	<1	<1	1	<1	<1	7	5	5	1	<1	1
19	<1	<1	<1	1	<1	<1	8	6	6	1	<1	<1
20	<1	<1	<1	1	<1	<1	8	6	7	1	<1	<1
21	<1	<1	<1	1	<1	<1	7	5	6	1	<1	<1
22	<1	<1	<1	2	<1	<1	6	5	5	1	<1	1
23	<1	<1	<1	2	<1	1	6	5	5	2	<1	1
24	<1	<1	<1	2	<1	<1	6	4	4	10	2	4
25	<1	<1	<1	1	<1	<1	5	4	4	2	1	1
26	<1	<1	<1	1	<1	<1	4	2	3	2	<1	1
27	<1	<1	<1	3	<1	1	3	2	2	---	---	---
28	<1	<1	<1	2	<1	<1	2	2	2	---	---	---
29	2	<1	<1	8	<1	2	2	2	2	---	---	---
30	1	<1	<1	2	<1	<1	2	2	2	---	---	---
31	1	<1	<1	---	---	---	2	2	2	---	---	---
MAX	2	<1	<1	8	<1	2	14	6	7	---	---	---
MIN	<1	<1	<1	1	<1	<1	1	<1	<1	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	10	2	4	2	<1	1	2	<1	<1	<1	<1	<1
2	10	2	4	2	<1	1	4	<1	<1	2	<1	<1
3	8	2	4	3	<1	1	2	<1	1	<1	<1	<1
4	12	3	6	2	1	1	2	<1	<1	<1	<1	<1
5	11	5	6	3	1	1	---	---	---	<1	<1	<1
6	10	5	8	3	<1	<1	---	---	---	<1	<1	<1
7	12	4	6	2	<1	<1	---	---	---	1	<1	<1
8	10	3	4	1	<1	<1	---	---	---	3	<1	<1
9	12	3	3	2	<1	<1	---	---	---	<1	<1	<1
10	4	3	3	1	<1	<1	<1	<1	<1	<1	<1	<1
11	7	3	3	3	<1	<1	1	<1	<1	<1	<1	<1
12	11	3	3	2	<1	<1	<1	<1	<1	1	<1	<1
13	7	3	3	1	<1	<1	1	<1	<1	<1	<1	<1
14	3	2	3	1	<1	<1	<1	<1	<1	<1	<1	<1
15	5	2	2	1	<1	<1	<1	<1	<1	<1	<1	<1
16	3	2	2	2	<1	<1	2	<1	<1	<1	<1	<1
17	2	2	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
18	3	2	2	1	-1	<1	<1	<1	<1	<1	<1	<1
19	3	2	2	1	<1	<1	1	<1	<1	<1	<1	<1
20	4	2	2	1	<1	<1	<1	<1	<1	1	<1	<1
21	3	2	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
22	5	1	2	<1	<1	<1	1	<1	<1	<1	<1	<1
23	3	1	2	1	<1	<1	<1	<1	<1	<1	<1	<1
24	3	1	2	2	<1	1	2	<1	<1	<1	<1	<1
25	4	<1	1	2	<1	1	<1	<1	<1	<1	<1	<1
26	2	1	1	1	<1	<1	<1	<1	<1	<1	<1	<1
27	2	1	1	3	<1	<1	3	<1	<1	<1	<1	<1
28	2	1	1	1	<1	<1	<1	<1	<1	2	<1	<1
29	2	1	1	1	<1	<1	<1	<1	<1	<1	<1	<1
30	---	---	---	1	<1	<1	1	<1	<1	1	<1	<1
31	---	---	---	1	<1	<1	---	---	---	<1	<1	<1
MAX	12	5	8	3	1	1	---	---	---	3	<1	<1
MIN	2	<1	1	<1	-1	<1	---	---	---	<1	<1	<1

[illegible]

14182500 LITTLE NORTH SANTIAM RIVER NEAR MEHAMA, OR

LOCATION.--Lat 44°47'30", long 122°34'40", in NW ¼ sec.16, T.9 S., R.2 E., Marion County, Hydrologic Unit 17090005, on left bank 2.0 mi east of Mehama, and at mile 2.0.

DRAINAGE AREA.--112 mi² at cableway 1.2 mi downstream.

PERIOD OF RECORD.--October 1931 to current year. Records for July to September 1924 and July to September 1931 at site 4 mi upstream not equivalent as a result of differences in drainage areas.

REVISED RECORDS.--WSP 754: 1932. WSP 1218: 1934, 1936, 1949-50. WSP 1935: Maximum only, 1932-34, 1936, 1938, 1943, 1945-49, 1950(M,P), 1951-53(M), 1954(M,P), 1955(M), 1956(M,P), 1957(M), 1958-59(M,P). WSP 2135: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 655.41 ft above NGVD of 1929. Prior to June 12, 1948, nonrecording gage at about same site and datum.

REMARKS.--Records good. No regulation or diversion upstream from station. All records given herein are for measuring site 1.2 mi downstream from gage. Continuous water-quality records for the period May 1985 to September 1986 have been collected at this location.

AVERAGE DISCHARGE.--73 years (water years 1932-2004), 746 ft³/s, 90.50 in/yr, 540,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,000 ft³/s Dec. 22, 1964, gage height, 16.73 ft, from rating curve extended above 17,000 ft³/s; minimum discharge, 13 ft³/s Aug. 30, 1961.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 13	1630	12,300	10.93	Jan 29	0800	*12,700	*11.04

Minimum discharge, 36 ft³/s, Oct. 6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	133	1,320	664	1,660	918	548	398	669	140	61	204
2	38	123	1,100	584	1,420	827	471	403	560	134	60	190
3	38	112	1,530	527	1,290	762	430	388	481	129	59	174
4	37	102	1,070	494	1,150	1,100	439	371	422	125	59	158
5	37	95	1,450	434	1,020	1,330	437	336	407	121	62	146
6	38	89	2,000	445	960	1,600	414	300	543	119	65	136
7	48	85	1,320	1,030	1,160	1,150	399	284	900	115	71	127
8	59	82	1,190	1,250	1,020	1,080	382	314	1,050	112	64	121
9	125	79	991	1,630	881	1,210	368	291	1,020	109	58	116
10	212	77	816	1,670	787	1,070	367	268	991	106	e55	112
11	220	271	691	1,460	745	893	387	408	898	103	53	163
12	531	321	1,460	1,340	712	841	420	398	727	102	52	188
13	445	228	5,920	1,360	665	779	404	342	645	98	51	450
14	264	182	3,070	1,630	644	722	477	300	623	95	51	818
15	237	172	1,630	2,150	821	694	559	280	541	93	50	730
16	396	475	1,200	1,940	1,150	637	550	291	464	90	49	728
17	260	1,690	1,190	1,390	1,700	597	511	286	405	88	49	877
18	190	1,420	1,090	1,300	1,870	597	497	308	358	85	48	1,550
19	157	1,100	995	1,570	1,820	603	518	480	320	86	47	1,350
20	139	846	1,030	1,400	1,350	533	743	397	289	83	47	1,050
21	120	595	1,020	1,070	1,060	489	1,120	342	262	80	46	759
22	109	446	905	877	893	530	937	338	244	77	172	585
23	148	359	784	1,630	796	581	773	804	231	74	235	468
24	136	434	784	3,750	759	621	668	598	217	e72	289	391
25	117	477	848	1,990	741	615	576	459	201	e69	1,240	336
26	104	609	743	1,430	739	655	556	450	186	e67	1,630	298
27	94	518	688	1,520	962	926	587	1,010	174	e66	957	269
28	89	473	981	3,510	1,200	796	548	1,630	164	65	539	241
29	136	2,850	1,170	9,650	977	669	454	1,790	155	64	372	222
30	199	1,840	888	4,500	---	694	401	1,120	148	62	286	e205
31	157	---	741	2,410	---	661	---	831	---	62	233	---
TOTAL	4,919	16,283	40,615	56,605	30,952	25,180	15,941	16,215	14,295	2,891	7,110	13,162
MEAN	159	543	1,310	1,826	1,067	812	531	523	476	93.3	229	439
MAX	531	2,850	5,920	9,650	1,870	1,600	1,120	1,790	1,050	140	1,630	1,550
MIN	37	77	688	434	644	489	367	268	148	62	46	112
AC-FT	9,760	32,300	80,560	112,300	61,390	49,940	31,620	32,160	28,350	5,730	14,100	26,110
CFSM	1.42	4.85	11.7	16.3	9.53	7.25	4.74	4.67	4.25	0.83	2.05	3.92
IN.	1.63	5.41	13.49	18.80	10.28	8.36	5.29	5.39	4.75	0.96	2.36	4.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2004, BY WATER YEAR (WY)

MEAN	384	1,121	1,434	1,324	1,192	1,025	967	780	450	130	64.6	108
MAX	1,594	3,121	3,680	3,615	3,533	2,645	1,712	1,439	1,684	547	432	490
(WY)	(1948)	(1943)	(1965)	(1953)	(1996)	(1932)	(1937)	(1949)	(1933)	(1983)	(1968)	(1959)
MIN	17.3	25.7	193	218	260	226	268	211	53.5	32.3	19.2	24.3
(WY)	(1988)	(1937)	(1977)	(1937)	(1977)	(1992)	(1941)	(1992)	(1992)	(1992)	(1961)	(1987)

14182500 LITTLE NORTH SANTIAM RIVER NEAR MEHAMA, OR—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1932 - 2004	
ANNUAL TOTAL	253,248		244,168			
ANNUAL MEAN	694		667		746	
HIGHEST ANNUAL MEAN					1,146	1974
LOWEST ANNUAL MEAN					400	1977
HIGHEST DAILY MEAN	6,820	Jan 31	9,650	Jan 29	31,400	Feb 7, 1996
LOWEST DAILY MEAN	27	Sep 5	37	Oct 4	13	Aug 30, 1961
ANNUAL SEVEN-DAY MINIMUM	28	Sep 1	39	Oct 1	15	Aug 24, 1961
ANNUAL RUNOFF (AC-FT)	502,300		484,300		540,500	
ANNUAL RUNOFF (CFSM)	6.19		5.96		6.66	
ANNUAL RUNOFF (INCHES)	84.11		81.10		90.50	
10 PERCENT EXCEEDS	1,530		1,420		1,660	
50 PERCENT EXCEEDS	458		472		465	
90 PERCENT EXCEEDS	39		72		42	

e Estimated



2004 Water Year
SANTIAM RIVER BASIN

14182500 LITTLE NORTH SANTIAM RIVER NEAR MEHAMA, OR

Latitude: 44° 47 ' 30"

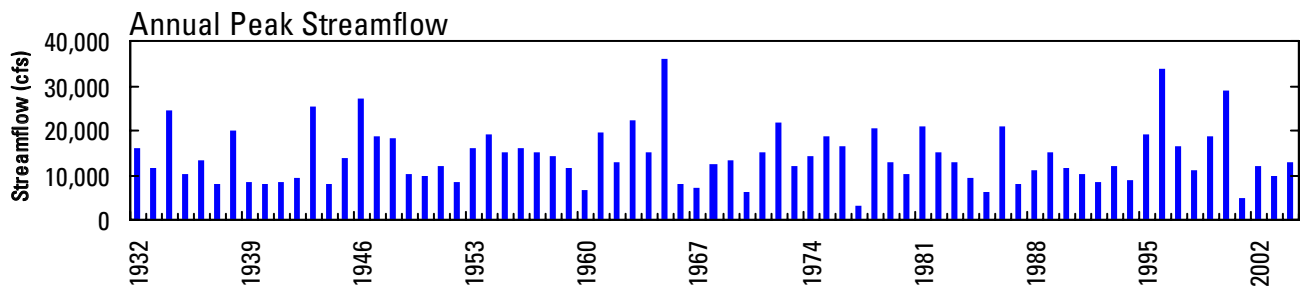
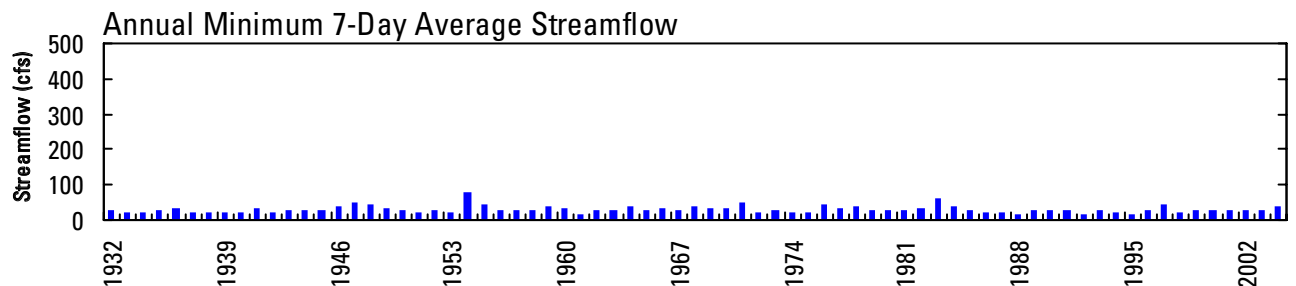
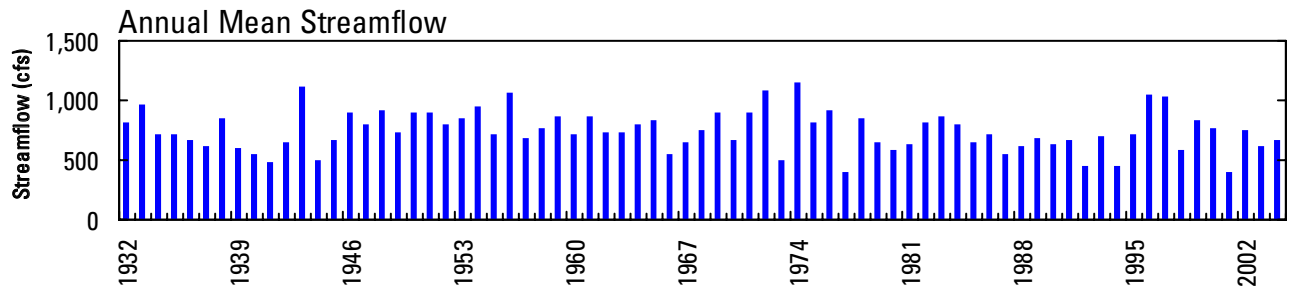
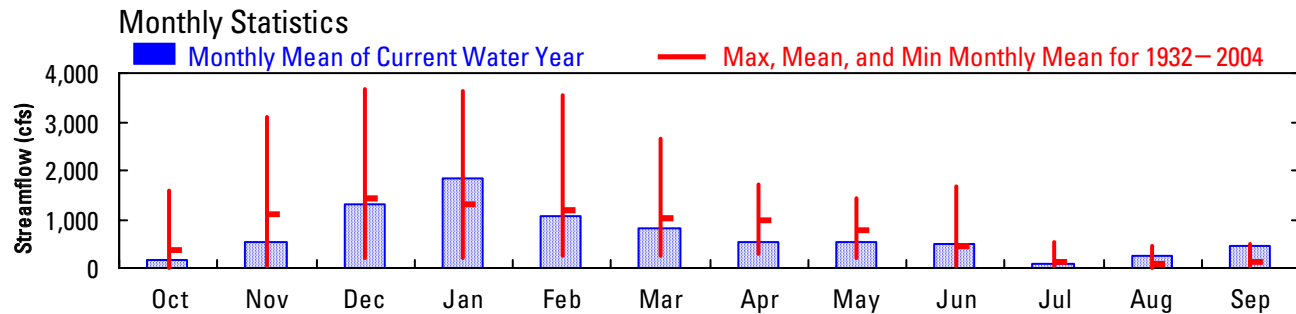
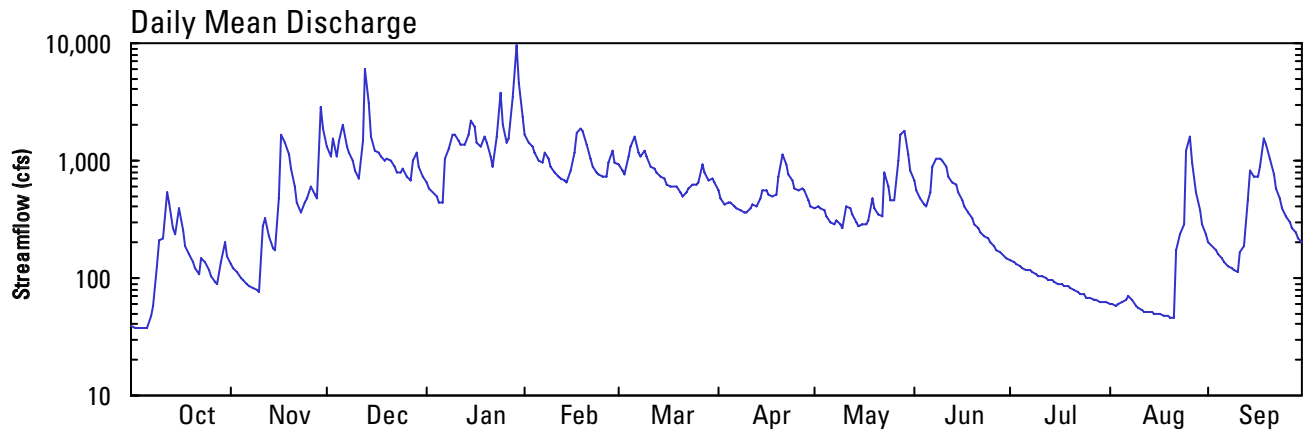
Longitude: 122° 34 ' 40"

Hydrologic Unit Code: 17090005

Marion County

Datum: 655.41 feet

Drainage Area: 112 square miles



14182500 LITTLE NORTH SANTIAM RIVER NEAR MEHAMA, OR

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 2000 to current year.

pH: June 2000 to current year.

WATER TEMPERATURE: July 1985 to November 1986, April 2000 to current year.

TURBIDITY: April 2000 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Water-quality data for the 2001 water year available in the files of the Portland field office.

SPECIFIC CONDUCTANCE: Records excellent.

pH: Records excellent.

WATER TEMPERATURE: Records excellent.

TURBIDITY: Records excellent. Turbidity data are highly dependent on the instrumentation used for the measurement. See the "Definitions" section for turbidity in the front of this report.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 53 microsiemens Sept. 5-7, 2003; minimum, 14 microsiemens Nov. 14, 2001, Apr. 14, 2002.

pH: Maximum, 8.7 units Aug. 1, 3, 2003; minimum, 6.8 units Apr. 14, 2002, Jan. 30 to Feb. 1, 2003, Jan. 29, 2004.

WATER TEMPERATURE: Maximum, 27.3°C Aug. 8, 1986, July 29, 2003; minimum, 0.8°C Dec. 1, 2, 1985.

TURBIDITY: Maximum, 301 FNU Apr. 14, 2002; minimum, <1 FNU many days each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 50 microsiemens Oct. 5, 6; minimum, 16 microsiemens Jan. 29.

pH: Maximum, 8.5 units Aug. 14, 21; minimum, 6.8 units Jan. 29.

WATER TEMPERATURE: Maximum, 26.8°C July 24; minimum, 2.2°C Jan. 6.

TURBIDITY: Maximum, 251 FNU Jan. 29; minimum, <1 FNU many days during year.

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

Date	Time	Instantaneous discharge, cfs (00061)	Suspnd. sediment, sieve diameter percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
DEC					
12...	1340	1,800	72	13	63
13...	1452	11,000	50	520	15,400
13...	1528	11,400	38	629	19,400
14...	1127	2,820	48	43	328
JAN					
29...	1112	12,100	61	451	14,800
29...	1150	11,500	43	523	16,200
29...	1453	10,400	37	525	14,700
30...	1140	4,440	62	118	1,420

14182500 LITTLE NORTH SANTIAM RIVER NEAR MEHAMA, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	47	45	46	36	36	36	25	25	25	31	31	31
2	47	45	46	36	36	36	26	25	25	32	31	31
3	47	46	47	37	36	36	25	23	24	32	32	32
4	48	46	47	37	36	37	26	24	25	32	32	32
5	50	47	48	37	36	36	26	23	24	33	32	33
6	50	46	47	37	36	36	24	21	22	33	32	33
7	49	46	47	37	36	37	25	24	24	32	24	27
8	48	46	47	38	37	37	26	25	26	25	24	25
9	46	43	45	38	37	38	27	26	27	25	23	24
10	43	36	40	38	38	38	29	27	28	24	24	24
11	36	33	34	39	32	37	29	29	29	25	24	25
12	33	28	30	35	31	32	29	22	26	25	25	25
13	29	28	28	32	31	31	23	18	21	25	24	25
14	31	29	30	33	32	32	25	21	23	24	22	24
15	33	31	31	33	32	33	27	25	26	22	21	22
16	32	29	30	33	27	32	28	26	27	23	22	22
17	31	30	30	27	24	24	27	27	27	25	23	24
18	33	31	32	25	24	24	27	27	27	25	24	25
19	34	32	33	25	24	25	27	27	27	24	23	23
20	34	34	34	26	25	26	27	26	27	25	23	24
21	36	34	35	28	26	28	26	26	26	26	25	25
22	36	35	36	29	28	28	27	26	26	27	26	27
23	37	35	36	30	29	29	28	27	27	27	21	25
24	35	34	35	30	30	30	28	27	28	22	19	20
25	35	34	35	32	30	30	27	26	26	25	22	23
26	36	35	35	32	31	31	28	27	27	26	25	25
27	37	35	36	32	31	31	28	28	28	26	22	25
28	37	36	37	33	31	32	29	28	28	22	19	21
29	38	37	37	31	22	24	30	28	28	19	16	17
30	40	34	37	25	23	24	31	30	30	22	19	21
31	38	36	37	---	---	---	31	31	31	24	22	23
MONTH	50	28	38	39	22	32	31	18	26	33	16	25
	FEBRUARY			MARCH			APRIL			MAY		
1	25	24	25	26	26	26	26	25	25	27	27	27
2	26	25	25	27	26	27	27	26	26	27	26	26
3	26	25	25	27	27	27	28	27	27	27	26	26
4	26	26	26	27	24	26	28	26	27	27	26	26
5	27	26	26	25	22	24	26	26	26	28	27	27
6	27	26	27	24	21	23	26	26	26	28	28	28
7	26	24	25	26	24	25	26	26	26	28	28	28
8	26	25	25	26	25	25	28	26	26	29	27	28
9	27	26	27	25	23	24	28	28	28	28	28	28
10	28	26	27	25	24	24	28	28	28	29	28	28
11	28	27	27	26	25	25	28	26	27	29	26	28
12	27	27	27	26	25	25	26	26	26	27	25	26
13	27	27	27	26	25	25	26	26	26	27	26	26
14	27	27	27	26	26	26	26	25	26	28	27	27
15	27	24	26	26	26	26	26	25	25	28	27	27
16	24	20	23	26	25	26	26	26	26	28	28	28
17	21	20	20	26	25	26	26	26	26	28	27	28
18	21	20	20	26	25	26	28	26	26	28	27	28
19	22	20	21	26	25	25	26	26	26	28	26	27
20	24	22	23	26	25	26	28	24	26	28	26	26
21	25	24	24	27	26	27	25	24	24	28	28	28
22	26	25	25	27	26	26	26	25	25	28	28	28
23	26	26	26	26	25	25	26	26	26	28	21	23
24	27	26	26	25	25	25	26	26	26	26	22	24
25	27	27	27	25	24	25	28	26	26	26	25	26
26	27	27	27	25	24	24	28	26	27	28	26	26
27	27	24	25	25	21	22	26	25	26	28	23	24
28	25	24	24	23	21	22	26	24	25	23	21	22
29	26	25	25	24	23	24	26	25	25	23	21	22
30	---	---	---	24	24	24	27	26	27	25	23	24
31	---	---	---	25	24	24	---	---	---	26	25	26
MONTH	28	20	25	27	21	25	28	24	26	29	21	26

14182500 LITTLE NORTH SANTIAM RIVER NEAR MEHAMA, OR—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	8.1	7.5	7.6	7.6	7.5	7.5	7.3	7.2	7.3	7.5	7.4	7.4
2	8.1	7.5	7.6	7.6	7.5	7.5	7.4	7.3	7.3	7.5	7.4	7.4
3	8.1	7.5	7.6	7.6	7.5	7.5	7.3	7.3	7.3	7.4	7.4	7.4
4	8.0	7.5	7.6	7.6	7.4	7.5	7.4	7.3	7.3	7.4	7.4	7.4
5	8.1	7.5	7.6	7.6	7.5	7.5	7.3	7.2	7.3	7.4	7.4	7.4
6	8.1	7.5	7.6	7.7	7.5	7.5	7.3	7.2	7.2	7.4	7.3	7.4
7	8.2	7.5	7.6	7.7	7.5	7.5	7.4	7.3	7.3	7.4	7.2	7.3
8	8.0	7.5	7.6	7.7	7.5	7.5	7.4	7.3	7.3	7.3	7.2	7.2
9	7.8	7.5	7.6	7.7	7.5	7.5	7.4	7.3	7.4	7.2	7.2	7.2
10	7.7	7.5	7.5	7.5	7.4	7.5	7.5	7.4	7.4	7.3	7.2	7.2
11	7.6	7.4	7.5	7.7	7.4	7.5	7.5	7.4	7.4	7.3	7.2	7.2
12	7.5	7.4	7.5	7.5	7.4	7.4	---	---	---	7.3	7.2	7.2
13	7.6	7.3	7.4	7.5	7.4	7.4	---	---	---	7.3	7.2	7.2
14	7.7	7.3	7.4	7.6	7.4	7.4	---	---	---	7.3	7.2	7.2
15	7.7	7.4	7.5	7.6	7.4	7.5	---	---	---	7.2	7.1	7.2
16	7.6	7.4	7.4	7.5	7.3	7.5	---	---	---	7.3	7.2	7.2
17	7.7	7.3	7.4	7.3	7.2	7.3	7.4	7.3	7.3	7.4	7.2	7.3
18	7.8	7.4	7.4	7.3	7.3	7.3	7.4	7.3	7.4	7.4	7.2	7.3
19	7.8	7.4	7.4	7.4	7.3	7.4	7.4	7.3	7.4	7.3	7.2	7.2
20	8.0	7.3	7.4	7.4	7.3	7.4	7.4	7.3	7.4	7.4	7.2	7.3
21	8.1	7.3	7.4	7.5	7.4	7.4	7.4	7.3	7.4	7.4	7.3	7.3
22	8.1	7.4	7.5	7.5	7.4	7.4	7.4	7.3	7.4	7.4	7.3	7.3
23	7.9	7.4	7.5	7.5	7.4	7.4	7.5	7.4	7.4	7.4	7.1	7.3
24	7.8	7.4	7.5	7.5	7.4	7.4	7.5	7.4	7.4	7.2	7.1	7.1
25	7.8	7.4	7.5	7.5	7.4	7.4	7.4	7.3	7.4	7.3	7.2	7.2
26	7.7	7.4	7.4	7.5	7.4	7.4	7.5	7.3	7.4	7.3	7.2	7.3
27	7.8	7.4	7.5	7.5	7.4	7.4	7.4	7.4	7.4	7.4	7.2	7.3
28	7.7	7.3	7.5	7.5	7.4	7.4	7.4	7.3	7.4	7.2	7.0	7.1
29	7.8	7.5	7.5	7.4	7.1	7.1	7.4	7.3	7.3	7.0	6.8	6.9
30	7.7	7.5	7.5	7.3	7.2	7.2	7.4	7.3	7.4	7.1	6.9	7.0
31	7.6	7.5	7.5	---	---	---	7.4	7.3	7.4	7.2	7.1	7.2
MAX	8.2	7.5	7.6	7.7	7.5	7.5	---	---	---	7.5	7.4	7.4
MIN	7.5	7.3	7.4	7.3	7.1	7.1	---	---	---	7.0	6.8	6.9
FEBRUARY			MARCH			APRIL			MAY			
1	7.3	7.2	7.3	7.3	7.2	7.2	7.5	7.3	7.4	7.7	7.3	7.5
2	7.3	7.3	7.3	7.4	7.2	7.2	7.5	7.3	7.4	7.7	7.3	7.4
3	7.3	7.3	7.3	7.3	7.2	7.2	7.5	7.3	7.4	7.7	7.3	7.4
4	7.3	7.3	7.3	7.2	7.1	7.2	7.6	7.4	7.4	7.7	7.3	7.5
5	7.4	7.3	7.4	7.2	7.0	7.1	7.5	7.3	7.4	7.7	7.3	7.5
6	7.4	7.3	7.4	7.2	6.9	7.1	7.5	7.3	7.4	7.7	7.3	7.5
7	7.4	7.3	7.3	7.2	7.0	7.1	7.6	7.4	7.4	7.7	7.3	7.5
8	7.4	7.3	7.4	7.2	7.0	7.1	7.5	7.3	7.4	7.6	7.4	7.5
9	7.5	7.4	7.4	7.2	7.0	7.0	7.5	7.4	7.4	7.6	7.4	7.5
10	7.5	7.4	7.5	7.2	7.0	7.0	7.5	7.4	7.4	7.6	7.4	7.5
11	7.5	7.4	7.5	7.2	7.0	7.1	7.5	7.4	7.4	7.5	7.3	7.4
12	7.6	7.5	7.5	7.2	7.0	7.1	7.5	7.3	7.4	7.5	7.3	7.4
13	7.6	7.5	7.5	7.3	7.0	7.1	7.5	7.3	7.4	7.5	7.3	7.4
14	7.7	7.5	7.6	7.3	7.0	7.1	7.5	7.3	7.4	7.6	7.3	7.5
15	7.6	7.5	7.5	7.3	7.0	7.1	7.5	7.3	7.4	7.6	7.3	7.4
16	7.6	7.4	7.5	7.5	7.1	7.2	7.5	7.3	7.4	7.6	7.4	7.5
17	7.5	7.4	7.4	7.5	7.3	7.4	7.5	7.3	7.4	7.6	7.4	7.4
18	7.5	7.4	7.4	7.5	7.3	7.4	7.5	7.3	7.4	7.5	7.3	7.4
19	7.5	7.4	7.5	7.5	7.3	7.4	7.5	7.3	7.4	7.6	7.3	7.4
20	---	---	---	7.5	7.3	7.4	7.4	7.3	7.4	7.6	7.3	7.4
21	---	---	---	7.6	7.3	7.4	7.4	7.3	7.3	7.6	7.4	7.5
22	---	---	---	7.5	7.3	7.4	7.5	7.2	7.3	7.6	7.4	7.5
23	---	---	---	7.5	7.3	7.4	7.5	7.3	7.3	7.4	7.2	7.3
24	---	---	---	7.5	7.3	7.4	7.5	7.3	7.4	7.5	7.2	7.3
25	7.4	7.3	7.3	7.5	7.3	7.4	7.6	7.3	7.4	7.6	7.3	7.4
26	7.4	7.3	7.3	7.5	7.3	7.4	7.6	7.3	7.4	7.5	7.3	7.4
27	7.3	7.2	7.2	7.4	7.2	7.3	7.6	7.3	7.4	7.4	7.2	7.3
28	7.3	7.1	7.2	7.4	7.2	7.3	7.6	7.3	7.4	7.3	7.1	7.2
29	7.3	7.1	7.2	7.5	7.3	7.4	7.7	7.3	7.4	7.3	7.1	7.2
30	---	---	---	7.5	7.3	7.3	7.7	7.3	7.4	7.4	7.2	7.3
31	---	---	---	7.5	7.3	7.4	---	---	---	7.5	7.2	7.3
MAX	---	---	---	7.6	7.3	7.4	7.7	7.4	7.4	7.7	7.4	7.5
MIN	---	---	---	7.2	6.9	7.0	7.4	7.2	7.3	7.3	7.1	7.2

14182500 LITTLE NORTH SANTIAM RIVER NEAR MEHAMA, OR—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.5	7.3	7.4	7.9	7.5	7.6	8.2	7.4	7.6	8.4	7.4	7.6
2	7.6	7.3	7.5	7.9	7.5	7.6	8.2	7.4	7.6	8.2	7.4	7.6
3	7.7	7.3	7.4	7.9	7.4	7.6	8.3	7.4	7.6	8.3	7.4	7.6
4	7.8	7.3	7.5	7.8	7.4	7.6	8.1	7.4	7.5	8.3	7.4	7.5
5	7.8	7.3	7.5	7.9	7.4	7.5	8.1	7.4	7.6	8.0	7.4	7.5
6	7.6	7.3	7.4	7.9	7.4	7.6	7.8	7.4	7.5	7.9	7.4	7.5
7	7.5	7.2	7.3	7.9	7.5	7.6	7.9	7.4	7.5	8.0	7.4	7.5
8	7.4	7.2	7.3	7.8	7.4	7.6	8.1	7.4	7.5	8.0	7.4	7.5
9	7.4	7.2	7.3	7.9	7.4	7.5	8.2	7.4	7.6	8.0	7.4	7.5
10	7.5	7.2	7.3	7.9	7.4	7.6	8.2	7.4	7.5	7.9	7.4	7.5
11	7.6	7.2	7.4	7.8	7.4	7.5	8.3	7.4	7.6	7.8	7.4	7.5
12	7.6	7.3	7.4	8.0	7.4	7.5	8.4	7.4	7.6	7.7	7.4	7.4
13	7.7	7.3	7.4	8.1	7.4	7.7	8.4	7.4	7.5	7.7	7.1	7.4
14	7.7	7.3	7.5	8.1	7.4	7.6	8.5	7.4	7.7	7.4	7.1	7.2
15	7.7	7.3	7.5	8.1	7.4	7.6	8.3	7.4	7.6	7.4	7.1	7.2
16	7.8	7.3	7.5	8.1	7.4	7.6	8.4	7.4	7.6	7.5	7.1	7.2
17	7.8	7.3	7.5	8.1	7.4	7.5	8.3	7.4	7.6	7.4	7.1	7.2
18	7.8	7.3	7.5	8.1	7.4	7.6	8.3	7.4	7.6	7.2	7.0	7.1
19	7.8	7.4	7.5	8.1	7.4	7.6	8.2	7.4	7.6	7.3	7.0	7.1
20	7.7	7.4	7.5	8.2	7.4	7.6	8.3	7.4	7.6	7.4	7.1	7.2
21	7.7	7.4	7.5	8.1	7.4	7.6	8.5	7.4	7.7	7.5	7.1	7.2
22	7.7	7.4	7.5	8.1	7.4	7.6	7.8	7.4	7.5	7.7	7.2	7.3
23	7.7	7.4	7.5	8.2	7.4	7.6	7.7	7.4	7.5	7.8	7.3	7.4
24	7.7	7.4	7.5	8.2	7.4	7.6	7.8	7.4	7.5	7.8	7.3	7.4
25	7.7	7.4	7.6	8.3	7.4	7.6	7.4	7.1	7.2	7.9	7.3	7.4
26	7.7	7.4	7.5	8.3	7.4	7.6	7.2	7.1	7.2	8.1	7.3	7.5
27	7.7	7.4	7.6	8.2	7.4	7.5	7.5	7.2	7.3	8.0	7.3	7.4
28	7.8	7.4	7.6	8.3	7.4	7.6	7.7	7.3	7.5	7.9	7.3	7.4
29	7.8	7.5	7.6	8.3	7.4	7.6	7.9	7.3	7.5	8.0	7.3	7.5
30	7.8	7.5	7.6	8.2	7.4	7.6	8.0	7.4	7.5	7.9	7.4	7.5
31	---	---	---	8.2	7.4	7.6	8.2	7.4	7.5	---	---	---
MAX	7.8	7.5	7.6	8.3	7.5	7.7	8.5	7.4	7.7	8.4	7.4	7.6
MIN	7.4	7.2	7.3	7.8	7.4	7.5	7.2	7.1	7.2	7.2	7.0	7.1

