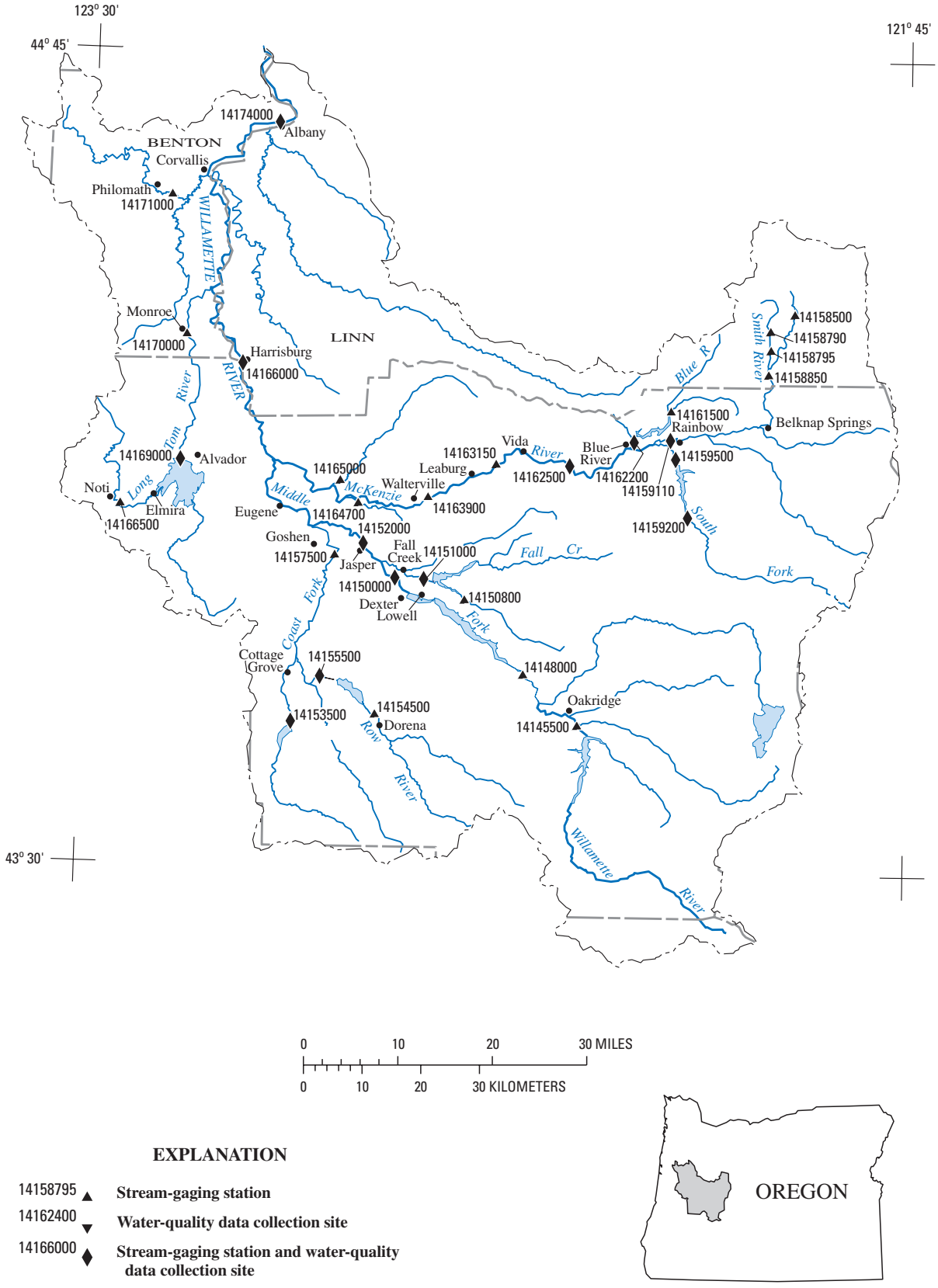


Figure 21. Location of surface-water and water-quality stations in the Willamette River Basin upstream from the Luckiamute River.

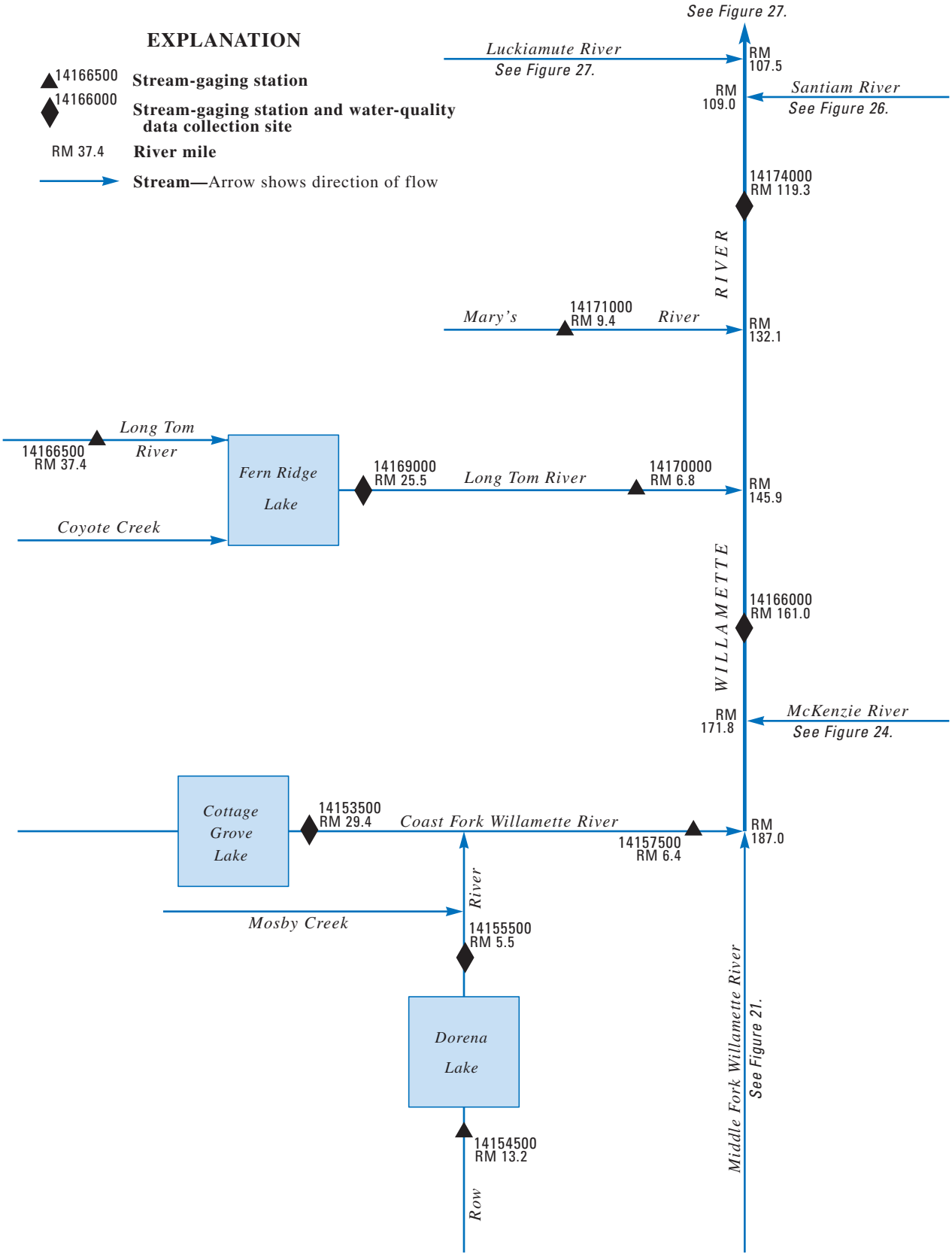


Figure 23. Schematic diagram showing gaging stations in the Long Tom, Coast Fork Willamette and upper Willamette River Basins.

14166500 LONG TOM RIVER NEAR NOTI, OR

LOCATION.--Lat 44°03'00", long 123°25'30", in SE $^1/_4$ NW $^1/_4$ sec.33, T.17 S., R.6 W., Lane County, Hydrologic Unit 17090003, on left bank 0.2 mi upstream from Southern Pacific Railroad bridge, 0.8 mi downstream from Noti Creek, 1.3 mi southeast of Noti and at mile 37.4.

DRAINAGE AREA.--89.3 mi^2.

PERIOD OF RECORD.--October 1935 to current year.

REVISED RECORDS.--WSP 1318: 1936(M). WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 389.05 ft above NGVD of 1929 (levels by National Weather Service). Prior to Nov. 6, 1940, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Slight regulation caused by logpond upstream from Noti. No diversion upstream from station.

AVERAGE DISCHARGE.--70 years (water years 1936-2005), 227 ft^3/s, 34.56 in/yr, 164,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,990 ft^3/s Dec. 22, 1955, gage height, 20.17 ft; minimum discharge, 0.04 ft^3/s Aug. 13, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 29	1830	*1,070	*8.41				

Minimum discharge, 7.2 ft^3/s, Sept. 27, gage height, 0.47 ft.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	34	44	109	144	73	368	93	77	48	21	28
2	19	40	42	122	130	71	289	90	74	47	21	19
3	19	104	40	106	120	69	248	86	70	46	20	12
4	19	81	39	96	114	68	220	86	67	45	19	13
5	18	59	40	87	109	66	189	83	67	43	18	12
6	22	50	55	82	108	64	168	86	143	42	18	11
7	31	45	169	92	118	63	178	83	160	41	18	11
8	25	42	603	143	106	61	228	80	133	41	18	11
9	30	39	854	233	99	61	232	86	113	44	16	10
10	39	37	655	275	94	61	198	148	97	41	16	12
11	31	35	469	248	92	59	198	142	89	42	17	14
12	26	35	436	195	92	56	212	111	81	39	16	14
13	24	36	295	180	115	55	249	97	75	37	16	13
14	22	36	236	170	105	54	233	91	72	35	16	12
15	22	35	189	157	97	54	207	87	69	34	15	11
16	22	38	158	145	93	55	200	88	69	33	14	12
17	31	38	135	137	89	65	197	87	73	33	14	14
18	66	37	120	271	87	60	194	122	70	31	15	15
19	80	40	110	308	86	65	182	188	87	29	15	13
20	60	38	100	238	94	141	168	185	81	28	13	12
21	46	37	93	191	89	171	153	152	71	27	14	11
22	43	36	87	161	82	140	140	130	66	27	13	9.8
23	40	35	81	142	78	136	134	113	63	27	14	8.2
24	38	35	77	128	76	162	129	101	59	25	13	8.3
25	36	47	75	118	74	152	120	93	56	25	13	8.8
26	58	62	82	113	73	144	113	86	56	24	12	8.9
27	56	51	77	108	72	475	108	78	56	24	12	7.7
28	42	46	72	106	73	735	103	78	55	23	13	8.2
29	33	43	70	220	---	899	99	98	54	22	17	9.2
30	33	43	69	206	---	814	97	87	51	21	31	10
31	35	---	72	167	---	506	---	79	---	20	28	---
TOTAL	1,085	1,334	5,644	5,054	2,709	5,655	5,554	3,214	2,354	1,044	516	359.1
MEAN	35.0	44.5	182	163	96.8	182	185	104	78.5	33.7	16.6	12.0
MAX	80	104	854	308	144	899	368	188	160	48	31	28
MIN	18	34	39	82	72	54	97	78	51	20	12	7.7
AC-FT	2,150	2,650	11,190	10,020	5,370	11,220	11,020	6,370	4,670	2,070	1,020	712
CFSM	0.39	0.50	2.04	1.83	1.08	2.04	2.07	1.16	0.88	0.38	0.19	0.13
IN.	0.45	0.56	2.35	2.11	1.13	2.36	2.31	1.34	0.98	0.43	0.21	0.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2005, BY WATER YEAR (WY)

MEAN	38.8	198	468	579	548	405	248	127	65.9	30.5	16.8	17.4
MAX	300	708	1,425	1,260	1,283	923	684	340	164	65.2	35.5	34.5
(WY)	(1948)	(1974)	(1956)	(1956)	(1996)	(1938)	(1937)	(1963)	(1937)	(1937)	(1993)	(1997)
MIN	8.00	16.6	23.8	25.2	62.5	89.3	57.2	51.5	24.7	6.20	3.61	7.25
(WY)	(1988)	(1937)	(1977)	(1977)	(1977)	(2001)	(1977)	(2001)	(1977)	(1977)	(1977)	(2001)

14166500 LONG TOM RIVER NEAR NOTI, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1936 - 2005	
ANNUAL TOTAL	66,040		34,522.1			
ANNUAL MEAN	180		94.6		227	
HIGHEST ANNUAL MEAN					424	1974
LOWEST ANNUAL MEAN					45.5	1977
HIGHEST DAILY MEAN	1,440	Jan 30	899	Mar 29	5,850	Dec 22, 1964
LOWEST DAILY MEAN	11	Aug 21	7.7	Sep 27	0.04	Aug 13, 1977
ANNUAL SEVEN-DAY MINIMUM	12	Aug 15	8.5	Sep 23	0.06	Aug 8, 1977
ANNUAL RUNOFF (AC-FT)	131,000		68,470		164,600	
ANNUAL RUNOFF (CFSM)	2.02		1.06		2.54	
ANNUAL RUNOFF (INCHES)	27.51		14.38		34.56	
10 PERCENT EXCEEDS	507		192		575	
50 PERCENT EXCEEDS	72		68		90	
90 PERCENT EXCEEDS	19		14		15	

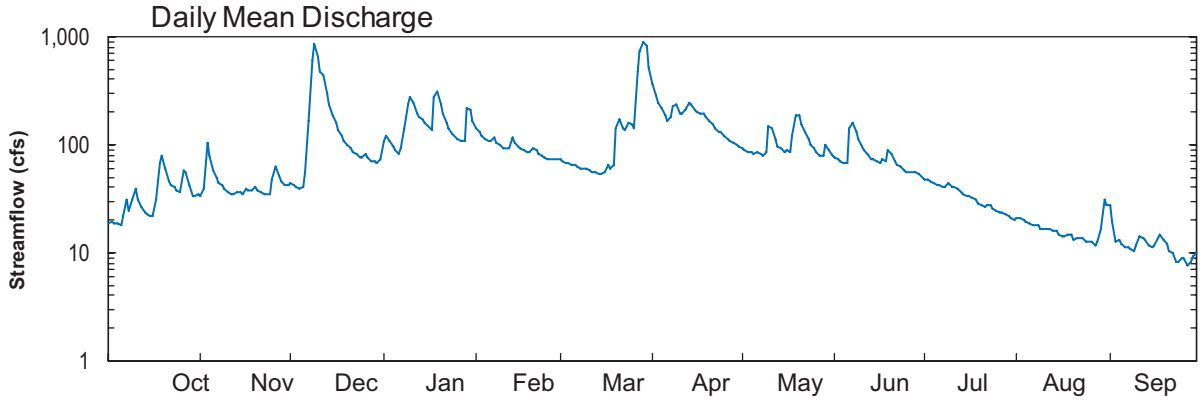
2005 Water Year

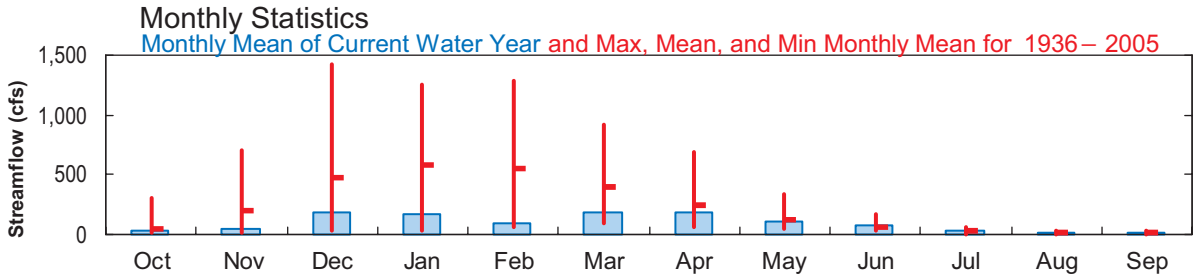
WILLAMETTE RIVER BASIN

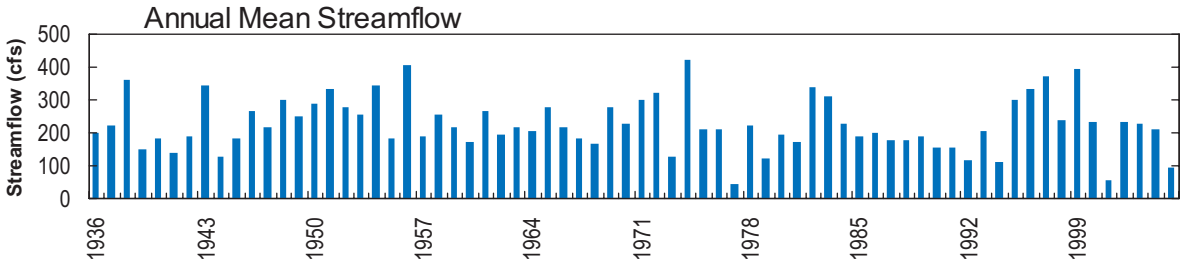
14166500 LONG TOM RIVER NEAR NOTI, OR

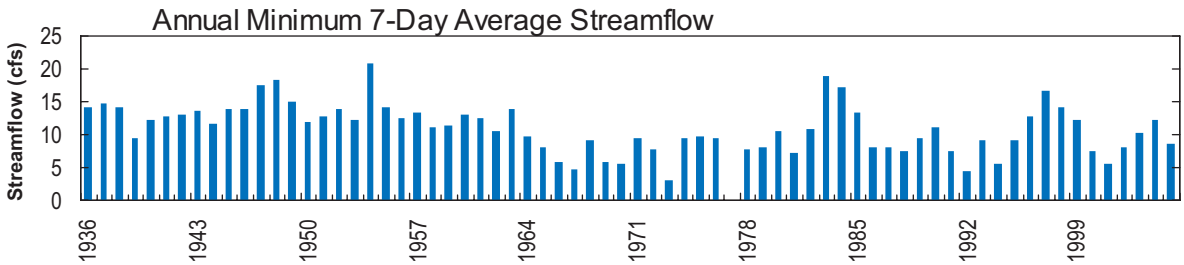
Latitude: 44°03'00" Longitude: 123°25'30" Hydrologic Unit Code: 17090003

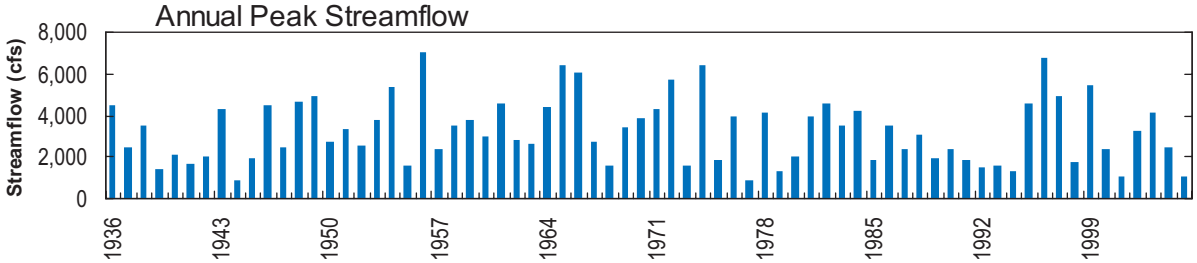
Lane County Datum: 389.05 feet Drainage Area: 89.3 mi²











14168000 FERN RIDGE LAKE NEAR ELMIRA, OR

WATER-QUALITY RECORDS

LOCATION.--Lat 44°07'15", long 123°18'00", near center of sec.4, T.17 S., R.5 W., Lane County, Hydrologic Unit 17090003, in control house at spillway section of dam across Long Tom River and Coyote Creek, 4.5 mi northeast of Elmira and at mile 25.7.