14182500 LITTLE NORTH SANTIAM RIVER NEAR MEHAMA, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	17.4	14.2	15.7	4.7	3.9	4.3	7.5	7.1	7.3	5.0	3.8	4.4
2	17.0	14.7	15.7	5.3	4.2	4.8	7.6	7.1	7.3	4.3	3.8	4.1
3	17.8	15.2	16.2	5.0	4.0	4.4	7.6	6.2	6.9	4.3	4.1	4.2
4	---	14.8	---	5.4	3.8	4.6	7.4	6.1	6.6	4.1	2.9	3.4
5	---	---	---	5.1	3.7	4.5	7.5	7.3	7.4	3.6	2.6	3.0
6	---	---	---	5.8	4.2	5.0	7.4	6.4	6.9	3.1	2.2	2.5
7	---	---	---	6.8	5.3	6.0	6.5	6.2	6.3	4.2	3.1	3.7
8	15.4	13.9	14.5	7.1	6.2	6.7	6.9	6.2	6.5	5.3	4.2	4.9
9	13.9	12.0	13.0	7.5	6.3	6.9	6.8	6.1	6.5	5.8	5.2	5.5
10	12.6	10.9	11.9	7.7	7.0	7.3	7.0	6.5	6.7	6.1	5.6	5.7
11	10.9	10.2	10.4	8.5	7.7	8.1	7.0	6.6	6.8	6.0	5.2	5.6
12	10.5	9.9	10.2	8.0	7.0	7.5	7.1	6.9	7.0	5.9	5.2	5.5
13	10.6	9.6	10.1	7.0	6.0	6.5	7.2	5.6	6.7	6.3	5.6	5.9
14	10.9	10.1	10.5	7.5	6.5	7.1	5.9	5.6	5.8	6.2	5.9	6.0
15	10.3	9.7	9.9	8.0	7.4	7.7	6.4	5.9	6.1	6.2	5.8	6.0
16	10.5	9.6	10	7.7	7.5	7.6	6.3	5.8	6.0	6.2	5.5	5.9
17	11.9	10.2	11.0	8.0	7.6	7.8	6.7	6.0	6.3	6.2	5.4	5.8
18	11.6	10.5	11.1	8.7	8.0	8.4	6.5	5.8	6.1	6.4	6.0	6.2
19	11.6	10.8	11.3	8.7	6.0	7.7	6.8	5.8	6.3	6.5	6.0	6.2
20	13.1	11.4	12.3	6.0	5.5	5.8	7.1	6.8	6.9	6.1	5.1	5.5
21	14.2	12.8	13.3	5.7	5.4	5.5	7.3	6.7	7.1	5.5	4.6	5.0
22	14.8	13.2	13.8	5.4	4.7	4.9	6.7	5.9	6.2	5.4	4.3	4.8
23	13.4	11.3	12.5	5.5	4.4	4.8	6.9	5.9	6.3	6.2	5.4	5.8
24	11.3	9.8	10.4	5.6	5.1	5.4	7.0	6.5	6.9	6.1	4.8	5.6
25	10.8	9.1	9.7	5.4	4.7	5.1	6.5	5.1	5.8	5.4	4.6	5.1
26	11.3	9.1	10	6.1	4.9	5.6	5.4	5.0	5.2	5.8	5.2	5.5
27	11.6	9.3	10.3	6.3	5.3	5.8	5.3	4.2	4.8	6.2	5.6	5.9
28	11.9	10.7	11.3	6.9	6.2	6.5	5.1	4.2	4.7	6.2	5.8	6.0
29	11.6	9.4	10.6	7.0	6.5	6.8	5.3	4.7	5.1	6.3	5.8	6.1
30	9.4	7.1	8.5	7.3	6.6	7.0	5.0	4.2	4.6	6.3	5.3	5.7
31	7.1	4.5	5.7	---	---	---	5.0	4.5	4.8	5.8	5.2	5.5
MONTH	---	---	---	8.7	3.7	6.2	7.6	4.2	6.3	6.5	2.2	5.2
FEBRUARY			MARCH			APRIL			MAY			
1	5.9	5.1	5.4	7.0	5.9	6.4	7.4	4.8	6.1	12.6	9.7	11.4
2	6.5	5.7	6.0	6.7	5.2	6.1	8.2	5.0	6.8	13.4	9.9	11.8
3	6.2	5.4	5.8	6.0	4.9	5.0	10.1	6.9	8.6	13.5	10.5	12.2
4	6.4	5.8	6.1	6.2	4.9	5.6	9.8	7.3	8.9	12.9	10.7	11.3
5	6.1	4.9	5.5	6.2	5.5	5.8	9.5	7.4	8.2	11.9	9.7	10.8
6	6.1	5.6	5.9	6.7	5.4	6.0	8.8	7.4	8.1	11.4	9.3	10.6
7	6.0	5.5	5.7	8.3	6.4	7.2	9.2	7.7	8.5	11.5	10.5	11.1
8	6.2	5.3	5.7	8.4	6.3	7.3	10.0	7.0	8.7	11.1	9.8	10.5
9	5.7	4.7	5.2	7.5	6.7	7.1	10.3	7.2	9.1	12.2	9.6	10.8
10	5.6	4.2	4.9	7.3	5.7	6.5	11.1	7.9	9.8	11.2	10.0	10.4
11	6.2	4.6	5.4	7.8	5.5	6.6	11.7	8.7	10.5	10.0	8.8	9.4
12	5.8	4.3	5.1	7.7	6.1	6.9	11.3	8.7	9.8	10.8	8.4	9.4
13	5.5	4.2	4.8	7.9	5.8	6.9	10.1	8.5	9.3	12.2	8.5	10.5
14	6.6	5.5	6.0	8.7	7.0	7.8	9.3	7.6	8.2	13.2	10.0	11.8
15	6.5	5.6	6.0	8.0	6.2	7.2	7.6	6.5	6.9	12.8	10.3	11.0
16	6.2	5.6	5.9	7.9	5.7	6.8	8.7	6.4	7.4	13.1	9.8	11.0
17	6.3	5.4	5.8	8.1	5.8	7.1	8.7	7.0	7.9	12.5	9.6	11.2
18	6.4	6.0	6.1	7.9	6.4	6.8	8.2	7.1	7.7	11.8	10.0	10.5
19	6.2	5.4	5.8	7.1	5.9	6.4	8.0	7.0	7.5	11.5	9.4	10.5
20	6.1	4.7	5.4	7.9	4.8	6.4	7.7	6.5	7.0	13.4	9.3	11.4
21	6.6	5.0	5.7	9.1	6.5	7.9	7.5	6.1	6.7	12.7	10.8	11.3
22	7.0	5.7	6.3	9.3	7.1	8.4	9.7	6.3	7.8	11.1	10.0	10.4
23	7.3	6.4	6.8	9.4	7.8	8.6	8.7	7.3	7.9	10.3	8.7	9.3
24	7.0	6.0	6.4	8.6	7.2	7.7	9.7	6.5	8.1	12.1	8.3	10.1
25	6.4	5.4	5.9	7.2	6.3	6.6	11.3	7.1	9.1	13.3	9.3	11.4
26	6.4	5.8	6.1	6.5	5.9	6.1	12.6	8.8	10.8	12.9	10.6	11.1
27	6.1	5.8	6.0	6.7	5.8	6.2	12.2	9.4	10.9	10.6	9.4	9.9
28	6.5	5.4	5.9	7.9	5.2	6.5	10.9	8.5	9.8	9.4	7.9	8.7
29	6.4	5.8	6.1	9.3	6.2	7.8	11.7	7.9	9.9	8.3	7.6	8.0
30	---	---	---	8.8	6.6	7.6	12.7	8.9	11.0	9.6	8.1	8.7
31	---	---	---	7.4	5.7	6.5	---	---	---	11.2	8.6	9.8
MONTH	7.3	4.2	5.8	9.4	4.8	6.8	12.7	4.8	8.6	13.5	7.6	10.5

14182500 LITTLE NORTH SANTIAM RIVER NEAR MEHAMA, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	12.6	8.6	10.6	21.1	16.9	18.8	25.7	20.3	22.7	16.6	14.9	16.0
2	13.7	9.7	11.7	20.7	17.5	18.9	24.7	20.3	22.3	15.3	13.9	14.5
3	14.8	11.0	13.0	20.8	18.0	19.2	22.7	20.2	21.4	16.5	13.8	14.9
4	15.7	11.8	13.9	21.1	17.2	18.8	22.1	18.7	20.4	16.2	14.7	15.3
5	14.9	12.1	12.9	21.6	16.4	18.8	22.3	19.1	20.4	17.4	13.9	15.3
6	12.1	10.2	10.9	22.1	17.5	19.6	20.1	17.9	18.6	17.4	13.7	15.3
7	10.7	9.2	9.9	19.9	17.5	18.6	22.3	16.4	18.8	17.6	13.8	15.4
8	9.9	9.1	9.4	20.7	15.4	17.9	24.4	17.7	20.6	17.8	13.9	15.6
9	9.8	9.0	9.3	20.2	16.2	17.9	25.4	19.5	22.1	16.8	15.2	16.1
10	10.1	9.3	9.6	20.6	16.7	18.3	26.1	20.2	22.7	17.5	14.2	15.7
11	10.2	8.8	9.4	21.4	15.7	18.4	26.3	20.4	23.1	17.4	15.7	16.5
12	11.4	8.8	10.1	22.9	17.1	19.8	26.3	21.2	23.6	15.8	14.9	15.4
13	10.8	9.9	10.4	23.8	18.9	21.1	26.3	21.2	23.6	15.4	12.6	14.5
14	11.7	9.5	10.3	24.4	19.0	21.5	26.2	21.7	23.7	13.3	11.8	12.5
15	13.6	9.2	11.2	23.8	19.5	21.4	25.9	21.0	23.3	12.8	11.9	12.4
16	14.7	10.1	12.5	24.2	18.6	21.1	25.6	20.7	23.0	12.7	11.7	12.2
17	15.9	11.5	13.9	23.4	19.6	21.3	25.2	19.9	22.4	12.1	11.0	11.7
18	16.8	12.8	15.0	22.5	19.5	21.1	25.2	19.9	22.4	11.0	10.1	10.4
19	16.9	13.2	15.2	22.7	19.4	20.9	25.6	20.2	22.8	10.5	9.7	10.1
20	16.7	12.8	14.9	23.7	19.6	21.2	25.1	20.5	22.8	11.0	9.8	10.3
21	17.7	14.0	16.0	24.5	18.7	21.3	23.6	20.2	22.0	11.4	9.5	10.5
22	17.1	14.6	15.5	25.6	19.4	22.2	22.0	17.6	19.9	12.0	9.8	10.9
23	14.8	13.7	14.3	26.4	20.1	23.0	17.6	16.3	16.7	12.6	10.4	11.6
24	15.6	14.2	14.9	26.8	21.1	23.8	16.7	14.8	16.0	13.1	10.9	12.1
25	18.8	15.1	16.5	26.2	21.3	23.5	14.8	12.5	13.4	13.1	11.7	12.5
26	19.4	15.9	17.4	25.2	19.9	22.3	12.5	12.0	12.2	13.7	12.4	13.0
27	19.8	16.1	17.8	25.4	19.8	22.1	14.6	12.0	13.1	14.1	12.4	13.2
28	20.2	16.1	18.0	26.0	20.4	22.9	15.2	---	---	14.2	12.5	13.4
29	20.4	16.6	18.3	26.0	20.8	23.1	16.0	13.0	14.7	13.8	13.1	13.5
30	20.7	16.7	18.5	26.2	20.8	23.2	16.8	13.8	15.5	---	12.6	---
31	---	---	---	25.6	20.4	22.7	17.3	14.9	16.2	---	---	---
MONTH	20.7	8.6	13.4	26.8	15.4	20.8	26.3	---	---	---	9.5	---

14182500 LITTLE NORTH SANTIAM RIVER NEAR MEHAMA, OR—Continued

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/- 2.5 DEGREES, FNU
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	<1	<1	<1	<1	<1	<1	3	2	2	<1	<1	<1
2	<1	<1	<1	<1	<1	<1	2	1	1	<1	<1	<1
3	3	<1	<1	<1	<1	<1	7	1	3	<1	<1	<1
4	1	<1	<1	<1	<1	<1	3	1	2	<1	<1	<1
5	2	<1	<1	<1	<1	<1	4	1	3	<1	<1	<1
6	<1	<1	<1	<1	<1	<1	11	3	4	1	<1	<1
7	1	<1	<1	<1	<1	<1	4	2	2	4	<1	3
8	<1	<1	<1	<1	<1	<1	4	1	2	5	<1	2
9	4	<1	<1	<1	<1	<1	2	1	1	7	2	4
10	5	<1	2	<1	<1	<1	3	<1	1	6	1	2
11	3	<1	<1	4	<1	<1	2	<1	1	2	<1	<1
12	16	<1	2	2	<1	<1	9	<1	5	2	<1	<1
13	5	<1	<1	<1	<1	<1	194	<1	14	6	<1	<1
14	1	<1	<1	<1	<1	<1	21	<1	<1	12	<1	1
15	2	<1	<1	<1	<1	<1	---	---	---	12	4	6
16	4	<1	<1	29	<1	<1	---	---	---	6	2	3
17	<1	<1	<1	23	3	10	5	<1	1	2	<1	<1
18	1	<1	<1	5	2	3	3	<1	<1	4	<1	<1
19	<1	<1	<1	3	1	2	1	<1	<1	2	<1	1
20	<1	<1	<1	2	<1	1	3	<1	<1	1	<1	<1
21	<1	<1	<1	3	<1	<1	1	<1	<1	2	<1	<1
22	<1	<1	<1	<1	<1	<1	2	<1	<1	<1	<1	<1
23	1	<1	<1	<1	<1	<1	<1	<1	<1	50	<1	3
24	<1	<1	<1	1	<1	<1	<1	<1	<1	55	8	25
25	<1	<1	<1	4	<1	<1	<1	<1	<1	8	2	4
26	2	<1	<1	3	1	2	<1	<1	<1	5	1	2
27	1	<1	<1	2	<1	<1	<1	<1	<1	16	1	3
28	<1	<1	<1	1	<1	<1	7	<1	4	113	7	18
29	<1	<1	<1	54	<1	20	14	1	4	251	90	163
30	---	---	---	11	3	5	2	<1	<1	140	24	61
31	4	<1	<1	---	---	---	2	<1	<1	24	9	13
MAX	16	<1	2	54	3	20	194	3	14	251	90	163
MIN	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FEBRUARY			MARCH			APRIL			MAY			
1	10	5	7	3	<1	<1	1	<1	<1	1	<1	<1
2	9	4	6	<1	<1	<1	3	<1	<1	1	<1	<1
3	7	3	3	<1	<1	<1	1	<1	<1	1	<1	<1
4	8	2	3	8	<1	3	4	<1	<1	<1	<1	<1
5	2	1	1	46	<1	1	1	<1	<1	2	<1	<1
6	6	<1	1	26	1	3	2	<1	<1	<1	<1	<1
7	8	2	4	2	<1	<1	<1	<1	<1	1	<1	<1
8	2	<1	1	2	<1	<1	<1	<1	<1	3	<1	<1
9	2	<1	<1	1	<1	<1	4	<1	<1	1	<1	<1
10	1	<1	<1	<1	<1	<1	4	<1	<1	1	<1	<1
11	<1	<1	<1	2	<1	<1	2	<1	<1	2	<1	<1
12	<1	<1	<1	2	<1	<1	2	<1	<1	1	<1	<1
13	<1	<1	<1	4	<1	<1	2	<1	<1	1	<1	<1
14	<1	<1	<1	<1	<1	<1	4	<1	<1	<1	<1	<1
15	4	<1	<1	<1	<1	<1	3	<1	<1	2	<1	<1
16	18	<1	1	---	---	---	2	<1	<1	<1	<1	<1
17	17	3	4	3	<1	<1	1	<1	<1	<1	<1	<1
18	6	3	4	1	<1	<1	2	<1	<1	1	<1	<1
19	6	2	3	1	<1	<1	1	<1	<1	3	<1	<1
20	2	<1	1	<1	<1	<1	7	<1	2	<1	<1	<1
21	1	<1	<1	2	<1	<1	7	2	5	<1	<1	<1
22	1	<1	<1	1	<1	<1	3	<1	2	<1	<1	<1
23	1	<1	<1	2	<1	<1	4	<1	<1	9	<1	2
24	<1	<1	<1	3	<1	<1	2	<1	<1	4	<1	<1
25	<1	<1	<1	<1	<1	<1	2	<1	<1	<1	<1	<1
26	1	<1	<1	1	<1	<1	2	<1	<1	4	<1	<1
27	11	<1	<1	8	<1	2	1	<1	<1	8	<1	3
28	10	<1	3	3	<1	<1	2	<1	<1	12	6	9
29	1	<1	<1	2	<1	<1	4	<1	<1	19	3	6
30	---	---	---	4	<1	<1	<1	<1	<1	6	1	2
31	---	---	---	2	<1	<1	---	---	---	2	<1	1
MAX	18	5	7	46	1	3	7	2	5	19	6	9
MIN	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

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

[illegible]

14183000 NORTH SANTIAM RIVER AT MEHAMA, OR

LOCATION.--Lat 44°47'20", long 122°37'00", in NW ¼ sec.18, T.9 S., R.2 E., Marion County, Hydrologic Unit 17090005, on right bank 300 ft downstream from highway bridge at Mehama, 0.5 mi downstream from Little North Santiam River, and at mile 38.71.

DRAINAGE AREA.--654.3 mi².

PERIOD OF RECORD.--July 1905 to March 1907, October 1910 to September 1914, September 1921 to current year. Monthly discharge only September 1921, published in WSP 1318. Prior to October 1913, published as North Fork of Santiam River at Mehama.

REVISED RECORDS.--WSP 739: 1922-23(M). WSP 1044: 1943. WSP 1248: 1906, 1911-14, 1924(M), 1926, 1934-36(M), 1937, 1938(M), 1942(M). WSP 2135: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 602.49 ft above NGVD of 1929. Prior to June 15, 1933, nonrecording gage at site 100 ft upstream at same datum.

REMARKS.--Records good. Flow regulated since 1953 by Detroit Lake (station 14180500) and Big Cliff Reservoir, usable capacity for reregulating purposes, 2,930 acre-ft. No diversion upstream from station.

AVERAGE DISCHARGE.--36 years (water years 1906, 1911-14, 1922-1952), 3,251 ft³/s, 2,355,000 acre-ft/yr. 52 years (water years 1953-2004), 3,443 ft³/s, 2,494,000 acre-ft/yr, regulated period.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,600 ft³/s Dec. 28, 1945, gage height, 15.37 ft, from rating curve extended above 36,000 ft³/s, on basis of slope-area measurement of peak flow; maximum gage height, 17.5 ft Nov. 20, 1921, from graph based on gage readings, and Jan. 6, 1923, from floodmark, at site then in use; minimum discharge, 254 ft³/s Aug. 3, 1970; minimum daily, 420 ft³/s Sept. 18, 1924.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 17,800 ft³/s Dec. 13, gage height, 8.75 ft; minimum discharge, 929 ft³/s Aug. 13, 14, 19-21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,090	2,220	5,190	3,030	8,920	2,800	3,660	2,080	3,110	1,500	1,080	1,300
2	2,090	2,210	4,790	2,800	8,560	2,570	3,570	2,080	3,170	1,490	1,080	1,430
3	2,090	2,220	5,360	2,630	8,290	2,450	3,480	2,060	2,650	1,480	1,080	1,570
4	2,120	2,210	5,120	2,660	8,050	3,400	3,560	2,020	2,540	1,470	1,090	1,700
5	2,110	2,200	7,410	2,390	7,790	3,890	3,550	1,980	2,410	1,460	1,100	1,740
6	2,120	2,200	8,710	2,360	7,630	3,730	3,370	1,920	2,910	1,450	1,100	1,720
7	2,090	2,190	7,580	3,420	7,420	2,960	2,250	1,910	3,990	1,440	1,110	1,720
8	2,110	2,180	7,290	4,030	6,260	2,820	2,020	1,960	4,470	1,430	1,090	1,710
9	2,180	2,170	6,090	5,280	5,070	2,990	2,000	1,930	4,770	1,450	1,030	1,700
10	2,280	2,180	4,960	6,220	3,920	2,840	2,000	1,900	4,900	1,450	950	1,960
11	2,310	2,400	e5,200	5,820	3,850	2,590	2,010	2,120	4,180	1,440	955	2,040
12	2,650	2,480	e6,800	5,550	3,110	2,550	2,050	2,080	3,780	1,430	952	2,070
13	2,570	2,390	11,700	5,530	2,500	2,470	2,030	2,000	3,360	1,410	953	2,360
14	2,360	2,340	7,530	5,960	2,280	2,340	2,160	1,920	3,190	1,380	955	2,880
15	2,350	2,340	7,890	6,930	2,500	2,280	2,290	1,900	3,110	1,280	959	2,780
16	2,520	2,730	7,380	6,760	2,990	2,260	2,240	1,980	2,660	1,160	958	2,820
17	2,370	4,340	e7,300	5,670	4,030	2,240	2,200	1,980	2,450	1,140	949	3,050
18	2,290	4,230	e7,000	5,470	4,380	2,300	2,220	2,130	2,280	1,150	955	4,160
19	2,270	4,470	6,840	5,850	4,580	2,380	2,270	2,350	2,290	1,150	944	3,830
20	2,230	4,530	6,880	5,570	3,920	2,200	2,700	2,230	2,060	1,150	943	3,530
21	2,240	4,040	6,850	5,190	3,310	2,070	3,450	2,130	1,900	1,140	948	3,050
22	2,220	3,870	6,690	4,970	2,800	2,130	3,100	2,110	1,850	1,140	1,200	2,760
23	2,270	3,700	6,440	6,630	2,500	2,200	2,820	2,700	1,760	1,120	1,300	2,710
24	2,260	3,820	5,430	10,400	2,410	2,240	2,620	2,420	1,680	1,100	1,310	2,640
25	2,170	3,950	4,710	7,700	2,380	2,250	2,430	2,230	1,610	1,100	2,560	2,560
26	2,150	4,150	3,740	8,090	2,380	2,280	2,340	2,220	1,610	1,100	3,130	2,520
27	2,150	4,040	3,030	7,740	2,740	2,680	2,350	3,080	1,580	1,100	2,310	2,470
28	2,160	3,850	3,730	8,410	3,320	2,540	2,300	5,340	1,550	1,090	1,740	2,440
29	2,230	6,900	e4,400	15,000	2,930	2,850	2,160	7,300	1,530	1,090	1,510	2,410
30	2,300	5,910	3,560	9,720	---	3,310	2,090	5,870	1,520	1,080	1,410	2,380
31	2,240	---	3,160	9,060	---	3,430	---	4,020	---	1,090	1,340	---
TOTAL	69,590	98,460	188,760	186,840	130,820	82,040	77,290	79,950	80,870	39,460	38,991	72,010
MEAN	2,245	3,282	6,089	6,027	4,511	2,646	2,576	2,579	2,696	1,273	1,258	2,400
MAX	2,650	6,900	11,700	15,000	8,920	3,890	3,660	7,300	4,900	1,500	3,130	4,160
MIN	2,090	2,170	3,030	2,360	2,280	2,070	2,000	1,900	1,520	1,080	943	1,300
AC-FT	138,000	195,300	374,400	370,600	259,500	162,700	153,300	158,600	160,400	78,270	77,340	142,800

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2004, BY WATER YEAR (WY)

	2,870	5,103	6,211	5,696	4,225	3,337	3,320	3,519	2,547	1,380	1,217	1,931
MEAN	2,870	5,103	6,211	5,696	4,225	3,337	3,320	3,519	2,547	1,380	1,217	1,931
MAX	5,109	9,857	14,300	11,700	12,360	10,890	6,128	5,897	5,521	2,528	1,833	2,800
(WY)	(1960)	(1974)	(1978)	(1953)	(1996)	(1972)	(1993)	(1960)	(1955)	(1983)	(1968)	(1959)
MIN	656	690	1,183	1,212	1,048	1,467	1,624	1,136	956	757	699	916
(WY)	(1953)	(1953)	(1977)	(1977)	(1977)	(1992)	(1973)	(1973)	(1992)	(1992)	(1992)	(2001)

14183000 NORTH SANTIAM RIVER AT MEHAMA, OR—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1953 - 2004	
ANNUAL TOTAL	1,262,365		1,145,081			
ANNUAL MEAN	3,459		3,129		3,443	
HIGHEST ANNUAL MEAN					5,255	1974
LOWEST ANNUAL MEAN					1,743	1977
HIGHEST DAILY MEAN	13,600	Jan 30	15,000	Jan 29	46,700	Feb 7, 1996
LOWEST DAILY MEAN	825	Aug 18	943	Aug 20	626	Oct 28, 1952
ANNUAL SEVEN-DAY MINIMUM	831	Aug 13	951	Aug 15	636	Nov 4, 1952
ANNUAL RUNOFF (AC-FT)	2,504,000		2,271,000		2,494,000	
10 PERCENT EXCEEDS	7,080		6,310		6,940	
50 PERCENT EXCEEDS	2,520		2,380		2,450	
90 PERCENT EXCEEDS	925		1,160		1,150	

e Estimated



2004 Water Year
SANTIAM RIVER BASIN

14183000 NORTH SANTIAM RIVER AT MEHAMA, OR

Latitude: 44° 47' 20"

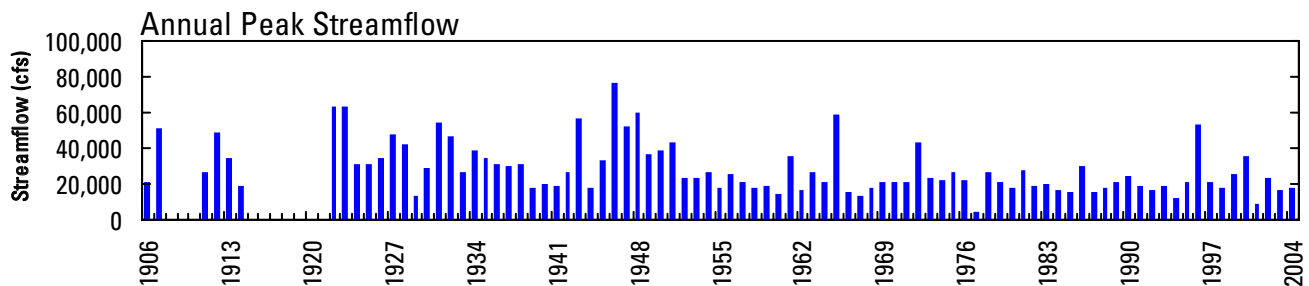
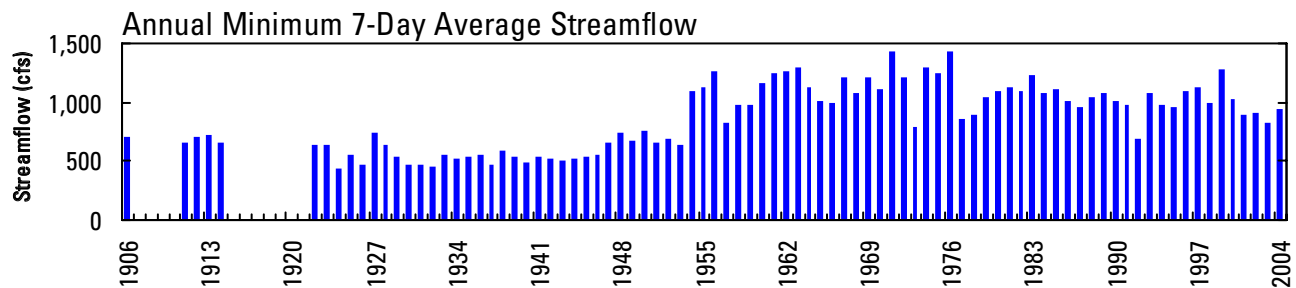
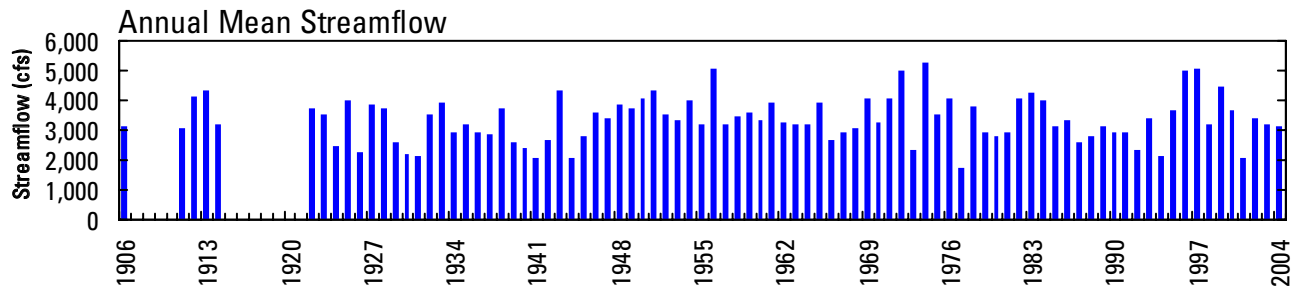
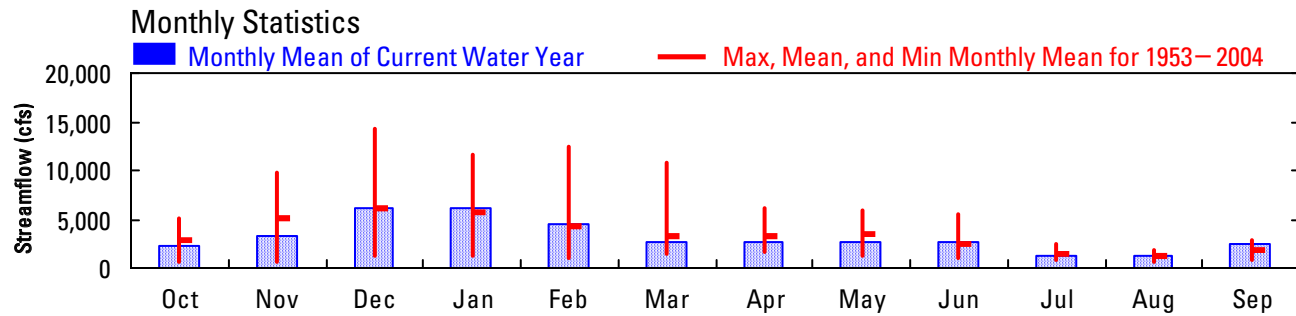
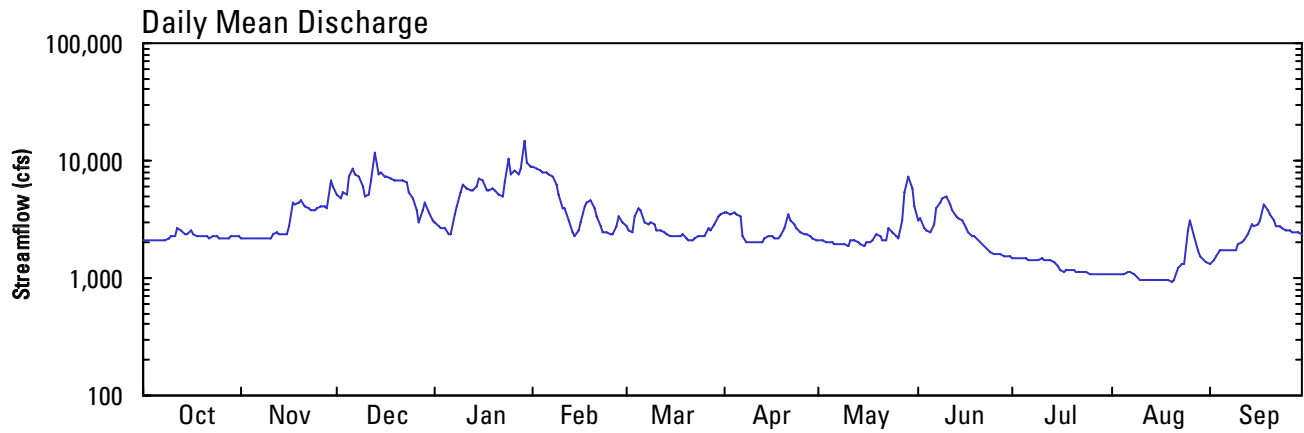
Longitude: 122° 37' 00"

Hydrologic Unit Code: 17090005

Marion County

Datum: 602.49 feet

Drainage Area: 654 square miles



14183000 NORTH SANTIAM RIVER AT MEHAMA, OR—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: April 2000 to current year.

pH: June 2000 to current year.

WATER TEMPERATURE: September 1985 to October 1986, April 2000 to current year.

TURBIDITY: April 2000 to current year.

INSTRUMENTATION.--Water-quality monitor since April 2000.

REMARKS.--

SPECIFIC CONDUCTANCE: Records good.

pH: Records excellent except those for the periods Jan. 12, 13, Mar. 7-24, May 11-18, which are good.

WATER TEMPERATURE: Records good.

TURBIDITY: Records excellent. Turbidity data are highly dependent on the instrumentation used for the measurement. See the "Definitions" section for turbidity in the front of this report.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 52 microsiemens Oct. 22, 2001; minimum, 15 microsiemens Apr. 14, 2002.

pH: Maximum, 8.8 units Sept. 26, 2004; minimum, 6.3 units April 14, 2002.

WATER TEMPERATURE: Maximum, 19.9°C Aug. 10, 2001; minimum, 3.0°C Jan. 6, 2004.

TURBIDITY: Maximum, 296 FNU Apr. 14, 2002; minimum <1 FNU many days each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 44 microsiemens Oct. 28, 29, Nov. 7, 8; minimum, 16 microsiemens Jan. 29.

pH: Maximum, 8.8 units Sept. 26; minimum, 6.9 units Dec. 13, Jan. 29.

WATER TEMPERATURE: Maximum, 17.8°C July 23; minimum, 3.0°C Jan. 6.

TURBIDITY: Maximum, 291 FNU Jan. 29; minimum; <1 FNU many days during year.

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

Date	Time	Instantaneous discharge, cfs (00061)	Suspnd. sediment, sieve diameter percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
DEC					
12...	1508	7,190	60	10	194
13...	1630	17,800	56	343	16,500
13...	1707	17,700	40	452	21,600
14...	1255	6,510	65	20	351
JAN					
29...	1307	17,100	70	292	13,500
29...	1406	16,600	49	355	15,900
30...	1410	8,800	59	70	1,660

14183000 NORTH SANTIAM RIVER AT MEHAMA, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	40	39	39	43	42	42	30	29	30	35	34	35
2	40	39	39	43	42	42	31	30	30	36	35	35
3	39	38	39	43	42	43	30	27	28	36	36	36
4	39	38	39	43	42	43	32	28	30	37	36	36
5	40	39	39	43	43	43	32	26	29	38	37	38
6	40	39	40	43	43	43	28	25	26	38	36	38
7	42	39	40	44	42	42	30	28	29	36	28	32
8	42	41	42	44	42	42	31	30	30	29	28	29
9	43	42	42	43	42	42	32	31	31	28	26	27
10	43	42	42	43	42	43	33	31	32	28	26	26
11	42	41	41	43	39	41	34	32	33	28	28	28
12	42	36	38	41	38	39	34	25	29	28	28	28
13	39	36	37	41	40	41	26	18	22	28	28	28
14	40	38	39	42	41	41	26	21	24	28	25	26
15	40	38	40	42	41	41	30	26	28	25	24	24
16	39	37	38	42	31	39	30	29	30	26	24	24
17	41	38	40	31	26	28	30	29	30	28	26	26
18	42	40	41	29	28	28	31	30	30	28	27	27
19	42	41	41	31	29	30	31	30	31	27	25	26
20	42	42	42	34	30	32	31	29	30	28	25	26
21	43	42	42	36	34	35	30	29	29	29	27	28
22	43	42	43	38	35	36	31	30	30	31	29	30
23	42	42	42	38	37	38	32	31	31	31	21	28
24	42	42	42	38	37	37	32	30	31	23	19	21
25	42	42	42	38	36	37	31	30	30	27	23	25
26	42	42	42	38	36	37	32	30	31	29	27	28
27	43	42	42	38	36	37	34	32	33	29	24	28
28	43	43	43	39	37	38	33	30	31	24	20	22
29	44	42	43	37	23	27	32	30	31	20	16	17
30	43	43	43	29	26	28	34	32	33	22	18	20
31	43	42	42	---	---	---	35	34	34	26	22	24
MONTH	44	36	41	44	23	38	35	18	30	38	16	28
	FEBRUARY			MARCH			APRIL			MAY		
1	28	26	28	32	31	31	33	31	32	34	34	34
2	29	28	28	32	31	31	34	32	32	34	34	34
3	30	28	29	32	31	31	34	32	33	35	34	34
4	30	29	30	33	26	29	33	33	33	35	34	34
5	30	30	30	30	24	27	33	32	33	35	35	35
6	31	30	30	28	23	25	34	32	33	36	35	35
7	30	28	28	29	27	28	34	33	34	36	35	35
8	30	29	29	29	28	29	35	34	34	36	35	35
9	31	30	31	28	26	27	34	34	34	36	35	36
10	33	31	32	28	26	27	35	34	34	36	36	36
11	32	31	31	30	28	29	37	34	34	36	34	35
12	33	31	33	30	28	29	34	34	34	34	34	34
13	34	33	34	30	29	29	34	33	33	35	34	34
14	34	33	34	31	30	30	33	33	33	35	35	35
15	34	32	32	31	30	30	33	33	33	36	35	35
16	32	24	30	31	30	31	34	33	33	36	35	35
17	26	24	25	31	30	30	34	32	33	36	34	35
18	25	24	25	31	30	30	33	33	33	36	35	35
19	26	24	25	31	30	30	34	33	33	35	33	34
20	28	26	27	32	30	31	38	31	36	36	34	34
21	30	28	30	32	31	31	31	26	28	35	35	35
22	31	30	31	32	30	31	31	28	29	35	35	35
23	32	31	31	30	30	30	35	30	32	35	29	31
24	32	32	32	32	29	31	36	31	33	34	31	32
25	32	32	32	32	32	32	37	31	34	34	33	34
26	32	32	32	32	32	32	31	30	30	35	34	34
27	32	27	30	32	29	30	34	30	32	34	26	30
28	29	27	28	32	30	31	33	32	33	26	22	24
29	31	29	30	33	31	32	34	33	33	24	21	22
30	---	---	---	33	30	31	34	34	34	26	24	25
31	---	---	---	33	30	31	---	---	---	31	26	29
MONTH	34	24	30	33	23	30	38	26	33	36	21	33

WILLAMETTE RIVER BASIN

14183000 NORTH SANTIAM RIVER AT MEHAMA, OR—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	8.7	7.4	7.5	8.2	7.5	7.6	7.4	7.2	7.3	7.3	7.2	7.2
2	8.6	7.4	7.5	8.0	7.5	7.6	7.4	7.2	7.3	7.4	7.2	7.3
3	8.6	7.4	7.6	8.1	7.5	7.6	7.3	7.2	7.2	7.4	7.2	7.3
4	8.4	7.4	7.5	8.2	7.5	7.6	7.4	7.2	7.3	7.4	7.2	7.3
5	8.5	7.4	7.5	8.2	7.5	7.6	7.4	7.2	7.3	7.5	7.2	7.3
6	8.6	7.5	7.5	8.1	7.5	7.6	7.3	7.2	7.2	7.4	7.2	7.3
7	8.6	7.4	7.5	8.2	7.5	7.6	7.3	7.2	7.3	7.2	7.1	7.2
8	8.4	7.5	7.5	8.1	7.5	7.6	7.4	7.3	7.3	7.2	7.1	7.1
9	8.2	7.5	7.6	8.1	7.5	7.6	7.4	7.3	7.3	7.2	7.1	7.1
10	8.4	7.5	7.6	7.9	7.5	7.6	7.4	7.3	7.3	7.2	7.1	7.1
11	7.9	7.5	7.5	8.0	7.5	7.5	7.5	7.3	7.3	7.2	7.1	7.1
12	8.0	7.4	7.5	7.9	7.5	7.5	7.3	7.2	7.3	7.2	7.1	7.1
13	8.2	7.4	7.5	8.0	7.5	7.5	7.2	6.9	7.0	7.4	7.1	7.2
14	8.4	7.4	7.5	8.1	7.5	7.5	7.1	7.0	7.0	7.3	7.2	7.3
15	8.1	7.5	7.5	8.0	7.5	7.6	7.2	7.1	7.2	7.2	7.2	7.2
16	8.2	7.5	7.5	7.7	7.4	7.5	7.2	7.2	7.2	7.3	7.2	7.2
17	8.2	7.5	7.5	7.4	7.3	7.3	7.3	7.2	7.2	7.4	7.2	7.3
18	8.3	7.4	7.6	7.4	7.3	7.3	7.3	7.2	7.2	7.4	7.2	7.3
19	8.3	7.5	7.5	7.4	7.3	7.3	7.3	7.2	7.3	7.3	7.2	7.2
20	8.2	7.5	7.6	7.5	7.3	7.4	7.3	7.2	7.3	7.3	7.2	7.3
21	8.4	7.4	7.5	7.5	7.4	7.4	7.3	7.2	7.2	7.4	7.2	7.3
22	8.2	7.4	7.5	7.6	7.4	7.4	7.3	7.2	7.3	7.4	7.3	7.3
23	8.2	7.5	7.6	7.7	7.4	7.5	7.4	7.3	7.3	7.3	7.1	7.3
24	8.2	7.5	7.6	7.7	7.4	7.5	7.4	7.3	7.3	7.1	7.0	7.1
25	8.2	7.5	7.6	7.5	7.4	7.4	7.3	7.2	7.3	7.2	7.1	7.2
26	8.2	7.5	7.5	7.6	7.4	7.4	7.4	7.2	7.3	7.3	7.2	7.3
27	8.2	7.5	7.5	7.6	7.4	7.4	7.4	7.2	7.3	7.3	7.2	7.3
28	8.0	7.5	7.6	7.6	7.4	7.4	7.2	7.2	7.2	7.2	7.0	7.1
29	8.2	7.5	7.6	7.4	7.0	7.1	7.2	7.2	7.2	7.0	6.9	7.0
30	8.1	7.5	7.6	7.3	7.1	7.2	7.3	7.2	7.2	7.1	7.0	7.1
31	8.1	7.5	7.6	---	---	---	7.3	7.2	7.2	7.2	7.1	7.2
MAX	8.7	7.5	7.6	8.2	7.5	7.6	7.5	7.3	7.3	7.5	7.3	7.3
MIN	7.9	7.4	7.5	7.3	7.0	7.1	7.1	6.9	7.0	7.0	6.9	7.0
FEBRUARY			MARCH			APRIL			MAY			
1	7.3	7.2	7.2	7.6	7.3	7.4	7.7	7.4	7.5	8.1	7.4	7.5
2	7.3	7.2	7.3	7.6	7.3	7.4	7.7	7.4	7.5	8.0	7.4	7.5
3	7.3	7.2	7.3	7.6	7.3	7.4	7.7	7.4	7.5	8.0	7.3	7.5
4	7.3	7.2	7.3	7.5	7.3	7.4	7.7	7.4	7.5	7.9	7.4	7.5
5	7.3	7.2	7.3	7.5	7.2	7.3	7.7	7.4	7.5	8.0	7.4	7.6
6	7.3	7.3	7.3	7.5	7.2	7.3	7.7	7.4	7.5	8.0	7.4	7.5
7	7.3	7.2	7.3	7.6	7.3	7.3	7.8	7.4	7.5	7.8	7.4	7.5
8	7.3	7.2	7.3	7.6	7.3	7.4	7.8	7.3	7.5	7.9	7.4	7.5
9	7.4	7.2	7.3	7.5	7.3	7.3	7.8	7.4	7.5	7.9	7.4	7.5
10	7.4	7.3	7.3	7.6	7.3	7.4	7.8	7.4	7.5	7.8	7.3	7.5
11	7.4	7.2	7.3	7.7	7.3	7.4	7.8	7.4	7.5	7.8	7.4	7.5
12	7.5	7.3	7.3	7.7	7.3	7.4	7.8	7.4	7.5	7.8	7.3	7.5
13	7.5	7.3	7.3	7.8	7.3	7.4	7.8	7.4	7.5	7.8	7.3	7.5
14	7.5	7.3	7.4	7.8	7.3	7.4	7.8	7.4	7.5	7.9	7.3	7.5
15	7.5	7.3	7.3	7.8	7.3	7.4	7.8	7.4	7.5	7.7	7.3	7.4
16	7.4	7.2	7.3	7.8	7.3	7.5	7.8	7.4	7.5	7.9	7.3	7.5
17	7.3	7.2	7.2	7.8	7.4	7.5	7.8	7.4	7.5	7.8	7.3	7.4
18	7.3	7.2	7.2	7.7	7.4	7.5	7.8	7.4	7.5	7.7	7.3	7.4
19	7.3	7.1	7.2	7.8	7.4	7.5	7.8	7.4	7.5	8.0	7.4	7.5
20	7.3	7.2	7.2	7.8	7.4	7.5	7.7	7.3	7.4	8.0	7.4	7.5
21	7.4	7.2	7.3	7.8	7.4	7.5	7.5	7.3	7.3	7.9	7.4	7.5
22	7.5	7.2	7.3	7.8	7.3	7.5	7.7	7.3	7.4	7.9	7.4	7.5
23	7.5	7.3	7.3	7.8	7.4	7.5	7.7	7.3	7.5	7.7	7.4	7.5
24	7.5	7.3	7.3	7.8	7.4	7.5	7.8	7.3	7.5	7.9	7.3	7.5
25	7.5	7.3	7.4	7.8	7.4	7.5	7.8	7.3	7.5	7.9	7.4	7.5
26	7.5	7.3	7.4	7.8	7.4	7.5	7.9	7.3	7.5	7.7	7.4	7.5
27	7.6	7.3	7.4	7.7	7.4	7.5	8.0	7.3	7.5	7.6	7.3	7.4
28	7.5	7.2	7.3	7.7	7.4	7.5	8.0	7.4	7.6	7.4	7.2	7.3
29	7.6	7.3	7.3	7.8	7.4	7.5	8.0	7.4	7.6	7.3	7.1	7.2
30	---	---	---	7.6	7.4	7.4	8.0	7.4	7.6	7.5	7.2	7.3
31	---	---	---	7.7	7.4	7.5	---	---	---	7.6	7.2	7.3
MAX	7.6	7.3	7.4	7.8	7.4	7.5	8.0	7.4	7.6	8.1	7.4	7.6
MIN	7.3	7.1	7.2	7.5	7.2	7.3	7.5	7.3	7.3	7.3	7.1	7.2

14183000 NORTH SANTIAM RIVER AT MEHAMA, OR—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.7	7.3	7.4	7.9	7.4	7.5	8.0	7.3	7.5	8.1	7.2	7.4
2	7.8	7.3	7.4	8.0	7.4	7.6	8.0	7.3	7.5	8.2	7.3	7.5
3	7.9	7.3	7.5	8.0	7.4	7.5	8.0	7.3	7.5	8.4	7.4	7.5
4	7.9	7.3	7.5	7.9	7.3	7.6	7.9	7.3	7.5	8.3	7.3	7.5
5	7.9	7.3	7.5	7.9	7.2	7.4	8.0	7.3	7.5	8.2	7.3	7.5
6	7.8	7.3	7.4	7.9	7.2	7.5	7.8	7.3	7.4	8.2	7.3	7.5
7	7.6	7.2	7.3	7.9	7.3	7.5	7.9	7.3	7.5	8.2	7.3	7.5
8	7.5	7.2	7.3	7.9	7.3	7.5	7.9	7.3	7.5	8.2	7.3	7.5
9	7.5	7.2	7.3	7.9	7.3	7.5	7.9	7.3	7.5	8.3	7.3	7.5
10	7.5	7.2	7.3	7.9	7.3	7.5	8.0	7.3	7.4	8.3	7.3	7.4
11	7.6	7.2	7.4	7.9	7.3	7.5	8.0	7.3	7.5	8.2	7.3	7.4
12	7.7	7.2	7.3	7.9	7.3	7.5	8.1	7.3	7.5	8.3	7.3	7.4
13	7.7	7.2	7.4	7.9	7.3	7.5	8.0	7.3	7.5	8.3	7.2	7.3
14	7.9	7.2	7.5	7.9	7.3	7.5	8.1	7.3	7.5	8.0	7.1	7.3
15	7.8	7.2	7.5	8.0	7.3	7.5	8.0	7.3	7.5	8.0	7.2	7.3
16	7.9	7.3	7.5	8.0	7.3	7.5	8.0	7.3	7.5	8.1	7.1	7.3
17	7.9	7.3	7.5	8.0	7.3	7.5	7.9	7.3	7.5	7.8	7.1	7.2
18	8.0	7.3	7.5	8.0	7.3	7.5	7.9	7.3	7.4	7.3	7.0	7.1
19	7.9	7.3	7.5	8.0	7.3	7.5	7.9	7.3	7.4	7.5	7.1	7.1
20	7.9	7.3	7.5	8.0	7.3	7.5	8.0	7.3	7.5	7.7	7.1	7.2
21	7.9	7.3	7.5	8.0	7.2	7.4	8.1	7.3	7.5	8.2	7.1	7.4
22	7.9	7.4	7.5	7.9	7.2	7.5	7.8	7.3	7.4	8.5	7.4	7.5
23	7.9	7.4	7.5	8.0	7.3	7.5	7.9	7.3	7.5	8.6	7.4	7.5
24	8.0	7.4	7.6	8.0	7.2	7.5	8.0	7.3	7.4	8.6	7.4	7.6
25	8.0	7.4	7.6	8.0	7.3	7.5	7.4	7.1	7.3	8.6	7.4	7.5
26	7.9	7.3	7.6	8.0	7.3	7.5	7.3	7.1	7.2	8.8	7.5	7.6
27	7.9	7.4	7.5	8.0	7.3	7.5	7.7	7.1	7.3	8.7	7.4	7.6
28	7.9	7.4	7.6	8.0	7.3	7.5	7.9	7.2	7.5	8.7	7.4	7.6
29	7.9	7.3	7.5	8.0	7.3	7.5	8.0	7.2	7.3	8.5	7.4	7.5
30	7.9	7.3	7.5	8.0	7.3	7.5	8.1	7.2	7.3	8.7	7.5	7.6
31	---	---	---	8.0	7.3	7.5	8.2	7.2	7.4	---	---	---
MAX	8.0	7.4	7.6	8.0	7.4	7.6	8.2	7.3	7.5	8.8	7.5	7.6
MIN	7.5	7.2	7.3	7.9	7.2	7.4	7.3	7.1	7.2	7.3	7.0	7.1

14183000 NORTH SANTIAM RIVER AT MEHAMA, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	14.6	12.6	13.4	11.8	10.7	11.2	8.0	7.5	7.7	5.3	4.3	4.8
2	14.4	12.8	13.4	11.9	11.1	11.5	8.0	7.6	7.8	5.1	4.4	4.8
3	15.0	13.2	13.9	11.5	10.4	10.9	8.0	6.6	7.3	5.1	4.8	4.9
4	13.9	13.0	13.4	11.7	10.5	11.1	7.9	6.5	7.1	4.8	4.0	4.3
5	14.6	13.3	13.9	11.5	10.3	10.9	8.0	7.6	7.8	4.3	3.4	3.8
6	15.0	13.4	14.1	11.7	10.6	11.2	7.6	6.8	7.2	3.4	3.0	3.1
7	14.8	13.3	14.0	11.9	11.2	11.5	6.9	6.6	6.8	4.3	3.3	3.9
8	14.2	13.1	13.6	11.6	11.0	11.3	7.2	6.7	6.9	5.3	4.3	4.9
9	13.9	13.1	13.4	11.7	11.0	11.4	7.2	6.6	6.9	5.8	5.2	5.4
10	14.1	12.6	13.3	11.8	11.2	11.4	7.3	6.9	7.1	5.9	5.5	5.6
11	13.1	12.5	12.8	11.4	9.9	10.9	7.3	7.0	7.2	5.8	5.1	5.4
12	13.0	11.7	12.4	10.6	9.5	10	7.3	7.1	7.2	5.7	5.0	5.4
13	13.3	11.6	12.4	10.6	9.3	9.9	7.3	5.7	6.9	6.0	5.5	5.7
14	13.9	12.8	13.2	11.0	9.9	10.6	6.2	5.7	6.0	6.1	5.7	5.9
15	13.3	12.1	12.8	10.9	10.2	10.5	6.6	6.1	6.3	6.1	5.7	5.9
16	13.4	11.9	12.6	10.3	8.2	9.7	6.5	6.1	6.3	6.1	5.4	5.8
17	14.8	12.8	13.7	8.6	7.9	8.2	6.8	6.2	6.6	5.9	5.2	5.6
18	14.4	12.9	13.5	9.1	8.6	8.8	6.6	6.1	6.4	6.2	5.7	5.9
19	14.4	13.2	13.8	9.2	6.9	8.3	6.8	6.1	6.5	6.3	5.8	6.0
20	15.1	13.7	14.4	7.3	6.8	7.1	7.1	6.8	6.9	5.9	5.0	5.4
21	15.7	14.1	14.7	7.7	7.0	7.3	7.2	6.6	7.0	5.3	4.6	5.0
22	15.1	14.0	14.5	7.4	6.9	7.2	6.6	6.1	6.4	5.2	4.3	4.8
23	14.4	12.9	13.8	7.9	7.0	7.5	6.7	6.1	6.4	6.2	5.1	5.7
24	13.9	12.4	13.1	7.9	7.2	7.6	6.9	6.5	6.8	6.2	5.0	5.7
25	14.0	12.5	13.2	7.4	6.6	7.1	6.5	5.4	6.1	5.5	4.8	5.2
26	14.4	12.8	13.5	7.4	6.7	7.1	5.8	5.3	5.5	5.7	5.2	5.4
27	14.6	13.0	13.7	7.7	6.7	7.2	5.6	5.1	5.4	6.2	5.5	5.8
28	14.4	13.7	14.1	8.1	7.6	7.8	5.4	5.0	5.2	6.3	5.8	6.0
29	13.7	12.1	13.0	7.9	6.5	7.0	5.5	5.0	5.3	6.4	6.0	6.2
30	12.2	11.1	11.8	7.6	6.8	7.2	5.1	4.5	4.8	6.4	5.4	5.8
31	11.6	10.6	11.1	---	---	---	5.4	4.8	5.1	5.8	5.3	5.5
MONTH	15.7	10.6	13.4	11.9	6.5	9.3	8.0	4.5	6.5	6.4	3.0	5.3
FEBRUARY			MARCH			APRIL			MAY			
1	5.8	5.0	5.4	7.1	5.9	6.5	7.6	5.2	6.3	12.1	8.1	10.0
2	6.2	5.6	5.8	7.1	5.2	6.2	8.6	5.7	7.0	12.9	8.1	10.4
3	5.9	5.3	5.6	6.0	5.0	5.4	10.0	6.9	8.2	13.0	8.7	10.7
4	6.1	5.5	5.8	6.2	5.5	5.8	9.3	7.2	8.2	10.5	8.8	9.5
5	5.7	4.9	5.3	6.2	5.6	5.9	7.7	6.8	7.3	10.8	8.3	9.5
6	5.8	5.4	5.6	6.7	5.3	6.0	8.2	6.9	7.4	11.0	7.8	9.4
7	5.8	5.4	5.6	8.3	6.3	7.1	9.1	6.9	7.8	10.0	8.4	9.3
8	5.9	5.3	5.5	8.6	6.2	7.3	10.3	6.5	8.3	10.6	8.1	9.2
9	5.4	4.7	5.1	7.8	6.7	7.1	10.8	6.5	8.5	11.8	8.0	9.6
10	5.7	4.4	5.0	7.8	5.9	6.8	11.0	7.0	8.9	9.3	8.0	8.6
11	6.1	4.6	5.3	8.2	5.6	6.9	11.3	7.5	9.3	9.7	7.9	8.6
12	5.7	4.5	5.1	8.1	5.9	7.0	9.8	7.4	8.5	10.5	7.9	8.9
13	5.2	4.2	4.8	8.2	5.8	7.0	9.4	7.4	8.3	12.1	7.4	9.6
14	6.4	5.2	5.7	8.8	6.5	7.5	8.9	7.3	7.9	12.6	8.1	10.2
15	6.3	5.4	5.9	8.6	6.0	7.2	8.1	6.8	7.4	10.3	8.6	9.0
16	6.2	5.6	5.9	8.4	5.6	7.0	8.9	6.7	7.7	12.2	8.4	9.7
17	6.4	5.6	6.0	8.6	5.6	7.0	8.7	6.9	7.8	12.2	7.9	9.8
18	6.6	6.1	6.3	7.2	6.2	6.7	8.8	7.0	7.8	9.5	8.6	8.9
19	6.4	5.5	6.0	7.3	5.8	6.4	8.3	6.9	7.6	11.7	8.4	9.7
20	6.2	4.8	5.5	8.1	5.0	6.5	7.7	6.9	7.3	12.8	8.1	10.2
21	6.5	5.1	5.8	8.8	6.1	7.5	8.0	6.4	7.1	10.3	8.9	9.4
22	6.8	5.6	6.2	9.8	6.7	8.2	10.4	6.5	8.2	9.9	8.5	9.1
23	7.3	6.1	6.6	9.6	7.4	8.4	8.9	7.3	8.0	10.0	8.5	9.1
24	6.8	5.8	6.3	8.0	6.9	7.4	10.3	6.7	8.4	12.2	7.7	9.8
25	6.6	5.5	6.0	6.9	6.2	6.6	11.5	6.8	9.1	13.0	8.2	10.5
26	6.3	5.8	6.1	7.0	5.9	6.5	12.5	8.0	10.2	10.9	9.1	9.6
27	6.5	5.9	6.1	7.4	6.3	6.7	12.3	8.5	10.3	9.7	9.2	9.5
28	6.7	5.6	6.1	8.8	5.5	7.1	11.2	7.7	9.3	9.2	8.0	8.7
29	6.5	5.8	6.2	9.5	6.3	7.8	12.0	7.4	9.6	8.4	7.7	8.1
30	---	---	---	8.0	6.6	7.5	12.7	8.2	10.3	9.5	8.1	8.7
31	---	---	---	7.7	5.8	6.6	---	---	---	10.9	8.4	9.5
MONTH	7.3	4.2	5.7	9.8	5.0	6.9	12.7	5.2	8.3	13.0	7.4	9.4

14183000 NORTH SANTIAM RIVER AT MEHAMA, OR—Continued

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/- 2.5 DEGREES, FNU
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	1	<1	<1	1	<1	<1	3	1	2	3	2	2
2	4	<1	<1	1	<1	<1	2	<1	1	2	2	2
3	2	<1	<1	2	<1	<1	6	<1	2	3	2	2
4	<1	<1	<1	2	<1	<1	2	1	2	3	2	2
5	1	<1	<1	2	<1	<1	6	1	4	3	2	2
6	3	<1	<1	1	<1	<1	10	2	4	3	2	2
7	<1	<1	<1	1	<1	<1	5	2	3	---	---	---
8	<1	<1	<1	1	<1	<1	4	2	2	---	---	---
9	<1	<1	<1	1	<1	<1	2	1	2	---	---	---
10	2	<1	<1	2	<1	<1	2	<1	1	---	---	---
11	<1	<1	<1	2	<1	<1	1	<1	1	---	---	---
12	8	<1	1	1	<1	<1	8	<1	4	---	---	---
13	2	<1	<1	2	<1	<1	200	3	67	---	---	---
14	<1	<1	<1	<1	<1	<1	62	9	20	12	2	2
15	1	<1	<1	1	<1	<1	10	4	6	14	5	7
16	4	<1	<1	21	<1	<1	5	4	4	9	2	4
17	2	<1	<1	21	2	11	8	3	4	3	1	2
18	<1	<1	<1	5	2	2	4	2	3	3	1	2
19	1	<1	<1	4	1	2	4	3	3	3	2	2
20	<1	<1	<1	2	<1	1	4	3	3	2	<1	1
21	1	<1	<1	1	<1	<1	4	3	3	2	<1	1
22	2	<1	<1	2	<1	<1	4	3	3	2	<1	<1
23	2	<1	<1	5	<1	<1	4	3	3	49	<1	4
24	1	<1	<1	1	<1	<1	5	2	3	54	11	28
25	2	<1	<1	3	<1	<1	3	2	3	11	4	6
26	<1	<1	<1	2	1	2	3	2	2	5	2	3
27	<1	<1	<1	2	<1	1	3	2	2	16	2	3
28	1	<1	<1	2	<1	<1	7	3	5	113	8	18
29	1	<1	<1	56	<1	18	14	3	6	291	95	172
30	1	<1	<1	10	2	4	4	2	3	137	28	68
31	<1	<1	<1	---	---	---	3	2	2	28	11	16
MAX	8	<1	1	56	2	18	200	9	67	---	---	---
MIN	<1	<1	<1	<1	<1	<1	1	<1	1	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	14	6	9	3	1	2	1	<1	<1	<1	<1	<1
2	9	5	7	2	1	1	1	<1	<1	<1	<1	<1
3	8	4	4	2	1	1	1	<1	<1	<1	<1	<1
4	10	4	4	8	1	4	2	<1	<1	<1	<1	<1
5	4	3	4	38	2	2	1	<1	<1	<1	<1	<1
6	6	3	4	30	2	4	1	<1	<1	<1	<1	<1
7	6	4	5	4	1	2	1	<1	<1	1	<1	<1
8	4	3	4	2	<1	1	<1	<1	<1	1	<1	<1
9	4	2	3	2	1	1	1	<1	<1	<1	<1	<1
10	4	2	3	2	<1	<1	<1	<1	<1	1	<1	<1
11	4	2	2	2	<1	<1	<1	<1	<1	1	<1	<1
12	3	2	2	1	<1	<1	1	<1	<1	<1	<1	<1
13	4	2	2	2	<1	<1	2	<1	<1	<1	<1	<1
14	4	2	2	2	<1	<1	3	<1	<1	---	---	---
15	6	2	3	1	<1	<1	2	<1	<1	---	---	---
16	18	2	3	2	<1	<1	2	<1	<1	---	---	---
17	17	4	6	1	<1	<1	<1	<1	<1	<1	<1	<1
18	9	4	5	2	<1	<1	1	<1	<1	3	<1	<1
19	7	3	4	2	<1	<1	1	<1	<1	2	<1	<1
20	4	2	2	1	<1	<1	5	<1	2	2	<1	<1
21	2	2	2	3	<1	<1	6	3	4	2	<1	<1
22	3	1	2	<1	<1	<1	3	<1	2	2	<1	<1
23	2	1	2	<1	<1	<1	2	<1	<1	5	<1	1
24	2	1	2	1	<1	<1	2	<1	<1	2	<1	<1
25	4	1	1	1	<1	<1	3	<1	<1	3	<1	<1
26	2	1	1	2	<1	<1	1	<1	<1	2	<1	<1
27	11	1	2	5	<1	1	1	<1	<1	6	<1	2
28	11	2	4	2	<1	<1	2	<1	<1	13	5	8
29	3	2	2	2	<1	<1	<1	<1	<1	16	3	7
30	---	---	---	2	<1	<1	1	<1	<1	3	1	2
31	---	---	---	2	<1	<1	---	---	---	3	<1	<1
MAX	18	6	9	38	2	4	6	3	4	---	---	---
MIN	2	1	1	<1	<1	<1	<1	<1	<1	---	---	---

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

[illegible]

444728122450000 NORTH SANTIAM RIVER AT GEREN ISLAND WATER TREATMENT PLANT, NEAR STAYTON, OR

LOCATION.--Lat 44°47'28", long 122°45'00", Marion County, Hydrologic Unit 17090005, at the water treatment plant water intake, on Geren Island which is located approximately 5 mi east of Stayton and at mile 30.5.

DRAINAGE AREA.--667.01 mi².

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 2001 to current year.

pH: March 2001 to current year.

WATER TEMPERATURE: March 2001 to current year.

DISSOLVED OXYGEN: May 2003 to current year.

TURBIDITY: March 2001 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Records for the period March to September 2001, may be found in the files of the Portland field office.

SPECIFIC CONDUCTANCE: Records excellent.

pH: Records good.

WATER TEMPERATURE: Records excellent.

DISSOLVED OXYGEN: Records poor.

TURBIDITY: Records excellent. Turbidity data are highly dependent on the instrumentation used for the measurement. See the "Definitions" section for turbidity in the front of this report.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 51 microsiemens Sept. 21, 2001; minimum, 12 microsiemens Jan. 30 to Feb. 1, 2003, but may have been lower during period of missing record.

pH: Maximum, 9.3 units Sept. 1, 3, 2004; minimum, 6.9 units May 22-24, 26, 27, 2003, Jan. 24, 2004.

WATER TEMPERATURE: Maximum, 20.4°C Aug. 7, 10, 12, 2001; minimum, 3.4°C Mar. 2, 2002.

DISSOLVED OXYGEN: Maximum 15.8 mg/L Mar. 6, 2004 but may have been higher during period of missing record; minimum, 4.5 mg/L Sept. 22, 2004, but may have been lower during period of missing record.

TURBIDITY: Maximum, 154 FNU Jan. 29, 2004; minimum, <1 FNU many days each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 44 microsiemens on many days; minimum, 21 microsiemens Jan. 29, but may have been lower during period of missing record.

pH: Maximum, 9.3 units Sept. 1, 3; minimum, 6.9 units Jan. 29.

WATER TEMPERATURE: Maximum, 18.9°C July 23; minimum, 3.8°C Jan. 5.

DISSOLVED OXYGEN: Maximum, 15.8 mg/L Mar. 6, but may have been higher during periods of missing record; minimum, 4.5 mg/L Sept. 22, but may have been lower during periods of missing record.

TURBIDITY: Maximum, 154 FNU Jan. 29; minimum, <1 FNU many days during year.

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	34	33	34	43	42	43	36	35	36	36	36	36
2	34	33	33	43	42	42	36	36	36	37	36	37
3	---	---	---	43	42	43	36	33	34	37	37	37
4	---	---	---	43	42	43	37	34	36	38	37	37
5	---	---	---	43	43	43	37	34	36	---	---	---
6	---	---	---	43	43	43	---	---	---	---	---	---
7	---	---	---	44	43	43	---	---	---	---	---	---
8	42	41	41	43	43	43	---	---	---	---	---	---
9	42	42	42	44	43	43	---	---	---	---	---	---
10	43	42	42	43	43	43	37	37	37	---	---	---
11	42	41	41	43	42	43	37	37	37	---	---	---
12	41	39	40	42	41	41	37	32	35	---	---	---
13	41	39	39	43	42	42	32	25	29	---	---	---
14	41	40	41	43	42	42	32	25	28	---	---	---
15	42	41	41	43	42	43	39	32	35	---	---	---
16	42	40	40	43	39	42	37	36	36	31	30	30
17	42	41	41	39	33	34	37	34	36	33	31	32
18	43	42	42	36	35	35	35	34	35	33	33	33
19	43	42	42	38	35	37	35	35	35	33	31	32
20	43	43	43	40	38	39	35	34	35	33	31	32
21	43	43	43	42	40	40	34	34	34	34	33	33
22	44	43	43	41	41	41	35	34	34	35	34	34
23	44	43	43	42	41	41	35	35	35	35	29	33
24	44	43	44	41	41	41	35	34	34	29	26	27
25	44	43	43	41	41	41	34	34	34	33	28	30
26	43	43	43	41	40	41	35	34	35	35	33	34
27	44	43	43	42	40	40	35	35	35	35	32	34
28	44	43	44	42	40	41	35	33	34	32	26	28
29	44	43	43	40	29	33	35	33	33	26	21	23
30	44	43	43	35	31	33	36	35	35	36	23	29
31	44	43	43	---	---	---	36	36	36	33	26	30
MONTH	---	---	---	44	29	41	---	---	---	---	---	---

444728122450000--NORTH SANTIAM RIVER AT GEREN ISLAND WATER TREATMENT PLANT, NEAR STAYTON, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	35	33	34	34	32	33	34	34	34	35	35	35
2	35	33	34	34	33	34	37	34	35	35	34	35
3	---	---	---	34	33	34	36	34	35	35	34	35
4	---	---	---	34	31	32	35	35	35	35	34	35
5	---	---	---	32	31	32	35	35	35	35	35	35
6	---	---	---	31	29	30	35	34	35	35	35	35
7	---	---	---	33	31	32	35	35	35	36	35	35
8	---	---	---	33	32	32	35	35	35	35	35	35
9	---	---	---	32	31	31	35	35	35	36	35	36
10	---	---	---	31	30	31	36	35	35	36	35	36
11	---	---	---	32	31	32	35	35	35	36	35	35
12	---	---	---	33	32	32	35	34	35	35	34	34
13	---	---	---	33	32	33	35	34	34	35	34	34
14	---	---	---	34	33	33	34	33	34	35	35	35
15	---	---	---	34	33	33	34	33	33	36	35	35
16	---	---	---	34	33	34	---	---	---	36	35	35
17	---	---	---	34	33	34	34	33	34	36	34	35
18	---	---	---	34	33	34	34	33	34	36	34	36
19	---	---	---	34	33	34	34	34	34	36	33	34
20	---	---	---	34	34	34	34	34	34	34	33	34
21	---	---	---	35	34	35	35	31	33	35	34	35
22	---	---	---	35	34	34	33	30	32	35	35	35
23	---	---	---	34	34	34	33	31	32	35	30	32
24	---	---	---	34	33	33	34	32	33	33	30	32
25	33	32	32	34	33	33	34	33	34	35	33	34
26	33	33	33	34	33	33	35	33	34	35	34	34
27	33	31	32	33	30	32	35	34	35	34	31	32
28	32	31	31	33	31	31	38	34	34	31	29	30
29	32	32	32	34	33	33	---	---	---	32	30	31
30	---	---	---	35	33	34	35	34	35	34	32	33
31	---	---	---	34	34	34	---	---	---	34	33	34
MONTH	---	---	---	35	29	33	---	---	---	36	29	34
	JUNE			JULY			AUGUST			SEPTEMBER		
1	34	34	34	38	37	38	38	37	37	37	36	37
2	34	34	34	38	37	37	38	37	37	37	36	37
3	35	34	34	38	37	37	38	37	38	37	37	37
4	35	34	35	38	37	37	38	37	37	37	37	37
5	35	34	35	38	37	37	37	36	37	38	37	37
6	35	33	34	38	37	37	37	36	36	38	37	37
7	34	32	32	38	37	37	37	36	36	37	36	37
8	32	32	32	38	37	38	37	36	36	37	36	37
9	---	---	---	38	37	37	37	36	36	37	36	37
10	33	32	32	38	37	37	39	36	38	37	36	37
11	33	31	32	38	37	37	39	39	39	37	36	37
12	33	32	33	38	37	37	39	39	39	37	36	37
13	34	33	33	38	37	38	39	39	39	37	34	36
14	34	33	33	38	37	38	39	39	39	34	32	32
15	35	33	34	39	38	38	39	39	39	34	33	33
16	35	34	34	39	38	39	39	39	39	34	32	33
17	35	34	35	39	38	39	39	39	39	34	32	33
18	35	35	35	39	38	38	39	39	39	32	30	30
19	36	35	35	38	37	38	39	38	38	32	30	31
20	36	35	36	38	37	38	38	38	38	33	31	32
21	36	35	36	38	37	38	38	38	38	34	32	33
22	37	35	36	38	37	38	39	36	38	35	34	34
23	37	36	37	38	37	38	40	37	39	38	35	36
24	36	36	36	38	37	38	38	37	38	39	37	38
25	38	36	36	38	37	38	38	28	33	39	37	38
26	37	36	36	38	37	38	30	26	28	40	38	39
27	37	36	37	38	37	38	32	27	29	40	39	40
28	37	36	37	37	37	37	34	32	33	41	39	40
29	40	36	37	37	37	37	35	34	34	41	39	40
30	38	37	38	37	37	37	36	35	36	40	39	40
31	---	---	---	37	37	37	37	36	36	---	---	---
MONTH	---	---	---	39	37	38	40	26	37	41	30	36