DRAINAGE AREA.--252 mi^2, not including Amazon Creek basin (see REMARKS).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: March to September 2005.
TURBIDITY: March to Septebmer 2005.

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

REMARKS.-- Lake is formed by earth-fill dam with concrete outlet and spillway, completed in 1941 by U.S. Army Corps of Engineers; storage began Nov. 13, 1941. Total capacity (new capacity table put into use Oct. 1, 1992 based on Dec. 1992 resurvey), 107,400 acre-ft at elevation 375.1 ft, maximum pool elevation. Usable capacity, 93,350 acre-ft between elevations 340.0 ft, sill of outlet gate, and 373.5 ft, normal maximum operating pool level. Reservoir used for flood control and improvement of navigation. Since November 1951, most of flow of Amazon Creek has been diverted in SE $^1/_4$ sec.29, T.17 S., R.4 W., and discharged into Fern Ridge Lake; drainage area at point of diversion, 21.3 mi^2.
WATER TEMPERATURE: Records good.
TURBIDITY: Records good except for those greater than 200 FNU, which are fair and those for the periods May 11-19, June 7-14, July to September, which are poor. 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 MARCH TO SEPTEMBER.--
WATER TEMPERATURE: Maximum, 26.2°C July 5; minimum, 8.5°C Mar. 29.
TURBIDITY: Maximum, 758 FNU Sept. 13; minimum, 30 FNU July 8, 12.

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	14.1	11.4	12.8	18.4	16.2	16.9
2	---	---	---	---	---	---	12.2	10.7	11.4	20.0	16.5	17.5
3	---	---	---	---	---	---	12.0	10.1	10.9	20.6	16.5	17.4
4	---	---	---	---	---	---	11.5	10.1	10.7	19.5	18.1	18.6
5	---	---	---	---	---	---	12.5	10.7	11.4	19.2	18.5	18.8
6	---	---	---	---	---	---	13.6	11.3	12.3	18.5	16.2	17.5
7	---	---	---	---	---	---	12.6	12.0	12.3	16.6	15.8	16.2
8	---	---	---	---	---	---	12.4	10.4	11.4	19.8	16.2	17.1
9	---	---	---	---	---	---	13.6	11.3	12.2	17.5	13.1	15.8
10	---	---	---	---	---	---	13.2	11.5	12.0	14.9	12.6	13.8
11	---	---	---	---	---	---	14.0	10.9	12.6	14.9	13.6	14.1
12	---	---	---	---	---	---	12.9	11.1	11.8	18.4	13.8	14.9
13	---	---	---	---	---	---	12.1	10.2	11.3	20.8	14.2	16.0
14	---	---	---	---	---	---	12.6	10.6	11.5	19.7	14.5	16.5
15	---	---	---	---	---	---	12.6	11.1	11.7	18.8	17.4	18.0
16	---	---	---	---	---	---	13.5	11.7	12.3	19.2	16.4	17.4
17	---	---	---	---	---	---	13.1	11.8	12.4	17.6	14.5	16.3
18	---	---	---	12.8	11.1	11.7	13.1	11.4	12.1	19.1	13.8	15.5
19	---	---	---	14.7	11.3	12.5	14.9	11.8	13.0	17.1	15.9	16.5
20	---	---	---	11.7	9.7	10.6	17.2	12.4	13.8	19.1	16.1	16.8
21	---	---	---	10.5	9.6	10	17.3	12.1	13.9	17.9	16.0	16.4
22	---	---	---	10.2	8.6	9.6	15.8	13.6	14.6	19.4	15.6	16.7
23	---	---	---	10.4	8.8	9.6	16.2	14.2	15.4	17.3	15.6	16.4
24	---	---	---	10.7	9.6	10.1	18.2	14.9	15.5	18.8	15.9	17.0
25	---	---	---	11.4	10.1	10.7	18.1	14.9	15.7	18.1	16.1	16.7
26	---	---	---	11.2	10.2	10.8	17.4	15.1	16.1	18.0	17.0	17.4
27	---	---	---	11.1	10.6	10.8	22.6	16.2	18.2	26.1	17.5	21.2
28	---	---	---	10.6	9.4	10.2	20.2	17.5	18.2	23.8	19.5	21.7
29	---	---	---	11.6	8.5	9.6	17.5	16.0	16.7	19.5	18.0	18.5
30	---	---	---	11.6	9.5	10.2	17.3	16.0	16.3	21.9	17.4	18.3
31	---	---	---	12.3	8.8	10.8	---	---	---	19.3	17.5	18.4
MONTH	---	---	---	14.7	8.5	10.5	22.6	10.1	13.3	26.1	12.6	17.1

14168000 FERN RIDGE LAKE NEAR ELMIRA, OR--Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.5	17.4	18.4	23.5	21.1	21.8	26.1	25.1	25.5	22.7	20.8	21.4
2	18.3	17.3	17.6	23.2	21.9	22.5	25.1	23.6	24.2	22.6	21.1	21.5
3	20.6	16.9	18.2	22.3	21.4	21.6	24.6	23.6	24.1	22.5	20.9	21.6
4	19.4	16.6	17.5	22.8	21.8	22.2	24.4	23.8	24.1	23.1	20.6	21.1
5	18.6	15.5	16.9	26.2	21.9	23.8	24.7	23.6	24.1	21.8	20.6	21.0
6	16.6	14.7	15.5	26.1	24.6	25.2	24.9	23.8	24.3	21.7	20.2	20.9
7	16.9	14.3	15.2	24.6	23.4	23.8	25.7	24.8	25.3	22.0	20.5	21.2
8	18.2	14.8	15.6	24.2	22.9	23.4	26.0	25.1	25.4	22.4	20.8	21.5
9	20.9	16.1	16.9	24.6	22.1	22.8	25.7	24.8	25.2	22.0	20.1	21.0
10	21.3	17.9	19.1	23.8	22.5	23.2	25.7	23.8	24.4	21.1	19.0	19.7
11	20.2	18.3	19.3	24.2	22.2	23.1	24.3	23.8	24.0	19.4	18.1	18.6
12	18.5	17.2	17.8	23.5	22.2	22.9	24.2	22.9	23.5	18.8	18.4	18.6
13	22.3	17.4	19.4	22.2	21.6	21.7	24.4	23.9	24.1	19.4	18.3	18.6
14	19.1	17.3	17.8	22.6	22.0	22.3	24.9	23.8	24.3	19.5	18.4	18.8
15	19.3	18.8	19.0	23.4	22.6	23.1	24.9	24.0	24.3	19.7	18.4	19.3
16	20.1	18.8	19.3	23.3	22.5	22.8	24.3	23.0	23.4	19.4	18.5	18.8
17	19.6	17.6	18.6	23.6	22.7	23.1	23.9	22.6	23.3	18.9	18.2	18.6
18	18.8	17.9	18.3	24.5	23.3	24.0	23.5	22.7	23.1	18.9	18.1	18.6
19	20.9	17.9	18.7	25.0	23.8	24.2	23.8	22.8	23.2	18.9	17.9	18.2
20	20.9	18.8	19.7	25.6	24.5	24.9	25.6	22.7	24.0	19.1	17.6	18.2
21	23.2	19.8	21.3	25.0	24.1	24.5	25.8	22.2	23.3	18.9	17.0	17.8
22	22.3	20.3	21.1	25.6	22.4	23.9	23.4	22.2	22.7	18.5	17.2	17.7
23	22.1	19.4	20.6	24.9	24.2	24.6	23.5	22.7	23.1	18.0	16.8	17.4
24	21.9	20.6	20.9	24.4	23.6	23.9	23.3	22.0	22.4	17.5	16.0	16.5
25	21.5	20.5	21.0	24.0	23.1	23.5	22.5	21.1	21.6	16.6	15.2	15.7
26	22.7	21.3	21.8	24.6	23.6	24.0	23.7	21.3	22.5	16.5	15.3	15.8
27	21.9	20.5	21.2	24.7	24.1	24.4	23.7	21.6	22.4	17.6	15.8	16.4
28	21.1	20.1	20.6	25.2	24.4	24.8	24.8	21.0	22.0	18.7	16.3	16.7
29	20.6	19.5	20.0	25.7	24.3	24.8	23.6	22.0	22.6	20.0	16.2	17.6
30	22.0	20.6	21.4	25.8	24.8	25.2	22.4	20.8	21.6	21.1	18.3	19.5
31	---	---	---	25.8	24.8	25.1	21.6	20.6	20.9	---	---	---
MONTH	23.2	14.3	19.0	26.2	21.1	23.6	26.1	20.6	23.5	23.1	15.2	18.9
YEAR	26.2	8.5	18.7									