444728122450000--NORTH SANTIAM RIVER AT GEREN ISLAND WATER TREATMENT PLANT, NEAR STAYTON, OR—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	9.0	7.4	7.7	8.7	7.6	7.7	7.8	7.5	7.6	7.4	7.3	7.3
2	8.9	7.4	7.6	8.3	7.6	7.7	7.8	7.5	7.6	7.5	7.3	7.3
3	9.0	7.4	7.6	8.5	7.6	7.7	7.7	7.5	7.6	7.5	7.3	7.3
4	8.4	7.4	7.5	8.6	7.6	7.7	7.8	7.5	7.6	7.5	7.3	7.3
5	8.7	7.4	7.5	8.6	7.6	7.7	7.6	7.4	7.5	---	---	---
6	8.8	7.4	7.6	8.4	7.6	7.6	7.5	---	---	---	---	---
7	8.9	7.4	7.6	8.6	7.5	7.6	---	---	---	---	---	---
8	8.6	7.4	7.5	8.4	7.5	7.7	---	---	---	---	---	---
9	8.5	7.4	7.5	8.5	7.5	7.6	7.7	---	---	---	---	---
10	8.7	7.4	7.6	8.1	7.5	7.6	7.7	7.5	7.6	---	---	---
11	8.0	7.4	7.5	8.5	7.5	7.6	7.8	7.5	7.6	---	---	---
12	8.4	7.4	7.5	8.3	7.5	7.6	7.7	7.5	7.5	---	---	---
13	8.6	7.4	7.5	8.3	7.5	7.6	7.5	7.2	7.4	---	---	---
14	8.6	7.4	7.5	8.5	7.5	7.6	7.3	7.2	7.2	---	---	---
15	8.2	7.4	7.5	8.2	7.5	7.6	7.5	7.3	7.4	7.5	---	---
16	8.5	7.4	7.5	7.8	7.5	7.6	7.5	7.4	7.4	7.5	7.3	7.3
17	8.5	7.4	7.5	7.6	7.4	7.4	7.5	7.4	7.4	7.5	7.3	7.4
18	8.5	7.3	7.5	7.7	7.4	7.6	7.5	7.4	7.4	7.5	7.3	7.4
19	8.6	7.4	7.5	7.8	7.6	7.6	7.5	7.4	7.4	7.5	7.3	7.3
20	8.5	7.3	7.5	7.9	7.6	7.7	7.5	7.4	7.4	7.5	7.3	7.3
21	8.6	7.3	7.4	7.9	7.6	7.7	7.5	7.4	7.4	7.5	7.3	7.4
22	8.5	7.3	7.4	8.0	7.6	7.7	7.5	7.4	7.4	7.6	7.3	7.4
23	8.4	7.4	7.5	8.1	7.6	7.7	7.5	7.4	7.4	7.4	7.2	7.3
24	8.4	7.4	7.5	8.1	7.6	7.7	7.5	7.4	7.4	7.2	7.1	7.2
25	8.4	7.3	7.4	7.9	7.6	7.7	7.5	7.4	7.4	7.3	7.1	7.2
26	8.4	7.3	7.4	8.0	7.6	7.7	7.5	7.3	7.4	7.4	7.2	7.3
27	8.4	7.3	7.4	8.0	7.6	7.6	7.5	7.3	7.4	7.4	7.2	7.3
28	8.5	7.3	7.6	7.9	7.6	7.7	7.4	7.3	7.3	7.2	7.1	7.2
29	8.6	7.6	7.7	7.6	7.3	7.4	7.4	7.2	7.3	7.1	6.9	7.0
30	8.5	7.6	7.7	7.6	7.3	7.5	7.4	7.3	7.3	7.1	7.0	7.0
31	8.5	7.6	7.7	---	---	---	7.4	7.3	7.3	7.2	7.0	7.2
MAX	9.0	7.6	7.7	8.7	7.6	7.7	---	---	---	---	---	---
MIN	8.0	7.3	7.4	7.6	7.3	7.4	---	---	---	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	7.3	7.2	7.2	7.6	7.1	7.2	7.7	7.2	7.3	8.3	7.4	7.6
2	7.3	7.2	7.2	7.6	7.1	7.2	7.7	7.2	7.3	8.2	7.4	7.6
3	---	---	---	7.5	7.1	7.2	7.7	7.2	7.3	8.2	7.4	7.6
4	---	---	---	7.6	7.1	7.2	7.7	7.2	7.3	8.1	7.4	7.6
5	---	---	---	7.5	7.1	7.2	7.6	7.2	7.2	8.1	7.4	7.6
6	---	---	---	7.5	7.1	7.2	8.0	7.2	7.4	8.1	7.4	7.6
7	---	---	---	7.6	7.1	7.2	8.1	7.5	7.7	8.0	7.4	7.6
8	---	---	---	7.7	7.1	7.2	8.1	7.5	7.7	8.1	7.4	7.6
9	---	---	---	7.6	7.1	7.2	8.1	7.5	7.7	8.1	7.4	7.6
10	---	---	---	7.6	7.1	7.2	8.1	7.5	7.7	7.9	7.4	7.6
11	---	---	---	7.6	7.1	7.2	8.1	7.5	7.7	8.0	7.4	7.6
12	---	---	---	7.8	7.1	7.2	8.0	7.5	7.7	8.1	7.4	7.6
13	---	---	---	7.8	7.1	7.2	8.1	7.5	7.7	8.1	7.4	7.6
14	---	---	---	7.8	7.1	7.2	8.0	7.5	7.6	8.2	7.4	7.6
15	---	---	---	7.8	7.1	7.2	7.9	7.5	7.6	7.9	7.4	7.6
16	---	---	---	8.0	7.1	7.4	---	---	---	8.1	7.4	7.7
17	---	---	---	7.9	7.3	7.4	8.0	7.5	7.7	8.1	7.4	7.5
18	---	---	---	7.8	7.3	7.4	8.0	7.5	7.6	7.8	7.4	7.5
19	---	---	---	7.9	7.3	7.5	8.0	7.5	7.6	8.2	7.4	7.6
20	---	---	---	8.0	7.3	7.4	8.0	7.5	7.6	8.2	7.4	7.6
21	---	---	---	8.0	7.3	7.5	7.9	7.5	7.6	8.1	7.4	7.6
22	---	---	---	8.0	7.3	7.4	7.9	7.4	7.5	8.1	7.4	7.6
23	---	---	---	7.9	7.3	7.4	8.0	7.4	7.6	7.9	7.4	7.6
24	7.5	---	---	7.8	7.3	7.4	8.0	7.4	7.6	8.0	7.4	7.6
25	7.5	7.2	7.2	7.7	7.3	7.3	8.1	7.4	7.6	8.1	7.3	7.6
26	7.6	7.2	7.2	7.7	7.3	7.4	8.2	7.4	7.6	7.8	7.4	7.5
27	7.6	7.1	7.2	7.7	7.2	7.4	8.3	7.4	7.6	7.8	7.4	7.5
28	7.5	7.1	7.2	7.7	7.2	7.3	8.3	7.3	7.6	7.6	7.3	7.5
29	7.5	7.1	7.2	7.8	7.2	7.3	---	---	---	7.6	7.3	7.4
30	---	---	---	7.6	7.2	7.3	8.3	7.4	7.6	7.7	7.3	7.5
31	---	---	---	7.7	7.2	7.3	---	---	---	7.9	7.3	7.5
MAX	---	---	---	8.0	7.3	7.5	---	---	---	8.3	7.4	7.7
MIN	---	---	---	7.5	7.1	7.2	---	---	---	7.6	7.3	7.4

444728122450000--NORTH SANTIAM RIVER AT GEREN ISLAND WATER TREATMENT PLANT, NEAR STAYTON, OR—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.0	7.3	7.6	7.9	7.3	7.6	8.4	7.5	7.8	9.3	7.8	8.1
2	8.1	7.4	7.6	8.0	7.4	7.6	8.5	7.6	7.8	9.2	7.8	8.1
3	8.2	7.3	7.6	7.9	7.3	7.5	8.5	7.6	7.8	9.3	7.8	8.1
4	8.1	7.3	7.6	7.9	7.4	7.6	8.3	7.6	7.7	9.2	7.8	8.1
5	8.1	7.4	7.5	7.9	7.3	7.6	8.6	7.6	7.8	9.1	7.8	8.0
6	8.0	7.4	7.6	7.9	7.3	7.6	8.2	7.6	7.8	9.1	7.8	8.0
7	7.9	7.4	7.5	7.9	7.4	7.6	8.5	7.6	7.8	9.1	7.7	8.0
8	7.8	7.4	7.5	7.9	7.3	7.5	8.5	7.6	7.7	9.2	7.7	8.0
9	---	---	---	7.9	7.3	7.5	8.5	7.6	7.8	9.2	7.7	8.0
10	8.0	7.4	7.5	7.9	7.3	7.5	8.7	7.5	7.9	9.1	7.7	7.9
11	8.1	7.3	7.6	7.8	7.3	7.5	8.7	7.8	8.1	9.1	7.7	7.8
12	8.1	7.3	7.5	7.9	7.3	7.5	8.8	7.8	8.1	9.2	7.7	7.9
13	8.1	7.3	7.5	7.9	7.3	7.5	8.8	7.9	8.1	9.2	7.7	7.8
14	8.2	7.3	7.7	8.1	7.3	7.6	8.8	7.8	8.1	9.0	7.6	7.8
15	8.2	7.4	7.6	8.1	7.5	7.7	8.7	7.9	8.1	9.1	7.6	7.8
16	8.2	7.4	7.6	8.0	7.5	7.7	8.7	7.8	8.1	9.1	7.6	7.7
17	8.1	7.4	7.6	8.1	7.5	7.7	8.7	7.8	8.0	9.0	7.6	7.7
18	8.1	7.3	7.6	8.1	7.5	7.7	8.7	7.8	8.0	8.3	7.5	7.6
19	8.0	7.3	7.6	8.1	7.5	7.7	8.7	7.8	8.0	8.8	7.5	7.6
20	7.9	7.4	7.5	8.2	7.5	7.7	8.7	7.8	8.0	8.9	7.5	7.7
21	7.9	7.3	7.5	8.1	7.5	7.7	8.8	7.8	8.0	9.0	7.5	7.7
22	7.9	7.4	7.5	8.1	7.5	7.7	8.5	7.8	7.9	9.1	7.5	7.7
23	7.9	7.3	7.5	8.1	7.5	7.7	8.7	7.7	8.0	9.2	7.5	7.7
24	7.9	7.2	7.5	8.1	7.5	7.7	8.8	7.8	7.9	9.2	7.5	7.8
25	7.9	7.3	7.5	8.2	7.5	7.7	8.1	7.7	7.8	9.1	7.5	7.6
26	7.8	7.2	7.5	8.2	7.6	7.7	8.1	7.6	7.7	9.2	7.5	7.7
27	7.9	7.3	7.5	8.2	7.5	7.7	8.7	7.5	7.8	9.1	7.4	7.6
28	8.0	7.3	7.6	8.3	7.5	7.7	8.8	7.6	7.8	8.9	7.3	7.5
29	8.0	7.5	7.6	8.3	7.5	7.8	9.0	7.5	7.9	8.8	7.3	7.5
30	7.9	7.4	7.6	8.3	7.6	7.8	9.0	7.6	7.9	9.0	7.4	7.6
31	---	---	---	8.4	7.6	7.8	9.2	7.5	7.8	---	---	---
MAX	---	---	---	8.4	7.6	7.8	9.2	7.9	8.1	9.3	7.8	8.1
MIN	---	---	---	7.8	7.3	7.5	8.1	7.5	7.7	8.3	7.3	7.5

444728122450000--NORTH SANTIAM RIVER AT GEREN ISLAND WATER TREATMENT PLANT, NEAR STAYTON, OR—

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	15.0	12.5	13.7	11.6	10.1	10.8	8.7	8.2	8.5	5.4	4.4	4.8
2	14.7	12.9	13.7	11.6	10.8	11.2	8.8	8.3	8.5	5.3	4.5	4.9
3	15.4	13.3	14.2	11.3	10.1	10.7	8.6	7.3	8.0	5.3	4.9	5.1
4	14.1	13.0	13.5	11.6	10.3	10.9	8.6	7.2	7.7	5.0	4.4	4.6
5	14.6	13.4	14.0	11.3	9.8	10.6	8.6	8.2	8.5	---	3.8	---
6	15.4	13.7	14.4	11.6	10.2	11.0	---	7.8	---	---	---	---
7	15.2	13.8	14.3	11.9	10.9	11.4	---	---	---	---	---	---
8	14.2	13.0	13.6	11.5	10.8	11.2	---	---	---	---	---	---
9	13.9	12.9	13.5	11.8	10.8	11.3	---	---	---	---	---	---
10	14.3	12.7	13.4	11.8	11.0	11.4	7.7	7.4	7.5	---	---	---
11	13.1	12.4	12.8	12.0	10.5	11.4	7.7	7.3	7.5	---	---	---
12	13.8	12.4	13.1	10.8	9.9	10.4	7.6	7.4	7.5	---	---	---
13	13.9	12.0	12.9	10.8	9.4	10.1	7.7	7.0	7.5	---	---	---
14	14.3	13.1	13.5	11.4	10.2	10.8	7.0	6.2	6.6	---	---	---
15	13.3	12.5	12.9	11.1	10.5	10.8	6.9	6.4	6.6	6.0	---	---
16	14.0	12.6	13.2	10.5	9.6	10.3	6.8	6.5	6.6	5.9	5.3	5.7
17	15.3	13.4	14.2	9.6	9.0	9.2	7.1	6.6	6.8	5.7	5.0	5.4
18	14.8	12.9	13.8	10.0	9.4	9.7	6.9	6.4	6.6	5.9	5.4	5.6
19	14.8	13.4	14.0	10.0	8.5	9.3	6.9	6.4	6.6	6.0	5.6	5.8
20	15.5	13.9	14.7	8.8	8.2	8.5	7.2	6.8	7.0	5.7	4.8	5.2
21	16.0	14.2	15.1	8.9	8.5	8.7	7.2	6.5	7.0	5.2	4.5	4.9
22	15.4	14.2	14.7	8.6	8.2	8.4	6.6	6.2	6.4	5.0	4.3	4.7
23	14.6	13.2	13.9	9.1	8.3	8.7	6.7	6.2	6.5	6.2	4.9	5.5
24	13.9	12.1	13.0	9.4	8.5	8.9	6.8	6.5	6.7	6.2	5.3	5.9
25	14.1	12.2	13.1	8.5	8.0	8.3	6.5	5.7	6.3	5.5	5.1	5.3
26	14.6	12.5	13.5	8.7	8.1	8.3	6.0	5.5	5.8	5.4	5.1	5.3
27	14.8	12.8	13.8	8.4	7.7	8.1	5.8	5.5	5.6	5.9	5.2	5.4
28	14.8	13.9	14.3	9.0	8.4	8.8	5.9	5.5	5.7	6.5	5.8	6.1
29	13.9	12.2	13.0	8.9	7.6	8.0	5.7	5.1	5.5	6.8	6.4	6.6
30	12.3	10.9	11.8	8.2	7.6	7.9	5.2	4.6	4.9	6.9	5.7	6.3
31	11.4	10.1	10.7	---	---	---	5.5	4.9	5.2	5.7	5.3	5.6
MONTH	16.0	10.1	13.6	12.0	7.6	9.8	---	---	---	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	5.5	4.9	5.2	7.6	6.0	6.7	7.8	5.1	6.5	12.7	8.6	10.8
2	5.8	5.3	5.5	7.4	5.4	6.4	9.1	5.7	7.2	13.6	8.6	11.0
3	---	5.2	---	6.3	5.2	5.6	10.3	6.4	8.2	13.6	9.1	11.5
4	---	---	---	6.7	5.7	6.1	9.5	7.1	8.1	12.4	9.3	10.3
5	---	---	---	6.4	5.7	6.0	7.8	6.6	7.0	11.7	8.6	10.0
6	---	---	---	6.8	5.4	6.2	8.2	6.6	7.2	11.6	8.1	9.9
7	---	---	---	8.7	6.5	7.5	9.4	6.8	7.9	10.8	8.8	9.9
8	---	---	---	8.9	6.3	7.7	10.7	6.8	8.7	11.7	8.5	9.9
9	---	---	---	8.0	6.9	7.5	11.3	6.8	9.0	12.6	8.4	10.2
10	---	---	---	8.2	6.1	7.1	11.6	7.2	9.5	11.0	8.3	9.3
11	---	---	---	8.4	5.7	7.1	12.0	7.9	9.9	10.0	8.2	9.1
12	---	---	---	8.4	6.0	7.3	11.5	7.8	9.2	10.9	8.2	9.4
13	---	---	---	8.4	5.8	7.2	10.1	7.6	8.9	12.8	7.9	10.3
14	---	---	---	9.2	6.7	7.9	9.7	7.5	8.3	13.1	8.7	10.8
15	---	---	---	8.8	6.1	7.6	9.0	7.0	7.7	12.2	9.0	9.8
16	---	---	---	8.8	5.7	7.3	---	---	---	12.5	8.8	10.1
17	---	---	---	8.8	5.7	7.3	9.2	6.9	8.0	13.1	8.4	10.6
18	---	---	---	7.7	6.4	7.0	9.6	7.2	8.3	11.1	9.1	9.6
19	---	---	---	7.7	5.9	6.6	9.2	7.2	8.2	12.5	8.7	10.1
20	---	---	---	8.4	5.0	6.7	9.1	7.2	7.9	13.4	8.4	10.8
21	---	---	---	9.3	6.2	7.8	8.4	7.3	7.6	12.8	9.3	10.3
22	---	---	---	10.2	6.8	8.5	8.7	6.8	7.6	10.4	8.9	9.6
23	---	---	---	10.2	7.6	8.9	10.8	6.7	8.5	11.0	8.7	9.6
24	7.1	---	---	8.5	7.1	7.8	10.5	7.5	8.5	13.5	8.0	10.4
25	6.9	5.6	6.2	7.3	6.4	6.8	10.7	6.9	8.7	13.8	8.8	11.3
26	6.6	6.0	6.3	7.1	6.0	6.6	12.0	7.1	9.5	13.1	9.6	10.4
27	6.9	6.1	6.4	7.6	6.3	6.9	13.2	8.4	10.8	10.2	9.5	9.8
28	6.9	5.8	6.3	9.2	5.5	7.3	12.8	8.9	11.0	9.7	8.3	9.0
29	6.7	5.9	6.4	9.8	6.3	8.1	12.6	---	---	8.8	8.0	8.3
30	---	---	---	8.4	6.4	7.5	13.4	8.6	10.9	9.6	8.2	8.8
31	---	---	---	7.9	5.7	6.7	---	---	---	11.1	8.4	9.5
MONTH	---	---	---	10.2	5.0	7.2	---	---	---	13.8	7.9	10.0

444728122450000--NORTH SANTIAM RIVER AT GEREN ISLAND WATER TREATMENT PLANT, NEAR STAYTON, OR—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.0	7.3	7.6	7.9	7.3	7.6	8.4	7.5	7.8	9.3	7.8	8.1
2	8.1	7.4	7.6	8.0	7.4	7.6	8.5	7.6	7.8	9.2	7.8	8.1
3	8.2	7.3	7.6	7.9	7.3	7.5	8.5	7.6	7.8	9.3	7.8	8.1
4	8.1	7.3	7.6	7.9	7.4	7.6	8.3	7.6	7.7	9.2	7.8	8.1
5	8.1	7.4	7.5	7.9	7.3	7.6	8.6	7.6	7.8	9.1	7.8	8.0
6	8.0	7.4	7.6	7.9	7.3	7.6	8.2	7.6	7.8	9.1	7.8	8.0
7	7.9	7.4	7.5	7.9	7.4	7.6	8.5	7.6	7.8	9.1	7.7	8.0
8	7.8	7.4	7.5	7.9	7.3	7.5	8.5	7.6	7.7	9.2	7.7	8.0
9	---	---	---	7.9	7.3	7.5	8.5	7.6	7.8	9.2	7.7	8.0
10	8.0	7.4	7.5	7.9	7.3	7.5	8.7	7.5	7.9	9.1	7.7	7.9
11	8.1	7.3	7.6	7.8	7.3	7.5	8.7	7.8	8.1	9.1	7.7	7.8
12	8.1	7.3	7.5	7.9	7.3	7.5	8.8	7.8	8.1	9.2	7.7	7.9
13	8.1	7.3	7.5	7.9	7.3	7.5	8.8	7.9	8.1	9.2	7.7	7.8
14	8.2	7.3	7.7	8.1	7.3	7.6	8.8	7.8	8.1	9.0	7.6	7.8
15	8.2	7.4	7.6	8.1	7.5	7.7	8.7	7.9	8.1	9.1	7.6	7.8
16	8.2	7.4	7.6	8.0	7.5	7.7	8.7	7.8	8.1	9.1	7.6	7.7
17	8.1	7.4	7.6	8.1	7.5	7.7	8.7	7.8	8.0	9.0	7.6	7.7
18	8.1	7.3	7.6	8.1	7.5	7.7	8.7	7.8	8.0	8.3	7.5	7.6
19	8.0	7.3	7.6	8.1	7.5	7.7	8.7	7.8	8.0	8.8	7.5	7.6
20	7.9	7.4	7.5	8.2	7.5	7.7	8.7	7.8	8.0	8.9	7.5	7.7
21	7.9	7.3	7.5	8.1	7.5	7.7	8.8	7.8	8.0	9.0	7.5	7.7
22	7.9	7.4	7.5	8.1	7.5	7.7	8.5	7.8	7.9	9.1	7.5	7.7
23	7.9	7.3	7.5	8.1	7.5	7.7	8.7	7.7	8.0	9.2	7.5	7.7
24	7.9	7.2	7.5	8.1	7.5	7.7	8.8	7.8	7.9	9.2	7.5	7.8
25	7.9	7.3	7.5	8.2	7.5	7.7	8.1	7.7	7.8	9.1	7.5	7.6
26	7.8	7.2	7.5	8.2	7.6	7.7	8.1	7.6	7.7	9.2	7.5	7.7
27	7.9	7.3	7.5	8.2	7.5	7.7	8.7	7.5	7.8	9.1	7.4	7.6
28	8.0	7.3	7.6	8.3	7.5	7.7	8.8	7.6	7.8	8.9	7.3	7.5
29	8.0	7.5	7.6	8.3	7.5	7.8	9.0	7.5	7.9	8.8	7.3	7.5
30	7.9	7.4	7.6	8.3	7.6	7.8	9.0	7.6	7.9	9.0	7.4	7.6
31	---	---	---	8.4	7.6	7.8	9.2	7.5	7.8	---	---	---
MAX	---	---	---	8.4	7.6	7.8	9.2	7.9	8.1	9.3	7.8	8.1
MIN	---	---	---	7.8	7.3	7.5	8.1	7.5	7.7	8.3	7.3	7.5

444728122450000--NORTH SANTIAM RIVER AT GEREN ISLAND WATER TREATMENT PLANT, NEAR STAYTON, OR—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	11.3	10.1	10.7	---	---	---	---	---	---	12.2	11.8	12.0
2	11.2	10.1	10.6	---	---	---	---	---	---	12.5	12.1	12.2
3	11.1	9.9	10.5	---	---	---	---	---	---	12.5	12.1	12.3
4	10.8	10.1	10.4	---	---	---	---	---	---	12.8	12.2	12.5
5	10.9	10.1	10.4	---	---	---	---	---	---	---	---	---
6	11.0	9.9	10.4	---	---	---	---	---	---	---	---	---
7	11.9	10.0	10.7	---	---	---	---	---	---	---	---	---
8	11.6	10.7	11.0	---	---	---	---	---	---	---	---	---
9	11.7	10.8	11.1	---	---	---	---	---	---	---	---	---
10	11.9	10.8	11.2	---	---	---	11.2	10.8	10.9	---	---	---
11	11.4	10.9	11.1	---	---	---	11.3	10.8	11.0	---	---	---
12	11.9	10.9	11.2	---	---	---	11.2	10.9	11.0	---	---	---
13	11.9	10.8	11.3	---	---	---	10.9	10.6	10.8	---	---	---
14	11.7	10.7	11.1	---	---	---	11.4	10.5	11.0	---	---	---
15	11.6	10.8	11.1	---	---	---	11.5	11.3	11.4	---	---	---
16	11.7	10.8	11.1	---	---	---	11.4	11.3	11.3	12.6	12.2	12.3
17	11.5	10.5	11.0	---	---	---	11.6	11.3	11.4	12.8	12.2	12.4
18	11.5	10.5	11.0	---	---	---	11.6	11.3	11.4	12.7	12.3	12.4
19	11.4	10.5	10.8	---	---	---	11.5	11.3	11.3	12.7	12.3	12.4
20	11.3	10.3	10.7	---	---	---	11.5	11.3	11.3	13.0	12.3	12.7
21	11.1	10.0	10.6	---	---	---	11.6	11.3	11.5	13.2	12.6	12.8
22	10.9	10.1	10.4	---	---	---	11.7	11.4	11.6	13.3	12.7	12.9
23	11.0	10.3	10.6	---	---	---	11.6	11.2	11.4	12.7	12.2	12.5
24	11.1	10.4	10.7	---	---	---	11.4	11.2	11.3	12.5	12.2	12.4
25	11.1	10.3	10.7	---	---	---	11.7	11.4	11.6	12.9	12.5	12.7
26	11.0	10.2	10.5	---	---	---	12.0	11.7	11.8	12.9	12.6	12.7
27	10.9	10.1	10.4	---	---	---	12.2	11.8	11.9	12.9	12.5	12.7
28	---	---	---	---	---	---	12.0	11.7	11.9	12.6	12.3	12.5
29	---	---	---	---	---	---	11.9	11.6	11.8	12.6	12.2	12.4
30	---	---	---	---	---	---	12.3	11.9	12.1	12.7	12.2	12.4
31	---	---	---	---	---	---	12.3	11.8	12.0	12.9	12.6	12.7
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	13.1	12.7	12.9	15.1	14.1	14.5	---	---	---	12.0	10.4	11.1
2	12.9	12.7	12.8	15.6	14.2	14.8	---	---	---	12.1	10.2	11.1
3	---	---	---	15.7	14.5	15.1	---	---	---	11.8	10.1	10.9
4	---	---	---	15.5	14.7	15.0	---	---	---	11.7	10.6	11.4
5	---	---	---	15.5	14.8	15.1	---	---	---	12.0	10.8	11.5
6	---	---	---	15.8	14.6	15.2	---	---	---	12.3	10.9	11.5
7	---	---	---	15.3	14.0	14.7	---	---	---	11.9	11.2	11.5
8	---	---	---	15.3	13.8	14.5	---	---	---	12.1	10.8	11.5
9	---	---	---	15.0	13.9	14.4	---	---	---	12.2	10.5	11.4
10	---	---	---	15.1	13.8	14.4	---	---	---	12.2	11.1	11.8
11	---	---	---	14.9	13.4	14.2	12.4	10.8	11.6	12.2	11.5	11.9
12	---	---	---	14.5	13.1	13.8	12.5	11.0	12.0	12.2	11.2	11.8
13	---	---	---	14.3	12.9	13.6	12.6	11.6	12.1	12.4	10.5	11.4
14	---	---	---	13.9	12.6	13.2	12.7	11.7	12.3	12.1	10.4	11.2
15	---	---	---	13.7	12.1	12.8	12.9	12.1	12.6	11.9	10.7	11.6
16	---	---	---	---	---	---	---	---	---	12.0	10.6	11.5
17	---	---	---	---	---	---	---	---	---	12.2	10.4	11.3
18	---	---	---	---	---	---	12.9	11.9	12.4	---	---	---
19	---	---	---	---	---	---	13.0	12.1	12.5	12.1	10.6	11.5
20	---	---	---	---	---	---	13.0	12.2	12.7	12.2	10.2	11.2
21	---	---	---	---	---	---	13.0	12.4	12.8	11.8	10.4	11.4
22	---	---	---	---	---	---	13.2	12.4	12.9	11.9	11.3	11.6
23	---	---	---	---	---	---	13.3	11.5	12.5	11.9	11.1	11.6
24	---	---	---	---	---	---	12.9	11.7	12.5	12.2	10.1	11.3
25	13.3	12.4	12.9	---	---	---	13.2	11.6	12.5	11.9	10.0	10.9
26	13.9	12.8	13.4	---	---	---	13.2	11.1	12.1	11.5	10.2	11.2
27	14.4	13.4	13.9	---	---	---	12.6	10.7	11.7	11.6	11.3	11.4
28	14.9	14.0	14.3	---	---	---	12.4	10.9	11.6	---	---	---
29	15.0	14.1	14.4	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	12.0	10.2	11.1	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

444728122450000--NORTH SANTIAM RIVER AT GEREN ISLAND WATER TREATMENT PLANT, NEAR STAYTON, OR—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	---	---	---	11.7	10.0	10.8	10.1	8.6	9.4
2	---	---	---	---	---	---	11.6	10.1	10.8	10.0	8.7	9.4
3	---	---	---	---	---	---	11.6	10.2	10.9	9.5	8.0	8.9
4	---	---	---	---	---	---	11.7	10.5	11.1	9.1	7.9	8.4
5	---	---	---	---	---	---	11.6	10.2	10.9	8.8	7.7	8.3
6	---	---	---	---	---	---	11.7	10.7	11.2	9.2	7.9	8.5
7	---	---	---	---	---	---	11.8	10.2	11.1	8.5	7.1	7.9
8	---	---	---	---	---	---	11.7	10.1	10.9	7.7	5.9	7.1
9	---	---	---	---	---	---	11.5	10.0	10.8	6.6	5.4	6.0
10	---	---	---	---	---	---	11.5	8.0	10.0	6.5	5.4	5.9
11	---	---	---	---	---	---	9.5	7.6	8.6	6.2	5.4	5.8
12	---	---	---	---	---	---	9.4	7.8	8.6	6.3	5.4	5.8
13	---	---	---	---	---	---	10.1	7.8	9.2	6.1	5.2	5.7
14	---	---	---	---	---	---	10.2	8.5	9.3	6.4	5.2	5.8
15	---	---	---	10.9	9.3	10.1	10.1	8.6	9.3	5.9	4.8	5.4
16	---	---	---	11.0	9.3	10.1	9.9	8.6	9.2	5.8	4.9	5.2
17	---	---	---	11.1	9.3	10.2	10	8.6	9.3	5.7	4.9	5.3
18	---	---	---	11.1	9.7	10.4	9.9	8.6	9.2	6.1	5.0	5.4
19	---	---	---	11.3	10.0	10.6	9.8	8.6	9.1	6.0	4.9	5.3
20	---	---	---	11.4	10	10.6	9.9	8.6	9.2	5.7	4.7	5.2
21	---	---	---	11.4	9.8	10.5	9.9	8.7	9.3	5.8	4.8	5.4
22	---	---	---	11.4	9.7	10.5	9.8	8.8	9.2	5.9	4.5	5.3
23	---	---	---	11.3	9.7	10.4	9.8	9.0	9.4	---	---	---
24	---	---	---	11.4	9.8	10.5	9.9	9.1	9.4	---	---	---
25	---	---	---	11.6	10	10.7	9.6	9.1	9.3	---	---	---
26	---	---	---	11.8	10.2	10.9	9.7	9.1	9.4	---	---	---
27	---	---	---	11.7	10.2	10.9	9.9	9.0	9.5	---	---	---
28	---	---	---	11.7	10.1	10.8	10	8.9	9.4	---	---	---
29	---	---	---	11.7	10.1	10.8	9.9	8.8	9.3	---	---	---
30	---	---	---	11.6	10.1	10.8	10	8.7	9.3	---	---	---
31	---	---	---	11.7	10.1	10.9	10.3	8.5	9.2	---	---	---
MONTH	---	---	---	---	---	---	11.8	7.6	9.7	---	---	---

444728122450000--NORTH SANTIAM RIVER AT GEREN ISLAND WATER TREATMENT PLANT, NEAR STAYTON, OR—Continued

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/- 2.5 DEGREES, FNU
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	3	<1	<1	2	<1	<1	3	2	2	3	2	2
2	<1	<1	<1	1	<1	<1	2	1	1	5	2	2
3	1	<1	<1	1	<1	<1	4	1	2	4	2	2
4	2	<1	<1	2	<1	<1	2	2	2	12	2	2
5	4	<1	<1	2	<1	<1	8	2	5	---	---	---
6	1	<1	<1	8	<1	<1	9	---	---	---	---	---
7	2	<1	<1	1	<1	<1	---	---	---	---	---	---
8	1	<1	<1	1	<1	<1	---	---	---	---	---	---
9	1	<1	<1	1	<1	<1	---	---	---	---	---	---
10	2	<1	<1	1	<1	<1	2	1	2	---	---	---
11	1	<1	<1	2	<1	<1	3	1	2	---	---	---
12	4	<1	1	2	<1	<1	4	1	3	---	---	---
13	2	<1	<1	2	<1	<1	64	3	26	---	---	---
14	3	<1	<1	1	<1	<1	40	10	22	---	---	---
15	4	<1	<1	2	<1	<1	10	4	6	5	3	4
16	1	<1	<1	9	<1	<1	7	4	6	4	2	3
17	1	<1	<1	10	2	7	7	5	6	3	2	2
18	2	<1	<1	3	2	2	7	4	5	2	2	2
19	<1	<1	<1	4	1	2	7	4	5	3	2	2
20	1	<1	<1	3	1	2	6	5	5	2	1	2
21	2	<1	<1	2	<1	1	6	5	5	2	1	2
22	3	<1	<1	2	<1	1	5	4	5	2	1	2
23	<1	<1	<1	2	<1	1	5	4	4	25	2	3
24	5	<1	<1	2	<1	1	5	4	4	33	7	18
25	<1	<1	<1	3	1	1	4	3	4	10	4	5
26	<1	<1	<1	3	1	2	4	2	3	5	3	4
27	3	<1	<1	2	<1	1	3	2	2	6	3	3
28	2	<1	<1	2	<1	1	8	3	5	35	5	8
29	1	<1	<1	35	1	13	9	4	6	154	30	93
30	1	<1	<1	8	2	4	4	2	3	72	21	41
31	<1	<1	<1	---	---	---	6	2	2	26	6	12
MAX	5	<1	1	35	2	13	---	---	---	---	---	---
MIN	<1	<1	<1	1	<1	<1	---	---	---	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	11	5	6	3	2	2	4	1	2	1	<1	<1
2	6	4	5	2	1	2	3	<1	1	1	<1	<1
3	---	---	---	2	1	2	2	<1	1	1	<1	<1
4	---	---	---	6	2	3	3	<1	1	2	<1	<1
5	---	---	---	12	2	3	2	<1	1	2	<1	<1
6	---	---	---	19	2	5	2	<1	1	1	<1	<1
7	---	---	---	8	2	2	2	<1	1	1	<1	<1
8	---	---	---	11	1	2	2	<1	<1	2	<1	<1
9	---	---	---	10	1	2	2	<1	<1	4	<1	<1
10	---	---	---	9	1	2	2	<1	<1	1	<1	<1
11	---	---	---	7	1	1	1	<1	<1	1	<1	<1
12	---	---	---	2	1	1	2	<1	<1	1	<1	<1
13	---	---	---	2	<1	1	2	<1	<1	1	<1	<1
14	---	---	---	2	<1	1	2	<1	<1	<1	<1	<1
15	---	---	---	2	<1	1	2	<1	1	1	<1	<1
16	---	---	---	2	<1	1	---	---	---	2	<1	<1
17	---	---	---	3	<1	1	2	<1	<1	6	<1	<1
18	---	---	---	3	<1	1	2	<1	<1	1	<1	<1
19	---	---	---	10	<1	1	2	<1	<1	2	<1	<1
20	---	---	---	3	<1	1	1	<1	1	2	<1	<1
21	---	---	---	2	<1	<1	3	<1	2	1	<1	<1
22	---	---	---	1	<1	<1	6	2	4	1	<1	<1
23	---	---	---	4	<1	<1	4	2	2	3	<1	1
24	---	---	---	2	<1	1	2	1	2	2	<1	<1
25	3	1	2	4	<1	1	2	<1	1	2	<1	<1
26	3	1	2	6	<1	1	2	<1	<1	5	<1	<1
27	10	2	2	4	<1	1	3	<1	<1	3	<1	1
28	9	2	4	2	<1	1	2	<1	<1	10	2	5
29	4	2	2	3	<1	1	1	<1	<1	9	2	5
30	---	---	---	3	1	2	2	<1	<1	3	1	2
31	---	---	---	3	<1	2	---	---	---	2	<1	1
MAX	---	---	---	19	2	5	---	---	---	10	2	5
MIN	---	---	---	1	<1	<1	---	---	---	<1	<1	<1

444728122450000--NORTH SANTIAM RIVER AT GEREN ISLAND WATER TREATMENT PLANT, NEAR STAYTON, OR—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	2	<1	<1	1	<1	<1	35	4	12	2	<1	<1
2	2	<1	<1	2	<1	<1	35	3	15	1	<1	<1
3	1	<1	<1	1	<1	<1	45	<1	10	5	<1	<1
4	<1	<1	<1	1	<1	<1	7	<1	<1	2	<1	<1
5	2	<1	<1	2	<1	<1	16	<1	<1	9	<1	<1
6	1	<1	<1	2	<1	<1	7	<1	<1	2	<1	<1
7	7	<1	1	1	<1	<1	6	<1	<1	2	<1	<1
8	7	<1	2	3	<1	<1	10	<1	<1	2	<1	<1
9	4	<1	2	<1	<1	<1	14	<1	<1	2	<1	<1
10	2	<1	1	1	<1	<1	7	<1	<1	2	<1	1
11	3	<1	1	2	<1	<1	2	<1	<1	2	<1	1
12	2	<1	<1	2	<1	<1	<1	<1	<1	2	<1	<1
13	2	<1	<1	1	<1	<1	<1	<1	<1	4	<1	1
14	2	<1	<1	1	<1	<1	2	<1	<1	3	<1	1
15	1	<1	<1	<1	<1	<1	1	<1	<1	3	<1	1
16	2	<1	<1	<1	<1	<1	1	<1	<1	3	<1	1
17	2	<1	<1	1	<1	<1	1	<1	<1	3	<1	1
18	1	<1	<1	7	<1	<1	2	<1	<1	6	2	3
19	3	<1	<1	1	<1	<1	2	<1	<1	4	1	2
20	2	<1	<1	<1	<1	<1	<1	<1	<1	3	1	2
21	5	<1	<1	<1	<1	<1	1	<1	<1	2	<1	1
22	4	<1	<1	2	<1	<1	6	<1	1	2	<1	1
23	<1	<1	<1	1	<1	<1	4	<1	2	3	<1	<1
24	<1	<1	<1	<1	<1	<1	2	<1	<1	2	<1	<1
25	<1	<1	<1	<1	<1	<1	24	2	4	2	<1	<1
26	1	<1	<1	2	<1	<1	8	3	5	2	<1	<1
27	2	<1	<1	1	<1	<1	7	1	2	3	<1	<1
28	1	<1	<1	2	<1	<1	2	<1	1	2	<1	<1
29	<1	<1	<1	3	<1	1	1	<1	<1	---	---	---
30	<1	<1	<1	13	<1	3	1	<1	<1	---	---	---
31	---	---	---	24	<1	6	1	<1	<1	---	---	---
MAX	7	<1	2	24	<1	6	45	4	15	---	---	---
MIN	<1	<1	<1	<1	<1	<1	<1	<1	<1	---	---	---

14185000 SOUTH SANTIAM RIVER BELOW CASCADIA, OR

LOCATION.--Lat 44°23'31", long 122°29'47", in NW ¼ SW ¼ sec.31, T.13 S., R.3 E., Linn County, Hydrologic Unit 17090006, on left bank, 0.2 mi upstream from Mouse Creek, 0.8 mi southwest of Cascadia, and at mile 49.2.

DRAINAGE AREA.--174 mi².

PERIOD OF RECORD.--September 1935 to current year. Monthly discharge only September 1935, published in WSP 1318.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 775 ft above NGVD of 1929, from topographic map. Prior to Sept. 26, 1989, at site 0.7 mi downstream at datum 759.88 above NGVD of 1929. Prior to Nov. 1, 1935, nonrecording gage at site 0.7 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good except December through March, which are fair. No regulation or diversion upstream from station. Continuous water-quality records for the period June 1962 to September 1967 and February 1969 to September 1987 have been collected at this location.

AVERAGE DISCHARGE.--69 years (water years 1936-2004), 815 ft³/s, 63.64 in/yr, 590,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,700 ft³/s Feb. 7, 1996, gage height, 18.11 ft, from rating curve extended above 10,000 ft³/s; minimum discharge, 23 ft³/s Dec. 1, 2, 1936, at site then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 29	0915	6,120	8.07	Jan 29	1145	9,650	9.86
Dec 13	1715	*13,900	*11.84				

Minimum discharge, 29 ft³/s, Oct. 6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	79	1,450	909	2,260	1,070	686	541	883	196	72	124
2	31	77	1,130	794	2,040	989	596	528	726	187	70	127
3	31	76	1,380	685	1,890	897	561	510	616	181	70	130
4	30	67	1,140	615	1,670	1,210	560	483	531	176	69	115
5	30	63	1,980	544	1,430	1,450	545	434	500	166	71	106
6	31	61	2,500	603	1,370	1,680	507	390	581	159	72	100
7	46	60	1,770	1,420	1,520	1,310	486	373	833	154	78	94
8	45	60	1,580	1,910	1,310	1,210	466	398	1,030	149	71	89
9	66	60	1,240	2,440	1,100	1,240	454	363	1,310	144	65	86
10	81	63	1,210	2,280	952	1,140	451	368	1,710	140	62	84
11	89	219	983	1,880	861	994	467	496	1,520	135	61	93
12	255	233	1,830	1,790	799	927	485	428	1,180	130	59	115
13	177	156	8,070	1,740	731	857	476	372	978	124	58	155
14	112	126	5,050	1,890	698	798	626	340	837	121	57	272
15	140	122	2,520	2,280	784	767	714	322	704	117	55	299
16	190	428	1,730	2,080	1,040	698	652	364	608	113	55	296
17	113	1,060	1,550	1,650	1,910	666	638	379	527	109	53	302
18	86	658	1,470	1,560	2,440	673	628	655	467	106	52	680
19	76	675	1,330	1,890	2,230	669	619	1,000	418	104	51	593
20	76	613	1,300	1,790	1,680	592	972	736	380	102	51	521
21	68	458	1,170	1,400	1,310	573	1,470	589	349	99	50	398
22	65	357	1,000	1,140	1,070	625	1,330	533	328	95	265	316
23	110	290	878	2,360	956	663	1,060	678	313	90	273	261
24	89	379	1,000	5,050	871	682	897	565	296	87	171	226
25	73	418	1,080	2,940	811	683	790	480	276	84	285	202
26	64	566	963	2,030	817	753	770	452	257	82	538	187
27	59	445	869	2,570	932	1,120	785	588	242	80	400	175
28	59	421	1,340	4,590	1,190	985	723	2,150	228	78	259	158
29	109	4,120	1,930	8,390	1,060	831	615	2,240	217	77	191	148
30	127	2,220	1,310	5,490	---	872	555	1,500	207	75	159	142
31	93	---	985	3,200	---	815	---	1,110	---	73	138	---
TOTAL	2,652	14,630	53,738	69,910	37,732	28,439	20,584	20,365	19,052	3,733	3,981	6,594
MEAN	85.5	488	1,733	2,255	1,301	917	686	657	635	120	128	220
MAX	255	4,120	8,070	8,390	2,440	1,680	1,470	2,240	1,710	196	538	680
MIN	30	60	869	544	698	573	451	322	207	73	50	84
AC-FT	5,260	29,020	106,600	138,700	74,840	56,410	40,830	40,390	37,790	7,400	7,900	13,080
CFSM	0.49	2.80	9.96	13.0	7.48	5.27	3.94	3.78	3.65	0.69	0.74	1.26
IN.	0.57	3.13	11.49	14.95	8.07	6.08	4.40	4.35	4.07	0.80	0.85	1.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2004, BY WATER YEAR (WY)

	MEAN	285	1,086	1,529	1,461	1,370	1,176	1,136	920	512	165	80.0	94.4
MAX	1,296	2,442	4,319	3,278	3,326	2,913	2,052	1,639	1,261	466	222	318	
(WY)	(1951)	(1943)	(1965)	(1953)	(1996)	(1972)	(1937)	(1960)	(1937)	(1983)	(1968)	(1959)	
MIN	31.6	27.6	82.3	107	130	324	356	282	101	54.2	35.9	40.9	
(WY)	(1988)	(1937)	(1977)	(1977)	(1977)	(1941)	(1941)	(1987)	(1992)	(1940)	(1992)	(1987)	

14185000 SOUTH SANTIAM RIVER BELOW CASCADIA, OR—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1936 - 2004	
ANNUAL TOTAL	292,922		281,410			
ANNUAL MEAN	803		769		815	
HIGHEST ANNUAL MEAN					1,280	1972
LOWEST ANNUAL MEAN					359	1977
HIGHEST DAILY MEAN	8,070	Dec 13	8,390	Jan 29	23,200	Feb 7, 1996
LOWEST DAILY MEAN	27	Sep 6	30	Oct 4	23	Dec 1, 1936
ANNUAL SEVEN-DAY MINIMUM	29	Aug 31	33	Oct 1	24	Nov 25, 1936
ANNUAL RUNOFF (AC-FT)	581,000		558,200		590,400	
ANNUAL RUNOFF (CFSM)	4.61		4.42		4.68	
ANNUAL RUNOFF (INCHES)	62.62		60.16		63.64	
10 PERCENT EXCEEDS	1,840		1,780		1,810	
50 PERCENT EXCEEDS	459		528		502	
90 PERCENT EXCEEDS	38		70		61	



2004 Water Year

SANTIAM RIVER BASIN

14185000 SOUTH SANTIAM RIVER BELOW CASCADIA, OR

Latitude: 44° 23 ' 31"

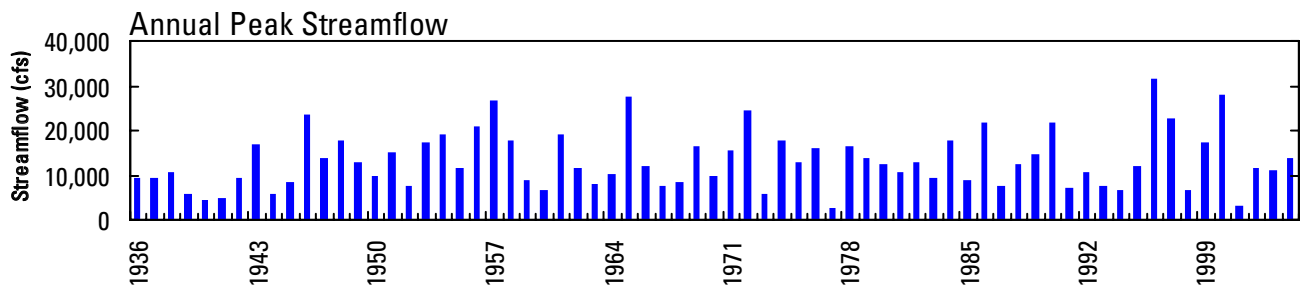
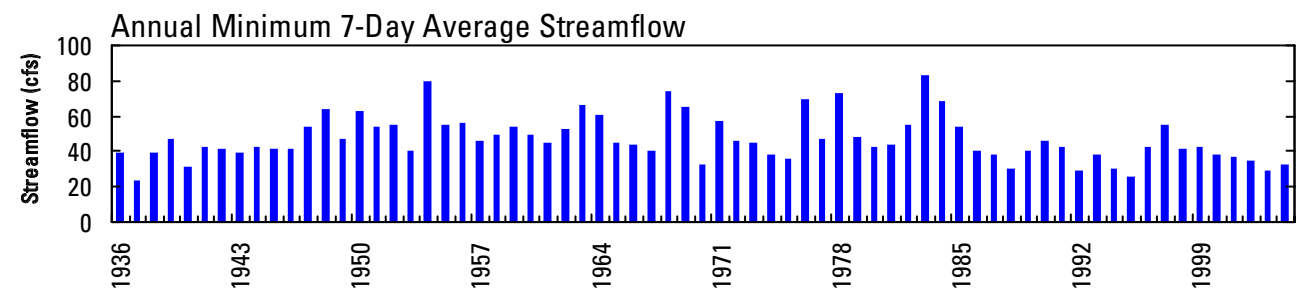
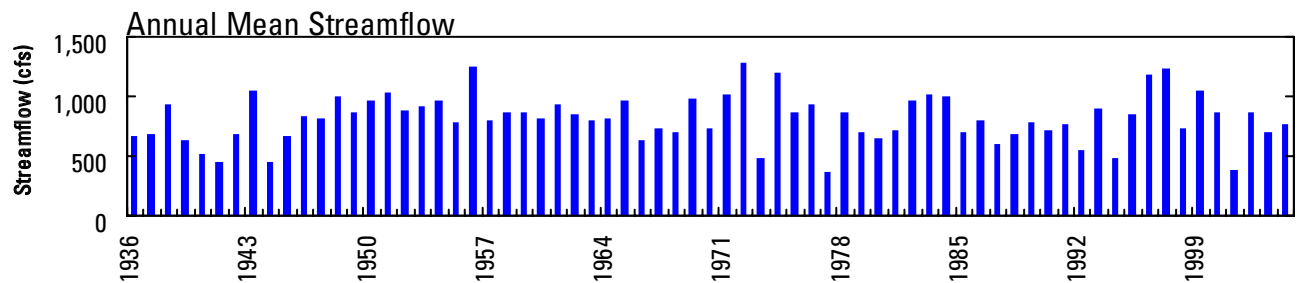
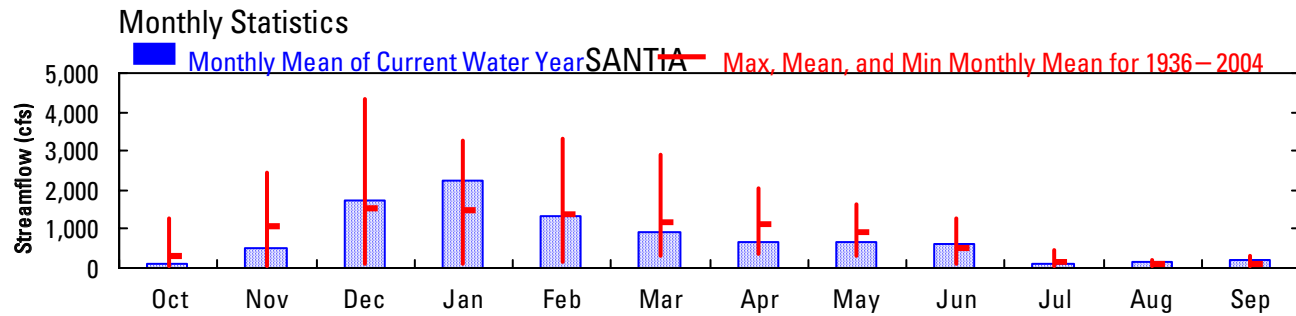
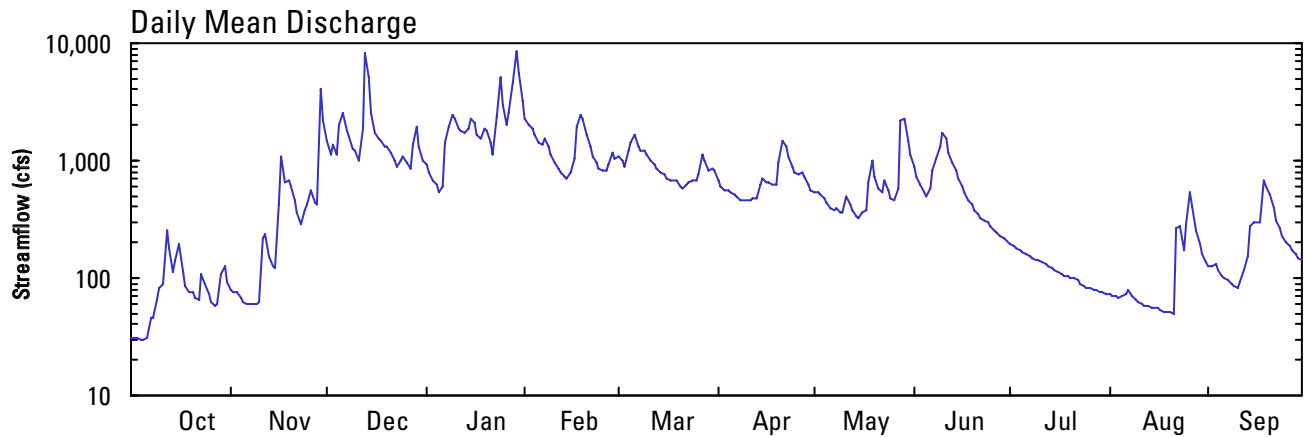
Longitude: 122° 29 ' 47"

Hydrologic Unit Code: 17090006

Linn County

Datum: 775.0 feet

Drainage Area: 174 square miles



14185900 QUARTZVILLE CREEK NEAR CASCADIA, OR

LOCATION.--Lat 44°32'25", long 122°26'05", in NW ¼ sec.10, T.12 S., R.3 E., Linn County, Hydrologic Unit 17090006, on Bureau of Land Management land, on right bank 80 ft downstream from Panther Creek, 10 mi north of Cascadia, and at mile 6.6.

DRAINAGE AREA.--99.2 mi².

PERIOD OF RECORD.--August 1963 to November 1964 (destroyed by flood of December 1964); October 1965 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,050 ft above NGVD of 1929, from topographic map. Aug. 13, 1963 to Dec. 22, 1964, water-stage recorder on left bank at present datum.

REMARKS.--Records fair. No regulation or diversion upstream from station. Continuous water-quality records for the period August 1963 to September 1987 have been collected at this location.

AVERAGE DISCHARGE.--40 years (water years 1964, 1966-2004), 652 ft³/s, 89.25 in/yr, 472,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,700 ft³/s Feb. 7, 1996, gage height, 20.54 ft, from rating curve extended above 8,000 ft³/s on the basis of slope-area measurement of peak flow; minimum discharge, 14 ft³/s Aug. 19-23, 1973.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 36,500 ft³/s Dec. 22, 1964, from slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 29	0800	5,350	10.44	Jan 24	0130	5,010	10.19
Dec 13	1500	*10,100	*13.44	Jan 29	1100	7,310	11.75

Minimum discharge, 31 ft³/s, Aug. 21, gage height, 3.20 ft.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	72	1,480	455	1,430	904	511	396	566	113	44	110
2	36	69	1,250	399	1,300	784	439	386	459	108	43	107
3	36	66	1,860	363	1,240	682	409	366	388	105	43	101
4	36	60	1,210	331	1,080	866	430	340	333	101	43	88
5	36	58	e2,000	294	928	1,170	426	302	325	96	44	80
6	36	56	e2,500	325	1,010	1,500	392	270	452	92	50	73
7	49	55	1,650	1,090	1,260	1,040	374	261	694	88	55	68
8	57	56	1,450	1,440	993	1,020	356	272	848	86	46	64
9	94	55	1,180	1,950	790	1,120	345	247	894	83	42	62
10	96	58	1,020	1,870	674	963	347	236	1,030	80	40	60
11	97	214	851	1,540	641	785	370	372	845	79	39	85
12	376	191	2,220	1,460	623	739	393	318	649	75	38	93
13	220	130	6,420	1,550	577	684	366	266	565	73	37	227
14	119	103	3,280	1,960	586	645	457	237	518	70	36	307
15	175	117	1,690	2,560	878	627	515	224	438	68	36	347
16	228	827	1,180	2,240	1,360	562	528	231	376	66	35	304
17	126	1,390	1,160	1,580	2,020	531	460	240	328	64	34	480
18	91	1,250	1,080	1,590	2,210	544	458	429	290	62	33	1,170
19	81	1,130	1,010	2,030	1,930	547	504	549	260	61	33	991
20	76	818	1,050	1,670	1,340	467	1,100	398	236	60	32	779
21	67	539	963	1,200	997	450	1,480	322	215	58	32	532
22	62	394	812	935	800	521	1,070	313	199	e56	204	383
23	102	305	696	2,250	700	568	854	552	187	e55	171	294
24	82	340	788	4,140	669	579	702	430	174	e53	196	241
25	69	386	854	2,150	636	560	602	347	162	e52	766	202
26	61	506	705	1,430	682	638	589	337	151	e51	850	178
27	56	400	629	1,900	1,120	1,270	602	627	141	e49	563	158
28	56	402	695	3,670	1,280	873	534	1,560	133	e48	309	141
29	97	3,760	749	6,070	931	711	437	1,570	125	e47	205	131
30	119	2,010	567	3,920	---	719	396	1,040	119	46	153	121
31	87	---	493	2,150	---	627	---	736	---	45	123	---
TOTAL	2,959	15,817	43,492	56,512	30,685	23,696	16,446	14,174	12,100	2,190	4,375	7,977
MEAN	95.5	527	1,403	1,823	1,058	764	548	457	403	70.6	141	266
MAX	376	3,760	6,420	6,070	2,210	1,500	1,480	1,570	1,030	113	850	1,170
MIN	36	55	493	294	577	450	345	224	119	45	32	60
AC-FT	5,870	31,370	86,270	112,100	60,860	47,000	32,620	28,110	24,000	4,340	8,680	15,820
CFSM	0.96	5.31	14.1	18.4	10.7	7.71	5.53	4.61	4.07	0.71	1.42	2.68
IN.	1.11	5.93	16.31	21.19	11.51	8.89	6.17	5.32	4.54	0.82	1.64	2.99

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

	MEAN	245	974	1,279	1,272	1,093	962	848	606	316	98.5	58.6	86.3
MAX	786	2,224	2,897	2,450	2,441	2,018	1,600	1,147	817	336	240	268	
(WY)	(1998)	(1974)	(1974)	(1970)	(1982)	(1972)	(1993)	(1999)	(1984)	(1983)	(1968)	(1971)	
MIN	20.8	57.6	110	157	208	204	382	182	63.1	36.8	20.9	27.8	
(WY)	(1988)	(1994)	(1977)	(1977)	(1977)	(1992)	(1968)	(1992)	(1992)	(1992)	(1992)	(2002)	

WILLAMETTE RIVER BASIN

14185900 QUARTZVILLE CREEK NEAR CASCADIA, OR—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1964 - 2004	
ANNUAL TOTAL	247,007		230,423			
ANNUAL MEAN	677		630		652	
HIGHEST ANNUAL MEAN					1,113	1974
LOWEST ANNUAL MEAN					311	1977
HIGHEST DAILY MEAN	6,420	Dec 13	6,420	Dec 13	16,000	Feb 7, 1996
LOWEST DAILY MEAN	31	Sep 4	32	Aug 20	14	Aug 19, 1973
ANNUAL SEVEN-DAY MINIMUM	32	Aug 31	34	Aug 15	14	Aug 17, 1973
ANNUAL RUNOFF (AC-FT)	489,900		457,000		472,100	
ANNUAL RUNOFF (CFSM)	6.82		6.35		6.57	
ANNUAL RUNOFF (INCHES)	92.63		86.41		89.25	
10 PERCENT EXCEEDS	1,770		1,480		1,510	
50 PERCENT EXCEEDS	367		394		366	
90 PERCENT EXCEEDS	36		55		39	

e Estimated



2004 Water Year
SANTIAM RIVER BASIN

14185900 QUARTZVILLE CREEK NEAR CASCADIA, OR

Latitude: 44° 32 ' 25"

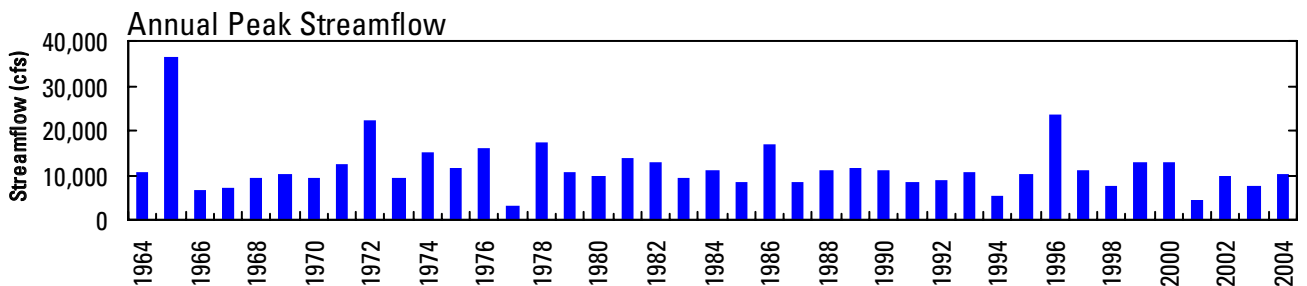
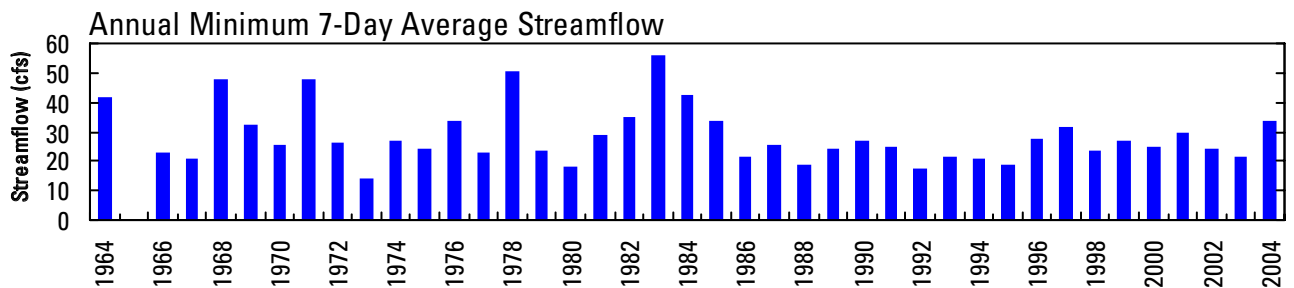
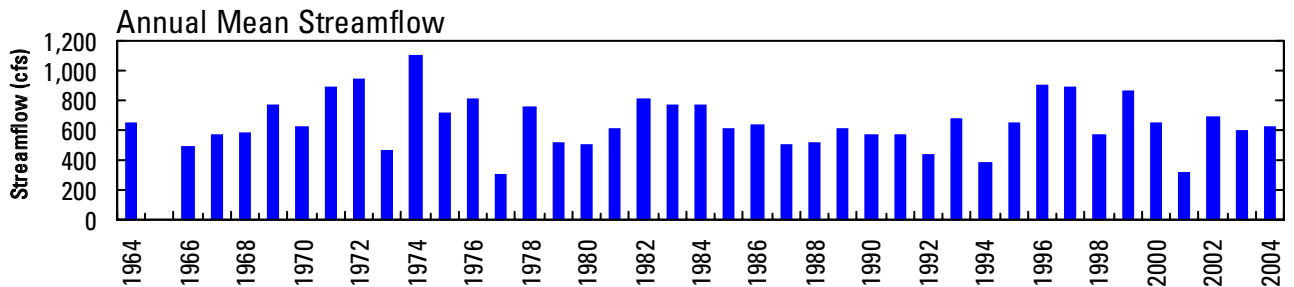
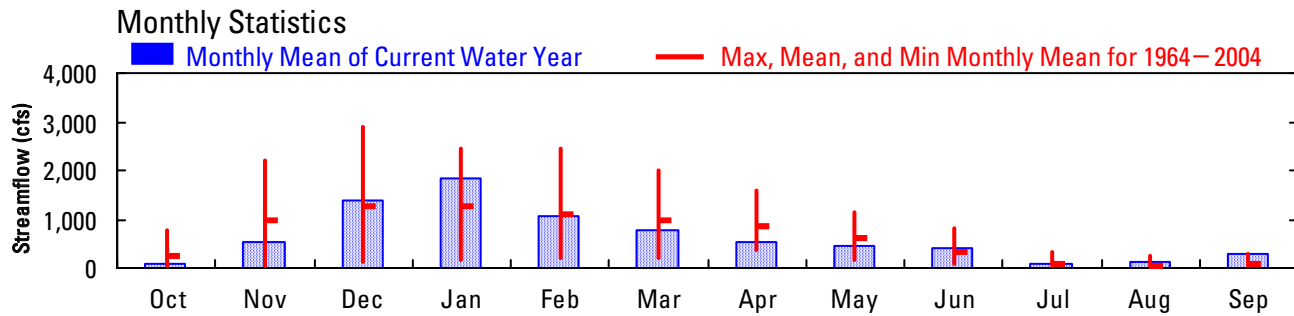
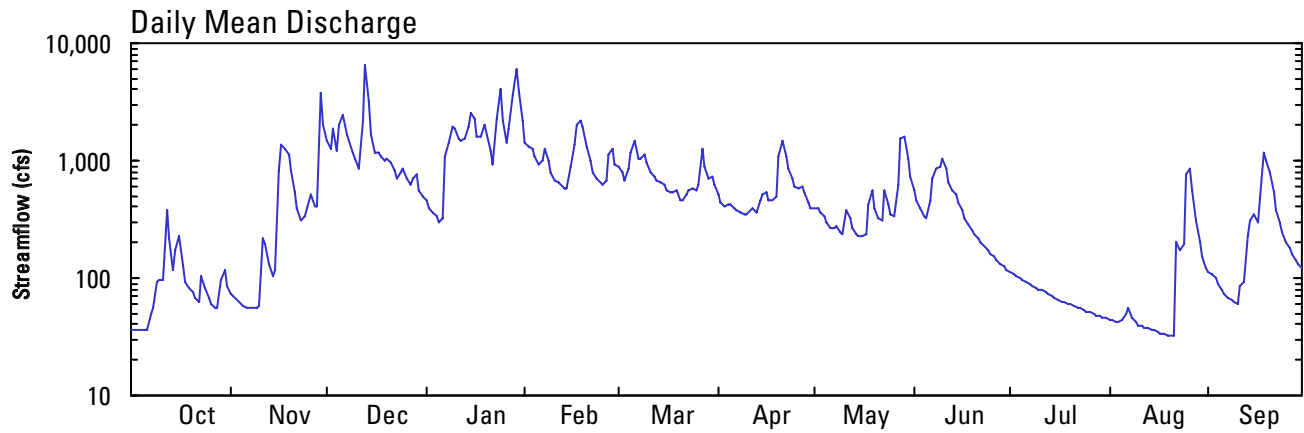
Longitude: 122° 26 ' 05"

Hydrologic Unit Code: 17090006

Linn County

Datum: 1,050.00 feet

Drainage Area: 99.2 square miles



14187000 WILEY CREEK NEAR FOSTER, OR

LOCATION.--Lat 44°22'20", long 122°37'20", in NE ¼ NE ¼ sec.12, T.14 S., R.1 E., Linn County, Hydrologic Unit 17090006, on right bank 0.5 mi downstream from Little Wiley Creek, 3.5 mi southeast of Foster, and at mile 4.4.

DRAINAGE AREA.--51.8 mi².

PERIOD OF RECORD.--October 1947 to July 1973, July 1988 to current year.

REVISED RECORDS.--WDR OR-90-2: 1989 (M), WDR OR-93-1: 1992.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 720 ft above NGVD of 1929, from topographic map. Prior to April 6, 1965, water-stage recorder at present site at datum of 718.08 ft above NGVD of 1929 (Corps of Engineers bench mark). Apr. 6, 1965, to July 1973, water-stage recorder at present site at datum 2.00 ft lower than previous datum.

REMARKS.--No estimated daily discharges. Records good except those below 20 ft³/s, which are fair. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--41 years (water years 1948-72, 1989-2004), 213 ft³/s, 55.82 in/yr, 154,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,640 ft³/s Jan. 21, 1972, gage height, 9.28 ft, datum then in use, from rating curve extended above 3,700 ft³/s; maximum gage height, 9.80 ft, Dec. 21, 1964 (backwater from debris), datum then in use; minimum discharge, 2.9 ft³/s August 28-31, 1992.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 13	1600	*3,720	*7.30				
						No other peak greater than base discharge.	