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	125	69	87	121	54	68
2	---	---	---	---	---	---	112	72	88	123	50	69
3	---	---	---	---	---	---	98	50	84	152	67	87
4	---	---	---	---	---	---	90	56	81	266	72	159
5	---	---	---	---	---	---	67	43	55	253	72	136
6	---	---	---	---	---	---	64	40	51	148	87	115
7	---	---	---	---	---	---	104	48	71	186	48	101
8	---	---	---	---	---	---	88	60	72	146	42	66
9	---	---	---	---	---	---	78	61	67	306	53	74
10	---	---	---	---	---	---	88	50	66	147	60	79
11	---	---	---	---	---	---	84	48	65	89	55	67
12	---	---	---	---	---	---	98	56	73	100	60	76
13	---	---	---	---	---	---	113	50	83	203	70	89
14	---	---	---	---	---	---	124	69	94	148	74	83
15	---	---	---	---	---	---	72	51	63	144	67	93
16	---	---	---	---	---	---	90	50	55	183	123	143
17	---	---	---	---	---	---	97	51	77	316	140	177
18	---	---	---	174	107	123	89	43	63	379	132	187
19	---	---	---	---	---	---	66	43	50	177	84	118
20	---	---	---	---	---	---	---	---	---	143	74	84
21	---	---	---	324	156	241	73	48	58	120	71	88
22	---	---	---	215	139	183	53	38	45	132	72	90
23	---	---	---	157	93	128	93	40	52	84	55	70
24	---	---	---	136	55	109	62	41	48	77	52	63
25	---	---	---	118	80	94	57	47	50	94	47	65
26	---	---	---	136	74	92	60	35	45	107	62	81
27	---	---	---	103	73	88	106	35	44	101	62	79
28	---	---	---	147	73	91	114	42	62	241	81	125
29	---	---	---	187	87	122	120	59	76	151	77	102
30	---	---	---	160	95	125	119	61	84	82	49	67
31	---	---	---	120	69	97	---	---	---	66	41	48
MAX	---	---	---	324	156	241	125	72	94	379	140	187
MIN	---	---	---	103	55	88	53	35	44	66	41	48
		JUNE			JULY			AUGUST			SEPTEMBER	
1	89	48	62	175	48	82	186	55	91	302	128	171
2	86	55	68	158	55	70	142	59	86	277	139	181
3	68	40	56	132	58	76	136	57	79	311	127	183
4	93	38	64	87	48	60	169	51	78	238	116	158
5	202	54	97	95	50	68	205	62	105	224	111	138
6	149	87	102	127	40	62	175	71	105	195	117	135
7	106	54	91	164	36	70	202	70	97	234	122	143
8	150	50	84	146	30	59	153	62	95	233	127	155
9	144	39	94	115	36	60	177	64	100	278	140	204
10	460	42	102	100	34	63	137	72	90	525	245	323
11	144	59	83	97	33	77	116	67	81	440	157	300
12	120	73	94	94	30	38	171	70	86	700	146	367
13	146	64	99	91	34	42	119	69	83	758	143	182
14	334	44	120	83	34	42	132	54	78	266	140	168
15	65	41	50	88	36	47	104	54	72	224	124	156
16	102	42	59	80	37	45	96	63	74	200	108	137
17	255	53	76	166	35	60	122	65	82	181	98	136
18	78	37	55	115	50	62	152	62	93	193	94	128
19	64	32	41	103	49	62	216	72	105	198	94	127
20	88	32	49	141	59	79	213	95	128	194	97	138
21	126	37	55	240	76	113	192	95	134	198	106	131
22	229	55	101	262	157	204	180	91	112	222	105	144
23	115	44	67	237	138	194	152	84	108	212	120	140
24	80	37	53	220	150	176	174	92	119	208	116	138
25	111	38	57	202	118	150	230	93	145	210	112	139
26	108	33	62	160	100	120	255	129	169	191	113	130
27	86	44	60	159	88	108	215	111	160	178	104	132
28	79	33	48	136	67	99	257	138	193	179	113	139
29	234	38	51	116	68	83	286	121	179	274	124	178
30	363	43	122	150	69	92	259	122	166	454	160	218
31	---	---	---	189	66	100	227	116	160	---	---	---
MAX	460	87	122	262	157	204	286	138	193	758	245	367
MIN	64	32	41	80	30	38	96	51	72	178	94	127

14169000 LONG TOM RIVER NEAR ALVADORE, OR

LOCATION.--Lat 44°07'25", long 123°17'55", in SW ¼ NE ¼ sec.4, T.17 S., R.5 W., Lane County, Hydrologic Unit 17090003, on left bank 0.2 mi downstream from Fern Ridge Dam, 1.7 mi west of Alvadore and at mile 25.5.

DRAINAGE AREA.--252 mi^2, not including Amazon Creek basin.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1939 to current year. Prior to October 1943, published as "at Smithfield," and October 1943 to September 1959, as "below Fern Ridge Dam, near Smithfield." Prior to October 1985, published figures included diversion from Fern Ridge Reservoir into Coyote Creek channel (station 14169001).

REVISED RECORDS.--WSP 1248: 1940-41, 1948.

GAGE.--Water-stage recorder and masonry control. Datum of gage is 332.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Sept. 21, 1939, nonrecording gage and Sept. 21, 1939 to Sept. 30, 1943, water-stage recorder at site 2.5 mi downstream at datum 11.09 ft lower.

REMARKS.--Records good. Flow regulated since 1941 by Fern Ridge Lake (station 14168000). Several diversions for irrigation upstream from station. Discharge not adjusted for storage or release from Fern Ridge Lake as evaporation from reservoir at times exceeds natural flow and diversions, and beginning November 1951, most of flow of Amazon Creek has been diverted in to Fern Ridge Lake. Drainage area at point of diversion 21.3 mi^2.

AVERAGE DISCHARGE.--66 years (water years 1940-2005), 513 ft^3/s, 371,400 acre-ft/yr, river only, not adjusted for diversions into or out of Fern Ridge Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft^3/s Jan. 1, 1943, gage height, 15.12 ft, site and datum then in use; minimum daily discharge, 2 ft^3/s Aug. 7, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,900 ft^3/s Mar. 29, gage height, 6.69 ft; minimum discharge, 11 ft^3/s July 13, 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	851	943	68	167	317	161	1,030	120	175	53	25	25
2	867	935	68	400	315	159	773	121	174	53	25	25
3	859	928	68	470	261	158	696	122	137	53	25	25
4	866	917	68	391	224	157	627	162	82	53	25	24
5	917	916	68	269	224	116	539	171	68	53	25	24
6	933	943	68	207	223	109	343	306	114	40	25	24
7	971	929	288	199	223	114	585	227	393	31	25	24
8	961	930	1,020	203	221	114	869	205	414	32	25	23
9	968	968	1,710	686	220	113	839	175	240	32	25	23
10	970	948	1,730	934	188	113	706	770	149	32	25	24
11	962	929	1,690	756	149	113	519	1,250	149	22	25	24
12	960	910	1,640	560	141	113	667	711	128	12	25	24
13	952	553	1,490	381	511	103	747	331	82	12	25	24
14	959	530	687	414	420	82	648	334	51	13	29	23
15	955	521	545	412	223	82	560	436	50	23	32	23
16	966	514	439	376	223	77	457	296	131	24	32	23
17	958	504	326	320	223	83	452	295	129	24	31	23
18	957	493	291	465	221	84	434	339	89	24	31	24
19	978	482	291	588	220	227	402	643	e89	24	31	23
20	967	186	260	545	346	343	382	500	e178	15	31	23
21	958	180	220	370	442	341	289	443	e294	20	31	22
22	948	149	209	331	380	343	245	395	299	26	31	21
23	939	79	208	275	366	397	231	311	151	25	31	19
24	932	78	111	255	360	563	263	231	68	26	31	17
25	925	78	63	246	214	560	376	116	53	26	31	17
26	981	88	121	246	165	485	269	59	51	26	32	17
27	999	90	172	235	162	1,180	254	112	53	26	31	17
28	990	65	172	210	161	2,110	234	145	54	26	31	18
29	982	69	170	302	---	2,580	208	166	53	26	31	21
30	970	68	169	414	---	2,550	148	324	53	25	30	21
31	958	---	167	542	---	1,570	---	217	---	26	25	---
TOTAL	29,359	15,923	14,597	12,169	7,343	15,300	14,792	10,033	4,151	903	877	665
MEAN	947	531	471	393	262	494	493	324	138	29.1	28.3	22.2
MAX	999	968	1,730	934	511	2,580	1,030	1,250	414	53	32	25
MIN	851	65	63	167	141	77	148	59	50	12	25	17
AC-FT	58,230	31,580	28,950	24,140	14,560	30,350	29,340	19,900	8,230	1,790	1,740	1,320

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

MEAN	711	693	1,144	1,396	971	474	249	162	67.1	45.2	75.3	178
MAX	1,623	2,171	3,195	4,244	3,148	1,660	1,565	812	469	150	533	916
(WY)	(1948)	(1974)	(1956)	(1956)	(1996)	(1957)	(1963)	(1963)	(1993)	(1993)	(1951)	(1964)
MIN	14.8	20.1	44.6	30.3	9.94	3.69	3.73	4.72	13.7	13.4	12.8	10.0
(WY)	(1940)	(1940)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1944)	(1944)	(1944)	(1943)

14169000 LONG TOM RIVER NEAR ALVADORE, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1940 - 2005	
ANNUAL TOTAL	151,616		126,112			
ANNUAL MEAN	414		346		513	
HIGHEST ANNUAL MEAN					988	1974
LOWEST ANNUAL MEAN					143	1977
HIGHEST DAILY MEAN	3,410	Jan 6	2,580	Mar 29	10,800	Jan 1, 1943
LOWEST DAILY MEAN	41	Jul 12	12	Jul 12	2.0	Aug 7, 1941
ANNUAL SEVEN-DAY MINIMUM	42	Jul 8	18	Sep 22	3.3	Feb 24, 1977
ANNUAL RUNOFF (AC-FT)	300,700		250,100		371,400	
10 PERCENT EXCEEDS	969		948		1,490	
50 PERCENT EXCEEDS	54		207		78	
90 PERCENT EXCEEDS	45		24		30	

e Estimated

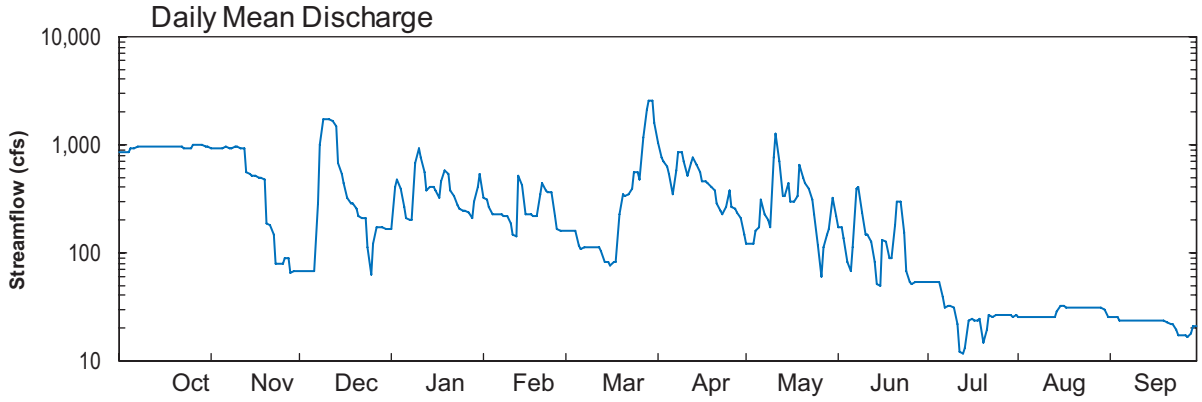
2005 Water Year

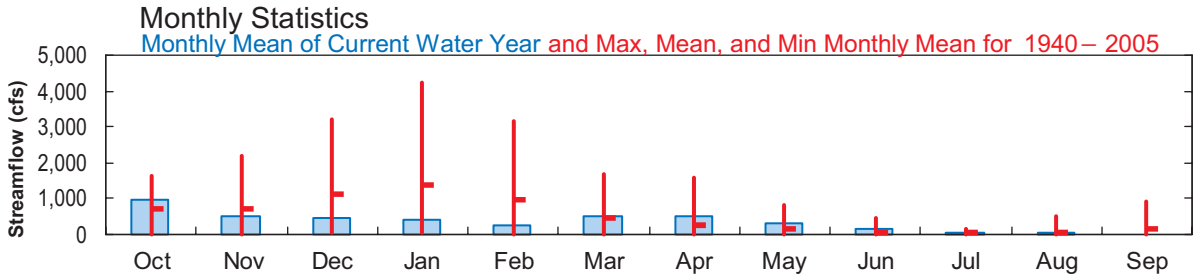
WILLAMETTE RIVER BASIN

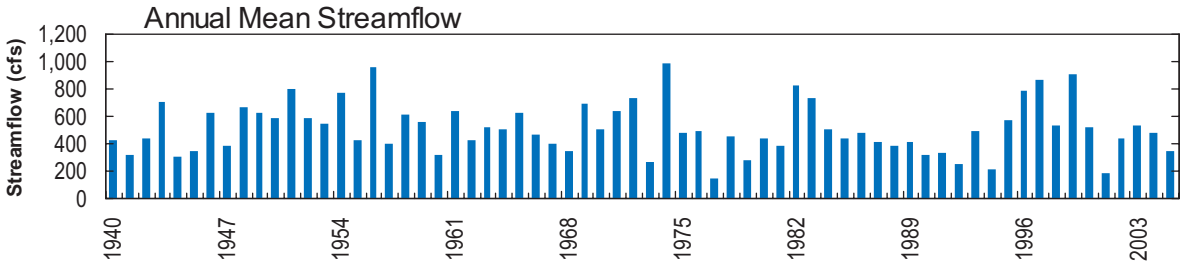
14169000 LONG TOM RIVER NEAR ALVADORE, OR

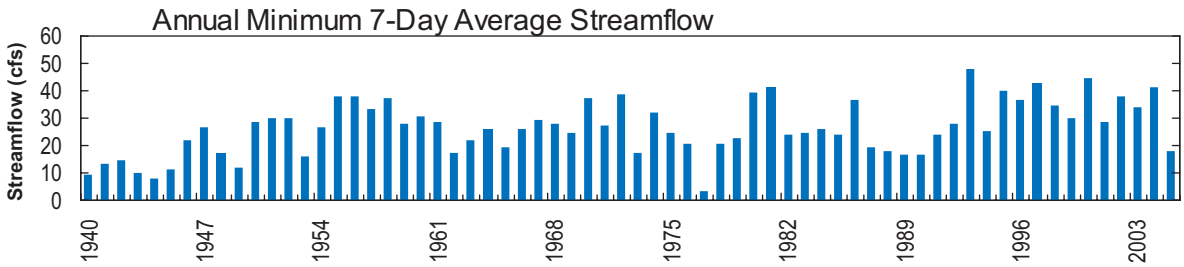
Latitude: 44°07'25" Longitude: 123°17'55" Hydrologic Unit Code: 17090003

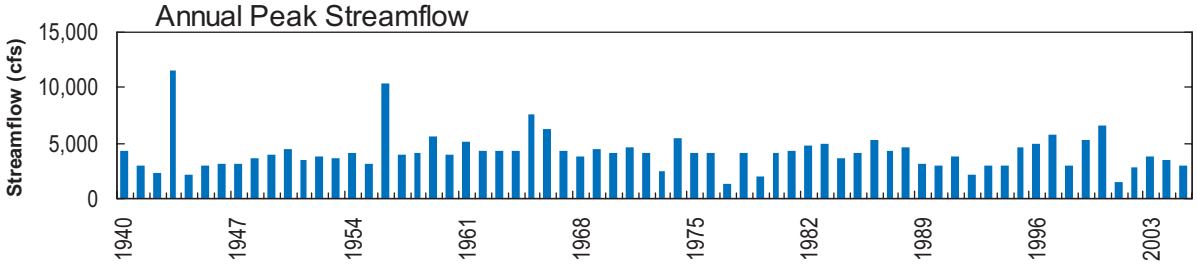
Lane County Datum: 332.00 feet Drainage Area: 252 mi²











WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: August 2001 to current year.
TURBIDITY: March to September 2005.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--
WATER TEMPERATURE: Records good.
TURBIDITY: Records fair except those for the periods June 30 to July 5, July 30 to Aug. 4, Aug. 16-30, Sept. 8-30, which are poor. Probe calibrated to formazin. 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.--
WATER TEMPERATURE: Maximum, 25.2°C Aug. 15, 2002, Aug. 9, 2005; minimum, 1.5°C Jan. 4, 5, 2005.
TURBIDITY: Maximum recorded, greater than 1000 FNU many days during July, August and September, 2005; minimum recorded, 35 FNU June 9, but may have been lower during periods of missing record.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 25.2°C Aug. 9; minimum, 1.5°C Jan. 4, 5.
TURBIDITY: Maximum recorded, greater than 1000 FNU many days during July, August and September; minimum recorded, 35 FNU June 9, but may have been lower during periods of missing record.

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	18.3	17.7	17.9	11.8	11.6	11.7	7.8	7.2	7.5	5.8	5.3	5.6
2	18.3	17.7	17.9	11.8	11.6	11.7	7.4	6.9	7.2	5.3	4.5	4.9
3	18.1	17.7	17.9	11.7	11.3	11.6	6.9	6.1	6.5	4.5	3.3	3.8
4	17.9	17.7	17.8	11.3	10.3	10.6	6.1	5.5	5.8	3.4	1.5	2.8
5	18.3	17.7	17.9	10.7	10.0	10.3	6.7	5.8	6.2	2.0	1.5	1.9
6	18.9	18.0	18.4	10.1	9.8	10	6.3	5.9	6.1	2.8	1.8	2.2
7	18.5	17.9	18.3	9.9	9.7	9.8	6.9	5.8	6.2	3.7	2.7	3.2
8	18.5	17.9	18.1	9.9	9.5	9.7	8.2	6.8	7.2	3.5	2.4	3.0
9	18.5	17.7	18.1	9.7	9.4	9.6	8.5	7.6	8.0	3.6	2.7	3.0
10	17.7	17.4	17.6	9.8	9.6	9.7	10.0	8.5	9.1	3.2	2.8	3.0
11	17.5	17.2	17.3	10.0	9.6	9.7	10.3	9.8	10.0	3.5	2.8	3.1
12	17.6	17.2	17.4	10.1	9.6	9.8	9.9	9.1	9.5	4.9	3.1	4.1
13	17.5	17.2	17.4	10.2	9.9	10.1	9.6	9.2	9.4	5.0	4.2	4.6
14	17.4	17.0	17.2	10.4	10.1	10.2	9.8	9.1	9.4	4.9	4.1	4.5
15	17.4	17.0	17.1	10.4	10.2	10.3	9.4	8.9	9.2	4.9	3.6	4.3
16	17.1	17.0	17.1	11.2	10.3	10.6	8.9	8.2	8.5	4.0	3.5	3.7
17	17.0	15.9	16.4	10.7	10.1	10.4	8.2	7.9	8.1	5.5	4.0	4.5
18	15.9	15.0	15.3	10.4	9.8	10.1	8.1	7.7	7.9	7.6	5.4	6.8
19	15.1	14.7	15.0	9.8	9.0	9.5	7.9	7.4	7.7	8.5	7.4	7.9
20	14.9	14.7	14.8	9.0	8.4	8.7	7.7	7.0	7.4	9.2	8.1	8.7
21	14.9	14.3	14.7	8.4	7.3	8.0	7.0	6.5	6.7	9.6	8.2	8.8
22	14.4	14.0	14.1	7.5	6.8	7.2	6.7	6.2	6.4	9.2	8.3	8.8
23	14.0	13.8	13.9	8.5	7.4	7.7	6.8	6.4	6.6	9.2	8.8	9.0
24	14.1	13.6	13.7	10.9	8.5	9.4	6.8	6.4	6.6	9.0	8.4	8.6
25	13.9	13.3	13.7	11.1	9.7	10.4	6.4	5.7	6.1	8.7	8.0	8.2
26	13.3	12.7	12.9	9.7	9.0	9.2	6.1	5.7	5.9	8.8	8.0	8.3
27	12.7	12.4	12.5	9.6	8.7	9.2	6.0	5.5	5.8	8.8	8.3	8.4
28	12.4	12.3	12.3	8.7	7.7	8.0	5.7	5.5	5.6	9.1	7.9	8.4
29	12.7	12.1	12.4	7.7	7.2	7.4	5.9	5.5	5.7	8.2	7.2	7.7
30	12.6	12.1	12.3	7.5	6.9	7.2	6.3	5.4	5.7	8.2	7.5	7.9
31	12.2	11.7	12.0	---	---	---	6.3	5.3	5.7	8.5	7.4	7.8
MONTH	18.9	11.7	15.8	11.8	6.8	9.6	10.3	5.3	7.2	9.6	1.5	5.7