Minimum discharge, 5.0 ft³/s, Oct. 1, 2.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	12	249	379	643	304	126	84	119	34	10	13
2	5.2	12	177	300	567	258	113	77	102	34	9.9	15
3	5.3	14	264	237	499	232	104	71	90	32	9.7	15
4	5.3	12	207	202	523	301	95	68	79	31	9.9	13
5	5.6	11	457	171	463	354	89	65	77	29	11	12
6	5.9	11	617	208	450	380	83	61	88	27	12	12
7	11	11	505	615	528	322	77	60	108	27	13	11
8	9.3	11	458	738	434	275	73	64	176	26	11	10
9	15	11	355	800	345	244	69	57	250	25	9.4	10
10	16	11	457	704	281	211	64	58	334	25	8.4	10
11	15	25	312	566	238	183	61	81	310	23	8.0	13
12	35	27	401	513	208	164	59	68	231	22	7.7	16
13	23	20	1,930	484	186	148	58	58	189	21	7.6	25
14	15	16	1,260	515	181	134	79	52	162	20	7.4	30
15	17	17	685	561	212	124	103	49	136	19	7.2	33
16	24	80	467	484	310	114	101	62	115	18	7.1	32
17	15	143	390	385	558	107	112	56	99	18	6.8	48
18	11	74	337	391	684	107	109	90	87	17	6.8	90
19	10	100	292	471	625	105	115	112	77	17	6.5	92
20	10	95	263	447	477	95	290	89	69	16	6.5	117
21	9.1	70	220	351	362	89	515	77	63	16	6.2	71
22	9.2	53	186	276	286	86	415	71	61	15	56	50
23	19	41	164	628	253	83	285	68	61	14	39	39
24	15	70	212	1,170	225	93	213	61	58	13	27	32
25	12	82	284	796	212	102	174	54	53	12	39	28
26	10	113	236	574	253	137	148	55	48	12	60	27
27	9.1	82	213	644	322	243	129	77	45	12	40	25
28	9.0	72	492	1,040	337	181	115	245	42	11	25	22
29	16	782	820	1,420	302	146	104	244	39	11	20	21
30	19	432	492	1,170	---	149	93	182	37	10	17	20
31	14	---	358	816	---	144	---	144	---	10	15	---
TOTAL	400.2	2,510	13,760	18,056	10,964	5,615	4,171	2,660	3,405	617	520.1	952
MEAN	12.9	83.7	444	582	378	181	139	85.8	114	19.9	16.8	31.7
MAX	35	782	1,930	1,420	684	380	515	245	334	34	60	117
MIN	5.2	11	164	171	181	83	58	49	37	10	6.2	10
AC-FT	794	4,980	27,290	35,810	21,750	11,140	8,270	5,280	6,750	1,220	1,030	1,890
CFSM	0.25	1.62	8.57	11.2	7.30	3.50	2.68	1.66	2.19	0.38	0.32	0.61
IN.	0.29	1.80	9.88	12.97	7.87	4.03	3.00	1.91	2.45	0.44	0.37	0.68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2004, BY WATER YEAR (WY)

MEAN	75.9	263	413	449	388	341	269	187	85.8	30.5	15.9	17.7
MAX	397	620	1,107	842	944	625	490	353	286	75.9	53.4	67.8
(WY)	(1951)	(1951)	(1965)	(1953)	(1961)	(1972)	(1955)	(1963)	(1993)	(1969)	(1968)	(1968)
MIN	6.01	15.7	109	82.1	92.5	85.0	133	62.8	20.2	9.89	4.40	5.15
(WY)	(2003)	(1953)	(1960)	(1963)	(2001)	(1992)	(1968)	(1973)	(1992)	(2003)	(1992)	(1992)

14187000 WILEY CREEK NEAR FOSTER, OR—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1948 - 2004	
ANNUAL TOTAL	72,567.1		63,630.3		213	
ANNUAL MEAN	199		174		318	
HIGHEST ANNUAL MEAN					80.3	
LOWEST ANNUAL MEAN					2001	
HIGHEST DAILY MEAN	1,930	Dec 13	1,930	Dec 13	6,410	Dec 22, 1964
LOWEST DAILY MEAN	3.4	Sep 5	5.2	Oct 1	2.9	Aug 28, 1992
ANNUAL SEVEN-DAY MINIMUM	3.7	Aug 31	6.2	Oct 1	3.0	Aug 26, 1992
ANNUAL RUNOFF (AC-FT)	143,900		126,200		154,200	
ANNUAL RUNOFF (CFSM)	3.84		3.36		4.11	
ANNUAL RUNOFF (INCHES)	52.11		45.70		55.82	
10 PERCENT EXCEEDS	510		484		500	
50 PERCENT EXCEEDS	74		78		115	
90 PERCENT EXCEEDS	5.5		11		11	



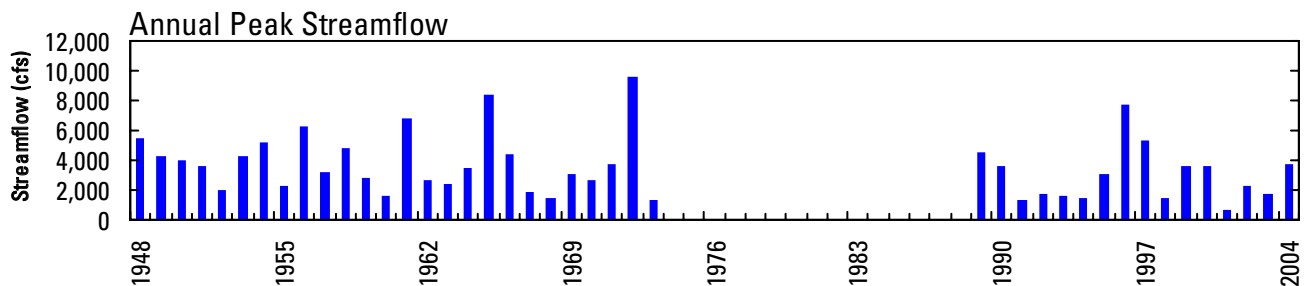
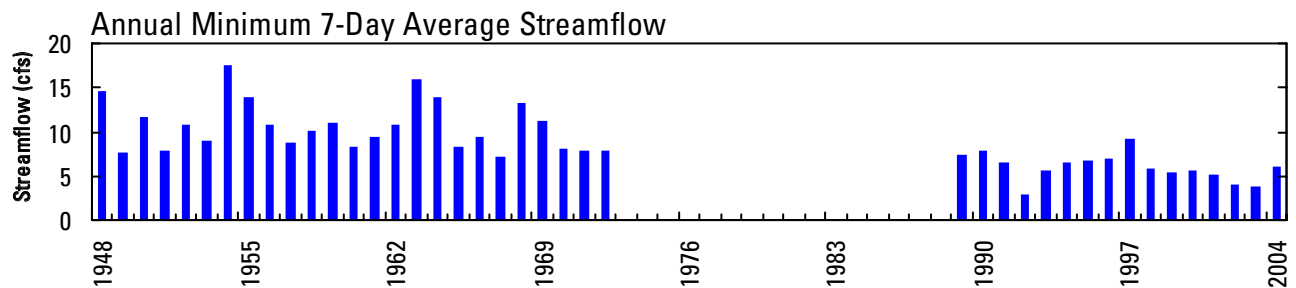
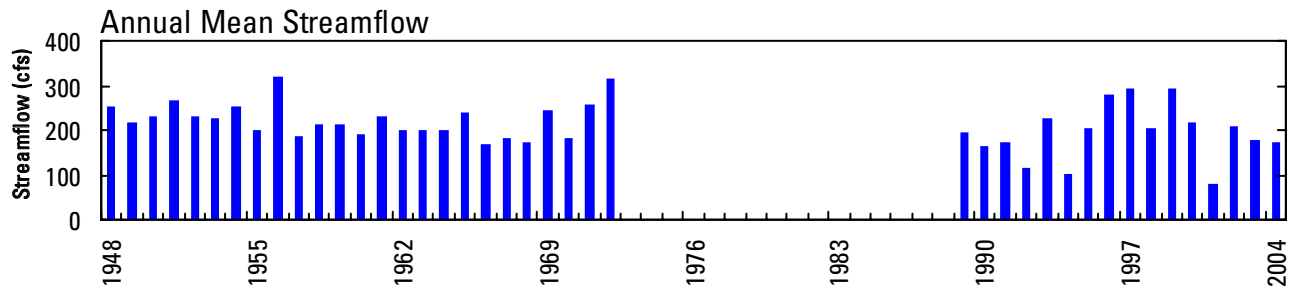
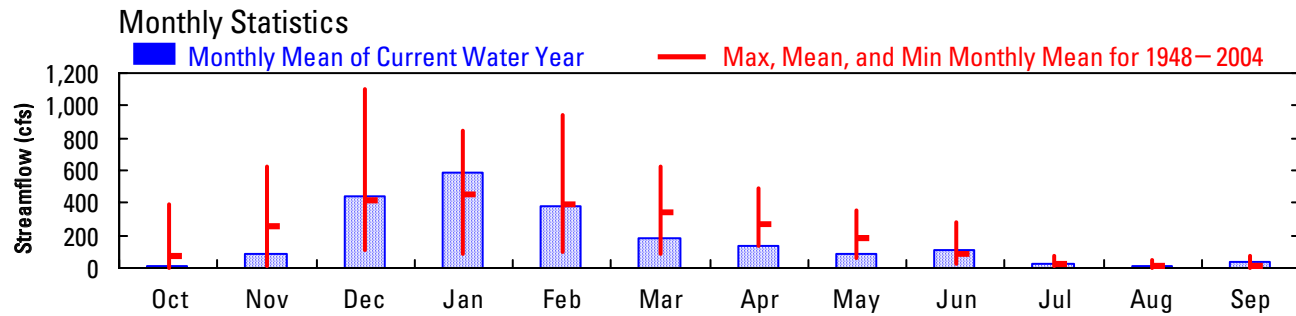
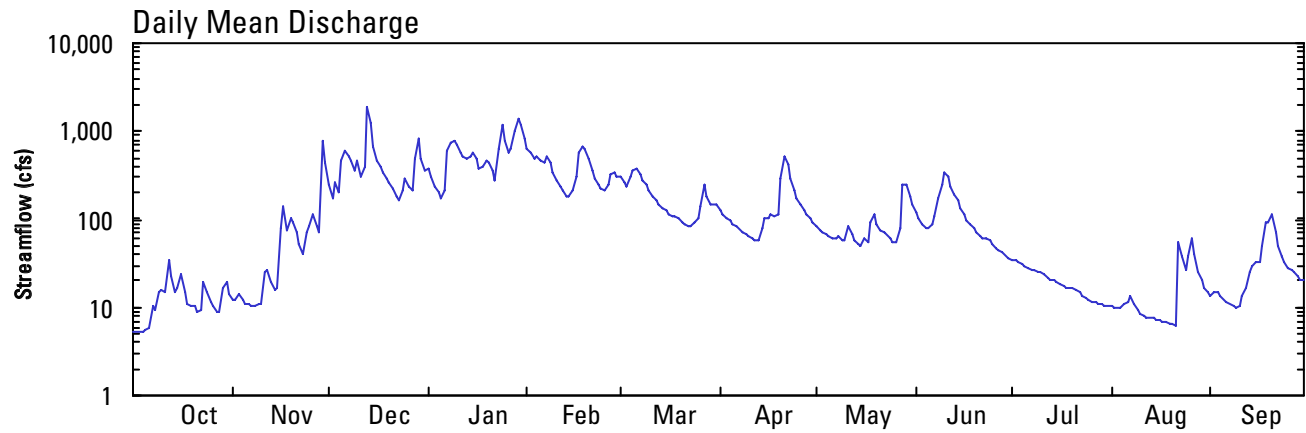
2004 Water Year
SANTIAM RIVER BASIN

14187000 WILEY CREEK NEAR FOSTER, OR

Latitude: 44° 22 ' 20"
Linn County

Longitude: 122° 37 ' 20"
Datum: 716.08 feet

Hydrologic Unit Code: 17090006
Drainage Area: 51.8 square miles



14187200 SOUTH SANTIAM RIVER NEAR FOSTER, OR

LOCATION.--Lat 44°24'45", long 122°41'15", in SE ¼ NE ¼ sec.28, T.13 S., R.1 E., Linn County, Hydrologic Unit 17090006, on left bank 0.6 mi downstream from Wiley Creek and at mile 37.0.

DRAINAGE AREA.--557 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1973 to current year. Records for October 1966 to July 1973 (published as South Santiam River at Foster, station 14186700) at site 0.5 mi upstream not equivalent owing to inflow between sites.

GAGE.--Water-stage recorder. Elevation of gage is 530 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since October 1966 by Green Peter Lake (station 14186100) and since December 1966 by Foster Lake (station 14186600). No diversion upstream from station. Continuous water-quality records for the period July 1973 to September 1997 have been collected at this location.

AVERAGE DISCHARGE.--31 years (water years 1974-2004), 2,838 ft³/s, 69.19 in/yr, 2,056,000 acre-ft/yr, adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,700 ft³/s Feb. 7, 1996, gage height, 18.74 ft, from rating curve extended above 16,000 ft³/s; minimum discharge, 343 ft³/s July 18, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,100 ft³/s Dec. 13, gage height, 16.01 ft; minimum discharge, 343 ft³/s July 18.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	597	605	4,190	3,270	10,600	2,510	3,090	3,530	1,240	827	721	1,050
2	603	601	4,820	3,890	10,200	1,810	3,130	3,670	1,200	777	649	1,080
3	602	606	6,490	3,780	7,380	1,510	3,100	3,730	1,180	764	643	1,070
4	603	601	5,980	2,910	7,660	2,100	3,090	3,730	1,190	765	643	1,070
5	604	599	8,170	2,580	7,510	2,840	3,390	3,740	1,180	763	645	1,080
6	604	602	9,320	2,010	7,650	3,260	3,590	3,390	1,190	764	649	1,080
7	607	602	8,430	3,330	7,540	3,000	3,200	3,000	1,210	761	651	1,080
8	605	599	8,130	4,290	6,630	2,590	2,870	2,580	1,360	765	647	1,080
9	610	605	6,670	4,890	6,230	2,250	3,410	2,580	1,750	768	644	1,070
10	612	604	6,630	6,900	3,900	2,800	2,940	2,680	2,450	769	640	1,060
11	610	612	6,290	6,660	3,700	3,180	2,770	2,730	2,360	766	631	1,070
12	630	624	6,880	5,780	2,530	3,210	3,260	2,560	1,910	760	636	1,070
13	622	615	10,900	5,730	2,000	3,050	3,260	2,490	1,550	769	634	1,080
14	608	608	11,100	6,150	1,410	3,020	3,320	2,210	1,280	765	633	1,090
15	609	609	10,600	7,280	1,160	3,010	3,600	2,000	1,230	765	630	1,090
16	617	662	10,600	7,830	1,450	2,360	3,120	1,780	1,200	765	630	1,100
17	614	1,160	10,600	7,370	2,880	1,470	1,890	1,600	1,180	760	631	1,110
18	624	1,150	10,500	7,230	3,760	1,580	1,880	1,530	1,170	730	637	1,170
19	625	1,090	10,500	7,360	3,760	2,070	3,100	1,480	1,170	757	633	1,170
20	618	1,070	10,500	6,720	3,180	1,150	3,020	1,300	1,160	805	634	1,220
21	607	806	10,400	6,550	3,260	1,150	2,890	1,170	1,140	819	634	1,450
22	606	717	6,620	6,040	3,270	1,100	2,760	1,160	1,140	812	696	1,450
23	613	680	6,280	7,000	2,300	1,100	2,120	1,160	1,140	815	701	1,460
24	610	705	5,120	9,980	1,930	1,240	1,850	1,160	1,130	816	645	1,450
25	607	723	5,720	10,200	1,570	1,210	1,810	1,160	1,130	819	658	1,440
26	604	834	4,880	9,550	1,380	1,290	1,810	1,160	1,140	814	704	1,460
27	601	873	4,720	8,060	1,580	1,620	2,820	1,230	1,130	819	665	1,440
28	601	834	4,800	10,600	2,010	1,900	2,390	2,370	1,130	818	645	1,430
29	605	5,490	6,110	11,700	2,520	1,770	2,770	3,040	1,030	826	638	1,440
30	608	4,610	6,190	11,100	---	1,770	2,680	2,070	938	825	632	1,440
31	598	---	3,640	10,900	---	2,780	---	1,440	---	816	651	---
TOTAL	18,884	30,496	231,780	207,640	120,950	65,700	84,930	69,430	39,208	24,364	20,130	36,350
MEAN	609	1,017	7,477	6,698	4,171	2,119	2,831	2,240	1,307	786	649	1,212
MAX	630	5,490	11,100	11,700	10,600	3,260	3,600	3,740	2,450	827	721	1,460
MIN	597	599	3,640	2,010	1,160	1,100	1,810	1,160	938	730	630	1,050
AC-FT	37,460	60,490	459,700	411,900	239,900	130,300	168,500	137,700	77,770	48,330	39,930	72,100
MEAN†	388	1,751	6,487	8,321	5,007	3,161	2,307	2,097	1,943	389	517	897
CFSM†	0.70	3.14	11.6	14.9	8.99	5.68	4.14	3.76	3.49	0.70	0.93	1.61
IN.†	0.80	3.51	13.4	17.2	9.36	6.54	4.62	4.34	3.89	0.81	1.07	1.80
AC-FT†	23,880	104,170	398,870	511,640	278,080	194,370	137,270	128,930	115,640	23,930	31,800	53,370

CAL YR 2003 TOTAL 1075514 MEAN 2947 MAX 12400 MIN 593 AC-FT 2133000 MEAN† 2924 CFSM† 2924 IN.† 71.28 AC-FT† 2117080
WTR YR 2004 TOTAL 949862 MEAN 2595 MAX 11700 MIN 597 AC-FT 1884000 MEAN† 2758 CFSM† 4.95 IN.† 67.40 AC-FT† 2001870

† Adjusted for change in contents, in Green Peter Lake and Foster Lake. Data provided by U.S. Army Corps of Engineers.



2004 Water Year
SANTIAM RIVER BASIN

14187200 SOUTH SANTIAM RIVER NEAR FOSTER, OR

Latitude: 44° 24 ' 45"

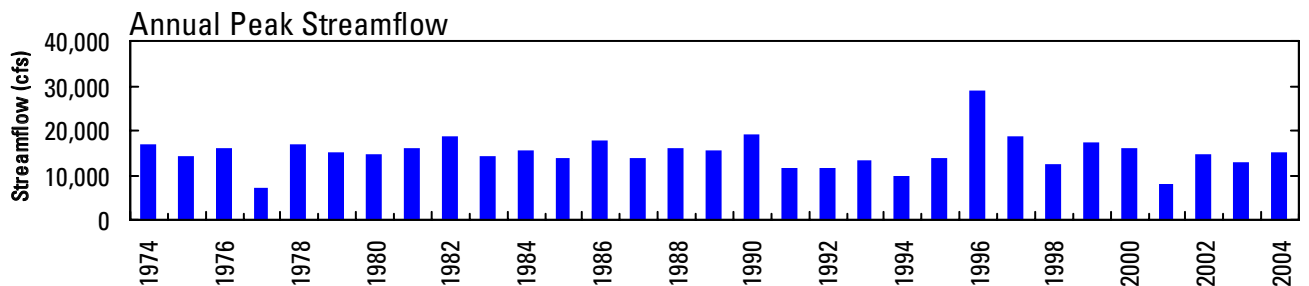
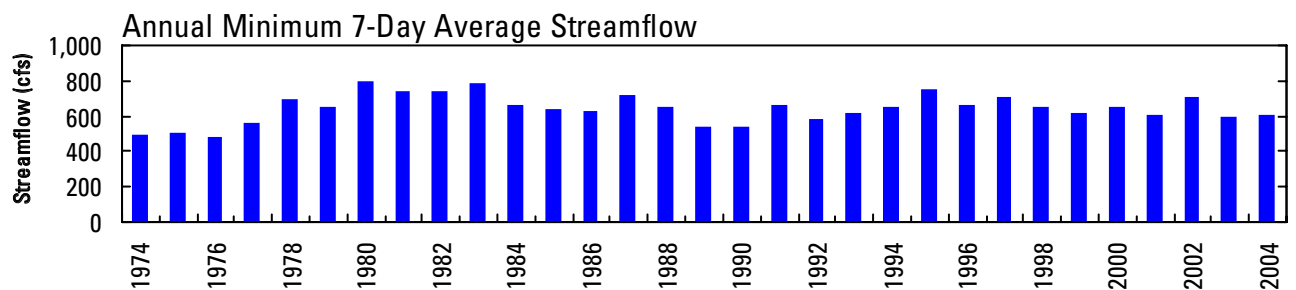
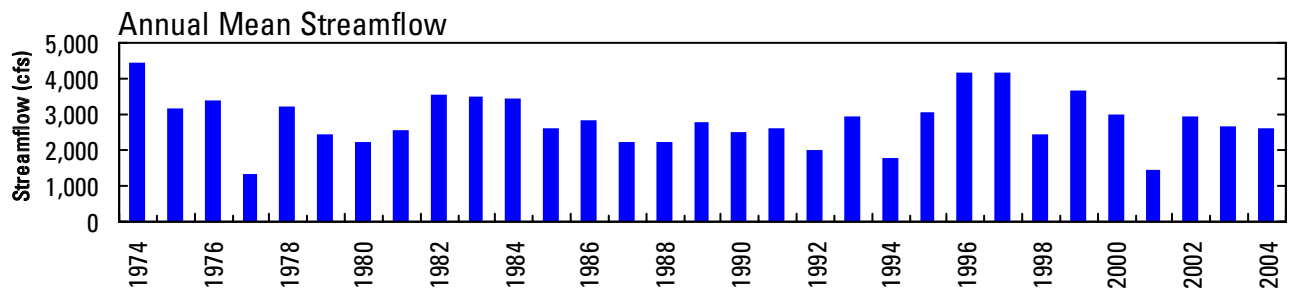
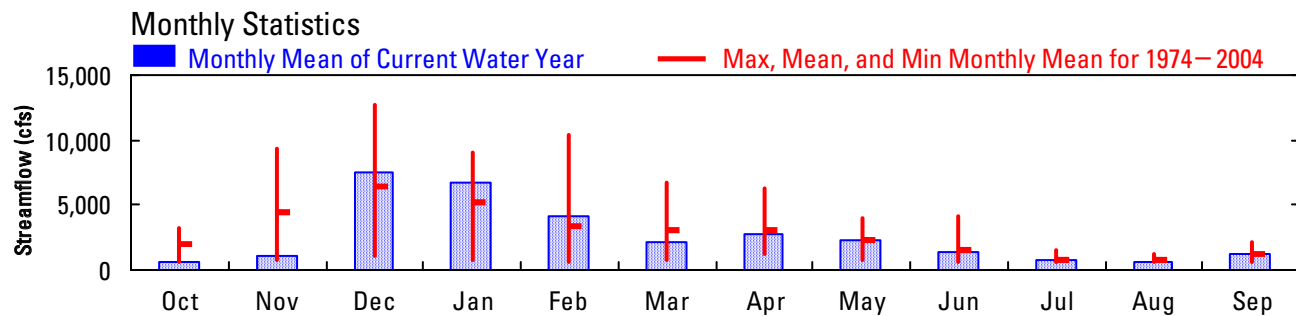
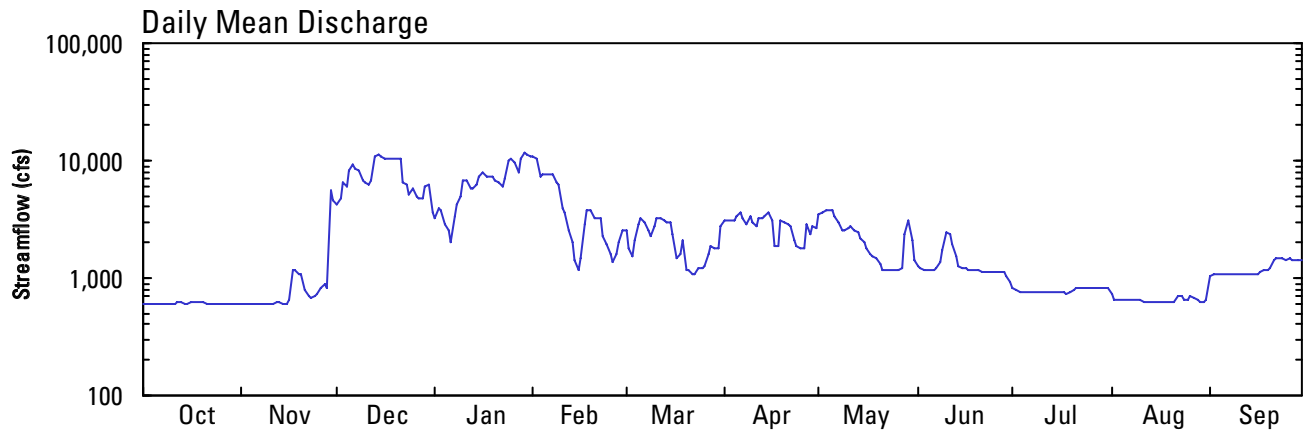
Longitude: 122° 41 ' 15"

Hydrologic Unit Code: 17090006

Linn County

Datum: 530.00 feet

Drainage Area: 557 square miles



14187200 SOUTH SANTIAM RIVER NEAR FOSTER, OR—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--July 1973 to September 1997, August 2001 to current year.

INSTRUMENTATION.--Temperature probe and data logger.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--Maximum, 15.5°C at times in 1975, 1978, 1981, 1987, 1990, 1993; minimum, 2.5°C Dec. 30, 31, 1978, Feb. 1, 1980, Feb. 7, 1985.

EXTREMES FOR CURENT YEAR.--Maximum, 15.2°C July 18; minimum, 4.6°C Jan. 6.

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	13.3	12.6	13.0	12.3	11.6	11.9	8.2	7.7	7.9	6.1	5.1	5.6
2	13.3	12.9	13.1	12.1	11.4	11.8	8.7	8.0	8.3	6.0	5.7	5.8
3	13.5	12.8	13.2	11.6	11.0	11.3	8.8	8.2	8.5	6.1	5.7	5.8
4	13.2	12.9	13.1	11.4	10.8	11.1	8.9	8.1	8.5	5.9	5.5	5.7
5	13.6	12.9	13.2	11.3	10.6	11.0	9.0	8.7	8.8	5.6	5.0	5.3
6	13.6	13.0	13.3	10.9	10.4	10.7	9.0	8.3	8.6	5.2	4.6	4.9
7	13.8	13.1	13.4	11.0	10.5	10.7	8.5	8.2	8.3	6.3	5.1	5.7
8	13.7	13.0	13.4	10.9	10.5	10.6	8.7	8.2	8.4	6.6	5.9	6.3
9	13.8	13.0	13.4	10.9	10.3	10.6	8.3	8.1	8.2	6.7	6.2	6.4
10	13.8	12.9	13.4	10.9	10.3	10.6	8.4	8.0	8.2	6.8	6.3	6.5
11	14.1	13.0	13.6	10.8	10.2	10.6	8.4	7.8	8.1	6.8	6.0	6.4
12	13.7	13.0	13.3	10.6	10.1	10.3	8.6	8.1	8.3	6.6	5.9	6.3
13	14.0	13.1	13.4	10.4	9.8	10.1	8.8	7.0	8.2	6.8	6.4	6.6
14	13.8	13.1	13.4	10.6	10.1	10.3	7.6	7.1	7.3	7.1	6.5	6.8
15	13.8	12.9	13.4	10.6	10.2	10.3	7.3	6.9	7.1	7.2	6.8	7.0
16	14.6	13.2	13.8	10.2	9.4	10.0	7.5	6.9	7.2	7.0	6.5	6.8
17	14.0	13.1	13.6	10.0	9.2	9.7	7.6	7.2	7.4	6.8	6.3	6.6
18	14.2	13.0	13.6	10.3	9.8	10.1	7.5	7.1	7.3	7.0	6.6	6.8
19	14.4	13.3	14.0	10.1	8.6	9.4	7.6	7.1	7.3	7.1	6.7	6.9
20	14.6	13.6	14.2	8.9	8.5	8.7	8.0	7.6	7.8	6.8	6.0	6.4
21	14.4	13.6	14.0	8.8	8.4	8.6	8.1	7.8	7.9	6.4	5.9	6.1
22	14.6	13.3	14.0	8.6	8.2	8.4	7.8	7.5	7.6	6.1	5.6	5.9
23	14.3	13.3	13.8	8.7	7.9	8.3	7.7	7.3	7.5	7.3	6.0	6.6
24	14.0	13.3	13.6	8.3	7.7	8.1	7.8	7.4	7.6	7.3	6.3	6.8
25	14.0	13.4	13.6	8.2	7.7	7.9	7.5	7.0	7.3	6.6	6.2	6.4
26	14.0	13.4	13.6	8.0	7.6	7.7	7.3	6.8	7.0	6.5	6.2	6.3
27	14.2	13.3	13.7	7.8	7.3	7.6	7.1	6.8	6.9	6.9	6.3	6.6
28	14.3	13.0	13.9	8.0	7.6	7.8	7.0	6.7	6.9	7.3	6.6	6.8
29	14.0	12.9	13.4	8.2	7.8	8.0	6.9	6.2	6.5	7.9	7.3	7.6
30	13.8	13.0	13.4	8.0	7.7	7.9	6.3	5.9	6.1	7.6	6.6	7.0
31	13.0	12.2	12.6	---	---	---	6.3	6.0	6.1	6.8	6.3	6.5
MONTH	14.6	12.2	13.5	12.3	7.3	9.7	9.0	5.9	7.6	7.9	4.6	6.4

14187200 SOUTH SANTIAM RIVER NEAR FOSTER, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	6.6	6.1	6.4	7.6	6.9	7.2	8.8	7.7	8.1	11.3	8.9	10.3
2	6.8	6.3	6.6	7.6	6.5	7.0	9.8	7.6	8.6	10.9	9.0	10.1
3	7.1	6.5	6.7	6.9	6.3	6.6	9.1	8.1	8.6	11.0	8.7	9.9
4	7.0	6.4	6.7	7.4	6.7	7.0	9.1	7.8	8.4	10.7	8.5	9.6
5	6.8	6.0	6.4	7.2	6.6	6.9	9.0	7.9	8.5	10.4	8.2	9.5
6	6.8	6.3	6.5	7.4	6.4	7.0	9.1	7.9	8.4	10.5	8.2	9.4
7	6.7	6.3	6.5	8.5	7.1	7.7	9.3	8.0	8.6	10.5	8.9	9.9
8	6.7	6.0	6.3	8.7	7.1	7.8	9.0	7.8	8.4	10.6	8.9	9.6
9	6.2	5.6	5.9	8.8	7.6	8.1	9.6	7.9	8.8	10.3	8.4	9.6
10	6.3	5.3	5.8	7.9	7.2	7.5	10.8	8.4	9.8	9.8	8.2	8.9
11	6.4	5.4	5.9	8.5	7.1	7.7	10.3	8.0	9.6	9.9	9.0	9.4
12	6.3	5.4	5.8	8.6	7.4	7.9	9.9	8.0	8.8	10.2	8.7	9.5
13	6.1	5.2	5.6	8.5	7.4	7.8	9.7	8.0	8.6	10.4	8.6	9.7
14	6.9	5.7	6.3	8.6	7.6	8.1	9.1	7.8	8.4	10.7	8.6	9.8
15	7.1	6.0	6.6	9.1	7.6	8.3	9.2	8.3	8.7	11.3	9.2	10.0
16	7.2	6.5	6.8	9.3	7.8	8.4	9.1	7.4	8.2	10.5	9.5	10.0
17	7.5	6.6	7.0	8.7	7.4	8.0	9.2	7.5	8.4	11.7	9.4	10.4
18	7.6	7.0	7.2	8.6	7.4	8.1	9.2	7.7	8.5	11.1	9.3	10
19	7.4	6.6	7.0	8.6	7.4	8.0	9.4	8.5	9.0	10.9	9.3	10.2
20	7.1	5.9	6.5	8.5	7.3	7.9	8.5	7.7	8.1	11.0	9.7	10.3
21	7.2	6.2	6.7	9.2	7.4	8.2	8.8	7.7	8.2	10.3	9.3	9.9
22	7.4	6.4	6.9	9.5	7.8	8.6	9.6	7.5	8.4	9.7	8.8	9.4
23	7.7	6.9	7.2	9.3	7.8	8.5	9.2	8.0	8.5	10.2	8.9	9.7
24	7.7	6.9	7.2	9.3	7.9	8.7	9.6	8.0	8.6	10.4	9.1	9.6
25	7.6	6.6	7.1	9.7	7.8	8.8	10.4	7.9	9.0	10.6	9.4	10.0
26	7.6	6.8	7.2	8.6	7.8	8.2	11.3	9.4	10.1	10.1	9.3	9.7
27	7.4	6.9	7.2	8.5	7.8	8.2	10.8	8.8	10.2	10.1	9.5	9.8
28	7.6	6.8	7.2	9.7	8.0	8.7	10.9	8.6	9.7	10.6	9.7	10.2
29	7.4	6.7	7.1	9.9	8.1	8.8	10.9	9.1	10.0	10.5	10.0	10.2
30	---	---	---	8.9	8.3	8.6	11.0	9.4	10.4	10.7	9.6	10.1
31	---	---	---	9.0	7.9	8.4	---	---	---	11.2	9.9	10.5
MONTH	7.7	5.2	6.6	9.9	6.3	8.0	11.3	7.4	8.9	11.7	8.2	9.8
	JUNE			JULY			AUGUST			SEPTEMBER		
1	11.3	10.0	10.6	13.7	11.4	12.5	13.8	12.2	13.0	14.4	13.6	14.1
2	11.2	10.2	10.6	13.2	11.4	12.4	13.8	12.1	12.8	14.1	13.8	13.9
3	11.8	10.2	10.9	13.1	11.8	12.4	13.7	12.2	12.9	14.1	13.6	13.8
4	11.9	10.3	11.0	13.4	11.7	12.5	13.5	12.2	12.9	14.1	13.6	13

14187500 SOUTH SANTIAM RIVER AT WATERLOO, OR

LOCATION.--Lat 44°29'55", long 122°49'20", in SW ¼ NW ¼ sec.28, T.12 S., R.1 W., Linn County, Hydrologic Unit 17090006, on left bank 0.1 mi downstream from highway bridge at Waterloo, 2.1 mi upstream from Hamilton Creek, and at mile 23.3.

DRAINAGE AREA.--640 mi².

PERIOD OF RECORD.--July 1905 to March 1907, October 1910 to December 1911 (gage heights only January to December 1911), July 1923 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as South Fork of Santiam River at Waterloo 1905-07, 1910-11.

REVISED RECORDS.--WSP 1248: 1907, 1924-30, 1932.

GAGE.--Water-stage recorder. Datum of gage is 370.39 ft above NGVD of 1929. Prior to Dec. 31, 1911, nonrecording gage at site 0.5 mi downstream at datum about 5.0 ft lower. July 1, 1923 to Nov. 12, 1934, nonrecording gage, at present site and datum.

REMARKS.--Records fair except for the period Dec. 13-21, which are poor. Flow regulated since October 1966 by Green Peter Lake (station 14186100) and since December 1966 by Foster Lake (station 14186600). Some diversion upstream from station. Continuous water-quality records for the period October 1963 to September 1987 have been collected at this location.

AVERAGE DISCHARGE.--44 years (water years 1906, 1924-1966), 2,896 ft³/s, 2,098,000 acre-ft/yr. 38 years (water years 1967-2004), 3,001 ft³/s, 2,174,000 acre-ft/yr (regulated period).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 95,200 ft³/s Dec. 22, 1964, gage height, 24.50 ft; minimum discharge, 61 ft³/s Oct. 12, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,000 ft³/s Dec. 13, gage height, 9.92 ft; minimum discharge, 553 ft³/s Oct. 1.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	586	596	4,480	4,450	11,500	3,000	3,350	3,600	1,360	e840	e730	1,000
2	587	600	4,840	5,050	11,000	2,380	3,410	3,770	1,280	e785	e630	1,130
3	582	602	6,580	4,910	8,250	1,880	3,380	3,870	1,250	e770	e630	1,120
4	586	594	6,200	3,920	8,560	2,360	3,360	3,860	1,250	e765	e630	1,120
5	589	591	8,090	3,430	8,040	3,290	3,590	3,870	1,250	e765	e630	1,120
6	594	595	9,610	2,890	8,220	3,840	3,860	3,610	1,270	e760	e630	1,120
7	608	593	8,860	4,320	8,120	3,460	3,520	3,160	1,330	e750	631	1,110
8	600	593	8,470	5,720	7,260	3,070	3,160	2,790	1,610	e750	626	1,120
9	605	600	7,140	5,940	6,730	2,630	3,630	2,700	2,010	750	622	1,110
10	609	600	7,030	7,980	e4,700	3,060	3,250	2,800	2,770	753	617	1,110
11	609	608	6,620	7,800	e4,140	3,520	2,990	2,910	2,750	745	605	1,120
12	636	635	7,040	6,720	3,010	3,580	3,500	2,700	2,210	737	612	1,130
13	621	620	e12,100	6,570	2,350	3,390	3,510	2,630	1,810	742	607	1,140
14	596	610	e13,000	6,870	1,750	3,340	3,580	2,350	1,460	743	607	1,150
15	603	616	e11,500	8,180	1,430	3,320	3,860	2,140	1,370	743	605	1,160
16	612	658	e11,100	8,600	1,690	2,810	3,470	1,910	1,320	742	601	1,170
17	592	1,190	e10,900	8,210	3,340	1,810	2,320	1,710	1,280	e750	601	1,190
18	618	1,330	e10,800	8,130	4,370	1,680	2,120	1,650	1,250	e725	610	1,310
19	634	1,180	e10,800	8,290	4,310	2,400	3,220	1,610	1,230	e755	607	1,310
20	609	1,320	e10,900	7,700	3,700	1,470	3,470	1,420	1,210	e805	607	1,340
21	596	952	e10,900	7,430	3,570	1,330	3,490	1,260	e1,210	e820	608	1,550
22	598	820	7,670	6,850	3,720	1,300	3,040	1,220	e1,200	e810	e700	1,600
23	607	753	6,910	7,920	2,780	1,210	2,570	1,220	e1,200	e815	e750	1,600
24	601	789	5,980	11,400	2,350	1,520	2,090	1,210	e1,190	e815	662	1,590
25	598	820	6,260	11,200	2,040	1,300	2,010	1,210	e1,190	e820	691	1,580
26	597	955	5,760	10,700	1,750	1,530	2,010	1,210	1,200	e815	759	1,600
27	585	1,000	5,380	9,100	2,000	1,830	2,890	1,290	1,180	e820	699	1,570
28	586	957	6,260	11,500	2,340	2,130	2,630	2,280	1,180	e820	661	1,560
29	595	5,500	7,750	12,900	2,950	2,020	2,900	3,290	1,100	e825	646	1,580
30	612	5,070	7,530	12,500	---	2,040	2,840	2,400	982	e825	635	1,570
31	594	---	4,920	11,800	---	2,940	---	1,650	---	e815	655	---
TOTAL	18,645	32,347	251,380	238,980	135,970	75,440	93,020	73,300	42,902	24,175	19,904	38,880
MEAN	601	1,078	8,109	7,709	4,689	2,434	3,101	2,365	1,430	780	642	1,296
MAX	636	5,500	13,000	12,900	11,500	3,840	3,860	3,870	2,770	840	759	1,600
MIN	582	591	4,480	2,890	1,430	1,210	2,010	1,210	982	725	601	1,000
AC-FT	36,980	64,160	498,600	474,000	269,700	149,600	184,500	145,400	85,100	47,950	39,480	77,120

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

MEAN	2,008	4,575	6,569	5,801	3,806	3,373	3,066	2,384	1,618	789	763	1,287
MAX	5,530	9,509	12,910	9,978	10,430	9,649	6,529	4,384	4,300	1,526	1,239	2,769
(WY)	(1969)	(1985)	(1978)	(1999)	(1996)	(1972)	(1993)	(1999)	(1984)	(1983)	(1969)	(1968)
MIN	601	827	1,126	713	597	865	1,059	792	616	470	475	473
(WY)	(2004)	(1988)	(1977)	(1977)	(1977)	(1992)	(1968)	(1987)	(1992)	(1967)	(1967)	(1967)

WILLAMETTE RIVER BASIN

14187500 SOUTH SANTIAM RIVER AT WATERLOO, OR—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1967 - 2004	
ANNUAL TOTAL	1,157,457		1,044,943		3,001	
ANNUAL MEAN	3,171		2,855		4,666	1974
HIGHEST ANNUAL MEAN					1,407	1977
LOWEST ANNUAL MEAN					26,000	Feb 9, 1996
HIGHEST DAILY MEAN	13,000	Dec 14	13,000	Dec 14	75	Oct 7, 1966
LOWEST DAILY MEAN	568	Sep 29	582	Oct 3		
ANNUAL SEVEN-DAY MINIMUM	573	Sep 2	590	Oct 1		
ANNUAL RUNOFF (AC-FT)	2,296,000		2,073,000		2,174,000	
10 PERCENT EXCEEDS	8,050		7,760		7,040	
50 PERCENT EXCEEDS	1,800		1,560		1,820	
90 PERCENT EXCEEDS	586		607		694	

e Estimated



2004 Water Year
SANTIAM RIVER BASIN

14187500 SOUTH SANTIAM RIVER AT WATERLOO, OR

Latitude: 44° 29 ' 55"