14169000 LONG TOM RIVER NEAR ALVADORE, OR—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	8.2	7.5	7.8	12.0	10.0	10.9	---	---	---	---	---	---
2	7.9	7.4	7.6	11.8	10.5	11.1	---	---	---	---	---	---
3	7.8	7.2	7.5	12.0	10.5	11.1	---	---	---	---	---	---
4	7.4	6.7	7.1	---	---	---	---	---	---	---	---	---
5	7.2	6.4	6.8	---	---	---	---	---	---	---	---	---
6	6.8	5.8	6.3	---	---	---	---	---	---	---	---	---
7	6.2	5.5	5.9	---	---	---	---	---	---	---	---	---
8	5.8	5.4	5.6	---	---	---	---	---	---	---	---	---
9	5.6	5.1	5.3	---	---	---	---	---	---	---	---	---
10	5.5	4.9	5.1	---	---	---	---	---	---	---	---	---
11	5.5	4.4	4.9	---	---	---	---	---	---	---	---	---
12	5.6	4.9	5.2	---	---	---	---	---	---	---	---	---
13	6.5	5.5	5.9	---	---	---	---	---	---	---	---	---
14	6.1	5.2	5.6	---	---	---	---	---	---	---	---	---
15	5.8	4.7	5.3	---	---	---	---	---	---	---	---	---
16	6.0	3.9	5.0	---	---	---	---	---	---	---	---	---
17	6.0	4.2	5.1	---	---	---	---	---	---	---	---	---
18	6.1	4.8	5.5	---	---	---	---	---	---	---	---	---
19	7.3	5.9	6.6	---	---	---	---	---	---	---	---	---
20	7.7	7.1	7.4	---	---	---	---	---	---	---	---	---
21	8.7	7.0	7.7	---	---	---	---	---	---	---	---	---
22	9.0	7.3	8.1	---	---	---	---	---	---	---	---	---
23	9.0	7.2	8.2	---	---	---	---	---	---	---	---	---
24	10.9	7.5	9.1	---	---	---	---	---	---	---	---	---
25	9.8	8.9	9.2	---	---	---	---	---	---	---	---	---
26	10.5	8.9	9.6	---	---	---	---	---	---	---	---	---
27	10.3	9.2	9.8	---	---	---	---	---	---	---	---	---
28	10.7	9.7	10.3	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	10.9	3.9	6.9	12.0	10.0	11.0	---	---	---	---	---	---
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	22.0	20.2	21.0	24.9	23.6	24.1	21.2	19.8	20.5
2	---	---	---	22.3	20.8	21.6	23.8	22.6	23.2	21.4	20.2	20.8
3	---	---	---	21.5	20.4	21.0	23.8	22.4	23.0	21.5	19.9	20.8
4	---	---	---	22.9	20.8	21.6	24.4	22.5	23.2	21.0	19.6	20.3
5	---	---	---	24.3	21.1	22.7	24.4	22.2	23.2	20.8	19.4	20.0
6	---	---	---	24.6	23.4	23.9	24.6	22.4	23.3	20.6	19.4	20.1
7	---	---	---	23.5	22.0	22.8	24.9	23.2	24.0	20.8	19.6	20.2
8	---	---	---	22.8	21.7	22.1	25.1	23.7	24.2	21.2	20.0	20.5
9	---	---	---	22.8	21.0	21.8	25.2	23.1	24.0	20.8	19.5	20.1
10	---	---	---	22.4	21.5	21.9	24.0	22.6	23.3	19.7	18.3	19.0
11	---	---	---	23.5	21.3	22.2	24.0	22.4	22.9	18.8	17.5	18.2
12	---	---	---	23.3	21.3	22.1	23.1	22.1	22.5	19.0	17.4	18.1
13	---	---	---	23.0	20.2	21.4	24.1	22.6	23.1	18.9	17.4	18.0
14	---	---	---	23.3	20.1	21.5	24.0	22.6	23.2	19.3	17.8	18.4
15	---	---	---	23.5	20.9	22.1	24.2	22.8	23.3	19.5	17.7	18.5
16	---	---	---	22.9	21.3	21.9	23.3	21.8	22.5	18.4	17.7	18.1
17	---	---	---	23.4	21.3	22.1	23.0	21.9	22.3	19.0	17.6	18.1
18	---	---	---	24.3	21.9	23.0	22.8	21.7	22.1	18.8	17.4	17.9
19	---	---	---	24.1	22.1	22.9	23.3	21.8	22.3	18.4	17.2	17.7
20	---	---	---	24.7	22.8	23.6	24.1	21.6	22.7	18.3	17.0	17.6
21	---	---	---	24.1	22.2	23.0	23.2	21.2	22.4	17.7	16.5	17.3
22	---	---	---	23.7	21.4	22.6	22.6	21.0	21.7	17.5	16.5	17.1
23	---	---	---	24.3	22.7	23.3	22.6	21.5	22.0	17.4	16.2	16.8
24	20.9	19.9	20.5	23.7	22.3	22.8	22.1	21.0	21.5	16.8	15.4	16.1
25	21.4	20.0	20.6	23.2	21.9	22.4	21.6	20.3	20.9	16.2	14.7	15.4
26	21.3	20.6	20.9	24.0	22.3	22.9	22.4	20.2	21.4	16.4	15.0	15.5
27	21.0	20.1	20.5	24.3	22.7	23.4	22.6	20.6	21.4	17.3	15.1	16.0
28	20.3	19.4	20.0	24.9	23.0	23.8	22.4	20.0	21.0	17.7	15.5	16.3
29	20.3	18.9	19.7	24.5	22.9	23.6	21.9	20.8	21.5	18.4	15.5	16.8
30	21.6	20.0	20.9	25.1	23.5	24.1	21.7	19.9	20.8	19.8	17.9	18.7
31	---	---	---	25.0	23.3	24.0	21.0	19.5	20.1	---	---	---
MONTH	21.6	18.9	20.4	25.1	20.1	22.6	25.2	19.5	22.5	21.5	14.7	18.3
YEAR	25.2	1.5	13.8									

14169000 LONG TOM RIVER NEAR ALVADORE, OR—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	98	71	88	60	44	54
2	---	---	---	---	---	---	120	81	90	60	40	46
3	---	---	---	---	---	---	96	71	88	50	40	42
4	---	---	---	---	---	---	90	68	81	78	40	53
5	---	---	---	---	---	---	68	49	57	58	49	54
6	---	---	---	---	---	---	59	46	51	77	55	68
7	---	---	---	---	---	---	125	48	78	90	51	58
8	---	---	---	---	---	---	89	67	80	90	45	56
9	---	---	---	---	---	---	75	65	69	217	52	57
10	---	---	---	---	---	---	77	56	67	117	63	71
11	---	---	---	---	---	---	82	58	67	75	52	62
12	---	---	---	---	---	---	101	67	85	177	48	58
13	---	---	---	---	---	---	113	71	84	269	63	73
14	---	---	---	---	---	---	103	67	85	110	62	65
15	---	---	---	---	---	---	69	53	65	106	57	87
16	---	---	---	---	---	---	91	55	68	143	97	115
17	---	---	---	---	---	---	91	58	69	255	105	131
18	---	---	---	146	122	135	78	52	61	364	96	140
19	---	---	---	---	---	---	66	45	50	160	84	105
20	---	---	---	---	---	---	70	50	53	98	81	87
21	---	---	---	332	199	245	69	49	58	98	71	83
22	---	---	---	214	161	193	52	46	49	101	72	88
23	---	---	---	162	114	136	---	---	---	77	61	68
24	---	---	---	153	72	130	---	---	---	74	59	70
25	---	---	---	111	81	102	---	---	---	230	65	78
26	---	---	---	147	89	106	57	42	47	301	79	100
27	---	---	---	118	82	91	59	41	46	98	74	82
28	---	---	---	221	82	121	79	48	62	171	79	121
29	---	---	---	236	79	132	98	60	67	116	77	100
30	---	---	---	115	83	95	78	57	70	100	53	61
31	---	---	---	109	70	86	---	---	---	54	47	49
MAX	---	---	---	332	199	245	125	81	90	364	105	140
MIN	---	---	---	109	70	86	52	41	46	50	40	42

14169000 LONG TOM RIVER NEAR ALVADORE, 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	69	47	60	>1,000	112	395	997	205	764	258	201	224
2	71	57	63	>1,000	83	641	530	193	338	251	207	222
3	106	50	58	189	83	108	518	190	302	276	225	242
4	127	57	64	106	65	74	379	119	173	288	223	251
5	160	52	90	>1,000	60	169	220	120	161	309	204	236
6	126	77	88	93	61	73	239	135	173	339	225	276
7	104	51	74	115	65	80	217	126	153	457	230	308
8	54	38	47	117	51	59	165	124	137	656	249	368
9	50	35	40	90	57	64	175	121	129	509	223	304
10	94	36	63	93	66	75	174	116	125	664	239	292
11	409	65	109	100	63	76	120	103	111	990	293	529
12	98	70	80	117	68	78	150	104	125	>1,000	369	813
13	94	70	84	144	78	98	129	109	116	>1,000	491	979
14	114	76	86	112	74	87	125	102	112	>1,000	387	979
15	96	59	71	86	69	76	107	84	96	>1,000	307	418
16	76	54	66	108	64	73	995	80	102	>1,000	277	367
17	361	60	99	323	68	119	>1,000	115	561	>1,000	261	438
18	76	58	61	152	85	105	>1,000	121	584	976	254	416
19	---	---	52	179	98	119	>1,000	389	951	560	207	326
20	---	---	---	302	103	163	>1,000	420	907	882	220	280
21	---	---	---	384	112	169	>1,000	461	>1,000	942	211	325
22	147	73	97	396	178	204	---	---	---	993	220	357
23	112	64	86	267	207	219	---	---	---	>1,000	269	469
24	179	79	120	287	194	202	---	---	---	>1,000	253	616
25	169	65	106	201	166	187	---	---	---	>1,000	252	276
26	140	70	83	185	146	156	---	---	---	>1,000	262	858
27	436	66	119	155	138	145	---	---	---	>1,000	264	795
28	102	57	63	160	119	135	---	---	---	>1,000	331	>1,000
29	150	60	85	250	117	148	---	---	---	>1,000	364	444
30	272	70	116	882	164	282	---	---	---	>1,000	378	550
31	---	---	---	856	257	548	>1,000	202	990	---	---	---
MAX	436	79	120	>1,000	257	641	>1,000	461	>1,000	>1,000	491	>1,000
MIN	50	35	40	86	51	59	107	80	96	251	201	222

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

14170000 LONG TOM RIVER AT MONROE, OR

LOCATION.--Lat 44°18'47", long 123°17'43", in NE $^1/_4$ sec.33, T.14 S., R.5 W., Benton County, Hydrologic Unit 17090003, on left bank at Monroe, 110 ft upstream from bridge on State Highway 99W, 0.1 mi downstream from Shafer Creek and at mile 6.8.