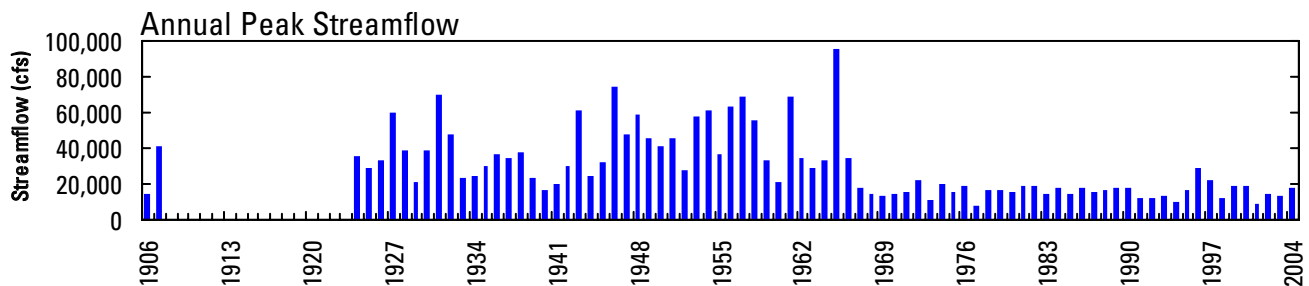
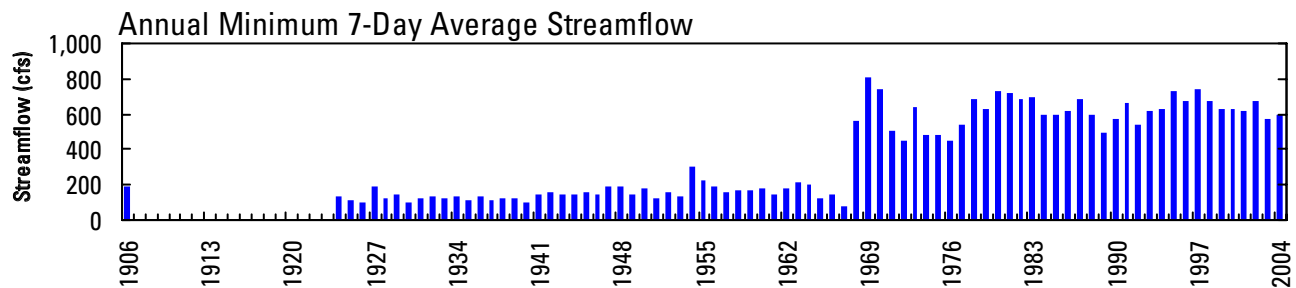
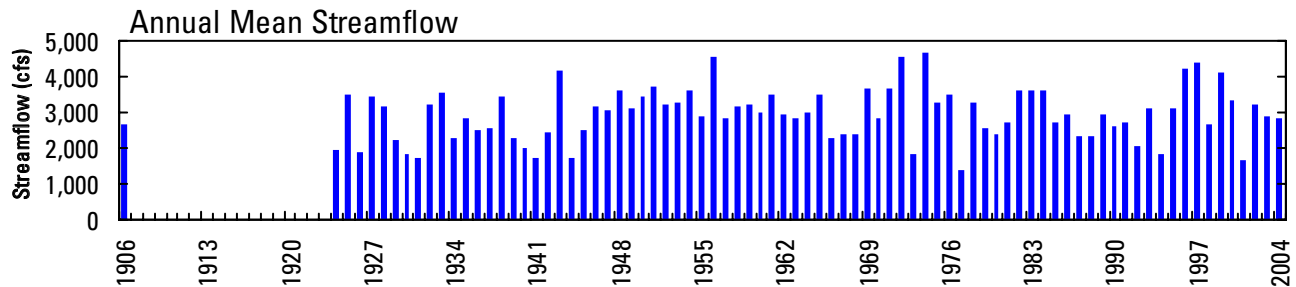
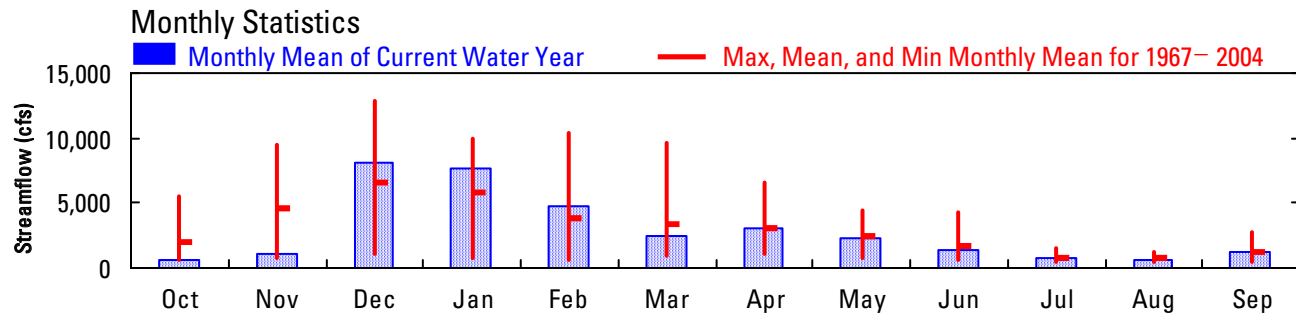
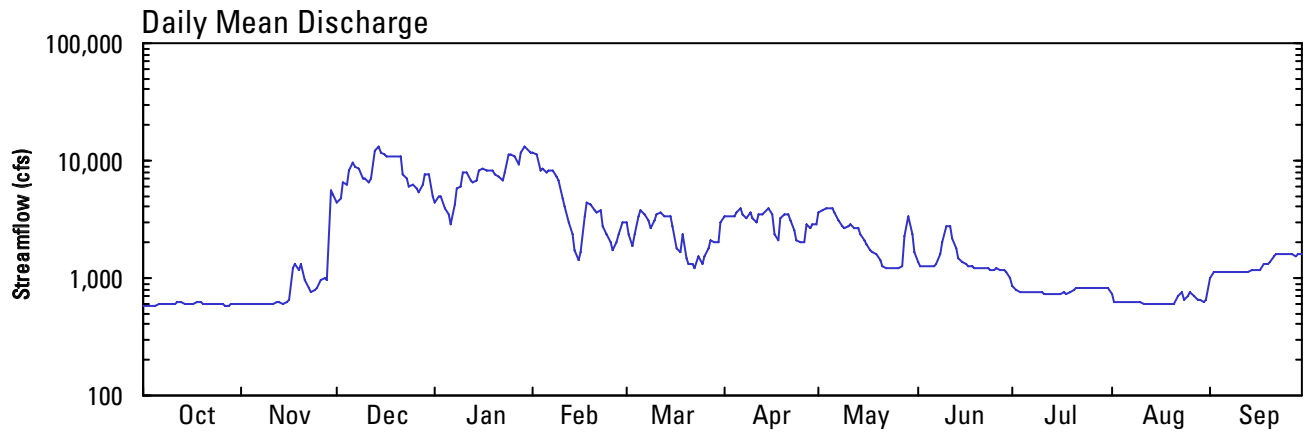
Longitude: 122° 49 ' 20"

Hydrologic Unit Code: 17090006

Linn County

Datum: 370.39 feet

Drainage Area: 640 square miles



14187600 LEBANON SANTIAM CANAL NEAR LEBANON, OR

LOCATION.--Lat 44°30'54", long 122°51'49", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.19, T.12 S., R.1 W., Linn County, Hydrologic Unit 17090006, near right bank, on downstream side of bridge on Headgate Road, 2.2 mi east of Lebanon.

PERIOD OF RECORD.--May 1992 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 370 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good except those for the period October 1-23, which is fair. Flow completely regulated.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 191 ft³/s Mar. 8, 1994; minimum daily discharge, 25 ft³/s Jan. 18, 1994.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	77	61	48	49	66	94	89	69	74	95	92
2	82	76	64	50	58	61	91	91	74	80	92	94
3	82	76	74	48	65	56	91	87	72	79	92	93
4	81	76	69	46	66	60	91	82	71	79	94	93
5	81	76	66	42	63	67	92	82	70	79	95	93
6	81	76	69	36	64	70	91	80	71	79	95	92
7	81	76	67	40	63	68	86	77	73	77	96	92
8	81	75	66	44	61	72	83	74	81	76	96	92
9	81	75	62	44	69	75	86	73	87	76	96	92
10	81	75	62	47	71	78	83	78	90	76	96	91
11	81	76	60	46	69	81	81	83	85	76	95	90
12	82	76	61	58	63	79	85	81	78	77	95	89
13	82	76	45	74	58	75	85	80	73	78	95	89
14	81	75	37	75	53	75	86	76	75	79	94	85
15	81	75	62	76	51	74	88	74	78	85	94	85
16	81	77	74	70	54	71	85	71	77	92	94	84
17	80	78	72	69	60	64	75	74	75	92	94	84
18	79	70	70	69	55	64	72	81	74	91	95	85
19	80	69	67	70	55	72	77	80	73	92	95	85
20	80	70	66	68	60	62	74	76	73	95	95	85
21	78	66	66	66	71	59	75	73	72	96	95	86
22	77	64	60	65	72	66	77	72	72	95	98	86
23	77	63	61	59	66	69	79	72	76	95	96	86
24	77	63	59	49	63	75	73	71	78	94	88	86
25	77	63	59	48	60	71	72	71	78	93	88	85
26	76	65	69	47	57	76	75	70	78	93	90	86
27	76	65	75	44	59	81	85	72	77	93	89	86
28	76	58	73	47	61	86	81	79	76	94	87	86
29	77	67	50	50	65	85	83	83	74	97	87	86
30	77	64	51	51	---	85	83	74	71	97	87	85
31	77	---	50	49	---	95	---	65	---	97	87	---
TOTAL	2,465	2,138	1,947	1,695	1,781	2,238	2,479	2,391	2,271	2,676	2,885	2,643
MEAN	79.5	71.3	62.8	54.7	61.4	72.2	82.6	77.1	75.7	86.3	93.1	88.1
MAX	82	78	75	76	72	95	94	91	90	97	98	94
MIN	76	58	37	36	49	56	72	65	69	74	87	84
AC-FT	4,890	4,240	3,860	3,360	3,530	4,440	4,920	4,740	4,500	5,310	5,720	5,240
CAL YR2003	TOTAL 27490 MEAN 75.3 MAX 105 MIN 37 AC-FT 54530											
WTR YR2004	TOTAL 27609 MEAN 75.4 MAX 98 MIN 36 AC-FT 54760											



2004 Water Year
SANTIAM RIVER BASIN

14187600 LEBANON SANTIAM CANAL, NEAR LEBANON, OR

Latitude: 44° 30 ' 54"

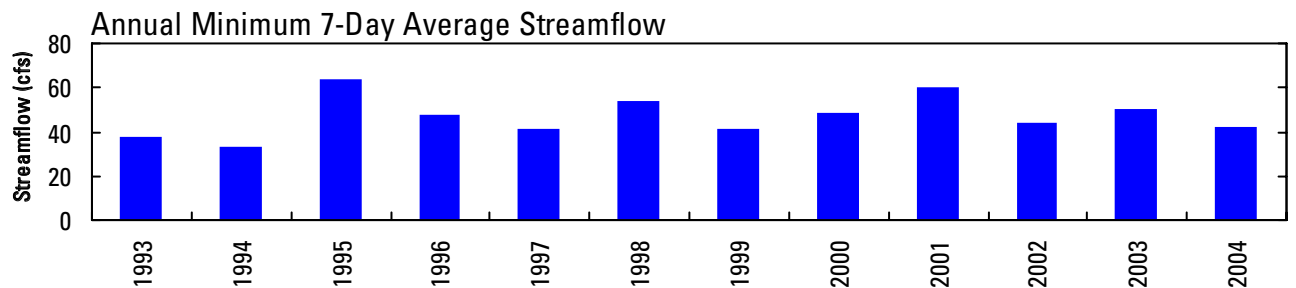
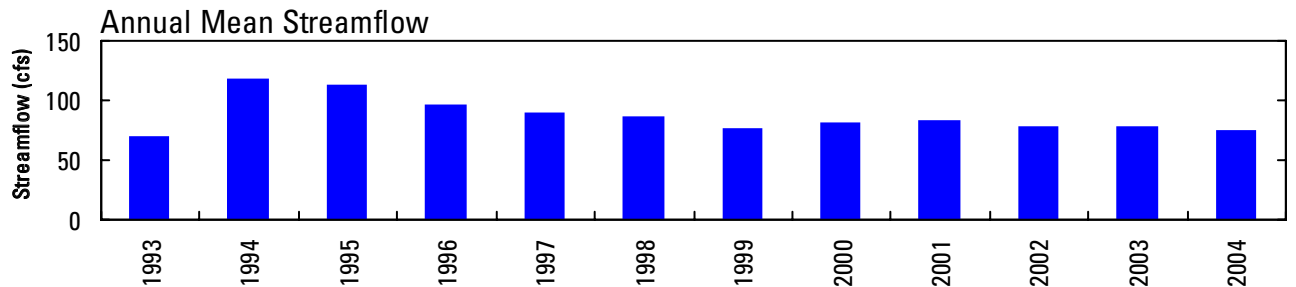
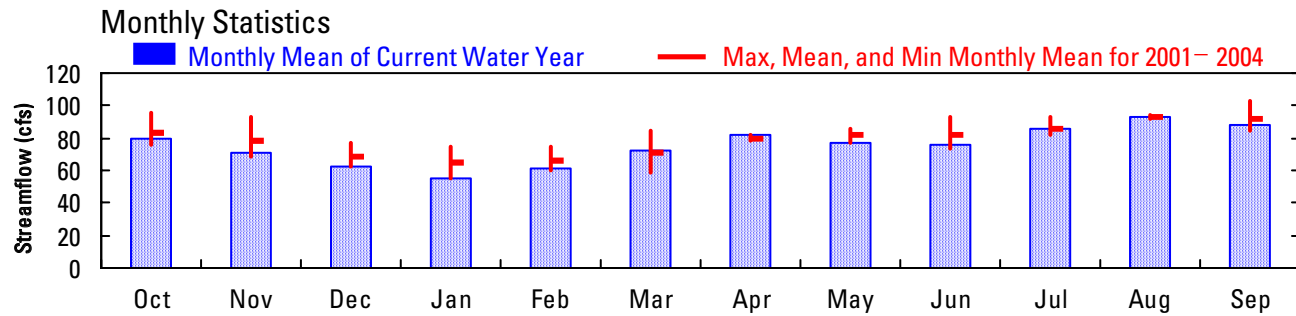
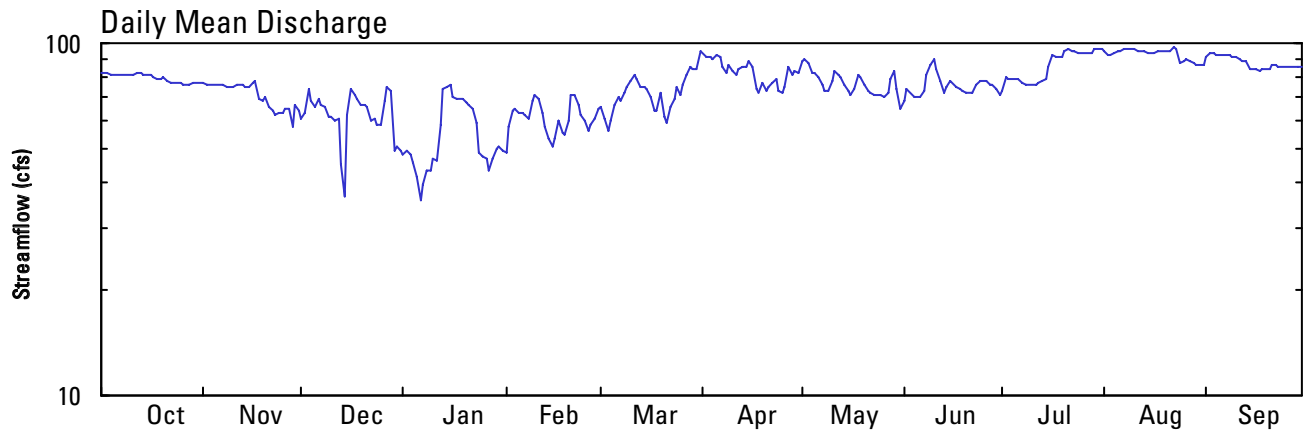
Longitude: 122° 51 ' 49"

Hydrologic Unit Code: 17090006

Linn County

Datum: 370.0 feet

Drainage Area:



14188610 SCHAFER CREEK NEAR LACOMB, OR

LOCATION.--Lat 44°37'11", long 122°27'53", in NE ¼ SE ¼ sec.8, T.11 S., R.3 E., Linn County, Hydrologic Unit 17090006, on right bank, 40 ft upstream from Crabtree Creek, and 8.0 mi east of LaComb.

DRAINAGE AREA.--1.03 mi².

PERIOD OF RECORD.--July 1993 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,900 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except those below 2.0 ft³/s and estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--11 years (water years 1994-2004), 7.54 ft³/s, 99.46 in/yr, 5,460 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 400 ft³/s Feb. 7, 1996, gage height, 7.93 ft, from rating curve extended above 110 ft³/s, on basis of slope-area measurement of peak flow; minimum discharge, 0.01 ft³/s Sept. 30, Oct. 1-5, 1999, Sept. 24, 25, 2001, Sept. 6, 7, 2003, Aug. 17-21, 2004.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 130 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 13	unknown	unknown	unknown	Jan 29	unknown	unknown	unknown

Minimum discharge, 0.01 ft³/s, Aug. 17-21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.40	2.1	14	e2.4	e15	6.9	5.4	e4.8	5.3	0.49	0.05	2.2
2	e0.40	1.9	11	e1.9	e11	5.7	4.7	e4.8	4.3	0.44	0.04	1.8
3	e0.40	1.6	20	e1.7	e8.5	4.8	4.8	e4.8	3.7	0.41	0.04	1.8
4	e0.40	1.4	12	e1.6	7.4	6.9	5.4	e4.6	3.1	0.36	0.04	1.6
5	e0.30	1.2	35	e1.3	6.0	11	e5.0	e4.0	3.4	0.31	0.03	1.3
6	e0.40	1.1	34	e1.3	6.2	14	e5.0	e3.6	5.4	0.29	0.04	1.1
7	e0.60	1.1	12	e1.7	7.0	9.0	e5.0	2.8	7.3	0.24	0.04	1.0
8	e0.60	1.1	9.1	e3.0	5.6	10	e5.0	3.0	8.6	0.22	0.04	0.96
9	e0.90	1.0	7.1	e5.5	4.5	14	e4.6	2.5	8.3	0.21	0.05	0.94
10	e1.8	1.2	6.9	e8.0	3.9	11	e4.8	2.3	14	0.19	0.04	0.84
11	e2.4	6.1	e9.0	e7.5	3.8	8.2	e5.0	4.3	9.5	0.17	0.04	2.1
12	e6.0	4.9	e13	e7.5	4.2	7.8	e5.0	3.5	6.7	0.19	0.04	1.9
13	e4.6	3.7	e140	e8.5	4.3	7.1	e5.5	3.0	5.4	0.17	0.04	3.3
14	e3.2	2.9	e70	e14	4.7	6.9	e7.0	2.8	4.5	0.15	0.04	4.1
15	e3.6	3.2	e26	e24	6.8	6.6	e6.5	2.6	3.9	0.13	0.03	8.4
16	e4.2	14	e16	e26	17	6.0	e5.5	2.8	3.4	0.13	0.03	7.4
17	3.1	25	e12	e18	26	6.0	e4.8	2.9	3.0	0.13	0.02	14
18	2.3	13	6.4	e17	29	6.4	e4.6	3.8	2.5	0.11	0.02	24
19	2.1	9.8	6.7	e20	18	6.0	e4.4	4.5	2.1	0.10	0.02	17
20	1.8	7.3	9.1	e18	9.6	5.2	e7.5	3.7	1.8	0.09	0.02	10
21	1.5	5.5	8.8	e14	6.6	5.9	e10	3.3	1.7	0.08	0.02	7.0
22	1.6	4.3	7.2	e10	5.2	7.5	e9.0	3.7	1.4	0.09	1.5	5.9
23	2.8	3.6	6.2	e24	4.7	7.4	e7.5	6.1	1.2	0.08	1.5	4.7
24	2.2	3.2	8.5	e46	5.3	7.7	e6.5	5.0	1.1	0.07	3.6	4.1
25	1.8	2.9	7.6	e30	5.5	7.8	e6.0	4.4	1.00	0.06	13	3.5
26	1.4	2.7	5.9	e16	6.8	7.9	e6.0	4.7	0.85	0.05	24	3.2
27	1.2	2.4	4.8	e17	10	15	e6.5	7.1	0.76	0.06	12	2.9
28	1.4	3.8	4.2	e34	9.6	9.9	e6.5	16	0.69	0.06	6.8	2.6
29	3.1	50	3.6	e170	7.1	9.0	e5.5	18	0.63	0.05	4.8	2.2
30	3.1	25	e3.0	e85	---	9.3	e4.8	10	0.56	0.05	3.6	2.0
31	2.6	---	e2.6	e30	---	7.1	---	7.0	---	0.05	2.8	---
TOTAL	62.20	207.0	531.7	664.9	259.3	254.0	173.8	156.4	116.09	5.23	74.33	143.84
MEAN	2.01	6.90	17.2	21.4	8.94	8.19	5.79	5.05	3.87	0.17	2.40	4.79
MAX	6.0	50	140	170	29	15	10	18	14	0.49	24	24
MIN	0.30	1.0	2.6	1.3	3.8	4.8	4.4	2.3	0.56	0.05	0.02	0.84
AC-FT	123	411	1,050	1,320	514	504	345	310	230	10	147	285
CFSM	1.95	6.70	16.7	20.8	8.68	7.95	5.62	4.90	3.76	0.16	2.33	4.66
IN.	2.25	7.48	19.20	24.01	9.37	9.17	6.28	5.65	4.19	0.19	2.68	5.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2004, BY WATER YEAR (WY)

MEAN	4.26	11.0	14.6	14.0	11.5	10.8	10.4	7.89	4.11	0.75	0.39	1.07
MAX	9.18	28.8	24.2	21.4	23.7	20.9	17.6	16.4	7.78	1.89	2.40	4.79
(WY)	(1997)	(1996)	(1997)	(2004)	(1996)	(2003)	(2002)	(1999)	(1999)	(1997)	(2004)	(2004)
MIN	0.32	0.97	4.44	4.42	4.33	7.25	5.79	3.84	1.00	0.13	0.04	0.04
(WY)	(2003)	(1994)	(1998)	(2001)	(2001)	(1996)	(2004)	(1994)	(2003)	(2003)	(2003)	(2001)

14188610 SCHAFER CREEK NEAR LACOMB, OR—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1994 - 2004	
ANNUAL TOTAL	2,830.40		2,648.79		7.54	
ANNUAL MEAN	7.75		7.24		10.5	
HIGHEST ANNUAL MEAN					4.20	
LOWEST ANNUAL MEAN					170	
HIGHEST DAILY MEAN	140	Dec 13	170	Jan 29	Jan 29, 2004	
LOWEST DAILY MEAN	0.02	Aug 30	0.02	Aug 17	0.01	
ANNUAL SEVEN-DAY MINIMUM	0.02	Aug 30	0.02	Aug 15	0.02	
ANNUAL RUNOFF (AC-FT)	5,610		5,250		5,460	
ANNUAL RUNOFF (CFSM)	7.53		7.03		7.32	
ANNUAL RUNOFF (INCHES)	102.22		95.67		99.46	
10 PERCENT EXCEEDS	17		14		17	
50 PERCENT EXCEEDS	4.0		4.5		3.8	
90 PERCENT EXCEEDS	0.06		0.13		0.15	

e Estimated



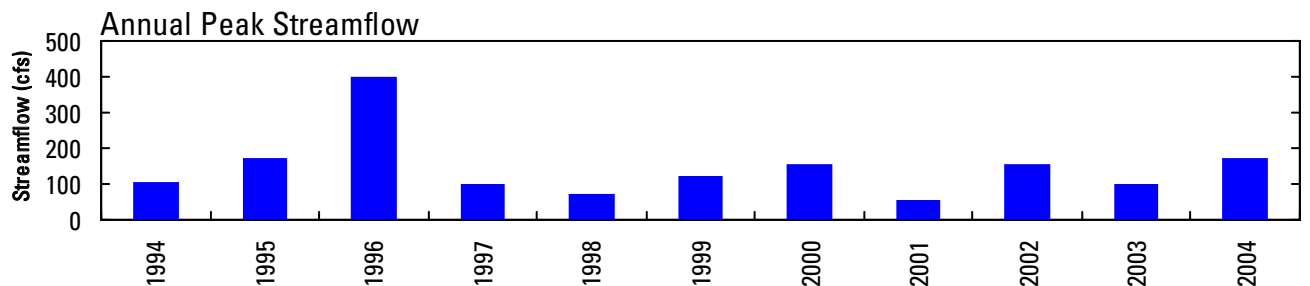
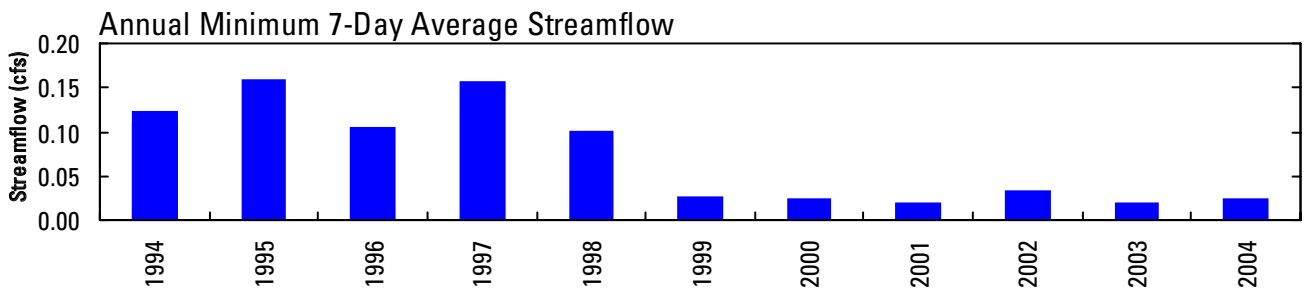
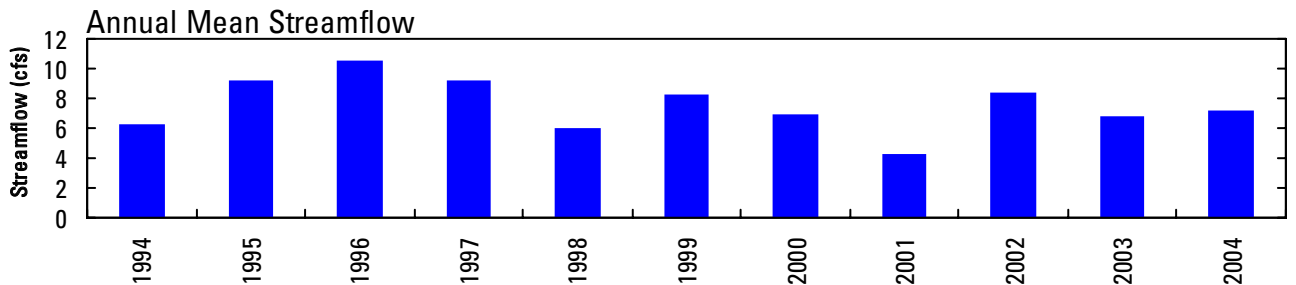
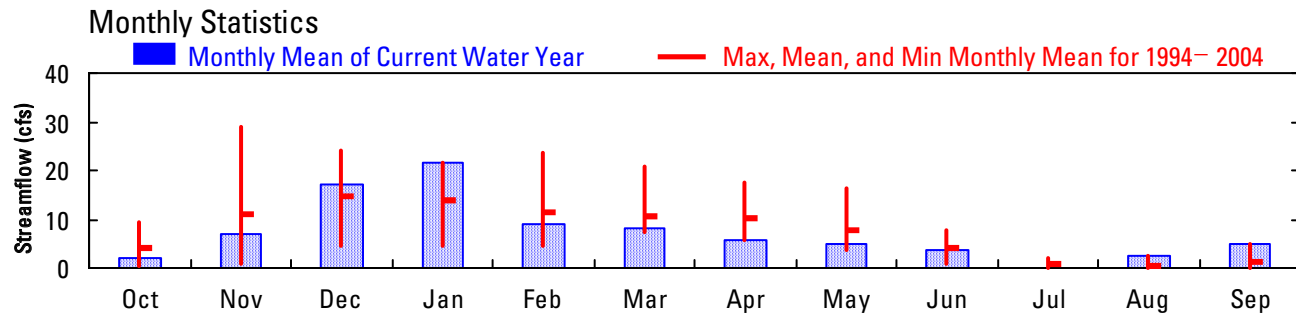
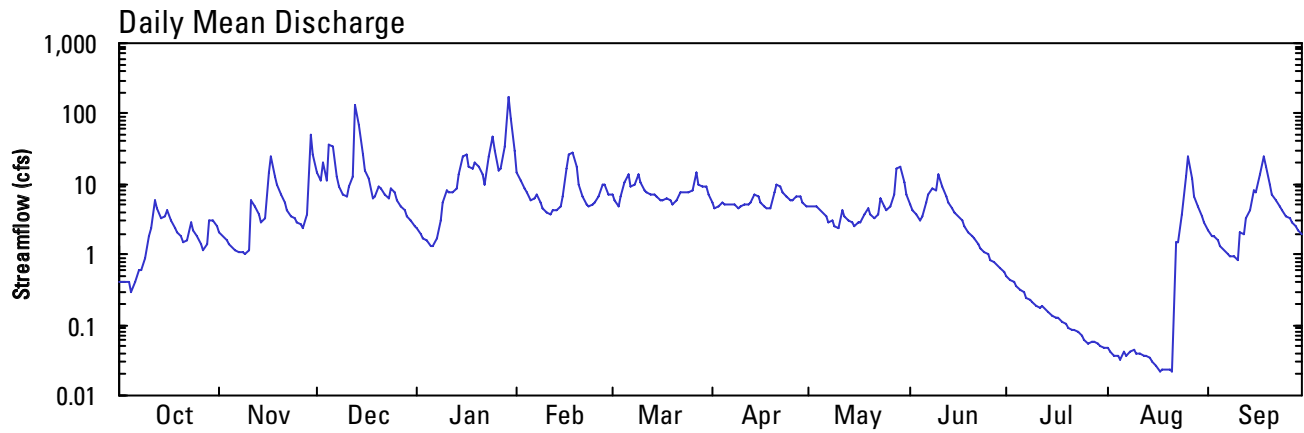
2004 Water Year
SANTIAM RIVER BASIN

14188610 SCHAFFER CREEK NEAR LACOMB, OR

Latitude: 44° 37 ' 11"
Linn County

Longitude: 122° 27 ' 53"
Datum: 2,900 feet

Hydrologic Unit Code: 17090006
Drainage Area: 1.03 square miles



14188800 THOMAS CREEK NEAR SCIO, OR

LOCATION.--Lat 44°42'44", long 122°46'08", in NW ¼ SE ¼ sec.11, T.10 S., R.1 W., Linn County, Hydrologic Unit 17090006, on right bank, at State Highway 226, 13 mi upstream from Mill Creek, 3.9 mi east of Scio, and at mile 14.2

DRAINAGE AREA.--109.73 mi².

PERIOD OF RECORD.--October 1962 to 1987, October 2002 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 370 ft above NGVD of 1929, from topographic map. October 1962 to 1986, at site 0.4 mi upstream, on left bank, at 380.84 ft above NGVD of 1929.