DRAINAGE AREA.--391 mi^2.

PERIOD OF RECORD.--November 1920 to July 1921, October 1921 to April 1926, November 1926 to May 1927, October 1927 to current year. Prior to October 1930, published as "near Monroe."

REVISED RECORDS.--WSP 654: Drainage area. WSP 1248: 1923, 1927, 1928(M). WSP 1288: 1952.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 270.57 ft above NGVD of 1929. Prior to Nov. 24, 1944, nonrecording gage at various sites ranging from present site to 1.5 mi downstream at different datums.

REMARKS.--No estimated daily discharges. Records good except those below 20 ft^3/s, which are fair. Flow regulated since Nov. 1941 by Fern Ridge Lake (station 14168000). Several small diversions upstream from station. Periodic suspended sediment data are available for the period October 1991 to September 1994.

AVERAGE DISCHARGE.--18 years (water years 1922-25, 1928-1941), 689 ft^3/s, 499,200 acre-ft/yr. 64 years (water years 1942-2005), 764 ft^3/s, 553,600 acre-ft/yr, regulated period.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,300 ft^3/s Jan. 2, 1943, gage height, 17.14 ft, site and datum then in use, from graph based on gage readings, includes some overflow from Willamette River near Junction City; no flow Oct. 20-22, 1944 (water filling pool at gage); minimum discharge observed prior to regulation, 7 ft^3/s Sept. 29, Oct. 1, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,350 ft^3/s Mar. 29, gage height, 7.31 ft; minimum discharge, 4.2 ft^3/s Sept. 28, 29.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	601	896	100	241	435	215	1,370	194	228	80	24	19
2	769	908	100	347	372	211	1,040	185	222	78	22	16
3	768	969	100	479	343	207	821	181	205	80	22	17
4	761	918	100	435	296	205	716	191	156	78	23	20
5	812	884	100	323	284	187	722	215	123	74	20	20
6	836	903	112	256	281	162	430	279	182	70	19	17
7	882	888	261	250	285	160	554	293	360	50	22	17
8	886	872	1,100	350	276	158	1,000	244	492	44	20	17
9	894	907	2,310	678	269	152	1,120	240	352	45	17	15
10	914	895	2,180	1,100	253	149	821	606	239	51	16	15
11	898	876	2,020	959	223	143	707	1,420	209	46	15	21
12	886	858	1,940	698	203	142	797	930	202	33	14	20
13	876	626	1,750	476	473	141	922	450	156	27	14	18
14	880	495	1,080	469	613	118	815	326	115	26	11	17
15	877	484	689	473	314	111	650	464	106	25	16	14
16	891	483	554	475	285	112	584	356	127	27	20	16
17	897	475	459	397	278	121	553	337	212	30	21	22
18	911	467	366	596	272	124	566	392	155	27	19	28
19	944	455	353	599	270	166	504	681	165	23	20	23
20	919	303	330	715	369	391	477	708	222	26	19	19
21	904	205	291	487	473	397	404	558	213	19	25	14
22	900	191	264	429	427	336	343	464	339	24	22	13
23	891	135	256	361	386	484	317	413	257	27	21	12
24	882	110	219	333	377	494	316	326	149	30	19	12
25	878	112	137	322	316	674	388	247	108	27	19	12
26	917	122	143	307	222	521	381	151	100	24	18	11
27	952	129	219	304	218	1,330	297	146	100	23	19	8.4
28	935	110	215	276	217	2,400	296	212	97	21	21	6.1
29	921	100	212	400	---	2,970	279	221	88	18	21	9.9
30	907	100	217	497	---	2,940	229	310	84	19	21	23
31	901	---	216	587	---	2,110	---	310	---	25	23	---
TOTAL	27,090	15,876	18,393	14,619	9,030	18,031	18,419	12,050	5,763	1,197	603	492.4
MEAN	874	529	593	472	322	582	614	389	192	38.6	19.5	16.4
MAX	952	969	2,310	1,100	613	2,970	1,370	1,420	492	80	25	28
MIN	601	100	100	241	203	111	229	146	84	18	11	6.1
AC-FT	53,730	31,490	36,480	29,000	17,910	35,760	36,530	23,900	11,430	2,370	1,200	977

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2005, BY WATER YEAR (WY)

MEAN	759	932	1,759	2,146	1,593	895	466	253	97.7	43.7	69.8	185
MAX	1,895	3,437	5,355	6,222	4,683	2,761	2,277	1,193	697	148	524	960
(WY)	(1948)	(1951)	(1956)	(1956)	(1996)	(1957)	(1963)	(1963)	(1993)	(1993)	(1951)	(1955)
MIN	27.1	91.5	55.5	43.5	44.1	136	54.5	50.3	28.6	23.0	19.5	12.4
(WY)	(1942)	(1953)	(1977)	(1977)	(1977)	(1978)	(1977)	(1987)	(1987)	(1965)	(2005)	(1943)

14170000 LONG TOM RIVER AT MONROE, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1942 - 2005	
ANNUAL TOTAL	200,348		141,563.4			
ANNUAL MEAN	547		388		764	
HIGHEST ANNUAL MEAN					1,517	1956
LOWEST ANNUAL MEAN					177	1977
HIGHEST DAILY MEAN	4,290	Jan 8	2,970	Mar 29	16,400	Jan 2, 1943
LOWEST DAILY MEAN	24	Aug 19	6.1	Sep 28	0.00	Oct 20, 1944
ANNUAL SEVEN-DAY MINIMUM	27	Aug 13	10	Sep 23	8.4	Oct 17, 1944
ANNUAL RUNOFF (AC-FT)	397,400		280,800		553,600	
10 PERCENT EXCEEDS	1,440		902		2,360	
50 PERCENT EXCEEDS	164		256		233	
90 PERCENT EXCEEDS	36		19		37	

2005 Water Year

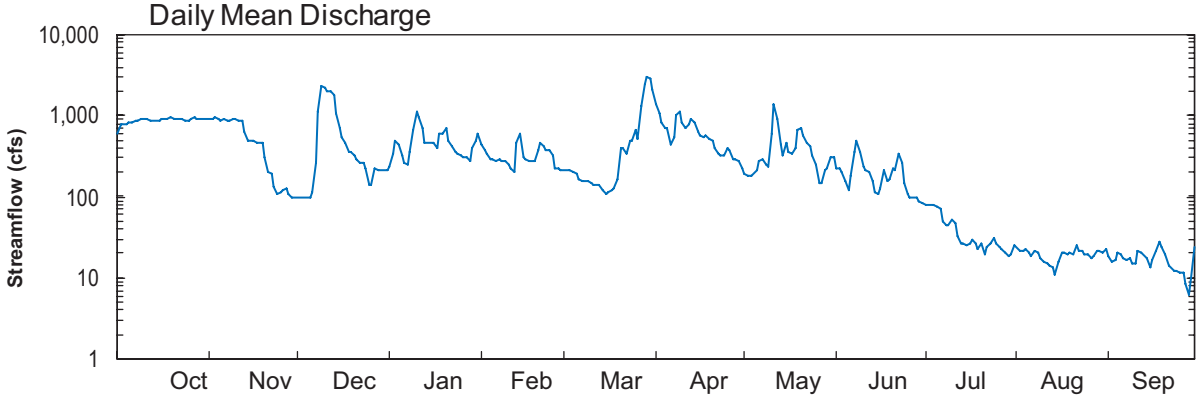
WILLAMETTE RIVER BASIN

14170000 LONG TOM RIVER AT MONROE, OR

Latitude: 44°18'47" Longitude: 123°17'43" Hydrologic Unit Code: 17090003

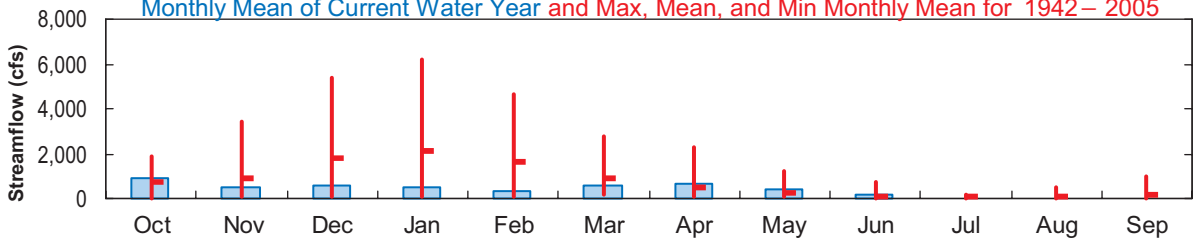
Benton County Datum: 270.57 feet Drainage Area: 391 mi²

Daily Mean Discharge

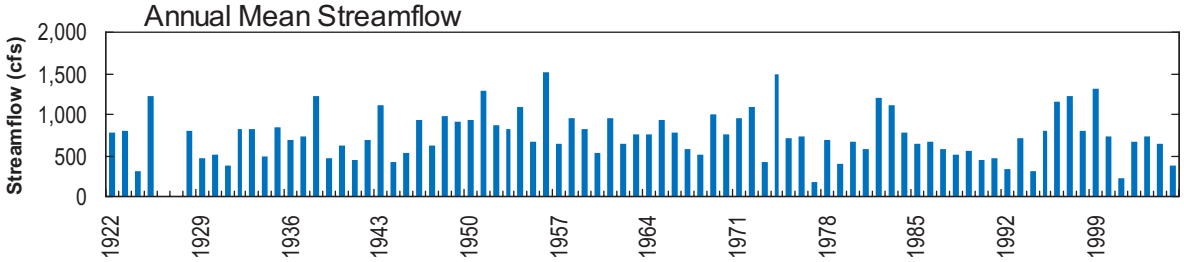


Monthly Statistics

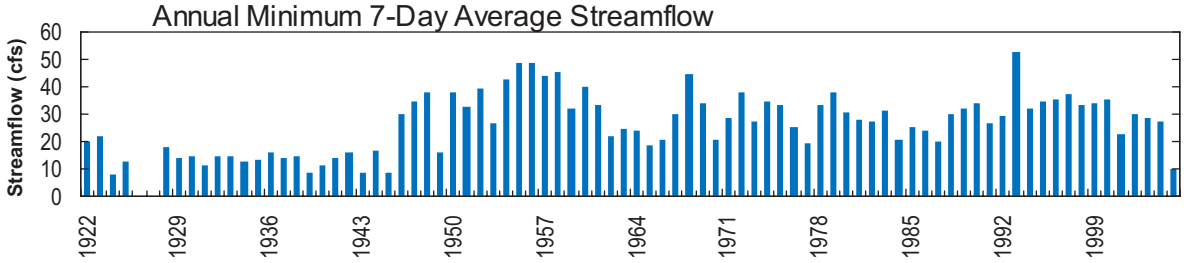
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1942 – 2005



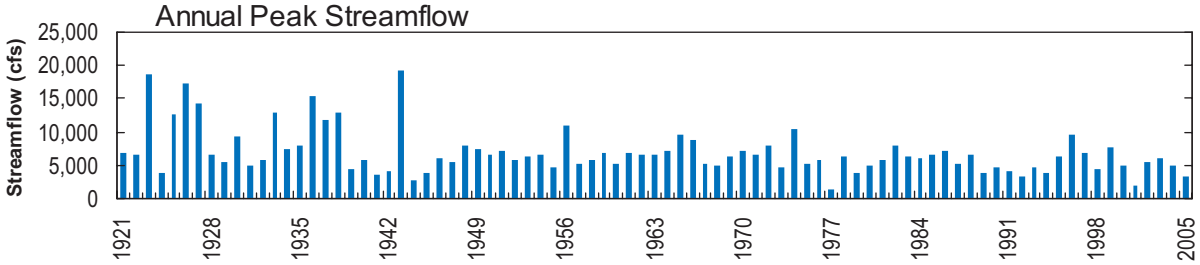
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



14171000 MARYS RIVER NEAR PHILOMATH, OR

LOCATION.--Lat 44°31'35", long 123°20'00", in NE ¼ SE ¼ sec.18, T.12 S., R.5 W., Benton County, Hydrologic Unit 17090003, on right bank 15 ft downstream from bridge on Bellfountain Road, 0.6 mi downstream from Newton Creek, 2.0 mi southeast of Philomath and at mile 9.4.

DRAINAGE AREA.--159 mi^2, including drainage area of Evergreen Creek upstream from Bellfountain Road, 1.4 mi south of station.

PERIOD OF RECORD.--October 1940 to September 1985, October 2000 to current year.

REVISED RECORDS.--WSP 1218: Drainage area. WSP 1935: 1956(M).

GAGE.--Water-stage recorder. Datum of gage is 224.01 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1961, nonrecording gage at bridge 50 ft upstream at same datum. October 1, 1961 to Sept. 30, 1985, gage on left bank, 35 ft downstream at same datum.

REMARKS.--Records good except those for the period Sept. 24-30 and estimated daily discharges, which are fair. Records include flow of Evergreen Creek at Bellfountain Road crossing 1.4 mi south of station, with which overflow from Marys River may at times be mingled. Slight regulation by small storage reservoir on Rock Creek from which municipal supply is diverted for city of Corvallis. Other small diversions upstream from station for irrigation.

AVERAGE DISCHARGE.--50 years (water years 1941-85, 2001-05), 446 ft^3/s, 38.09 in/yr, 322,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft^3/s Dec. 22, 1964, gage height, 20.72 ft; maximum gage height, 20.91 ft Jan. 15, 1974; minimum discharge, 0.60 ft^3/s Aug. 23, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 9	0530	*1,760	*12.59				

Minimum discharge, 14 ft^3/s, Sept. 5, 9, 22-24, gage height, 1.94 ft.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	149	127	261	312	136	748	205	169	91	29	18
2	26	193	129	260	280	125	611	194	168	87	30	17
3	25	309	118	233	257	112	514	183	159	84	28	17
4	25	247	118	212	243	108	455	181	147	80	28	17
5	24	191	140	193	235	104	401	172	152	76	26	16
6	26	160	166	182	227	102	356	174	267	77	26	16
7	27	140	311	210	242	100	366	170	407	74	25	16
8	32	125	1,420	295	224	97	460	162	447	73	24	15
9	50	112	1,610	364	206	95	469	222	339	73	23	15
10	72	103	1,150	408	196	92	408	471	275	73	22	18
11	59	97	1,060	376	188	90	414	512	247	72	23	20
12	47	91	928	331	180	87	420	392	224	70	23	18
13	41	89	720	345	174	84	461	317	201	67	22	18
14	36	87	636	327	164	81	450	286	186	62	21	18
15	34	85	554	322	156	79	426	256	173	58	20	17
16	33	86	467	313	151	79	457	254	165	55	20	17
17	50	86	401	318	146	93	528	261	173	54	19	19
18	94	87	333	463	143	93	594	e402	168	50	20	18
19	187	94	290	522	140	105	580	e490	172	47	20	18
20	177	91	262	471	138	235	525	e497	155	45	21	18
21	126	82	240	421	131	274	459	e439	141	44	20	17
22	101	80	221	367	129	226	406	e383	134	44	20	15
23	93	77	205	325	128	205	376	e336	132	43	20	15
24	99	78	189	292	116	209	348	e296	120	41	19	15
25	108	119	181	267	117	192	312	e266	113	40	18	17
26	152	162	208	249	116	233	285	240	109	37	17	17
27	150	149	201	231	114	1,300	264	218	109	36	17	18
28	121	132	178	219	121	1,190	243	202	108	34	17	19
29	109	119	170	536	---	1,510	227	193	105	33	18	20
30	112	118	166	468	---	1,390	218	184	98	32	20	21
31	146	---	177	364	---	977	---	172	---	30	19	---
TOTAL	2,409	3,738	13,076	10,145	4,974	9,803	12,781	8,730	5,563	1,782	675	520
MEAN	77.7	125	422	327	178	316	426	282	185	57.5	21.8	17.3
MAX	187	309	1,610	536	312	1,510	748	512	447	91	30	21
MIN	24	77	118	182	114	79	218	162	98	30	17	15
AC-FT	4,780	7,410	25,940	20,120	9,870	19,440	25,350	17,320	11,030	3,530	1,340	1,030
CFSM	0.49	0.78	2.65	2.06	1.12	1.99	2.68	1.77	1.17	0.36	0.14	0.11
IN.	0.56	0.87	3.06	2.37	1.16	2.29	2.99	2.04	1.30	0.42	0.16	0.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2005, BY WATER YEAR (WY)

MEAN	68.7	451	1,042	1,175	1,024	773	456	218	95.3	36.1	18.0	19.8
MAX	568	1,897	2,360	2,455	2,398	1,736	1,133	660	295	89.6	35.8	51.9
(WY)	(1948)	(1974)	(1982)	(1970)	(1949)	(1961)	(1963)	(1963)	(1984)	(1984)	(1968)	(1941)
MIN	8.24	21.9	29.9	37.6	83.2	190	160	90.9	43.1	16.4	4.89	6.02
(WY)	(1953)	(1953)	(1977)	(1977)	(1977)	(1941)	(1977)	(1966)	(1966)	(1973)	(1967)	(1967)

14171000 MARYS RIVER NEAR PHILOMATH, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1941 - 2005	
ANNUAL TOTAL	117,379		74,196			
ANNUAL MEAN	321		203		446	
HIGHEST ANNUAL MEAN					816	1974
LOWEST ANNUAL MEAN					104	1977
HIGHEST DAILY MEAN	3,680	Jan 30	1,610	Dec 9	11,300	Dec 22, 1964
LOWEST DAILY MEAN	13	Aug 20	15	Sep 8	1.4	Aug 29, 1967
ANNUAL SEVEN-DAY MINIMUM	15	Aug 15	16	Sep 3	2.4	Aug 26, 1967
ANNUAL RUNOFF (AC-FT)	232,800		147,200		322,900	
ANNUAL RUNOFF (CFSM)	2.02		1.28		2.80	
ANNUAL RUNOFF (INCHES)	27.46		17.36		38.09	
10 PERCENT EXCEEDS	951		452		1,220	
50 PERCENT EXCEEDS	130		140		155	
90 PERCENT EXCEEDS	24		20		15	

e Estimated

2005 Water Year

WILLAMETTE RIVER BASIN

14171000 MARYS RIVER NEAR PHILOMATH, OR

Latitude: 44°31'35" Longitude: 123°20'00" Hydrologic Unit Code: 17090003

Benton County Datum: 224.01 feet Drainage Area: 159 mi²