REMARKS.--Records fair. No regulation. Several small diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--26 years (water years 1963-1986, 2003-04), 493 ft³/s, 60.99 in/yr, 356,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,400 ft³/s Dec. 22, 1964, gage height, 18.44 ft, datum then in use, from rating curve extended above 7,200 ft³/s, on basis of slope-area measurement of peak flow; maximum gage height, 19.58 ft, Jan. 21, 1972, (backwater from debris), datum then in use; minimum discharge, 3.4 ft³/s Sept. 6, 2003.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 13	1600	*12,800	*15.80	Jan 29	1130	5,260	11.81
Jan 24	0830	4,600	11.36				

Minimum discharge, 6.5 ft³/s, Oct. 1, gage height, 4.17 ft.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	30	651	752	1,350	789	355	197	285	75	19	47
2	7.4	29	505	703	1,080	662	311	183	238	72	18	49
3	7.5	31	780	629	915	599	280	172	209	71	17	55
4	7.8	26	582	586	834	681	261	162	183	69	18	44
5	8.0	24	1,040	478	692	850	241	159	185	64	20	39
6	8.6	23	1,440	529	692	1,030	223	148	240	59	23	35
7	16	22	1,060	1,570	761	799	207	142	321	58	28	32
8	26	22	938	1,750	655	691	195	162	466	57	23	30
9	39	22	732	1,820	563	638	186	148	533	53	18	27
10	45	21	720	1,610	482	564	176	138	590	52	15	28
11	35	41	570	1,190	424	490	169	212	540	50	15	48
12	83	58	1,110	939	381	442	163	184	442	46	14	63
13	78	43	6,330	844	347	397	160	156	385	46	14	72
14	46	36	3,890	904	338	361	211	140	344	42	14	90
15	47	36	1,850	1,200	505	337	288	129	290	40	14	84
16	105	206	1,110	1,010	782	307	251	177	251	38	13	111
17	54	520	995	742	1,400	285	231	185	216	36	13	173
18	39	396	790	791	1,680	279	234	231	191	36	12	487
19	34	404	668	892	1,460	276	284	234	170	36	11	541
20	34	324	642	805	1,060	245	558	203	153	35	11	403
21	28	246	561	625	834	227	1,020	181	140	33	11	265
22	25	176	471	505	692	226	747	168	131	30	71	196
23	49	139	412	1,560	613	224	574	201	131	27	82	156
24	38	195	488	3,860	600	266	472	184	126	25	69	129
25	29	233	580	1,950	574	277	394	160	118	24	194	112
26	25	311	484	1,180	625	350	342	155	107	23	250	101
27	22	237	534	1,330	829	560	305	193	100	22	181	93
28	21	201	1,030	2,660	1,010	444	271	352	92	22	112	82
29	31	1,730	2,140	4,430	822	367	243	505	86	20	82	75
30	51	999	1,110	3,390	---	417	217	431	80	19	65	72
31	37	---	822	2,110	---	427	---	347	---	19	53	---
TOTAL	1,083.3	6,781	35,035	43,344	23,000	14,507	9,569	6,339	7,343	1,299	1,500	3,739
MEAN	34.9	226	1,130	1,398	793	468	319	204	245	41.9	48.4	125
MAX	105	1,730	6,330	4,430	1,680	1,030	1,020	505	590	75	250	541
MIN	7.0	21	412	478	338	224	160	129	80	19	11	27
AC-FT	2,150	13,450	69,490	85,970	45,620	28,770	18,980	12,570	14,560	2,580	2,980	7,420
CFSM	0.32	2.06	10.3	12.7	7.23	4.26	2.91	1.86	2.23	0.38	0.44	1.14
IN.	0.37	2.30	11.88	14.69	7.80	4.92	3.24	2.15	2.49	0.44	0.51	1.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2004, BY WATER YEAR (WY)

MEAN	166	685	1,080	1,080	867	730	564	370	202	76.1	41.7	67.2
MAX	633	1,898	2,310	1,836	1,666	1,504	921	744	682	407	203	251
(WY)	(1969)	(1974)	(1965)	(1972)	(1986)	(1972)	(2003)	(1963)	(1984)	(1983)	(1968)	(1968)
MIN	22.9	127	104	144	176	245	298	168	70.2	22.5	10.7	11.6
(WY)	(2003)	(2003)	(1977)	(1977)	(1977)	(1965)	(1968)	(1973)	(2003)	(2003)	(2003)	(2003)

WILLAMETTE RIVER BASIN

14188800 THOMAS CREEK NEAR SCIO, OR—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1963 - 2004	
ANNUAL TOTAL	192,062.8		153,539.3		493	
ANNUAL MEAN	526		420		760	
HIGHEST ANNUAL MEAN					1974	
LOWEST ANNUAL MEAN					229	
HIGHEST DAILY MEAN	6,330	Dec 13	6,330	Dec 13	11,400	Dec 22, 1964
LOWEST DAILY MEAN	4.5	Sep 6	7.0	Oct 1	4.5	Sep 6, 2003
ANNUAL SEVEN-DAY MINIMUM	5.4	Aug 31	8.9	Oct 1	5.4	Aug 31, 2003
ANNUAL RUNOFF (AC-FT)	381,000		304,500		356,900	
ANNUAL RUNOFF (CFSM)	4.80		3.82		4.49	
ANNUAL RUNOFF (INCHES)	65.11		52.05		60.99	
10 PERCENT EXCEEDS	1,200		1,010		1,160	
50 PERCENT EXCEEDS	206		206		279	
90 PERCENT EXCEEDS	9.8		23		27	



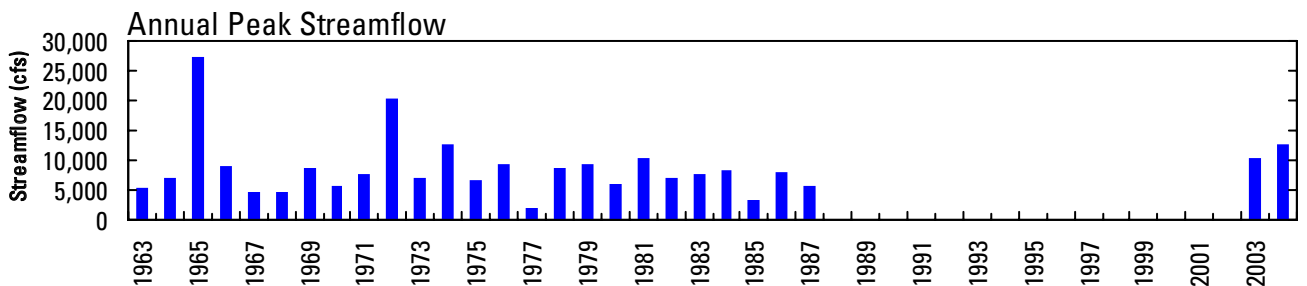
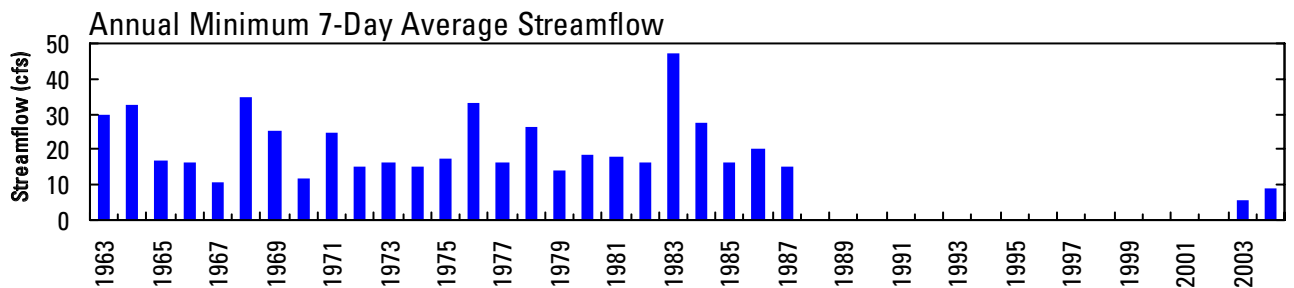
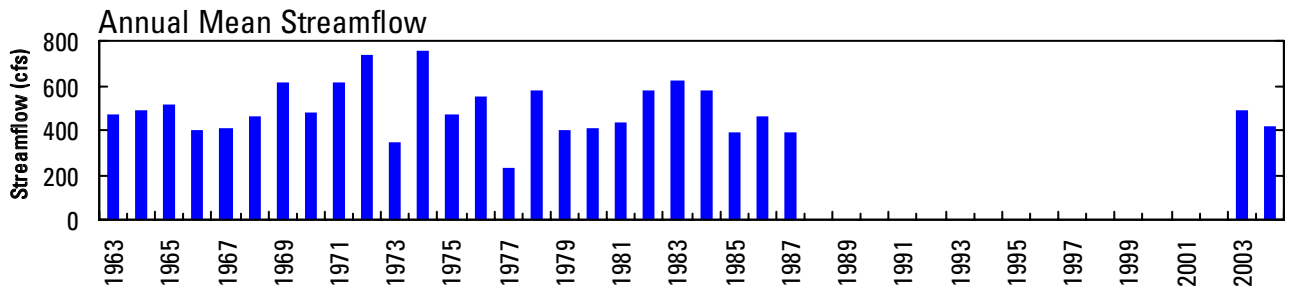
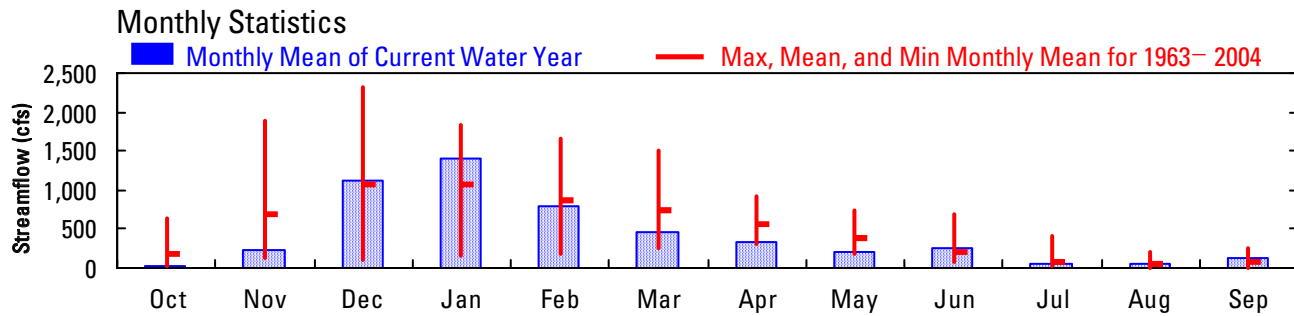
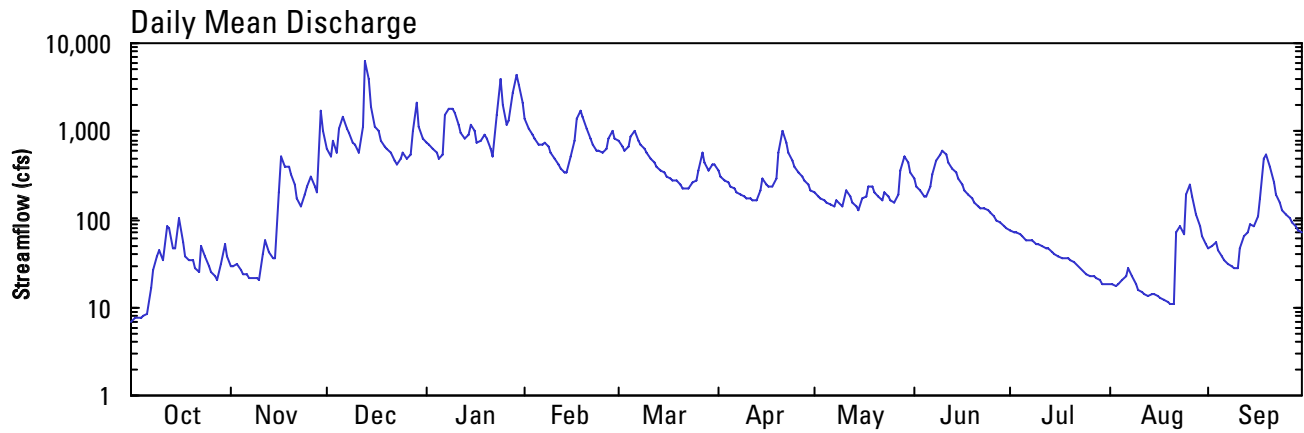
2004 Water Year
SANTIAM RIVER BASIN

14188800 THOMAS CREEK NEAR SCIO, OR

Latitude: 44° 42 ' 44"
Linn County

Longitude: 122° 46 ' 08"
Datum: 370 feet

Hydrologic Unit Code: 17090006
Drainage Area: 110 square miles



14188850 THOMAS CREEK NEAR CRABTREE, OR

LOCATION.--Lat 44°41'26", long 122°56'20", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.63, T.10 S., R.2 W., Linn County, Hydrologic Unit 17090006, on right bank, 4.2 mi northwest of Crabtree, and at mile 2.2.

DRAINAGE AREA.--142.68 mi².

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 247 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair. No regulation. Diversion for irrigation upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 15.43 ft Dec. 13, 2003; minimum gage height, 4.52 ft Sept. 6, 2003

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 15.43 ft Dec. 13; minimum gage height, 4.77 ft Oct. 1.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.79	5.16	7.38	8.04	8.72	7.63	6.56	6.00	6.25	5.35	5.00	5.20
2	4.82	5.13	7.05	8.09	8.34	7.36	6.43	5.95	6.09	5.34	5.01	5.21
3	4.86	5.15	7.51	7.92	8.06	7.25	6.32	5.89	5.99	5.32	5.00	5.23
4	4.87	5.13	7.24	7.78	7.93	7.36	6.25	5.83	5.89	5.33	4.99	5.19
5	4.89	5.09	7.92	7.48	7.70	7.58	6.20	5.81	5.86	5.30	5.01	5.16
6	4.90	5.08	8.51	7.40	7.68	7.94	6.14	5.76	6.01	5.29	5.00	5.13
7	4.94	5.07	8.09	8.75	7.82	7.57	6.07	5.73	6.35	5.24	5.06	5.10
8	5.04	5.07	7.95	9.10	7.60	7.36	6.02	5.83	6.67	5.25	5.06	5.08
9	5.14	5.07	7.60	9.10	7.41	7.25	5.98	5.78	6.90	5.24	5.03	5.07
10	5.24	5.05	7.66	8.82	7.25	7.11	5.94	5.72	6.99	5.23	4.99	5.08
11	5.22	5.06	7.30	8.41	7.11	6.95	5.90	5.94	6.92	5.23	4.97	5.09
12	5.34	5.36	8.03	8.10	6.99	6.83	5.87	5.93	6.70	5.21	4.97	5.31
13	5.52	5.27	11.58	7.94	6.89	6.72	5.84	5.79	6.53	5.19	4.95	5.25
14	5.32	5.21	11.36	7.95	6.85	6.62	5.96	5.71	6.45	5.17	4.94	5.46
15	5.22	5.17	9.08	8.37	7.20	6.54	6.29	5.67	6.28	5.14	4.96	5.35
16	5.56	5.52	8.29	8.16	7.62	6.46	6.22	5.80	6.15	5.13	4.95	5.52
17	5.35	7.04	8.15	7.79	8.52	6.38	6.14	5.88	6.03	5.12	4.92	5.63
18	5.23	6.70	7.82	7.90	8.89	6.34	6.12	6.02	5.93	5.13	4.91	6.67
19	5.17	6.71	7.62	8.07	8.57	6.35	6.27	6.08	5.82	5.12	4.91	6.92
20	5.15	6.60	7.55	7.94	8.04	6.25	6.82	5.98	5.76	5.15	4.89	6.61
21	5.12	6.33	7.41	7.62	7.70	6.19	7.78	5.88	5.70	5.09	4.89	6.24
22	5.08	6.06	7.22	7.40	7.45	6.17	7.39	5.82	5.65	5.09	5.06	5.98
23	5.15	5.87	7.07	8.53	7.28	6.15	7.05	5.93	5.66	5.07	5.46	5.79
24	5.24	6.02	7.31	11.05	7.28	6.23	6.83	5.90	5.64	5.05	5.27	5.65
25	5.14	6.13	7.64	9.27	7.25	6.32	6.64	5.79	5.59	5.02	5.70	5.56
26	5.09	6.52	7.36	8.46	7.38	6.52	6.49	5.74	5.55	5.03	6.10	5.51
27	5.06	6.30	7.57	8.59	7.65	6.96	6.37	5.85	5.51	5.02	5.89	5.47
28	5.05	6.11	8.41	9.74	7.93	6.79	6.27	6.30	5.47	5.01	5.59	5.42
29	5.06	8.27	9.74	11.48	7.66	6.58	6.19	6.78	5.43	5.01	5.42	5.37
30	5.26	7.98	8.49	10.78	---	6.66	6.08	6.66	5.38	4.99	5.30	5.35
31	5.23	---	8.12	9.46	---	6.75	---	6.45	---	4.99	5.26	---
TOTAL	159.05	175.23	250.03	265.49	222.77	211.17	190.43	184.20	181.15	159.85	159.46	165.60
MEAN	5.13	5.84	8.07	8.56	7.68	6.81	6.35	5.94	6.04	5.16	5.14	5.52
MAX	5.56	8.27	11.58	11.48	8.89	7.94	7.78	6.78	6.99	5.35	6.10	6.92
MIN	4.79	5.05	7.05	7.40	6.85	6.15	5.84	5.67	5.38	4.99	4.89	5.07

14189000 SANTIAM RIVER AT JEFFERSON, OR

LOCATION.--Lat 44°42'55", long 123°00'40", in SE ¼ sec.11, T.10 S., R.3 W., Marion County, Hydrologic Unit 17090005, on right bank 350 ft upstream from Southern Pacific railroad bridge at Jefferson, 2.1 mi downstream from confluence of North and South Santiam Rivers, and at mile 9.62.

DRAINAGE AREA.--1,790 mi², approximately.

PERIOD OF RECORD.--October 1905 to June 1906 (gage heights and discharge measurements only), October 1907 to September 1916, October 1939 to current year. Gage-height records collected at same site since 1907 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 904: Drainage area. WSP 1094: 1908, 1910, 1912, 1943. WSP 1248: 1911, 1915-16(M). WSP 1935: 1909, WDR OR-93-1: 1974.

GAGE.--Water-stage recorder. Datum of gage is 199.63 ft above NGVD of 1929. Prior to Sept. 22, 1940, nonrecording gages at sites within 350 ft downstream at datum 3.00 ft higher.

REMARKS.--No estimated daily discharges. Records good except for the period July 15 to Sept. 30, which is fair. Flow regulated since 1953 by Detroit Lake, since 1966 by Green Peter Lake, and by Foster Lake. Salem Canal diverts from North Santiam River at Stayton for irrigation and power; most of this water reaches Willamette River by way of Mill Creek at Salem. Stayton Canal diverts from North Santiam River at Stayton for irrigation of lands near town of West Stayton; some return flow reaches North Santiam River upstream from station. Albany power canal diverts from South Santiam River at Lebanon; return flow reaches Willamette River at Albany. Continuous water-quality records for the period October 1963 to September 1987 have been collected at this location. Water temperature data for the period October 2000 to June 2001 available in the files of the Portland Field Office. Periodic suspended sediment data are available for the period October 1991 to September 1993.

AVERAGE DISCHARGE.--22 years (water years 1908-16, 1940-1952), 7,587 ft³/s, 5,497,000 acre-ft/yr. 52 years (water years 1953-2004), 7,785 ft³/s, 5,640,000 acre-ft/yr (regulated period).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 197,000 ft³/s Dec. 22, 1964, gage height, 24.22 ft; minimum discharge observed, 260 ft³/s Aug. 15-22, Aug. 24 to Sept. 2, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood stage of 25.0 ft was reached in December 1861, and 23.4 ft in February 1890 (information from Corps of Engineers). On Nov. 21, 1921, the stage reached 19.5 ft at gage on railroad bridge 350 ft downstream, corresponding gage height at present site and datum, 24.4 ft, from curve of relation, discharge, 202,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 50,900 ft³/s Dec. 14, gage height, 15.18 ft; minimum discharge, 1,150 ft³/s Aug. 20-22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,120	2,540	11,500	11,300	25,500	8,320	7,520	5,440	5,090	2,200	1,460	1,860
2	2,130	2,550	10,600	11,900	23,700	7,460	7,640	5,730	4,810	2,060	1,420	2,130
3	2,140	2,530	13,000	11,100	20,300	6,190	7,400	5,820	4,210	2,010	1,390	2,270
4	2,170	2,510	12,900	10,000	19,600	7,240	7,340	5,760	3,870	2,000	1,370	2,360
5	2,170	2,500	16,100	8,490	18,100	9,290	7,400	5,760	3,620	1,970	1,350	2,420
6	2,210	2,490	21,800	7,490	18,100	10,800	7,660	5,480	3,890	1,920	1,350	2,410
7	2,240	2,490	19,800	10,600	18,400	9,040	6,560	5,020	5,290	1,910	1,370	2,400
8	2,250	2,490	18,900	14,300	16,400	8,090	5,550	4,790	6,640	1,900	1,380	2,370
9	2,340	2,480	16,300	15,000	14,200	7,500	5,670	4,550	7,840	1,870	1,370	2,360
10	2,440	2,480	15,100	17,300	11,300	7,410	5,470	4,490	8,270	1,870	1,330	2,450
11	2,540	2,570	13,800	16,900	9,660	7,440	5,140	4,850	8,590	1,870	1,280	2,610
12	2,770	2,970	15,500	14,700	8,370	7,320	5,420	4,880	7,190	1,850	1,250	2,770
13	2,980	2,820	27,800	14,000	6,680	6,950	5,560	4,590	6,150	1,840	1,230	2,830
14	2,690	2,740	40,800	14,300	5,780	6,690	5,700	4,280	5,390	1,780	1,220	3,710
15	2,590	2,720	26,600	17,300	5,810	6,450	6,390	3,970	5,090	1,710	1,200	3,550
16	2,870	2,910	22,900	17,800	6,620	6,180	6,160	3,830	4,430	1,620	1,200	3,890
17	2,720	5,540	21,900	16,100	11,100	5,040	5,290	3,770	4,000	1,570	1,180	3,860
18	2,590	5,870	20,700	15,600	14,000	4,620	4,640	3,660	3,650	1,570	1,170	5,800
19	2,560	5,950	19,900	16,500	13,500	5,340	5,420	3,870	3,500	1,560	1,170	6,090
20	2,520	6,480	19,600	15,900	11,400	4,720	6,720	3,860	3,320	1,560	1,160	5,490
21	2,500	5,520	19,400	14,400	9,730	4,050	8,770	3,510	3,090	1,580	1,150	4,950
22	2,490	4,930	16,700	13,300	8,960	3,990	7,880	3,340	2,920	1,560	1,190	4,570
23	2,540	4,580	14,600	15,900	7,650	3,970	7,030	3,440	2,900	1,510	1,840	4,310
24	2,600	4,670	13,500	32,600	6,940	4,290	5,770	3,740	2,800	1,490	1,750	4,160
25	2,490	4,880	13,000	25,600	6,600	4,230	5,330	3,560	2,690	1,500	2,650	3,990
26	2,420	5,630	11,800	23,300	6,370	4,640	4,990	3,330	2,640	1,500	3,970	3,920
27	2,400	5,560	10,300	20,900	6,880	5,330	5,380	3,930	2,610	1,480	3,560	3,840
28	2,400	5,160	13,600	24,400	8,430	5,660	5,380	6,310	2,560	1,480	2,570	3,740
29	2,460	12,400	20,300	37,900	8,310	5,580	5,230	10,800	2,480	1,480	2,150	3,700
30	2,650	14,700	16,800	33,800	---	6,060	5,090	9,850	2,330	1,470	1,940	3,690
31	2,600	---	12,500	27,900	---	7,070	---	6,980	---	1,460	1,820	---
TOTAL	76,590	133,660	548,000	546,580	348,390	196,960	185,500	153,190	131,860	53,150	50,440	104,500
MEAN	2,471	4,455	17,680	17,630	12,010	6,354	6,183	4,942	4,395	1,715	1,627	3,483
MAX	2,980	14,700	40,800	37,900	25,500	10,800	8,770	10,800	8,590	2,200	3,970	6,090
MIN	2,120	2,480	10,300	7,490	5,780	3,970	4,640	3,330	2,330	1,460	1,150	1,860
AC-FT	151,900	265,100	1,087,000	1,084,000	691,000	390,700	367,900	303,900	261,500	105,400	100,000	207,300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2004, BY WATER YEAR (WY)

MEAN	4,715	11,250	15,990	14,960	11,450	9,348	8,362	7,078	4,475	1,855	1,437	2,685
MAX	11,890	26,850	37,880	30,310	32,350	25,700	16,150	14,180	11,150	4,825	2,883	5,325
(WY)	(1969)	(1974)	(1965)	(1953)	(1996)	(1972)	(1993)	(1960)	(1984)	(1983)	(1968)	(1968)
MIN	432	622	2,420	2,178	1,897	3,245	3,874	2,115	1,287	944	747	887
(WY)	(1953)	(1953)	(1977)	(1977)	(1977)	(1992)	(1968)	(1973)	(1992)	(1965)	(1966)	(1953)

WILLAMETTE RIVER BASIN

14189000 SANTIAM RIVER AT JEFFERSON, OR—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1953 - 2004	
ANNUAL TOTAL	2,876,477		2,528,820			
ANNUAL MEAN	7,881		6,909		7,785	
HIGHEST ANNUAL MEAN					12,310	
LOWEST ANNUAL MEAN					3,512	
HIGHEST DAILY MEAN	40,800	Dec 14	40,800	Dec 14	143,000	Dec 23, 1964
LOWEST DAILY MEAN	984	Aug 16	1,150	Aug 21	396	Oct 7, 1952
ANNUAL SEVEN-DAY MINIMUM	995	Aug 14	1,170	Aug 16	406	Oct 15, 1952
ANNUAL RUNOFF (AC-FT)	5,705,000		5,016,000		5,640,000	
10 PERCENT EXCEEDS	19,600		16,300		17,500	
50 PERCENT EXCEEDS	5,350		4,800		5,110	
90 PERCENT EXCEEDS	1,140		1,580		1,440	



2004 Water Year
SANTIAM RIVER BASIN

14189000 SANTIAM RIVER AT JEFFERSON, OR

Latitude: 44° 42 ' 55"

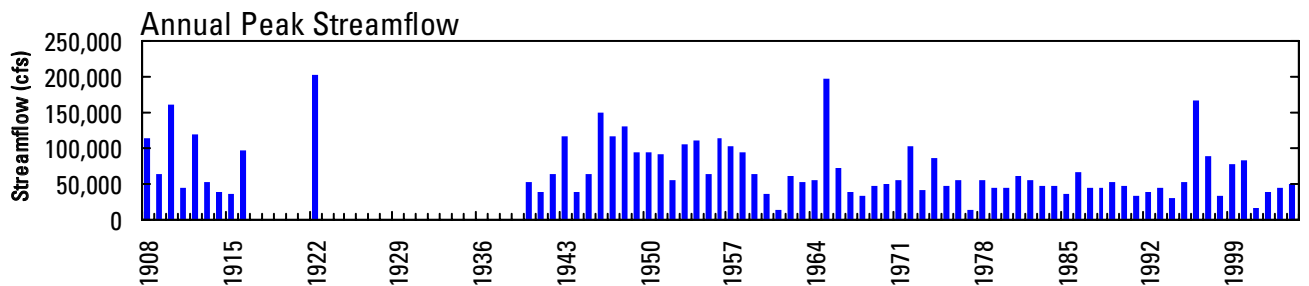
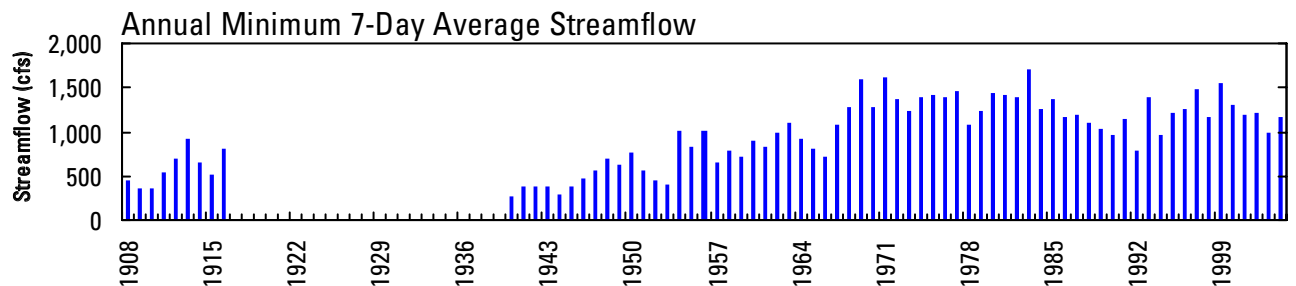
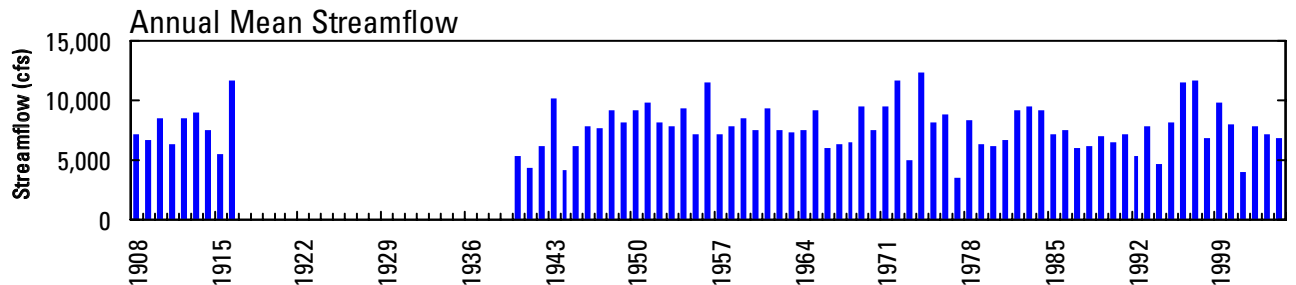
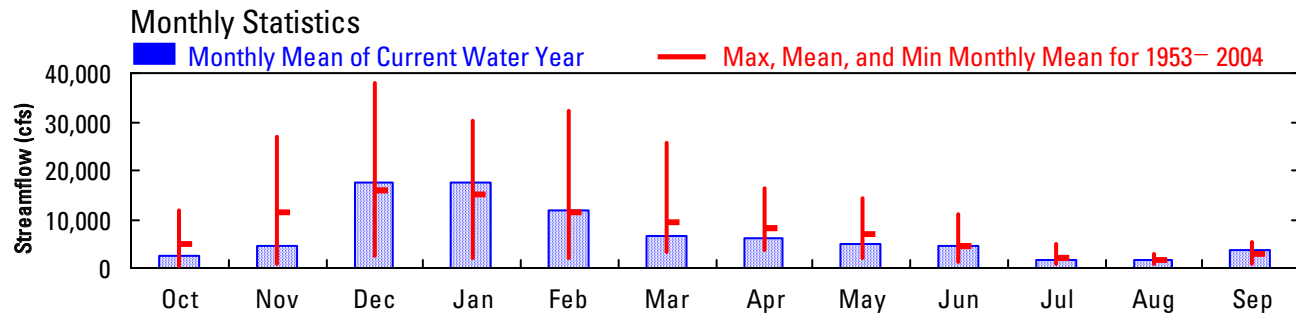
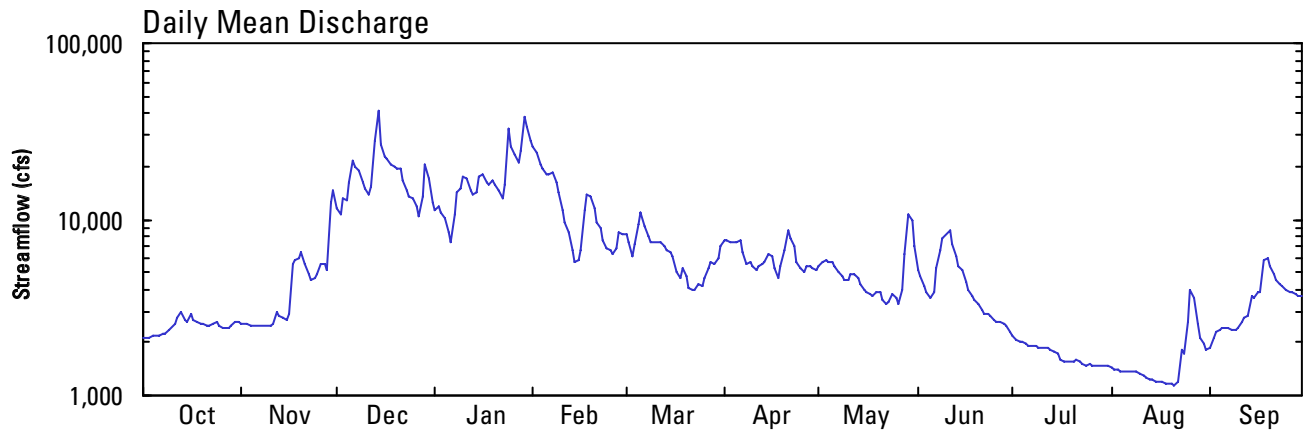
Longitude: 123° 00 ' 40"

Hydrologic Unit Code: 17090005

Marion County

Datum: 199.63 feet

Drainage Area: 1,790 square miles



WILLAMETTE RIVER BASIN

14189050 SANTIAM RIVER NEAR JEFFERSON, OR

WATER-QUALITY RECORDS

LOCATION.--Lat 44°44'20", long 123°02'55", in SW $\frac{1}{4}$ sec.34, T.9 S., R.3 W., Marion County, Hydrologic Unit 17090005, on right bank 0.1 mi upstream from Interstate 5 bridge in east side of Santiam Safety Rest Area, and at mile 6.2.

DRAINAGE AREA.--1,790 mi² approximately, at site (14189000) 3.42 mi upstream.

PERIOD OF DAILY RECORD.--May 2001 to current year.

INSTRUMENTATION.--Temperature probe and data logger.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded, 23.5°C July 24, 2004; minimum recorded, 3.3°C Jan. 6, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum recorded, 23.5°C July 24; minimum recorded, 3.3°C Jan. 6.

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	16.3	14.6	15.5	9.8	8.6	9.3	8.8	8.3	8.6	6.5	4.9	5.7
2	16.0	14.9	15.3	9.9	9.6	9.8	9.2	8.7	8.9	5.7	4.8	5.3
3	15.8	14.6	15.2	10.2	9.2	9.8	9.2	8.3	8.8	6.0	5.6	5.8
4	15.6	14.7	15.0	10.3	9.3	9.8	8.5	7.8	8.1	6.0	5.5	5.9
5	15.0	14.4	14.7	10.2	9.6	9.9	9.3	8.5	9.0	5.5	4.3	4.9
6	16.0	14.1	15.1	10.5	9.5	10.1	9.1	8.4	8.7	4.3	3.3	3.7
7	16.2	15.3	15.8	11.0	10.2	10.6	8.4	8.2	8.3	5.2	3.6	4.4
8	15.8	14.2	14.7	10.9	10.4	10.7	8.7	8.2	8.4	6.0	5.2	5.6
9	14.4	13.6	14.0	11.3	10.3	10.8	8.4	8.0	8.1	6.3	5.9	6.1
10	14.3	13.0	13.7	11.2	10.6	11.0	8.5	8.0	8.2	6.8	6.2	6.5
11	14.1	12.9	13.2	12.0	11.2	11.6	8.5	8.2	8.4	6.8	6.3	6.5
12	14.0	12.6	13.2	11.6	10.2	10.7	8.6	8.3	8.4	6.5	6.1	6.3
13	13.6	12.4	13.1	10.3	9.1	9.6	8.7	8.1	8.5	6.9	6.2	6.6
14	14.5	13.1	13.7	11.2	9.9	10.5	8.1	7.1	7.4	7.1	6.8	6.9
15	14.0	12.9	13.3	11.2	10.8	10.9	7.5	7.1	7.3	7.3	7.0	7.1
16	14.3	13.1	13.6	10.8	10.3	10.5	7.6	7.0	7.3	7.2	6.9	7.0
17	16.0	14.0	14.9	10.3	9.6	9.8	7.9	7.6	7.7	7.0	6.8	6.9
18	15.6	14.2	14.8	10.6	9.7	10.2	7.7	7.3	7.5	7.4	6.8	7.1
19	15.3	14.5	14.9	10.6	8.8	10.0	7.6	7.0	7.3	7.3	7.1	7.2
20	16.4	14.9	15.6	8.8	7.9	8.2	8.2	7.6	7.9	7.2	6.4	6.8
21	16.8	15.6	16.2	8.7	8.0	8.3	8.4	8.0	8.2	6.5	6.2	6.3
22	16.6	15.8	16.2	8.0	7.5	7.8	8.1	7.4	7.7	6.3	5.9	6.1
23	15.8	14.3	14.9	8.6	7.8	8.2	7.5	7.2	7.3	7.3	6.3	6.6
24	14.4	13.0	13.6	8.9	8.2	8.6	7.7	7.4	7.6	7.3	6.6	7.1
25	13.7	12.6	13.2	8.6	8.1	8.3	7.6	7.1	7.4	6.6	6.2	6.4
26	14.0	12.6	13.4	8.7	7.8	8.2	7.1	6.5	6.8	6.6	6.3	6.5
27	14.4	12.9	13.7	8.2	7.5	7.9	7.0	6.7	6.8	6.9	6.4	6.6
28	15.1	14.3	14.6	9.1	7.9	8.4	7.0	6.8	6.9	7.1	6.8	7.0
29	14.7	12.8	13.6	9.2	8.2	8.8	7.0	5.7	6.1	7.7	7.1	7.4
30	12.8	11.3	12.1	8.3	8.2	8.3	6.0	5.5	5.7	7.7	6.9	7.3
31	11.3	9.6	10.1	---	---	---	6.4	6.0	6.2	6.9	6.5	6.6
MONTH	16.8	9.6	14.2	12.0	7.5	9.6	9.3	5.5	7.7	7.7	3.3	6.3

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	6.6	6.1	6.4	8.7	7.4	7.9	9.6	7.8	8.8	14.0	12.6	13.4
2	6.9	6.4	6.6	8.5	7.3	7.9	10.2	7.7	9.0	14.3	11.8	13.1
3	6.9	6.4	6.7	7.9	6.8	7.2	11.5	8.8	10.2	14.5	11.9	13.3
4	7.2	6.6	6.9	7.8	6.8	7.2	11.1	9.2	10.3	14.0	11.6	12.5
5	6.8	6.0	6.4	7.5	7.0	7.2	10.5	8.6	9.3	12.8	10.7	11.7
6	6.8	6.3	6.5	7.8	6.7	7.3	10.1	8.5	9.3	12.6	10.6	11.7
7	6.9	6.3	6.6	9.7	7.8	8.6	10.4	8.8	9.5	12.6	11.4	12.2
8	6.9	6.0	6.4	9.8	8.4	9.2	11.4	9.3	10.3	13.5	10.9	12.1
9	6.7	5.9	6.1	9.8	8.8	9.4	11.6	9.7	10.7	13.8	11.6	12.6
10	6.4	5.5	6.0	9.3	7.9	8.7	12.4	10.2	11.4	13.3	11.0	12.0
11	6.7	5.5	6.1	9.2	7.7	8.5	13.2	11.2	12.2	11.9	10.5	11.1
12	6.7	5.4	6.2	9.6	8.2	8.9	12.8	10.8	11.5	12.5	10.8	11.6
13	6.3	5.3	5.6	9.2	8.2	8.7	11.1	10.1	10.6	13.5	11.2	12.3
14	7.2	5.5	6.3	10.1	8.9	9.5	10.6	9.7	10.1	13.6	12.6	13.1
15	8.1	7.1	7.5	9.8	8.4	9.2	9.9	8.9	9.5	12.9	11.5	12.5
16	7.8	7.4	7.5	10.0	8.5	9.3	11.2	9.1	10.0	13.6	11.4	12.3
17	7.5	7.0	7.2	10.2	8.8	9.5	11.2	9.7	10.5	15.0	12.2	13.5
18	8.1	7.5	7.8	10.0	8.7	9.4	10.8	9.7	10.3	14.0	12.3	13.2
19	8.0	7.1	7.6	9.6	8.1	8.7	10.3	9.5	9.8	13.7	11.3	12.3
20	7.5	6.3	6.9	9.6	7.7	8.7	9.7	8.8	9.3	14.9	12.3	13.5
21	7.4	6.4	6.9	10.7	8.6	9.6	10.0	8.4	9.1	14.2	13.1	13.7
22	7.8	6.9	7.4	11.9	9.3	10.5	11.2	8.6	9.8	13.3	11.8	12.5
23	8.9	7.6	8.2	12.2	10.3	11.3	11.1	9.8	10.3	13.9	11.5	12.6
24	8.6											